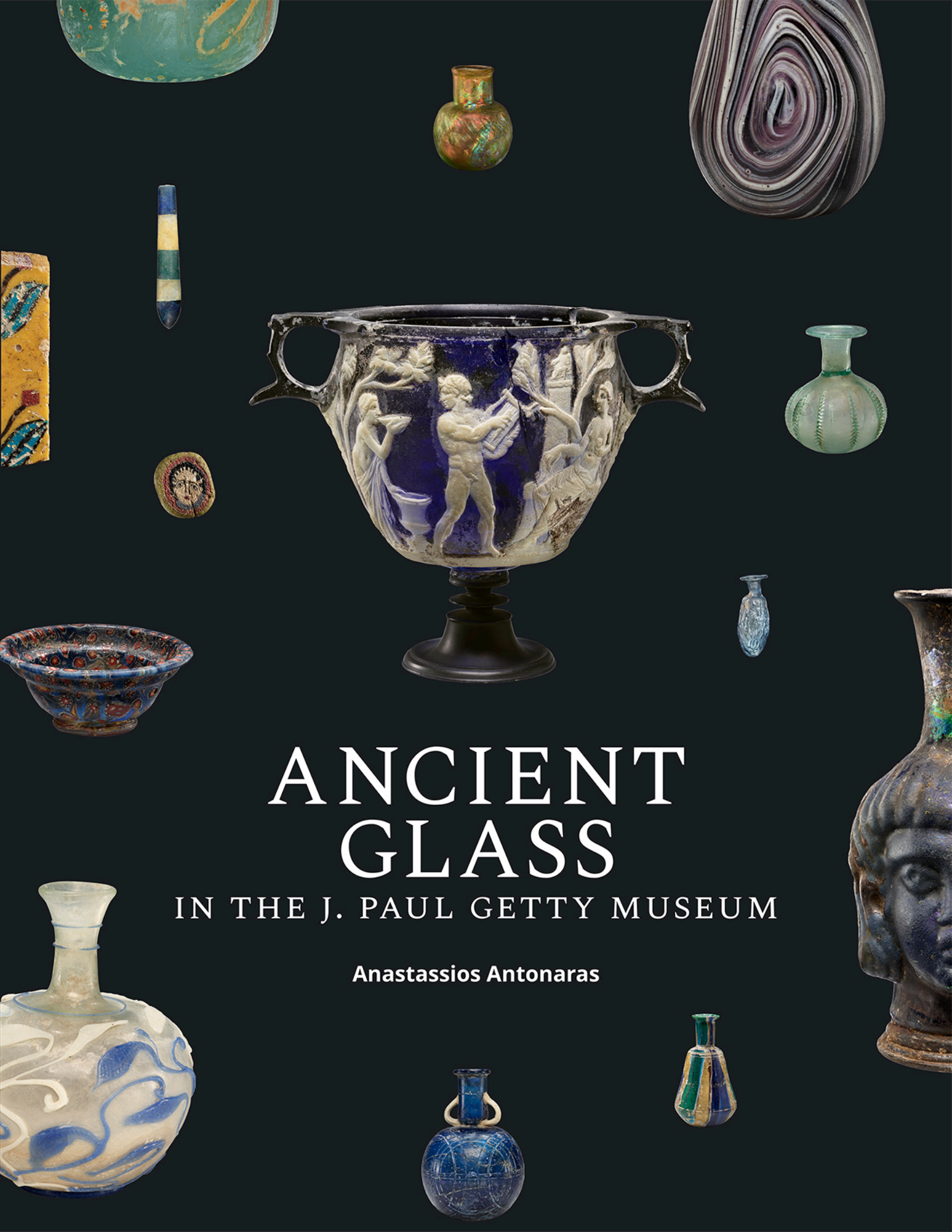


## Anastassios Antonaras



Ancient Glass in the J. Paul Getty Museum



# Ancient Glass in the J. Paul Getty Museum

**Anastassios Antonaras**

With contributions by Nicole Budrovich and  
Monica Ganio

J. PAUL GETTY MUSEUM, LOS ANGELES



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Fig. 2: Institutional Archives, The Getty Research Institute, Los Angeles (2010.IA.04)

Fig. 3: *Los Angeles Times* Photographic Archive: “Julie Frazier standing next to case of objects.” January 24, 1958. (Collection 1429. Box 328. Neg. #108387).

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# Director's Foreword

Ancient artisans first discovered the technology of glassmaking as early as the third millennium BCE, likely in Mesopotamia, through the heated mixture of raw materials found in nature. By the late Bronze Age (1550–1200 BCE), glass was being manufactured for usable objects, such as vessels and pendants, and fashioned as ingots for transport. In the centuries that followed, craftspeople across the Mediterranean and Near East developed new methods for mixing and shaping this versatile material. The earliest glass products—beads, inlays, and small vessels for precious oils and perfume—were treasured objects, likely made for use in religious practices and burials. As the art of glassmaking evolved, notably with the development of glass blowing in the first century BCE, glass became more affordable while the market for luxury glass, such as mosaic and cameo glass, also continued to thrive.

The J. Paul Getty Museum has a diverse and comprehensive collection of ancient glass objects, presented here in 584 catalogue entries, which illustrate the long technological and artistic history of the material. The origins of the Museum's ancient glass collection date to 1940, when J. Paul Getty, who had started collecting antiquities the previous year, bought a group of sixteen vessels at a New York auction. When Getty established the Museum in 1954 and opened his ranch house in Malibu to the public, these vessels were prominently displayed. And when the newly constructed Villa Museum, based on the ancient Roman Villa dei Papiri in Herculaneum, opened twenty years later, a marbled glass bowl was shown with other luxury vessels of agate and silver.

The glass collection continued to grow in the following decades, as curators acquired both individual works, such as the exquisite cameo glass skyphos, and selections of works from the Kofler-Truniger collection and others. The most transformative addition occurred in 2003–4, when the Museum acquired 420 works from the renowned Oppenländer collection, greatly expanding the geographical, chronological, and stylistic scope of the Getty's ancient glass holdings and placing it among the finest and most important in the United States. Since the reopening of the remodeled Getty Villa in 2006, the ancient glass collection, or a special exhibition drawn from it, has been a permanent aspect of our displays.

This publication continues the Museum's tradition of sharing scholarly catalogues of our collections with a wide and diverse public, increasingly both online and in print. Previous comparanda include *Roman Mosaics* (2016), *Ancient Terracottas from South Italy and Sicily* (2016), *Ancient Lamps* (2017), and the *Corpus Vasorum Antiquorum, Fascicule 10: Athenian Red-Figure Column- and Volute-Kraters* (2019).

Since the Oppenländer glass collection was first published in 1974, our scientific understanding of ancient glass technologies and typologies has greatly advanced, and a comprehensive review of the collection was well overdue. In the fall of 2019, former senior curator Jeffrey Spier invited Anastassios Antonaras, a leading specialist in ancient glass, to examine the collection for the creation of a scientific catalogue. This publication, researched and written by Dr. Antonaras following that initial study and a second visit in the fall of 2022, with the support of Getty curatorial and conservation staff, brings this project to fruition.

Introductory essays include a discussion of the formation and display of the Getty's ancient glass collection, by Nicole Budrovich, and an in-depth survey of the history and technology of ancient glassmaking by Dr. Antonaras. An analytical study of ancient glass colorants by Monica Ganio of the Getty Conservation Institute is provided in the appendix.

The body of the catalogue begins with vessels, presented chronologically and grouped according to shape, followed by glass appliqués, jewelry, and implements. The individual catalogue entries provide detailed descriptions, conservation notes, comparanda, and images.

The Getty's team of photographers, led by Tahnee Louise Cracchiola, created new images of nearly 300 objects and 360-degree photography of 11 highlight pieces, successfully capturing the reflective, transparent, opaque, and iridescent qualities of this material at a new level of clarity and fidelity.

We are most grateful to Dr. Antonaras and the Getty staff who have contributed to this catalogue, for ensuring that the work continued across time zones and despite the difficulties of the pandemic. There can be no doubt that this open-access digital publication will become an essential resource to scholars and art lovers across the globe.

Timothy Potts

*Maria Hummer-Tuttle and Robert Tuttle Director*

*J. Paul Getty Museum*

# Acknowledgments

The production of this catalogue has been a complex and lengthy endeavor, and I want to express my gratitude to many individuals who made it possible. First and foremost, I extend my heartfelt thanks to the director of the J. Paul Getty Museum, Timothy Potts, and the former senior curator of antiquities, Jeffrey Spier. Their invitation to study the museum's glass collection during my 2016 visit to the Getty Villa was the inception of this project.

In 2019 I received a Getty Villa Scholar stipend, which allowed me to study a significant portion of the Museum's collection for three months. This period of research was greatly enriched by the guidance and support of Mary Louise Hart, former associate curator of antiquities. Despite the challenges posed by a three-year timeframe and a global pandemic, I was able to complete writing the book. A subsequent two-month visit to the Villa at the end of 2022 enabled me to study the remaining objects and finalize the bibliographic research. During this visit, curatorial assistant Nicole Budrovich was instrumental in ensuring the smooth and timely completion of the project. I also owe a special thanks to Roko Rumora, then a graduate intern at the Villa, for his assistance in accessing and handling the objects.

I am grateful to the curatorial team at the Villa, especially Claire Lyons for sharing her expertise on the Punic glass objects in the collection, and Kenneth Lapatin and Jens Daehner for their insightful discussions on the nature of several objects.

I want to recognize the achievements of the team at the Villa Imaging Studios: Tahnee Louise Cracchiola, Rebecca Truszkowski, Niki Nakagawa, Manuel Perez, Benjamin Goddard, and Joanna Hernandez. Their spectacular images of the glass objects reveal details and features almost imperceptible to the naked eye. Additional thanks are due to Getty Digital Imaging photographers Rebecca Vera-Martinez and Taylor Branham and imaging specialists Robert Dennis and Gary Hughes for their post-production work.

I also extend my appreciation to Getty Conservation Institute associate scientist Monica Ganio and former graduate intern Elena Cofini, whose analyses and chemical identifications were crucial in distinguishing between authentic and ambiguous glass objects and verifying the specific nature of certain pieces and pastiches.

Furthermore, my thanks extend to the Villa conservators Jessica Arista and Marie Svoboda, for assisting me and the Imaging Studios team; preparators Marcus Adams, Dan Manns, and Cesar Santander; mountmakers Richard Hards and Elizabeth Soriano, who deserve special mention for their essential contributions in accessing glass objects on display and in storage; and registrars Jennifer Adam and Janet Chen for coordinating art moves.

Finally, I want to thank the anonymous reviewers for their constructive comments, which have significantly improved the quality of this catalogue. I also want to express my appreciation for the Getty Publications team, especially Ruth Evans Lane, the editor of this publication; Greg Albers, digital publications manager at the Getty and product manager for Quire; and Erin Cecele Dunigan, Quire community manager and the digital project lead on this book, for their support in bringing this work to fruition. Thanks are also due to rights coordinator Danielle Brink; cover designer Dani Grossman; former graduate intern Kate Justement; production coordinator Molly McGeehan; digital production assistant Jenny Park; and freelance copy editor Kerri Cox Sullivan.

# Abbreviations and Organization of Catalogue Entries

The catalogue entries of vessel and non-vessel glass objects presented in this publication adhere to the following format:

Catalogue number: Refers to an individual object or fragment of an object

The objects of the catalogue have been divided into two main groups, vessels and non-vessel artifacts. Vessels are presented first, grouped on the basis of their production technique, following chronologically the historical evolution of the glass technology, that is, core-formed, rod-formed, cast, slumped, rotary-pressed, and blown. Within each such group open shapes are presented first (plates, bowls, and beakers) and close-shaped vessels follow (amphorae, flasks, jugs, bottles, jars, and unguentaria), and examples of each shape are arranged chronologically. Non-vessel objects are presented at the end of the catalogue, organized in groups based on their use—appliqués, jewelry, spindle whorls, knucklebones, stirring rods, medical-alchemical implements, sculpture, and earplugs—chronologically arranged within each group.

Title: Usually a single word describing the shape or the use of the object

Accession number: Getty inventory number

Inventoried glass objects are given a number that includes the year of accession. For objects acquired prior to 2000, two letters indicate the department and the material of the object, in most cases AF, referring to the departments of antiquities and glass, respectively, and a sequence number.

Dimensions: Measurements are given in centimeters. The following abbreviations are used:

H. = height (if the original orientation of the fragment is known)

L. = length

W. = width

Diam. = diameter

Th. = thickness

Wt. = weight (measurement given in grams)

dim. = dimension

max. = maximum

est. = estimated

pres. = preserved

In some catalogue entries, when the orientation of the fragment is uncertain or irrelevant, the dimensions are reported without prefixes: e.g.,  $0.60 \times 0.40 \times 0.20$ .

Date: Based on the comparanda, and given in a range of centuries or parts of centuries

Production area: Most of the objects lack any kind of information regarding their provenience, so production areas were deduced on the basis of comparanda that have been unearthed in controlled excavations and can provide such geographical indications.

**Material:** Color and quality of glass are described, noting first the degree of transparency (opaque, translucent, or transparent), followed by the color of the glass. The description of color always refers to the original color of the object and not to its present state, which may have been seriously affected by weathering.

**Modeling technique and decoration:** The techniques applied to the shaping and the decoration are noted, occasionally with further explanations referring to the steps of the procedure.

**Condition:** The state of preservation, the extent and nature of the different types of weathering, and the missing parts and occasional fills are noted. Those that are basically undamaged are considered “intact”; those that have been repaired without loss are considered “complete.”

**Description:** The overall form and the shape of each part of the vessel are described first, starting from the rim and

moving toward the base. Unless stated to the contrary, there are no pontil marks. The description of the decoration, if any exists, follows.

**Comments and Comparanda:** For most of the catalogue entries, parallels are cited, and, whenever possible, some comments were added referring either to this particular object or to a whole group or class of objects that provide a context for the find. The equal sign (=) is used to indicate the various publications in which a single object has been presented.

**Provenance:** The recorded sequence of entities that owned the object prior to its acquisition by the Getty Museum

**Bibliography:** Any publication that the object was presented in

**Exhibitions:** Any exhibition that the object was presented in



# Typological Classification

## A. Vessels

### I. Ancient

#### 1. Core-Formed

##### 1.1. Pharaonic

Amphoriskoi | cats. 1–2

Krateriskos | cat. 3

Lentoid Flask | cat. 4

Flask | cat. 5

##### 1.2. Achaemenid

Alabastron | cat. 6

Kohl Tubes | cats. 7–9

##### 1.3. Greek

Alabastra | cats. 10–33

Amphoriskoi | cats. 34–47

Oinochoae | cats. 48–52

Aryballoi | cats. 53–56

Unidentified | cats. 57–58

#### 2. “Cast”-Rotary Pressing

Single-Colored | cats. 59–81

Cameos | cats. 82–85

##### Mosaic

Millefiori | cats. 86–116

Striped and Reticello | cats. 117–131

Marbled | cats. 132–142

Cast and Inlaid | cats. 143–144

Gold-Band | cats. 145–147

Slumped and Blown | cats. 148–157

Splashware | cat. 158

### 3. Blown

#### 3.1. Mold-Blown

##### 3.1.1. Fully Mold-Blown

Bowls and Cups | cats. 159–168

Beakers | cats. 169–174

Flasks | cats. 175–179

Jugs and Oinochoae | cats. 180–189

Unguentaria

Handleless | cats. 190–200

Sprinklers | cats. 201–204

Handled | cats. 205–217

##### 3.1.2. Dip Mold-Blown

Bowls and Cups | cat. 218

Beaker | cat. 219

Amphora | cat. 220

Flasks | cats. 221–226

Handled Unguentaria | cats. 227–228

#### 3.2 Free-Blown

Plates, Trays, and Dishes | cats. 229–232

Bowls and Cups | cats. 233–255

Beakers | cats. 256–265

Skyphoi and Kantharoi | cats. 266–267

Amphorae | cats. 268–269

Flasks | cats. 270–283

Guti | cats. 284–288

Jugs and Oinochoae | cats. 289–306

Bottle | cat. 307

Jars | cats. 308–316

Unguentaria

Handleless | cats. 317–342

Handleless Sprinklers | cats. 343–350

Handleless Lentoid | cat. 351

Handled

Aryballoi | cats. 352–353

Amphoriskoi | cats. 354–366

Multihandled | cats. 367–368

Kohl Tubes | cats. 369–371

Ink wells | cats. 372–375

3.3 Rod-Formed | cats. 376–379

## II. Islamic (seventh – fourteenth century)

Blown

Mold-Blown

Fully Mold-Blown Flasks | cats. 380–395

Dip Mold-Blown Flask | cat. 396

Free-Blown

Plates and Bowls | cats. 397–398

Flasks | cats. 399–432

Jars | cats. 433–436

## III. Modern and Pastiche

Free-Blown | cats. 437–441

## B. Miscellanea

### I. Ancient

Appliqués | cats. 442–508

Jewelry

Beads | cats. 509–542

Amulets | cats. 543–560

Bracelets | cats. 561–566

Gold-Glass | cat. 567

Spindle Whorl | cat. 568

Knucklebone | cat. 569

Stirring Rods | cats. 570–571

Pin | cat. 572

Medical-Alchemical Implements | cat. 573

Sculpture | cats. 574–575

Earplugs | cats. 576–577

Window Pane | cat. 578

Glassworking | cat. 579

## II. Islamic

Medical-Alchemical Implements | cats. 580–582

## III. Later and Modern

Sculpture | cats. 583–584

# Map



# Overview of Contents

An important aspect of a museum's mission is to share its collections with the public. Along with its exhibitions, publishing the content of its collections in scholarly organized catalogues is the most efficient way to achieve that goal. The thorough, scholarly publication of the Getty Museum's ancient glass collection aims to be beneficial not only to specialists, students, and professional art historians and archaeologists, but also to amateurs of ancient and Roman art and technology, studio artists, designers, and glassblowers, who will now gain access to a diverse and understudied corpus of artifacts. Furthermore, it is aimed toward the wider public, who will gain insight into one of the more intriguing genres of ancient art. Visitors to the Getty Villa's galleries of ancient glass are almost inevitably intrigued by the impressive variety of shapes and colors, as well as the remarkable survival of such delicate objects over the centuries. This publication is also intended to serve as an extended guide with the hope that school groups and educators in the local communities might use information from it for their curricula, as an aid for their visits to the museum, and for deepening their knowledge of an ancient craft that in many ways continues to rely on the same techniques and aesthetics even today.

Many of the artifacts represent extremely rare technological categories, for example, cameo glass and gold-band glass; classical Greek core-formed, single-colored, and even decolorized vessels, in addition to an exceptionally accomplished group of mold-blown vessels with naturalistic human heads, fruits, mythological scenes, and figures as well as intricate geometrical patterns. Namely, the Getty Museum possesses a rich and diverse collection of 649 objects catalogued as glass, 584 of which are included in the present publication, which excludes glass gems, faience, and objects made of stone or

other materials. The majority stem from the Oppenländer Collection, which the Getty Museum acquired over half of in 2003 and 2004. Chronologically, the collection and the contents of this publication span three millennia, from the Bronze Age to the medieval period (1500 BCE–1000 CE). The objects originate from a wide geographical area, including Middle Eastern, Mediterranean, and central European regions. Vessels constitute the largest group, with 447 objects, but there are other important glass artifacts as well: 59 pieces of jewelry, 61 incrustation fragments for sumptuous inlaid furniture and shrines, 3 sculptures, and 14 implements of symbolic and practical use, including distaffs and spindle whorls for weaving, gaming pieces in the form of knucklebones, medicinal bleeding cups, and parts of an alchemical alembic apparatus.

A group of the top glass researchers at the time, including Axel von Salder, Birgit Nolte, Peter La Baume, and Thea Elisabeth Haevernich, summarily presented a large portion of the glass artifacts (422) with primarily black-and-white group photos more than forty years ago. A number of these pieces were also featured in the 2007 exhibition and 2011 Museum publication, *Molten Color: Glassmaking in Antiquity*, by Karol Wight. This publication project has provided an excellent opportunity to identify the nature and the physical properties of some of these long-known but little-studied objects, which are here the subject of thorough scholarly analysis, dating, and attribution to regional production centers. Analytical study of a few selected objects by the Getty Conservation Institute scientist Dr. Monica Gaudio, using the technology and equipment available at the GCI, supplements the macroscopic art-historical and archaeological perspectives of the author.

# Ancient Glass in the Getty Museum: History of the Collection

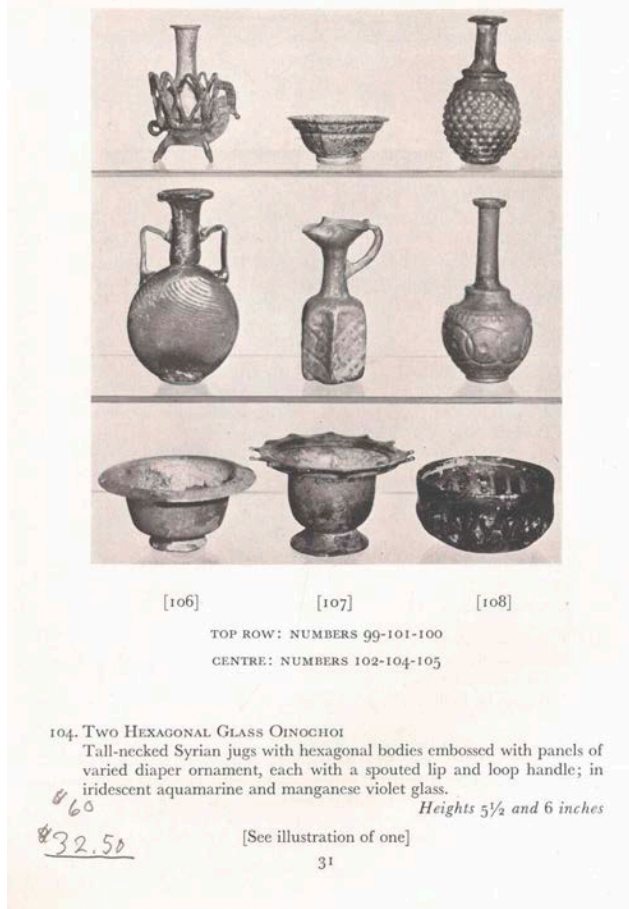
*Nicole Budrovich*

J. Paul Getty's earliest purchases of ancient art predate the founding of the museum itself. The evolution of the collection from the first acquisition of ancient glass in 1940 until today reflects shifting goals, interests, and audiences over more than half a century. The colorful and varied glass objects in the collection have extensive histories of prior ownership that can stretch back decades and in some cases centuries, and the circumstances of the Getty's acquisition of the works, as well as their public display, are also notable. Despite the popularity of ancient glass among collectors since the late eighteenth century, researching the provenance of these objects is often challenging.<sup>1</sup> Ancient glass vessels share common shapes and many times are not distinctive enough to be identified without a detailed illustration. Typically, only the most exceptional works were documented with published drawings and photographs. Nevertheless, ongoing research has helped expand the documented histories of the collection.

Numbering nearly 600 objects, the Getty's ancient glass holdings include J. Paul Getty's personal collection (1940–54), objects Getty bought for the Ranch House Museum and the Villa (1954–76), and subsequent acquisitions purchased on the art market and from private collectors.<sup>2</sup> The final and most substantial acquisition was a large selection of objects from the important Erwin Oppenländer glass collection in 2003 and 2004.

By the 1930s J. Paul Getty had started actively acquiring art, sporadically purchasing decorative arts, tapestries,

and paintings from auction houses and dealers in Europe and New York. During an extended visit to Rome in the summer months of 1939, Getty frequented the city's museums and archaeological sites, and this stay sparked a serious interest in collecting ancient sculpture.<sup>3</sup> Getty bought his first antiquities that summer, including three marbles from the dealer Alfredo Barsanti in Rome: a torso of Aphrodite (later determined to be a modern forgery) and two portrait heads of imperial women.<sup>4</sup> Following the outbreak of World War II in the fall of 1939, Getty returned to New York. In the spring of 1940, he acquired a group of 16 ancient glass vessels at the auction of the Harry Leonard Simmons collection through French & Co., the New York decorative arts dealer who acted as Getty's trusted agent (fig. 1).<sup>5</sup> These would be his last ancient art purchases before pausing all collecting when the United States entered the war in December 1941. Unfortunately, Getty's personal diaries from this period are not preserved, so his motivations for buying ancient glass are unknown. He did consider himself a discerning collector, preferring more to "own a few choice pieces than to amass an agglomeration of second-rate items," distinguishing himself from his friend and sometime rival William Randolph Hearst.<sup>6</sup> For the Simmons sale, Getty limited his selection to objects illustrated in the catalogue, six of which included information about previous owners, all collectors based in New York in the early 1900s.<sup>7</sup>



**Figure 1.** Harry Leonard Simmons sale, Parke-Bernet Galleries, New York, 1940, p. 31. J. Paul Getty acquired seven of the nine objects in this catalogue illustration: nos. 99 (cat. 400), 101 (cat. 89), 102 (cat. 227), 104 (cat. 188), 106 (cat. 248), 107 (cat. 249), and 108 (cat. 71).

After the war Getty returned to collecting, acquiring his first examples of ancient mosaics, bronze statuettes, Attic pottery, and large-scale marble sculpture. Although marble portraits and sculpture made up the bulk of the antiquities acquired in the 1950s, Getty continued to show some interest in ancient glass, with five vessels obtained in two purchases from the London dealer Spink & Son, Ltd. in 1950 and 1953.<sup>8</sup> These were the last ancient glass objects Getty bought for his personal collection, which officially opened to the public in the Ranch House as the J. Paul Getty Museum in 1954 (fig. 2). The first museum guidebook, published that year, notes that several ancient glass vessels were displayed along with a set of late antique silver drinking cups (later identified as modern) in the Roman Room.<sup>9</sup> The 1965 museum handbook includes detailed descriptions of 12 glass vessels on display, calling attention to the varied colors and surface sheens, including light green, aquamarine, amber, brilliant blue, silver, and rainbow iridescence (fig. 3).<sup>10</sup>



**Figure 2.** Getty Ranch House, circa 1948–57, Getty Institutional Archives



**Figure 3.** Roman Glass display in J. Paul Getty Museum, “Getty Art Bids Viewers,” *Los Angeles Times*, January 24, 1958, photo by Harry Chase

As the collection outgrew the Ranch House, plans were made for a new building, and Getty decided to model the museum after the ancient Villa dei Papiri in Herculaneum, a site he knew well from the excavation plan and finds displayed in the Naples Archaeological Museum; the Villa had captivated his imagination by the early 1950s, if not before.<sup>11</sup> With curator Burton Fredericksen looking to quickly expand the collection holdings to fill the new gallery spaces, Getty approved the acquisition of more than 300 objects from Royal Athena Galleries in New York in 1971, an assortment of objects of mixed quality that included eight ancient glass vessels.<sup>12</sup> The next year, Getty approved the purchase of the finest glass vessel to enter the collection up to that time, a ribbed bowl imitating banded agate. Discovered in 1764 on the grounds of Château de Ripaille, a fourteenth-century estate in Thonon-les-Bains on Lake Geneva, the bowl was found intact in a sealed lead box that also



contained ashes of a cremation burial and several pieces of ancient jewelry. The bowl remained at the estate for nearly two centuries, until it was sold at auction in 1972 (fig. 4).<sup>13</sup> A few months after this acquisition, Getty purchased a finely carved agate bowl, the type of Hellenistic luxury vessel that the ribbed glass bowl imitates.<sup>14</sup> When the newly constructed J. Paul Getty Museum opened in 1974, the glass bowl received special mention in the guidebook and was displayed alongside the agate bowl and a Greek silver cup, calling attention to the varied mediums of luxury vessels.<sup>15</sup> This would be the last ancient glass acquisition Getty approved, and today it is displayed in a gallery dedicated to J. Paul Getty as a collector.



**Figure 4.** Cat. 133, Ribbed Bowl, 50 BCE–50 CE, 72.AF.37. Photo from the 1907 publication of *Le Chateau de Ripaille* by Max Bruchet (Paris), p. 20; ill.

Upon his death in 1976, Getty left the majority of his personal estate to the museum, making it the world's wealthiest art institution. The endowment led to a shift in the museum's approach to acquisitions, allowing the museum to build a world-class art collection and research center. Newly appointed antiquities curator Jiří Frel worked to expand the size and scope of the collection, securing high-quality works of art as well as groups of fragments and small objects for study. Frel bought from auctions and dealers, while also soliciting donations from dealers, academics, and collectors locally and beyond Los Angeles. Frel's methods were often unscrupulous and included a well-documented tax-fraud donation scheme that led to his dismissal from the museum in 1984.<sup>16</sup> Nevertheless, in those years there were donations of over a hundred ancient glass objects, mostly fragments and small flasks with little or no provenance information.<sup>17</sup> Frel also pursued significant works, including two Phoenician and Punic glass pendant beads (as part of two Etruscan gold necklaces) and an elegant blue kantharos with twisted spiral handles.<sup>18</sup> In 1984, the year of Frel's

departure, the museum acquired a cameo glass skyphos, an exquisite example of Roman glass craftsmanship (fig. 5).<sup>19</sup>



**Figure 5.** Cat. 82, Cameo Glass Skyphos, 15 BCE–25 CE, 84.AF.85

In 1985, antiquities curator Marion True arranged for the acquisition of selected works from the Kofler-Truniger collection at auction in London, including the most important work offered, a cameo glass flask with Egyptianizing motifs.<sup>20</sup> The department's graduate intern that year, Karol Wight, helped prepare the acquisition proposals for these objects, sparking her own interest in ancient glass, which ultimately led to her dissertation on one of the Kofler-Truniger pieces acquired at the sale, a first-century mythological beaker (fig. 6).<sup>21</sup> Later that year, the Getty bought two blown-glass beakers from New York dealer Robert Haber.<sup>22</sup> There were no additional glass acquisitions until the mid-1990s, when the partial purchase and donation of the Barbara and Lawrence Fleischman collection brought three ancient glass objects, the most notable a fine white and blue snake-thread flask.<sup>23</sup> Around the same time, True acquired a mold-blown cup inscribed in Greek, "Be glad that you have come," possibly made by the Syrian workshop of Ennion, and a remarkable facet-cut glass beaker.<sup>24</sup>

The Getty Museum's ancient glass collection now numbered around 175 objects. The holdings included a selection of high-quality works, notably the two cameo glass vessels, but it was hardly representative of the great variety of glass objects produced in antiquity. In 2003 and 2004, however, Marion True, with assistance from Karol



**Figure 6.** Cat. 169, Mythological Beaker, late 1st century CE, 85.AF.83

Wight, arranged for the purchase of approximately 420 pieces from the ancient glass collection of Erwin Oppenländer (1901–1988), which had been inherited by his two children, Gert and Ingrid.<sup>25</sup> The entire collection of more than 1,000 objects had been assembled with great care to include only works of the highest quality that represent the various glass manufacturing techniques.<sup>26</sup> Erwin Oppenländer began collecting ancient glass in the 1920s, buying works at auction and from European dealers. Pieces from his collection are first mentioned in articles in 1959 and, starting in 1965, appear in the “Recent Acquisitions” section of the *Journal of Glass Studies*. Among the selection acquired by the Getty, some objects have much earlier histories, a few coming from the Barberini and Stroganoff collections in Rome, which were assembled in the seventeenth and eighteenth centuries, and the collections of Louis de Clercq (1836–1901), Arnold Vogell (1857–1911), Fredrich von Gans (1833–1920), and Giorgio Sangiorgi (1886–1965). The 50 objects from the Pierre Mavrogordato (1870–1948) collection may have been purchased en bloc, but this is uncertain. By 1974, Oppenländer’s glass collection numbered 762 objects and was presented in a special exhibition in Hamburg and Cologne, accompanied by an extensive catalogue by the noted glass experts Axel von Saldern, Birgit Nolte, Peter La Baume, and Thea Elisabeth Haevernick.<sup>27</sup>



**Figure 7.** View of Gallery 101E in 2006, *Glass in Antiquity*, J. Paul Getty Museum at the Getty Villa

The Oppenländer acquisition greatly broadened and deepened the Getty Museum’s glass holdings. Like the Getty’s antiquities collection as a whole, the majority of the Oppenländer glass objects are Greek and Roman, but there are examples of Egyptian, Mesopotamian, Phoenician, and Achaemenid Persian glass as well. The Oppenländer material also expands the chronological range to span the entire history of ancient glass production, from New Kingdom Egyptian core-formed works and Mycenaean cast glass beads (about 1400–1300 BCE) to Byzantine and Islamic vessels (800–1100 CE), as well as modern copies and forgeries in the style of ancient glass.

After the acquisition, plans were drawn up for a special inaugural exhibition, and in 2005 Karol Wight and Catherine Hess co-authored a guide to ancient, Renaissance, Baroque, and modern glassmaking terms.<sup>28</sup> Following an extensive redesign, the Getty Villa reopened in 2006 as the exclusive home of the museum’s antiquities collection. Four small galleries that focused on various materials and manufacturing techniques—terracotta, bronze, silver, and glass—included a selection of ancient glass vessels (fig. 7).<sup>29</sup> A special temporary exhibition of the recent Erwin Oppenländer acquisition, titled *Molten Color: Glassmaking in Antiquity*, presented the history of the collection and overviews of ancient glassmaking techniques, including videos of contemporary glass artists at work.<sup>30</sup> The next year, the Getty and the Corning Museum of Glass co-presented the exhibition *Reflecting Antiquity: Modern Glass Inspired by Ancient Rome*, which examined the impact of the rediscovery of Roman glass on modern glassmakers with over a hundred works, including a selection of Getty objects.<sup>31</sup> Shortly after this exhibition closed, *Molten Color* was reinstalled, and in 2010 it became part of the Villa’s permanent installation (fig. 8).



**Figure 8.** View of Gallery 214 in 2010, *Molten Color: Glassmaking in Antiquity*, J. Paul Getty Museum at the Getty Villa

Between 2016 and 2018, the Villa's permanent collections were fully reinstalled.<sup>32</sup> Although this undertaking changed the permanent display considerably, the *Molten Color* gallery remained essentially intact—a testament to that display's value and success—and was redesigned with brighter streamlined displays including material beyond the Oppenländer collection (fig. 9). Curated by Mary Louise Hart, the gallery has a more open floorplan with wall cases organized by glassmaking techniques, and at its center, the cameo glass skyphos and flask are shown in the round.<sup>33</sup> In addition to the 140 works in this gallery, a few ancient glass objects are also on view in the galleries devoted to Persia and Bactria, the Etruscans, Neolithic and Bronze Age Greece, and J. Paul Getty the Collector. Although the finest works are on display, much of the glass collection, more than 400 objects, remains in storage.



**Figure 9.** View of Gallery 214 in 2017, *Greek and Roman Glass*, J. Paul Getty Museum at the Getty Villa

This catalogue is the first comprehensive presentation of the Getty Museum's ancient glass collection, which in its diversity, quality, and beauty lives up to the promise of J. Paul Getty's earliest acquisitions and is certainly the finest collection in the western United States. As an open-access digital catalogue that includes detailed technical studies and newly commissioned photography, this publication continues Getty's commitment to sharing his collection with the public, allowing specialists and amateurs alike to discover and appreciate the wonder of ancient glass (fig. 10).



**Figure 10.** View of Gallery 214 in 2023, *Greek and Roman Glass*, J. Paul Getty Museum at the Getty Villa

## NOTES

1. As part of the Getty Museum's Antiquities Provenance Project, Judith Barr has extensively researched J. Paul Getty's personal collection and the museum's ancient glass holdings, and her findings have been invaluable in providing this summary. The study of ancient glass dates at least to the nineteenth century, though glass objects were documented in archaeological records even earlier; for a summary of the literature through the mid-twentieth century, see Harden 1984. For more recent introductions to ancient Greek and Roman glass scholarship, see Larson 2023 and Cool 2016.
2. The Getty Museum at the Ranch House had a series of directors, curators, and acting curators, notably Paul Wescher and Burton Fredericksen, who specialized in paintings but oversaw antiquities purchases.
3. Getty 1941, p. 392.
4. Lapatin 2018, p. 109. Imitation Statue of Aphrodite (67.AK.12), Bust of a Woman (70.AA.100), and Portrait Head of Agrippina the Younger (70.AA.101).
5. See Harry Leonard Simmons, cats. 269–289, and cat. 431; Parke-Bernet Galleries 1940.
6. Getty 1965, p. 14.

7. Just over a third of the ancient glass objects are illustrated in the auction catalog (19 of 53 lots) and a few include ex-collection information (12 of 53 lots); Parke-Bernet Galleries 1940. Prior owners represented in Getty's purchases include Emile Tabbagh, 1879–1933 (cats. 400, 407), George Dupont Pratt, 1869–1935 (cat. 179), and Robert Weeks de Forest, 1848–1931 (cat. 248), whose collections were sold in New York in the 1930s. Additional and earlier owners have since been identified, including Enrico Caruso, 1873–1921 (cat. 400), Frank Gair Macomber, 1849–1941 (cat. 431), Valentine Everit Macy, 1871–1930 (cat. 403), and a 1936 Anderson Galleries auction (cats. 89, 249).
8. In 1950, cats. 230, 294; in 1953, cats. 226, 364, 396.
9. Imitation of Frankish Silver Treasure 78.AK.11–17; *JPGM Guidebook* 1st ed., p. 21.
10. Stothart 1965, pp. 20–21. For a photo of the early glass display, see the *Los Angeles Times*, Jan. 24, 1958, p. 25: <https://www.newspapers.com/article/the-los-angeles-times/44318751/>.
11. In 1955 Getty published a fictionalized history of the Lansdowne Hercules (70.AA.109), which he imagined as having once been displayed in the actual Villa dei Papiri; see Lapatin 2018, pp. 15–18, and the novella "A Journey from Corinth" in Getty and Le Vane 1955, pp. 273–329.
12. 71.AF.79–85, and 71.AK.86 which was deaccessioned; Fredericksen 2015, p. 104.
13. The glass bowl (cat. 133) had long remained in the collections of the Château de Ripaille and in 1892 was transferred with the estate to Frédéric Engel-Gros (1843–1918), whose heirs still own the chateau.
14. The agate bowl (72.AI.38) was found in Qift (formerly Koptos) in southern Egypt in 1930.
15. *JPGM Guidebook* 3rd ed., p. 36; *JPGM Handbook* 4th ed., p. 36. The silver cup was likely 72.AM.34.
16. Felch and Frammolino 2011, 26–37; Kennedy, "Jiri Frel, Getty's Former Antiquities Curator, Dies at 82," *New York Times*, May 17, 2006.
17. Donation groups include forty-five glass fragments (76.AF.70) from Bruce McNall, five glass pendants (cats. 556–560) from Ira Goldberg, a group of 46 glass vessels (cats. 185, 245, 340–342, 351, 380–382, 384–393, 397, 401–402, 408, 412–416, 418–430, 432, 561–562, 580–582) from Edwin Lipps, and a group of 27 glass fragments (cats. 57–124) from Jiří Frel (four fragments, 83.AF.28.3, 83.AF.28.5, 83.AF.28.7, 83.AF.28.13, were deaccessioned to the Education Department's art handling collection in 2017). The donations from Frel note the importance of the objects for study purposes.
18. Necklaces with Glass Pendants 83.AM.1 and Kantharos cat. 267.
19. Cameo Glass Skyphos cat. 82.
20. Ernest Kofler and Marthe Truniger acquired their ancient glass pieces from the mid-1950s through the late 1970s, assembling a collection of hundreds of vessels, Egyptian inlays, and fragments. From this sale, cats. 84, 86, 88, and 169 were acquired with Robin Symes acting as agent, and cat. 181 was acquired from the Mansour Gallery shortly after the auction. See Christie's 1985.
21. Cat. 169; see Wight 2011, p. vi.
22. Cats. 162 and 171.
23. Cats. 85, 93, and 270.
24. Cats. 166 and 256.
25. In 2003, the Getty bought the bulk of Gert Oppenländer's collection, 370 works, and the following year acquired an additional 43 objects from Ingrid Reisser, who still retains the rest of her collection. On the Getty acquisition, Wight 2004, p. 196.
26. Acquisition Proposal, Gert Oppenländer collection of ancient glass, 2003, Getty Museum, Antiquities Department records.
27. Exhibitions were held at the Museum für Kunst und Gewerbe in Hamburg (October 4–November 17, 1974) and the Römisch-Germanisches Museum in Cologne (spring 1975); see von Saldern et al. 1974.
28. Hess and Wight 2005.
29. Moltesen 2007, pp. 156–158, fig. 3.
30. *Molten Color: Glassmaking in Antiquity*, J. Paul Getty Museum at the Getty Villa, January 28–August 6, 2006, reinstalled in 2007 (January 11–April 23, 2007), 2009 (October 8, 2009–February 22, 2010), and became part of the permanent collection in 2010 (October 8, 2010–February 26, 2017): <https://www.getty.edu/art/collection/exhibition/103P50>.
31. *Reflecting Antiquity: Modern Glass Inspired by Ancient Rome*, J. Paul Getty Museum at the Getty Villa, October 8, 2007–January 14, 2008, and at the Corning Museum of Glass, February 15–May 27, 2008: <https://www.getty.edu/art/collection/exhibition/103P22>.
32. "Reinstallation of Antiquities Collection Begins at the Getty Villa," *Getty News & Stories*, December 6, 2016; Tim Potts, "A New Vision for the Collection at the Getty Villa," *Getty News & Stories*, April 2, 2018.
33. For a description of the current gallery and its contents, see Getty Villa, Gallery 214, Greek and Roman Glass, <https://www.getty.edu/art/collection/gallery/113ZAX>.

# An Introduction to the History and Technology of Ancient Glass Production

*Anastassios Antonaras*

Glass was one of the first substances invented, possibly as a very fortunate accident during experimentation with glazed pottery or faience. This advance probably took place sometime in the third millennium BCE, in all likelihood in Mesopotamia, and the first objects—monochrome or polychrome, translucent or opaque—were produced in Mesopotamia and Egypt. The indications for glassmaking in Egypt are rare but clear. Initially, simple beads and, later on, decorative elements and inlays were for a very long period the only glass creations, while vessels—polychrome opaque ones—are known only from the fifteenth century BCE onward (cats. 1–5).

Colored glass was available to glass workshops operating in major urban centers in Mesopotamia, Egypt, and the Aegean—with clear stylistic and color differences between them—thanks to the long-distance trade of glass ingots. The fact that all three regions' workshops were housed in palaces or temples highlights the material's elite status, and in this era the use of glass vessels was extremely restricted, occurring only in the most affluent social circles. In the Mycenaean world in the second half of the second millennium BCE, many beads and pendants of dark blue and only very rarely white glass were used (cats. 509–532) and a few small unguentaria made with mosaic technique are also noted. In eighth-century BCE Assyria, colorless transparent glass was made for the first time and used for the production of vessels (cat. 6).<sup>1</sup>

The raw materials required for the production of glass are silica, which is derived from sand; soda (sodium carbonate), of which the main source in historic times was natron from Wadi Natrun in northern Egypt and in other times plant ash;<sup>2</sup> and calcium, either as limestone or from the crushed shells already present in sand. Glass was colored through the addition of metallic oxides (iron, manganese, cobalt, copper, lead, antimony).<sup>3</sup>

Glassmaking—that is, the production of glass out of raw materials—and glassworking, the forming of objects out of preexisting glass, constituted two distinct processes of ancient and medieval glass production that took place in different regions and at different times.<sup>4</sup> For example, glass produced in the mid-second millennium BCE in the East—that is, on the Syro-Palestinian coast and in Egypt—was transported in ingot form and sold in distant western regions, where it could be used at any time, depending on the needs and intentions of the glassworker who bought it.

Glass workshops, although they were not supposed to operate within city walls, at least from Roman times onward have been archaeologically attested in almost all cities and towns of the Empire, either near the city walls (outside or inside them) or often housed in abandoned public spaces and buildings at the center of the cities, occasionally within workshop quarters but also around military camps.<sup>5</sup>



In Classical Greece, core-formed polychrome vessels, mainly unguentaria, and miniature replicas of tableware were produced from the sixth century BCE onward. These apparently were expensive items, meant only for gods, kings, and the highest ranks of society. In the fourth century BCE in Greece and the Near East, colorless transparent glass was reintroduced and fashioned into small objects and fancy tableware vessels apparently used in official or ceremonial banquets. During the Hellenistic period (fourth–first centuries BCE), technical and artistic advancements occurred in glassworking, but glass vessels remained exquisite products, like tableware, almost exclusively drinking vessels, such as bowls, and a few pouring vessels, such as amphorae, which were still intended for elite users. It was only in the late Hellenistic period (second–first centuries BCE) that drinking vessels of simpler form and decoration started appearing in bigger numbers, for the first time produced for upper middle-class users.

The invention of the glassblowing technique in the first century BCE for the first time made glass objects even more accessible to wide parts of society and led to the prevalence of glass objects in almost every middle-class household. All classes of tableware were amply produced in glass: drinking vessels (bowls, beakers), vessels for presenting and offering food (dishes, plates, trays), and vessels for pouring liquids and drinks (jugs, decanters, flasks, and bottles). Unguentaria appear in a great variety of shapes and sizes, containing perfumes as well as cosmetic, medical, and religious substances.

For the first time, then, the storage, preservation, and trade of various products, even in large quantities, could be conducted in bulky, completely utilitarian glass vessels. Furthermore, from the third–fourth centuries CE onward a new use of the transparency of glass was devised and glass vessels were used as lamps. Some forms of tableware—bowls and beakers—were altered to serve as lamps, and other special forms were created to meet the needs of society for lighting, which from late antiquity onward were mainly satisfied by glass containers.

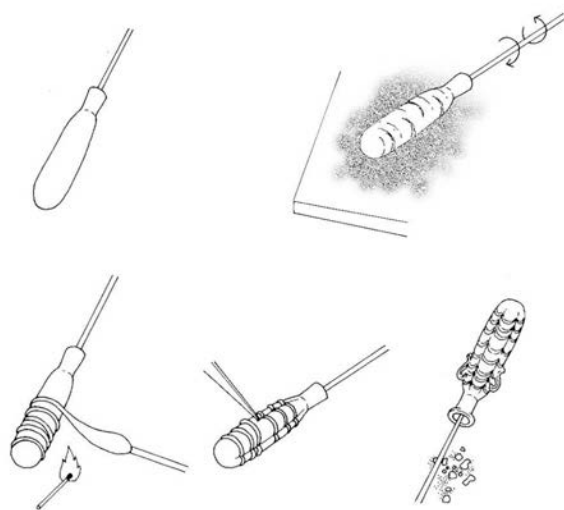
Throughout the Late Antique, Byzantine, and medieval periods, and according to social, economic, and commercial fluctuations, glass retained these uses. Glass served people in various ways in their everyday life, on official and important occasions, and finally accompanied them to their graves, where these fragile items were protected from breakage and the consequent recycling that was widely occurring, thereby offering us a better glimpse of the wide variety of shapes, sizes, and colors of these products.

## GLASS-FORMING TECHNIQUES

The common feature among all ancient and modern glass-forming techniques is that they make good use of the fact that glass becomes liquid if adequately heated. Then, with the help of gravity—and frequently also of rotation, which helps to maintain an object's symmetry—the molten glass is formed into the desired shape, using appropriate—and very basic—tools. During the Hellenistic era there was a push to explore the use of a variety of forming techniques. Blowing became the dominant technique after the first century CE.

### *Core-Forming*

Core-forming involves the formation of a vessel with the help of a metal rod, the tip of which has been covered with a core made of a mixture of inorganic and organic materials.<sup>6</sup> The exact details of this process are not yet fully known and more than one theory exists about it.<sup>7</sup> It seems that the core is coated with a layer of crushed glass mixed with a little water; this procedure is repeated as many times as necessary to obtain the required thickness. The core is then inserted in the furnace opening, where the molten glass fuses and the vessel is formed. Thin threads of glass in contrasting colors with the body are wound around the vessel and dragged up and down, forming festoons, zigzags, or feather-like motifs (fig. 11).<sup>8</sup>



**Figure 11.** Core-forming technique

A core of organic and inorganic materials is made on the end of a metal rod; the metal rod is then rolled on crushed glass and is inserted in the kiln until the glass melts and covers the core. The glassworker uses tools to form the rim and neck of the vessel, and then adds handles and base. The decoration is usually made by winding threads of colored glass that are often combed to create a zigzag or feathered pattern.

The earliest recorded appearance of the core-forming technique was in fifteenth-century BCE Mesopotamia and during the second half of the second millennium BCE in Egypt, where local glass production appeared as well. Egyptian glassworking is different in the higher quality of the glass employed, and the greater variety of vessel shapes and decorative themes used. The high quality of the vessels can be connected to the fact that glass was made in workshops associated with royal palaces; such vessels were made exclusively for the use of royalty and high nobility.<sup>9</sup> The Egyptian production of core-formed vessels, which include bottles, jugs, amphoriskoi, krateriskoi, beakers, flasks, cups, and other special shapes, has been organized into six major groups or workshops and the Getty collection includes examples of three of them.<sup>10</sup> Egyptian glass production of the Pharaonic era is represented in the J. Paul Getty Museum collection by amphoriskoi (cats. 1–2), a krateriskos (cat. 3), a lentoid flask (cat. 4), and a flask (cat. 5) dated in the middle of the second millennium BCE. Between the tenth and the eighth centuries BCE, when they reappear in Mesopotamia, the manufacture of core-formed vessels in Egypt appears to have ceased.<sup>11</sup>

Very few sites and little infrastructure for glassworking practices are preserved between the discovery of glass in ancient Mesopotamia and the Roman era. Nonetheless, some information can be extracted from written sources, from excavated artifacts related to glass production, and from the products themselves. For instance, Mesopotamian glassmaking recipes, preserved in cuneiform texts, inform us that there were already three types of glassmaking furnaces being used.<sup>12</sup> Also, the Hurrian site of Nuzi has yielded the earliest remains of glass manufacturing, dated in the second half of the fourteenth century BCE.<sup>13</sup> Finds from fourteenth-century BCE Tel el-Amarna in Egypt have been identified as primary glassworking installations, as were finds from thirteenth-century BCE Qantir, while wall decoration at Karnak from the period of Tuthmosis III (1479–1425 BCE) seems to show blue glass ingots.<sup>14</sup> Moreover, preserved glass ingots provide information regarding the form of furnaces and the materials used in firing; they show that glass was manufactured in small-scale crucibles of various shapes, either curved or rectilinear.<sup>15</sup> These ingots, discovered in excavations of shipwrecks, also prove that the primary production of glass was already taking place in the middle of the second millennium BCE, in locations and regions that were far distant from the areas in which that glass would eventually be formed into vessels or other solid objects. For example, the glass ingots found in the ca. 1400 BCE shipwreck at Ulu Burun off the western coast of Türkiye may have been made in Egypt.

Shipped to Greece, such ingots were formed into blue glass beads (cats. 509–532) by the Mycenaeans.<sup>16</sup> The oldest excavated glass workshop, safely dated in the fourth century BCE, was active in the city of Rhodes, Greece, where both vessels and beads were produced.<sup>17</sup>

Core-formed vessels appear for the first time in the Aegean Sea region in the sixth century BCE, quite probably having been produced on the island of Rhodes. These are genuinely innovative products that do not imitate or evolve from known shapes in the repertoire of Mesopotamian and Egyptian core-formed vessels, but rather render the shapes of contemporaneous Greek clay vessels, in particular alabastra (cats. 10–21), amphoriskoi (small amphorae) (cats. 34–41), aryballoi (cats. 53–56), and oinochoae/juglets (cats. 48–49). It is believed that they were used as unguentaria, intended for aromatic and cosmetic substances.

The earlier examples are dated in the period between the middle of the sixth to the end of the fifth century BCE and appear in large numbers in Rhodes, Macedonia, the Aegean islands, and Italy.<sup>18</sup> Two groups are easily discerned among these early examples, those made of dark blue and purple glass decorated with applied white, yellow, and turquoise threads (alabastra, cats. 13–21; amphoriskoi, cats. 35–41; aryballoi, cats. 53–56; oinochoae, cats. 48–49) and those made of milky glass decorated with purple threads (alabastra, cats. 10–11; amphoriskos, cat. 34). Core-formed vessels, like juglets with a spiky appearance (cat. 52), small bowls, and alabastra, were also produced in the Etruscan world from the middle of the seventh century BCE until the first decades of the sixth century BCE.

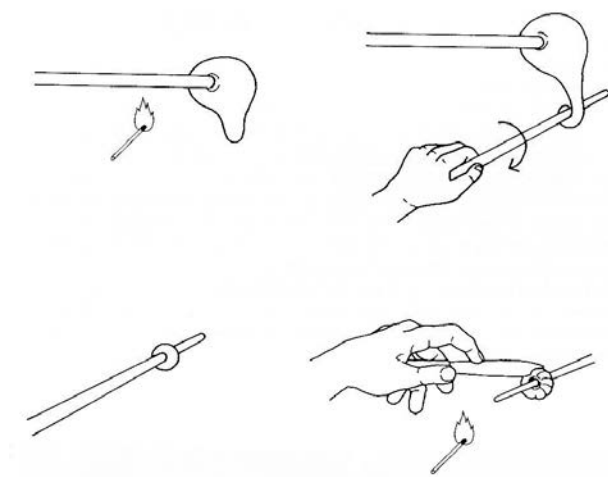
A second group of core-formed vessels appears after the early fourth century BCE; they were produced until the third century BCE. These vessels probably came from more than one workshop and are found predominantly in mainland Greece, as well as in central and southern Italy and, less often, on the Greek islands. The earlier examples of this group repeat the vessel types of the first group, that is, alabastra (cats. 22–26, 28, and possibly cat. 27), amphoriskoi, aryballoi, and juglets (cats. 50–51), with some differences in shape and decoration, following the morphological evolution of their clay counterparts. Sometime later completely new shapes appear, such as the hydricke, the unguentarium (cat. 42), and the lentoid aryballos.<sup>19</sup>

The third group of core-formed vessels is dated to the period between the second century BCE and the early first century CE; the centers of production appear to have been in Cyprus and on the Phoenician coast. What sets apart

this group from the previous two is that the alabastra (cats. 29–33) and the amphoriskoi (cats. 43–47) it includes are different in shape from the older ones, following the shapes of contemporaneous ceramic vessels.<sup>20</sup>

## Rod-Forming

In this method, a glass object is constructed around a metal mandrel (fig. 12). It was originally intended, and quite often was used, for making beads, pendants, and bracelets. Additionally, it allowed the construction of the tall, narrow vessels that first appeared in Egypt in the fourteenth century BCE,<sup>21</sup> in the Near East between the sixth and fourth centuries BCE,<sup>22</sup> and in the Hellenistic period.<sup>23</sup> Rod-formed cylindrical unguentaria known as “kohl tubes”—probable Iranian products dating to the fifth century BCE—are represented in the J. Paul Getty Museum collection by three ornate examples (cats. 7–9). Moreover, in the fourth and fifth centuries CE this technique was widely used on the Syro-Palestinian coast to form small-size vessels out of brightly colored opaque glass—usually black and turquoise (cats. 376–378)<sup>24</sup>—with a very few known later examples dated to the seventh and eighth centuries (cat. 379).



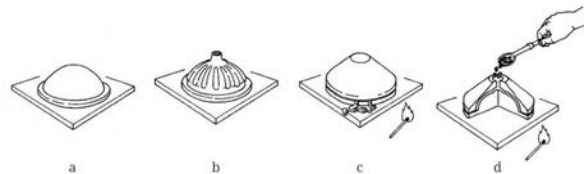
**Figure 12. Rod-forming technique**

A glass object is formed around a core or metal mandrel. Most beads, pendants, and some core-formed vessels are made by winding the molten glass around a rod.

## Casting

Casting in open, one-piece molds was the technique used for the production of the earliest glass objects, such as Egyptian inlays (cats. 443–448) and Mycenaean beads (cats. 509–532). Casting in closed molds is the technique of

forming a glass vessel or a solid object like a sculpture (cats. 574–575) through the use of a mold, which is filled with cullet (crushed residual glass) (fig. 13). It is based on the lost-wax casting technique, widely employed in metalworking.<sup>25</sup> Cullet was used because it was not possible through ancient pyrotechnologies to achieve temperatures high enough for the glass to melt and be poured into the mold. An early example in the collection of casting and drilling takes the form of an alabastron (cat. 6).



**Figure 13. Cast, lost wax technique**

(a) Former. (b) Lower part of the mold is placed on the former. (c) Upper part of the mold is placed on top of the lower part and heated. (d) Cullet of glass is poured into the cavity between the two parts of the mold, then heated and fused to form the vessel.

During the Julio-Claudian era, single-colored, brightly hued glass vessels appeared that had the exact same shape as the clay and silver vessels of that time.<sup>26</sup>

Although it was once believed that they were cast,<sup>27</sup> more recent research indicates that they may have actually been made using a rotary pressing variation (see below) (cats. 75–79).<sup>28</sup>

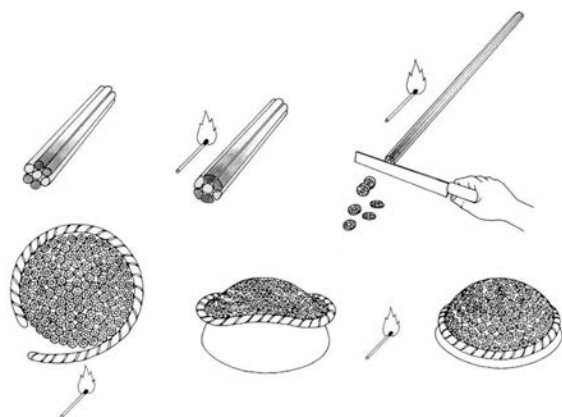
## Slumping

Slumping is a technique used to form open-shaped vessels by slumping, or sagging, a disk of viscous glass heated in the furnace over a convex former mold or in a concave, open mold; the glass disk gradually slumps and takes the shape of the mold through gravity, with the glassworker's appropriate tooling.<sup>29</sup> This technique appears relatively often in the years before the invention of glassblowing, used for various vessel forms and production methods. What vessels formed by slumping have in common is the fact that human breath was not used in their production. Such vessels were formed by heating the glass and using either a simple, open mold or a bipartite, closed one. In addition, in the early first century CE, slumped and blown mosaic vessels—small- or medium-sized flasks and unguentaria—were produced, illustrating the transition to the free-blowing technique (cats. 148–158).<sup>30</sup>

Mosaic vessels were made of bands and/or horizontal rod or cane sections of glass, known as florets (cats. 86–157).



Masses of hot glass of the adequate colors were put together, tooled, and adhered, creating a wide and thick plaque with the desired motif in large scale in it. This plaque was reheated and pulled out for several meters, producing thus a rod of a much smaller diameter with the design all the way through. Thin discoid sections of these rods or canes were cut and used to form mosaic vessels and architectural and furniture inlays. The bands/cane lengths used were sometimes simpler monochrome or polychrome pieces and other times composite ones, forming intricate motifs, such as spirals, concentric circles, or rosettes. These pieces were heated on a flat surface; placed in contact with each other, they fused together and created a disk, whose perimeter was enclosed by a twisted polychrome—usually white and blue—glass coil. In order to give the mosaic vessel its final form, glassworkers then used the slumping technique on a convex former mold (fig. 14).<sup>31</sup> It is possible that for some types of vessels, glassworkers used a bipartite mold, which was filled with discoid tesserae that had been cut from cylindrical canes. The mold was sealed and heated so that the tesserae would fuse. After the vessel was annealed, it was internally polished on a lathe.



**Figure 14.** Slumping technique

(a) Glass rods of various colors bundled together; (b) heated; (c) stretched and cut in small disks, i.e., florets; (d) florets arranged and heated to form a disk framed by a twisted glass rod; (e) disk slumped over a former mold to assume vessel's final shape.

A long tradition of mainly monochrome glass inlays placed in cells cut into a wooden background flourished, especially during the Late Period in Egypt (712–332 BCE). They were used to decorate objects intended for religious or funerary purposes. Later, probably in Egypt or also in Italy, in about the late first century BCE through the early first century CE, composite mosaic glass canes were produced which were cut into slices, forming small plaques. They thereby presented a complete miniature theme from fused together glass canes that were tooled to

form the appliqué of the incrustation bearing the entire desired motive and pulled out and reduced to the desired minuscule size: geometrical patterns, floral motives, theatrical masks, fish, deities, and imitations of veined stones (cats. 496, 501). These plaques represent the most exquisite and technically refined glass products of the ancient world. They were used to decorate wooden objects, like caskets or boxes, framed with other monochrome or polychrome glass elements, probably used in rows of similar motives.<sup>32</sup> A unique trimming of such a rod composed of concentric layers of bright colored glass, which was pierced and used as a pendant, is in the Museum collection (cat. 554). Florets and other sections of mosaic rods and canes were used for the creation of beads (cats. 534–541) representing geometrical patterns or human faces.

Millefiori vessels are recognized as a special type of mosaic vessel even though their forming process was not technically different. Millefiori-vessel tesserae were pieces of composite mosaic canes that had the shape of a flower in cross-section, known as florets. The collection includes two dishes (cats. 86–87) and 28 bowls (cats. 88–112, cats. 114–116) are included.

The twisting network vessels of the reticella type are another category of mosaic vessel, whose forming technique was, however, different. They are made of a distinctive glass cane, composed of one or two thin threads of colored glass twisted onto or inside clear molten glass.<sup>33</sup> The vessels were formed by firing and fusing together short canes of the type forming a disk, or by winding a long, hot cane around a former mold with the help of a long, wide, flat wooden tool, the paddle, while the rim was formed by attaching a twisted, bichrome coil.<sup>34</sup> In the collection reticella mosaic vessels include fragments of two bowls (cats. 125–126).

Marbled mosaic vessels and gold-band mosaic vessels are formed in a similar way.<sup>35</sup> A composite glass cane, with the desired motif formed along its length, was wound spirally on a flat surface. It was then pressed again at regular intervals so that an undulating motion would complement the spiral decorative motif, which resembled the veining of semiprecious stones.<sup>36</sup> The vessel assumed its final shape through slumping in a former mold, a process that further distorted the decoration and rendered it even more intricate. In the Museum collection marbled mosaic vessels include four bowls, one plain (cat. 132), and three ribbed (cats. 133–135); a lidded pyxis (cat. 136); and fragments of six unidentified vessel shapes (cats. 137–142). In addition, there are three gold-band vessels: an alabastron (cat. 145), a pyxis (cat. 147), and a

flask (cat. 146). Furthermore, in the collection are striped mosaic vessels—that is, vessels made of lengths of mosaic canes—including an alabastron (cat. 117) and six bowls (cats. 118–123, and eight vessels of unidentified shape cats. 124–131).

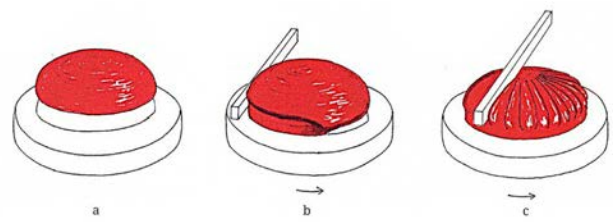
Some closed-shaped vessels were also formed by firing a blank disk composed of bands of glass. The disk was heated and slumped on an oval former mold made of plaster; gravity allowed its bottom part to acquire a conical shape. This part was then compressed into a narrow cylindrical neck with the help of a paddle. At the end of the process the form was crushed and its remains were removed from the inside of the vessel.<sup>37</sup> For examples in the Museum collection, see the gold-band alabastron (cat. 145) and the flask (cat. 146). In the case of gold-band mosaic vessels, a band made of a sheet of gold leaf encased between two layers of transparent glass was used together with other composite bands, each made of two or three different colors of opaque glass. In the collection, three gold-band vessels appear: an alabastron (cat. 145), a flask (cat. 146), and a pyxis (cat. 147).

## Rotary Pressing

This technique is almost the same as that of mold pressing, that is, the technique of forming an object by pressing viscous glass into an open mold made of plaster or clay; the only difference is that the former mold is placed on a potter's wheel so that it can be rotated.

The desired decoration is generated in intaglio on the inside of a plaster mold or former; the mold/former is then placed on the potter's wheel and preheated viscous glass is pressed onto its walls with a plunger that thus shapes the interior of the vessel. The mold is shattered in order to release the finished vessel.<sup>38</sup> It is very likely that cameo glass vessels were at least partly formed through this technique (cats. 82–85).<sup>39</sup>

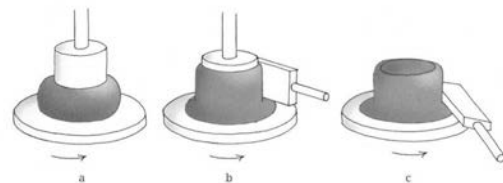
The ribbed bowl (cats. 66–74) is a widely circulated vessel form that was produced by a variation of this technique. Even though there are different theories as to the technique that was used to form such bowls, the prevailing one today is the following: a preheated disk of glass is placed on a form in order to receive its final shape, while at the same time it is pressed radially with a rod in order for the relief ribs to be created (fig. 15).<sup>40</sup> After this is done, the vessel is momentarily reinserted in the furnace, and the heat to which it is exposed polishes its exterior. The vessel's interior, as well as the exterior of its rim, is cold-polished on the lathe, a process which leaves visible traces in the form of fine striations.



**Figure 15.** Rotary-pressing technique for a ribbed bowl  
(a) Heated mass of glass slumped on former mold placed on a potter's wheel; shaping (b) and decorating (c) vessel while slowly rotating.

A class of single-colored, brightly hued vessels appeared in the late first century BCE and were produced into the first half of the first century CE; their shape was identical to that of contemporary clay and silver vessels.<sup>41</sup> These used to be considered as cast<sup>42</sup> but more recent research suggests that they were produced through a variation of rotary pressing.<sup>43</sup> In the Getty collection five bowls are included (cats. 75–79).

Finally, another simple vessel-forming technique, heavily influenced by pottery making, consists in placing a heated mass of glass on a potter's wheel and forming the vessel's vertical walls by simultaneously pressing a plunger in the center of the glass and using a paddle on the exterior (fig. 16). These two tools substitute for the potter's hands. It is thought that this technique was invented in Crete in the early second century BCE; it was used in the production of a particular type of pyxis.<sup>44</sup>



**Figure 16.** Rotary-pressing technique for a Cretan pyxis, 3rd–1st century BCE  
(a) The vessel is formed on a potter's wheel. (b) The viscous glass is pressed down with a plunger on the rotating lathe. (c) A paddle shapes the outside.

## Free-Blowing

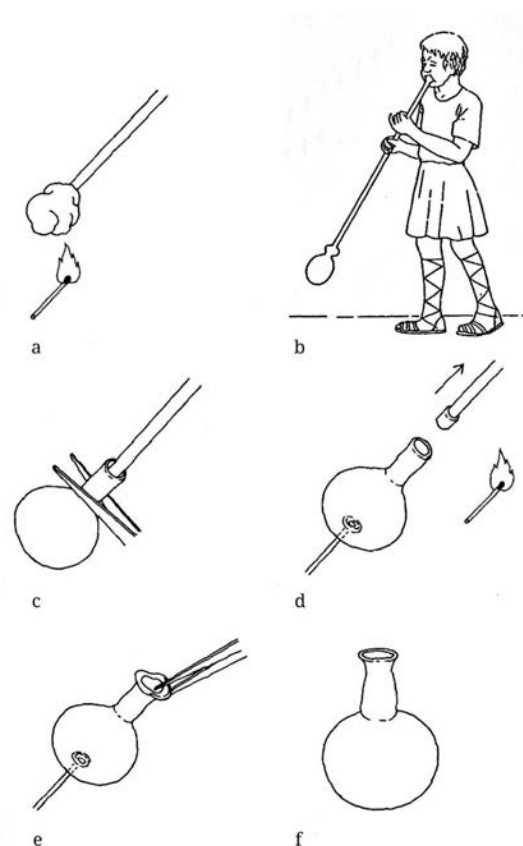
The technique of free-blowing involves the inflation and further shaping of molten glass through the use of human breath channeled through a heat-insulated pipe. According to Pliny, glassblowing, or *flatu figurare*, that is, “shaping by breath,” was one of the three techniques that made Sidon a famous glassworking center.<sup>45</sup> The technique was invented in the first half of the first century BCE somewhere in the Syro-Palestinian area, where there was already a centuries-long tradition in

glassworking.<sup>46</sup> Around the middle of the first century CE, free-blowing began to spread beyond the Syro-Palestinian region to Italy, Switzerland, and Dalmatia.<sup>47</sup>

The period of the technique's spread and popularization coincided with the Augustan age—and the resulting political calm and economic flourishing. Moreover, this political situation made possible easy and fast communication between the different provinces. The economic boom in Italy attracted tradesmen and workmen from all over the Empire and especially from the eastern provinces. The quality and quantity of early blown vessels that have been preserved in the West, in contrast to the relative scarcity of such finds in the East, would seem to support this hypothesis. It appears that the blowing technique was perfected in Italy and, as documented also in historical sources,<sup>48</sup> particularly in Rome, where glassworkers from the East—Sidonians especially—relocated for financial reasons.<sup>49</sup>

The free-blowing technique reached maturity with the help of three developments: the invention of the closed, vaulted furnace, in which it is possible to melt glass in a clay crucible or tank, which occurred by the third quarter of the first century CE at the latest;<sup>50</sup> the invention of the blowpipe, a hollow rod—probably at first made out of clay and later of metal—through which the vessels were blown;<sup>51</sup> the use of the blowpipe or of some other, solid iron rod (a pontil), onto which the half-finished vessel is transferred in order for the vessel's rim to be formed while it is still hot (fig. 17).

The innovative discovery of blowing rendered the production of glass vessels much easier and more economical, as each vessel could be made with much less glass and the formation process was much swifter in comparison with earlier techniques. Strabo illustrates this shift clearly when he writes that in the second half of the first century CE one could buy a glass vessel for just one copper coin.<sup>52</sup> This resulted in the devaluing of glass objects in the economic and aesthetic system of Roman society. The use of glass then spread throughout all social strata, and geographically it reached the most remote parts of the Roman Empire and even beyond. Glass vessels also took on new functions, such as the transport and storage of liquid and solid products in large quantities. Gradually, everyday, utilitarian glass objects began to be sold by the pound.<sup>53</sup> Blowing and technical processing in general did not significantly add to the price of glass as a raw material. This clearly points to the simplification of the forming process, as well as to the widespread circulation of glass products, even though



**Figure 17. Free-blowing technique**

Forming an object by blowing into a mass of hot glass. (a) Blowing is done with the blowpipe, on whose lower end the gob (molten glass) has already been picked up. (b) The parison (bubble of glass at the end of the blowpipe) is produced by the initial act of blowing, and the final product is then formed. (c) The neck and the body are finalized while still attached to the blowpipe. (d) Then a metal rod (pontil/pounty) is attached to the bottom of the vessel and the blowpipe is cut off/removed. (e) While still on the pontil, the vessel's rim is shaped, and additional elements (handles or decorative elements, e.g., blobs or threads) are applied. (f) The vessel is left to cool (anneal) gradually.

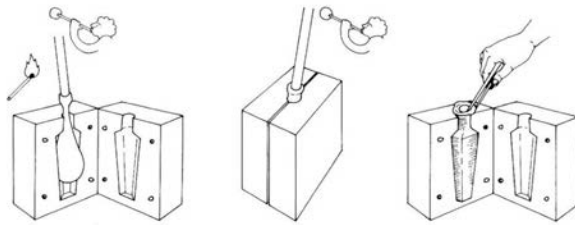
they are known to have been ten times more expensive than clay vessels of equal size.<sup>54</sup>

Free-blown vessels represent the largest group of the Getty Museum vessels, with 148 examples, among them 4 plates and dishes (cats. 229–232), 23 bowls and cups (cats. 233–255), 10 beakers (cats. 256–265), 1 skyphos (cat. 266), 1 kantharos (cat. 267), 2 amphorae (cats. 268–269), 14 flasks (cats. 270–283), 5 guti (cats. 284–288), 18 jugs (cats. 289–306), 1 bottle (cat. 307), and 28 unguentaria (cats. 190–217) (12 handleless, 3 sprinklers, 11 amphoriskoi, 2 oinochoae).

## Mold-Blowing

Mold-blown vessels—vessels made by blowing a heated mass of glass into a previously manufactured container, on the inside of which is an intaglio decoration that

becomes imprinted on the exterior surface of the vessel being formed—were always a rarity (fig. 18). Even during the time of the technique's greatest popularity in the first century CE, such items represented only a small fraction of the total glassworking production. This was an important technique from an aesthetic perspective, but quantitatively contributed only very little to the totality of glass production.<sup>55</sup> The use of this technique with glass presents special difficulties. Unlike clay, glass does not shrink when cooling; it inserts itself in the most detailed points of the mold's decoration, where it remains and hardens. It was therefore necessary to use two- and three-part clay or plaster molds<sup>56</sup> that were casts of metal or glass originals. The molds were repaired or fully replaced relatively frequently because, upon coming into contact with the hot glass, they were subjected to a strong thermal shock that wore them out after a short period of use.



**Figure 18.** Mold-blowing technique

The vessel is formed by blowing into a concave or a specially shaped mold; the vessel is completed with the free-blowing of its rim and the attachment of handles.

Mold-blowing, referred to as *argenti modo caelere*, according to Pliny, is one of the three techniques that made Sidon a renowned glassworking center.<sup>57</sup>

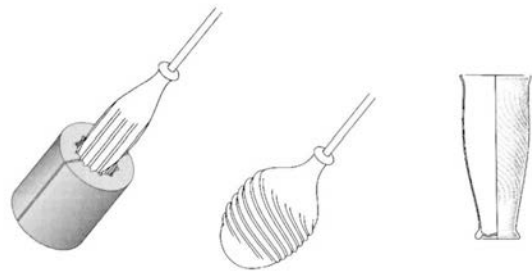
The use of multipart molds was invented and developed on the Syro-Palestinian coast, probably in an effort to form glass products that imitated metal prototypes with forged-decorated surfaces.<sup>58</sup> Mold-blowing started to be used commercially during the time of Augustus; its development in the western part of the Roman Empire began probably around the middle of the first century CE, with a focus on the production of tableware.<sup>59</sup> It remained popular until the end of the Flavian era (69–96 CE), when it was superseded by the facet-cutting technique. Mold-blown vessels continued to be made, albeit sporadically, until the fourth century CE, using a very restricted set of decorative themes that mostly depicted human heads.<sup>60</sup> Polygonal *eulogia* vessels, meant to hold sanctified liquid, water, or oil from the Holy Land, appeared in the eastern Mediterranean in the late sixth

and early seventh centuries CE, bearing religious decorations consisting of Christian and Judaic motifs.<sup>61</sup>

Mold-blown vessels represent a large group among the Getty vessels, with 59 examples. Among them are 10 bowls and cups (cats. 159–168), 6 beakers (cats. 169–174), 6 flasks (cats. 175–180), 9 jugs (cats. 181–189), and 28 unguentaria (cats. 190–217: 12 handleless, 3 sprinklers, 11 amphoriskoi, 2 oinochoae).

## Dip Mold–Blown

Dip mold–blowing is a variation on the mold-blowing technique used to produce decorated vessels, fully formed in a mold, with only details like the handle or rim shaped freehand. It comprises vessels that were produced by free-blowing, but whose decorations were first formed in a mold. These vessels acquired their relief decoration during the early stages of blowing by being inserted into a mold or a ring with a relief interior. Then, using free-blowing, they were given their final shape. As a result, the decoration expanded, covering a larger area and thus faded out and extruded less (fig. 19). Throughout the Roman era, dip mold–blowing was employed at various periods, especially during the fourth and fifth centuries CE.<sup>62</sup> Additionally, it has been shown that, at least in some cases, engraved decorations were first roughly indicated by blowing the vessel in the appropriate mold before these blanks were completed by wheel-cutting.<sup>63</sup>



**Figure 19.** Dip mold-blowing technique

A vessel is partially formed by blowing into an intaglio or specially shaped mold; the vessel then acquires its finished dimensions through free blowing during which the original mold-made decoration is blunted or altered.

Dip mold–blown vessels represent a small group among the Getty vessels, with 11 examples. Among them appear one bowl (cat. 218), one beaker (cat. 219), one amphora (cat. 220), and eight flasks (cats. 221–228).

## DECORATIVE TECHNIQUES

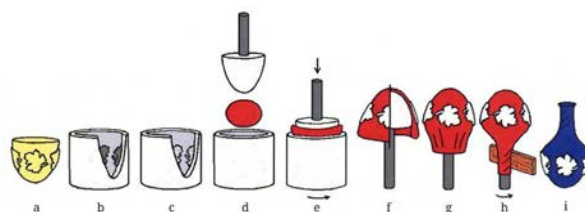
### *Wheel-Cutting/Engraving*

This technique involves the removal of part of the mass of glass from a vessel with the help of a bowdrill. It was used to partially form some vessels during Classical Greek and Hellenistic times in the second half of the first millennium BCE.<sup>64</sup> During the Roman period all the ways of creating engraved decorations known today were in use. These engraved vessels are the vessels known in the historical sources as *τορεύματα* (“works in relief”);<sup>65</sup> their decorations were formed with a rotating stone or metal lathe and pointed metal tools.<sup>66</sup> The use of this technique linked glass and glass decorating with minor-object manufacture in general and with the production and decoration of silver and bone vessels and objects in particular.<sup>67</sup> The decoration consisted mainly of geometrical patterns, faceting, inscriptions, floral motifs, and figurative scenes. Interesting examples in the collection include among others a plate (cat. 232), bowls (cats. 252, 256), a jug (cat. 290), and a flask (cat. 363).

### *Cameo Glass*

The cameo technique also became linked with engraving. It was traditionally believed that cameo vessels or objects were produced through the repeated blowing, or “casting,” of different-colored layers of glass, that is, a darker background was coated with a white layer, a process repeated when more than one color was used. According to this view, the desired motif was carved into the outer layer through cold-cutting and cold-polishing, thus revealing around it the layer of glass below, a dark-colored background, against which the motif carved on the lighter-colored, upper layer would stand out. However, current scientific opinion holds, more convincingly, that basically the decoration was impressed on the vessel at the very moment of its formation, which occurred through rotary pressing in a mold. In the mold the different-colored plastic elements of the decoration were filled in advance with wet crushed glass, which melted and fused as the semi-viscous glass that would form the inner layer of the vessel body was pressed in (fig. 20).<sup>68</sup>

Very few vessels with cameo decorations have been preserved; most surviving specimens are dated to the late first century BCE and the first half of the first century CE.<sup>69</sup> The cameo technique, simplified and executed by wheel-cutting, is revived in the fourth century. These late products differ from the earlier



**Figure 20.** Rotary pressing technique for a cameo vessel  
(a) Wax model with decoration in relief. (b) Plaster mold with spaces. (c) Spaces are filled with glass powder, perhaps also with binders. (d) Glass is pressed in. Hot glass melts the powdered glass that is being pressed in. (e) The plaster mold is turned and broken off. (f) The newly made glass is turned upside down. (g) The new glass sags and the rim flows. (h) The rim on the new glass is constricted. (i) The new glass is turned right side up and annealed (cooled).

examples in that their body is made of more translucent glass and their decoration is flat with vertical edges.<sup>70</sup>

In the Getty collection there are four cameo vessels, and among these are two of the most spectacular extant examples, a two-handled footed bowl, or skyphos (cat. 82), and a small flask (cat. 84). The other two examples are fragments of another skyphos (cat. 83) and an unidentified vessel (cat. 85).

### *Application of Plastic Elements*

Decoration with applied plastic threads and coils of varying diameters constitutes the oldest decorative technique in glassworking, known since Pharaonic, Classical Greek, and Hellenistic times, and still in use during Roman times as well. In cases where the thread is attached to the vessel and marvered before the latter acquires its final dimensions, it is fully incorporated into the vessel's surface and, provided that it is thick enough and appropriately placed, it may resemble the veining in stone vessels. In the first century CE, moreover, marvered and flattened threads, usually white ones on dark-colored vessels, are combined with pressed ribs to create the very particular vessels that are known by the German term “zarte Rippenschalen” (cats. 236, 238).<sup>71</sup> Usually, however, the thread is attached after the vessel has acquired its final dimensions and therefore remains a relief decorative element.

In general, there can be discerned the following types of applied elements: (1) Oblong elements, finer threads, and thicker coils—left in relief (flasks and unguentaria, cats. 329, 365, 367, 370) or marvered flush on the surface of the vessel (cat. 298). In the second century CE a particular technique known as snake-threading involved the application of thick, flattened threads that bear a simple geometric motif in relief on their surface (cat. 270). (2) Circular elements, plain, amorphous, or circular

blobs—either left in relief (bowls, cats. 254–255) or marvered flush (modiolus, cat. 233, aryballos cat. 352, amphoriskos cat. 355)—and relief decorative medallions.

### ***Gold-Glass, or “Fondi d’Oro”***

The gold-glass technique first emerged during the Classical Greek period, used in decorative inlays for couches, thrones and statues,<sup>72</sup> while in Hellenistic times it was used for the decoration of vessels.<sup>73</sup> It appears to have been forgotten or to have fallen into disuse until the fourth century CE, when it reappeared.

The exact shapes of the vessels on which this technique was applied are not known since no whole vessels have survived. The extant specimens consist of flat vessel bottoms that were discovered, almost in their entirety, embedded in the plaster that sealed tomb openings in the Roman catacombs. Overall, there are known examples of Christian, Jewish, and pagan themes used in the decorations. Among other hypotheses, it has been assumed that such vessels were produced in order to be used as keepsake gifts on formal occasions, such as weddings and anniversaries or the assumption of public office.<sup>74</sup>

Specific technical details regarding this decoration method remain unclear. In general, it refers to the attachment of a thin sheet of gold leaf to the inside bottom of an open-shaped vessel. The desired theme is engraved on the gold, while in some cases color is added to emphasize particular details. Subsequently, a second parison of glass is blown inside the vessel, which has already been adequately reheated so that it does not fracture due to thermal shock. The new layer of glass attaches itself to the walls of the vessel, thus sealing and protecting the decoration between two layers of translucent glass.<sup>75</sup> This technique is used, both during the fourth century and the sixth century CE, for the production of tesserae as well as of plaques and crustae of opus sectile wall revetments.<sup>76</sup> In the Getty collection there are two nineteenth-century replicas of gold-glass bowls (cats. 438–439).

### ***Indentations***

While the vessel is still hot it is decorated around its exterior with impressions that are probably intended to imitate the look of forged metal, the more valuable prototypes of glass vessels; the indentations are formed by simple thrusts with the help of pucellas. The same technique was also occasionally applied on clay vessels of the same period.<sup>77</sup> The vessel body thus becomes

sometimes almost cube-like and other times corrugated in shape. This technique, already used for free-blown vessels since the second half of the first century CE,<sup>78</sup> becomes most widespread between the second and fourth centuries CE (cats. 261, 271, 344).<sup>79</sup>

### ***Pinching***

Protrusions of various sizes are created on the surface of the glass vessel with the help of pincers; these projections are usually spread all over the lower part of the vessel body (cats. 282–283, 349) and sometimes form toes (cats. 323–324) or a ring that acts as a substitute for a base (cat. 350). These protrusions are usually flat; they have a small indent in their middle that is sometimes perforated because of the pressure exerted by the pincers.<sup>80</sup>

This decorative technique appears in the eastern Mediterranean at the end of the second century CE,<sup>81</sup> becomes more widespread from the fifth century on, and remains in use until the eighth century, at least in Jordan and in the Syro-Palestinian area (cats. 345–347).<sup>82</sup> Pinching was also used for the shaping of scalloped rims, such as in the case of a bowl in the collection (cat. 249).

A technique that produces similar results, but is nonetheless different in terms of production, was used on vessels that have thicker, elongated protrusions, called “fins,” that are more regularly formed and arranged. In all likelihood, the fins in this case were created through mold-blowing. This technique appears around the third century CE<sup>83</sup> and remains in use during the fourth century CE<sup>84</sup> as well.

Finally, another similar, but more intricate decorative pattern—called “bifurcated” or “Fadendekor”—can also be produced by using pincers before the vessel has acquired its final size. In its simpler form the pattern is composed of vertical relief ribs that decorate the belly of the vessel, from base to shoulders. In its more complex version, the ribs are compressed at regular intervals, creating a rhomboid network.<sup>85</sup>

### ***Bicoloring***

Two or more different colors of glass were used in the production of vessels in Pharaonic Egypt, ancient Greece, the Roman world, and during medieval times. As part of the decoration of a vessel, the handles, the base, or even applied threads or blobs were formed of glass in a bright color that was different from the color of the vessel body.<sup>86</sup> See, for example, core-formed alabastra and jugs (cats. 1, 7, 15, 50); mold-blown flasks (cats. 206, 208, 216); a

dip mold-blown amphoriskos (cat. 220); and free-blown jugs (cats. 291, 304, 305), jars (cats. 310, 313), and an amphoriskos (cat. 268).

## Painting/Enameling

After the Late Classical Greek and Hellenistic periods (fifth–first centuries BCE), painting/enameling was used quite rarely as a decorative technique on glass vessels, occasionally alongside gilding.<sup>87</sup> However, glass vessels with rich painted decorations do appear in relatively larger numbers in the last quarter of the first century CE. Pliny, who died in 79 CE, noted that in his time glass was the most adaptable material, useful even for painting.

The material used is a kind of enamel: pulverized glass of the desired hue mixed with a liquid. The mixture is painted on the vessel, which is then heated so that the decoration can fuse to its surface.<sup>88</sup> Among the earliest Roman glass vessels decorated with enamel are bowls, such as cat. 239, made between about 40 and 60 CE; these may be one of the forms of painted glass that attracted Pliny's attention.<sup>89</sup>

There are known examples of gilded vessels and plaques from the first and second centuries CE. In that period gilding was done after annealing and involved the application of gold leaf onto the surface to be decorated; the design details were then engraved with a pointed tool.<sup>90</sup>

Finally, the decorations on some third-century vessel lids were cold-painted. To keep the decoration protected from damage—to which it was particularly susceptible because of its means of production—the design was painted in reverse on the inside surface of the lid, intended to be viewed through the glass.<sup>91</sup>

All of the techniques described above continue in use during the third and fourth centuries CE,<sup>92</sup> and they reappear occasionally later, such as during the Middle Byzantine period, between the tenth and thirteenth centuries CE.<sup>93</sup>

## NOTES

- Stern and Schlick-Nolte 1994, pp. 28–37; Nicholson and Henderson 2000, pp. 195–224; Rehren 2021.
- Nenna, Picon, and Vichi 2000, p. 99.
- Pliny, *Natural History* 36.62, 36.193; Seneca, *Epist.* 90.31, and 105; Brill 1999, vol. 1, pp. 15–17.
- Glassmaking and glassworking had been considered distinct processes since the fourteenth century BCE, as evidence of glass ingots from the Ulu Burun shipwreck demonstrates. See Bass 1986, pp. 281–282; Nicholson, Jackson, and Trott 1997, pp. 143–153.
- Antonaras 2012, pp. 10–15, wherein previous bibliography.
- Auth 1976, p. 20; Stern and Schlick-Nolte 1994, p. 29.
- Stern and Schlick-Nolte 1994, pp. 28–33.
- Harden 1981; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 28–36, 37–44.
- Stern and Schlick-Nolte 1994, p. 26.
- Nolte 1968.
- Stern and Schlick-Nolte 1994, pp. 28–37.
- Oppenheim et al. 1970, pp. 69–71.
- Schlick-Nolte and Lierke 2002, p. 19; Vandiver 1983, pp. 239–247.
- For the finds from Amarna, see Nicholson, Jackson, and Trott 1997, pp. 143–153, pl. XVII; Nicholson 2007, esp. pp. 125, 158. For the finds from Qantir, see Rehren and Pusch 1997. For the finds from Karnak, see Schlick-Nolte and Lierke 2002, pp. 17–22, figs. 3–4.
- Barag 1985, pp. 107–113; Stern and Schlick-Nolte 1994, p. 20.
- On Mycenaean beads, see Nightingale 2002, with further bibliography.
- Triantafyllidis 2000, pp. 36–39, 193–195.
- Harden 1981, pp. 58–99; Grose 1989, pp. 110–115.
- Harden 1981, pp. 100–121; Grose 1989, pp. 115–122.
- Harden 1981, pp. 123–141; Grose 1989, pp. 122–125.
- Stern and Schlick-Nolte 1994, p. 136, with rich bibliography on the Egyptian finds of the kind.
- Barag 1975, pp. 23–26.
- Ignatiadou 2017, p. 61; Lierke 2001, p. 183, fig. 10.
- Barag 1975, p. 30, note 29; Stern 2001, p. 144, nos. 78–81.
- Stern and Schlick-Nolte 1994, pp. 50–52; Lierke 2001, pp. 183–184.
- Grose 1991, p. 2; Grose 1989, p. 254.
- Stern and Schlick-Nolte 1994, pp. 64–65.
- Lierke 1999, pp. 58–59.
- Stern and Schlick-Nolte 1994, pp. 68–71.
- Grose 1989, pp. 261–262; Stern and Fünfschilling 2020, pp. 41–68.

31. Stern and Schlick-Nolte 1994, pp. 64–65, 68–69. Very enlightening on this matter are the illustrations in Tait 1991, pp. 219–221, where glassmaker B. Gudenrath recreates the process using modern equipment.
32. Bianchi 1983a; Bianchi 1983b; Grose 1989, pp. 351–358; Stern and Schlick-Nolte 1994, pp. 61–63, 360–364, 368–409; Nenna 1995; Auth 1999; Mahnke 2008; Nenna 2010, pp. 81–85.
33. Stern and Schlick-Nolte 1994, p. 54.
34. Auth 1976, p. 54, col. pl. 51; Stern and Schlick-Nolte 1994, pp. 65–66, 274–275; Lierke 1999, pp. 39–41.
35. Lierke 1999, pp. 61–66.
36. Weinberg and McClellan 1992, pp. 56–57, no. 48.
37. Lierke 1999, pp. 64–66; Schlick-Nolte and Lierke 2002, pp. 29–31.
38. Lierke 1999, pp. 32–36, 102–103.
39. Lierke and Lindig 1997; Lierke 1999, pp. 67–96.
40. Stern and Schlick-Nolte 1994, pp. 72–78.
41. Grose 1991, p. 2; Grose 1989, p. 254.
42. Stern and Schlick-Nolte 1994, pp. 64–65.
43. Lierke 1999, pp. 58–59.
44. Lierke 1999, pp. 37–39; Stern and Schlick-Nolte 1994, pp. 79–81.
45. Pliny, *Natural History* 36.193. For a detailed commentary on the passage, see Stern 2007, pp. 358–359.
46. Israeli 1991, p. 53.
47. Stern 1999a, p. 443.
48. Strabo, *Geographica* 16.2.25.
49. Stern 2004, pp. 82–83.
50. Baldoni 1987; Stern and Schlick-Nolte 1994, pp. 24–25.
51. Stern 1999a, pp. 446–447.
52. Strabo, *Geographica* 16.2.25. For a detailed commentary on the passage, see Stern 2007, pp. 362–363.
53. Barag 1985, pp. 113–116.
54. Stern 1999a, pp. 460–466.
55. Fleming 1999, p. 42. For a general overview of finds from different areas, as well as of specific techniques and products, see Fontaine-Hodiamont, Bourguignon, and Laevers 2010. A concise overview of what is known about this technique can be found in Stern 2010. For an example of finds from a large Mediterranean city, see Antonaras 2010c.
56. Stern 1995, pp. 46–47.
57. Pliny, *Natural History* 36.193. For a detailed commentary on this passage, see Stern 2007, pp. 359–362.
58. Isings 1957, p. 45, type 31.
59. Stern 2001, p. 41.
60. Stern 1995, pp. 201–246. On the production of mold-blown and dip mold-blown vessels in a large Mediterranean center like Thessaloniki throughout the Roman period and on the relation and juxtaposition of this technique with free-blowing, see Antonaras 2010c, p. 252.
61. Barag 1970c, pp. 35–63; Barag 1971, pp. 45–63; Stern 1995, pp. 247–269; Newby 2008, *passim* and see pp. 12–17 for an introduction.
62. Price and Cottam 1998, p. 13; Stern 2001, pp. 27, 133–134.
63. Sorokina 1978, pp. 118–119, pl. 4.2; this technique has been traced in a workshop of the second and/or third century CE at Tanais, on the Black Sea.
64. Ignatiadou 2017, p. 61.
65. Martial, *Epigr.* 11.11 and 12.74. Clement of Alexandria, *Paedagogus* 2.3.35. For detailed commentary on the passages, see Trowbridge 1930, pp. 109, 166, respectively.
66. This technique has been studied in detail in Paolucci 1997, pp. 17–20 and *passim*. On techniques that survived through the Middle Ages and in more recent times, see Charleston 1964, pp. 83–100 and Charleston 1965, pp. 41–54.
67. Paolucci 1997, pp. 63–80.
68. Lierke 1999, pp. 67–96, esp. 83–85. On older hypotheses regarding the way of production, see Gudenrath and Whitehouse 1990; Painter and Whitehouse 1990a; Painter and Whitehouse 1990b; Sternini 1995, pp. 120–121.
69. Whitehouse 1991.
70. Whitehouse 1990. For an overview on the matter with many examples from the Corning Museum of Glass collection, see Whitehouse 1997a, pp. 41–65.
71. Stern 2001, pp. 81–82.
72. Stern 1999b, pp. 40–41; Ignatiadou et al. 2005.
73. The term is used for the first time in Athenaeus, *Deipnosophistae* 5.199f, in relation to glass vessels. For a commentary on the passage, see Trowbridge 1930, pp. 110, 154, note 23. For gilded vessels of this period, see Stern and Schlick-Nolte 1994, pp. 262–267, nos. 69–70; Ignatiadou 2000, pp. 35–36, figs. 1–4; Arveiller-Dulong and Nenna 2000, pp. 168–171.
74. Cameron 1996.
75. Stern 2001, pp. 139–140.
76. Antonaras 2008, pp. 298–302.



77. E.g., a fourth-century CE vessel from Thessaloniki (acc. no. BK 4467/186 in Museum of Byzantine Culture, Thessaloniki), rendering in clay a glass vessel of Isings's form 103 with indentations around the body.
78. Isings 1957, p. 46, form 32, and p. 49, form 35.
79. Price and Cottam 1998, p. 33; Stern 2001, pp. 209–211, 242–243, nos. 99–101, 128–129.
80. Stern 2001, p. 248, no. 134, where there is also a relevant bibliography.
81. Price and Cottam 1998, pp. 32–33; Stern 2001, pp. 249–251, nos. 135–137.
82. Dussart 1998, p. 128, BX 111a, table 32/1, p. 158, BX 83, table 46/21, p. 161, BXII.1, table 49/1; Stern 2001, p. 354, no. 201; Gorin-Rosen 2006, p. 111, note 7.
83. Weinberg and McClellan 1992, p. 132, no. 107; Fremersdorf and Polónyi-Fremersdorf 1984, p. 65, nos. 152–153.
84. Dussart 1998, p. 162, BXII 214, table 49/7.
85. Weinberg 1988, pp. 3, 80–81, cat. nos. 351–353, drawing in table 4-39, photo in table 4-15/351, 352, where there is also an older bibliography, as well as technical and production details.
86. For typical examples from various periods and places of origin, see Stern and Schlick-Nolte 1994, pp. 137, 205, 237, 279, nos. 8, 43, 59, 76; Stern 2001, pp. 70, 119, 193, 235, 238, nos. 13, 49, 84, 121, 124.
87. Stern and Schlick-Nolte 1994, pp. 262–267, nos. 69–70; Ignatiadou 2000, pp. 35–36, figs. 1–4; Arveiller-Dulong and Nenna 2000, pp. 168–171.
88. Rütli 1991b.
89. Rütli 1991b, pp. 134–135.
90. Whitehouse 2001a, pp. 254, 273–274, no. 866.
91. Vessberg 1952, type I lid, pp. 149–150, table X, no. 5; Whitehouse 2001a, p. 264, no. 859.
92. Whitehouse 2001a, pp. 253–277.
93. Grabar 1971, pp. 90–106; Whitehouse 1998b, pp. 4–7; Antonaras 2010b, pp. 395–397.

# Catalogue



## 1. Amphoriskos

<b>Accession Number</b>	2003.146
<b>Dimensions</b>	est. H. 12.6, pres. H. 9.5, Diam. rim 2.5, Diam. base 2.8 cm; Wt. 83.46 g
<b>Date</b>	New Kingdom, Eighteenth Dynasty; Tuthmosis IV to Amenhotep IV/Akhenaten before Amarna period; 1401–1347 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque blue, white, turquoise, and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles, base, and marvered threads

**CONDITION** Mended; neck, foot, and handles modern additions. There is a small amount of discoloration in this area. There are a few minor nicks and scratches.

**DESCRIPTION** Amphoriskos: neck and rim are not preserved; preserved examples indicate it probably had a horizontal rim with an almost pointed edge and funnel-shaped neck. Obtuse-angled junction with rounded shoulder; inverted piriform body; convex bottom; tall, outward-splayed medium blue foot, concave on its underside with a rounded edge. Traces of four dark blue handles, probably originally vertical loop handles, are preserved on the shoulder.

Marvered white, turquoise, and yellow threads spirally wound around the body from shoulders to almost the bottom eight times and dragged 19 times upwards, forming a festoon pattern.

**COMMENTS AND COMPARANDA** Based on its shape (Nolte 1968, p. 165 amphoriskoi, form III.f, wherein several parallels are cited) and decoration, this vessel belongs among the products of a workshop, known in bibliography as “Workshop 2,” which was established early in the reign of Amenhotep III at Malkata and continued its operation during Amenhotep IV/Akhenaten in Amarna (Nolte 1968, workshop 2a, pp. 88–93). The vessels of this group are characterized by their garlands, and they can be subdivided into groups 2a and 2b. This vessel belongs to group 2a, where the garland thread is usually thin and even, drawn out with small arches and very curved; the second group shows irregular garlands, sometimes narrower, sometimes wider, and often curved in large arches. Usually the decoration comprises yellow, white, and turquoise threads on an opaque dark blue to translucent dark blue background, just like this vessel and cat. 3. The vessels of the first group are elegant, elongated, and slender, and those of the second group are broader and more compact.

For parallels, see Nolte 1968, pp. 88–93, plates VI:4; VII:8, 9, 11. Also Grose 1989, pp. 59–60, no. 5, for a two-handled example; for a four-handled parallel, see the Metropolitan Museum of Art piece that has been dated to the period of Amenhotep III–Akhenaten, ca. 1391–1336 BCE, 26.7.1177: <https://www.metmuseum.org/art/collection/search/544828>.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 18, no. 2; p. 21, ill.

Wight 2011 pp. 28, 30, fig. 15.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 2. Amphoriskos or Flask

<b>Accession Number</b>	2004.3
<b>Dimensions</b>	H. 8.5, Diam. rim 2.3, max. Diam. 4.2 cm; Wt. 52.20 g
<b>Date</b>	New Kingdom; 1540–1075 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Dark-colored, probably dark green, turquoise, and yellow-white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied unmarvered thread

**CONDITION** Mended, heavily reconstructed, and filled. Discolored from weathering.

**DESCRIPTION** Short cylindrical neck; ovular body; convex bottom. Two opposing milky yellow vertical loop handles are modern restoration.

An unmarvered turquoise or translucent light blue thread around the rim. The dark-colored body is decorated with splashes of opaque turquoise and yellow glass.

**COMMENTS AND COMPARANDA** No direct parallels are published. The vessel could be a flask (Nolte 1968, form I), although it cannot be excluded that it originally had handles (Nolte 1968, form II). Probably connected to the production of a workshop active after the Amarna period in an unknown place, during the Ramesside period (Nineteenth–Twentieth Dynasties; thirteenth–eleventh centuries BCE), where single-colored vessels were made

alongside thread-decorated vases of workgroup 5 (Nolte 1968, pp. 127–129, workshop 6).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern 1968, p. 12, no. 2.

von Saldern et al. 1974, p. 19, no. 8.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



## 3. Krateriskos

<b>Accession Number</b>	2004.2
<b>Dimensions</b>	H. 9.6, Diam. rim 5.0–5.3, max. Diam. 6.0, Diam. base 4.0–4.1 cm; Wt. 85.52 g
<b>Date</b>	New Kingdom, Eighteenth Dynasty; probably the reigns of Tuthmosis IV [when handles are added to this form] to Amenhotep III; ca. 1397–1353 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Translucent dark blue and opaque white, yellow, and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles, foot, and marvered threads

**CONDITION** Mended, fills in several parts of the body.

**DESCRIPTION** Translucent dark blue ground; opaque white, yellow, and turquoise décor. Flattened, horizontal rim with rounded edge; wide, cylindrical neck, slightly tapering toward the body; almost horizontal rounded shoulder; squat, bulbous body; tall, conical footed base with rounded edge. On the upper body, right below the shoulder, three dark blue loop handles are arranged at equal distances.

A marvered turquoise thread is wound around the rim. Around the neck and on the lower part of the body, three marvered threads—opaque white, yellow, and turquoise—are spirally wound and dragged upward, forming a festooned pattern. A marvered turquoise thread encircles the base.

**COMMENTS AND COMPARANDA** Krateriskoi are one of the most characteristic Egyptian vessel forms. This particular shape and the presence of handles date it to the reigns of Tuthmosis IV, when handles were added to krateriskoi, and Amenhotep III, when they were most popular and perfectly shaped, ca. 1397–1350 BCE (Stern and Schlick-Nolte 1994, pp. 130–131). Furthermore, the turquoise thread around the rim ascribes it to a particular workshop that specialized in decoration of festoon patterns, among which this feature exclusively appears (Nolte 1968, workshop 2a, plate VII:12; Nolte 1985, p. 95, plate 7.9, 12). For a discussion of this workshop, known as “Workshop 2,” see cat. 1.

Comparanda include finds kept in the Museum für Kunst und Gewerbe Hamburg, the Hermitage St. Petersburg, the Museum of Cairo, and the Louvre (Nolte 1968, workshop 2a, p. 93, no. 12, plate VIII:14, 16, 17, 19); Württembergisches Museum Stuttgart (Stern and Schlick-Nolte 1994, pp. 130–131, no. 5); Toledo Museum of Art (Große 1989, pp. 60–61, nos. 7–8); and a similar vessel is in the British Museum (Tatton-Brown and Andrews 1991, pp. 30–31, fig. 26).

**PROVENANCE** By 1965, Private Collection (Stuttgart, Germany); by 1968–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

Note: described in Nolte 1968 as found in a Mycenaean grave in Cyprus: “aus einem myken. Grab auf Zypern”

**BIBLIOGRAPHY** Möller 1965, pp. 33–34, no. 76.

Nolte 1968, p. 93, no. 15, plate VIII:15; reference to the export of glass p. 93, no. 15, plate 8, pp. 15ff. and 89.

von Saldern et al. 1974, p. 18, no. 1.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 4. Lentoid Flask

<b>Accession Number</b>	2003.148
<b>Dimensions</b>	H. 6.3, max. W. 5.4 cm; Wt. 45.21 g
<b>Date</b>	New Kingdom, Nineteenth Dynasty; 1292–1202 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Translucent dark blue and opaque yellow and green glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles and unmarvered and marvered threads

**CONDITION** Mended; parts of the thread on the rim are missing. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark blue ground; opaque yellow and green decoration. A flattened coil forms a rudimentary uneven rim-disk; cylindrical neck, tapering toward the body; lentoid body. Two green loop handles extend from lower neck to the shoulder.

An unmarvered yellow thread is wound around the rim. One yellow and one green thread—both marvered—are spirally wound 4 times around the body and dragged up

and down 12 times to form a loosely rendered feathered pattern.

**COMMENTS AND COMPARANDA** The translucent, dark blue base color is typical of the Ramesside period (Nineteenth–Twentieth Dynasties; 1292–1070), as is the large green and yellow feather décor of the body. From the glass workshop in Lisht (Egypt), numerous fragments of thick-walled, squat vessels confirm the dating (Nolte 1968, workshop 5, pp. 121–126, form VII, pp. 172–173, wherein several parallels are cited). The vessel is one of the last thread-decorated glasses in Egypt of excellent quality. Cf. Nolte 1968, p. 121, plate XXI:11, similar feather decoration in yellow and white; XXI:22, a small vessel of a similar shape with yellow and green thread decoration and greenish handles. Also cf. Metropolitan Museum of Art turquoise body, blue, white, and yellow threads 30.8.179 [ca. 1295–1070 BCE]: <https://www.metmuseum.org/art/collection/search/569296>.

**PROVENANCE** By 1974, Gawain McKinley Ltd. (London, England); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 18–19, no. 5; p. 20, plate no. 5.

McKinley 1974, p. 2, ill.

*JGS* 1977, p. 169, no. 1, ill.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 5. Fish-Shaped Vessel

<b>Accession Number</b>	2003.147
<b>Dimensions</b>	H. 6.0, L. 12.5 cm; Wt. 114.08 g (with all fills and restoration material)
<b>Date</b>	ca. 1403–1347 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Dark blue (appearing black) and opaque yellow and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied unmarvered and marvered threads

**CONDITION** Partly preserved; restored; many cracks are clearly visible, and there are some areas of fill. The surface has some nicks and scratches, and large areas of devitrified white.

**DESCRIPTION** Dark blue ground and white in the area of the belly, with yellow thread decoration. Fish-shaped container.

An unmarvered yellow thread is wound around the open mouth and another is applied along the top of the back. The eyes are outlined with a yellow thread. There are two small white projections on the underside, indicating the fish's ventral fins. A flush, vertical yellow thread divides the head from the body and a parallel thread is preserved at the middle of the body; a third yellow thread forms large zigzags between them. On the upper part of the body there are small cavities, which are filled with a translucent yellow substance, possibly glass.

**COMMENTS AND COMPARANDA** The vessel belongs to a well-known form of fish-shaped flasks that represent a *Tilapia nilotica* fish, common in the Nile and a standard

decorative motif in ancient Egyptian art rendered in many media (Shaw and Nicholson 1995, p. 100). These flasks seem to have held ointments, and since they cannot stand by themselves, they must have been supported by stands. Published examples have been unearthed in Malkata and Amarna (cf. Nolte 1968, pp. 70, 134–136, 176, form XI, plates XXVIII:59, 60; XXIX:1, 2). Other fish-shaped, core-formed Egyptian vessels are known from museum collections: a very colorful example in the British Museum, EA55193: [https://www.britishmuseum.org/collection/object/Y\\_EA55193](https://www.britishmuseum.org/collection/object/Y_EA55193) (Nolte 1968, p. 70, plate XXIX:2; Cooney 1976, p. 146, no. 1753, plate VII), and a monochrome one, EA63786: [https://www.britishmuseum.org/collection/object/Y\\_EA63786](https://www.britishmuseum.org/collection/object/Y_EA63786) (Cooney 1976, p. 146, no. 1754; Tait 1991, p. 28, fig. 23); a single-colored fish in the Brooklyn Museum, 37.316E (<https://www.brooklynmuseum.org/opencollection/objects/4014>); also, a similar fish-shaped glass object, probably used as a palette, of the same period is in the Miho Museum (Miho Museum 2001, p. 29, 192, no. 21).

**PROVENANCE** By 1970–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1970, p. 171, no. 1, ill.

von Saldern et al. 1974, p. 18, no. 3; p. 19, plate no. 3.

Dolez 1988, p. 22.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 6. Alabastron

<b>Accession Number</b>	2004.16
<b>Dimensions</b>	H. 14.0, Diam. rim 3.3, max. Diam. 3.5 cm; Wt. 156.75 g
<b>Date</b>	Seventh–sixth centuries BCE
<b>Production Area</b>	Achaemenid Persian
<b>Material</b>	Transparent, almost colorless glass, with a greenish tinge
<b>Modeling Technique and Decoration</b>	Cast, carved, and ground

**CONDITION** Intact. Pitting and weathering on the inside have caused a brown discoloration. Pitting on the exterior forms an almost continuous layer of tiny pits. A horizontal crack is visible in the lower body area.

**DESCRIPTION** Flaring rim, with one ground band clearly visible at the tip and another in the interior at the transition to the neck; short, wide, cylindrical neck; rudimentary sloping shoulder; elongated ovoid body; mildly convex bottom. On upper body, two opposing oval lugs (knobs) are barely visible, but each lug was first formed as a lozenge that was further cut off or smoothed into its final oval shape.

**COMMENTS AND COMPARANDA** These cast alabastra are part of a Phoenician or Assyrian monochrome glass production that included bowls but also handled jars, jugs, and incense burners. They have been found in Assyria, Cyprus, Italy, and Spain in contexts dated to the late eighth through sixth centuries BCE (von Saldern 1970,



pp. 225–228, nos. 48–54; Grose 1989, pp. 75–76). In general, it is believed that they were made by Phoenician craftsmen working in the Assyrian royal court. Particularly for the alabastra, it has been assumed that they were made in Phoenicia (Barag 1985, esp. pp. 52–57). Alabastra appear in two variants: a taller and slender one with height ranging between 18 and 23 cm (from Italy: von Saldern 1970, no. 48 = Goldstein 1979, p. 102, no. 200; von Saldern 1970, no. 51 = Barag 1985, pp. 67–68, no. 44; von Saldern 1970, no. 54a; and Cyprus: von Saldern 1970, no. 52 = Lightfoot 2017, p. 29, no. 3), and a squatter one, like this vessel, with a height between 10 and 14 cm (von Saldern 1970, nos. 50, 53, from Cyprus; Arveiller-Dulong and Nenna 2000, pp. 166–167, no. 195, from Italy). In addition, a similar squat alabastron has been unearthed in Rhodes in a burial dated to the last quarter of the fourth century BCE (Triantafyllidis 2000, pp. 154–155, no. 15).

**PROVENANCE** By 1968–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern 1968, p. 12, no. 3.

Oppenheim et al. 1970, p. 226, no. 49, fig. 45.

von Saldern et al. 1974, p. 92, no. 241.

Wight 2011 pp. 18, 24, fig. 12.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



## 7. Kohl Tube

<b>Accession Number</b>	2003.160
<b>Dimensions</b>	H. 7.5, max. W. side 1.7, Th. bottom 1.0, body walls ca. 0.5 cm; Wt. 29.81 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Western Asiatic, probably northwestern Iran, perhaps Azerbaijan
<b>Material</b>	Translucent dark blue and greenish and opaque white, orange, and turquoise glass
<b>Modeling Technique and Decoration</b>	Rod-formed; applied unmarvered and marvered threads

**CONDITION** Condition is good, but the orange glass is fragmented. There are a few minor nicks, fills, and scratches.

**DESCRIPTION** Upright, rounded rim and short, cylindrical greenish-turquoise neck; right-angled junction with vestigial shoulder; elongated body, square in cross-section, tapering downward; almost flat bottom rounded at the periphery. The interior is cylindrical, and the bottom is about 1 cm thick.

On the rim is a twisted blue and white thread. On the body, two orange threads flush with the surface are spirally wound and dragged upward at two points on each side, forming festoons. The one on the upper part of the body is wound spirally six times, and the one on the lower part is wound four times. Three opaque white threads are wound horizontally and are flush with the



surface. One is on the shoulder, over the orange thread, and two more at the middle of the body, in the void band between the orange threads. Two twisted blue and white threads were applied along the corner edge of each side. Each thread starts on the shoulder of one edge, continues along it, curves at the bottom, and continues along the second edge to the shoulder. A white blob is added on each shoulder that is left protruding toward the neck.

**COMMENTS AND COMPARANDA** These small, tubular vases—assumed to have been used to hold kohl, an eyeliner of antiquity—are known as kohl tubes. They were rod-formed, that is, made by collecting molten glass on one end of a metal rod, which was pulled out after the vessel was formed and decorated, and while it was still hot. They are usually made of dark-colored glass decorated with bright-colored threads dragged to form zigzag or feathered patterns, or rarely festoons like this vessel. Depending on the shape of their body, they are classified into three groups—I. square, II. cylindrical, and III. flattened pear-shaped—and then divided into subgroups in relation to their decoration. So, this vessel belongs to a rare group of tubes with square cross-section and additional knobs on the corners of the shoulders (group IC). The other two examples in the Getty collection belong to a homogeneous, relatively numerous group of circular kohl tubes. The first subgroup (group IIC; e.g., cat. 8) is distinguished by their convex base and the thread decoration, composed of threads of one or two colors marvered into the surface and dragged to form festoons. Another subgroup of cylindrical tubes (group IIB) in the collection are decorated with spirally wound coil decoration, in this case of the same color as the body and dragged up and down, forming a feather pattern (cat. 9).

They are considered Iranian products, because that is where most of them were unearthed, although occasionally they found their way to distant regions such as Assyria, Georgia, and even Cyprus. They are dated to the fifth and fourth centuries but mainly to the fifth century BCE (Barag 1975).

**PROVENANCE** By 1967–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1967, p. 133, no. 4.

von Saldern et al. 1974, p. 48, no. 103; p. 52, plate no. 103.

Barag 1975, pp. 24 n. 4, 35, IC.3, fig. 25.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 8. Kohl Tube

<b>Accession Number</b>	2003.162
<b>Dimensions</b>	H. 9.4, Diam. rim 1.0, max. Diam. 1.4 cm; Wt. 27.51 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Western Asiatic, probably northwestern Iran, area of Ardebil, perhaps Azerbaijan
<b>Material</b>	Dark blue; opaque red and yellow glass
<b>Modeling Technique and Decoration</b>	Rod-formed; applied marvered threads

**CONDITION** Condition is good, with some signs of wear and discoloration and some iridescence. Small areas of the decoration have fallen off, especially on the bottom.

**DESCRIPTION** Rounded vertical rim; cylindrical body, tapering toward the rim; convex bottom.

Dark blue ground decorated with marvered red and yellow threads that are spirally wound, seven and six times respectively, from rim to bottom, and which are dragged upward, forming a festoon pattern.

**COMMENTS AND COMPARANDA** See cat. 7.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 50, no. 110; p. 50, plate no. 110.

Barag 1975, p. 24 n. 4; pp. 28, 36, IIC.1, fig. 42.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 9. Balsamarium or Kohl Tube

<b>Accession Number</b>	2003.163
<b>Dimensions</b>	H. 6.9, max. Diam. 1.6, Th. 0.2 cm; Wt. 15.30 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Western Asiatic, probably northwestern Iran
<b>Material</b>	Dark green glass, appearing black
<b>Modeling Technique and Decoration</b>	Rod-formed; applied unmarvered thread

**CONDITION** Top of body and rim restored.

**DESCRIPTION** Cylindrical body, tapering toward the rim; flat, lopsided bottom.

An unmarvered thread of the same color as the body is spirally wound around the body from shoulder to bottom and dragged upward and downward nine times to form a feather pattern. The ends of the thread are visible, and overall the decoration may have been made by scoring, i.e., pressing the still-hot surface with a sharp tool, creating the impression of an applied thread.

**COMMENTS AND COMPARANDA** See cat. 7.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 50–51, no. 111.

Barag 1975, p. 24 n. 4; p. 35, IIB.3, fig. 34.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 10. Alabastron

<b>Accession Number</b>	2003.180
<b>Dimensions</b>	H. 10.3, Diam. rim 3.9, max. Diam. 3.0 cm; Wt. 94.98 g
<b>Date</b>	Late sixth–fifth centuries BCE

<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Intact. Remains of whitish core in the interior. Some crust on the handles.

**DESCRIPTION** Broad, horizontal rim-disk, slightly uneven on its upper side; very short, cylindrical neck; rounded shoulder; almost cylindrical, straight-sided body, tapering toward the neck; shallow, convex bottom. Below the shoulder, two opposing white ring handles with knobbed tails.

Opaque white body and handles; translucent purple decoration. An unmarvered purple thread is wound around the rim. A marvered purple thread is wound spirally around the upper half of the body, dragged upward to form a zigzag pattern. Below this a partly marvered thread is wound spirally three times.

**COMMENTS AND COMPARANDA** The alabastron (a narrow-necked flask) was one of the ceramic vessel forms that was rendered in glass by the core-forming technique from the sixth century BCE, when this technique, known in Mesopotamia and Egypt since the middle of the second millennium BCE, was introduced in the Aegean world. In addition to alabastra, amphoriskoi (small amphorae), aryballoi, and oinochoiskai (juglets) were also rendered in core-formed glass. It is believed that they functioned as unguentaria, intended for aromatic and cosmetic substances (Harden 1981; McClellan 1984; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 37–44).

This alabastron belongs to the earliest group of Aegean core-formed vessels, dating from the middle of the sixth century to the end of the fifth century BCE (Harden 1981, pp. 58–99; Grose 1989, pp. 110–115). They were made either of blue glass and decorated with white, yellow, and turquoise threads or of milky white glass decorated with purple threads. Vessels of this group have been found in great numbers in Rhodes, Macedonia, the Aegean islands, and Italy. For the classification of this particular alabastron, see Grose 1989, class I:A, alabastron form I:2: pp. 133–134, nos. 65–68.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel,

Germany, May 26–30, 1908, lot 1064]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1064, plate XI, no. 47.

von Saldern et al. 1974, p. 66, no. 158; p. 56, plate no. 158.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 11. Alabastron

<b>Accession Number</b>	2004.5
<b>Dimensions</b>	H. 13.2, Diam. rim 3.4, max. Diam. 4.2 cm; Wt. 99.43 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved, mended.

**DESCRIPTION** Opaque white ground with translucent purple decoration. Broad, horizontal, translucent rim-disk; very short, cylindrical neck; cylindrical body, wider at the lower part, curving in toward a convex bottom. Below the shoulder, two opposing, small vertical ring

handles with knobbed tails set at different heights on the body. Remains of a whitish core in the interior.

The body and the handles are made of opaque white glass. An unmarvered translucent purple thread is wound around the rim. A marvered translucent purple thread is spirally wound 28 times from neck to bottom and dragged alternately nine times upwards and nine times downwards, forming a feather pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:A, alabastron form I:1.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 66, no. 154.  
Wight 2011 pp. 28, 31, fig. 16.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 12. Alabastron

**Accession Number** 2003.181

<b>Dimensions</b>	H. 10.6, Diam. rim 3.0, max. Diam. 2.5 cm; Wt. 43.38 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque green and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered thread

**CONDITION** Fully preserved. Small cracks and broken bubbles on the surface. A small area of the lip appears to have been restored. Remains of reddish core in the interior.

**DESCRIPTION** Opaque green body and handles; opaque yellow decoration. Broad, horizontal rim-disk; cylindrical neck; rounded shoulder; cylindrical body, tapering toward the neck; shallow, convex bottom. On the shoulders are two opposing ring handles with knobbed tail affixed near the shoulders. One of the handles is lopsided, placed obliquely on the body.

An unmarvered yellow thread is wound around the rim.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F subgroup with dark-colored ground and two horizontal threads, dated to the late sixth century BCE, alabastron form I:3B, dated to the fifth century BCE: p. 137, no. 77. Arveiller-Dulong and Nenna 2000, p. 44, no. 17; p. 24 color plate, from Eretria, Greece.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 67, no. 162.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 13. Alabastron

<b>Accession Number</b>	2004.6
<b>Dimensions</b>	H. 9.4, Diam. rim 3.0, max. Diam. 2.6 cm; Wt. 39.00 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Dark purple (seemingly black) and opaque white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Mended. Weathering occurs all over the vessel, giving it a rusty color with some iridescence. Remains of red grainy core in the interior.

**DESCRIPTION** Dark purple (seemingly black) body; opaque white decoration. Broad, horizontal rim-disk; vestigial neck; cylindrical body, wider toward the flat bottom. Below the shoulder are two small, opposing vertical ring handles with knobbed tails; one is purple, and the other dark green.

The alabastron is decorated with applied white threads. An unmarvered thread is wound around the rim, and three more around the body on top, middle, and bottom. The upper one is unmarvered and the other two are marvered. The threads on the shoulder and near the bottom are wound twice, and the middle thread three times.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F, alabastron form I:3A: p. 187, no. 77; Harden 1981, form 3, pp. 58–59.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1077]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** Cramer 1908, no. 1077.

von Saldern et al. 1974, p. 67, no. 161.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 14. Alabastron

<b>Accession Number</b>	2003.190
<b>Dimensions</b>	H. 12.5, Diam. rim 3.0, max. Diam. 3.2 cm; Wt. 60.16 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque white and yellow glass, with bronze



**Modeling Technique and Decoration** Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Mended; partly covered with iridescence and whitish weathering.

**DESCRIPTION** Translucent dark blue body; opaque white and yellow decoration. Horizontal rim-disk; fusiform body; flat bottom. Two blue, small vertical ring handles with knobbed tails, opposite each other, are placed over the decoration on the upper body. A bronze chain is attached to the handles.

An unmarvered white thread lines the rim. A wide marvered yellow thread is wound twice around the middle of the body. A fine white thread is wound from top to bottom, forming almost horizontal rows: at the upper part of the body, it is spirally wound nine times; at the middle, it is spirally wound nine times, overlapping with and going between the yellow bands; and at the lower part, seven more times. The decoration on the middle of the body is dragged twenty-two times up and down, forming a zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:G, alabastron form I:5: pp. 137–138, nos. 78–79.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 73, no. 186; p. 57, plate no. 186.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 15. Alabastron

<b>Accession Number</b>	2003.196
<b>Dimensions</b>	H. 6.7, Diam. rim 1.8, max. Diam. 2.2 cm; Wt. 17.73 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque turquoise and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Almost fully preserved; neck is mended, and part of one handle is missing. In the interior, visible light-colored remains of the core.

**DESCRIPTION** Translucent dark blue ground with opaque turquoise and yellow decoration. Moderately broad, horizontal rim-disk, uneven and sloping inward; short, cylindrical neck; horizontal shoulder; ovular body; convex bottom. Below the shoulder two opposing yellow ring handles with knobbed tails.

An unmarvered opaque yellow thread is wound around the rim. A marvered opaque yellow thread is spirally wound five times in almost horizontal lines around the upper body above the handles. Below is another yellow thread wound twice at the middle of the handles. At central and lower body, a thick turquoise and a fine yellow thread are spirally wound five and nine times respectively, and are dragged upward and downward

alternately 30 times, forming a zigzag pattern. Below this band, near the bottom, a yellow and a turquoise thread are each wound once. The central part of the body is ribbed by the tooling that formed the zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:B, alabastron form I:5: pp. 137–138, nos. 78–79.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, pp. 74–75, no. 197.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 16. Alabastron

<b>Accession Number</b>	2003.185
<b>Dimensions</b>	H. 9.4, Diam. rim 3.0, max. Diam. 2.9 cm; Wt. 37.24 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and opaque turquoise glass, with bronze

<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads
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**CONDITION** Intact. It is almost entirely weathered, now appearing white.

**DESCRIPTION** Translucent dark blue body; opaque turquoise decoration. Horizontal rim-disk; short, cylindrical neck; rudimentary shoulder; cylindrical body, curving in toward the almost flat, slightly convex bottom. On the shoulder, two opposing, unevenly placed dark blue ring handles with knobbed tails.

One unmarvered turquoise thread is wound around the rim. A marvered turquoise thread is spirally wound 27 times from neck to bottom. The first six coils, covering the upper third of the body, are straight, and the 18 lower, which cover the lower two-thirds of the body, are dragged up and down, forming a zigzag pattern.

A bronze, M-shaped pin, missing one leg, is placed inside the vessel. This type of double pin appears in the seventh century BCE, probably originating from Macedonia but widespread throughout the Balkans, and continues to appear until the Hellenistic era (fourth–first centuries BCE) mildly altered. For parallels, see Michailidou-Despotidou 2011, pp. 92–94, 536, plate 44: nos. 296–297; Vasić 1982, pp. 244–247, fig. 2.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:B, alabastron form I:3A: pp. 136–137, no. 75.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1060]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1060.

von Saldern 1974, p. 70, no. 175.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 17. Alabastron

<b>Accession Number</b>	2003.182
<b>Dimensions</b>	H. 8.7, Diam. rim 3.4, max. Diam. 2.8 cm; Wt. 44.54 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark, probably purple, and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved; mostly covered with weathering, and now appears white.

**DESCRIPTION** Translucent dark, probably purple body; opaque white and yellow decoration. Horizontal rim-disk; short, cylindrical neck, tapering toward the body; rudimentary shoulder; cylindrical body, curving in toward the flat bottom. Two opposing ring handles with knobbed tails on the shoulders.

An unmarvered thread, probably yellow but now gray due to weathering, is wound around the rim. One white and one yellow thread—both marvered—are spirally wound 18 times around the neck and body, dragged up and down, forming a zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastro, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F, alabastron form I:3A; p. 141, no. 88; also very similar but

taller are the examples of form I:3B: pp. 140–142, nos. 81, 85–87, 89–91.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 67, no. 164; p. 69, plate no. 164.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 18. Alabastron

<b>Accession Number</b>	2003.183
<b>Dimensions</b>	H. 9.0, Diam. rim 2.5, max. Diam. 2.6 cm; Wt. 34.54 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Brownish-purple and opaque white, appearing turquoise, glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved; mended and repaired near the bottom. Surface pitted.



**DESCRIPTION** Brownish-purple, now opaque, body; opaque turquoise decoration. Horizontal rim-disk; short, cylindrical neck, tapering toward the body; rudimentary sloping shoulder; cylindrical body, wider toward the shallow, convex bottom. Two opposing ring handles with knobbed tails on the shoulders.

An unmarvered thread, probably white but now gray due to weathering, is wound around the rim. One marvered white thread, now mainly appearing turquoise, is spirally wound 21 times around the neck and body, in almost horizontal rows.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F, alabastron form I:3B: pp. 140–142, nos. 81, 85–87, 89–91.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1060]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1060.

von Saldern et al. 1974, p. 70, no. 175.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 19. Alabastron

<b>Accession Number</b>	2003.184
<b>Dimensions</b>	H. 9.9, Diam. rim 3.2, max. Diam. 2.5 cm; Wt. 43.59 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Brown, opaque yellow, and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved; small part of the rim filled; surface pitted, especially on rim, neck, and bottom; covered with brown incrustation.

**DESCRIPTION** Turquoise ground; yellow and dark brown décor. Broad, horizontal rim-disk; cylindrical neck, tapering upward; cylindrical body; convex bottom. Two opposing ring handles with knobbed tails are placed over the decoration on the upper body near the shoulder. One of the handles is placed slightly lower than the other.

A marvered yellow thread, wound around the rim, spirals 22 times around the body to the center of the bottom. An unmarvered dark brown thread starts on the neck under the rim and spirals 22 times adjacent to the yellow thread to the center of the bottom. The decoration on the upper part of the body is dragged downward, forming a zigzag pattern. On the lower part of the body the threads are dragged up and down, forming a close-set zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F, alabastron form I:3B: pp. 139–141, nos. 82–85. Almost identical with cat. 20.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 70, no. 174.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 20. Alabastron

<b>Accession Number</b>	2003.189
<b>Dimensions</b>	H. 10.0, Diam. rim 2.8, max. Diam. 2.6 cm; Wt. 48.54 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent brown, and opaque yellow, turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Intact.

**DESCRIPTION** Translucent brown body; opaque turquoise and yellow decoration. Horizontal rim-disk; cylindrical body; flat bottom. Two opposing purple ring handles with knobbed tails are placed over the decoration on the upper body, one slightly lower than the other.

A yellow thread wound unmarvered around the rim spirals marvered 25 times around the body to the center of the bottom. A marvered turquoise thread starts on the neck under the rim and spirals 25 times between the coils of the yellow thread and extends to the center of the bottom. The decoration from the upper body to just below the handles is dragged 22 times upward and 22 downward, forming a zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra see comments on cat. 10. For the classification of this particular alabastron see Grose 1989, class I:F, alabastron form I:3B: pp. 139–141, nos. 82–85. Almost identical with cat. 19.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, pp. 72–73, no. 185; p. 57, plate no. 185.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 21. Alabastron

<b>Accession Number</b>	2003.186
<b>Dimensions</b>	H. 10.4, Diam. rim 3.2, Diam. body 2.6 cm; Wt. 44.25 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent light green/gray and opaque turquoise and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Intact. Some weathering and iridescence on the neck and handles.

**DESCRIPTION** Translucent light green/gray body; opaque turquoise and yellow decoration. Horizontal rim-disk; short, cylindrical neck; rudimentary shoulder; cylindrical body, curving in toward the flat bottom. Two opposing ring handles with knobbed tails, placed at slightly different heights.

An unmarvered yellow thread is wound around the rim. A thin turquoise and wide yellow thread—both marvered—are spirally wound in 25 almost horizontal rows. The first seven, covering the upper third of the body, are straight, and the lower 18, covering the lower two-thirds of the body, are dragged up and down, forming a zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra, see comments on cat. 10. For the classification of this particular alabastron, see Grose 1989, class I:F, alabastron form I:3A: p. 141, no. 88.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 70, no. 178; p. 71, plate no. 178.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 22. Alabastron

<b>Accession Number</b>	2003.193
<b>Dimensions</b>	H. 16.5, Diam. rim 5.9, max. Diam. 4.3 cm; Wt. 137.51 g
<b>Date</b>	Mid-fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and opaque yellow, turquoise, and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Mended. Half of the rim and part of the bottom are added. There is likely overpaint on the surface to disguise the repairs. Tooling marks on the upper- and underside of the rim and on the neck. Whitish core remains in the interior.

**DESCRIPTION** Translucent dark blue ground; opaque yellow, turquoise, and white decoration. Broad, horizontal rim-disk, slightly sloping to the outside; cylindrical neck, tapering upward; rudimentary shoulder and cylindrical body, slightly tapering toward the shoulder; shallow, convex bottom. Below the shoulder are two opposing ring handles with long straight tails; neither handle is pierced.

An unmarvered yellow thread is wound around the rim. The body of the vessel, from the shoulder down, is decorated with spirally wound groups of opaque yellow, white, and turquoise marvered threads—yellow appearing four times, and white and turquoise three times. In total more than 50 lines of colored glass are discernible from the bottom to the rim. The threads are dragged 16 times upward and downward, forming a delicate feather pattern.

**COMMENTS AND COMPARANDA** On the origins of core-formed alabastra and early examples, see comments on cat. 10. This object belongs to the second group of core-formed vessels, which appears after the early fourth century BCE and continues to be made until the third century BCE (Harden 1981, pp. 100–121; Grose 1989, pp. 115–122). They were probably produced in more workshops and are found predominantly in mainland Greece, as well as in central and southern Italy. Initially the vessel types of the first group are repeated, differing only in shape and decoration, but later on new shapes appear, like the hydriske, the unguentarium, and the lentoid aryballos. For the classification of this particular alabastron, see Grose 1989, class II:A, alabastron form II:2: pp. 154–155, nos. 127–128.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 73, no. 190; p. 61, plate no. 190.

*JPGM Handbook* 7th ed., p. 46, ill.

*JPGM Handbook Antiquities* rev. ed., p. 103.

Wight 2011 pp. 29, 33, fig. 18.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 23. Alabastron

<b>Accession Number</b>	2003.187
<b>Dimensions</b>	H. 13.3, Diam. rim 3.6, max. Diam. 3.3 cm; Wt. 78.31 g
<b>Date</b>	Mid-fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean. Allegedly from Olbia, Ukraine
<b>Material</b>	Translucent dark blue and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved. There is some discoloration, and the vessel is almost fully covered with iridescence. There are a few minor abrasions and scratches. A small part of the thread on the rim is missing.

**DESCRIPTION** Translucent dark blue body; opaque yellow decoration. Broad, horizontal rim-disk; cylindrical neck wider toward the body; rudimentary shoulder; cylindrical body wider toward the bottom; flat bottom with curved edges. Two lugs on the upper part of the body placed unevenly at different heights.

On the neck there is a horizontal band, 2.3 cm long and 1.0 cm wide, that covers a tear in the neck of the vessel. A small horizontal hole is visible below the applied band.

An unmarvered yellow thread is wound around the rim. A marvered white thread is spirally wound 21 times around the upper and middle body, and a marvered yellow thread is wound 13 times around the lower part of the body. The threads are dragged 16 times up and down, forming a feather pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 22. For the classification of this particular alabastron, see Grose 1989, class II:A, alabastron form II:2: pp. 153–155, nos. 124, 128.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 70, no. 181; p. 72, plate no. 181.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 24. Alabastron

<b>Accession Number</b>	2003.191
<b>Dimensions</b>	H. 18.4, Diam. rim 6.1, max. Diam. 4.8 cm; Wt. 281.38 g
<b>Date</b>	Second half of the fourth century BCE

<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and opaque yellow and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Almost fully preserved. Mended, especially around the neck. A small hole on one side of the neck. Around the lower part of the neck, three small disks of blue glass have been pushed into the mass of the vase, reinforcing the join between the neck and the body, where large air bubbles are visible in X-ray images, as well as around the bottom. There is an oval depression next to one of the lugs, probably the scar of an unsuccessful attempt to attach a lug there. Tooling marks on the underside of the rim and the neck.

**DESCRIPTION** Translucent dark blue body; opaque yellow and white decoration. Broad, horizontal rim-disk; wide, cylindrical neck; rudimentary shoulder; cylindrical body; flat bottom. Two opposing horizontal lugs below the shoulder.

A thick unmarvered white thread is wound around the rim. This thread has a very thin yellow layer on the side attached to the rim, and in one part there are some remains of a dark blue thread. On the upper part of the body, a yellowish-white thread—like the one around the rim—and a white thread are each wound once and marvered. Below these a white and a yellow thread—both marvered—are spirally wound 17 times to the bottom and dragged 18 times upward and downward, forming a zigzag pattern. It is quite probable that all threads consist of a white and a yellow layer, which, depending on the way it was applied on the vessel, appear either white or yellow.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 22. For the classification of this particular alabastron, see Grose 1989, class III:A or B, alabastron form III:1. This example does not fit exactly in either group A or B. Although the thread around the rim is unmarvered, the neck and the upper body are not decorated; the long neck, the cylindrical body, the handles in the form of lugs, and their position near the shoulder lead us to ascribe it to this form. For a comparable find from Macedonia, cf. Adam-Veleni and Ignatiadou 2010, pp. 336–337, nos. 345–346, dated to the last quarter of the fourth century BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his



son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 73, no. 187; p. 57, plate no. 187.

**EXHIBITIONS** Art of Alchemy (Los Angeles, 2016–2017)

Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 25. Alabastron

<b>Accession Number</b>	2004.7
<b>Dimensions</b>	H. 10.0, Diam. rim 3.5, max. Diam. 3.1 cm; Wt. 52.08 g
<b>Date</b>	Mid-fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent dark blue and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, lugs, and unmarvered and marvered threads

**CONDITION** Almost fully preserved; mended. One lug missing, and most of the decoration has fallen off.

**DESCRIPTION** Translucent dark blue body; opaque yellow decoration. Broad, horizontal rim-disk; short, cylindrical neck wider toward the body; cylindrical body

wider toward the flat bottom. A thick coil was attached to the shoulder and wound to form the neck. Another coil was attached to the upper side of the neck, wound twice and tooled to form the rim. Two opposing lugs were placed on the upper body near the shoulder; one is missing.

An unmarvered yellow thread is wound around the rim. A marvered yellow thread is wound spirally 28 times from neck to bottom and dragged upward at 16 points, forming a wide feather pattern. The decoration was probably originally composed of two threads, each wound 14 times; the second thread, likely in a different color, is not preserved at all and only the groove of its path remains visible.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 22. For the classification of this particular alabastron, see Grose 1989, class II:A, alabastron form II:2; pp. 153–154, no. 125.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 70, no. 177.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 26. Alabastron

<b>Accession Number</b>	2004.8
<b>Dimensions</b>	H. 5.7, Diam. rim 2.2, max. Diam. 1.9 cm; Wt. 16.68 g
<b>Date</b>	Mid-fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent dark blue and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved. Chips are missing from the rim. Weathering has caused some iridescence. In the interior, red, grainy core remains are visible.

**DESCRIPTION** Translucent dark blue body; opaque yellow decoration. Broad, horizontal rim-disk; short conical neck, tapering downward; narrow but horizontal shoulder; cylindrical body, wider toward the bottom, curves in, forming a convex bottom. Below the shoulder there are two oppositely placed, small ring handles. In addition, one of the lugs forms a horizontal loop and the other a vertical one.

Decorated with yellow threads, with an unmarvered one wound around the rim. A marvered yellow thread is wound spirally 13 times from shoulder to bottom. It begins as a wavy horizontal line and then it is dragged upward at seven points, forming a festoon pattern on the body to the convex lower part, where it is again left in the form of horizontal lines.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 22. For the classification of this particular alabastron, see Grose 1989, class II:D, alabastron form II:8: pp. 158–159, no. 140.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 112, no. 300.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 27. Alabastron

<b>Accession Number</b>	2003.192
<b>Dimensions</b>	H. 13.5, Diam. rim 3.0, max. Diam. 2.5 cm; Wt. 67.15 g
<b>Date</b>	Possibly fourth–first centuries BCE, quite probably nineteenth or twentieth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple and opaque yellow and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied lugs, and unmarvered and marvered threads

**CONDITION** Mended; some fills. Whitish core remains in the interior.

**DESCRIPTION** Translucent purple body; opaque yellow and white decoration. Wide, flaring, almost horizontal rim; long cylindrical neck; almost nonexistent shoulder; cylindrical body; mildly rounded bottom. Two fine coils applied first below the shoulders, then bent, and attached lower on the body form two opposing ring handles.

An unmarvered yellow thread is wound around the rim. A marvered white thread is spirally wound from the bottom to the rim 25 times and dragged 10 times upward and downward, forming a feather pattern.

**COMMENTS AND COMPARANDA** On core-formed alabstra of this period, see comments on cat. 22. No exact parallels have been located. The rim is part of the same mass and not an added-on rim-disk. The handles do not look like the usual ones for form I:3A, and they are made of translucent, bubbly glass. The body fits well with second-first-century BCE products, while the handles seem to imitate duck-shaped handles of the fourth century BCE.

It is not easy to date this vase precisely; it was difficult for the authors of the 1974 catalogue of the Oppenländer collection to assign a narrow date, and rather they dated it more vaguely between the fourth and the first century BCE.

Chemical analyses conducted by the GCI scientist Dr. Monica Gaudio have shown that the glass of the body does not correspond to other core-formed vessels and it is very rich in zinc, providing another indication that it may have been made in Europe in the nineteenth or twentieth century CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 73, no. 189; p. 61, plate no. 189.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 28. Alabastron

<b>Accession Number</b>	2003.188
<b>Dimensions</b>	H. 13.3, Diam. rim 3.3, max. Diam. 3.4 cm; Wt. 65.42 g
<b>Date</b>	Third-second centuries BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, lugs, and marvered threads

**CONDITION** Almost fully preserved; one lug is missing. Surface pitted.

**DESCRIPTION** Translucent dark blue body; opaque white and yellow decoration. Horizontal rim-disk; cylindrical neck; rudimentary sloping shoulder; cylindrical body; flat bottom. Two opposing lugs on the body, near the shoulder.

A marvered yellow thread is wound around the rim-disk and spirals loosely three times around the neck, where it is joined by a marvered white thread that begins on the neck. These two threads spiral 10 times around the body to the bottom and are dragged up and down 10 times, forming a spaced feather pattern.

**COMMENTS AND COMPARANDA** On core-formed alabstra of this period, see comments on cat. 22. For the classification of this particular alabastron, see Grose 1989, class III:C, alabastron form III:3: pp. 167–168, no. 164.



Further examples include one in Freer Gallery (no. 09.435 = Grose 1989, fig. 88 left) and one from Samothrace (Dusenbery 1967, pp. 37–38, no. 3, fig. 4).

**PROVENANCE** Louis de Clercq, French, 1836–1901; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, p. 71, no. 182; p. 72, plate no. 182.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 29. Alabastron

<b>Accession Number</b>	2003.194
<b>Dimensions</b>	H. 12.2, Diam. rim 2.1, max. Diam. 2.6 cm; Wt. 38.75 g
<b>Date</b>	Second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark green and opaque white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied lugs and marvered thread

**CONDITION** Intact. Remains of whitish core in the interior.

**DESCRIPTION** Dark green, seemingly black ground; opaque white decoration. Horizontal rim-disk; short, wide cylindrical neck, tapering downward; rudimentary shoulder; straight-sided conical body; convex bottom. Two opposing lugs on shoulders; one is made by folding and flattening a dark green band four times and the other twice.

A marvered opaque white thread is wound spirally 44 times from the bottom to the rim and dragged eight times upward and downward along the body, forming a feather pattern.

**COMMENTS AND COMPARANDA** For a discussion of early core-formed alabastra, see cat. 10. This object belongs to the third group of core-formed vessels, which appears between the second century BCE and the early first century CE; the centers of production seem to have been in Cyprus and on the Phoenician coast. The group includes different shapes of alabastra and amphoriskoi, which are similar to those of ceramic vessels manufactured at the same time (Harden 1981, pp. 123–141; Grose 1989, pp. 122–125). For the classification of this particular alabastron compare Grose 1989, class III:E, alabastron form III:4: p. 168, no. 165, which has a much more acute angle turning to the bottom. Cf. Fossing 1940, p. 112, fig. 84, spotted by Axel von Saldern (von Saldern 1974, pp. 73–74, no. 191), who also notes that this vessel does not have the unusually elongated shape, but is greatly expanded below the middle of the body.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1974, pp. 73–74, no. 191; p. 61, plate no. 191.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 30. Alabastron

<b>Accession Number</b>	2004.22
<b>Dimensions</b>	H. 13.3, Diam. rim 2.5, max. Diam. 2.3 cm; Wt. 24.26 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Opaque light bluish glass with white striations
<b>Modeling Technique and Decoration</b>	Sagging or blowing

**CONDITION** Intact.

**DESCRIPTION** Flaring, fire-polished rim; elongated conical body; convex bottom. The interior is smooth, covered in areas by a layer of whitish incrustation.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 29. The alabastron probably belongs to the fashion of archaizing vases that were imitating archaic prototypes. In this case, for the prototype of the shape of the body, see a clay alabastron from Kamiros, dated between 610–550 BCE, kept in the British Museum, 1860,0404.49: [https://www.britishmuseum.org/collection/object/G\\_1860-0404-49](https://www.britishmuseum.org/collection/object/G_1860-0404-49). The production technique indicates a much later date, and the object is made of the exact same glass as the jug, cat. 289, and the patella, cat. 77. See also the comments of Axel von Saldern corroborating this dating and ascribing it to the early imperial colored glass vessels (von Saldern et al. 1974, p. 112, no. 300).

**PROVENANCE** By 1901, Louis de Clercq, French, 1836–1901 (Paris, France); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** de Ridder 1909, no. 581, plate 31.

von Saldern et al. 1974, p. 112, no. 300.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 31. Alabastron

<b>Accession Number</b>	2003.195
<b>Dimensions</b>	H. 12.5, Diam. rim 2.4, max. Diam. 3.3, Th. 0.3 cm; Wt. 55.16 g
<b>Date</b>	Second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Translucent dark blue and opaque yellow, now appearing white, glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, lugs, and unmarvered and marvered threads

**CONDITION** The vessel is almost completely iridescent, with a small area of the original blue color still visible.

There are some minor abrasions, such as a small hole near the bottom, and some nicks and scratches.

**DESCRIPTION** Translucent dark blue ground; opaque yellow, now appearing white, decoration. Broad, horizontal rim-disk; biconical body; convex bottom. Two lugs near the neck.

A yellow, now appearing white, thread is wound 33 times around the body from the bottom to the rim. The thread is combed at the upper part of the body from under the rim to the transition to the lower conical part, forming a feathered pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 29. For the classification of this particular alabastron, see Grose 1989, class III:E, alabastron form III:5: pp. 168–169, nos. 166–167; Harden 1981, form 18, pp. 122–123.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 74, no. 192.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 32. Alabastron

**Accession Number** 2003.197

<b>Dimensions</b>	H. 11.4, Diam. rim 2.4, max. Diam. 4.4 cm; Wt. 67.24 g
<b>Date</b>	Second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Translucent dark blue and opaque turquoise and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, lugs, and marvered and unmarvered threads

**CONDITION** Fully preserved; iridescence on the upper surface of the rim, and cracked on the bottom. A fill on the blue lug. Dark-colored remains of the core are visible in the interior.

**DESCRIPTION** Translucent dark blue ground; turquoise and yellow decoration. Moderately broad, horizontal rim-disk, uneven and sloping inward; cylindrical neck; vestigial shoulder; straight-sided fusiform body; convex pointed bottom. Below the shoulder, two opposing lugs; one lug is yellow and the other is blue.

A marvered opaque turquoise thread is spirally wound in almost horizontal lines from the center of the bottom to the rim 37 times, ending in the neck. Along the upper part of the body, from the shoulder down to the point where the body turns inward toward the bottom, it was dragged upward 21 times, forming a festoon pattern.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 29. For the classification of this particular alabastron, see Grose 1989, class III:E, alabastron form III:5: pp. 168–169, nos. 166–167; Harden 1981, form 18, pp. 122–123.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 75–76, no. 199; p. 77, plate no. 199.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 33. Alabastron

<b>Accession Number</b>	2003.198
<b>Dimensions</b>	H. 7.9, Diam. rim 2.5, max. Diam. 3.2, Th. 0.3 cm; Wt. 33.90 g
<b>Date</b>	Mid-second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Opaque dark blue and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, lugs, and unmarvered and marvered threads

**CONDITION** Fully preserved; some cracks are visible; surface pitted and in areas discolored. The surface has some abrasions and nicks. White-yellow sand from the core is still visible on the interior.

**DESCRIPTION** Blue ground, now opaque; opaque white decoration. Broad, horizontal rim-disk; cylindrical neck; straight-sided piriform body that turns abruptly inward and downward to a convex bottom. Two lugs near the neck.

A marvered white thread is wound 17 times around the body, from the bottom to the rim. At the upper part of the body, below the lugs and down to the carination, nine coils of the thread are combed, forming upright festoons.

**COMMENTS AND COMPARANDA** On core-formed alabastra of this period, see comments on cat. 29. For the classification of this particular alabastron, see Grose 1989, class III:E, alabastron form III:5. The majority of the

alabastra of this form are better proportioned and quite similar among themselves, quite different to the squatter variant of this vessel, which is very similar to an example from Amathous, Cyprus (Harden 1981, p. 128, no. 340).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 76, no. 200.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 34. Amphoriskos

<b>Accession Number</b>	2003.178
<b>Dimensions</b>	H. 7.0, Diam. rim 2.9, max. Diam. 4.9, Diam. base 1.2 cm; Wt. 51.83 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** Intact; some pitting on the surface. Reddish remains of the core in the interior.

**DESCRIPTION** Broad, flaring rim-disk; cylindrical neck; convex shoulder; top-shaped body; conical base-knob. Two vertical strap handles extend from the shoulder to the middle of the neck.

Opaque white ground; translucent purple decoration. An unmarvered thread is wound around the rim and base. A marvered thread is wound spirally from shoulders to mid-body, at first in two horizontal lines and from the greatest diameter downward dragged up and down, forming a zigzag pattern. Another marvered thread is wound twice below the zigzags.

**COMMENTS AND COMPARANDA** The amphoriskos (small amphora) was one of the ceramic vessel forms that was rendered in glass by the core-forming technique from the sixth century BCE onward, when this technique, known in Mesopotamia and Egypt since the middle of the second millennium BCE, was introduced in the Aegean world. In addition to amphoriskoi, alabastra, aryballoi, and oinochoiskai (juglets) were imitated in core-formed glass. It is believed that they functioned as unguentaria, intended for aromatic and cosmetic substances (Harden 1981; McClellan 1984; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 37–44).

This object belongs to the earliest group of Aegean core-formed vessels, dating from the middle of the sixth century to the end of the fifth century BCE (Harden 1981, pp. 58–99; Grose 1989, pp. 110–115), which were made either of blue glass and decorated with white, yellow, and turquoise threads or of milky white glass decorated with purple threads. Vessels of this group have been found in great numbers in Rhodes, Macedonia, the Aegean islands, and Italy. For the classification of this particular amphoriskos, see Grose 1989, class I:A, amphoriskos form I:2; for the class, see p. 143, nos. 94–95; for the form, see p. 145, no. 101.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 66, no. 153; p. 56, plate no. 153.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 35. Amphoriskos

<b>Accession Number</b>	2003.168
<b>Dimensions</b>	H. 6.0, Diam. rim 2.2, max. Diam. 4.1, Diam. base 1.1 cm; Wt. 33.00 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass, with bronze chain
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** Almost fully preserved; small part of the rim is filled. Almost the entire vessel is covered with whitish weathering. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark blue body; opaque yellow and turquoise decoration. Broad, inward-sloping rim-disk; relatively tall, cylindrical neck; almost right-angled shoulder; top-shaped body; convex bottom; circular base-knob with a rounded edge. Two dark blue vertical strap handles extend from the shoulders to the upper part of the neck under the rim.

An unmarvered opaque yellow thread is wound around the rim. A wide marvered yellow thread starts on the shoulder and spirals four times around the shoulders and the upper body, where an opaque whitish thread (its



white color, likely the result of weathering, was originally turquoise) is wound twice, and they are both dragged up and down, forming a zigzag pattern. Below this, a marvered yellow thread is wound horizontally twice around the body.

A bronze chain ending with a large ring is attached to one of the handles.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, class I:B, amphoriskos form I:2: p. 144, no. 97.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 81, no. 221; p. 61, plate no. 221.

Wight 2011 pp. 103, 112, fig. 80.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 36. Amphoriskos

**Accession Number** 2003.169

<b>Dimensions</b>	H. 6.5, Diam. rim 2.6, max. Diam. 4.5, Diam. base 1.0 cm; Wt. 33.74 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark green (appearing black) and opaque white and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** One handle restored. Some minor nicks and scratches. One side of the vessel is discolored and iridescent.

**DESCRIPTION** Translucent dark green (appearing black) body; opaque white and turquoise decoration. Broad, inward-sloping rim-disk; relatively tall, cylindrical neck; obtuse-angled shoulder; top-shaped body; convex bottom; circular base-knob with a rounded edge. Two dark green vertical strap handles extend from the upper part of the neck to the shoulders.

An unmarvered opaque white thread is wound around the rim. A marvered white thread starts on the shoulder and spirals five times around the shoulders and the upper body, where a marvered opaque turquoise thread is wound twice, and they are both tooled into a zigzag pattern to the middle of the body. Below this a marvered white thread is wound horizontally twice around the body.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, nontypical example of class I:B, amphoriskos form I:2: pp. 144–146, nos. 97–104.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 60, no. 132; p. 59, plate no. 132.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 37. Amphoriskos

<b>Accession Number</b>	2003.171
<b>Dimensions</b>	H. 8.0, Diam. rim 2.9, max. Diam. 4.8, Diam. base 1.0 cm; Wt. 49.66 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** Fully preserved, with some discoloration and large areas of iridescence. There are no visible cracks or breaks, but some small nicks and scratches. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark blue body; opaque yellow and turquoise decoration. Broad, inward-sloping rim-disk; relatively tall, cylindrical neck mildly tapering toward rim; obtuse shoulder; elongated, top-shaped body; convex bottom; circular base-knob with a rounded edge. Two opposing dark blue vertical strap handles extend from the shoulders to the upper part of the neck under the rim.

An unmarvered opaque yellow thread is wound around the rim. A wide marvered yellow thread starts on the shoulder and spirals twice around the shoulders and the upper body, where a marvered opaque turquoise thread

is wound at least twice; they are both dragged up and down, forming a zigzag pattern. Below this a marvered yellow thread is wound horizontally twice around the body.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, class I:B, amphoriskos form I:2: pp. 144–146, nos. 97–104.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 62, no. 138.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 38. Amphoriskos

<b>Accession Number</b>	2003.172
<b>Dimensions</b>	H. 11.0, Diam. rim 3.3, max. Diam. 6.7, Diam. base 1.8 cm; Wt. 130.15 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow glass

<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads
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**CONDITION** Intact with very few minor abrasions. Vertical indentations on the body caused by the tooling of the zigzags.

**DESCRIPTION** Translucent dark blue body; opaque yellow decoration. Broad, inward-sloping rim-disk; relatively tall, cylindrical neck wider toward the body; obtuse-angled shoulder; top-shaped body; convex bottom; circular base-knob with a rounded edge. Two dark blue vertical strap handles extend from the shoulders to the rim.

An unmarvered opaque yellow thread is wound around the rim. A wide marvered yellow thread starts on the shoulder and spirals 13 times around the shoulders and the body, and it is dragged up and down forming a zigzag pattern.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, class I:B, amphoriskos form I:1: p. 143, no. 96.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 62, no. 141; p. 60, plate no. 141.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 39. Amphoriskos

<b>Accession Number</b>	2003.173
<b>Dimensions</b>	H. 7.1, Diam. rim 2.4, max. Diam. 4.5 cm; Wt. 44.01 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, and unmarvered and marvered threads

**CONDITION** Intact, with mild pitting. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark blue body; opaque yellow and turquoise decoration. Broad, inward-sloping rim-disk; relatively tall, cylindrical neck; obtuse-angled shoulder; top-shaped body; convex bottom; circular base-knob with a rounded edge. Two dark blue vertical strap handles extend from the shoulders to the upper part of the neck.

An opaque yellow thread and a turquoise thread—both unmarvered—are wound around the rim. A wide marvered yellow thread starts on the neck as a large flake and spirals eight times around the shoulders and the upper body, where a marvered opaque turquoise thread is wound once and they are both dragged up and down, forming a zigzag pattern. Below this a marvered yellow thread is wound horizontally twice around the body.



**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, class I:B, amphoriskos form I:2: p. 144, no. 97.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 62, no. 142.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 40. Amphoriskos

<b>Accession Number</b>	2003.170
<b>Dimensions</b>	H. 7.3, Diam. rim 2.6, max. Diam. 4.4, Diam. base 1.2 cm; Wt. 40.10 g
<b>Date</b>	Fifth century BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque dark red, yellow, and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** Fully preserved, with some signs of wear and some discoloration, especially on the neck and upper body. Some nicks and scratches. Whitish remains of the core in the interior.

**DESCRIPTION** Opaque dark red body; opaque yellow and turquoise decoration. Broad, inward-sloping rim-disk; tall, cylindrical neck, tapering toward the body; obtuse-angled shoulder; conical body; convex bottom; circular base-knob with a rounded edge. Two red vertical strap handles extend from the shoulders to the upper part of the neck under the rim.

An unmarvered opaque yellow thread is wound around the rim. A wide marvered thread, probably yellow originally, now totally weathered to white, starts on the shoulder and spirals three times around the shoulders and the upper body, where a marvered opaque turquoise thread is wound twice; both were dragged up and down, forming a zigzag pattern. Below this a marvered thread, yellow originally, now completely weathered to white, is wound horizontally three times around the body.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. For the classification of this particular amphoriskos, see Grose 1989, class I:F, amphoriskos form I:2: pp. 146–48, nos. 104, 109.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1017]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1017.

von Saldern et al. 1974, p. 60, no. 133.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 41. Amphoriskos

<b>Accession Number</b>	2003.175
<b>Dimensions</b>	H. 7.5, Diam. rim 2.5, max. Diam. 4.3, Diam. base 1.0 cm; Wt. 39.80 g
<b>Date</b>	Probably late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark green (appearing black) and opaque white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base-knob, and unmarvered threads

**CONDITION** Fully preserved; no cracks or breaks. Very few nicks and scratches. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark green body (appearing black); opaque white decoration. Broad, inward-sloping rim-disk; tall, cylindrical neck; obtuse-angled shoulder; top-shaped body; convex bottom; globular base-knob. Two dark green vertical strap handles extend from the shoulders to the upper part of the neck.

A thick unmarvered opaque white thread is wound around the rim, and another one around half of the base-knob.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 34. This is a very rare variant of the core-formed amphoriskoi because of its monochrome body, and no other examples

with the exact same colors of dark green (nearly black) and white have been identified. For the classification of this particular amphoriskos, see Grose 1989, class I:F, amphoriskos form I:2. The almost spherical base-knob does not appear among group I amphoriskoi, yet the body shape fits within that group. The base-knob appears in group II, similar to II:2, which has a different body form. Other intriguing details are that the rim was made by bending the mass of the body and not by a separate disc. In addition, only a layer of dirt—no larger particles of the core—is visible in the interior, raising doubts about the production technique and the date of the vessel.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 64, no. 147; p. 63, plate no. 147.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 42. Unguentarium

<b>Accession Number</b>	2003.203
<b>Dimensions</b>	H. 11.4, Diam. rim 2.5, max. Diam. 5.1, Diam. base 2.6 cm; Wt. 71.44 g
<b>Date</b>	Third century BCE

<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Translucent dark blue and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles, base, and marvered threads

**CONDITION** Mended. Pitting on the surface, more visible on the decoration; weathering on the ground areas.

**DESCRIPTION** Translucent dark blue ground; white and yellow décor. Flat, horizontal rim; cylindrical neck; oval body; pointed bottom on a tall, conical, outward-splayed base. On the shoulders are two dark blue horizontal loop handles.

A marvered white thread spirally wound four times on the lower part of the neck continues with eight revolutions on the upper part of the body, where it is flanked by five coils of a marvered yellow thread, and ends with five more coils on the lower body. The decoration on the upper body is dragged upward, forming a zigzag pattern. This tooling resulted in vertical ribbing on the body.

**COMMENTS AND COMPARANDA** Double-handled unguentaria along with hydriskai, jars, and lentoid aryballoi are a new vessel form, ascribed to the second, far rarer group II of Mediterranean core-formed vessels. This group appears late in the fourth century BCE, at the very beginning of the Hellenistic era (fourth–first centuries BCE), and dominated the market until the first or second quarter of the third century. New production centers operated then, probably in Italy and mainland Greece, possibly Macedonia. New decorative patterns replaced the old zigzags with festoons and feather patterns (Harden 1981, pp. 100–121; McClellan 1984, pp. 77–126; Grose 1989, pp. 115–122; Stern and Schlick-Nolte 1994, pp. 38–39). For the classification of this particular vessel, see Grose 1989, class II:G, unguentarium form II:1, pp. 121–122; Harden 1981, pp. 135–137, nos. 372–373.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 81, no. 218; p. 61, plate no. 218.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 43. Amphoriskos

<b>Accession Number</b>	2003.200
<b>Dimensions</b>	H. 14.6, Diam. rim 3.0, max. Diam. 4.5 cm; Wt. 129.39 g
<b>Date</b>	Mid-second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region or Cyprus
<b>Material</b>	Translucent dark blue, almost transparent greenish, and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base-knob, and marvered threads

**CONDITION** Mended; some fills on neck, with some signs of weathering, pitting, and discoloration. The handles were restored. On the body two shades of blue are visible, possibly as a result of breakage and mending.

**DESCRIPTION** Translucent dark blue ground; opaque yellow decoration. Moderately broad, inward-sloping rim-disk; cylindrical neck, tapering upward; obtuse-angled shoulder; slim, ovoid body; convex pointed bottom; short, spherical light greenish base-knob. Two opposing vertical translucent greenish strap handles extend from the

shoulder to just below the rim, bend, and then attach on the middle of the neck.

A marvered opaque yellow thread is wound on the rim and spirals to the bottom 22 times, in horizontal lines to the shoulder, tooled to form a carelessly executed feathered pattern on the body, and finally in a straight-lined spiral on the bottom near the base-knob.

**COMMENTS AND COMPARANDA** Amphoriskoi are one of the two main vessel forms produced in glass workshops active in the eastern Mediterranean between the middle of the second century BCE and the early first century CE, conventionally referred to as Mediterranean group III, a period of revival of core-forming, after a century-long period of stasis during which no new glass vessel forms were introduced. On Mediterranean group III: Harden 1981, pp. 123–141; McClellan 1984, pp. 127–164; Grose 1989, pp. 122–125; Stern and Schlick-Nolte 1994, p. 39. For the classification of this particular vessel, see Grose 1989, class III:E, amphoriskos form III:2B: pp. 169–172, nos. 168–176.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 78, no. 209; p. 79, plate no. 209.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 44. Amphoriskos

<b>Accession Number</b>	2003.201
<b>Dimensions</b>	H. 12.5, Diam. rim 2.5, max. Diam. 5.2 cm; Wt. 117.62 g
<b>Date</b>	Mid-second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region or Cyprus
<b>Material</b>	Translucent dark green; translucent to almost transparent amber-colored; opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base-knob, and marvered threads

**CONDITION** The vessel is in good condition, with some signs of weathering, pitting, and discoloration. There is a small hole near the base and a few abrasions and scratches on the surface. Base-knob mended and partly restored.

**DESCRIPTION** Translucent dark green ground; opaque white and yellow decoration. Moderately broad, uneven, inward-sloping rim-disk; cylindrical neck with upward taper; obtuse-angled shoulder; broad, uneven ovoid body; convex pointed bottom; short, spherical amber-colored base-knob. Two opposing vertical translucent amber-colored strap handles extend from the shoulder to just below the rim, bend, and attach on the middle of the neck. Irregular depressions on the shoulder and upper body.

A marvered opaque yellow thread is wound on the rim and spirals to the bottom 32 times, in horizontal lines to

the shoulder and on the lower body, and is dragged upward 24 times to form a festoon pattern on the body. A marvered white thread is added from the shoulder to the lower body, mingling with the spiral and festoon pattern of the yellow thread.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 43. For the classification of this particular amphoriskos, see Grose 1989, class III:E, amphoriskos form III:2B: pp. 169–172, nos. 168–176.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 80, no. 210; p. 79, plate no. 210.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 45. Amphoriskos

<b>Accession Number</b>	2003.202
<b>Dimensions</b>	H. 11.4, Diam. rim 2.1, max. Diam. 5.1 cm; Wt. 118.41 g
<b>Date</b>	Second–mid-first century BCE, with modern restorations
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region

<b>Material</b>	Translucent dark blue-green; transparent greenish; opaque turquoise and yellow glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles and marvered threads

**CONDITION** Mended; areas with whitish weathering, especially on the handles. Parts of the rim, shoulder, and handles are restored. The entire vessel is coated with a transparent greenish varnish.

**DESCRIPTION** Translucent dark blue-green, transparent greenish, and opaque turquoise and yellow glass. Narrow, outward-splayed flattened rim-disk; tall cylindrical neck; sloping obtuse-angled shoulder; conical body; convex pointed bottom. An oval knob of greenish glass is applied on the center of the bottom. Two greenish, large opposing coil handles stretch vertically from shoulder to upper neck under the rim.

A yellow and a turquoise thread—both marvered—are spirally wound 27 times from the rim to bottom. The threads have been dragged 26 times up and down from the shoulder to the bottom, forming a festoon pattern.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 43. For the classification of this particular amphoriskos, see Grose 1989, class III:E, amphoriskos form III:2B: pp. 170–172, nos. 170–174. The shoulder area was restored, forming an unexpected obtuse angle between the neck and the body, compared for instance with cat. 46, which is more typical for the form.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 80, no. 214.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 46. Amphoriskos

<b>Accession Number</b>	2003.204
<b>Dimensions</b>	H. 16.0, Diam. rim 2.8, max. Diam. 5.2 cm; Wt. 146.88 g
<b>Date</b>	Second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Translucent dark blue and green; opaque white and red glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handles, base-knob, and marvered threads

**CONDITION** Intact. Pitting on the surface, with more on the ground areas.

**DESCRIPTION** Transparent dark blue ground; transparent greenish, opaque turquoise, and yellow glass. Moderate splayed rim, tooled outward from the neck; tall, cylindrical neck, tapering upward; sloping obtuse-angled shoulder; tall conical body; convex pointed bottom. A drop-shaped base-knob of red glass is applied on the center of the bottom. Two large, opposing strap handles stretch vertically from shoulder to upper neck under the rim, bent and attached lower on the neck. One handle is greenish and the other bluish glass.

A red and a white thread—both marvered—are wound 32 times from rim to bottom in horizontal lines, which along the neck and at the central body are dragged upward to form a festoon pattern.

**COMMENTS AND COMPARANDA** On core-formed amphoriskoi of this period, see comments on cat. 43. For the classification of this particular amphoriskos, see Grose 1989, class III:E, amphoriskos form III:2B: pp. 170–172, nos. 170–174.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 59, no. 130, illus.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 47. Amphoriskos

<b>Accession Number</b>	2003.199
<b>Dimensions</b>	H. 10.0, Diam. rim 2.6, max. Diam. 4.6 cm; Wt. 49.93 g (with the fill)
<b>Date</b>	Mid-second–mid-first centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Translucent dark blue and opaque yellow and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk and marvered threads

**CONDITION** Mended. Part of the rim and several parts of the body and the bottom are fills. Some cracks visible; surface pitted and in areas discolored. Probably missing handles and base pad. There is a visible scar where the lower part of a now-missing handle once attached. The corresponding handle attachment spot of the rim is missing. Spots on the shoulder and rim where the other handle, now missing, would have been attached are filled with a colored resin.

**DESCRIPTION** Translucent dark blue ground; opaque white and yellow decoration. Broad, horizontal rim-disk; long cylindrical neck gradually widening toward the body; obtuse-angled shoulder; long convex lower part of the body. It is highly likely that it had two long S-shaped handles and a pad base, but because critical parts of the rim, shoulder, and bottom areas are missing, it is not possible to determine the exact shape of the vessel.

A yellow and a white thread—both marvered—are spirally wound around the vessel from the rim to the center of the bottom. The thread was tooled three times downward and three times upward to form very wide feather patterns on the neck and the upper body, and five times downward and five times upward on the lower body.

**COMMENTS AND COMPARANDA** On the origins of core-formed amphoriskoi, see cat. 34. This object belongs to the third group of core-formed vessels, which appears between the second century BCE and the early first century CE; the centers of production seem to have been in Cyprus and on the Phoenician coast. The group includes different shapes of alabastri and amphoriskoi, which are similar to those of ceramic vessels manufactured at the same time (Harden 1981, pp. 123–141; Grose 1989, pp. 122–125). For the classification of this particular amphoriskos, see Grose 1989, p. 123, class III:E, amphoriskos form III:3. A few unprovenanced examples include Grose 1989, pp. 172–173, nos. 177–179; Corning Museum of Glass, 2022.1.26 (previously Brooklyn Museum, 12.34): vessel's form and displaced feather pattern are the same, and it preserves the strongly curved handles stretching from the rim to the shoulder, typical for the form. That vessel was reassembled with the addition of what seems to be a freeblown base of a stemmed beaker: <https://glasscollection.cmog.org/objects/47925/alabastron>; Musée du Verre, Grand Curtius, Liège, B 1463; Royal Ontario Museum, 950.157.21: the same vessel without handle and with a flat foot noted in von Saldern 1974, no. 206; Hayes 1975, p. 15, no. 38, plate 3: <https://collections.rom.on.ca/objects/405071/>.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 76, no. 206; p. 78, plate no. 206.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 48. Oinochoe

<b>Accession Number</b>	2003.179
<b>Dimensions</b>	H. 8.3, Diam. rim 3.1 × 2.4, max. Diam. 4.6, Diam. base 2.8 cm; Wt. 54.78 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim-disk, handle, base, and unmarvered and marvered threads

**CONDITION** Mild pitting. A burst bubble on the lower part of the handle. Tooling marks on the upper surface of the base. Whitish remains of the core in the interior.



**DESCRIPTION:** Core-formed, opaque white oinochoe decorated with translucent purple threads. Trefoil rim-disk; short, cylindrical neck; sloping shoulder; ovoid body; convex bottom; discoid conical base. Tall, strap handle, arching well above the rim-disk, applied on the shoulder and attached on the rim.

One unmarvered thread around the rim and the base. A marvered thread is wound eight times from neck to mid-body. The last four coils, on the wider part of the body, are dragged up and down, forming a zigzag pattern; the last three coils are adjacent, appearing as one wide thread. Just below the zigzag pattern, another purple thread is wound twice around.

**COMMENTS AND COMPARANDA** The oinochoiske (juglet) was one of the ceramic vessel forms that had been rendered in glass with core-forming since the sixth century BCE, when this technique, known in Mesopotamia and Egypt since the middle of the second millennium BCE, was introduced in the Aegean world. In addition to oinochoiskai, amphoriskoi (small amphorae), alabastra, and aryballoi were imitated in core-formed glass. It is believed that they functioned as unguentaria, intended for aromatic and cosmetic substances (Harden 1981; McClellan 1984; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 37–44).

This object belongs to the earliest group of Aegean core-formed vessels, dating from the middle of the sixth century to the end of the fifth century BCE (Harden 1981, pp. 58–99; Grose 1989, pp. 110–115), made either of blue glass and decorated with white, yellow, and turquoise threads or of milky white glass decorated with purple threads. Vessels of this group have been found in great numbers in Rhodes, Macedonia, the Aegean islands, and Italy. For the classification of this particular oinochoe, see Grose 1989, class I:A, oinochoe form I:2: pp. 148–149, nos. 110–113.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 66, no. 155; p. 57, plate no. 155.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 49. Oinochoe

<b>Accession Number</b>	2003.166
<b>Dimensions</b>	H. 8.0, Diam. rim 3.0 × 2.3, max. Diam. 5.2, Diam. base 2.3 cm; Wt. 57.92 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handle, rim-disk, base, and unmarvered and marvered threads

**CONDITION** Intact. Some light weathering on the shoulders and on the base.

**DESCRIPTION** Translucent dark blue ground; opaque yellow and turquoise décor. Narrow trefoil rim-disk; short, cylindrical neck; convex shoulder; ovoid body; convex bottom. Short outward-splayed base, concave on its underside, a bit off-center. An opaque light blue strap handle extends from the shoulder to the rim-disk.

An unmarvered yellow thread is wound around the rim. A marvered yellow thread is wound three times in horizontal lines on the shoulder, and below, together with a marvered turquoise thread, wound three–four times and dragged up and down, forming a zigzag pattern. Below this a marvered yellow thread is wound spirally twice.

**COMMENTS AND COMPARANDA** See comments on cat. 48. For the classification of this particular oinochoe, see Grose 1989, class I:B, oinochoe form I:2: pp. 150–151, nos. 116–117.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 54, no. 119; p. 53, plate no. 119.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 50. Oinochoe

<b>Accession Number</b>	2003.165
<b>Dimensions</b>	H. 10.2, Diam. rim 4.6, max. Diam. 5.9, Diam. base 4.0 cm; Wt. 157.40 g
<b>Date</b>	Mid-fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent dark blue and opaque yellow, turquoise, and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, base, and unmarvered and marvered threads

**CONDITION** Fully preserved; mended. There is some discoloration; minor nicks and scratches on the surface.

**DESCRIPTION** Translucent dark blue ground; opaque yellow, turquoise, and white threads. Broad trefoil rim-disk; cylindrical neck, tapering toward the body; rounded sloping shoulder; straight-sided, almost cylindrical body tapering toward the bottom; circular dark blue pad-base, asymmetrical, uneven, and slightly concave on its underside. A vertical translucent dark blue strap handle is applied on the shoulder and, arching, extends to the edge of the rim-disk.

An unmarvered yellow thread is wound around the rim and another yellow thread is wound spirally three times around the neck. Seven marvered threads are wound spirally around the body. Each one continues and intermingles with the other. A yellow thread starts on the shoulder and spirals four times, followed by a turquoise and a white thread, each spiraling three times. At the middle of the body the same sequence is repeated, and the decoration closes with a yellow thread spiraled four times near the bottom of the vessel. All these threads are dragged up and down 24 times, forming a feather pattern, and some of the finer strands are not visible in every column. One unmarvered yellow thread is wound around the base.

**COMMENTS AND COMPARANDA** See comments on cat. 48. For the classification of this particular oinochoe, see Grose 1989, class II:A, oinochoe form II:1: pp. 161, 163, nos. 147, 150.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 54, no. 117; p. 49, plate no. 117.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 51. Oinochoe

<b>Accession Number</b>	2003.167
<b>Dimensions</b>	H. 5.8, Diam. rim 2.8, max. Diam. 3.7 cm; Wt. 32.33 g
<b>Date</b>	Late fourth–early third centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque white and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied handle, rim-disk, base, and unmarvered and marvered threads

**CONDITION** Intact. Condition is good, with a few abrasions, and there are some small areas of discoloration and iridescence.

**DESCRIPTION** Translucent dark blue ground; opaque white and turquoise décor. Trefoil rim-disk; cylindrical neck; convex shoulder; straight-sided cylindrical body tapering toward the bottom; low circular pad-base, asymmetrical, uneven, and slightly concave on its underside. A dark blue strap handle extends from the shoulder to beneath the rim.

An unmarvered turquoise thread is wound around the rim and spirally wound three times along the neck. On the body, two marvered threads—one turquoise and one white, appearing yellow in areas—are spirally wound five times and dragged downward, forming a festoon pattern.

Around the base is wound an unmarvered turquoise thread.

**COMMENTS AND COMPARANDA** See comments on cat. 48. For the classification of this particular oinochoe, see Grose 1989, class II:A, oinochoe form II:1 subclass with upright festoon and not feathering; see Toronto, ROM 950.157.15 (Grose 1989, p. 118, fig. 74).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 54, no. 120; p. 53, plate no. 120.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 52. Oinochoe

<b>Accession Number</b>	2003.164
<b>Dimensions</b>	H. 8.8, Diam. rim 3.8 × 3.5, max. Diam. 4.4 (including handle), 4.2 (body) cm; Wt. 51.00 g
<b>Date</b>	Mid-seventh–early sixth centuries BCE
<b>Production Area</b>	Italy
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied elements

**CONDITION** Parts of the rim, neck, handle, and the decorative band on the neck are restored. In the interior, which is rough, off-white remains of the core are visible. There are small cracks all over the body, probably indicating that it was made by marvering crushed glass.

**DESCRIPTION** Core-formed, translucent dark blue miniature oinochoe. Applied trefoil rim-disk; long cylindrical neck; sloping shoulder; ovoid body; convex bottom; discoid base with a tall stem. An almost vertical, mildly convex strap handle is attached on the shoulder (distorting the decorative protrusions in that area), stretched upward, and bent to the underside of the rim-disk.

Three rows of pinched, projecting knobs decorate the vessel from shoulder to mid-body height. A small, amorphous hole is visible on the lower part of the bottom, adjacent to the spot where the coil that forms the base is applied. On the convex bottom is a thick coil of glass, wound four times, forming the stem and the base, which is flattened to a discoid shape. A finer thread is spirally wound five times over the lower part of the body and the stem, beginning on the lower body. A thick coil is wound one and a half times around the mid-neck height and flattened to form a decorative discoid band.

One of the glass knobs on the body is further stretched and bent on the shoulder, covering—only partly—a hole on the body wall. On the lower part of the body a small cavity is visible, and another minute one between two knobs of the lowest row.

Both ends of the handle have rounded edges, indicating that the handle was made of a lump of glass that was first stretched and tooled to the desired size on a flat surface, and then applied on the vessel.

**COMMENTS AND COMPARANDA** The projecting knobs that cover the surface of the body, which give it a spiky appearance, gave to the vessels of this type the nickname “hedgehog” or “hirsute” (*irsuti* in Italian) vessels (including oil flasks in the shape of small oinochoae like this vessel, small bowls, alabastra, and rarely lenticular pyxides). They were made in Etruscan workshops, originally in Caere and later in Orvieto, using the core-forming technique and were made, almost exclusively, of blue glass in different shades imported from the Near East. In addition to the vessels, beads and jewelry inlays were produced in these workshops. They appear in the middle of the seventh century BCE, and their production was at its peak during the late seventh and the first decades of the sixth century BCE. They were probably

made to hold perfume in the form of scented oil, which was a specialty of the region (especially around Vetulonia), and they are found in elite burials at the sites of Cerveteri, Orvieto, Chiusi, and other early Etruscan sites (Caputo 1963, pp. 13–17; Bizzari 1965, pp. 57–61; Martelli 1994, pp. 75–98; Giuntoli 1996, pp. 13–16; Cappucini 2017, pp. 44–46).

**PROVENANCE** By 1972, Gawain McKinley Ltd.; by 1973–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** McKinley 1972, p. 2, upper left ill.

JGS 1973, p. 187, no. 2, ill.

von Saldern et al. 1974, p. 54, no. 115; p. 52, plate no. 115.

Harden 1981, p. 170, no. 113e.

Carandini 1985, p. 188, fig. 227.

Martelli 1994, p. 97, nos. 44–45.

von Saldern 2004, p. 88, no. 3.

Wight 2011, pp. 34, 36, fig. 19.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 53. Aryballos

<b>Accession Number</b>	2003.174
<b>Dimensions</b>	H. 6.0, Diam. rim 2.6, max. Diam. 4.7 cm; Wt. 48.12 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, and unmarvered and marvered threads

**CONDITION** Intact, with very few abrasions and scratches. Reddish remains of the core in the interior. Vertical indentations on the body caused by the tooling of the zigzags.

**DESCRIPTION** Translucent dark blue body; opaque yellow and turquoise decoration. Broad, inward-sloping rim-disk; cylindrical neck; obtuse-angled shoulder; almost spherical body; convex bottom. Two dark blue ring handles with knobbed tails extend from the lower part of the neck to the shoulder.

An unmarvered opaque yellow thread is wound around the rim. A marvered yellow thread starts on the shoulders, spirals eight times around the upper body, where a marvered opaque turquoise thread is wound three times, and they are both dragged up and down, forming a zigzag pattern. Below this a yellow and a

marvered turquoise thread are wound horizontally once around the body.

**COMMENTS AND COMPARANDA** The aryballos was one of the ceramic vessel forms that was rendered in glass with core-forming after the sixth century BCE, when this technique, known in Mesopotamia and Egypt since the middle of the second millennium BCE, was introduced in the Aegean world. In addition to aryballoi, amphoriskoi (small amphorae), alabastra, and oinochoiskai (juglets) were imitated in core-formed glass. It is believed that they functioned as unguentaria, intended for aromatic and cosmetic substances (Harden 1981; McClellan 1984; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 37–44).

This aryballos belongs to the earliest group of Aegean core-formed vessels, dating from the middle of the sixth to the end of the fifth century BCE (Harden 1981, pp. 58–99; Grose 1989, pp. 110–115), made either of blue glass and decorated with white, yellow, and turquoise threads or of milky white glass decorated with purple threads. Vessels of this group have been found in great numbers in Rhodes, Macedonia, the Aegean islands, and Italy. For the classification of this particular aryballos, see Grose 1989, class I:B, form I:1A: p. 151, no. 119.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 64, no. 145; p. 53, plate no. 145.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 54. Aryballos

<b>Accession Number</b>	2003.177
<b>Dimensions</b>	H. 6.0, Diam. rim 2.4, max. Diam. 4.4 cm; Wt. 34.64 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, and unmarvered and marvered threads

**CONDITION** Intact, with very few abrasions and scratches. Reddish remains of the core in the interior.

**DESCRIPTION** Translucent dark blue body; opaque yellow and turquoise decoration. Broad inward-sloping rim-disk; cylindrical neck; obtuse-angled shoulder; almost spherical body; convex bottom. Two dark blue ring handles with knobbed tails extend from the upper part of the neck near the rim to the shoulder.

An unmarvered opaque yellow thread is wound around the rim. A wide marvered yellow thread starts on the neck as a large flake that covers almost the entire height of the neck on one side and spirals around the shoulders and the upper body, where a marvered opaque turquoise thread is wound twice, and they are both dragged up and down, forming a zigzag pattern. Below this a marvered yellow thread is wound horizontally twice around the body.

**COMMENTS AND COMPARANDA** See comments on cat. 53. For the classification of this particular aryballos, see Grose 1989, class I:B, aryballos form I:1: p. 151, no. 119.

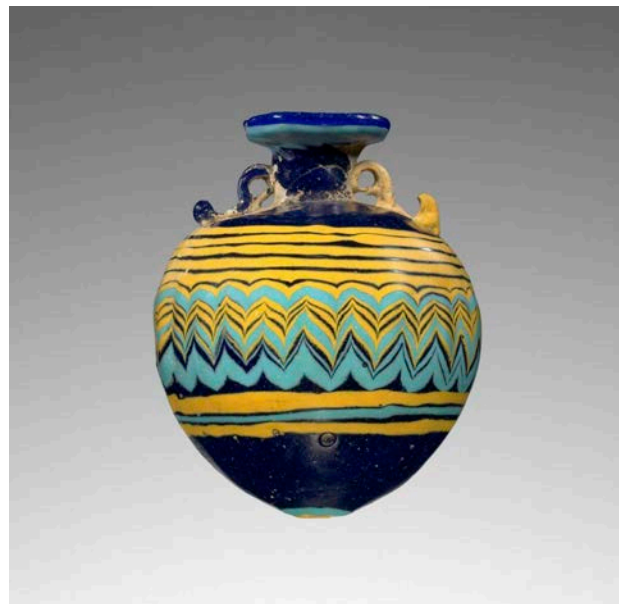
**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1041]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1041.

von Saldern et al. 1974, p. 65, no. 151, plate no. 151.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 55. Aryballos

<b>Accession Number</b>	2004.4
<b>Dimensions</b>	H. 7.2, Diam. rim 2.8, max. Diam. 6.5 cm; Wt. 146.88 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and turquoise glass

**Modeling Technique and Decoration** Core-formed; applied rim, handles, unmarvered and marvered threads, and dots

**CONDITION** Intact.

**DESCRIPTION** Translucent dark blue ground; yellow and turquoise decoration. Broad, inward-sloping turquoise rim-disk; cylindrical neck; convex shoulder; ovoid body; convex pointed bottom. Two “dolphin” ring handles with knobbed tails, one dark blue and one yellow, extend from the middle of the neck to the shoulder.

An unmarvered dark blue thread is wound around the rim. A marvered yellow thread is wound five times around the body as horizontal lines and at the largest diameter a turquoise thread is added, spiraling three times with the yellow thread, dragged to form a zigzag and feathered pattern. Below are two yellow threads flanking a turquoise thread. At the center of the bottom is a wider turquoise dot with a smaller yellow dot at the center.

**COMMENTS AND COMPARANDA** See comments on cat. 53. For the classification of this particular aryballos, see Grose 1989, class I:B, aryballos form I:1: pp. 151–152, no. 120.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 64, no. 144.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 56. Aryballos

<b>Accession Number</b>	2003.176
<b>Dimensions</b>	H. 6.1, Diam. rim 2.7, max. Diam. 5.0, Th. 0.3 cm; Wt. 43.66 g
<b>Date</b>	Late sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean, possibly Rhodes
<b>Material</b>	Translucent dark blue and opaque yellow and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied rim, handles, and unmarvered and marvered threads

**CONDITION** Fully preserved. The vessel has much discoloration, visible especially around the mouth and neck. There are a few minor abrasions, such as nicks and scratches.

**DESCRIPTION** Translucent dark blue ground; white and yellow combed pattern. Inward-sloping rim-disk with tooling marks above; cylindrical neck; right-angled junction with rounded shoulder; ribbed, spherical-ovoid body; convex bottom. Two blue scroll-shaped handles extend from under the mouth to the shoulder.

An unmarvered yellow thread is wound around the rim. A marvered thread (probably the same one) continues, spiraling twice around the neck and twice around the shoulder, then continuing, spiraling seven more times on the central body, alternating with a white thread in a combed pattern. Around the bottom a white thread is wound two times and a yellow once. A finer, white thread



appearing near the bottom is the loose end of the thread wound around the body.

**COMMENTS AND COMPARANDA** See comments on cat. 53. For the classification of this particular aryballos, see Grose 1989, class I:B, aryballos form I:2; Arveiller-Dulong and Nenna 2000, p. 125, no. 153.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 1039]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 1039, ill.

von Saldern et al. 1974, p. 64, no. 149; p. 65, plate no. 149.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 57. Fragment of a Core-Formed Vessel

**Accession Number** 83.AF.28.1

**Dimensions** H. 1.1, W. 1.6 cm; Wt. 0.69 g

**Date** Sixth–fifth centuries BCE

<b>Production Area</b>	Eastern Mediterranean, Aegean?
<b>Material</b>	Translucent dark blue and opaque turquoise and white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied marvered threads

**CONDITION** Body fragment. On the interior side a thick, reddish-yellow layer is preserved from remains of the core.

**DESCRIPTION** Translucent dark blue ground; opaque turquoise and white decoration. Fragment of the body of a seemingly cylindrical vessel. One opaque yellow and one white thread, both marvered, are spirally wound around the upper body and dragged upward, forming a zigzag pattern.

**COMMENTS AND COMPARANDA** Different forms of ceramic vessels were rendered in glass with core-forming from the sixth century BCE, when this technique, known in Mesopotamia and Egypt since the middle of the second millennium BCE, was introduced in the Aegean world. Amphoriskoi (small amphorae), alabastra, aryballoi, and oinochoiskai (juglets) were imitated in core-formed glass, although the original shape of the core-formed vessel that this fragment comes from has not been identified. It is believed that these vessels functioned as unguentaria, intended for aromatic and cosmetic substances (Harden 1981; McClellan 1984; Grose 1989, pp. 109–125; Stern and Schlick-Nolte 1994, pp. 37–44). The earlier examples, dating from the middle of the sixth to the end of the fifth century BCE (Harden 1981, pp. 58–99; Grose 1989, pp. 110–115), were made either of blue glass and decorated with white, yellow, and turquoise threads or of milky white glass decorated with purple threads. Vessels of this group have been found in great numbers in Rhodes, Macedonia, the Aegean islands, and Italy.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 58. Fragment of a Core-Formed Vessel

<b>Accession Number</b>	83.AF.28.2
<b>Dimensions</b>	pres. H. 1.2, W. 1.0 cm; Wt. 0.72 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, Aegean?
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Core-formed; applied elements

**CONDITION** Body fragment. On the interior side is a thick reddish layer from the core.

**DESCRIPTION** Translucent dark blue, curved body fragment decorated with applied fine white threads, dragged to form a festoon motif.

**COMMENTS AND COMPARANDA** See cat. 57.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 59. Grooved Bowl

<b>Accession Number</b>	2003.217
<b>Dimensions</b>	H. 8.5, Diam. rim 15.8, Th. 0.5 cm; Wt. 260.62 g
<b>Date</b>	Ca. 150–50 BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent amber-colored glass
<b>Modeling Technique and Decoration</b>	Rotary pressed, engraved

**CONDITION** Intact.

**DESCRIPTION** Thick conical/mastoid bowl with rounded rim and convex bottom. In the interior, 0.7 cm below the rim, three horizontal grooves, each 0.3 cm wide.

**COMMENTS AND COMPARANDA** Conical and hemispherical grooved bowls are the most characteristic glass vessels made on the Syro-Palestinian coast in the second half of the second to the middle of the first century BCE. This form appears to have been widespread throughout the Mediterranean from the Levant to the Atlantic Ocean. They were imitating silver bowls. On this form, see Grose 1979, pp. 54–59, group A; Grose 1989, pp. 193–194, 204–207, nos. 211–222. Further parallels and discussions on the form include Weinberg 1970, p. 21, nos. 1–11; Weinberg 1973, nos. 1–8; Hayes 1975, p. 18, no. 39; Auth 1976, p. 45, no. 33; Stern and Schlick-Nolte 1994, pp. 284–285, no. 79; Nenna 1999a, pp. 70, 72, no. c32; Israeli 2003, p. 77, no. 63; Antonaras 2012, p. 67, no. 16.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 93, no. 244, plate no. 244.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 60. Grooved Bowl

<b>Accession Number</b>	2004.17
<b>Dimensions</b>	H. 8.5, Diam. rim 14.0, Th. 0.5 cm; Wt. 260.91 g
<b>Date</b>	Ca. 150–50 BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent amber-colored glass
<b>Modeling Technique and Decoration</b>	Rotary pressed, engraved

**CONDITION** Fully preserved; mended and filled. Partly covered with weathering.

**DESCRIPTION** Thick conical/mastoid bowl with rounded rim and convex bottom. In the interior, three horizontal grooves 0.5 cm wide: one is 1 cm below the rim and a pair at 3 cm, at mid-body. On the exterior, two concentric grooves, 2.8 and 4.2 cm wide and 0.3 cm thick, encircle the bottom.

**COMMENTS AND COMPARANDA** See cat. 59.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 93, no. 245.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 61. Grooved Bowl

<b>Accession Number</b>	2004.18
<b>Dimensions</b>	H. 5.8, Diam. rim 12.3, Th. 0.4 cm; Wt. 179.60 g
<b>Date</b>	Ca. 150–50 BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Rotary pressed, engraved

**CONDITION** Intact; cream weathering on areas of the exterior.

**DESCRIPTION** Straight rim with round edge sloping slightly inward; thick hemispherical body with rounded, convex bottom. On the interior, two deep horizontal grooves, 0.4 cm wide, at 1.1 and 2.2 cm below the rim. On the exterior, three concentric circular grooves, 1, 3.3, and 4.5 cm in diameter, encircle the center of the bottom.

**COMMENTS AND COMPARANDA** See comments on cat. 59. Further parallels and discussions on the form include Weinberg 1970, p. 21, nos. 12–14; Weinberg 1973, nos. 9–13; Grose 1989, no. 220; Stern and Schlick-Nolte 1994, pp. 290–294, nos. 82–83; Nenna 1999a, pp. 86–87, no. c199; Israeli 2003, p. 77, no. 61; Antonaras 2012, p. 68, no. 18.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 95, no. 251.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 62. Bowl

<b>Accession Number</b>	2003.219
<b>Dimensions</b>	H. 4.8, Diam. rim 10.2, Th. 0.2 cm; Wt. 97.30 g
<b>Date</b>	Second–first centuries BCE
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Molded

**CONDITION** Intact, with some areas of iridescence. There are a few minor nicks and scratches. The body, both interior and exterior, is covered with circular scratches.

**DESCRIPTION** Bowl with a slightly flared, uneven lip. The rim is accentuated in the interior with a fine groove running 0.3 cm below the lip. At the center of the tiny resting surface is one dot, surrounded by a thick ring, which is encircled by a fine, thin ring.

**COMMENTS AND COMPARANDA** No exact parallels have been noted. The bowl, however, belongs to a group of high-quality Hellenistic tableware vessels, predominantly plates, hemispherical bowls—sometimes footed or finned (e.g., cat. 64)—and skyphoi found in

burials in Canosa, the ancient Canusium in southern Italy (for an overview of Canosa Group vessels, see Stern and Schlick-Nolte 1994, pp. 97–115). The vessels belong to two main groups: Millefiori Mosaic Glass and Cast Monochrome Tablewares, the latter made of decolorized, occasionally gilded glass or of strongly colored deep blue and light blue or purple glass (Oliver 1968, pp. 48–55; Grose 1989, pp. 185–189). Occasionally they were decorated with lathe-cut bands or grooves, or gilding; a very few had gold-leaf designs set between two fine colorless bowls in a sandwich gold-glass technique. They have been dated between the late third and the late second century BCE, although individual vessels of all hoards range from the late third to the late first century BCE (Stern and Schlick-Nolte 1994, pp. 100–102). This particular bowl was made of heavily colored glass by chip casting (Lierke 2009, pp. 27–29; Stern and Schlick-Nolte 1994, pp. 49–53, 110–111).

Relatively similar (in respect to the flanged rim and the groove along the rim) are footed bowls made of decolorized glass, although admittedly having a more conical body shape (see Stern and Schlick-Nolte 1994, pp. 102–104, figs. 177, 189–191, also pp. 256–259, nos. 67–68), all of them dated to the second or perhaps to the first century BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 94, no. 248; p. 96, plate no. 248.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 63. Bowl

<b>Accession Number</b>	2003.216
<b>Dimensions</b>	H. 1.9, Diam. rim 8.7, Th. 0.3 cm; Wt. 52.22 g

<b>Date</b>	Third century BCE
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Decolorized glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** The vessel is fully preserved, with some minor abrasions and nicks. There are three small cracks at the lip.

**DESCRIPTION** Bowl with horizontal rim with rounded edge, spreading slightly downward; shallow hemispherical body with convex curving sides; convex bottom. On the rim are “chatter marks,” that is, signs of concentric circles that regularly appear on rotary pressed vessels of decolorized glass (Stern and Schlick-Nolte 1994, figs. 47–48; Ignatiadou 2013, p. 59, fig. 18).

**COMMENTS AND COMPARANDA** This bowl belongs to a group of high-quality Hellenistic tableware vessels, predominantly plates, hemispherical bowls, sometimes footed or finned (e.g., cat. 64), and skyphoi found in burials in Canosa, in southern Italy, the ancient Canusium (for an overview on Canosa Group vessels, see Stern and Schlick-Nolte 1994, pp. 97–115). The vessels belong to two main groups: Millefiori Mosaic Glass and Cast Monochrome Tablewares, the latter made of decolorized, occasionally gilded glass or of strongly colored deep blue and light blue or purple glass (cat. 62) (Oliver 1968, pp. 48–55; Grose 1989, pp. 185–189). Occasionally they were decorated with lathe-cut bands or grooves or gilding; a very few had gold-leaf designs set between two fine colorless bowls in a sandwich gold-glass technique. They have been dated between the late third and the late second century BCE, although individual vessels of all hoards range from the late third to the late first century BCE (Stern and Schlick-Nolte 1994, pp. 100–102). This particular bowl was made of decolorized glass by chip casting or by sagging over a former mold (Lierke 2009, pp. 27–29; Stern and Schlick-Nolte 1994, pp. 49–53, 110–111). It is one of a very small group of bowls that were supplemented with a lid shaped like a shallow dish with a flat bottom and a wide rim with a short overhang (Stern 1999b, pp. 33–41, 46–50; Ignatiadou 2013, pp. 141–150). These lidded glass bowls have been connected to the term “exaleiptra” among the precious vessels recorded in treasures of Athenian temples (Stern 1999b, p. 35). The closest parallel, dated to the third century BCE, is of unknown provenance, and is held in the Kunstmuseum Düsseldorf (Ricke 1989, p. 19, no. 6; Stern 1999b, p. 49, no. 10, fig. 13). Relatively similar lidded bowls with painted

and gilded lids have been unearthed in Macedonia (Ignatiadou 2000, pp. 35–36), reportedly on the Black Sea coast (Kunina 1997, pp. 12, 289–290, no. 18, plate 13; Stern 1999b, pp. 46–47, no. 1, fig. 22), Italy, and Egypt (Arveiller-Dulong and Nenna 2011, pp. 170–172, nos. 198–201), all of them dated to the fourth and third centuries BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 93, no. 243.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 64. Finned Bowl

<b>Accession Number</b>	2003.215
<b>Dimensions</b>	H. 6.6, Diam. rim 15.8, Diam. base 3.3 cm; Wt. 325.40 g
<b>Date</b>	Third–second centuries BCE
<b>Production Area</b>	Possibly Italy
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Cast and cut

**CONDITION** Fully preserved; cracked.

**DESCRIPTION** Mildly flaring, rounded rim; hemispherical body; and convex bottom. An incised, six-petaled rosette is set in a circle at the center of the bowl's bottom. Probably representing lotus petals, 12 pointed leaves spring from this medallion. Each leaf is formed of three elongated grooves. In between the leaves, 12 short,



vertical, slightly slanting fins project from the surface around the middle of the body. The fins differ in size, ranging from 2.8 to 3.3 cm, and they are mildly slanted. An oblique notch/tooling mark is visible below one of the fins. A pair of faint horizontal grooves is incised at the exterior, 1.7 cm below the rim, midway between the rim and the ribs. In the interior, two horizontal grooves, one at 1.7 and another at 3.3 cm below the rim.

**COMMENTS AND COMPARANDA** This bowl belongs to a group of high-quality Hellenistic tableware vessels, predominantly plates, hemispherical bowls, sometimes footed or finned, like 2003.215, and skyphoi found in burials in Canosa, in southern Italy, the ancient Canusium (for an overview on Canosa Group vessels, see Stern and Schlick-Nolte 1994, p. 97–115). The vessels belong to two main groups: Millefiori Mosaic Glass and Cast Monochrome Tablewares, the latter made of decolorized (cat. 63), occasionally gilded glass or of strongly colored deep blue and light blue or purple glass (cat. 62) (Oliver 1968, pp. 48–55; Grose 1989, pp. 185–189). Occasionally they were decorated with lathe-cut bands, grooves, or fins, or gilding; a very few had gold-leaf designs set between two fine colorless bowls in a sandwich gold-glass technique. They have been dated between the late third and the late second century BCE, although individual vessels of all hoards range from the late third to late first century BCE (Stern and Schlick-Nolte 1994, pp. 100–102). This particular bowl was made of intensely colored glass by chip casting (Lierke 2009, p. 27–29; Stern and Schlick-Nolte 1994, pp. 49–53, 110–111).

Metal vessels served as prototypes for the shape and the decoration of finned or lobed bowls. They appear in an earlier, third-century BCE version made of decolorized glass with varying petal patterns and a number of fins around the shoulders. Published finds are known from Gordion (von Saldern 1959, pp. 38–40, nos. 7–13, dated to the third century), Canosa (Harden 1968, pp. 27–28, 31, 35, nos. 7, 2.d, 5, fig. 21; Bartoccini 1935, pp. 246, fig. 12, plates I–II), Xanthos (Demargne 1958, pp. 61, 64, 68f., plate XX, no. 1856), and museum collections (British Museum: Harden 1968, pp. 27–28, no. 7, figs. 20–22). A later variant, a type to which this vessel belongs, has been dated to the late second–early first centuries BCE. The fins on these bowls, unlike the earlier examples, are placed between the tips of the petals of the stylized lotus that decorate the body. The petals are narrower and plainer in design compared to the earlier examples; they share the same size, rendered in sunk relief. Published examples include those from the shipwreck in Antikythera, Greece (Weinberg 1965, pp. 32–33, no. 2, figs. 7–8; Weinberg and

McClellan 1992, pp. 104–105, no. 61), Camarat 2, France (Foy and Nenna 2001, p. 104, nos. 129.2–3), Delos (Nenna 1999a, pp. 94–97, no. C252), and museum collections (Corning Museum of Art: Goldstein 1979, pp. 134–135, no. 277, plate 37). For an overview of the form and the finds, see Weinberg 1965, pp. 32–33; and Harden 1968, pp. 43–44.

**PROVENANCE** Giorgio Sangiorgi, Italian, 1886–1965 (Rome, Italy); by 1959, Private Collection; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1959, p. 39, no. 11, fig. 21.

von Saldern et al. 1974, p. 92, no. 242; p. 98, plate no. 242.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 65. Bowl with Fins

<b>Accession Number</b>	2003.228
<b>Dimensions</b>	H. 5.6, Diam. rim 9.3, Diam. base 4.3 cm; Wt. 88.24 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Free-blown; probably applied pieces; incised

**CONDITION** Intact; dark and calcinated crust on the interior and on the knobs on the exterior.

**DESCRIPTION** Slightly flaring rim, cut off; deep body, cylindrical at the upper part, tapering toward a narrow, flat bottom. Eight tooled, slightly uneven square knobs around the circumference at mid-height. The knobs are not perfectly aligned, appearing at different heights with respect to the rim and the spaces between them. They were each pressed on all five sides to attain the square shape. The decoration was possibly applied as blobs of hot glass on the walls of the vessel while it was still on the blowpipe and further modeled with tooling to assume the square shape. Five wavy striations are visible along the area over and on the knobs. Two fine, horizontal incised grooves 0.9 and 1.0 cm below the rim.

**COMMENTS AND COMPARANDA** This presumably free-blown vessel seems to be a descendant of the high-quality lobed or finned bowls that first appeared in the third century BCE and were evolving until the first century BCE (see cat. 64, wherein the discussion of this form).

No direct parallels have been located, but in rim shape and overall appearance the bowl looks close to finely ribbed bowls, that is, zarte Rippenschale (see comments on cat. 236, wherein the discussion of this form).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 102, no. 268; p. 101, plate no. 268.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 66. Ribbed Bowl

<b>Accession Number</b>	2003.221
<b>Dimensions</b>	H. 3.9, Diam. rim 12.8, Diam. base 5.5 cm; Wt. 175.64 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; some encrusted areas.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; shallow body decorated with 26 long, vertical, slightly oblique, regularly arranged ribs. Ribs start 1 cm below the rim and range in size from 3.9 to 5.2 cm in length. In the interior, two fine, horizontal grooves are incised at the bottom.

**COMMENTS AND COMPARANDA** See cat. 71.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 97, no. 259; p. 99, plate no. 259.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 67. Ribbed Bowl

<b>Accession Number</b>	2003.222
<b>Dimensions</b>	H. 4.5, Diam. rim 12.2, Th. 1.0 cm; Wt. 125.30 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact, with a few abrasions and some scratches. Some weathering, and the surface is covered with large areas of iridescence and some with black incrustation.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; shallow body decorated with 37 slightly slanting ribs that are quite uniform in size and evenly spaced. The ribs begin 1.2 cm below rim. In the interior there is one horizontal groove, 0.5 cm below rim; a pair of grooves at 2.5 cm indicate the beginning of the curved, lower part of the vessel.

**COMMENTS AND COMPARANDA** See cat. 71.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 96, no. 255; p. 97, plate no. 255.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 68. Ribbed Bowl

<b>Accession Number</b>	2003.223
<b>Dimensions</b>	H. 4.2, Diam. rim 12.6, Diam. base 5.0, Th. 0.3 cm; Wt. 157.30 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent light bluish-green glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** The vessel is intact, with no cracks or breaks, and only a few nicks and scratches. Some weathering and some incrustation. Some small areas of iridescence.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; deep convex body decorated with 79 short, vertical ribs, slightly slanting to the left, quite evenly spaced but not uniform in size. Ribs are visible only on the area near the shoulder of the carinated part of the body, starting 1.5 cm below the rim, and range in size from 1.2 to 2.1 cm in length. In the interior, three grooves 0.1 cm thick are visible: one at the center of the bottom and a pair along the circumference of the bottom.

**COMMENTS AND COMPARANDA** See also cat. 71. Isings 1957, form 3c; Grose 1989, pp. 264–265, nos. 234–237; Israeli 2003, p. 81, no. 71; Antonaras 2012, p. 57, no. 23; Antonaras 2017, pp. 54–56, form 6a.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 96–97, no. 256; p. 99, plate no. 256.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 69. Ribbed Bowl

<b>Accession Number</b>	2003.224
<b>Dimensions</b>	H. 4.5, Diam. rim 13.5, Diam. base 5.2, Th. 0.4 cm; Wt. 217.73 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact. Many scratches from usage on the bottom.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; shallow, convex body; flat bottom. Mid-body decorated with 56 short vertical, slightly oblique ribs, regularly arranged. Ribs begin 1.3 cm below the rim and range from 2.2 to 2.7 cm in length.

**COMMENTS AND COMPARANDA** On this form of vessel, see cat. 71. For comparanda, see cat. 68.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 97, no. 257; p. 96, plate no. 257.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 70. Ribbed Bowl

<b>Accession Number</b>	2003.220
<b>Dimensions</b>	H. 5.6, Diam. rim 11.1, Diam. base 5.8 cm; Wt. 166.57 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; some encrusted areas.

**DESCRIPTION** Vertical, slightly everted, smooth, fire-rounded rim. Deep body decorated with 19 vertical, slightly oblique ribs, unequal in size. The upper part of the body is ground; for 1 cm below the rim the glass is totally smooth, and lower traces of the ribs become visible. Ribs begin 1.9 to 2.3 cm below the rim and range in size, some of them extending to the bottom. In the interior, three horizontal grooves are incised; one wider—0.4 cm—at 0.7 cm below the rim, and two thinner ones—0.2 cm—at mid-body, that is, 3.9 cm below the rim.

**COMMENTS AND COMPARANDA** See cat. 71.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 94–95, no. 249; p. 98, plate no. 249.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 71. Ribbed Bowl

<b>Accession Number</b>	78.AF.27
<b>Dimensions</b>	H. 6.0, Diam. rim 11.8, Diam. base 6.1 cm; Wt. 206.25 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; partly encrusted; many pinprick bubbles.

**DESCRIPTION** Fire-polished rim, smooth and vertical; hemispherical body; flat, slightly concave bottom. Body decorated with 21 vertical, slightly oblique ribs, unequal in size. Ribs begin 2.3 cm below the rim and range in size between 2.5 and 4 cm. In the interior, 0.5 cm below the rim, one horizontal groove, 0.2 cm wide.

**COMMENTS AND COMPARANDA** The ribbed bowl is a form known from Hellenistic times (fourth–first centuries BCE) and is one of the most popular glass vessels in the Roman Empire and beyond its frontiers between the first century BCE and the first century CE. It has been quite convincingly proposed that they were made by pressing a

mass of hot glass on a former mold placed on a rotating surface, enabling the craftsman to form slightly uneven ribs at relatively equal distances in an easy and swift way, although that often resulted in a mild obliquing of the ribs. The exterior of the rim is flattened or usually ground (Lierke 1993, pp. 218–234; Lierke 2009, pp. 52–55; Stern and Schlick-Nolte 1994, pp. 75–79). On the interior, horizontal grooves are often incised under the rim, at mid-body, and on the bottom.

Ribbed bowls appear in three main shapes: shallow (Isings 1957, pp. 18–19, form 3a), deep (Isings 1957, pp. 19–20, form 3b), and deep with a tall, conical base-ring. In addition, the length of the ribs has been used as a typological criterion, with those bearing short ribs on the middle of their body clustered in another group (Isings 1957, pp. 20–21, form 3c). They were made in Italy and the eastern Mediterranean; in Italy vessels were made of deliberately colored dark blue and purple glass; of naturally colored blue, green, and amber glass; and of mosaic glass; in the eastern Mediterranean mostly naturally colored bluish-green and amber vessels were produced and used (Stern and Schlick-Nolte 1994, pp. 308–309).

See further Harden 1940–48, p. 49, fig. 20:b and c; Isings 1957, pp. 17–21, form 3b; Grose 1989, pp. 266–267, nos. 239–242; Stern and Schlick-Nolte 1994, pp. 294–295, no. 84; Ovadiah 1999, pp. 223–224, fig. 3:1; Israeli 2003, p. 80, no. 68; Antonaras 2012, pp. 69–70, nos. 21–22; Antonaras 2017, pp. 54–56, form 6a.

**PROVENANCE** 1935, George Dupont Pratt, American, 1869–1935; 1935–1937, Estate of George Dupont Pratt, American, 1869–1935 [sold, Anderson Galleries, New York, January 15, 1937, lot 50]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, Inc., April 5, 1940, lot 108, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1937a, lot 50, ill.

Parke-Bernet Galleries 1940, lot 108, ill.

Stothart 1965, p. 20, no. F-15.

**EXHIBITIONS** None



## 72. Ribbed Bowl

<b>Accession Number</b>	2004.19
<b>Dimensions</b>	H. 7.7, Diam. rim 15.7, Diam. base 6.3 cm; Wt. 378.95 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent yellow-green glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; on most of the interior and on small parts of the exterior, cream and iridescent areas of weathering.

**DESCRIPTION** Slightly everted, almost vertical, smooth, fire-rounded rim; deep body decorated with 31 vertical, short ribs; flat, slightly concave bottom. At the exterior, the band below the rim was flattened with a blunt tool detectable on the upper end of the ribs. The ribs are slightly oblique, slanting from right to left at the bottom; unequal in size, ranging from 2.2 to 3 cm, and unevenly spaced. In three cases, the rib was not formed and in its place is visible only a small protuberance. In the interior, two horizontal grooves 0.2 cm wide are incised at 0.8 and 1.6 cm below the rim.

**COMMENTS AND COMPARANDA** On this form of vessel, see cat. 71. Also see Harden 1940–48, p. 49, fig. 20:b and c; Isings 1957, form 3b; Grose 1989, pp. 266–267, nos. 239–242; Stern and Schlick-Nolte 1994, pp. 294–295, no. 84; Ovadiah 1999, pp. 223–224, fig. 3:1; Israeli 2003, p. 80, no. 68; Antonaras 2012, pp. 69–70, nos. 21–22.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer

südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 942]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** Cramer 1908, no. 942, plate 12.4.

von Saldern et al. 1974, p. 96, no. 252.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 73. Ribbed Bowl

<b>Accession Number</b>	2003.218
<b>Dimensions</b>	H. 6.5, Diam. rim 12.9, Diam. base 5.8 cm; Wt. 209.55 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; some encrusted areas, and many scratches—traces of use—are visible on the bottom.

**DESCRIPTION** Slightly everted, smooth, fire-rounded rim; flat, slightly concave bottom; deep body decorated with 19 vertical, slightly oblique ribs, unequal in size. Ribs begin 1.3 cm below the rim and range in size between 2 and 3 cm. In the interior, three horizontal grooves 0.2 cm wide are incised, one 1.2 cm below the rim and two more at mid-body, 3.3 cm below the rim.



**COMMENTS AND COMPARANDA** See cat. 71.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 94, no. 246, plate no. 246.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 74. Ribbed Bowl

<b>Accession Number</b>	2003.225
<b>Dimensions</b>	H. 5.2, Diam. rim 13.5, Diam. base 3.6, Th. 0.45 cm; Wt. 181.50 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Eastern Mediterranean; a western European origin cannot be excluded
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Rotary pressed

**CONDITION** Intact; covered by devitrified, milky white weathering.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; deep convex body; flat bottom. Mid-body decorated with 64 short, vertical, slightly oblique ribs, regularly arranged. Ribs start 1.3 cm below the rim and range in size from 1.5 to 2.3 cm in length. On the interior near the base two horizontal grooves 0.1 cm wide are incised.

**COMMENTS AND COMPARANDA** See cat. 71.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 97, no. 259; p. 99, plate no. 259.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 75. Bowl (Patella), Double Convex Bowl

<b>Accession Number</b>	2003.232
<b>Dimensions</b>	H. 3.4, Diam. rim 7.3, Diam. base 2.8 cm; Wt. 48.11 g
<b>Date</b>	First half of the first century CE, probably second quarter of the first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque red glass; green speckles are visible on both interior and exterior
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Intact.

**DESCRIPTION** Horizontal rim; carinated body with two convex curves; outward-splayed base-ring, with rectangular cross section. On the interior, a fine groove just below the rim.

**COMMENTS AND COMPARANDA** Cast, angular vessels are a very characteristic shape for the early Roman period class of glass finewares. Among them carinated, cast bowls are a quite widespread vessel shape, made of

single-colored (this vessel, cats. 76–77) and mosaic opaque glass (cats. 90–92) in striking colors; slightly later, they appear in translucent glass (Isings 1957, form 2). They were probably produced in Italy and the eastern Mediterranean as well. The earlier examples have the constriction near the middle of the body, and the later near the rim, like the examples in the Getty collection, indicating that they were probably produced in the second quarter of the first century CE (Stern 1979, pp. 63–72, plate 6; Stern and Schlick-Nolte 1994, pp. 65, 328–331, nos. 99–101). Finds include bowls from Meroë, Sudan, dated ca. 20 BCE (Stern 1981, pp. 38, 55–56, nos. 17, 18, 18a, figs. 17, 18); Tanis, Nile Delta (Cooney 1976, pp. 43, 376, not ill.); Syria (Ritz 1931, plate 6.2, no. O.37554); near Istanbul (La Baume 1973, no. C 6.4); Vindonissa, Switzerland, (Berger 1960, p. 28, no. 41, plate 17, no. 22); Magdalensberg, Austria, dated before 45 CE (Czurda-Ruth 1979, p. 71, plate 3, nos. 535–537); Haltern, Germany, dated before 9 CE (Kropatscheck 1909, p. 371, fig. 16, no. 3; Van Lith 1977, p. 13, note 61). Further examples are kept in several museums in Israel (Israeli 2003, pp. 84–85, nos. 79–80), the USA (Grose 1989, p. 256, nos. 419–422; Antonaras 2012, p. 83, no. 70), Canada (Hayes 1975, p. 21, no. 55), and Japan (Miho Museum 2001, p. 70, no. 78).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 105, no. 281. Wight 2011, pp. 55, 58, fig. 34.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 76. Bowl (Patella), Double Convex Bowl

<b>Accession Number</b>	2003.233
<b>Dimensions</b>	H. 3.3, Diam. rim 7.3, Diam. base 2.7 cm; Wt. 46.09 g
<b>Date</b>	First half of the first century CE, probably second quarter of the first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque green glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Intact; some areas of discoloration on the interior and the exterior.

**DESCRIPTION** Horizontal rim; carinated body with two convex curves; outward-splayed base-ring, with rectangular cross section. On the interior, a fine groove just below the rim.

**COMMENTS AND COMPARANDA** See cat. 75.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 105, no. 282; p. 110, plate no. 282.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)



Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 77. Bowl (Patella), Double Convex Bowl

<b>Accession Number</b>	2003.234
<b>Dimensions</b>	H. 4.0, Diam. rim 7.8, Diam. base 3.1 cm; Wt. 56.47 g
<b>Date</b>	First half of the first century CE, probably second quarter of the first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque light blue glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Intact; some areas of discoloration on the interior and on one side of the exterior.

**DESCRIPTION** Horizontal rim; carinated body with two convex curves; outward-splayed base-ring, with rectangular cross section. On the interior, a fine groove just below the rim.

**COMMENTS AND COMPARANDA** See cat. 75.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 105, no. 284.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 78. Bowl (Patella)

<b>Accession Number</b>	2003.235
<b>Dimensions</b>	H. 3.4, Diam. rim 6.1, Diam. base 2.8, Th. 0.2 cm; Wt. 45.50 g
<b>Date</b>	First half of the first century CE, probably second quarter of the first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque red glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Intact and in good condition, with very few nicks and scratches. Some small areas of white discoloration. The bowl has almost completely discolored to green on both the interior and exterior.

**DESCRIPTION** Flaring, horizontal rim with rounded edge; hemispherical body with convex walls; convex bottom; conical base-ring with flat edge.

**COMMENTS AND COMPARANDA** This hemispherical bowl belongs to a relatively rare type of Early Roman cast vessel, mainly carinated plates and bowls and rectangular

trays, executed in striking colors of single-colored and mosaic opaque glass in the first half of the first century CE (Isings 1957, p. 36, form 20; Grose 1991, pp. 256, 306–307, 314, nos. 415, 422, 426). Parallels from controlled excavations include finds from Herculaneum and Pompeii dated to the Augustan–Tiberian period (Scatozza Höricht 1986, pp. 32–33, plate XIII, form 7; Beretta and Di Pasquale 2004, p. 21, no. 1.32); Taranto, from a context dated between the second and the third quarter of the first century CE (Maraschini 1988, p. 598, no. 41.9f, plate M); Vindonissa, dated to the Tiberian or Tiberian–early Claudian period (Berger 1960, p. 28, no. 43, plates 17, 24); Cologne, dated to the first century CE (Fremersdorf 1958, p. 37, plate 50; La Baume 1973, plate 48, 2 K 5); Trier, dated to about the middle of the first century CE (Goethert-Polaschek 1977, p. 34 n. 88, plate 33, p. 349, form 18).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 108, no. 286; p. 110, plate no. 286.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 79. Bowl

**Accession Number** 2003.236  
**Dimensions** H. 3.0, Diam. rim 8.6, Diam. base 5.8, Th. 0.2 cm; Wt. 76.00 g  
**Date** First half of the first century CE, probably second quarter of the first century CE

**Production Area** Probably Italy  
**Material** Opaque white glass  
**Modeling Technique and Decoration** Cast

**CONDITION** Intact and in good condition, with very few nicks and scratches. Some brown discoloration or incrustation on the exterior surface.

**DESCRIPTION** Flaring, almost horizontal rim delineated from the body with a fine horizontal groove on its interior and a wide groove on its exterior. Body walls curve mildly, tapering toward the flat bottom.

**COMMENTS AND COMPARANDA** This shallow bowl belongs to a very rare type of Early Roman cast vessels, mainly carinated plates and bowls and rectangular trays, executed in striking colors of single-colored opaque, translucent, and mosaic glass in the first half of the first century CE (Grose 1989, pp. 254–256). This particular shape, though, is not included among the principal forms of the group and the closest parallel is of unknown provenance, housed in the Princeton University Art Museum (Antonaras 2012, p. 70, no. 71).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 108, no. 291; p. 109, plate no. 291.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 80. Bowl

<b>Accession Number</b>	2003.237
<b>Dimensions</b>	H. 4.0, Diam. rim 7.4, Diam. base 5.4 cm; Wt. 52.40 g
<b>Date</b>	End of the first century BCE–first half of the first century CE
<b>Production Area</b>	Italy
<b>Material</b>	Peacock blue translucent glass
<b>Modeling Technique and Decoration</b>	Mold pressed or cast, then wheel-cut

**CONDITION** Intact. A few areas of discoloration and iridescence on both the interior and the exterior. Rotary scratches present on the entire vessel, particularly visible on both sides of the bottom.

**DESCRIPTION** Flared rim, rounded by grinding and polishing; cylindrical body; small, uneven, flaring base-ring; flat bottom. The bottom has been lathe-cut to form a flared base-ring, a fine ring 1 cm wide, and a boss in the center of the underside. There are two fine, lathe-cut grooves in the rim on the interior.

**COMMENTS AND COMPARANDA** This bowl is representative of a quite rare form of cast bowl—usually with truncated conical body, and less often cylindrical—probably produced in Italy between the end of the first century BCE and the first half of the first century CE. Published parallels include: Berger 1960, pp. 24–27, plates 3, 17, nos. 35–36, from Tiberian contexts; Goldstein 1979, p. 147, no. 307, plates 19, 39; Grose 1989, pp. 254–256, nos. 412–418; Grose 1991, pp. 2–11; Bonomi 1996, p. 126 n. 287; Scatozza Hörich 1995, pp. 33, 36, form 11, nos. 45, 46, before 79 CE; Mandruzzato and Marcante 2007, p. 115, no. 359.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 108, no. 292; p. 109, plate no. 292.

Wight 2011, pp. 55, 59, fig. 35.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 81. Bowl

<b>Accession Number</b>	2003.475
<b>Dimensions</b>	H. 5.7, Diam. rim 10.3, Diam. base 3.5 cm; Wt. 65.90 g
<b>Date</b>	First century CE
<b>Production Area</b>	Western Roman Empire, probably Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Molded and ground

**CONDITION** Intact. Some iridescence.

**DESCRIPTION** Hemispherical bowl with vertical, ground rim. Relief rings start at 1.4 cm below the rim. Three pairs of double rings are separated by two equidistant rows of single rings, forming seven bands, 0.7 cm wide, in total. A small disk is at the center of the bottom. The rings and the small disk are made of the same amber-colored glass as the body, and they are only covered on the surface with a thin layer of white glass.

**COMMENTS AND COMPARANDA** Both the interior and exterior present dense rows of parallel scratches, remains of grinding and polishing. It has been plausibly proposed that the two-colored vessel was cast, and then the outer layer was removed with wheel-cutting, creating the perfectly arranged and executed pattern of relief rings. The vessel is extremely rare, unexpectedly thin, if indeed molded. There is another similar, white bowl formerly in the Sangiorgi Collection, today at the Corning Museum of Glass (Whitehouse 2001a, p. 16, no. 2), and a third, fragmentary emerald-green bowl from Magdalensberg, Austria (Czurda-Ruth 1979, p. 20, no. 8, plate 1:8).

**PROVENANCE** By 1978–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1978, p. 119, no. 4.

Wight 2011, pp. 55, 59, fig. 36.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)



## 82. Cameo Glass Skyphos

<b>Accession Number</b>	84.AF.85
<b>Dimensions</b>	H. 10.5, Diam. rim 10.6, Th. 0.7 [blue: 0.5, white: 0.2] cm; Wt. 496.40 g (with the added base)
<b>Date</b>	15 BCE–25 CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque white over translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold cast; ground and polished

**CONDITION** Stem and base missing; body reassembled from fragments; chips missing from the broken edges, from the ends of the handle flanges, and from various parts of the figural scene.

**DESCRIPTION** Two-handled cup (skyphos), formerly on stem and foot. Rim rounded in the interior, with wheel-cut groove below the rim in the interior and another on

the exterior; body with slightly convex sides that taper toward the flat, faintly convex bottom. Wheel-cut stem, broken just below bottom of cup. Two vertical circular handles, attached to rim and to body at its maximum diameter, with horizontal finger-rests, a nick partway down the outside of the curve, and long, downward-curving thumb rests.

A continuous thick, straight groundline on the lower part just above the transition to the bottom and the wheel-cut groove below the lip delineate the space on both sides of the vessel on which two religious scenes rendered in white cameo are evolving. These scenes illustrate the participation of Ariadne in rituals of the Dionysiac cult, and perhaps of Cybele. The scenes are separated by the two handles. Below each handle is a mask of a Silenus.

Side A: On the left side is a tree with broad leaves, probably a fig tree, of which two branches—one divides in its upper part into two—extend up and behind a naked satyr, who is moving in three-quarter profile to the left, looking in profile to the right. The satyr is holding in his right hand a pan-pipe (syrinx), and in his left hand, resting against his forearm, a Bacchic crooked staff (pedum). At the center of this side, seated on a seven-layered rocky outcrop, is a female figure, identified as Ariadne, the Cretan princess who was abandoned by Theseus on the island of Naxos; Dionysos discovered her there and married her. She is shown in three-quarter profile to the left, head in profile to the right, her right arm thrown over her head and touching her forehead, her left arm vertical, with her hand flat on the rock on which she sits, torso naked, lower limbs covered with a drape that is also drawn up over her right arm. Behind her is a female figure, a maidservant standing in profile to the left, head garlanded, torso naked, lower limbs draped; her arms are extended to offer Ariadne a rectangular or circular object covered with layers of cloth, identified as a sacred basket (liknon), perhaps depicting the revelation of the Bacchic cult mysteries. On the right side, a tree with tightly narrow leaves growing vertically upward, probably a nut tree, closes the scene.

Side B: On the left side is a tree with broad leaves, probably a fig tree, and two branches, one of which—divided in its upper part into two—extends up and above a female figure, identified as Ariadne, in profile to the right, her right arm raised holding a phiale, a large hemispherical bowl, to her mouth, her left arm extended downward, with hand resting on the rim of a krater, torso naked, lower limbs draped. At the center of the side, a naked male satyr stands in three-quarter profile to the

right, garlanded head turning back in profile to the left, arms raised to hold and play the lyre he holds in front of him, legs apart, with weight resting on his left foot and the toes of his right foot on the groundline. Next is a pillar surmounted by a figure seated on a throne, with a phiale in its right hand and a tympanum in its left, identified with the goddess Cybele; the pillar is crossed by branches of a tree, implying a rustic shrine—as do the trees that frame the entire scene. In front of the tree and pillar is a male figure in three-quarter profile to the left, identified as Dionysos, perhaps seated on layered rock, his right arm extended, seemingly putting an almond-shaped pinch of incense onto the flaming altar in front of the pillar and next to him, his left arm bent, a pyxis with incense in his left hand, lower limbs draped; a nut tree, or possibly laurel, with tightly bunched leaves arranged vertically, and with trunk and branches, stretches up behind the seated figure and in front of the column.

On the iconographical interpretation of the scenes on the skyphos, see Goldstein et al. 1982, p. 15, no. 8; p. 99, no. 4; Harden et al. 1987, pp. 68–69, no. 31 (entry by D. Whitehouse); Simon 1999, pp. 89–96; Wight 2003, pp. 36–40.

**COMMENTS AND COMPARANDA** Glass cameo objects constitute one of the most opulent groups of Roman glassware, which imitate multilayered and multicolored natural stone such as agate and onyx. They are made by casting, probably in a mold, one or more layers of bright, opaque glass over a dark translucent ground, which in some cases was then free-blown (e.g., cat. 84). (For a multicolored fragment of a crater, see Roberts et al. 2010, p. 50, no. 10.) The most popular color combination is translucent dark blue body with opaque white overlay. Translucent dark purple (e.g., cat. 85), green, and brown were also used occasionally for the underlying layer, while very rarely opaque red, opaque green, light blue, translucent purple, and brown were used for the overlying layers. The figures on the outer layer were generated in intaglio on the inside of the plaster mold, or parts of the outer layer were removed, creating bright low-relief decoration on a dark background. The cameo technique was used for the production of sumptuous tableware, such as drinking and serving vessels, as well as flasks, inlays, medallions, and gems. This was a short-lived fashion that lasted from the late first century BCE to the early first century CE, and the production is likely placed in Italy, probably in Rome. Technically different cameos see a revival in the fourth century CE (Whitehouse 1991, pp. 19–32; Lierke 2009, pp. 62–72).

**PROVENANCE** By 1962–1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, Ancient Glass: Formerly the Kofler-Truniger Collection, Christie's, London, March 5–6, 1985, lot 150, to the J. Paul Getty Museum through Robin Symes, Limited]

**BIBLIOGRAPHY** *JGS* 1962, p. 140, no. 5.

Kunsthaus Zurich 1964, p. 47, no. 456; plate 37.

Jucker 1965, p. 46; plates 15, 16.2, .4; figs. 5, 6.

*3000 Jahre Glaskunst*, p. 33, full page ill.; p. 72, no. 226, ill.

Goldstein et al. 1982, p. 15, no. 8; p. 23, fig. 4; p. 99, cat. no. 4.

Christie's 1985, lot 150.

Fischer 1985, p. 398.

JPGM Acquisitions 1985, pp. 194–95, no. 65.

*JGS* 1986, p. 98, no. 2.

Harden et al. 1987, pp. 55, 83–84; cat. no. 36.

Sotheby's 1987, p. 64.

Bianchi and Fazzini 1988, pp. 218–219, no. 111.

Painter and Whitehouse 1990b, pp. 150–153, cat. no. A8, figs. 111–115.

Whitehouse 1991, p. 25, no. 13.

Grimm 1998, fig. 145.

Lierke 2009, p. 68, ill.

Wight and Swetnam-Burland 2010.

Lierke 2011, p. 77, fig. 15; p. 91, fig. 27a.

Wight 2011, pp. 55, 60, fig. 37.

Swetnam-Burland 2015, pp. 56–57, fig. 1.20, plate 3.

Sofroniew 2015, pp. 108–109, fig. 84.

Spier et al. 2018, p. 176, no. 176, ill.

*Masterpieces JPGM: Antiquities*, p. 104.

*JPGM Handbook* 3rd ed., p. 55.

*JPGM Handbook* 4th ed., p. 55.

*JPGM Handbook* 6th ed., p. 55.



*JPGM Handbook* 7th ed., p. 48, ill.

*JPGM Handbook Antiquities* 1st ed., p. 206.

*JPGM Handbook Antiquities* rev. ed., p. 214.

**EXHIBITIONS** Beyond the Nile: Egypt and the Classical World (Los Angeles, 2018)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)

Cleopatra's Egypt: Age of the Ptolemies (Brooklyn, 1988–1989; Detroit, 1989; Munich, 1989)

Glass of the Caesars (Corning, 1987; Mainz, 1988)

Sammlung E. und M. Kofler-Truniger, Luzern (Zurich, 1964)



### 83. Vessel Fragment, Probably a Skyphos

<b>Accession Number</b>	2003.354
<b>Dimensions</b>	H. 4.7, L. 3.5, Th. 0.3 cm; Wt. 14.60 g
<b>Date</b>	15 BCE–25 CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque blue and white glass
<b>Modeling Technique and Decoration</b>	Mold cast; ground and polished

**CONDITION** Upper body fragment.

**DESCRIPTION** Rim slightly flaring, flat at the top; body conical with mildly convex sides. On the interior there is a horizontal groove, 0.3 cm below the rim. On the exterior of the preserved fragment, part of a male head can be seen, namely, the left eye, the forehead, and the upper part of the head, which is covered with the short, slightly curved locks of a Julio-Claudian style. The upper part of the head is covered with blue glass that seems as if it was spilled over the relief of the hair. On this area a rectangular, almost square (W. 1.5, H. 1.2 cm) sign of abrasion is visible. This must have been the beginning of the handle of the vessel, which was probably a skyphos. When the handle of the vessel was broken, its stump was ground to the surface of the remaining vessel and then it was repurposed.

**COMMENTS AND COMPARANDA** See comments on cat. 82.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 122, no. 327; p. 123, plate no. 327.

**EXHIBITIONS** Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 84. Cameo Glass Flask

<b>Accession Number</b>	85.AF.84
<b>Dimensions</b>	H. 7.6, W. 4.2, Diam. base 2.0, Th. 0.3 cm; Wt. 35.27 g
<b>Date</b>	15 BCE–25 CE
<b>Production Area</b>	Probably Italy. Said to come from near Eskişehir, Türkiye
<b>Material</b>	Opaque white and translucent cobalt blue glass
<b>Modeling Technique and Decoration</b>	Mold cast and free-blown

**CONDITION** Rim is missing; small areas show weathering.

**DESCRIPTION** Flaring rim, lip not preserved; fine cylindrical neck widening toward ovular body; flat, mildly convex bottom.

On the body, the following scene from left to right: A naked boy with a garland in his hands approaches an altar surmounted by a seated figure of the god Thoth as a baboon wearing moon disk; on the base of the altar is a figure of a crouching ibis (another animal associated with the god Thoth) with a moon disk over its head. Another naked boy with flying cloak holds up a curved object, possibly a torch, before a horned altar with a flame on it. On the base of the altar is carved a uraeus—a rearing cobra and sun disk—a symbol of royalty and divine authority in Egypt. In front of the right side of the altar is a standing figure of a pharaoh wearing a striped nemes

headdress, the Double Crown of Upper and Lower Egypt, and a pleated kilt. He is holding a *mnwt* sign (notched palm branch) in the right hand—a symbol of time and in this context regnal years, i.e., a long reign promised by the gods—and *nw-pot* in the left, which is a type of vessel used by Egyptians for religious offerings. Behind him stand an obelisk with indecipherable hieroglyphs (from top to bottom on the shaft: circle enclosing a dot [Ra symbol], scarab with spread wings, an eye with its brow, a snake, a spindle-like object, an angle, and a falcon; on the base in a horizontal band: two sloping lines, a circle, three vertical lines, and walking legs) and a twisted tree with two leafy branches. On the mildly convex bottom is a five-petaled rosette surrounded by eight triangular, serrated sepals that extend to the straight line that forms the groundline of the figural composition that extends around the body.

**COMMENTS AND COMPARANDA** The Egyptian-looking decoration is not unique among cameo glass objects (Roberts et al. 2010, pp. 54–55, nos. 20–23, 64; van Aerde 2013), and belongs to a well-known genre of artistic scenes depicted in that period, with which the Italian clientele apparently was well-acquainted and wished to acquire. It has been plausibly proposed that the elements that compose this puzzling scene—a pharaoh, an obelisk, and a statue of the god Thoth as a baboon—are not depicting a particular scene, but rather serve as decorative Egyptian images understandable by Romans of the Augustan era, when Egyptian art objects, like statues and even obelisks, were brought to and displayed around Rome (Bianchi and Fazzini 1988, pp. 218–219; Wight and Swetnam-Burland 2010; Cole 2018).

In terms of its shape, the flask belongs to the usually colorful free-blown flasks of Isings form 6 (Isings 1957, p. 22), which is dated to the very early first century CE. A very close parallel is known from Canton Ticino, Switzerland, dated to the period 10–30 CE (Biaggio-Simona 1991, vol. 1, p. 337, and vol. 2, no. 16.2.029). It is also close to De Tommaso's type 5 (De Tommaso 1990, pp. 39–40), dated to the Julio-Claudian period. Furthermore, a fragment of a similarly shaped cameo flask is in the Corning Museum of Glass (Whitehouse 1997a, p. 56, no. 57).

**PROVENANCE** By 1962–1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, Ancient Glass: Formerly the Kofler-Truniger Collection, Christie's, London, March 5–6, 1985, lot 150, to the J. Paul Getty Museum through Robin Symes, Limited]

**BIBLIOGRAPHY** *JGS* 1962, p. 140, no. 5.

Kunsthau Zurich 1964, p. 47, no. 456; plate 37.

Jucker 1965, p. 46; plates 15, 16.2, 14; figs. 5, 6.

*3000 Jahre Glaskunst*, p. 33, full page ill.; p. 72, no. 226, ill.

Goldstein et al. 1982, p. 15, no. 8; p. 23, fig. 4; p. 99, cat. no. 4.

Christie's 1985, lot 150.

Fischer 1985, p. 398.

JPGM Acquisitions 1985, pp. 194–95, no. 65.

*JGS* 1986, p. 98, no. 2.

Harden et al. 1987, pp. 55, 83–84; cat. no. 36.

Sotheby's 1987, p. 64.

Bianchi and Fazzini 1988, pp. 218–219, no. 111.

Painter and Whitehouse 1990b, pp. 150–153, cat. no. A8, figs. 111–115.

Whitehouse 1991, p. 25, no. 13.

Grimm 1998, fig. 145.

Lierke 2009, p. 68, ill.

Wight and Swetnam-Burland 2010.

Lierke 2011, p. 77, fig. 15; p. 91, fig. 27a.

Wight 2011, pp. 56, 61, fig. 38.

Swetnam-Burland 2015, pp. 56–57, fig. 1.20, plate 3.

Sofroniew 2015, pp. 108–109, fig. 84.

Spier et al. 2018, p. 176, no. 176, ill.

*Masterpieces JPGM: Antiquities*, p. 104.

*JPGM Handbook* 3rd ed., p. 55.

*JPGM Handbook* 4th ed., p. 55.

*JPGM Handbook* 6th ed., p. 55.

*JPGM Handbook* 7th ed., p. 48, ill.

*JPGM Handbook Antiquities* 1st ed., p. 206.

*JPGM Handbook Antiquities* rev. ed., p. 214.

**EXHIBITIONS** *Beyond the Nile: Egypt and the Classical World* (Los Angeles, 2018)

*Reflecting Antiquity: Modern Glass Inspired by Ancient Rome* (Malibu, 2007–2008; Corning, 2008)

*Ancient Art from the Permanent Collection* (Los Angeles, 1999–2004)

*Cleopatra's Egypt: Age of the Ptolemies* (Brooklyn, 1988–1989; Detroit, 1989; Munich, 1989)

*Glass of the Caesars* (Corning, 1987; Mainz, 1988)

*Sammlung E. und M. Kofler-Truniger*, Luzern (Zurich, 1964)



## 85. Cameo Glass Fragment, Probably of a Vessel

<b>Accession Number</b>	96.AF.289
<b>Dimensions</b>	H. 1.6, W. 1.2, max. Th. 0.3 [purple layer 0.1, white 0.2] cm; Wt. 0.49 g
<b>Date</b>	15 BCE–25 CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent purple and opaque white glass
<b>Modeling Technique and Decoration</b>	Mold cast; ground and polished

**CONDITION** Fragment.

**DESCRIPTION** On the front side of the preserved fragment, a male head can be seen. The head is in profile turned to the right; he is clean-shaven and wearing a laurel wreath, the upper part of the head covered with short, slightly curled locks of the Julio-Claudian style. The back side is flat, with some hardly noticeable undulation.

**COMMENTS AND COMPARANDA** The fragment is flat and the back side shows no indication of a curve, merely some hardly noticeable undulation. If indeed from a vessel, it must have been a large or wide vessel. Compared to the majority of cameo vessels or gems, this fragment is very thin (0.2–0.3 cm). Cameo vessels are usually thicker (compare cat. 82 [Th. 0.7 cm]), although thinner (0.3–0.5 cm) vessels do appear occasionally (e.g., Whitehouse 1997a, pp. 58–62, nos. 60–68). If not from a vessel it could be part of a cameo gem or medallion, although these are also thicker (e.g., Whitehouse 1997a, pp. 42–43, nos. 37–38, medallions 1.1 and 0.9 cm thick, respectively; Roberts et al. 2010, p. 72, no. 62, 0.6 cm). For another cameo glass gem in the Getty Museum, see Spier 1992, p. 158, no. 436, 81.AN.172.

**PROVENANCE** 1996, Barbara Fleischman and Lawrence Fleischman, American, 1925–1997 (New York, New York), donated to the J. Paul Getty Museum, 1996

**BIBLIOGRAPHY** True and Hamma 1994, p. 356, cat. no. 270.

Report 98–99, p. 69.

**EXHIBITIONS** None



86. Dish

**Accession Number** 85.AF.85

<b>Dimensions</b>	H. 2.1, Diam. rim 16.0, Diam. base 8.8 cm; Wt. 134.68 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white and yellow and translucent purple and bluish glass
<b>Modeling Technique and Decoration</b>	Assembled of slices of canes, cast, applied base-ring, rotary polished

**CONDITION** Mended with a small filling. There is some weathering on the surface.

**DESCRIPTION** The dish has a flared, horizontal rim; conical, carinated body; flat bottom. It stands on a circular base-ring formed by an applied grayish green coil of glass.

The vessel is made of discoid mosaic tesserae of two types:

The first is roughly hexagonal: around a hexagonal central rod, 18 trapezoidal canes coil, forming a spiral with one and a half revolutions. Each is made of a translucent bluish core surrounded by a very fine yellow layer. The cane is surrounded by a thick purple and a fine white layer.

The second floret consists of six round concentric rods, in turn white, purple, yellow, purple, white, and purple. The white and yellow layers are considerably thinner than the purple ones. A few of these florets were probably accidentally placed on their side, appearing at a first glance purple with white striations.

**COMMENTS AND COMPARANDA** Mosaic vessels, although known from the Hellenistic era (fourth–first centuries BCE), become more numerous in the Early Roman period. The technique of mosaic glass provided the opportunity to create multiples of a figural or design composition by bundling and pressing colored glass canes while hot and malleable, forming the desired motif. They are made through a complex technique in which, first, rods of colored glass were tooled and fused together so that the cross section of the new composite rod would provide the desired colorful design, often a floral motif or a spiral. Next, the preformed, composite rods, called canes, were cut into disks or slices, called florets. In order to form a vessel with this motif on it, the glassmaker then arranged the florets in a desired pattern in the bottom of a two-part mold or on a flat surface that was later slumped on a convex former mold. When heated, the florets fused together to form the vessel. Finally, the rough vessel was released from the mold and the surface was

ground to a considerable depth in order to make it smooth and even. The making of a mosaic glass vessel could take a great amount of time, involving great expertise and labor as well as large quantities of fuel and raw materials (for the production technique, see Stern and Schlick-Nolte 1994, pp. 65–66, 68–71; Dawes 2002).

Shallow, carinated dishes—a well-known form among this group of exquisite vessels—constitute, with carinated bowls (see comments on cat. 89), one of the most numerous groups of Composite Mosaic Vessels (Grose 1989, pp. 257–258). This form of dish appears also among contemporaneous luxurious, monochrome glass products (see Grose 1989, pp. 254–256, figs. 136, 142; Goldstein 1979, p. 149, no. 315). Mosaic dishes of this shape are in the collections of a number of museums, including the Toledo Museum of Art (Grose 1989, no. 442); the Walters Art Gallery in Baltimore (Grose 1989, fig. 145, 47.75; <https://art.thewalters.org/detail/13501/mosaic-plate/>); Yale University Art Gallery (Matheson 1980, p. 20, no. 54); The Metropolitan Museum of Art (*Glass from the Ancient World* 1957, p. 82, no. 134, fig. 134; Milleker 2000, pp. 64, 206–7, no. 51); the Corning Museum of Glass (Goldstein 1979, pp. 180–181, no. 468, plate 25); the Louvre (Arveiller-Dulong and Nenna 2000, p. 148, no. 185); and Landesmuseum Württemberg Stuttgart (Stern and Schlick-Nolte 1994, p. 332, no. 102).

**PROVENANCE** By 1964–1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, *Ancient Glass: Formerly the Kofler-Truniger Collection*, Christie's, London, March 5–6, 1985, lot 183, to the J. Paul Getty Museum through Robin Symes, Limited]

**BIBLIOGRAPHY** Kunsthhaus Zurich 1964, p. 47, no. 459; plate 36.

*3000 Jahre Glaskunst*, p. 15, color plate (center); p. 63, no. 160 (not ill.).

Christie's 1985, lot 183.

JPGM Acquisitions 1985, p. 195, no. 66.

*JGS* 1986, p. 98, no. 1.

**EXHIBITIONS** Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Sammlung E. und M. Kofler-Truniger, Luzern (Zurich, 1964)



## 87. Fragment of a Dish

<b>Accession Number</b>	2003.258.1
<b>Dimensions</b>	pres. H. 1.7, W. 5.6, L. 4.0, Th. 1.8, est. Diam. base ca. 12.0 cm; Wt. 11.89 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Probably Italy, or eastern Mediterranean
<b>Material</b>	Translucent purple, gray, and yellow and opaque white glass
<b>Modeling Technique and Decoration</b>	Assembled of slices of canes, cast, applied base-ring; slumped; rotary polished

**CONDITION** Body fragment of a vessel, broken all around. The upper surface was polished in modern times; the lower surface, which was left in its original condition, is slightly irregular and pitted.

**DESCRIPTION** The fragment is part of a dish's flat bottom, which stood on a fine purple base-ring. This mosaic vessel is made of circular sections of composite canes of the following types: (1) The first consists of a thin yellow and thick, transparent bluish layer of glass, wound spirally up to seven times. (2) The second consists of a fine white rod surrounded by a thick purple, a fine white, and another fine purple layer of glass. (3) The third represents a seven-petaled rosette. Petals and the central disk, which are made of a grayish glass, are outlined by a fine white layer.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. This fragment could be part of a shallow carinated dish like cat. 86, or a non-carinated dish (for the class, see Grose



1989, pp. 256–261: composite mosaic vessels: non-carinated forms).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 88. Bowl

<b>Accession Number</b>	85.AF.86
<b>Dimensions</b>	H. 4.4, Diam. rim 8.9, Diam. base 5.6 cm; Wt. 102.68 g
<b>Date</b>	Early first century BCE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white, yellow, green, and turquoise and translucent purple glass
<b>Modeling Technique and Decoration</b>	Assembled of slices of canes, slumped, applied base-ring and rim; slumped; polished

**CONDITION** Mended; fully preserved; small chipping on the rim filled.

**DESCRIPTION** The bowl has an upright rounded lip; cylindrical body tapering toward the flat bottom. It stands on a tall, conical base-ring formed by a single revolution of an applied ribbon coil of glass, which consists of at least

10 layers of translucent purple and opaque turquoise and green glass.

The rim is a twisted purple and white rope-like cane. The vessel is made of a matrix comprising four types of circular mosaic sections, florets, fused together.

The first type of floret, which is the most numerous, consists of a yellow central rod surrounded by 17 translucent purple, trapezoidal petals outlined with white.

The second, quite numerous type of floret consists of a purple central rod surrounded by 13 yellow, trapezoidal petals outlined in white.

The third, less numerous type of floret consists of a thin central purple rod set in a thicker layer of white glass, surrounded by 13 translucent green, trapezoidal petals outlined in yellow.

The fourth type of floret appears with only one example and consists of a central green rod set in a thin layer of yellow glass surrounded by 13 translucent purple, trapezoidal petals outlined in white.

The fifth type of floret appears in a fragment of a floret, and consists of a central turquoise rod surrounded by a layer of translucent purple glass with white rods arranged in it—seven in the preserved part of the floret—flanked with white, which is set in a turquoise layer.

The typology of canes used for the production of the vessel includes two types of twisted cane, one made of opaque white and translucent turquoise glass, and the other of opaque white and translucent purple glass

**COMMENTS AND COMPARANDA** See comments on cat. 86.

Different forms of Hellenistic mosaic bowls are known, and three different kinds of mosaic (network, striped, or ribbon and composite mosaic) were used for their production (Weinberg 1965; Oliver 1968; Grose 1989, pp. 189–197; and more recently Lightfoot 2019). The production center for mosaic and network mosaic vessels remains unknown, although a proposed location is Alexandria, Egypt (Arveiller-Dulong and Nenna 2000, pp. 18, 140).

This particular bowl belongs to a group of late Hellenistic glass mosaic vessels: non-carinated, convex-sided mosaic bowls with a tall splaying base, examples of which have been recovered from a shipwreck that sank about 80 BCE off the island of Antikythera in the Aegean Sea, carrying a diverse cargo traveling from the eastern Mediterranean to

Italy (Weinberg 1965; Weinberg and McClellan 1992, pp. 28–33; Avronidaki 2012, pp. 140–145). A few similar non-carinated, convex-sided mosaic bowls, occasionally with a splayed base, have been very scarcely noted among Roman mosaic vessels dating from the late first century BCE to the early first century CE (Grose 1989, pp. 253–254: “composite mosaic vessels with applied rims”).

For bowls similar in shape but of different type of mosaic (Ribbon Bowls), see cat. 118.

**PROVENANCE** By 1981, Private Collection (Switzerland); 1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, *Ancient Glass: Formerly the Kofler-Truniger Collection*, Christie’s, London, March 5–6, 1985, lot 191, to the J. Paul Getty Museum through Robin Symes, Limited]

**BIBLIOGRAPHY** *3000 Jahre Glaskunst*, p. 62, no. 157, ill. Christie’s 1985, lot 191.

JPGM Acquisitions 1985, p. 194, no. 64.

**EXHIBITIONS** None



## 89. Mosaic Glass Bowl

<b>Accession Number</b>	78.AF.32
<b>Dimensions</b>	H. 4.1, Diam. rim 8.9, Diam. base 4.0 cm; Wt. 41.29 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white, red, and yellow and translucent purple glass

<b>Modeling Technique and Decoration</b>	Assembled of slices of canes, cast, applied base-ring; slumped; rotary polished
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**CONDITION** A number of repaired breaks are visible, and there are some nicks and scratches. There is discoloration and weathering on the interior surface. The base is totally weathered, possibly originally greenish.

**DESCRIPTION** The bowl has a slightly flared lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by an applied coil of glass, possibly green.

The vessel is made of a matrix comprising a single type of hexagonal mosaic section fused together. Each of these florets consists of eight concentric layers, in turn white, red, fine purple, yellow line, thicker purple, fine grayish white, purple, and white.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. Cast, angular vessels are a very characteristic type for the early Roman period class of glass finewares. Among them, carinated, cast bowls are a quite widespread vessel shape, made of single-colored (cats. 75–77) and mosaic opaque glass (cats. 90–92) in striking colors, and slightly later of translucent glass (Isings 1957, form 2). They were probably produced in Italy, and also probably in the eastern Mediterranean. The earlier examples have the constriction near the middle of the body, and the later near the rim, like the examples in the Getty Collection, indicating that they were probably produced in the second quarter of the century (Stern 1979, pp. 63–72, plate 6; Grose 1989, pp. 257–258; Stern and Schlick-Nolte 1994, pp. 65, 328–331, nos. 99–101). Mosaic bowls of this shape have been reported at many northwestern European sites (many of them listed in Van Lith 1977, p. 13; and Czurdaruth 1979, pp. 69–70). In addition, eastern Mediterranean finds include Damascus and Hama (Abdul-Hak and Abdul-Hak 1951, plate LVII.2a,c; Zouhdi 1964, pp. 71–72, 73–78, figs. 19–20); Beirut (Baramki 1967, p. 64, plate V.6); Dura Europos (Toll, Bellinger, and Ivanović Rostovcev 1946, p. 56, no. 8, plate 46); Meroë, Sudan (Stern 1981, pp. 38, no. 19, fig. 2.19); and Heis, Somalia (Stern 1987, p. 26, figs. 3.4, 4.5). Further examples are kept in several museums in Israel (Israeli 2003, pp. 83, nos. 81–82), the USA (Goldstein 1979, pp. 184–188, nos. 491–500; Grose 1989, pp. 311–325, nos. 449–525; Antonaras 2012, p. 68, no. 67), Canada (Hayes 1975, pp. 24–25, nos. 59–63, plate 5), and Japan (Miho Museum 2001, p. 70, no. 82).



**PROVENANCE** 1936, Private Collection [sold, Anderson Galleries, New York, March 6, 1936, lot 11]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries Inc., New York, April 5, 1940, lot 101, through French and Co., to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1936a, lot 11, ill.

Parke-Bernet Galleries 1940, lot 101, ill.

**EXHIBITIONS** None



## 90. Mosaic Bowl

<b>Accession Number</b>	2003.248
<b>Dimensions</b>	H. 4.2, Diam. rim 9.0, Diam. base 4.0 cm; Wt. 59.91 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque red, white, and green and translucent blue glass
<b>Modeling Technique and Decoration</b>	Assembled of slices of canes, cast, applied base-ring; slumped; rotary polished

**CONDITION** Fully preserved; mended and filled.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of discoid mosaic tesserae, with florets mostly of the following five types: (1) a central yellow rod surrounded in turn by red, blue, white, and blue layers; (2) a central yellow rod surrounded in turn by blue, red, white, and blue layers; (3) a central white rod set in red, surrounded by a dark blue layer with ten white rods, which in turn is surrounded by a blue layer; (4) a central white rod set in red, surrounded by a dark blue layer with ten yellow rods, which in turn is surrounded by a blue layer; (5) a central red rod surrounded in turn by white, blue, white, and blue layers of glass.

In addition, one tessera of the following type of floret appears: a central green rod surrounded in turn by yellow, red, white, and blue layers of glass.

The coil of the base is ribbon mosaic comprising roughly ten parallel layers of glass in red, white, and blue.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 118, no. 314; p. 111, plate no. 31.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 91. Mosaic Bowl

<b>Accession Number</b>	2003.249
<b>Dimensions</b>	H. 4.0, Diam. rim 9.0, Diam. base 4.1 cm; Wt. 66.89 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque red and yellow and translucent greenish and purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; cast, applied base-ring, rotary polished

**CONDITION** Fully preserved; mended and filled.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of discoid mosaic tesserae, with florets of the following types: (1) a central red rod surrounded by a layer of translucent green with ten yellow rods in it; (2) a central red rod surrounded by a spiraling layer of almost two revolutions of trapezoidal translucent green compartments outlined in yellow, which is surrounded in turn by a purple layer. The coil of the base is ribbon mosaic comprising parallel layers of yellow and greenish glass.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** 1929, Baurat Schiller [sold, Sammlung Baurat Schiller, Rudolph Lepke's Kunst-Auctions-Haus, Berlin, March 19, 1929, lot 588]; Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 118, no. 315; p. 119, plate no. 315.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 92. Mosaic Bowl

<b>Accession Number</b>	2003.250
<b>Dimensions</b>	H. 3.9, Diam. rim 9.0, Diam. base 4.2 cm; Wt. 48.83 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white and translucent grayish and purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; cast, applied base-ring, rotary polished

**CONDITION** Fully preserved; mended and filled.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a splayed, circular base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of discoid mosaic tesserae, in florets of the following types: (1) a central white rod surrounded in turn by a purple and another purple with two rows of white rods in it, 10 in the interior row and 20 in the exterior; (2) a central greenish-gray rod surrounded by six trapezoidal petals outlined in white, set in a purple layer.

One tessera on the rim, as a decorative highlight: thin, wavy, yellow stripes in a thick, translucent green layer. The coil of the base is ribbon mosaic comprising parallel layers of white and purple glass.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 118, no. 316; p. 119, plate no. 316.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 93. Mosaic Patella Bowl

**Accession Number** 96.AF.288

<b>Dimensions</b>	H. 4.7, Diam. rim 9.7, Diam. base 3.9 cm; Wt. 75.60 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean. Allegedly found at Panticapaeum (Kerch), Crimea
<b>Material</b>	Opaque red and yellow and translucent greenish and blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; cast, applied base-ring, rotary polished

**CONDITION** Fully preserved; mended. There is discoloration and weathering on the exterior surface. The interior is not weathered at all; was probably repolished in modern times.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by an applied coil of glass.

The vessel is made of discoid mosaic tesserae of three types: (1) a dark blue central rod surrounded by a currently brownish layer with two rows of yellow rods in it, all set in a translucent blue layer; (2) a red central rod surrounded by a currently brownish, probably originally translucent greenish layer with 10 white rods in it, all set in a translucent blue layer; (3) a red central rod surrounded by a currently brownish, probably originally translucent greenish layer with 10 yellow rods, all set in a translucent blue layer.

The coil of the base is ribbon mosaic comprising 12 parallel layers of glass, in turn six white and six green.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** 1955, Dr. Jacob Hirsch, German, 1874–1955 (Munich, Germany), sold to Barbara and Lawrence Fleischman, 1958; 1955–1958, Estate of Dr. Jacob Hirsch, German, 1874–1955; 1958–1996, Barbara Fleischman and Lawrence Fleischman, American, 1925–1997 (New York, New York), donated to the J. Paul Getty Museum, 1996

**BIBLIOGRAPHY** True and Hamma 1994, p. 356, cat. no. 269 [not illustrated].

Report 97–98, p. 68.

**EXHIBITIONS** None



#### 94. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.44
<b>Dimensions</b>	pres. H. 1.5, Th. 0.4 cm; Wt. 2.42 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque red and white and translucent blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; cast; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** The bowl has a slightly flaring lip, divided by a horizontal depression from the conical, probably cyma recta body. The preserved part of the vessel is made of discoid mosaic tesserae, with florets of two types: (1) dark blue star with eight legs set in milky white, which is set in dark blue ground; (2) amorphous chips of opaque red glass that loosely surround the tesserae with the star in them.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



#### 95. Fragment of a Mosaic Vessel with Geometrical Motif

<b>Accession Number</b>	76.AF.70.21
<b>Dimensions</b>	L. 1.6, W. 1.2, Th. 0.4–0.3 cm; Wt. 1.60 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent green and blue and opaque white, yellow, and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment; three sides are straight, probably cut in modern times.

**DESCRIPTION** The fragment gets thinner toward the curved end, where the body of the vessel was starting to rise. It consists of two types of rectangular tesserae: (1) heavily distorted, eight-petaled green rosette outlined in yellow, set in red; (2) eight-petaled blue rosette outlined in white, set in blue. On the back side, heavily distorted, are the same two types of tesserae.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of mosaic glass in Pharaonic Egypt and the Roman Empire, see comments on cat. 86, as



well as Stern and Schlick-Nolte 1994, pp. 65–66, 68–71; Dawes 2002. On different classes of Roman mosaic glass vessels, see Grose 1989, pp. 247–262. On Composite Mosaic Vessels of different shapes present in the Getty collection, with comments and parallels: on carinated dishes, see comments on cat. 86; on carinated bowls, see comments on cat. 89; on non-carinated bowls with different types of motifs, see comments on cat. 123 (spotted), cat. 125 (reticella), cat. 127 (striped mosaic), and cat. 129 (checkerboard).

Small fragments of mosaic glass vessels were sold in Rome between 1860 and 1920, where they were found, and most of the now-known examples that eventually ended up in museum collections were acquired there in that period. At the time, art dealers polished them to renew their bright, colorful appearance and often placed them in gold cardboard frames, giving them the appearance of a valuable object, even a jewel or a gem, like cats. 87, 109, and 129 (Grose 1989, pp. 243–244). The fragments in the collection are quite diverse, representing different classes of mosaics made with round florets and shorter and longer stripes of glass in many colorful combinations. In addition to the vessel fragments, in the collection there are several flat pieces (cats. 453–496) that were originally formed as plaques or bands, to be used as decorative features of wall revetments and/or on movable objects such as furniture, caskets, or musical instruments; these have geometric, floral, maritime, and anthropomorphic (including theatrical masks) motifs, on which see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 96. Fragment of a Mosaic Vessel with Floral Theme

<b>Accession Number</b>	76.AF.70.32
<b>Dimensions</b>	L. 1.5, W. 1.9, Th. 0.3–0.4 cm; Wt. 2.73 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent green and blue and opaque white, yellow, and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment.

**DESCRIPTION** Rectangular piece of a mildly curved part of a vessel, probably the transition from the bottom to the body, as the reducing thickness toward the curved part indicates. It consists of two types of rectangular tesserae: (1) eight-petaled green rosette outlined in yellow, set in red; (2) eight-petaled blue rosette outlined in white, set in blue. On the back side, irregularly arranged, are the same two types of tesserae.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. For closer parallels, see cat. 94.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 97. Fragment of a Mosaic Bowl

<b>Accession Number</b>	83.AF.28.10
<b>Dimensions</b>	pres. H. 1.4, est. Diam. rim ca. 7.0, Th. 0.4 cm; Wt. 1.85 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque red, white, green, and yellow and translucent blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** The vessel, apparently a deep bowl, has a vertical rim with lip ground both inside and outside, and conical body. Two horizontal ridges form a depressed band 0.5 cm below the rim on part of the fragment—probably a tooling mark and not a decorative feature. The preserved part of the vessel is made of rectangular mosaic tesserae, with florets of two types: (1) a large quatrefoil of consecutive layers of yellow in green, white, and red, set in a thick dark blue ground, quite probably rendering a four-petaled flower; (2) smaller quatrefoils of green petals set in yellow, which are set in greenish ground.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. For closer parallels, see cat. 94. The tesserae depicting the larger, four-petaled flower appear often in plaques with

Egyptianizing floral motifs, such as cat. 460. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

A fragment, probably part of the rim of an open-shape vessel, with identical motif is in the Freer Gallery (F. 1909.512.3.6; Liu 2008, p. 64, lower photo, F1909.512; <https://asia.si.edu/object/F1909.512/#object-content>), originally bought from J. Dattari, an antiquarian and antiquities dealer from Cairo.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 98. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.16
<b>Dimensions</b>	L. 3.4, W. 3.1, Th. 0.4–0.5 cm; Wt. 6.15 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent blue and opaque yellow, white, red, turquoise, and orange glass



**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Convex fragment of the lower part of a curved vessel, probably a bowl. The preserved part of the vessel consists of multicolored tesserae. The fragment was deformed by fire. The tesserae appear quite unusual at first glance, but closer inspection identifies in them deformed and discolored features of the floral motifs that appear in the plaques with the Nilotic flora, such as cat. 460.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 99. Fragment of a Mosaic Glass Vessel

**Accession Number** 83.AF.28.6

**Dimensions** L. 1.8, W. 1.9, Th. 0.25 cm; Wt. 1.78 g

**Date** Late first century BCE–early first century CE

**Production Area** Italy or possibly Egypt

**Material** Translucent purple and opaque turquoise, white, red, and yellow glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment, broken all around.

**DESCRIPTION** A flat fragment that has been repolished and lost part of its surface on both sides. Some mild curvature is still present, indicating that the fragment is part of a vessel. On the fragment are tesserae of a single type: a rosette with two layers of petals constructed of a central red rod surrounded by six turquoise trapezoidal petals, all of them set in white, and an outer layer of seven petals, each one consisting of a central yellow rod set in translucent purple glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. This fragment quite probably belongs to the same vessel as cat. 100.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 100. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.8
<b>Dimensions</b>	L. 1.9, W. 2.9, Th. 0.3 cm; Wt. 2.88 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent purple and opaque turquoise, white, red, and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment.

**DESCRIPTION** Tesserae of a single type, a rosette with two layers of petals: a central red rod surrounded by six turquoise trapezoidal petals, all of them set in white; then an outer layer of seven petals each one consisting of a central yellow rod set in translucent purple glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. It is quite probable that this belongs to the same vessel as cat. 99.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 101. Fragment of a Mosaic Glass Bowl

<b>Accession Number</b>	83.AF.28.18
<b>Dimensions</b>	pres. H. 1.8, est. max. Diam. 5.0, Th. 0.4 cm; Wt. 1.44 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent purple and opaque white, red, and gray glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment.

**DESCRIPTION** Fragment of a vessel, apparently a bowl with flaring lip and curved, probably cyma, recta body. On the preserved fragment appears one single type of tesserae, a rosette with two layers of petals: a rod with central white in translucent purple in opaque red; surrounded by six gray trapezoidal petals set in white, surrounded by translucent blue.

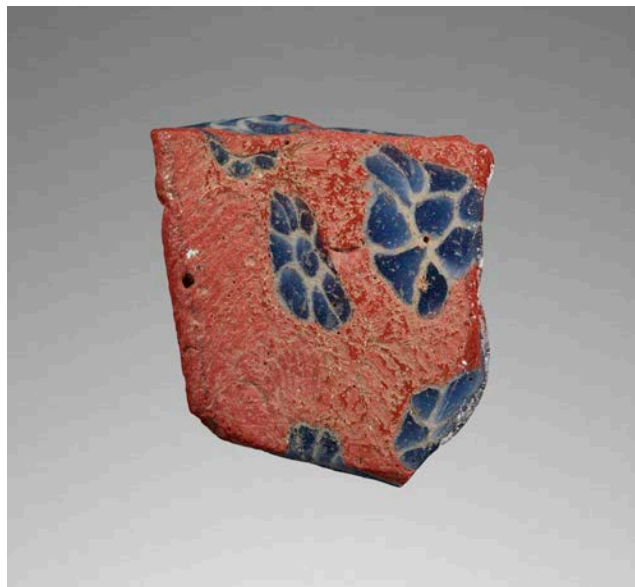
**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and

on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



102. Fragment of a Mosaic Glass Bowl

<b>Accession Number</b>	83.AF.28.22
<b>Dimensions</b>	pres. H. 1.7, est. Diam. rim 8.0–9.0, Th. 0.3 cm; Wt. 2.03 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent blue and opaque white and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** Bowl fragment. Vertical, slightly flaring, ground rim; convex walls. The preserved part of the vessel includes tesserae of one single type: an eight-petaled rosette of dark blue set in white, which is set in opaque brick red glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



103. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.11
<b>Dimensions</b>	L. 2.3, W. 3.3, Th. 0.2 cm; Wt. 3.48 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Opaque red, yellow, and white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** The vessel was made of florets of one single type: a red central rod, surrounded by seven green petals outlined in yellow, surrounded by a layer of 12 white rods set in a purple background. On one side the florets appear correctly, while on the other side some of

the florets have been distorted and the rods appear as white lengths in purple background.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 104. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.12
<b>Dimensions</b>	L. 2.0, W. 3.1, est. Diam. base 5.0, Th. 0.3 cm; Wt. 2.06 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Opaque red, yellow, and white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Flat fragment of what was probably the bottom of a wide bowl or plate. On the back side, a curved scar indicates the trail of the base-ring, which was probably a translucent purple rod that was removed when the fragment was repolished, probably in modern

times. The vessel was made of florets of two types: (1) a central yellow rod surrounded by six yellow rods set in translucent purple, set in red; (2) a central rod comprising rolled white and transparent yellowish layers surrounded by seven red rods set in translucent purple, outlined by a white layer. The same motif appears on both sides of the vessel.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 105. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.36
<b>Dimensions</b>	L. 1.2, W. 2.9, Th. 0.22 cm; Wt. 1.36 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent purple and opaque turquoise, white, yellow, and green glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Mildly concave body fragment. The piece consists of one type of floret: a turquoise central rod surrounded by six green petals outlined in yellow, set in a purple layer with approximately 12 white rods. The same pattern appears on the exterior but appears distorted, with the white rods showing as white lengths.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. For better-preserved fragments with similar motifs, see cats. 99–100.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



106. Fragment of a Mosaic Glass Vessel

**Accession Number** 83.AF.28.17

**Dimensions** pres. H. 1.1, W. 2.0, Th. 0.4–0.5 cm; Wt. 5.70 g

**Date** Late first century BCE–early first century CE

**Production Area** Italy or possibly Egypt

**Material** Translucent green and purple and opaque white glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Mildly curving body fragment from the transition from the bottom (seemingly raised) to the curving body walls. A single type of floret appears: a central translucent green quatrefoil outlined by white, set in translucent purple.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





107. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.4
<b>Dimensions</b>	pres. H. 2.0, est. Diam. rim 9.0, Th. 0.22 cm; Wt. 2.45 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent purple and green and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** Bowl fragment. Vertical, ground rim; convex walls. The vessel includes tesserae of three types: (1) an eight-petaled rosette with a central white rod set in translucent purple and yellow glass, surrounded by six translucent purple trapezoidal petals set in yellow, surrounded by translucent blue; (2) spiraling fine white in thick translucent purple glass; (3) spiraling fine yellow in thick translucent green glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



108. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2004.26.3
<b>Dimensions</b>	L. 2.5, W. 4.1 cm; Wt. 3.84 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent purple and opaque yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; applied base; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Mildly curving body fragment consisting of composite mosaic tesserae, with florets of a single type: central red rod set in one yellow and one red layer, surrounded by a layer of seven red petals outlined in yellow, and all set in a composite layer of nine white rods, each set in translucent purple glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.



**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 109. Fragment of a Bowl

<b>Accession Number</b>	2003.258.5
<b>Dimensions</b>	L 3.1, W. 3.9, Th. 0.1 cm; Wt. 4.17 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent dark blue and purple and opaque yellow and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment of a vessel, broken all around. The exterior is polished, probably in modern times. The interior is slightly dull and affected by weathering, particularly the opaque glass.

**DESCRIPTION** The piece consists of polygonal tesserae fused together. Each tessera comprises a central red rod surrounded by eight yellow petals outlined in translucent purple. Each flower is set in a wide, translucent dark blue layer of glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 110. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2004.26.6
<b>Dimensions</b>	L. 3.8, W. 3.7 cm; Wt. 4.31 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent blue and opaque pinkish, white, and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Body fragment consisting of a single type of a circular floret: a central white rod set in red surrounded by 16 trapezoidal petals in turn pinkish and blue.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



111. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.14
<b>Dimensions</b>	L. 1.1, W. 1.8, Th. 0.4 cm; Wt. 1.25 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent blue and opaque yellow and white glass

**Modeling Technique and Decoration**

Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Flat fragment consisting of one type of circular floret, each composed of a central yellow rod set in blue, surrounded by white.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



112. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.19
<b>Dimensions</b>	pres. H. 3.9, est. Diam. rim 10.0, Th. 0.4 cm; Wt. 11.90 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt

<b>Material</b>	Translucent blue and green and opaque white, red, and yellowish green glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** Vertical, slightly flaring, ground rim; convex body wall of a hemispherical bowl. On the preserved fragment the following two types of tesserae appear: (1) checkerboard pattern of 16 (4 × 4) tesserae, alternately translucent blue and opaque white; (2) a rosette of seven identical tesserae (six surrounding a central one), opaque red set in yellowish green in translucent green glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. For a glass mosaic bowl with similar patterns at the Museo Archeologico of Florence, see Bresciani et al. 1988, p. 104, no. 27.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 113. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.17
<b>Dimensions</b>	L. 1.1, W. 1.8, Th. 0.3 cm; Wt. 0.71 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Opaque red, yellow, white, and green and translucent blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment.

**DESCRIPTION** Small, curved body fragment, with irregular polygonal florets in dark blue background. Each floret has a central red rod, set in white, green, and yellow layers, surrounded by a white layer with red triangular rays in it.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

The shape of the tesserae, with the dentate band, is not present among Roman mosaic vessels. For a small piece of glass that was made of tesserae probably identical to those of this fragment and that was ground in the shape

of a human incisor set in a gold frame used as a pendant dated to the tenth century CE, see Antonaras 2019, pp. 186–187, no. 246. The mosaic technique was revived for a brief period during the ninth and tenth centuries, creating what was probably a very limited and clearly costly production line whose creations were nevertheless widely distributed from Egypt to Iran (Carboni and Whitehouse 2001, pp. 147–153; Goldstein et al. 2005, pp. 86–87).

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



114. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.18
<b>Dimensions</b>	L. 2.9, W. 2.0, Th. 0.5 cm; Wt. 3.80 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Opaque white, red, and yellow and translucent blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

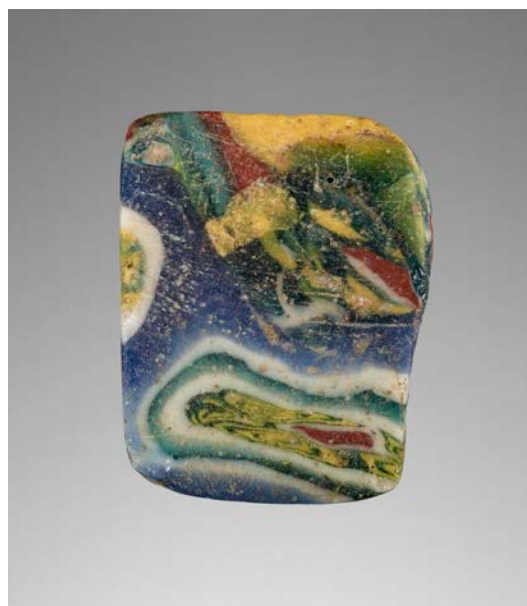
**DESCRIPTION** Rim rounded at the exterior; curved upper body fragment with a 0.5 cm–wide groove 1.6 cm below the rim. At least three different types of florets are discernible: (1) fine stripes of white in thick layers of blue; (2) yellow and red rods in a green background; (3) a white rod set in red in a yellow background.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in the nineteenth century and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



115. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.23
<b>Dimensions</b>	pres. H. 2.2, W. 1.8, Th. 0.3 cm; Wt. 3.36 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly Egypt
<b>Material</b>	Translucent dark blue and green and opaque white, red, yellow, and green glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Rim fragment. Wide flaring rim, rounded tip; the upper, convex part of what was probably a double convex bowl. In the body, three deformed florets are partly preserved in a translucent dark blue layer: (1) circular floret with a red central rod set in white, surrounded by green set in yellow spirals, surrounded by a white, a translucent light blue, and a white layer; (2) circular floret, whose central part is not preserved, the outer layers of which are yellow petals set in green, surrounded by a white layer; (3) stripes of green, light blue, red, and yellow, which may well be a severely deformed floret of type 1.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On cast, angular vessels, see comments on cat. 89. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None

**Accession Number** 76.AF.70.24

**Dimensions** L. 1.8, W. 2.4, Th. 0.3 cm; Wt. 0.96 g

**Date** Late first century BCE–early first century CE

**Production Area** Italy or possibly Egypt

**Material** Opaque white and red and translucent green, blue, and purple glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Mildly curved body fragment that consists of three types of deformed, irregular florets shown in lengths that, in cross section, most probably show: (1) yellow rods in green background; (2) white in translucent blue; and (3) white in translucent purple.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On short-stripped mosaic vessels, see comments on cat. 128. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



116. Fragment of a Mosaic Glass Vessel





## 117. Alabastron

<b>Accession Number</b>	2004.21
<b>Dimensions</b>	H. 13.4, Diam. rim 1.1, max. Diam. 2.3, Th. 0.1 cm; Wt. 32.57 g
<b>Date</b>	Early first century BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark blue, white, green, and light blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths of mosaic canes; slumped; rotary polished

**CONDITION** Mended. Small cavities at the bottom filled. Neck and part of rim not preserved. A fine groove or crack is visible along the seams between the bands. The edge of each band is not perfectly straight, and each one is set at a slightly different angle. Along the white band a vertical crack is visible.

**DESCRIPTION** The body at the top ends at a horizontal, flat edge that is ground on the exterior; everted conical body with straight walls tapering toward the rim; convex pointed bottom. The vessel is made from five parallel lengths of canes set horizontally on the body. The canes are set in the following order: dark blue, white, green, white, and blue.

**COMMENTS AND COMPARANDA** This alabastron belongs to a very rare group of vessels with juxtaposed sections of glass of contrasting colors forming simple

geometric designs. This technique was used for the production of bowls (Oliver 1967, p. 1, figs. 6–9) as well as alabastra. The size and shape of these banded alabastra are almost identical to the gold-band alabastra of Oliver's group A (Oliver 1967, pp. 20–22). For comparanda, see from Soli, Cyprus, a vessel with blue, white, and blue bands: Myers 1899, p. 104, no. 2808; illustrated in Oliver 1967, p. 19, fig. 10. At the British Museum is another example: a vessel with blue, white, and blue bands, and blue neck and rim: Tatton-Brown and Andrews 1991, p. 57, fig. 66 right; illustrated in Oliver 1967, pp. 19–20, fig. 11.

**PROVENANCE** Arnold Vogell, 1857–1911 (Karlsruhe, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** Oliver 1969, p. 17.

von Saldern et al. 1974, p. 102, no. 269.

Wight 2011, pp. 34, 37, fig. 20.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 118. Striped Mosaic Bowl

<b>Accession Number</b>	2004.23
<b>Dimensions</b>	H. 4.9, Diam. rim 8.4, Diam. base 5.6 cm; Wt. 110.75 g



<b>Date</b>	Early first century BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent yellow and opaque white, red, and purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths of round mosaic canes; slumped; applied base and rim; polished inside and out

**CONDITION** Mended and filled; some weathering on the exterior.

**DESCRIPTION** Bowl with vertical rim and convex, curving body tapering gradually toward the mildly convex bottom. Thick and tall conical, applied base-ring made of a length of translucent yellow glass.

The striped mosaic pattern of the vessel is formed from 16 lengths, varying in size, of two types of composite canes laid in parallel rows across the body and extending from the bottom to the rim. The canes are alternately: (1) white flanked by red and purple layers of glass and (2) white flanked by yellow layers. The rim is a twisted cane of a transparent yellowish ground and a fine opaque white thread wound spirally. The base is a translucent yellow cane.

**COMMENTS AND COMPARANDA** Different forms of Hellenistic mosaic bowls are known, and three different kinds of mosaic (network, striped, or ribbon and composite mosaic) were used for their production (Weinberg 1965; Oliver 1968; Grose 1989, pp. 189–197; and more recently Lightfoot 2019). The production center of mosaic and network mosaic vessels remains unknown, although a proposed location is Alexandria, Egypt (Arveiller-Dulong and Nenna 2000, p. 18, 140).

This particular bowl belongs to a group of late Hellenistic glass mosaic vessels, examples of which have been recovered from a shipwreck that sank about 80 BCE off the island of Antikythera in the Aegean, carrying a diverse cargo traveling from the eastern Mediterranean to Italy (Kaltsas, Vlachogianni, and Bouyia 2012, with all previous bibliography).

There are at least three direct comparanda of ribbon bowls (with base-ring and upright rim): the first was recovered from the Antikythera shipwreck (Weinberg 1965, pp. 34, 37, no. 7, figs. 15–16; Weinberg and McClellan 1992, p. 108, no. 69; Avronidaki 2012, p. 140, no. 104), and the other three are unprovenanced (Metropolitan Museum of Art 1929.100.86: Oliver 1968, pp. 55–56, fig. 8;

Lightfoot 2019, p. 173, fig. 6; Yale Art Gallery 1955.6.28: Matheson 1980, pp. 12–13, no. 38; Stern and Schlick-Nolte 1994, pp. 298–299, no. 86). This same bowl shape is also formed with network and millefiori glass (Oliver 1968, pp. 55–56).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 115, no. 310.

*JPGM Handbook* 7th ed., p. 79, ill.

*JPGM Handbook Antiquities* rev. ed., p. 103.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 119. Mosaic Bowl

<b>Accession Number</b>	2003.246
<b>Dimensions</b>	H. 3.8, Diam. rim 10.3, Diam. base 5.2 cm; Wt. 112.44 g
<b>Date</b>	Early first century BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Opaque yellow and white, translucent blue, and transparent almost colorless glass

**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped over a convex former mold; applied base and rim; rotary polished

**CONDITION** Fully preserved; mended and filled.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, splayed base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of rectangular mosaic tesserae, monochrome yellow, white, and blue with a thin white layer in the middle. In addition, discoid sections have been used, composed of a central white rod set in blue, around which have been spirally wound 1.5 revolutions of a translucent yellowish ground with a thin layer of opaque yellow glass on it. The lip of the rim is a twisted cane of transparent glass around which is twisted a very fine white thread.

The coil of the base is ribbon mosaic comprising wavy but parallel layers of blue, white, and yellow glass.

**COMMENTS AND COMPARANDA** This bowl belongs to a group of late Hellenistic glass mosaic vessels, examples of which have been recovered from a shipwreck that sank about 80 BCE off the island of Antikythera in the Aegean, loaded with diverse cargo traveling from the eastern Mediterranean to Italy (Kaltsas, Vlachogianni, and Bouyia 2012, with all previous bibliography). This particular shape of bowl with flaring rim is among the least represented among the late Hellenistic mosaic vessels (Oliver 1968, pp. 56–57; Stern and Schlick-Nolte 1994, pp. 300–301, no. 87). It was made with ribbon and mosaic-patterned glass, as was one from Tripoli, Libya Museum (Oliver 1968, pp. 56). A similar striped mosaic example in the British Museum (Tatton-Brown and Andrews 1991, p. 56, color plate 65) is said to be from one of the Greek islands. In addition, there are vessels made with millefiori mosaic (examples from the Antikythera Group: Weinberg 1965, pp. 35–36, nos. 4, 6, figs. 11, 14; Weinberg and McClellan 1992, p. 108, no. 66; Avronidaki 2012, pp. 143–144, no. 105) and network glass (Oliver 1968, p. 57, fig. 11; Lightfoot 2019, pp. 169–170, fig. 3).

**PROVENANCE** Stroganoff Collection (Rome, Italy); by 1914, Giorgio Sangiorgi, Italian, 1886–1965 (Rome, Italy); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer

(Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Sangiorgi 1914, p. 62, no. 218, plate XLI.

Noted in Oliver 1968, p. 57, no. 2.

von Saldern et al. 1974, pp. 117–118, no. 312; p. 116, plate no. 312.

Wight 2011, pp. 42, 45, fig. 24.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 120. Mosaic Bowl

<b>Accession Number</b>	2003.251
<b>Dimensions</b>	H. 4.0, Diam. rim 9.4, Diam. base 4.2 cm; Wt. 60.42 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent amber-colored and purple and opaque light blue, white, green, and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped over a convex former mold; applied base and rim; rotary polished

**CONDITION** Fully preserved.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of: (1) lengths of blue and white, single-colored canes; (2) composite canes—a fine yellow flanked by two thick green canes, a fine white flanked by two thick purple canes; and (3) a few twisted canes—purple ground with a fine white thread, and a colorless ground with a fine yellow thread.

The coil of the base is ribbon mosaic comprising wavy but parallel layers of green, white, and yellow glass.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 118, no. 320; p. 111, plate no. 320.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



121. Mosaic Bowl

<b>Accession Number</b>	2003.252
<b>Dimensions</b>	H. 3.8, Diam. rim 9.5, Diam. base 4.5 cm; Wt. 69.54 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent purple and opaque white, yellow, and grayish-green glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together sections and lengths (for the base-ring) of round mosaic canes; slumped over a convex former mold; applied base; rotary polished

**CONDITION** Intact.

**DESCRIPTION** The bowl has a flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, splayed, circular base-ring formed by a single revolution of an applied coil of glass.

The vessel is made of discoid mosaic tesserae, with florets of two types: (1) translucent purple matrix with roughly five thin, opaque white rods; (2) translucent purple matrix with roughly five thin, opaque yellow rods. The coil of the base is ribbon mosaic comprising parallel layers of grayish-green and purple glass.

**COMMENTS AND COMPARANDA** For the production technique, see Dawes 2002 and comments on cat. 86. On cast, angular vessels, see comments on cat. 89.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 122, no. 321; p. 111, plate no. 321.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 122. Mosaic Bowl

<b>Accession Number</b>	2003.247
<b>Dimensions</b>	H. 3.2, Diam. rim 10.0, Diam. base 4.4, Th. 0.2 cm; Wt. 53.00 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent brownish and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together sections of round mosaic canes; slumped over a convex former mold; applied base; rotary polished

**CONDITION** A number of repaired breaks visible, and there are some nicks and scratches. Some discoloration and weathering on the exterior surface, in addition to pitting, which has produced the rough appearance of the surface.

**DESCRIPTION** The bowl has a slightly flaring lip; conical, cyma recta body; and flat bottom. It stands on a tall, circular base-ring formed by an applied coil of glass.

The vessel is made of discoid mosaic tesserae of a single type, composed of fine white rods surrounded by brownish translucent glass. Some of the tesserae on the exterior have been fused almost vertically, probably as a result of movement during action of the slumping technique, so that the white rods appear elongated, as short, wavy white threads in the dark-colored body of the vessel. In the interior they mostly appear in cross section as white spots.

**COMMENTS AND COMPARANDA** This bowl belongs to the Roman Cast Composite Mosaic Vessels group, and in

particular to the Non-Carinated Bowls (Grose 1989, pp. 258–261), which are one of the largest groups of mosaic vessels, with deep and shallow bowls being among the most widely appearing forms; others include plates and beakers. For the production technique, see Dawes 2002 and comments on cat. 86. Broad, shallow bowls similar in shape are in the collection of the Toledo Museum of Art (Grose 1989, nos. 539–540).

**PROVENANCE** Friedrich Ludwig von Gans, German, 1833–1920 (Frankfurt, Germany); Kurt Walter Bachstitz Gallery, founded 1920, dissolved 1951; 1929, Baurat Schiller [sold, Sammlung Baurat Schiller, Rudolph Lepke's Kunst-Auctions-Haus, Berlin, March 19, 1929, lot 587]; Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 118, no. 313; p. 115, plate no. 313.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 123. Mosaic Bowl

<b>Accession Number</b>	2004.24
<b>Dimensions</b>	H. 5.2, Diam. rim 10.2, Diam. base 5.5, Th. 0.4 cm; Wt. 211.36 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent blue and opaque white glass



<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic rods; slumped; rotary polished
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**CONDITION** Mended.

**DESCRIPTION** Vertical, slightly everted, rounded rim; deep body with convex sides tapering toward the flat bottom. A fine incised horizontal groove in the interior right below the rim.

The vessel is made of discoid mosaic tesserae of a single type composed of fine white rods (possibly 11) surrounded by translucent dark blue glass. Most tesserae have been fused almost vertically, probably as a result of the movement during the action of the slumping technique, so that the white rods appear elongated as short, wavy white threads in the dark-colored body of the vessel.

**COMMENTS AND COMPARANDA** For the production technique, see the comments on cat. 86. On the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

For particular parallels, see the following: Grose 1989, p. 328, no. 546, ill. p. 233 (one of the two types of tesserae of that bowl is the one used exclusively in this vessel, that is, blue ground with numerous opaque white rods); Grose 1989, p. 330, no. 560, ill. p. 234, which is a shallow bowl with golden-yellow ground with white rods, the same concept in a different color (in addition, this bowl has in the interior three narrow, horizontal incised grooves: two in a band at the junction of the side and bottom, and a small one at the center of the bottom). For a ribbed bowl of the same-color mosaic tesserae, blue with white rods, see Grose 1989, p. 277, no. 285.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 115, no. 310.

Wight 2011, pp. 2, 42, 44, fig. 1, fig. 23.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 124. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	83.AF.28.27
<b>Dimensions</b>	L. 2.4, W. 3.4, Th. 0.3 cm; Wt. 4.06 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

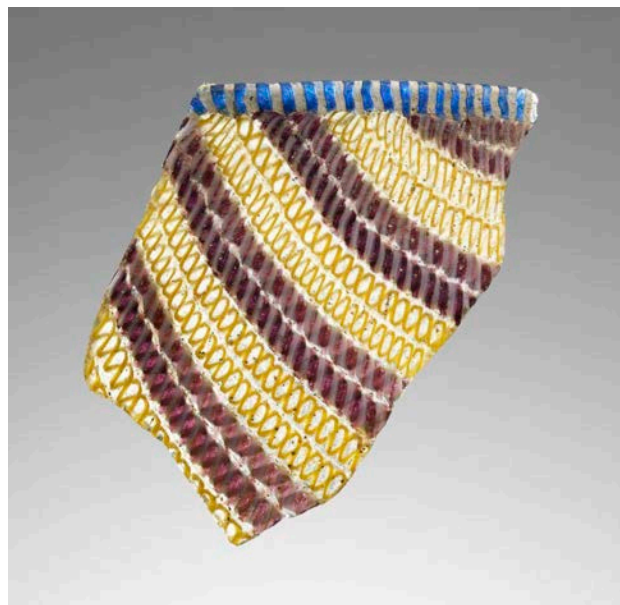
**DESCRIPTION** Mildly concave fragment broken all around. In the translucent dark blue body, white rods appear as short, white strokes, a result of the movement involved in the slumping technique.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate vessels in particular, see comments on cat. 132. On mosaic glass ribbed bowls, see cat. 133. For a whole vessel of a different shape but of the same mosaic tesserae, see cat. 123.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 125. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2004.26.7
<b>Dimensions</b>	H. 5.0, W. 4.6, est. Diam. rim 8.0 cm; Wt. 7.27 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Almost colorless, translucent purple and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment; part of the rim and upper body preserved.

**DESCRIPTION** Deep hemispherical bowl. The body is formed by bent, twisted ribbon canes arranged in pairs of the following two types: (1) reticella of two yellow threads twisted around a colorless ground; (2) twisted cane of a white thread wound around purple ground. The rim is finished with an applied twisted coil of white and blue glass.

**COMMENTS AND COMPARANDA** This bowl belongs to a relatively rare class of mosaic ware found mostly in Italy and neighboring regions. It is known as Network Mosaic, or reticella, and is made exclusively of cut lengths of single-network canes placed and fused next to each other and then sagged over a former mold. It is closely related to the striped mosaic wares with parallel-row pattern and appears in shallow and deep bowls and possibly in pyxides too. This type of reticella derives from a group of Hellenistic glass mosaic vessels where the stripes were spirally arranged, with known examples from the Canosa Group (Grose 1989, pp. 189–191) and the Antikythera Group (Weinberg 1965, pp. 38–39, nos. 10–11, figs. 20–25; Weinberg and McClellan 1992, pp. 108–110, nos. 71–74; Avronidaki 2012, pp. 143–144, nos. 110–113, with all previous bibliography). Most published Roman examples are made of colorless canes wound spirally with one or two threads, and the rims are formed with an applied twisted cane, usually of an intense color, contrasting with the transparency of the body. The presence of an added twisted thread as a rim links these classes with Hellenistic glass vessels like cat. 118. For general information on the class and parallels, see Grose 1989, pp. 253, 302–303, nos. 400–403, 405. In addition, published parallels are known from sites such as Vindonissa (dated to the Claudian or Neronian period; Berger 1960, pp. 9–13, nos. 4–5, plate 1), Cologne (Grose 1989, p. 196, fig. 111), and Lebanon (*Glass from the Ancient World* 1957, pp. 88–89, no. 147 [not recorded in the checklist of later owners that was published in the *Journal of Glass Studies* 3 (1961): 19–153]), as well as in museum collections, including the Fitzwilliam Museum (Fitzwilliam 1978, p. 28, no. 45); the Museo Nazionale Romano (294080 [deep]), the Louvre (Arveiller-Dulong and Nenna 2000, p. 149 and note 23), the Landesmuseum Württemberg (Stern and Schlick-Nolte 1994, p. 299), and the Corning Museum of Glass (Goldstein 1979, p. 32 and 193–195, nos. 523–528: 66.1.217: <https://www.cmog.org/artwork/lace-mosaic-bowl-0> [shallow]; 59.1.566-3: <https://www.cmog.org/artwork/fragment-laced-mosaic-bowl-0>; 59.1.566-1: <https://www.cmog.org/artwork/fragment-laced-mosaic-bowl-7>; 59.1.566-9: <https://www.cmog.org/artwork/fragment-laced-mosaic-bowl-8>).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.



**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 126. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2003.258.6
<b>Dimensions</b>	H. 3.0, W. 5.0, est. Diam. rim 8.0, Th. 0.3 cm; Wt. 7.40 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Transparent colorless, opaque white, and translucent blue glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment; part of the rim and upper body preserved.

**DESCRIPTION** Deep hemispherical bowl. Composed of diagonally arranged canes of colorless glass within which a fine opaque white rod is spiraling. The rim forms a rope-like twisted cane of spiraling white and turquoise glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On network mosaic, or reticella in particular, see comments on cat. 125.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 127. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2004.26.9
<b>Dimensions</b>	H. 3.5, W. 2.5, est. Diam. rim 10.0 cm; Wt. 3.78 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent purple, blue, and turquoise and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment; part of the rim and upper body preserved.

**DESCRIPTION** Deep hemispherical bowl. The body was formed by obliquely arranged single-colored bands in the following order: blue, turquoise, and white. The rim is finished with an applied twisted coil of purple and white glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. This bowl belongs to a relatively rare class of mosaic ware, Striped Mosaic ware, found mostly in Italy and neighboring regions. It is known as “parallel-row pattern” glass and is made exclusively of cut lengths of single network canes placed and fused next to each other and then sagged over a former mold. On the sagging technique, see Stern and Schlick-Nolte 1994, pp. 68–69. Both shallow and deep bowls were produced with this technique. For general information on the class and parallels, see Grose 1989, pp. 284–292, nos. 318–354. For a parallel production, see comments on cat. 128. In addition, published parallels are known from sites such as Vindonissa (dated to the Claudian or Neronian period; Berger 1960, pp. 9–13, nos. 4–5, plate 1).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 128. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2003.258.3
<b>Dimensions</b>	L. 3.2, W. 3.1, est. Diam. body 8.0 cm; Wt. 4.10 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque green, yellow, and white; translucent blue; and transparent pinkish glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Slightly concave body fragment of a mosaic vessel, possibly a bowl. Consists of two kinds of tesserae with ribbed decoration of white, blue, green, and yellow glass: (1) opaque green and yellow bands divided by a thin white layer; (2) a central white band flanked by transparent pinkish, white, and wide dark blue bands. In two cases the way the tesserae were fused on the former mold made the blue band appear to be turquoise.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat.

95. This bowl belongs to a small class of Striped Mosaic ware made of short stripes of composite canes, which are very close in terms of colors and combinations of colors to the parallel-row pattern glass (see cat. 127). It has been plausibly proposed by David Grose (Grose 1989, p. 253) that they are made of the leftover clippings of the canes used for the production of the more numerous Parallel-Row class. They are mostly found in Italy and neighboring regions and are made exclusively of cut short lengths of canes placed and fused next to each other and then sagged over a former mold. On the sagging technique, see Stern and Schlick-Nolte 1994, pp. 68–69. Both shallow and deep bowls as well as pyxides were produced with this technique. For general information on the class and parallels, see Grose 1989, pp. 252–253, 295–301, nos. 368–389, 393–397.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



129. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2003.258.4
<b>Dimensions</b>	pres. H. 2.4, W. 2.7, est. Diam. rim 10.0 cm; Wt. 4.00 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque green, yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** The rim is vertical and ground, and the body continues with a mild convex curve, probably a bowl. On the interior, 0.5 cm below the rim, a horizontal groove 0.1 cm wide is visible. The body tesserae compose a checkerboard pattern with rows of opaque green, yellow, white, and red tesserae.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. This bowl belongs to Roman Cast Composite Mosaic vessels and in particular to the Non-Carinated Bowls group (Grose 1989, pp. 258–261), which are one of the most numerous groups of mosaic vessels, with deep and shallow bowls being among the most widely appearing forms; others are plates and beakers. The checkerboard pattern is quite rare, and the other published examples are broad shallow bowls with single interior grooves; the pattern is created by tesserae in two or three colors (Grose 1989, p. 260, nos. 564–567). Known carinated mosaic bowls with checkerboard patterns date this group to the late first century BCE–early first century CE (Abdul Hak 1959, p. 81, fig. 14; Goldstein 1979, pp. 186–187, no. 497).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 130. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2004.26.8
<b>Dimensions</b>	H. 2.3, W. 4.1, est. Diam. rim 9.2 cm; Wt. 5.68 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Egypt, or possibly Italy
<b>Material</b>	Transparent decolorized; translucent blue and green; opaque white, red, and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; applied rim; rotary polished

**CONDITION** Rim and upper body fragment.

**DESCRIPTION** Deep hemispherical bowl. The body is formed by spiraling ribbon canes with bands in the following order: white, blue, red, yellow, green, and white. The rim is finished with an applied twisted coil of colorless and yellow glass.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. For comments about the various types of mosaic vessels present in the Getty collection, see cat. 95.

This bowl belongs to a group of early Roman glass vessels, almost exclusively bowls, deeper or shallow, and occasionally pyxides, distinguished by the applied, twisted coil that formed their rim, and the body almost always made of lengths of composite canes. It can be ascribed to a very small group known with the illustrative name Meandering-Strip Mosaic Vessels that stand outside of the usual canon for striped vessels in the Romano-Italian tradition, their body having been made of very large cane sections formed of several colored strips that were coiled, forming curvilinear, meandering, or sinuous motifs; they are dated to the Augustan or Julio-Claudian period (Grose 1989, family II: pp. 252–253, nos. 390–397).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 131. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	2003.258.2
<b>Dimensions</b>	W. 4.2, L. 3.8, Th. 0.6–0.3 (at the notch) cm; Wt. 16.35 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent amber-colored and opaque white and blue glass



**Modeling Technique and Decoration**

Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment, broken all around. The exterior is polished, probably in modern times. The interior is slightly dull.

**DESCRIPTION** The fragment is mildly convex and belongs to the bottom of a vessel, probably a bowl. It is composed of banded mosaic sections placed sparsely in an amber-colored matrix. The banded sections comprise five white and dark blue layers of glass interchangeably arranged. In the interior, a reverse formation appears as if there are two layers of decoration, one on each surface over an amber-colored matrix. It is more probable that this is the result of the difference in temperature between the exterior and the interior of the glass during the slumping on the former mold.

The polished exterior retains parts of a circular groove 3.7 cm wide, and a mishap is also visible at one point on the circumference. The cutter placed the wheel on the exact position to form a perfect circle, but something prevented him from finishing the cut at this point and he continued 3 mm farther, giving to the object a slightly off-center, oval shape. After the breakage of the original vessel, it appears that its pieces were retrieved and repurposed as valuable decorative elements, and this particular fragment was used as a gem or inlay. In the notch around it is visible a thick layer of weathering, probably indicative of some kind of metal setting covering that area for an extended period of time.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the various types of mosaic vessels present in the Getty collection, see comments on cat. 95. This vessel belongs to a group of early Roman glass vessels, almost exclusively bowls, deeper or shallow, and occasionally pyxides, distinguished by the applied, twisted coil that formed their rim, and by a body almost always made of lengths of composite canes. It can be ascribed to a very small group known as Short Strip Mosaic Vessels (Grose 1989, family II: pp. 252–253, nos. 368–369); see comments on cat. 128. For fragments of mosaic vessels used as insets in jewelry, see Voroniatov 2020, pp. 281–287.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 132. Agate Glass Bowl

<b>Accession Number</b>	2003.253
<b>Dimensions</b>	H. 2.8, Diam. rim 12.6, Diam. base 7.0 cm; Wt. 125.03 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent purple and amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Slumped; rotary polished

**CONDITION** Mended and filled in some areas of the rim. There are two perforations (diam. 0.2 cm) at 0.4 cm below the rim, placed across from each other. In the perforations, layers of white weathering are visible.

**DESCRIPTION** Ground vertical rim; hemispherical bowl; flat bottom. The bowl is made of a disk formed from a single composite cane of glass which consists in turn of three wide layers, one a translucent amber-color and two purple, each flanked by a thin layer of opaque white glass. The cane was bent at least 12 times, creating the illusion of veins in agate.

**COMMENTS AND COMPARANDA** Agate was one of the favorite stones of the Romans, and its rich colors and



intricate veins of different colors were rendered in glass in Hellenistic and Roman times (Grose 1989, pp. 192–193, 247–249; Weinberg and McClellan 1992, pp. 56–58, 97–98). Agate glass vessels are known in several shapes: shallow bowls like this vessel (Platz-Horster 1992, p. 303, no. 166), deeper bowls (Azuma 2001, no. 127), bottles (Fossing 1940, p. 114, fig. 860), and spindle-shaped alabastra (Auth 1976, p. 53, no. 43; Grose 1989, p. 369, no. 668; Schlick-Nolte 2002, pp. 88–90, V-47). They are ascribed to Italian workshops, especially in Rome. For a gold-band plate, see Alekseeva and Sorokina 2007, pp. 54–57, figs. 7–8, plate 37:1–2.

In addition, many ribbed bowls were formed with marbled mosaic glass that was a rendition of agate with opaque white wavy veins in a dark-colored translucent matrix, often dark blue or purple, for example cat. 133 (Isings 1957, pp. 19–20, form 3b; Antonaras 2017, pp. 54–56, form 6b).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 122, no. 324; p. 117, plate no. 324.

Del Bufalo 2016, p. 184, fig. 3.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Classical Connections: The Enduring Influence of Greek and Roman Art (Los Angeles, 2003–2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 133. Ribbed Bowl

<b>Accession Number</b>	72.AF.37
<b>Dimensions</b>	H. 7.5, Diam. rim 18.0, Diam. base 8.0 cm; Wt. 509.40 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Roman Empire, probably Italy. Found: park of the Château de Ripaille, Thonon-les-Bains, France, 1764
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary pressed and polished

**CONDITION** Intact.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; deep convex body decorated with 21 vertical ribs, slightly slanting to the left and relatively evenly spaced. Ribs begin 1.5 cm below the rim and are visible to the center of the bottom. In the interior, one groove on the lip and two more 1.5 cm from the bottom.

Composite mosaic pattern formed from polygonal sections of a composite cane of amber-colored glass in which a fine, opaque white thread was spiraled two times. The sections were fused together into a single mass, which was slumped over a former mold, and the ribs were formed by tooling, while the form was on a rotating base, probably a potter's wheel.

**COMMENTS AND COMPARANDA** For agate and marbled vessels, see comments on cat. 132. Mosaic glass ribbed bowls are mostly found in the western Roman provinces, and it is assumed that they were probably made in Italy (Stern and Schlick-Nolte 1994, pp. 73–74, 320), while monochrome ribbed bowls were made and predominantly used in the eastern Mediterranean. Preserved mosaic ribbed bowls imitate usually onyx, using either elongated, ribbon patterns or large spirals like both examples from Getty collection (this vessel and cat. 134). Both patterns were probably preferred because the distortion created by the ribs enhanced the imitation of veining typical for agate. For direct comparanda, see Isings 1957, pp. 19–20, form 3b; Berger 1960, pp. 13–16, plate 2:20–21; Goethert-Polaschek 1977, pp. 16–17, nos. 8–9; Follmann-Schulz 1988, p. 113, no. 423, fig. 48; Grose 1989, pp. 279, 282–283, nos. 290, 304, 306, 308–309; Follmann-Schulz 1992, pp. 11–12, nos. 4–5; Stern and Schlick-Nolte 1994, nos. 95–96, pp. 320–323, 78; Lazar 2003, p. 37, form 2.1.4, fig. 11; Antonaras 2017, pp. 54–56, form 6b.

**PROVENANCE** 1764, Found: park of the Château de Ripaille, Thonon-les-Bains, France, inside a round lead container holding the ashes and partially burnt bones of a cremation burial (Lullin 1787); 1764–1892, Found on the grounds of the Château de Ripaille, Thonon-les-Bains, France, in 1764 and transferred with the estate when sold to Frédéric Engel-Gros, 1892; 1892–1918, Frédéric Engel-Gros, French, 1843–1918 (Château de Ripaille, Thonon-les-Bains, France), by inheritance to his heirs, 1918; 1918–still in 1925, Heirs of Frédéric Engel-Gros, French, 1843–1918; 1972, Private Collection [sold, *Objets d'art et de bel ameublement*, Palais Galliera, Paris, March 7, 1972, lot 42, to Robin Symes, Limited]; 1972, Robin Symes, Limited, founded 1977, dissolved 2005 (London, England), sold to the J. Paul Getty Museum, 1972

**BIBLIOGRAPHY** Lullin 1787, p. 68.

Bulletin de la Société savoisiennne 1862, p. XI.

Bruchet 1907, p. 20; ill. (no plate number) [cited as being in the Engel-Gros Collection].

Ganz 1925, vol. I, pp. 7, 26, no. 56; vol. II, plate 8a.

Palais Galliera 1972, lot 42.

*Connaissance des arts* 1972, p. 165, no. 2, ill.

*JPGM Guidebook* 4th ed., p. 36.

*JPGM Handbook Antiquities* 1st ed., p. 204.

*JPGM Handbook Antiquities* rev. ed., p. 216.

Wight 2011, pp. 42, 51, fig. 30.

Lapatin 2015, p. 111, fig. 23.

Del Bufalo 2016, p. 185, fig. 5.

**EXHIBITIONS** Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)



## 134. Ribbed Bowl

<b>Accession Number</b>	2004.25
<b>Dimensions</b>	H. 4.9, Diam. rim 17.0, Diam. base 8.1 cm; Wt. 341.50 g
<b>Date</b>	Ca. 50 BCE–ca. 50 CE
<b>Production Area</b>	Roman Empire, probably Italy
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary pressed and polished

**CONDITION** Mended; fully preserved.

**DESCRIPTION** Vertical, smooth, fire-rounded rim; shallow convex body decorated with 19 vertical ribs, mildly slanting to the left and relatively evenly spaced. Ribs start 1.5 cm below the rim, and they are visible to the center of the bottom. In the interior, three grooves 0.1 cm thick are visible: two next to each other at the periphery of the bottom (W. 7.1, Th. 0.1 cm) and a small one at the center (W. 1.1, Th. 0.2 cm).

Composite mosaic pattern formed from polygonal sections of a composite cane of dark blue glass in which a fine, opaque white thread was spiraled two times. The

sections were fused together into a single mass, which was slumped over a former mold, and the ribs were formed by tooling while the form was on a rotating base, probably a potter's wheel.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cat. 132. On mosaic glass ribbed bowls, see cat. 133. For direct comparanda, see Isings 1957, pp. 18–19, form 3a; Berger 1960, pp. 13–16, plates 1:16–17, 2:18; Goethert-Polaschek 1977, pp. 16–17, nos. 8–9; Follmann-Schulz 1988, p. 113, nos. 423, 443, fig. 48; Grose 1989, pp. 279, 281–282, nos. 291, 300, 305; Tatton-Brown and Andrews 1991, pp. 58–59, fig. 67 left; Lazar 2003, p. 37, form 2.1.4, fig. 11; Boğan 2015, pp. 172–173, plates XXIX:3–4, XXX:1–3, XLVIII:3–4, 6–8; Antonaras 2017, pp. 54–56, form 6a.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 122, no. 328.

Wight 2011, pp. 42, 47, fig. 26.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 135. Ribbed Bowl Fragment

<b>Accession Number</b>	76.AF.70.15
<b>Dimensions</b>	L. 1.6, W. 2.6, Th. 0.3–0.5 cm; Wt. 2.65 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Roman Empire, probably Italy
<b>Material</b>	Translucent purple and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary pressed and polished

**CONDITION** Fragment.

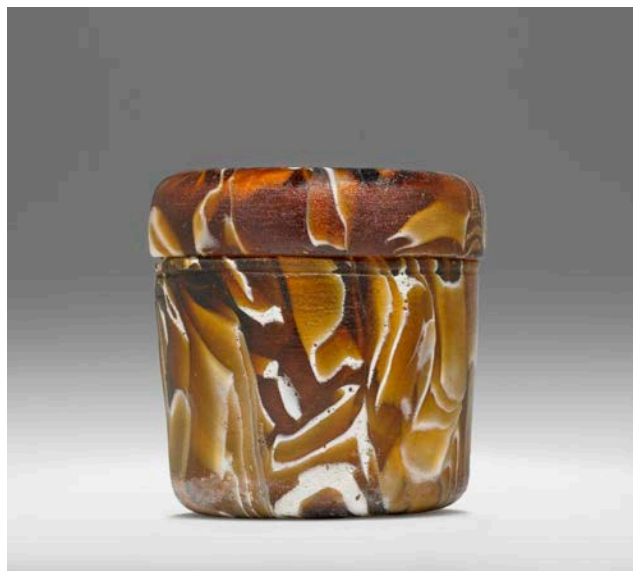
**DESCRIPTION** Fragment of lower body, which seems to be shallow and convex, preserving parts of three vertical, evenly spaced ribs. Composite mosaic pattern formed from polygonal sections of a composite cane of dark purple glass in which a fine, opaque white thread was spiraled. The sections were fused together into a single mass, which was slumped over a former mold, and the ribs were created by tooling while the former was on a rotating base, probably a potter's wheel.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cat. 132. For mosaic glass ribbed bowls, see cats. 133–134.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 136. Lidded Pyxis

<b>Accession Number</b>	2003.256
<b>Dimensions</b>	H. 5.1, Diam. rim 5.7, Diam. base 4.1 cm; Wt. 95.92 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Roman Empire, probably Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary pressed and polished; wheel-cut

**CONDITION** Intact.

**DESCRIPTION** Vertical, rounded rim, ground back to create a narrow ledge on which the lid sits. Deep cylindrical body, flat bottom.

On the upper side of the lid are two concentric cut grooves: a smaller central one, 1.3 cm, and a wider one, 3.6 cm, toward the edge. A fine, horizontal groove is cut on the body, right below the ledge of the rim.

Composite mosaic pattern formed from polygonal sections of a composite cane of amber-colored glass in which a fine, opaque white thread was spiraled. The sections were fused together and tooled into a single mass, which was slumped over a former mold and further tooled to the desired shape.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133. For direct comparanda, see Grose 1989, pp. 239, 335, no. 587.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 330; p. 124, plate no. 330.

Wight 2011, pp. 2, 42, 48, fig. 1, fig. 27.

**EXHIBITIONS** Art of Alchemy (Los Angeles, 2016–2017)

Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 137. Fragment of a Mosaic Glass Vessel

<b>Accession Number</b>	76.AF.70.2
<b>Dimensions</b>	L. 1.8, W. 8.8, Th. 0.4 cm; Wt. 4.52 g



<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque yellow and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Body fragment. The pattern is marbled, with irregular yellow veins in a dark purple background.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



138. Fragment of a Mosaic Glass Vessel

**Accession Number** 76.AF.70.4

<b>Dimensions</b>	L. 1.4, W. 1.7, Th. 0.2 cm; Wt. 0.74 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Slightly concave body fragment. The pattern is marbled with irregular white veins on a dark purple background.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



139. Fragment of a Mosaic Glass Vessel



<b>Accession Number</b>	76.AF.70.9
<b>Dimensions</b>	L. 2.4, W. 3.2, Th. 0.8 cm; Wt. 8.79 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Concave body fragment. The pattern is marbled with faint irregular white veins within the dark purple background

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 140. Fragment of a Mosaic Glass Vessel

**Accession Number** 76.AF.70.19

<b>Dimensions</b>	L. 1.6, W. 2.7, Th. 0.4 cm; Wt. 2.89 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or possibly eastern Mediterranean
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished; wheel-cut

**CONDITION** Fragment.

**DESCRIPTION** Curved fragment from lower body. The pattern is marbled with faint irregular white veins on a dark purple background. On the exterior, two concentric circular grooves are visible.

**COMMENTS AND COMPARANDA** Probably a ribbed bowl. For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



141. Fragment of a Mosaic Vessel with Marbled Motif

<b>Accession Number</b>	76.AF.70.39
<b>Dimensions</b>	L. 2.1, W. 2.4, Th. 0.3 cm; Wt. 3.66 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; rotary polished

**CONDITION** Body fragment, broken all around.

**DESCRIPTION** Concave body fragment. The pattern is marbled with faint irregular white veins on a dark purple background.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



142. Fragment of a Mosaic Vessel with Marbled Motif

<b>Accession Number</b>	76.AF.70.33
<b>Dimensions</b>	L. 2.1, W. 1.8, Th. 0.4 cm; Wt. 3.50 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque white and purple glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped or cast; rotary polished

**CONDITION** Fragment.

**DESCRIPTION** Body fragment preserving part of the wide, splayed, concave rim and body. Part of a patella, a double-convex bowl. On both sides is a slightly different wavy pattern of white and purple glass imitating agate or onyx.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat.

95. On agate and marbled vessels, see comments on cats. 132–133.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 143. Fragment of a Mosaic Vessel with Floral Motif

<b>Accession Number</b>	83.AF.28.23
<b>Dimensions</b>	L. 2.4, W. 2.0, Th. 0.35 cm; Wt. 3.00 g
<b>Date</b>	First century BCE, possibly to early first century CE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque white and red and translucent purple glass
<b>Modeling Technique and Decoration</b>	Made from a monochrome disk-shaped blank on which inlay elements were applied and fused together; slumped; rotary polished

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Concave fragment, probably from a bowl. The exterior is undecorated, a translucent purple appearing black. On the interior, five florets are randomly placed on a translucent purple (appearing black) background. In addition, one white curved stem is visible.

Each circular floret consists of a central red rod surrounded by eight elongated white petals set in purple.

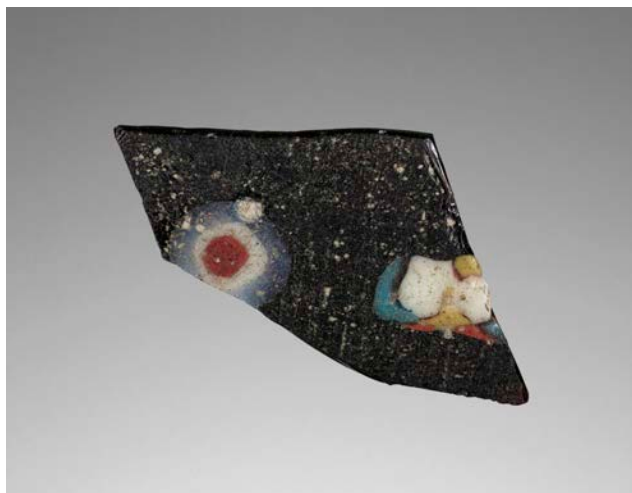
**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth-century Rome and on the different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

This fragment belongs to a class of vessels ascribed to late first-century BCE Egypt, known as Egyptian Cast and Inlaid Bowls (Grose 1989, p. 197). The vessel was formed by slumping a single-colored matrix of glass on whose surface inlay elements were added, forming a decorative pattern on the surface of the vessel. A fragment of a very similar vessel from Karanis, Egypt, is in the Kelsey Museum in Ann Arbor, Michigan. It is a broad shallow bowl with flowers and wading birds (Cool Root 1982, p. 17, plate 18e). Further parallels from Fayum, Egypt, preserving parts of the depictions of birds, garlands, and loosely arranged stars and rosettes, are published as well (*3000 Jahre Glaskunst*, p. 41, no. 36, color table F 4 = Christie's 1985, pp. 116–117, no. 225). Another example, a shallow bowl of almost-opaque medium blue glass with floral decoration, is kept in the Toledo Museum of Art (Grose 1989, p. 208, no. 227), and a few more are now in the Corning Museum of Glass (Whitehouse 2003, pp. 128–130, nos. 1099–1103).

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 144. Fragment of a Mosaic Vessel with Inlaid Geometrical Motifs

<b>Accession Number</b>	76.AF.70.22
<b>Dimensions</b>	L. 1.9, W. 3.5, Th. 0.3 cm; Wt. 2.60 g
<b>Date</b>	First century BCE, possibly to early first century CE
<b>Production Area</b>	Egypt
<b>Material</b>	Translucent purple and blue and opaque red, white, turquoise, and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a monochrome disk-shaped blank on which inlay elements were applied and fused together; slumped; rotary polished

**CONDITION** Fragment; the sole original edge is rounded.

**DESCRIPTION** An almost flat body fragment. On an almost opaque purple (appearing black) background appear two different florets: (1) a circular one with a red rod set in white and light blue layers; (2) an irregular motif, possibly part of a flower with white central part surrounded in areas by turquoise, yellow, and red features. The decoration is inlaid in the upper surface of the matrix and is not visible on the back side, which is rough and flat.

**COMMENTS AND COMPARANDA** See cat. 143.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 145. Gold-Band Alabastron

<b>Accession Number</b>	2003.229
<b>Dimensions</b>	H. 13.1, pres. H. body 11.0, Diam. rim 1.8, max. Diam. 2.6 cm; Wt. 47.80 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Eastern Mediterranean, probably Italy
<b>Material</b>	Translucent blue, purple, and amber-colored; transparent greenish; opaque white glass; gold
<b>Modeling Technique and Decoration</b>	Fusion and rod-forming. Assembled from prefabricated, composite mosaic canes and sandwich gold-glass strips which were applied lengthwise to a dark blue layer/matrix of glass, around a rod, slumped, and dragged sideways seven times to create a wavy pattern

**CONDITION** Mended. Small part of the upper edge of the body is missing and was replaced with some fill. The original neck and rim are also missing and were replaced with that of a ribbon flask. The inner lining of glass is slightly visible in the break near the bottom of the vessel.

**DESCRIPTION** Alabastron with removable neck and rim piece. The rim is flaring, almost horizontal, with ground tip, and the neck is cylindrical, covered in the interior with a whitish incrustation. It is made of stripes of white,

greenish, purple, light blue, and greenish—with gold flakes—glass. Originally from a free-blown gold-band flask (cf. cat. 146). The original necks of alabastra are very thin, with broad horizontal rim, and are usually monochrome.

At the top, the body ends in a horizontal, flat edge; everted conical body with straight walls tapering toward the rim; convex pointed bottom. The vessel is made from five parallel wavy lengths of canes set vertically on the body. The canes (0.1 cm thick) are set on a dark blue layer (0.5 cm thick) in the following order: turquoise (actually an opaque white layer under a translucent greenish layer that appears turquoise by transmitting the color of the underlying dark blue layer of the body); amber-color (appearing black) encasing a thin white trail; blue encasing a thin white trail; purple encasing a thin white trail; and a gold-glass band comprising greenish glass with gold flakes in it. This pattern is repeated three times. The interior of the body is smooth and the colors are clearly visible.

**COMMENTS AND COMPARANDA** The gold-band technique involves the use of bands with a gold foil encased in transparent glass next to other, colorful bands, for the formation of vessels through rod-forming, core-forming, slumping, and blowing (Cesarin 2019, pp. 45–58).

The use of colorless glass to cover gold foils first appeared in early fourth-century BCE Macedonia and Thessaly for the decoration of shallow, lidded bowls and finger rings (Ignatiadou 2003, pp. 4–7; Ignatiadou 2017, pp. 61–67). This technique reappeared in the late third–second centuries BCE with sandwich gold-glass vessels attributed to Alexandria (Harden 1968, pp. 21–47).

Proper gold-band glass objects form one of the rarest groups of Hellenistic and Roman glass objects. Hellenistic gold-band objects include mainly alabastra, some bowls, one skyphos, and a few beads, gems, and inlays. They were produced in the eastern Mediterranean, possibly in or around Alexandria, between the second and the mid-first centuries BCE. Roman gold-band glass products, datable between the last quarter of the first century BCE and the beginning of the first century CE, are mainly containers for cosmetics and ointments, pyxides, and flasks; a smaller group consists of sumptuous tableware items, bowls, and one patera (Cesarin 2019). The largest number is found in Italy, where they were most likely produced, likely in Aquileia and possibly elsewhere in Italy too.

From the third century CE and mainly during the fourth century, gold-glass reappears in various groups of vessels, the most numerous one known as “fonti d’oro.” They are characterized by the use of gold or gilded threads and the protection of the gold leaf with glass roundels and later with an entire layer of glass. It has been proposed that they were produced in Italy, Rhineland, and the eastern Mediterranean (Whitehouse 1996, p. 10; von Saldern 2004, pp. 352–361; Howells 2015).

Gold-band alabastra were introduced in the first century BCE, and if they were actually used, they were most probably used for holding scented oils and perfumes. This particular example belongs to a more numerous subgroup of these rare alabastra, which are smaller, with wider body and more numerous and narrower colored bands that occasionally overlap (Grose 1989, p. 196; Cesarin 2019, pp. 32–35). On the gold-band glass technique, see Cesarin 2019, and especially on Roman gold-band glass techniques pp. 45–70. For direct comparanda, see Oliver 1967, pp. 20–23, group B; Grose 1989, pp. 196–197, 208, nos. 225–226; Dusenbery 1967, p. 38, no. 8, fig. 9; Filarska 1952, p. 73, plate 6.5, no. 31; Tatton-Brown and Andrews 1991, p. 57, fig. 66 center. For an overview of all published examples, see Cesarin 2019, pp. 133–147, nos. H1–H43, plates I–IV.

**PROVENANCE** 1600s, Barberini Collection (Rome, Italy); by 1914, Giorgio Sangiorgi, Italian, 1886–1965 (Rome, Italy); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Sangiorgi 1914, no. 303, plate XXXIX.

Oliver 1967, p. 21, no. 25.

von Saldern et al. 1974, p. 104, no. 270; p. 102, plate no. 270.

Wight 2011, pp. 42, 50, fig. 29.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 146. Gold-Band Flask

<b>Accession Number</b>	2003.230
<b>Dimensions</b>	H. 9.1, Diam. rim 2.2, Diam. base 3.6 cm; Wt. 79.06 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy
<b>Material</b>	Translucent blue and turquoise; transparent greenish and purple; opaque white glass; gold
<b>Modeling Technique and Decoration</b>	Assembled from lengths of canes and cast; rotary polished; cut on the exterior

**CONDITION** Fully preserved; small part of body is missing. Interior covered with whitish weathering.

**DESCRIPTION** Flaring, almost horizontal rim; short, cylindrical neck; narrow, sloping shoulder; biconical carinated body; flat bottom.

Two parallel horizontal grooves at the transition from the shoulder to the upper end of the body, one on the greatest diameter of the body, and two more at the transition to the bottom. Gold-band mosaic formed from five bands in the following order: blue outlined in white; purple; colorless, encasing shattered golden leaf outlined in white, turquoise, and green. These lengths of canes have been bent, forming a U-shaped motif. This pattern is repeated three times on the body.

**COMMENTS AND COMPARANDA** On gold-band technique, see comments on cat. 145. On the form, see Isings 1957, pp. 24–24, form 7. For comparanda from various museum collections, see: Calvi 1968, p. 62, plate 4 (from Aquileia); Oliver 1967, p. 24, fig. 14, 15; La Baume and Salomonson 1976, p. 29, no. 30, color table III; Goldstein 1979, p. 203, no. 556, plates 31, 42 = Harden et al. 1987, p. 41, no. 17 = Cesarin 2019, p. 183, plate XIII (R117); JGS 1980, p. 88, no. 3; Christie's 1985, pp. 94, 101, no. 161; Loudmer and Kevorkian 1985, p. 45, no. 97; Grose 1989, p. 339, nos. 605–607; Maier et al. 1994, p. 269 and fig. 144 (from a Roman tomb at Nea Paphos, Cyprus); *3000 Jahre Glaskunst*, p. 68, no. 198; Kunina 1997, p. 268, nos. 95, 96; Sternini 1998, p. 70, no. VI9, plate IV; Arveiller-Dulong and Nenna 2000, p. 156, no. 194; Tartari 2005, pp. 109–110, no. 186, fig. 5; Lightfoot 2007, pp. 46–47, no. 43. Also see Fitzwilliam 1978, p. 25, no. 36, for a squat example.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 104, no. 274; p. 106, plate no. 274.

Wight 2011, pp. 1, 2, fig. 1.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 147. Gold-Band Pyxis

<b>Accession Number</b>	2003.231
<b>Dimensions</b>	H. 4.2, Diam. rim 5.3, Diam. base 5.0 cm; Wt. 63.79 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy
<b>Material</b>	Translucent blue and green; transparent greenish; opaque white glass; gold
<b>Modeling Technique and Decoration</b>	Assembled from fused composite canes; slumped; ground and polished

**CONDITION** Intact body; missing lid.

**DESCRIPTION** Vertical rim, ground back to create a narrow ledge on which the lid would sit; deep cylindrical body; flat bottom with two concentric circular grooves 0.5 cm from the outer edge. Both the inside and the outside are ground and polished.

Formed from wavy lengths of a composite cane comprising five bands in the following order: an opaque white with a dark, probably amber-yellow layer; a translucent dark blue layer; a transparent amber-yellow layer encasing a gold leaf; a translucent green layer; and an opaque white and transparent amber-yellow layer.

**COMMENTS AND COMPARANDA** On gold-band technique, see cat. 145. For other comparanda, see Oliver 1967, pp. 25–26; von Saldern 1968, no. 17; Goldstein 1979,

p. 204, no. 559, plates 31, 42; Grose 1989, p. 338, nos. 602–604; Tatton-Brown and Andrews 1991, pp. 58–59, fig. 68 right; Kunina 1997, p. 99, no. 97, which is identical in dimensions; Arveiller-Dulong and Nenna 2000, p. 155, no. 193; Mandruzzato and Marcante 2007, p. 115, no. 360; Cesarin 2017, pp. 84–85, fig. 5. For an overview of all published examples, see Cesarin 2019, pp. 165–179, no. 48–105, plates VIII–XI.

**PROVENANCE** 1952, Mutiaux Collection [sold, *Ancienne Collection Mutiaux: sixième vente: Objets d'art de haute curiosité, Hôtel Drouot, May 9, 1952*, lot 75]; by 1952–still in 1957, Ray Winfield Smith, American, 1897–1982; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 104, no. 275; p. 106, plate no. 275.

Wight 2011, pp. 103, 114, fig. 82.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 148. Jar

<b>Accession Number</b>	2003.277
<b>Dimensions</b>	H. 6.2, Diam. rim 4.2, Diam. base 3.3 cm; Wt. 35.35 g

<b>Date</b>	Early first century CE
<b>Production Area</b>	Italy
<b>Material</b>	Dark blue, turquoise, and white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Mended; small fill on the bottom; weathering on the interior.

**DESCRIPTION** Fire-polished, flaring rim; wide, short neck; pear-shaped body; slightly concave bottom. Free-blown ribbon jar of eight alternating vertical lengths of two composite canes: four are dark blue and four turquoise (appearing purplish in transmitted light), each one of them flanked by translucent white glass. All canes begin on one side of the rim and continue down and around to terminate at the same point on the other side of the rim. The canes were assembled and thereafter free-blown to achieve the shape.

**COMMENTS AND COMPARANDA** Slumped and blown color-band vessels represent a separate family of mosaic glass. These vessels are small- or medium-sized flasks or unguentaria. They are made of bands or sections of mosaic canes that were fused to a mass, which was gathered toward the end of the production on the blowpipe, and then formed using free-blowing. This development is very important for the history of glassworking, because it illustrates the transition from the earlier, Hellenistic and Roman technique of forming glass vessels by slumping a mass of glass over or into a mold to the free-blowing that revolutionized the entire glass industry and dates to the Augustan or Julio-Claudian period. The distribution pattern of provenanced finds indicates that the production center was probably in the western Mediterranean, possibly in Italy (Grose 1989, pp. 261–262).

Small globular and pear-shaped glass jars were popular in the first century CE, mostly made with the free-blowing technique (Isings 1957, pp. 88–89, variants of forms 68; Fünfschilling 2015, p. 391, forms AR 114, AR 115; Antonaras 2017, p. 131–132, forms 98, 99). This jar has the same shape as the aforementioned monochrome vessels, but it is rendered in a different technique that led to the striking, polychrome creation.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 363.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 149. Marbled Flask

<b>Accession Number</b>	2003.273
<b>Dimensions</b>	H. 6.2, Diam. rim 2.4, max. Diam. 5.5, Diam. base 4.0 cm; Wt. 42.95 g
<b>Date</b>	Early–mid-first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Mended. Exterior covered with whitish iridescent weathering; interior covered with weathering and soil crust.

**DESCRIPTION** Flaring, flattened rim; cylindrical neck, tapering toward the bulbous body; flat bottom. The vessel consists of approximately 18 amber-colored and white rods, which were fused together, slumped, and blown to

form the closed shape of the vessel and then “combed” 11 times, forming a distinct zigzag pattern. Rotary marks are visible in the interior of the neck.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 148.

This type of squat flask is well-known and has been unearthed in different parts of the Roman Empire, mainly in the western areas and Italy, which is considered to be their production site (Isings 1957, pp. 22–23, form 6; Grose 1989, pp. 261–262, 339–340, no. 609). The decoration of these glass vessels imitated vessels carved from semiprecious stone, especially sardonyx. Published examples include finds from Aquileia (Calvi 1968, plate 5, nos. 1–3), Athens (Alexandri 1972, pp. 115–118, plate 76), Zadar (Ravagnan 1994, p. 67, no. 105), and Bahrain (Nenna 1999b, p. 188, no. 280). In addition, several examples are in museum collections: the Louvre (Arveiller-Dulong and Nenna 2005, pp. 74–75, nos. 91, 94–95, 97, probably from Italy); National Museum of Scotland (Lightfoot 2007, p. 48, nos. 46–47); Fitzwilliam Museum (Fitzwilliam 1978, p. 25, no. 38); Miho Museum (Miho Museum 2001, pp. 95, 203, no. 127); and previously in the Winfield Smith Collection (*Glass from the Ancient World* 1957, p. 89, no. 149). The same shape has been rendered in gold-band mosaic glass as well (see Oliver 1967, p. 23, no. 3, fig. 17; Kunina 1997, p. 268, no. 95), and in a mosaic pattern that may be an example of blown mosaic vessels (*Glass from the Ancient World* 1957, p. 85, no. 141).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 130, no. 354.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 150. Flask

<b>Accession Number</b>	2003.274
<b>Dimensions</b>	H. 6.1, Diam. rim 2.0, max. Diam. 5.3, Th. 0.1 cm; Wt. 39.70 g
<b>Date</b>	Early–mid-first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Mended. The surface of the glass is iridescent and pitted, and shows signs of flaking.

**DESCRIPTION** Rim mildly flaring; pinched and flattened cylindrical neck with a constriction at its base; squat, bulbous body with a flattened bottom.

The vessel appears to consist of about 20 rods fused together in a pattern—repeating at least seven times—of a wide blue rod flanked by fine white rods. The rods were slumped to form the closed shape of the vessel and tooled at least four times on each side, forming a distinct zigzag pattern.

**COMMENTS AND COMPARANDA** On slumped and blown vessel, see comments on cat. 148. On this form of vessel, see comments on cat. 149.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 130, no. 355.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 151. Flask

<b>Accession Number</b>	2003.279
<b>Dimensions</b>	H. 5.5, Diam. rim 2.2, Diam. base 2.5 cm; Wt. 50.83 g
<b>Date</b>	Early–mid-first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Intact; small bits of weathering along a white cane on the exterior and throughout the interior.

**DESCRIPTION** Out-turned and flattened rim; short, cylindrical neck, tapering toward the squat, biconical body; flat bottom. From base to rim is a spiral white trail

with nine revolutions, which is dragged up four times to create a festoon pattern.

**COMMENTS AND COMPARANDA** For the production technique, see comments on cat. 148. For comparanda, see comments on cat. 149.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 367.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 152. Flask

<b>Accession Number</b>	2003.275
<b>Dimensions</b>	H. 10.5, Diam. rim 2.7, max. Diam. 6.0 cm; Wt. 95.30 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque white and translucent blue and purple glass



**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Partly preserved. The surface bears iridescent patches and pitting. The entire neck, excluding a small fragment on the rim, is a restoration.

**DESCRIPTION** Cylindrical neck; pear-shaped body; flattened base. The restoration has added to the end of the preserved cylindrical neck an outward-splayed mouth and a lip folded inward.

The vessel is made of blue and purple rods flanked and partly lined by white layers, making some of the purple appear as lavender and most of the blue as turquoise. In total there seem to be 20–21 rods of glass, interchanging wide purple and turquoise, flanked by thin white ones, which were fused side by side and then slumped to assume the pear shape of the body.

**COMMENTS AND COMPARANDA** On slumped and blown polychrome vessels, see comments on cat. 148. Examples of other pear-shaped and globular slumped and blown vessels include finds from Aquileia (Calvi 1968, p. 48, nos. 86–88) and Zadar (Ravagnan 1994, p. 66, no. 104, p. 80, no. 140); several more unprovenanced examples are in museum and private collections: Hayes 1975, p. 28, no. 80, plate 192; Auth 1976, pp. 56–57, nos. 50–52; Matheson 1980, p. 26, no. 68; Oliver 1980, p. 49, no. 29; Christie's 1985, pp. 79–80, nos. 134, 136, pp. 84–85, nos. 146–148; Grose 1989, pp. 339–341, nos. 608–616; *Volkenberg Collection* 1991, p. 36, no. 97; Kunina 1997, p. 269, nos. 101–102; Whitehouse 1997a, pp. 39–40, nos. 34–35; ex Kofler-Truniger collection (*3000 Jahre Glaskunst*, p. 70, no. 209), sold at Christie's June 6, 2021, lot 59 [<https://www.christies.com/en/lot/lot-6327009>]; ex Plesch collection, sold at Christie's April 1, 2014, lot 5 [<https://www.christies.com/lot/lot-5776243>]; Lightfoot 2021, p. 125, no. 7aA. Cat. 154 is very similar in terms of the colors used.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 359.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 153. Flask

**Accession Number** 2003.278  
**Dimensions** H. 7.5, Diam. rim 2.2, Diam. base 2.0 cm; Wt. 44.33 g  
**Date** Early first century CE  
**Production Area** Probably Italy  
**Material** Translucent purple and opaque white glass  
**Modeling Technique and Decoration** Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Intact; small bits of weathering along a white cane on the exterior and throughout the interior.

**DESCRIPTION** Out-turned and flattened rim; short, cylindrical neck, tapering toward the elongated pear-shaped body; flat bottom. Free-blown ribbon(?) flask made of three sections, each one decorated with a white thread spiraling in 12 revolutions. The sections were assembled and thereafter free-blown to achieve the shape.

**COMMENTS AND COMPARANDA** On slumped and blown vessels, see comments on cat. 148. For other slumped and blown polychrome vessels, see comparanda for cat. 152.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer,

1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 364.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 154. Flask

<b>Accession Number</b>	2003.276
<b>Dimensions</b>	H. 9.0, Diam. rim 2.5, Diam. base 3.5 cm; Wt. 68.49 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent blue and greenish and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Intact; small bits of weathering along a white cane on the exterior and throughout the interior.

**DESCRIPTION** Folded in, flaring rim; cylindrical neck; pear-shaped body; flat bottom. Free-blown ribbon flask of 19 alternating vertical lengths of three composite canes:

two are dark blue encased in colorless glass flanked by translucent white; the third is dark blue encased in colorless glass flanked by strips of alternating blue and yellow (to form green). All three canes begin on opposite sides of the rim and continue down and around to terminate at the same point on the other side of the rim. The canes were assembled and thereafter free-blown to achieve the shape.

**COMMENTS AND COMPARANDA** On slumped and blown vessels, see comments on cat. 148. For other slumped and blown polychrome vessels, see comparanda for cat. 152.

**PROVENANCE** Enrico Caruso, Italian, 1873–1921; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 361.

Wight 2011, pp. 42, 49, fig. 28.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 155. Flask

<b>Accession Number</b>	2003.267
<b>Dimensions</b>	H. 14.2, Diam. rim 2.3, Diam. base 4.2 cm; Wt. 128.04 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Translucent blue, purple, and amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Mended. Neck repaired with resin. Some areas of iridescence on the body. Internal surface partly covered with a light-colored material.

**DESCRIPTION** Cylindrical neck; globular body; flat, slightly concave bottom. The vessel is made of three different types of composite canes which were fused together and blown: (1) cane comprised of horizontal sections of amber and white stripes; (2) cane comprised of three blue and four white vertical stripes; (3) cane comprised of three purple and four white vertical stripes. In total nine composite canes are used—cane no. 1 two times, cane no. 2 four times, and cane no. 3 three times—arranged in the following order: 1, 2, 3, 1, 2, 3, 2, 3, 2. It seems that the intention of the glassworker was to arrange every type of cane three times, but either a shortage of material or a mistake altered one of the canes. In some areas different canes are superimposed and the different motifs are visible one over the other.

**COMMENTS AND COMPARANDA** On slumped and blown vessels, see comments on cat. 148; Whitehouse 1997a, pp. 39–40, no. 34. For other slumped and blown polychrome vessels, see comparanda for cat. 152.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 128, no. 341.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 156. Flask

<b>Accession Number</b>	2003.281
<b>Dimensions</b>	H. 10.6, Diam. rim 2.3, Diam. base 1.5, Th. 0.2 cm; Wt. 36.78 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Italy or eastern Mediterranean
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused-together lengths and sections of round mosaic canes; slumped; blown

**CONDITION** Mended; neck is restored.

**DESCRIPTION** Folded in and flattened flaring rim; cylindrical neck, constricted at its base; elongated tear-drop body; flat bottom. Probably four lengths of composite mosaic canes comprising spirals of fine opaque white and a thick, translucent dark blue layer, fused into a mass that was consequently blown to its final shape and size.

**COMMENTS AND COMPARANDA** On slumped and blown vessels, see comments on cat. 148. Slumped and blown examples are quite rare (cf. Oliver 1980, p. 49, nos. 30–31; Loudmer and Kevorkian 1985, pp. 43, 52, nos. 94, 108–109) as opposed to free-blown, tear-shaped unguentaria, which are one of the most widespread and numerous groups of early Roman blown unguentaria. They appear from the beginning of the first century CE,

their distribution culminates around the middle of it, and they cease to circulate in the early second century CE (Isings 1957, pp. 24, form 8; Rütli 1991a, pp. 114–116, forms AR 128.1, 129, 130; Antonaras 2017, pp. 149–150, form 126b, wherein many examples are cited; Fünfschilling 2015, p. 402, form AR 128).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 134, no. 371.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 157. Flask

<b>Accession Number</b>	2003.255
<b>Dimensions</b>	H. 6.5, Diam. rim 2.5, Diam. base 2.6 cm; Wt. 18.69 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Italy or western Roman Empire
<b>Material</b>	Green, yellow, red, and white glass
<b>Modeling Technique and Decoration</b>	Fused and blown mosaic glass

**CONDITION** Mended; part of the mouth is restored.

**DESCRIPTION** Folded in, flaring rim; cylindrical neck, constricted at its base; pear-shaped body; flat bottom. The vessel was made with florets and then free-blown. The florets used for its production are mainly of green glass with tiny yellow stems inside and a few of concentric circles with a wide red layer in a thinner white.

**COMMENTS AND COMPARANDA** Blown mosaic vessels represent a relatively unknown and apparently quite rare category of Roman glass. They were produced with a particular technique that involved blowing sections of composite mosaic canes that had been heated up and fused together. It was used to form vessels in shapes that were contemporaneously made with free-blowing too, like cups, small jars, and possibly jugs and/or modiolis. These are much thinner vessels than the slumped/sagged and blown ones; the patterns are heavily distorted, unrecognizable in most cases, especially in the interior of the vessel.

Blown mosaic glass was probably produced from the late first century CE to the second half of the second century CE. Several examples have been unearthed in Augusta Raurica in Switzerland, which may have been the production site of this technique. Other examples have been found elsewhere in western Europe, including the UK, France, and Germany, but also on the Black Sea coast and in the Balkans (Stern 2017, pp. 132–139; Stern and Fünfschilling 2020, pp. 41–68).

The form of this vessel is a very widely distributed type of first-century CE ointment flask or unguentarium (Isings 1957, pp. 22–23, form 6 variant; De Tommaso 1990, p. 63, type 38; Fünfschilling 2015, p. 402, form AR 127 = Rütli 1991a, p. 114, plate 100, form AR 127/I) present in the central European and Mediterranean provinces of the Roman Empire.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 329; p. 117, plate no. 329.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 158. Bowl

<b>Accession Number</b>	2003.293
<b>Dimensions</b>	H. 3.0, Diam. 8.8, Th. 0.2 cm; Wt. 76.00 g
<b>Date</b>	Late first century BCE–early first century CE
<b>Production Area</b>	Italy or western Roman Empire
<b>Material</b>	Translucent dark blue and opaque white and red glass
<b>Modeling Technique and Decoration</b>	Slumped; applied splashware

**CONDITION** Surface is weathered, with small iridescent patches. This bowl was reassembled, with large fills near the rim.

**DESCRIPTION** Hemispherical bowl. Splashing appears only on some parts of its interior, mainly on the upper body near the rim, and consists mainly of white specks and just a few red ones. On the exterior are tooling marks: two pairs of larger indentations and several, probably six, hardly visible, short, slanting indentations around the rim.

**COMMENTS AND COMPARANDA** Splashware came into fashion in the early first century CE in the 30s, met its peak around the 50s, and went out of fashion around 70 CE (Berger 1960, p. 34; Biaggio-Simona 1991, vol. 1, p. 238). The decoration was achieved by rolling or marvering a glass bubble or paraison on a flat surface, such as a marver, where chips of colored glass were arranged. The chips could have been left in relief, which was a relatively rare occurrence, as opposed to the much more usual method in which the paraison was reheated and the chips were melted flush with the surface before further expansion (see amphoriskos cat. 355; Fremersdorf 1938, pp. 116–121, summarized in English in Harden et al. 1987, pp. 101–103; and Whitehouse 1997a, pp. 207–212). The

majority of the provenanced finds were unearthed in Italy and the western Roman provinces, where the production site may have been located.

The fact that the vessel is so thick and uneven makes it quite plausible that it was slumped and thus predates the period in which splashware was in fashion, used on free- and mold-blown vessels like cat. 355 and cat. 165, respectively.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 140–141, no. 396, ill.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 159. Janiform Cup

<b>Accession Number</b>	2003.474
<b>Dimensions</b>	H. 8.7, Diam. rim 6.9, Diam. base 4.5 cm; Wt. 42.13 g
<b>Date</b>	Second century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent, almost colorless, slightly greenish glass



<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold consisting of two vertical sections joined to a disk-shaped base section; the vertical seams are hidden in the hair
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**CONDITION** Intact. Some incrustation and iridescence, mostly in the interior.

**DESCRIPTION** Cut-off, uneven rim; convex neck; janiform body, in the shape of two males with youthful, clean-shaven faces, placed back-to-back. The faces have large, almond-shaped eyes; curved eyebrows; short straight noses; round cheeks; smiling mouths with full lips; round, small chins. Hair is rendered as long wavy curls. Over the forehead is a row of pronounced round curls, along with ivy berries, part of an ivy wreath. The heart-shaped ivy leaves are clearly rendered on the sides of the heads, particularly visible on one of the faces.

Not entirely flat bottom, meaning not all of it rests on the supporting surface. On the base is a central disk and a ring near the periphery, both recessed.

**COMMENTS AND COMPARANDA** On head-shaped glass vessels, see comments on cat. 176. Cups are an underrepresented form among these vessels, which are usually finished as bottles and flasks, and almost all of the cups are single heads, unlike this vessel. Because of the ivy wreaths, the male faces can be associated with Dionysus or Antinous with features of Dionysus. A characteristic example of a head flask of Antinous as Dionysus is cat. 176, where several comparanda are cited.

**PROVENANCE** By 1978–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1978, p. 119, no. 6.

**EXHIBITIONS** *Molten Color: Glassmaking in Antiquity* (Malibu, 2005–2006; 2007; 2009–2010)



## 160. Beaker

<b>Accession Number</b>	2003.319
<b>Dimensions</b>	H. 6.8, Diam. rim 6.8, Diam. base 6.3 cm; Wt. 53.94 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical and one disk-shaped section for the base; vertical mold seams from rim to base through the stems of two of the palm fronds

**CONDITION** Severely weathered and reassembled. The surface bears some patchy iridescence, accretions, and flaking. Small chips missing near the rim.

**DESCRIPTION** Cracked-off, vertical, slightly everted rim; cylindrical body; flat bottom.

Crisp relief. The body is divided into three friezes separated by single horizontal ridges. Six stylized wreaths are represented on each of the upper and lower friezes. Each wreath consists of two concentric circles joined by radial lines rendering the foliage, probably laurel leaves; wavy lines below each wreath indicate the ends of the ribbons dangling below the wreath.

The central frieze contains an inscription in capital Greek. Two diametrically opposed vertical palm fronds divide the inscription into two almost equal parts: ΛΑΒΕ ΘΗΝ //

NEIKHN *labe ten neiken* (“seize the victory”). The N in THN is inverted.

Flat bottom, with a faint sunken dot in the center surrounded by a slightly raised ring placed at 1 cm from the outer edge of the bottom.

**COMMENTS AND COMPARANDA** This beaker belongs to a larger group of first-century mold-blown cylindrical beakers (Harden 1935, pp. 163–186, groups E, F, Ki, L), usually decorated with inscriptions, wreaths, and palm fronds (cats. 160–161), straight plants (cat. 162), or vine scrolls (cat. 163). Mold-blowing in general had probably already appeared in the first decade CE (Stern 1995, pp. 65–66; Lightfoot et al. 2014, p. 26) and seems to die out by the end of the first century (Price 1991, p. 74). There is a known example from Pompeii that obviously predates the eruption of Vesuvius in 79 CE (Scatozza Hörich 1995, p. 79, fig. 13a). An additional clue regarding a closer date for the beakers is provided by the type of glass used for their manufacture. They are made of “naturally colored” glass, which became popular after the middle of the century, mainly during the third quarter of the first century CE.

There are many published cylindrical beakers with wreaths and the inscription  $\Lambda\text{ABE THN N(E)IKHN}$ . They constitute Harden’s (Harden 1935, pp. 176–179) group K1, with different spellings (NIKHN vs. NEIKHN) or the inversion of N in THN, like in this particular example, as well as different arrangements of the inscription, which is probably the most numerous of all other groups. This particular beaker belongs to subgroup K1iii, identified by the six wreaths on each frieze and the inscription in one single line. Numerous examples are known and most of them were found on the Syro-Palestinian coast and Cyprus, and a few in Greece, the Black Sea coast, and Sardinia, indicating a production site on the Syro-Palestinian coast, as has already been proposed by other glass researchers (Harden 1935, pp. 180–181; Harden 1944, pp. 86–87; Wight 2000, p. 68–69). Marianne Stern (Stern 1995, p. 98) has proposed that they were produced in or near Sidon. Other examples include Harden 1944, pp. 94, 292; Matheson 1980, p. 53, no. 134; Braun and Haevernick 1981, p. 121, plate 44.3; McClellan 1983, pp. 77–78; Stern 1995, pp. 98–100, nos. 2–4q; Zelazowski 1996, fig. 5; Kunina 1997, pp. 133–134, fig. 23; Duncan-Jones 2000, p. 148, fig. 3; Whitehouse 2001a, pp. 26–27, no. 491; Arveiller-Dulong and Nenna 2005, pp. 183, 194, no. 536, plate 38; Alekseeva and Sorokina 2007, pp. 28–29, plate 22.2; Israeli 2011, p. 100; Antonaras 2022a, p. 45, no. 144.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 162, no. 454.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 161. Beaker with Inscription

<b>Accession Number</b>	2004.35
<b>Dimensions</b>	H. 7.8, Diam. rim 7.3, Diam. base 6.8, Th. 0.1 cm; Wt. 92.00 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold; mold marks visible as two lines on the sides; separate mold used for bottom; relief crisp

**CONDITION** Intact.

**DESCRIPTION** Everted, unworked rim sloping inward; slightly convex cylindrical sides; flat bottom. Below the rim, two raised horizontal ribs and pairs of palm fronds below, arranged tip to tip, appearing as a wreath encircling the vessel; below this is a Greek inscription in capital letters: KATAXAIPE KAI EYΦPAINOY *katachaire kai euphrainou* (“rejoice and be merry”). Two more raised ribs and a narrower band of palm fronds pointing to the

right decorate the lower part of the body; the two side seams are concealed by vertical palm fronds. On underside of base, one raised concentric circle.

**COMMENTS AND COMPARANDA** On first-century CE cylindrical beakers, see comments on cat. 160. There are several published cylindrical beakers with wreaths and the inscription KATAIXAIPE KAI EYΦPAINOY. They constitute Harden's (Harden 1935, pp. 171–173) group Fii, the difference between the groups Fi and Fii being the spelling in the former of KATAIXAIPE versus KATAIXAIPE in the latter. For comparanda, see Harden 1935, pp. 171–173, group Fii; Harden 1944, pp. 87–88, 292; McClellan 1983, pp. 76–77; Stern 1995, pp. 98–99; Stern 2001, no. 54, pp. 125–126; Whitehouse 2001a, pp. 22–23, nos. 485[Fi], 486[Fii]; Also, for beakers of the group Fi, i.e., with the variant of the inscription as KATAIXAIPE KAI EYΦPAINOY: Mackworth-Young 1949, p. 85, plates 25:2, 26:2–3; Fitzwilliam 1978, pp. 31–32, no. 51; Matheson 1980, p. 54, no. 135; Oliver 1980, p. 69, no. 63; Weinberg and McClellan 1992, p. 128, no. 102[Fi or ii = partly preserved]; Stiaffini and Borghetti 1994, p. 140, no. 425, plate 104; Kunina 1997, p. 275, no. 115; Arveiller-Dulong and Nenna 2005, p. 194, no. 538; Lightfoot 2007, p. 73, no. 150.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 162, no. 453.

Wight 2011, pp. 74, fig. 50a, b.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 162. Leaf Beaker

<b>Accession Number</b>	85.AF.91
<b>Dimensions</b>	H. 7.9–8.1, Diam. rim 6.1–6.3, Diam. base 6.0 cm; Wt. 44.89 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent yellow-greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical and one disk-shaped section for the base; vertical mold seams from rim to base through the stems of two of the plants

**CONDITION** Mended and filled. Incrustation from weathering, and iridescence.

**DESCRIPTION** Cracked-off, vertical, slightly everted rim; cylindrical body; flat bottom. At top and bottom, two pairs of raised lines form a frieze covered with four vertical plants, each with a straight stem with nine alternating plain and decorated leaves. The stems of the plants start in the space between the bottom bands.

Each plant has two different types of lanceolate leaves. The three larger leaves of the first type have a smooth interior and an exterior band with oblique short lines, possibly imitating the undulations of a serrated edge. The fourth of these leaves, on the top right of the plant, is smaller and it has opposing paired veins branching from a central vein, ending on the exterior line (pinnate venation). The difference probably should be ascribed

either to the small size of the motif that prevented the mold-maker from curving the details depicted on the larger leaves, or to the fact that it renders a feature of the actual plant—in other words, the immature leaf presents a different physiology as opposed to the mature leaves that are depicted on the lower part of the plant.

The leaves of the second type, with five on each plant, are completely smooth; the leaf on the top of the plant is squatter and in two cases is bisected by the mold seam, which makes it rounder. On the flat bottom, a central ring (W. 0.3 cm) and a wide raised concentric ring (W. 0.7 cm) at the middle (W. 3.7 cm) form a base-ring.

**COMMENTS AND COMPARANDA** Five identical beakers have been published. One was found in Cyprus at Idalion (Froehner 1879, pp. 63, 65; Cesnola 1903, plate LXXVIII.1; Lightfoot 2017, pp. 52–53, fig. 3 upper left). The second was once kept in the Kaiser Friedrich Museum (Congrès international d'archéologie 1939, p. 70, no. 200, plate 73) and possibly was found on the Black Sea coast. The third example was allegedly from Syria, once in the Kofler-Truniger Collection (*3000 Jahre Glaskunst*, p. 80, no. 271). The fourth example has no known find area (Christie's 1980, p. 21, lot 88; Galerie Günter Puhze 1982, p. 28, no. 297, illus.; Christie's 1989, lot 37; Christie's 1990, lot 20; Wight 2000, pp. 66–67, fig. 8). The fifth does not have a known find spot either (Israeli 2011, pp. 74–75; Christie's 2016, no. 242, p. 37).

Karol Wight (Wight 2000, pp. 61, 64) has convincingly proposed that these plants represent almond trees and that the leaves with the exterior corrugated band could be the almond nuts in their half-open outer casings.

These beakers, based on shape and size, belong to a larger group of first-century mold-blown beakers (Harden 1935, pp. 163–186, groups E, F, Ki, L), usually decorated with inscriptions, wreaths, and palm fronds (cats. 160–161), straight plants (this vessel), or vine scrolls (cat. 163). Mold-blowing in general appeared probably already in the first decade CE (Stern 1995, pp. 65–66; Lightfoot et al. 2014, p. 26) and seems to die out by the end of the first century (Price 1991, p. 74). There is a known example from Pompeii that obviously must predate the eruption of Vesuvius in 79 CE (Scatozza Hörich 1986, p. 79, fig. 13a). An additional clue regarding a narrower date for the beakers is provided by the type of glass used for their manufacture. They are made of “naturally colored” glass, which became popular after the middle of the century, mainly during the third quarter of the first century CE. As to their origin, they are considered to be from the eastern Mediterranean region, (Harden 1935, pp. 180–181; Harden

1944, pp. 86–87); this hypothesis is corroborated by the find places of two of the “leaf” beakers, one in Cyprus and another probably on the Black Sea coast (Wight 2000, pp. 68–69).

**PROVENANCE** 1985, Robert Haber (New York, New York), sold to the J. Paul Getty Museum, 1985

**BIBLIOGRAPHY** JPGM Acquisitions 1985, p. 195, no. 68.

Wight 2000, pp. 61–64, fig. 1a–d, 2–4.

**EXHIBITIONS** Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Cornin)



## 163. Beaker

<b>Accession Number</b>	2003.318
<b>Dimensions</b>	H. 7.0, Diam. rim 7.0, Diam. base 6.4 cm; Wt. 61.29 g
<b>Date</b>	Third quarter of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent yellowish green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical and one disk-shaped section for the base; vertical mold seams from rim to base left uncovered

**CONDITION** Intact; minor chipping on the rim; areas covered with iridescence and whitish incrustation.

**DESCRIPTION** Cut-off, vertical rim on a mildly overblown, cylindrical body; flat bottom. The body is



covered by a scrolling grapevine of six oval tendrils, alternately filled with a trefoil leaf or a cluster consisting of 18 and 19 berries arranged in six rows. Two vine leaves and one bunch are depicted on one of the mold parts and on the second part two bunches and one leaf. The upper and lower parts of the body are encircled by a palm frond, the upper pointing leftward, the lower rightward. The seam between the two vertical sections of the mold is not concealed. One raised ring at the middle of the bottom forms a base-ring.

**COMMENTS AND COMPARANDA** The exact decoration appears to be quite rare: one beaker from Cyprus is long known (Froehner 1879, p. 65 n. 2, 79 n. 11, 120, 139, plate XXVII.112; Cesnola 1903, vol. 3, plate LXXVIII.2; Lightfoot 2017, pp. 14, 53, fig. 3 upper right). Another beaker from a controlled excavation, namely from a grave in ed-Dur (Whitehouse 1998a, title page and fig. 12, plate 15, no. 116), is dated to the first century CE. Another example appeared in 1970 (*JGS* 1970, p. 171, no. 5 Milo Cripps collection). Another, squatter cup where the scroll is not framed with palm fronds appeared in the Cinzano Collection (Lazarus 1974, no. 6). Furthermore, the same scroll appears on three “harvest” beakers with convex sides (*3000 Jahre Glaskunst*, p. 81, no. 272; Benzian 1994, p. 80, lot 139 = ex Constable-Maxwell Collection 1979, Sotheby Parke Bernet 1979, p. 168, lot 301; Bonhams, July 14, 2004, lot 15 [= ex Constable-Maxwell Collection, London, ex British Rail Pension Fund Collection, London]). Finally, on identical cylindrical cups two similar friezes of wine scrolls bordered by double lines appear on vessels dated to the first century CE (Israeli 2011, pp. 70–73).

This beaker, based on its shape and size, belongs to a larger group of first-century mold-blown beakers (Harden 1935, pp. 163–186, groups E, F, Ki, L), usually decorated with inscriptions, wreaths and palm fronds (cats. 160–161), unbending plants (cat. 162), and vine scrolls (cat. 163). Mold-blowing in general had probably already appeared by the first decade of the first century CE (Stern 1995, pp. 65–66; Lightfoot et al. 2014, p. 26) and seems to die out by the end of the century (Price 1991, p. 74). There is a known example from Pompeii that obviously predates the eruption of Vesuvius in 79 CE (Scatozza Hörich 1986, p. 79, fig. 13a). An additional clue regarding a narrower date for these beakers is provided by the type of glass used for their manufacture. They are made of “naturally colored” glass, which became popular after the middle of the century, mainly during the third quarter of the first century CE. As to their origin, they are considered to be from the eastern Mediterranean region (Harden 1935, pp.

180–181; Harden 1944, pp. 86–87); this hypothesis is corroborated by the find places of two of the leaf beakers, one in Cyprus and another probably on the Black Sea coast (Wight 2000, pp. 68–69).

**PROVENANCE** By 1966–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1966, pp. 128–129, no. 5.

von Saldern et al. 1974, p. 162, no. 452.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 164. Cup

<b>Accession Number</b>	2003.316
<b>Dimensions</b>	H. 5.7, Diam. rim 8.3, Diam. base 7.7 cm; Wt. 56.06 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical sections and one disk-shaped section for the base.

**CONDITION** Intact; some parts are iridescent.



**DESCRIPTION** Rim cut off just above a slight overblow; cylindrical body; flat bottom. Below the rim is a double horizontal ridge and another at the transition to the bottom. Two vertical palm fronds divide the body between the ridges into two sections, concealing the mold segments. A horizontal floral wreath is arranged along the middle of the body. Six pairs of obliquely arranged barley or wheat ears alternate with round flowers, probably stylized poppy pods; all stem from the central twig. On the bottom, there is a raised concentric ring close to the exterior, forming a base-ring, and a central boss.

**COMMENTS AND COMPARANDA** The decoration is connected to Demeter, goddess of agriculture, grains, and food crops, whose symbol was a sheaf of barley; her flowers were poppies because they often grew up amid the wheatfields (*LIMC* IV, s.v. "Demeter," pp. 844–892, esp. pp. 851, 858, nos. 45, 121). On Demeter's presentation in ancient Greek poetry with poppies in her hands, see commentary on Theocritus's *Idylls* (Gow 1952, Theocritus II:169, note to *Idyll* VII.157). It seems probable that poppy pods are illustrated, although iconographically pomegranate and poppy are similar, both spherical and crowned by a radiating element. They differ in the fact that the pomegranate's sepals point down when the fruit hangs from the tree, whereas the poppy pod's rosette points up when attached to the plant's stem, like the ones depicted on the vessel (Ignatiadou 2012, p. 393). In addition, the poppy is directly associated with Demeter, while pomegranates had a bad connotation for the mother of Persephone, who was tricked by Hades into eating six seeds of a pomegranate and thus being forever tied to the Underworld, forced to remain there half the year (*LIMC* VIII, s.v. "Persephone," pp. 956–978).

No exact parallel to this cup has been located. On three beakers with convex sides, the upper of the two friezes of the decoration display a very similar wreath with a central horizontal ridge with alternating pairs of ears of barley and two poppies; the lower band with a wine scroll, like the one on cat. 163: *3000 Jahre Glaskunst*, p. 81, no. 272; Benzian 1994, p. 80, lot 139 = Sotheby Parke Bernet 1979, p. 168, lot 301; Bonhams 2004, lot 15 (= ex Constable-Maxwell Collection, London, ex British Rail Pension Fund Collection, London).

**PROVENANCE** By 1974, Gawain McKinley Ltd. (London, England); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 159, no. 146.

McKinley 1974, p. 5, ill. (lower right).

Wight 2011, pp. 76, 86, fig. 57.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 165. Cylindrical Box, Pyxis

<b>Accession Number</b>	2003.315
<b>Dimensions</b>	H. 5.8, Diam. rim 5.9, Diam. base 5.9 cm; Wt. 35.75 g
<b>Date</b>	First century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent amber-colored and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical semicircular parts for the body and a discoid for the base. Splashware accents

**CONDITION** Partly complete, lid missing; body reassembled with large fills; numerous cracks; surface pitted.

**DESCRIPTION** Straight, vertical, unworked rim; cylindrical body with horizontal ribs at top and bottom; flat bottom. Mold-blown zone of eight alternating upright

and inverted palmettes, each with seven leaves. The upright palmettes have thick out-turned leaves and the inverted palmettes have thin curling-up and -inward leaves. Four relief concentric circles and a central recessed boss decorate the base. The upper ridge was holding the lid, which, judging by other fully preserved examples, was conical with cylindrical unworked rim. A few splashed yellow blobs, marvered flush, on the bottom and around the body.

**COMMENTS AND COMPARANDA** On splashware, see comments on cat. 158. This particular cylindrical box is referred to by the ancient Greek term “pyxis,” which essentially denoted all lidded small boxes made of precious and plain materials, glass among them (Hilgers 1969, pp. 265–267). They were used to hold medicines, cosmetics, and magical ingredients (Hilgers 1969, pp. 265–267, no. 308). The glass pyxides were ideal as containers, neither contaminating the contents nor absorbing them. They are all mold-blown, and although they all are decorated with rows of palmettes, subtle differences in the motifs distinguish four variants in details, such as the spacing between the palmettes and the plasticity of the leaves (Stern 1995, pp. 169–170). This particular vessel belongs to the most populous variant (Kern 1954, pp. 34–35, fig. 7; Matheson 1980, p. 48, no. 125; Stern 1995, pp. 69–172, nos. 79–82; Whitehouse 2001b, pp. 32–33, nos. 500, 501; Israeli 2003, p. 127, nos. 125, 126, also in Israeli 2011, pp. 62–65; Antonaras 2012, p. 76, no. 75). For examples of the other variants, see Auth 1976, p. 67, no. 61 variant 3rd; von Saldern 1980b, p. 50, no. 42. Two examples from Pompeii indicate that the form was in vogue before the destruction of the city by the eruption of the Vesuvius in 79 CE (Scatozza Hörich 1995, p. 81; Kern 1954, pp. 34–35). The decoration evokes contemporaneous silverware (Oliver 1977, pp. 136–137, nos. 87, 88; Boscoreale saltcellar; dish from Trinquetaille, pp. 132–133, no. 84).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 158–159, no. 444.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 166. Cup

<b>Accession Number</b>	95.AF.60
<b>Dimensions</b>	H. 6.9, Diam. rim 7.4, max. Diam. 8.7, Diam. base 4.5 cm; Wt. 36.93 g
<b>Date</b>	Middle of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Transparent, almost colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical sections on either side of ΕΥΦΡΑΙΝΟΥ from rim to second ridge below inscription, cup-shaped base section; relief crisp

**CONDITION** Fully preserved. Minor chipping on the rim.

**DESCRIPTION** Flaring rim, with unworked, slightly everted lip; short and wide neck; calyx-shaped body; and flat bottom, with three concentric raised circles around a central recessed knob. An inscription in capital Greek runs around the vessel at greatest diameter in a frieze flanked by two ridges above and two below. It reads: ΕΥΦΡΑΙΝΟΥ ΕΦΩ ΠΑΡΕΙ *euphrainou epho parei* (“rejoice with what you are present in”). A frieze of 36 upturned tongues in raised outline covers the lower part of the body.

**COMMENTS AND COMPARANDA** There are two variants of this type of vessel, distinguished by the contour of the walls and the relation of the height to the diameter. This one belongs to the shorter, squatter variant with two ridges above the inscription (Harden 1935, group G1i). Several examples have been noted throughout the Mediterranean, but it is accepted, partly because of

the disk-shaped base section of the mold and the distribution pattern, that they were quite probably produced along the Syro-Palestinian coast (Stern 1995, p. 97, no. 1 with detailed bibliography and comments; Whitehouse 2001a, pp. 23–24, nos. 487–488; Antonaras 2017, pp. 68–69, form 19).

The inscription has been interpreted in different ways but the most convincing is the one that considers it an abbreviated form of ΕΥΦΡΑΙΝΟΥ ΕΠΙ ΤΟΥΤΩΙ ΕΦΩΙ ΠΑΡΕΙ. This phrase, which partly appears in the New Testament (Matthew 26:50: ‘Εταῖρε ἐφ’ ᾧ πάρει), translates as “Rejoice with what you are present” (Stern 1995, p. 97). Pseudo-Zonaras, lexicon, s.v. “Εφ’ ᾧ πάρει,” 928, line 14. For the possibility that there is an Epicurean connotation in the inscription, see Fontaine and Margos 2010, pp. 80–83.

**PROVENANCE** By 1992–1995, Mansour Gallery (London, England), sold to the J. Paul Getty Museum, 1995

**BIBLIOGRAPHY** JPGM Acquisitions 1995, p. 90, no. 10.

JGS 1996, p. 229, no. 1.

Wight 2011, pp. 104, 120, fig. 89.

**EXHIBITIONS** Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)



## 167. Cup

<b>Accession Number</b>	2003.317
<b>Dimensions</b>	H. 6.9, Diam. rim 7.4, Diam. base 4.5 cm; Wt. 67.47 g
<b>Date</b>	Middle of the first century CE

<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical sections on either side of ΕΥΦΡΑΙΝΟΥ from rim to second ridge below inscription, cup-shaped base section; relief crisp

**CONDITION** Mended. Minor chipping on the rim, filled.

**DESCRIPTION** Flaring rim, with unworked, slightly everted lip; short and wide neck; calyx-shaped body; and flat bottom, with three concentric raised circles around a central recessed knob. An inscription in capital Greek runs around the vessel at greatest diameter in a frieze flanked by three ridges above and two below. It reads: ΕΥΦΡΑΙΝΟΥ ΕΦΩ ΠΑΡΕΙ *euphrainou epho parei* (“rejoice with what you are present in”). A frieze of 35 upturned tongues in raised outline covers the lower part of the body.

**COMMENTS AND COMPARANDA** There are two variants of this type of vessel distinguished by the contour of the walls and the relation of the height to the diameter. This one belongs to the taller, slender variant with three ridges above the inscription (Harden 1935, group G1ii). See cat. 166.

**PROVENANCE** By 1971–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** JGS 1971, pp. 134–135, no. 7.

von Saldern et al. 1974, p. 159, no. 447.

Stern 1995, p. 98 n. 5g.

Wight 2011, pp. 104, 121, fig. 90.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 168. Cup

<b>Accession Number</b>	2004.34
<b>Dimensions</b>	H. 7.3, Diam. rim 6.5, Diam. base 4.0 cm; Wt. 104.04 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical sections and one for the base

**CONDITION** Fully preserved; small part of the rim missing. Small areas in the motifs are calcinated.

**DESCRIPTION** Cut-off rim; conical neck with mildly convex walls; squat, globular body; flat bottom. A wavy tendril running between two horizontal ridges encircles the neck. On the shoulder are 13 trefoil arches, each one containing two smaller arches, flanked by vertical, Y-shaped bars. On the mildly convex central part of the body, a frieze of vertical ribs is flanked by two horizontal ridges, followed lower by a smooth band and two more ridges before the final curving to the bottom. Two raised concentric circles form base-rings, and at the center of the bottom is a recess.

**COMMENTS AND COMPARANDA** Probably connected to the group of vessels with pronounced shoulder—mostly ribbed bowls and a few truncated beakers with diamond-shaped bosses—that are considered western products of the mid-first century CE (Stern 1995, pp. 110–111, no. 12).

There is also one ovoid cup in this group, which has on the upper body a similar “floral and foliage spray,” at the middle an ΕΥΦΡΑΙΝΟΥ ΕΦΩ ΠΑΡΕΙ inscription, and lower godroons (tongues); see Price 1991, p. 61 plate XVII.b, having in common the floral scroll on the shoulder and the vertical ribbing on the body.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 160, no. 449.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 169. Mythological Beaker

<b>Accession Number</b>	85.AF.83
<b>Dimensions</b>	H. 12.5, Diam. rim 7.0, Diam. base 4.8, Th. 0.14–0.18 cm; Wt. 85.93 g
<b>Date</b>	Third quarter of the first century CE
<b>Production Area</b>	Said to be from the Syro-Palestinian coast
<b>Material</b>	Translucent bluish-green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a five-part mold

**CONDITION** Intact, with some cracks; minor chipping on the rim. Incrustation on interior and exterior.

**DESCRIPTION** Rim cut off, tapers inward above bulge of overblow; conical body; flat bottom. A raised wide band at the outer edge of the bottom and a ring at the middle.

Body is decorated in mold-blown high relief with four figures standing on the groundline, separated by fluted columns on double torus base and with triangular capital, probably Ionian. A straight garland of four pairs of leaves runs between the columns.

The figures are the following:

Figure A: Poseidon or Neptune. A bearded figure, standing frontally, facing to the right, wearing a head band. His weight rests on his right leg and the left leg is bent. The long himation exposes his upper torso, falling from his left shoulder to cover his lower body from the waist down. In his raised left arm, he holds a trident; in his outstretched right hand a dolphin is poised snout downward.

Figure B: A beardless youth walking to the right wearing a chlamys, leaving his right thigh bare. His hair is pulled up, as if rolled around a fillet. His body is depicted almost frontally, his weight on his left leg. In his lowered right hand, behind him, he holds a small, oval object, and in his outstretched left hand, at chest level, a bird. Previously thought to be a personification of a Season, perhaps Autumn (Weinberg 1972, pp. 42–43), and more recently identified by Wight (Wight 1994, p. 35) as Bonus Eventus, a personification associated with the harvest, and later used as a symbol of prosperity and good fortune (*LIMC* 3, pp. 123–126, s.v. “Bonus Eventus”). The object in his left hand is identified as three stalks of grain or flowers.

Figure C: A youthful, beardless Dionysus or Bacchus, his hair pulled up, facing to the right, stands frontally, wearing a chitoniskos. He is resting his weight on his right leg and his left leg is bent. In his left hand he is holding an upright thyrsus; in his right hand he holds a kantharos and pours wine into the open mouth of a small panther, which sits next to and behind his right foot.

Figure D: A male, who stands in three-quarter frontal position, resting his weight on his left leg, his right leg bent. He is wearing a chitoniskos that is draped to expose his upper torso, loosely folded on his left shoulder. His left arm is bent at the elbow to hold a curved, upright staff upon the left shoulder. In his lowered right hand is an oval vessel. His hair is pulled up, as if rolled around a fillet. This figure had been previously identified as

Hermes, Sylvanus, or a Season (Weinberg 1972, pp. 42–43), but more recently and plausibly was identified by Wight (Wight 1994, p. 36) as Hymen, the staff as a flaming torch, and the vessel as a marriage loutrophoros.

**COMMENTS AND COMPARANDA** The vessel belongs to a group of truncated conical beakers decorated with mold-blown figures; they are known as “mythological beakers” because of the mythological figures appearing on them. (For the classification of the shape: Weinberg 1972, pp. 26–47, with several examples dated to the second half of the first century CE; Wight 1990, pp. 71–76.) This particular beaker, on the basis of its decoration, belongs to a subgroup of beakers with the figures less finely rendered yet still quite identifiable. Among the examples of this group, at least three different molds have been discerned on the basis of the number of figures (either three or four) and whether they stand on pedestals or not, like on this particular vessel. The figures have been identified as Neptune, Bacchus, and two Seasons (Weinberg 1972, pp. 42–43) or Bonus Eventus and Hymen (Wight 1994, pp. 35, 36).

**PROVENANCE** 1981, Private Collection (central Switzerland); 1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, Ancient Glass: Formerly the Kofler-Truniger Collection, Christie’s, London, March 5–6, 1985, lot 92, to the J. Paul Getty Museum through Robin Symes, Limited]

**BIBLIOGRAPHY** *3000 Jahre Glaskunst*, p. 19, color plate; p. 81, no. 274 (with drawing).

Christie’s 1985, lot 92.

JPGM Acquisitions 1985, p. 195, no. 69.

Clayton 1986, p. 183.

Drury 1986, p. 68.

*JGS* 1986, p. 99, fig. 3.

Wight 1990, p. 71, n. 1.

Wight 1991, p. 66, figs. 52–55.

Wight 1994, pp. 42–43, figs. 23–26.

Wight 2000, p. 75, n. 45.

Wight 2011, pp. 77, 88, fig. 60.

*JPGM Handbook Antiquities* 1st ed., p. 207.



**EXHIBITIONS** None



## 170. Mythological Beaker

<b>Accession Number</b>	2003.322
<b>Dimensions</b>	H. 12.5, Diam. rim 6.2, Diam. base 4.2 cm; Wt. 76.08 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent green glass, some iridescence
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a four-part mold: three vertical sections and the base

**CONDITION** Reassembled; large areas of the body are filled.

**DESCRIPTION** Rim cracked off just above a slight overblow; conical body; flat bottom.

Four columns—lower part smooth, upper part fluted—each on a double torus base and with a possibly conical capital, separate four standing human figures: Fortuna and three nude male figures. Above the figures a swag links the columns. At the center over each swag is a circular boss. On the background on either side of the figures' heads is a small X or cross-shaped motif. The figures stand on pedestals, and there is no continuous groundline. Below the figural zone appear plants with clearly defined stems, horizontal branches, and fruits

(Wight 2003, p. 49). The mold seams are concealed in the columns. On the bottom are impressed three irregular, off-center concentric circles around a central boss.

Fortuna: a female figure facing front, her head in profile to the left. She stands on a pedestal, her weight on her right foot. She is wearing himation and cloak. In her lowered right hand she holds a rudder next to her right leg and behind her. In her left hand she holds a cornucopia.

Figure on the left of Fortuna: frontal nude male, his head in profile to the left. He stands on a pedestal, his weight on his right foot. An oval or bag-shaped object is held in his lowered right hand; some object or piece of drapery may rest upon his left shoulder. The figure has been identified with Mercury, holding his coin purse and cradling his caduceus against his right forearm (Wight 2003, p. 48).

Figure on the right of Fortuna: left part of the head, left shoulder and hand, and a small part of the body are preserved. Front-facing nude male figure, his head in profile to the left. He stands on a pedestal, his weight on his right foot, holding in his hand a circular object. The figure has been identified as Apollo, holding a phiale for libation in his left hand and wearing his bow strapped across his back in the missing part, extending over his right shoulder (Wight 2003, p. 48).

The fourth figure is missing. According to other examples of this subgroup of mythological beakers, here would be standing Bacchus, holding his thyrsus and a cluster of grapes, nude except for a nebris draped across his chest. (Weinberg 1972, p. 44; Wight 2003, pp. 47–49, group III).

**COMMENTS AND COMPARANDA** The vessel belongs to a group of truncated conical beakers decorated with mold-blown figures; they are referred to as “mythological beakers” because of the mythological figures appearing on them. (For the classification of the shape: Weinberg 1972, pp. 26–47, with several examples dated to the second half of the first century CE.) This particular beaker, on the basis of the figures presented on it—Fortuna and three male figures (identified as Apollo, Bacchus, and Mercury), all of them standing on low pedestals looking to their right—and the architectural features that surround them, is ascribed to a subgroup with four more known parallels, which is considered to be among the earlier groups of mythological beakers (Wight 1994, pp. 49–51, group III).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1968, pp. 17, 21, no. 23.

Weinberg 1972, p. 45, no. 2, figs. 23–24.

von Saldern et al. 1974, p. 167, no. 457.

Wight 1991, p. 87.

Wight 1994, pp. 49–50.

Wight 2011, pp. 77, 88, fig. 61.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



## 171. Lotus Bud Beaker

<b>Accession Number</b>	85.AF.90
<b>Dimensions</b>	H. 21.0, Diam. rim 9.0, Diam. base 5.0, Th. 0.1 cm; Wt. 174.96 g
<b>Date</b>	First century CE
<b>Production Area</b>	Roman Empire, probably Italy
<b>Material</b>	Translucent bluish glass

### Modeling Technique and Decoration

Mold-blown; blown in a four-part mold: three vertical sections and one disk-shaped base section; relief is crisp, from either a not yet worn-out or a new mold

**CONDITION** Intact; some incrustation on the interior.

**DESCRIPTION** Rim cracked off; truncated, conical body; base plain, very slightly concave, no pontil mark. Two wheel-incised fine lines just below the rim. Wall decorated with six horizontal bands of eight three-tiered drop-shaped bosses; each row is offset from row above it so that bosses are arranged in quincunx. A horizontal ring articulates the bottom of the vessel above the flattened base. Base decorated with a small central boss, a concentric ring at the middle of the bottom, and a pair of larger rings at the edge of it.

**COMMENTS AND COMPARANDA** This beaker belongs to a large group of vessels decorated with pointed, three-tiered knobs, sometimes with additional motifs such as circular bosses and theatrical masks, occasionally accompanied by linear patterns or vine sprays (Isings 1957, pp. 45–46, form 31; Stern 1995, pp. 103–107, nos. 8–10, with thorough bibliography). Diverse interpretations have been proposed for the knobs: bosses, lotus buds, almonds, or knots in the trunk of a tree. The three-tiered shape with profiled edges, though, can only be connected to an olive tree's knobs. Hercules's club was made from the trunk of an olive tree and is represented with prominent knobs in many media, including at least three club-shaped glass bottles (Stern 1995, p. 107, no. 38). This hypothesis was first proposed by Clasina Isings (Isings 1976, p. 353), and it seems quite logical to associate these vessels with Hercules and some of his virtues, as well as his affinity for endless drinking.

Vessels decorated with tiered knobs have a wide but uneven distribution throughout the Roman Empire and beyond its borders. Examples decorated exclusively with knobs are ascribed to the western part of the Empire (Stern 1995, p. 104, with thorough bibliography).

Finds from Pompeii and Herculaneum (Scatozza Hörich 1986, p. 19, plate 1, top center; Scatozza Hörich 2001, p. 82, fig. 16a–b) show that these beakers were already in use before 79 CE, when the cities were destroyed by an eruption of Vesuvius, a date that is supported by finds from Switzerland (Berger 1960, pp. 52–54; Rütli 1991a, II, p. 71), the Netherlands (Isings 1957, p. 41, form 31), and Türkiye (Stern 1995, p. 106 n. 23). It is not clear how long they continued to be used after the late first century, but the latest are recorded in contexts up to the second

century. Other comparanda include Whitehouse 2000, pp. 112–113, no. 97; Whitehouse 2001a, pp. 27–28, nos. 492–496; Foy and Nenna 2001, p. 182, no. 305; Antonaras 2012, p. 77, no. 77; Antonaras 2017, pp. 71–72, form 21, with several new finds from controlled excavations in the Balkans, Cyprus, and Black Sea coast.

**PROVENANCE** 1985, Robert Haber (New York, New York), sold to the J. Paul Getty Museum, 1985

**BIBLIOGRAPHY** JPGM Acquisitions 1985, p. 195, no. 67.

Wight 2011, pp. 77, 87, fig. 59.

**EXHIBITIONS** Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)



## 172. Lotus Bud Beaker

<b>Accession Number</b>	2003.320
<b>Dimensions</b>	H. 21.2, Diam. rim 9.3, Diam. base 4.9, Th. 0.2 cm; Wt. 185.45g
<b>Date</b>	First century CE
<b>Production Area</b>	Roman Empire, probably Italy
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a four-part mold: three vertical sections and one disk-shaped base section; relief is crisp, from a not yet worn-out or a new mold

**CONDITION** Mended.

**DESCRIPTION** Rim cracked off; truncated conical body; base plain, with no pontil mark. Wall decorated with six horizontal bands of eight three-tiered drop-shaped bosses; each row is offset from row above it so that bosses are arranged in quincunx. Base decorated with a very small central boss and a concentric ring at the middle surrounded by a pair of larger rings at the edge.

**COMMENTS AND COMPARANDA** See cat. 171.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 166, no. 455.

Scatozza Hörich 1986, p. 39.

Stern 1995, p. 106, n. 7d.

Wight 2011, pp. 77, 87, fig. 58.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Classical Connections: The Enduring Influence of Greek and Roman Art (Los Angeles, 2003–2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 173. Beaker

**Accession Number** 2003.321

<b>Dimensions</b>	H. 13.9, Diam. rim 7.1, Diam. base 4.5 cm; Wt. 116.62 g
<b>Date</b>	First century CE
<b>Production Area</b>	Italy
<b>Material</b>	Translucent olive-green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a three-part mold: two vertical sections and one disk-shaped base section; the mold starts 1 cm below the rim

**CONDITION** Reassembled, with large fills on the body.

**DESCRIPTION** Cracked-off rim on the overblow; conical body; flat base impressed with two concentric circles around a central dot.

Mold-blown decoration consists of four large raised ovals that cover the body: each one is filled with two winding vertical tendrils that form a stylized flower at the ends. A stylized bucranium is placed on the upper part between the oval fields. Under each oval is a curved ribbon forming a garland suspended from circular bosses placed in the area between the oval fields.

On the flat bottom there is a central boss and two raised concentric circles, the outer forming a base-ring.

**COMMENTS AND COMPARANDA** This variant of the widely known truncated conical beakers (Isings 1957, pp. 45–46, form 31) is particular for its decoration and quite rare. It has been proposed that they are local products of the Vesuvian area. In Pompeii two almost identical examples, without the bucranium between the ovals, have been unearthed (Scatozza Hörich 1995, pp. 81, 83, fig. 15). Another example has been recovered from the excavations in Herculaneum in a shop on the central street, the Decumanus Maximus, where it was unearthed in its original straw holder, together with other glass vessels. The beaker from Herculaneum was made in a different mold, and the area between the oval fields is slightly wider, with four rectangular impressions placed along it. These impressions do not appear on the preserved part of the Pompeian find, but most of the vessel is missing, so it remains unclear if they did originally exist or not.

The production of the beakers is dated on stylistic grounds a few decades before the catastrophic eruption of Vesuvius in 79 CE. The scroll on the Pompeian fragment has been associated with those on the Ara Pacis Augustae (Isings 1957, p. 45). Although this association cannot be excluded, it is likely simply a more general similarity, reflecting the same artistic vocabulary used on the glass

vessel and the altar, among others, but a different size, media, and techniques have clearly been used in the execution of the motif. It is difficult to compare the subtle and complex rendering of the altar with the stylized scrolls and bucrania on the glass vessel. For direct comparanda, see Scatozza Hörich 1986, pp. 39–40, form 19, no. 66, plate VII; Scatozza Hörich 1995, pp. 81, 83, fig. 15; Foy and Nenna 2001, p. 181, no. 302 (from a Villa in Toulon, from a context dated ca. 80 CE).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 166, no. 456. Stern 1995, p. 110, n. 14b.

Scatozza Hörich 1986, p. 39.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



174. Beaker

**Accession Number** 2003.323

<b>Dimensions</b>	H. 12.5, Diam. rim 6.7, Diam. base 5.0 cm; Wt. 85.54 g
<b>Date</b>	First century CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a four-part mold: three vertical sections and one disk-shaped base section

**CONDITION** Mended and filled. Iridescence and area with incrustation.

**DESCRIPTION** Cracked-off, ground rim; conical body; flat bottom. The body is covered with a mold-blown, raised honeycomb pattern of nine rows of embossed oval cells, framed by a smooth band below the rim and another near the bottom, 1.5 cm wide. On the bottom are two raised concentric circles around a central boss.

**COMMENTS AND COMPARANDA** This beaker, on the basis of the body shape, is assigned to a relatively well-represented group of mold-blown conical beakers dated to the first century (Isings 1957, pp. 45–46, form 31; Stern 1995, pp. 103–107, nos. 8–10). A very similar beaker with raised almond-shaped bosses was found in Pompeii (Scatozza Hörich 1995, p. 82, fig. 16c). With regard to the decoration, it is comparable with a truncated conical beaker with pronounced shoulder (MCT VIII) with embossed diamond-shaped bosses, which is ascribed to an eastern Mediterranean production area and dated to the middle to second half of the first century CE (Stern 1995, pp. 110–111, no. 12). The decoration is also comparable with a shorter beaker in the Corning Museum of Glass (Whitehouse 2001a, p. 30, no. 497). Marianne Stern (Stern 1995, p. 111) has proposed that these vessels imitate facet-cut gems, being glass imitations of *pocula gemmata*, gold and silver cups decorated with gems (Hilgers 1969, p. 261, s.v. “poculum”).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 167, no. 458.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 175. Flask with Mythological Figures

<b>Accession Number</b>	2004.36
<b>Dimensions</b>	H. 19.8, Diam. rim 2.2, max. Diam. 8.8, Diam. base 5.4 cm; Wt. 122.42 g
<b>Date</b>	Possibly late first century CE, more likely third century CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a four-part mold; neck free-blown and tooled

**CONDITION** Mended. A small fill on the shoulder. Flaking, iridescent weathering on most of the body. A crack is visible along the overblow and around the bottom.

**DESCRIPTION** Cut-off vertical rim; cylindrical neck wider toward its base, with a constriction at the transition to the body; low, almost horizontal shoulder; conical body, standing on a flat, mildly concave bottom.

The body is decorated in very high relief, with three male Bacchic figures standing on a horizontal groundline, separated by freestanding fluted columns with double torus base and conical capital. The columns conceal the mold seams. The figures are:

Dionysus: stands naked, frontal, left arm raised, holding probably his thyrsus, which is actually not present, and



right arm lowered, holding a vessel from which he feeds his panther; jar beside his left leg.

Pan: naked with horns and goat-legged; his torso is presented frontally, but he walks to the right carrying a *λαγυβόλον* (shepherd's crook) in his left hand.

Silenus: wearing a short kilt; his torso is shown frontally, but he moves to the right, carrying a wineskin on his shoulders. With his right hand he is holding the neck, and his left hand on his waist forms a wider base on his left shoulder for the larger part of the wineskin. He is holding a curved stick almost behind him under the wineskin, probably a *λαγυβόλον*.

An interesting feature of the relief's rendering is the fact that the musculature of the figures is detailed and naturalistic, but the heads and the facial features were actually not carved in the mold and thus the heads are extremely stylized. There is no decoration on the bottom, but a small irregular indentation at the center.

**COMMENTS AND COMPARANDA** The same male figures are represented on three more flasks and on fragments of another three. With the exception of one, on their bottom appears the phrase *ΠΙΕ ΖΗΣΑΙΣ* *pie zesais* ("Drink! live!") in Greek letters (Matheson 1980, pp. 105–107, no. 280; Clairmont 1963, pp. 35–37, nos. 127–129, plate XIX). The only other flask of which the bottom does not bear an inscription is at the Corning Museum of Glass (Whitehouse 2001a, pp. 57–59, no. 529).

The date of the flasks has puzzled researchers for a long time (Harden et al. 1987, p. 154). The shape and the decoration with mythological figures are consistent with the first century CE, but the shape of the neck and the rim are known in vessels in the third and fourth centuries (Isings 1957, form 103). In addition, the relief, compared to the mythological beakers of the first century, is far too high, and the represented figures, which are larger and more robust than the first-century ones, are three and not four as in the earlier examples. Furthermore, Whitehouse (Whitehouse 2001a, p. 59) noted also that the inscription *ΠΙΕ ΖΗΣΑΙΣ* does not appear on first- or second-century glasses. As Susan Auth (Auth 1996, pp. 103–112) has phrased it: "This motto appears on glass vessels from the middle of the third century to the end of the fourth century CE connected to a symbolism of a wish for eternal life." Overall it seems that they fit much better in the third century, possibly representing some artistic revival in art with emphasis on classicism.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 167, no. 459, color plate on p. 157.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 176. Head Flask of Antinous as Dionysus

<b>Accession Number</b>	2003.326
<b>Dimensions</b>	H. 19.4, Diam. rim 2.6, Diam. base 3.6 cm; Wt. 166.30 g
<b>Date</b>	Second century CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent slightly greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in bipartite mold of two unequal vertical sections, open at the base; applied elements

**CONDITION** Fully preserved; slight iridescence on the surface; milky crust on some parts of the interior. The tip of the nose has been restored.

**DESCRIPTION** Fire-polished vertical rim; cylindrical neck, tapering toward the body, constricted at its base; flat bottom. Body in shape of a young beardless male head wearing an ivy wreath in crisp relief. The face has idealized features: large almond-shaped eyes with heavy lids and recessed pupils gazing ahead; narrow, straight nose; proportional, slightly open mouth with full lips; round chin with a large central dimple. Around the face is an ivy wreath with a wide, smooth convex band above the forehead, flanked by clusters of round berries at the temples and three heart-shaped leaves on each side of the face. The hair is rendered as large tufts around the face and very flat, irregular wavy vertical ridges on the back of the head. Blown into a bipartite mold of two unequal vertical sections, open at the base. Mold seams concealed in hair behind the ears. An annular pontil mark (W. 1 cm) is visible at the center of the slightly concave bottom. Neck and rim free-blown and tooled. A fine trail of glass is wound two times around the middle of the neck. Cylindrical, pronounced overblow over the head.

**COMMENTS AND COMPARANDA** Head-shaped glass vessels represent the shape of a human head in the round or of two (known as janiform) or multiple heads arranged back-to-back. They are mold-blown, almost exclusively in molds with two vertical parts. Predominantly they are shaped as bottles or flasks, occasionally with one or two handles; jugs; and a few cups, which are made only as single heads. They first appear in the early first century CE, in the late Augustan era, probably in the eastern Mediterranean, and the earlier forms are jugs and one-handled flasks. In the first century they were produced in the eastern Mediterranean and probably Italy as well, during the second and third centuries they were predominantly made on the Syro-Palestinian coast, from the third century they became common in northwestern Europe, and during the fourth century they were produced in Germany and Gaul. They render heads of deities, like Dionysus; a chubby curly-haired child, probably Eros or Dionysus; mythological creatures such as Medusa; unusual and ethnic faces, e.g., grotesques or Ethiopians; and, finally, heads of ordinary Caucasian people, these last appearing only in the northwestern provinces in the third–fourth centuries. Dionysus and the chubby child appear mostly in the eastern Mediterranean, Medusa in both east and west, and ethnic types, grotesques, and ordinary people predominantly in Italy and the northwestern European provinces (Isings 1957, pp. 93–94, forms 78a, 78b; Stern 1995, pp. 201–215). On janiform unguentaria, see cat. 200 and Antonaras 2009, pp. 324–326, form 146 = Antonaras 2017, pp. 163–164. For jugs in the shape of ordinary heads, see Antonaras 2009,

pp. 256–257, form 96 = Antonaras 2017, pp. 129–130. On a special group of cobalt blue ordinary heads, see Whitehouse 1997b, p. 370; Lightfoot 2020, pp. 83–84. For direct parallels, see Bucovală 1968, pp. 115–116, no. 237; Sorokina 1968, pp. 185–186, figs. 1, 2: cup; Stern 1995, pp. 230–232, no. 148: flask with cut-off rim; Kunina 1997, pp. 282–283, no. 153 = Sorokina 1968, p. 184, figs. 6–7; Arveiller-Dulong and Nenna 2005, pp. 194–195, no. 539: cup; Hendriks and Halbertsma 2019, p. 43.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 171, no. 467.

Stern 1995, p. 232 n. 8a.

Kunina 1997, p. 283, “Analogies” for no. 153.

Wight 2011, pp. 76, 85, fig. 56.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 177. Head Flask

**Accession Number**

2003.327

**Dimensions**

H. 14.0, Diam. rim 3.1, Diam. base 3.9 cm; Wt. 55.11 g

<b>Date</b>	Ca. second century CE
<b>Production Area</b>	Eastern Mediterranean [Saldern said probably Syrian]
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	The neck and rim were free-blown. The body was mold-blown in a two-part mold of two vertical sections, which did not fit well: the seams are visible, and from the ears downward, the back side seems to be larger than the front

**CONDITION** Fully preserved; small crack on the neck. Parts covered with iridescence, especially the interior; large areas with incrustation.

**DESCRIPTION** Fire-polished, rounded rim; tall conical neck; head-shaped body; flat bottom.

A mature, bearded male figure is represented, hairless on the front and upper part of the head with thin, flat, straight long hair to the nape of neck. His eyes are gazing ahead, eyebrows are soft, nose is short and straight, ears stylized and small, and the mouth is closed and partly hidden in the rich beard, which is rendered with large curls; the chin seems to be protruding under two large globular curls of the beard. On the flat bottom is an annular pontil mark (W. 1.7, Th. 0.2 cm), and off-center, toward the back side of the head, a straight mold seam is visible.

The melon-shaped upper part of the head and the relatively ugly facial features could be a physiognomic feature indicating a philosopher, in particular Socrates (von Saldern et al. 1974, p. 171, no. 468). Equally probable is that it represents a follower of the Dionysian cycle, such as a Silenus, since the busts of Socrates in sculpture exhibit all the basic features of the iconography of Silenus (Richter 1965, pp. 112–118, figs. 456–573; Scheibler 1989, pp. 33–55; Zanker 1996, pp. 57–62).

**COMMENTS AND COMPARANDA** For head-shaped vessels, see comments on cat. 176. No direct parallels have been found.

**PROVENANCE** By 1963–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1963, p. 141, no. 7, ill.

von Saldern et al. 1974, p. 171, no. 468.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 178. Flask

<b>Accession Number</b>	2003.328
<b>Dimensions</b>	H. 15.5, Diam. rim 5.3, Diam. base 4.4, Th. 0.2 cm; Wt. 111.70 g
<b>Date</b>	Ca. second–third centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent olive-greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a two-part mold

**CONDITION** Fair condition. The surface bears small patches of iridescence on the inside and brownish accretions concentrated on the neck. A large fill has been added on the mouth.

**DESCRIPTION** The body of the vessel was blown in a two-part, vertical mold.

Fire-polished rim; funnel mouth; cylindrical neck, constricted at its base; body in the shape of the head of a young, beardless, African man. He is represented having short, curly hair with small, round curls. The haircut leaves the neck and the relatively large ears visible. The forehead is short, the eyes are relatively large and oval, the nose is straight, the lips are thick, and the chin is

small. The face is heavy and wide overall, in a fashion well-known in the Tetrarchic period.

The vessel rests on a slightly concave bottom. Along the undersurface of the bottom a straight ridge is visible, the seam between the two parts of the mold. No pontil mark is visible.

**COMMENTS AND COMPARANDA** For head-shaped vessels, see comments on cat. 176. The flask is quite similar to a second-century CE glass flask form that presents a single ethnic head, with a known example from Alzey, Germany (Stern 1995, form F, p. 210, fig. 92). Compare it also with a find from Bonn (Fremersdorf 1961, p. 76, plate 168).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 161, 171, no. 469.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 179. Jar

<b>Accession Number</b>	78.AF.26
<b>Dimensions</b>	H. 12.4, Diam. rim 5.2, Diam. body 4.9 cm; Wt. 101.14 g
<b>Date</b>	Fourth century CE

<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent purple glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Incrustation on the interior.

**DESCRIPTION** In-folded, tubular rim; conical mouth; horizontal shoulder, where a noticeable overblow is visible; cylindrical body tapering toward the flat, slightly concave bottom. At the center of the bottom there is an annular pontil scar (W. 1 cm).

**COMMENTS AND COMPARANDA** Jars are a common shape in the eastern Mediterranean between the third and seventh centuries, with many forms recorded, mostly with bulbous body; the cylindrical type is rare (Stern 1995, pp. 150–151). The vessel was probably made in Syria, where purple glass was in fashion during the end of the third and the first half of the fourth centuries (Hayes 1975, p. 82; Stern 1995, p. 147). Parallels include four vessels in the Newark Museum (Auth 1976, p. 218, nos. 443–446). Similar but not identical parallels dated to the fourth century have been published from Greece and Syria (Antonaras 2017, p. 132, form 100; cf. Isings 1957, pp. 159–160, form 130b; cf. also Dussart 1998, p. 92, form BVII.2424, fig. 18/14, p. 160, BXL.3211b, plate 48).

**PROVENANCE** 1935, George Dupont Pratt, American, 1869–1935; 1935–1937, Estate of George Dupont Pratt, American, 1869–1935 [sold, Anderson Galleries, Inc., New York, January 15, 1937, lot 50]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 108, through French & Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1937a, lot 50.

Parke-Bernet Galleries 1940, lot 108.

Stothart 1965, p. 20, no. F-15.

**EXHIBITIONS** None



## 180. Flask

<b>Accession Number</b>	2003.343
<b>Dimensions</b>	H. 10.5, Diam. rim 3.4, Diam. base 3.6 cm; Wt. 28.30 g
<b>Date</b>	Second half of the fourth century CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Severely weathered. Surface bears heavy signs of iridescence and flaking. Dark accretions cover the shoulder and neck. Fragments have been reattached near the shoulder. Small fragments are missing in this area.

**DESCRIPTION** In-folded tubular rim; conical mouth; cylindrical neck. Horizontal shoulder, a bit squeezed on one side, and cylindrical body covered with 18 mold-blown vertical ribs. The vessel stands on a flat bottom; at the center of the bottom, an oval pontil mark (1 × 0.7 cm) is visible.

**COMMENTS AND COMPARANDA** Mold-blown cylindrical vessels, mainly jugs, with vertical ribs are known from Syro-Palestinian sites, dated to the fourth century, and this fashion continues into the sixth century CE (Stern 2001, pp. 265–266; Israeli 2003, p. 184). For parallels of mold-blown cylindrical vessels finished as jugs, see notes on cat. 187. For parallels of cylindrical ribbed vessels finished as jars, see Weinberg 1988, pp.

79–80, nos. 343–345, fig. 4-38, plate 4-15; Stern 2001, p. 233, no. 119; Whitehouse 2001a, p. 119, no. 619; Antonaras 2012, p. 93, no. 110.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 180, no. 499.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 181. Head Jug

<b>Accession Number</b>	85.AF.320
<b>Dimensions</b>	H. 17.2, Diam. rim 5.4, max. Diam. 8.0, Diam. base 6.7 cm; Wt. 207.00 g
<b>Date</b>	Mid-fourth–mid-fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and dark green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a bipartite mold with open base

**CONDITION** Intact; some areas iridescent, others covered with incrustation.

**DESCRIPTION** Cracked-off, everted rim; broad, conical neck, tapering toward the body; mold-blown head-shaped body; flat bottom. Body in form of youthful, clean-shaven



male head, with straight long hair to the nape of the neck and fringe of twelve vertical locks over the forehead. Large, almond-shaped eyes with pronounced pupils staring toward the upper right; soft eyebrows; straight wide nose; small mouth with full lips; round chin; large ears. Conical base formed of three and a half revolutions of a thick trail. A wishbone strap handle is applied to mid-neck in a large pad, drawn out and up, forming a horizontal part that was tooled into a thumb-rest tab, with acute angle below, and drawn vertically down to the upper part of the head's back and trailed off down to the base, with decoration of 18 horizontal ribs notched between lower attachment and bottom. The handle and the base are made of a different type of glass, seemingly opaque black glass, possibly dark green. Made in a two-part mold with open base—as evidenced by the plain, rough surface of the undersurface of the body. No pontil mark on the bottom. Vertical mold seam behind the ears incorporated in the hair, visible only on the left side of the vessel.

**COMMENTS AND COMPARANDA** See comments and comparanda, cat. 176.

This flask and cat. 182 belong to a well-defined group of head flasks, from a workshop creating products all made of a distinctive cobalt-blue translucent glass (Harden et al. 1987, p. 175, no. 96; Whitehouse 1997b, p. 370; Lightfoot 2020, pp. 83–84). All these flasks present, with small differences, as the head of a clean-shaven youth with large, almond-shaped eyes and well-arranged, flowing locks that are typical of late Roman portraiture. The workshop produced free-, dip mold-, and mold-blown vessels, which all had an applied coil base, and the handles are wishbone-shaped, drawn down from the neck to the body, often pinched (Harden et al. 1987, p. 175, no. 96; Whitehouse 1997b, pp. 367–375; Lightfoot 2020, pp. 83–93). For direct parallels, see Harden et al. 1987, p. 175, no. 96; Platz-Horster 1976, p. 45, no. 70; Whitehouse 2001a, pp. 74–76, no. 548; Whitehouse 1997b, pp. 367, 370, 374, plate 1; Lightfoot 2020, pp. 83–93, esp. 83–84.

**PROVENANCE** By 1981, Private Collection (Switzerland); 1985, Ernst Kofler, 1899–1989, and Marthe Truniger, 1918–1999 (Lucerne, Switzerland); 1985, Private Collection [sold, *Ancient Glass: Formerly the Kofler-Truniger Collection*, Christie's, London, March 5–6, 1985, lot 86, to Mansour Gallery]; 1985, Mansour Gallery (London, England), sold to the J. Paul Getty Museum, 1985

**BIBLIOGRAPHY** *3000 Jahre Glaskunst*, pp. 5, 84, no. 290.

Fischer 1985, p. 398.

Christie's 1985, lot 86.

JPGM Acquisitions 1985, p. 196, no. 70.

Drury 1986, p. 101.

Whitehouse 1997b, p. 370, appendix: no. A3.

*JPGM Handbook Antiquities* 1st ed., p. 209.

*JPGM Handbook Antiquities* rev. ed., p. 219.

Wight 2011, pp. 97, 101, 104, fig. 72.

**EXHIBITIONS** Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)



## 182. Head Jug

<b>Accession Number</b>	2004.44
<b>Dimensions</b>	H. 16.4, Diam. rim 5.0, max. Diam. 9.2, Diam. base 5.8 cm; Wt. 161.85 g
<b>Date</b>	Mid-fourth–mid-fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and dark green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a bipartite mold with open base; applied handle and base

**CONDITION** Intact; some areas iridescent. Large areas with milky and dark-colored incrustation; small pieces of the rim flaked off.

**DESCRIPTION** Cracked-off, everted rim; broad, conical neck, tapering toward the body; mold-blown head-shaped body; flat bottom. Body in form of youthful, clean-shaven male head, with straight long hair to the nape of neck and fringe over the forehead. Large, almond-shaped eyes with pronounced pupils; soft eyebrows; straight, wide nose; small mouth with full lips; round chin; large ears. Conical base formed of 3.5 revolutions of a thick trail. A wish-bone strap handle is applied to mid-neck in a large pad, drawn out and up, forming a horizontal part that was tooled into a thumb-rest tab, with acute angle below, and drawn vertically down to the upper part of the head's back, and trailed off down to the base, with decoration of 21 horizontal ribs notched between lower attachment and bottom. The handle and the base are made of a different type of glass, seemingly opaque black glass, possibly dark green. Made in a two-part mold with open base—as evidenced by the plain, rough surface of the undersurface of the body. No pontil mark on the bottom. Vertical mold seam behind the ears incorporated in the hair.

**COMMENTS AND COMPARANDA** See cat. 181.

**PROVENANCE** By 1977–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** *JGS* 1977, p. 170, no. 7, ill.

Wight 2011, pp. 97, 101, 104, fig. 71.

**EXHIBITIONS** *Molten Color: Glassmaking in Antiquity* (Malibu, 2005–2006; 2007; 2009–2010)



### 183. Janiform Jug

<b>Accession Number</b>	2003.324
<b>Dimensions</b>	H. 6.5, Diam. rim 2.2, Diam. base 2.2 cm; Wt. 21.60 g
<b>Date</b>	About second century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent dark purple glass with pinprick bubbles. The handle is made of a dark blue glass, covered by a brownish crust
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a bipartite mold of vertical sections, open at base; faint vertical seams at the junction of the heads

**CONDITION** Complete; the handle—if it is part of the original vessel—and a chip from the rim were reattached; surface presents some iridescence, sandy accretions, and pitting on the neck.

**DESCRIPTION** In-folded, tubular, flaring rim; lopsided cylindrical neck; mold-blown body in the shape of two heads placed back-to-back. The vessel stands on a mildly irregular, flat resting surface. The vertical seam mark indicates that this juglet was blown in a two-part mold. Coil handle with an elbow has been applied on the shoulder and drawn up onto the lip, where it forms a thumb rest. Each side of the janiform body represents a chubby clean-shaven male face. Face A smiling; heavy cheeks and lips; flat, wide nose; accentuated eyebrow ridges. A relief, smooth band across the forehead with two

horseshoe-shaped loops, apparently a symposiast's fillet. Hair is rendered as 22 rows of straight ridges diagonally arranged. Face B is similar but flatter, and the cheekbones are more accentuated, the nose appears to be shorter, and the eyes are more rounded than Face A; the forehead is smaller, and two curved horns are visible at the corners. Face A could be identified as Dionysus and the other as a satyr (Stern 1995, pp. 243–246, nos. 143–144).

**COMMENTS AND COMPARANDA** Head-shaped glass vessels represent the shape of a human head in the round or of two (known as janiform) or multiple heads arranged back-to-back. They are mold-blown, almost exclusively blown in molds with two vertical parts. Predominantly they are shaped as bottles or flasks, occasionally with one or two handles; jugs; and a few are cups made only as single heads. They first appear in the early first century CE, in the late Augustan era, probably in the eastern Mediterranean, and the earlier forms are jugs and one-handled flasks. In the first century they were produced in the eastern Mediterranean and probably Italy as well, during the second and third centuries they were predominantly made on the Syro-Palestinian coast, from the third century they become common in northwestern Europe, and during the fourth century they were produced in Germany and Gaul. They render heads of deities, like Dionysus and Livia-Juno; a chubby curly-haired child, probably Eros or Dionysus; mythological creatures like Medusa; unusual and ethnic faces, e.g. grotesques or Ethiopians; and finally, heads of ordinary male Caucasian people, these last appearing only in northwestern provinces in the third–fourth centuries CE. Dionysus and the chubby child appear mostly in the eastern Mediterranean, Medusa in both east and west, and ethnic types, grotesques, and ordinary people predominantly in Italy and northwestern European provinces (Isings 1957, pp. 93–94, forms 78a, 78b; Stern 1995, pp. 201–215). On janiform unguentaria, see cat. 200 and Antonaras 2009, pp. 324–326, form 146 = Antonaras 2017, pp. 163–164. For jugs in the shape of ordinary heads, see Antonaras 2009, pp. 256–257, form 96 = Antonaras 2017, pp. 129–130. For handleless parallels with similar faces, see *Glass from the Ancient World* 1957, p. 143, no. 285; La Baume and Salomonson 1976, p. 37, no. 70, plate 8:70; *3000 Jahre Glaskunst*, p. 83, no. 280; Stern 1995, pp. 243–246, nos. 143–144.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 170, no. 462.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 184. Grape Jug

<b>Accession Number</b>	2003.332
<b>Dimensions</b>	H. 12.0, Diam. rim 3.1 × 3.4, Diam. base 3.2 cm; Wt. 93.50 g
<b>Date</b>	Late second–third centuries CE
<b>Production Area</b>	Rhine region
<b>Material</b>	Translucent blue and colorless glass
<b>Modeling Technique and Decoration</b>	Mold-blown body in a two-part mold; free-blown neck and rim; applied handle and base

**CONDITION** A fill has been added on the shoulder. Incrustation on the body.

**DESCRIPTION** In-folded, flaring trefoil rim sharply bent downward; conical neck, wider toward the body; flat shoulder; conical body in the shape of a grape bunch with seven rows of grapes. An applied coil wound one and a half times forms the base-ring on the bottom. A colorless strap handle, tooled into three ridges, is applied on the shoulder and drawn up to the rim, where it forms an overhanging thumb rest.

**COMMENTS AND COMPARANDA** This jug belongs to a group of mold-blown vessels that render in a naturalistic fashion fruits like dates, pomegranates, and cedar and

pine cones. Grape flasks are known in three different variants, appearing in three distinct periods of Roman times (Moirin and Arveiller-Dulong 2010). The oldest examples reproduce the bunch with greater naturalism, as in cats. 197–198 (Isings 1957, p. 94, form 78e; Antonaras 2017, pp. 142–143, form 118); they appear as early as the third quarter of the first century and continue into the early second century, and it has been assumed that they are Syro-Palestinian products (Stern 1995, p. 180). The later examples, like cat. 199, are dated to the end of the second century and render the grape more schematically. Two-handled examples appear particularly in the northwestern provinces of the Roman Empire—probably locally produced there—in addition to the handleless variant that prevails in the east (Isings 1957, pp. 108–109, form 91a; Stern 1995, pp. 190–191, no. 119, with detailed bibliography). In addition, a single-handled blue jug known from Cologne, now at the Metropolitan Museum of Art, may be the closer parallel for this vessel (Fremersdorf 1961, p. 70, plate 141). Finally, there is a third subgroup comprising vessels with body modeled like a grape bunch standing on a discoid base. They are mainly found and were probably made in the Syro-Palestinian region, and they are ascribed to the third century based on stylistic features (Stern 1995, pp. 191–195, nos. 120–128).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 174, no. 474. Lierke 2009, p. 23, ill. [erroneously ascribed to the sixth century BCE]

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 185. Jug

<b>Accession Number</b>	79.AF.184.13
<b>Dimensions</b>	H. 13.4, Diam. rim 4.0, Diam. base 3.8 cm; Wt. 72.25 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent purple and greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; applied elements

**CONDITION** Intact; milky incrustation over parts of the body.

**DESCRIPTION** Fire-polished, rounded rim, pinched to form a trefoil mouth; short, wide, cylindrical neck; cylindrical body with overhanging horizontal shoulder; flat bottom, slightly indented at center. Body covered with 27 mold-blown vertical ribs. A thick, greenish coil is wound 11 times spirally from under the mouth to the center of the bottom. An almost vertical, smooth strap handle made of greenish glass is applied on the shoulder, drawn upward and then inward, forming a thumb rest at top and attached on the upper part of the neck up to the tip of the rim. The whole vessel is badly executed and lopsided. On the bottom, a round wad of greenish glass (W. 1.4 cm) where the pontil was attached renders the vessel unstable.

**COMMENTS AND COMPARANDA** Mold-blown cylindrical jugs with vertical ribs are known from Syro-Palestinian sites dated to the fourth century CE, and this



fashion continues into the sixth century. The purple color of the body and the combination with the greenish handle is more common in the fourth century (Stern 2001, pp. 265–266). The closest parallel, which is unprovenanced, is in the Princeton University Art Museum (Antonaras 2012, p. 96–97, no. 116). Quite similar but slightly different jugs are the following: von Saldern 1980b, p. 68, no. 60; Stern 2001, p. 283, no. 148; Arveiller-Dulong and Nenna 2005, p. 380, no. 1012 (all examples are slightly different). Further, the following jugs are comparable: Hayes 1975, p. 113, nos. 428–431; Auth 1976, p. 209, no. 391; Hizmi 1997, p. 45, fig. 6:18; Whitehouse 2001a, p. 181, no. 722; Israeli 2003, p. 184, no. 218; Arveiller-Dulong and Nenna 2011, p. 380, no. 1012. For very similar vessels with plain rim, see Stern 2001, p. 203, no. 148, with further bibliography.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 186. Oinochoe

<b>Accession Number</b>	2003.427
<b>Dimensions</b>	H. 11.7, Diam. rim 5.6 × 6.6, max. Diam. 7.3 cm; Wt. 95.81 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass

**Modeling Technique and Decoration** Mold-blown; applied elements

**CONDITION** Intact; lightly weathered on the inside.

**DESCRIPTION** Fire-polished, flaring rim; trefoil mouth; cylindrical neck wider toward the body; sloping shoulder; cylindrical body with a bulging overblow on the upper part. The vessel has a small applied base-ring. At the center of the bottom a pontil mark (W. 2.1 cm) is visible. A thick trail was added underneath the rim and joined in a spiral on one side. Finally, a coil handle was applied on the shoulder, drawn upward, and bent to be attached on the rim.

The glass gather was blown in a small, open mold, which shaped the lower part of the body. No signs of mold seams on the body. The area above the mold expanded beyond the edge of the mold, forming an overblow, the characteristic bulge on the shoulders that reveals the technique. The vessel was further shaped to the desired size, and then the decorative coil for the base and the handle were added, and finally the rim was formed.

**COMMENTS AND COMPARANDA** The color of the glass and the coil under the rim are quite common in fourth-century eastern Mediterranean products. This was a period of innovation in Syro-Palestinian glass production when mold-blowing was revived and this particular shape could be included in the great diversity of individual forms in use in that region (Stern 2001, pp. 132–135, 146). It is quite close to the free-blown “Blue Zigzag Group” that comprises several similar vessels, including jugs, jars, and spouted flasks, which are made of the same greenish glass and are decorated with threads of turquoise glass wound spirally or in zigzags (Stern 1977, pp. 120–122; see also comments on cat. 298). Exact parallels form a small but tightly connected group of jugs blown in an open mold that include the following: Musée Curtius 1958, no. 126 (entire vessel made of greenish glass), a variant of the work of the same workshop should be identified in no. 125, which ends in a pointed convex bottom; Klesse and Reineking-von Bock 1973, p. 51, no. 14: entire vessel made of greenish glass; Israeli 2003, p. 177, no. 199, with turquoise handle, base, and coil; Neuburg 1949, p. 26, plate XXI:74, from Hebron, with strap handle; Sotheby Parke Bernet 1979, pp. 170–171, no. 302 = Bonhams, July 5, 2018, lot 173 <https://www.bonhams.com/auctions/24684/lot/173/>, with turquoise handle, base, and coil; Dusenbery 1971, p. 26, fig. 46, identical but without coil base.



**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 228, no. 669.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 187. Oinochoe

<b>Accession Number</b>	71.AF.83
<b>Dimensions</b>	H. 14.2, Diam. rim 6.0, Diam. base 6.0 cm; Wt. 113.70 g
<b>Date</b>	End of fourth–sixth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact; the entire vessel is covered with iridescent weathering and incrustation over parts of the body.

**DESCRIPTION** Flaring rim, partly in-folded tubular and left partly fire-polished; conical mouth; short, cylindrical neck, widening toward the body; cylindrical body with mildly overhanging shoulder; flat bottom, slightly indented at center. Body covered with 35 mold-blown vertical ribs. Irregular remains of a pontil mark (W.

approx. 2.8 cm) are visible on the bottom. Smooth, vertical, angular strap handle from shoulder to rim.

**COMMENTS AND COMPARANDA** Mold-blown cylindrical jugs with vertical ribs are known from Syro-Palestinian sites dated in the fourth century, and this fashion continues into the sixth century CE (Stern 2001, pp. 265–266; Israeli 2003, p. 184). The closest parallels are in the Princeton University Art Museum (Antonaras 2012, pp. 96–97, no. 117); Newark Museum (Auth 1976, p. 209, no. 391); Royal Ontario Museum (Hayes 1975, p. 113, nos. 428–31, plate 27); Israel Museum (Israeli 2003, p. 184, no. 218); and Württemberg State Museum (Stern 2001, p. 281, no. 146). Quite close but slightly different jugs are the following: Antonaras 2012, pp. 96–97, no. 118; von Saldern 1980b, p. 68, no. 60; Arveiller-Dulong and Nenna 2005, p. 380, no. 1012; Hizmi 1997, pp. 128, 45\*, fig. 6:18; Whitehouse 2001a, p. 181, no. 722.

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 188. Eulogia Jug

<b>Accession Number</b>	78.AF.24
<b>Dimensions</b>	H. 14.0, Diam. rim 5.3 × 6.0, Diam. base 6.1 cm; Wt. 90.77 g
<b>Date</b>	Sixth–early seventh centuries CE
<b>Production Area</b>	Syro-Palestinian region

<b>Material</b>	Translucent bluish-green glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** The vessel is mended. There are areas covered with incrustation and iridescence. One side of the body, seemingly covered throughout with weathering, is probably missing and has been filled with a material that replicates weathered glass.

**DESCRIPTION** Fine, in-folded, tubular trefoil rim; conical mouth; cylindrical neck; hexagonal body; concave bottom. Three radial lines on the bottom. An annular pontil mark (W. 1.6 cm) is visible on the bottom. All sides of the body are mildly convex.

A slightly lopsided, vertical coil handle, applied to the middle of the neck, rises to the edge of the rim.

On the sides of the body the following motifs are imprinted (starting below the handle and moving counterclockwise):

1. A stylized vertical branch, probably a palm frond, with seven or eight pairs of straight, diagonal, elongated leaves.
2. A band of three vertically arranged lozenges, each inscribing a central circular boss. The lozenges at top and bottom are incomplete and only partly fit in the panel.
3. Nothing visible, probably a modern restoration.
4. A stylized vertical branch, probably a palm frond, with nine pairs of straight, diagonal, elongated leaves.
5. A band of three vertically arranged lozenges, each inscribing a central circular boss. The lozenges at top and bottom are incomplete and only partly fit in the panel.
6. A network of eleven staggered rows of three lozenges, each one with a circular boss at its center, covering the entire side.

**COMMENTS AND COMPARANDA** A large group of mold-blown vessels with Christian, Jewish, geometric, and vegetal motifs in sunken relief is long known and discussed in archaeology (Barag 1970c, p. 1971). They are dated between the fourth and the seventh centuries, predominantly in the sixth to the mid-seventh centuries. They were produced in Syria and Palestine to meet the needs of pilgrims to contain *eulogiae*—the blessings,

mementos of earth, oil, or water from holy places, that would permit the pilgrim to call upon its protective powers at a later date (Curčić and St. Clair 1986, p. 36; Newby 2008, pp. 12–17).

The particular group of mold-blown jugs, flasks, and jars to which this vessel belongs comprises almost exclusively hexagonal vessels, with vegetal and geometric decoration, including palm fronds (a Tree of Life or an allusion to the Entrance of Christ into Jerusalem). Three different panels were used in their decoration, each repeated twice and arranged in various ways (Stern 1995, pp. 250–251; Newby 2008, pp. 256–281). They are known mainly in translucent greenish glass, and on the underside they have a rosette or radial lines (Newby 2008, pp. 274–277, nos. 89, 90). The distribution of findspots indicates that they were made in Syria, probably in more than one workshop.

No exact parallel for the particular arrangement of the motifs on the sides of this jug has been located. Also unique is the placement of the handle at mid-neck height. For the closest parallels, see Newby 2008, geometric series, hexagonal molds, pp. 260–271; and compare also Stern 1995, pp. 260–264, nos. 178–186.

**PROVENANCE** 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, Inc., New York, April 5, 1940, lot 104, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 104, ill. Stothart 1965, p. 20, no. F-13.

Wight 2011, pp. 96, 99, fig. 68

**EXHIBITIONS** None



## 189. Eulogia Jug

<b>Accession Number</b>	2003.344
<b>Dimensions</b>	H. 25.7, Diam. rim 6.0, max. Diam. 7.5 (at the shoulders), Diam. base 6.3 cm; Wt. 235.20 g
<b>Date</b>	Mid-fifth–early seventh centuries
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent olive-green glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a two-part mold

**CONDITION** Reassembled with fills on the body and shoulder. The surface presents some patchy iridescence and brownish accretions.

**DESCRIPTION** In-folded, tubular rim; conical mouth; cylindrical neck widening considerably toward the body. Conical, uneven shoulders and hexagonal body standing on a flat, slightly concave bottom. Across the bottom a straight ridge is visible, the seam of the two parts of the lower part of the mold. At the center of the bottom is an annular pontil mark (W. 1 cm).

Applied trails are wound under the rim and at mid-neck. A thick coil handle has been applied on the shoulder and drawn up to the neck. The six sides of the body are uneven, ranging from 2.2 to 4.5 cm in width. On the sides of the body the following mold-blown low-relief themes are depicted left to right, beginning under the handle:

1. A network of 11 rows of two small (0.6 × 0.6 cm) lozenges (W. 2.2 cm).
2. A human body-shaped opening, which is almost entirely filled with a schematic figure surrounded by bosses. The body is covered with cross-hatch pattern, rendering the wrapping with bands. The panel is surrounded by four bosses vertically (from bottom upward: circular, oval, smaller circular, oval, circular) and three circular ones horizontally (W. 4.5 cm).
3. Six rows of pairs of bosses (W. 2.6 cm).
4. Latin cross with triangular endings of arms (*croix furchée*) with small globular terminals at the corners. Above and below the cross are four oblique oval bosses, which are pointing toward the center of the cross, and four more flank the horizontal arm (W. 3.4 cm).
5. An oval handleless vase below. The vase has conical mouth, biconical body, and tall conical base. From the vase stems a winding grape vine full of bunches and leaves (W. 4.5 cm).
6. A network of 19 rows of two larger (1 × 1 cm) lozenges. A circular boss is placed at the center of the lozenges of the five lower rows (W. 3 cm).

**COMMENTS AND COMPARANDA** A large group of mold-blown vessels with Christian, Jewish, geometric, and vegetal motifs in sunken relief has long been known and discussed in archaeology (Barag 1970c, p. 1971). They are dated between the fourth and seventh centuries, predominantly in the sixth to the mid-seventh centuries. They were produced in Syria and Palestine to meet the needs of pilgrims to contain eulogiae—the blessings, mementos of earth, oil, or water from holy places, that would permit the pilgrim to call upon its protective powers at a later date (Curčić and St. Clair 1986, p. 36; Newby 2008, pp. 12–17). For two direct parallels, see Newby 2008, pp. 174–175, no. 71; *3000 Jahre Glaskunst*, p. 90, no. 326. Also, cf. Stern 1995, p. 267, no. 190; Matheson 1980, p. 133, no. 354.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 181, no. 504.



## 190. Hexagonal Bottle with High-Relief Vessels / Flask

<b>Accession Number</b>	2003.297
<b>Dimensions</b>	H. 7.3, Diam. rim 2.2, Diam. base 2.0 cm; Wt. 21.76 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Phoenician region
<b>Material</b>	Opaque white glass
<b>Modeling Technique and Decoration</b>	Body mold-blown into a four-part mold of three vertical sections joined to a disk-shaped base section; mold seams between panels 2 and 3, 4 and 5, 6 and 1; free-blown and tooled neck and rim

**CONDITION** Fully preserved. Some incrustation on the interior and in small areas of the exterior. Small part of the body (the top of one of the columns) is modern fill.

**DESCRIPTION** Flaring, in-folded, tubular rim; cylindrical neck, tapering toward the bottom; hexagonal body; flat bottom with raised base-ring. On the bottom are visible three straight mold seams that meet at the center.

On the shoulder, six pointed arches, each containing an unidentified, large, egg-shaped object. On the body, six rectangular panels are divided by columns, each with an abacus and torus capital, smooth shaft, and high double

torus base. In the panels are presented six vessels, from left to right:

[Seam, concealed in the fruit and in the column's shaft]

1. Krater, a footed bowl with tall cylindrical neck with vertical grooves, oblate body, and tall crooked stem, the mouth with two rows of rounded objects.
2. Amphora, a footed wide-mouthed vessel with two vertical handles on the shoulder. If not an amphora, probably a hydria with the third handle turned to the back.

[Seam, concealed in the fruit and in the column's shaft]

3. Krater, a footed bowl with wide opening and two curving handles from shoulder to rim, the opening containing three rows of rounded objects, probably fruits.
4. Oinochoe, a footed jug with a round mouth and high handle to the right.

[Seam, concealed in the fruit and in the column's shaft]

5. Amphora, a second footed wide-mouthed vessel as in panel no. 2.
6. Oinochoe, a spouted jug with handle to the right.

Around the bottom, fillets suspended from the center of one panel to the center of the adjacent panel, with alternating large and small fruits with knobbed surfaces below each column, the larger ones on the seams and covering the fillet.

**COMMENTS AND COMPARANDA** Hexagonal bottles with high relief are the most common type of mold-blown vessels, probably connected to some recurring event or a religious function. This particular type is known as Vessels Type (Stern 1995, pp. 74–81, 115–117). Mold-blown, raised decoration arranged in three zones covers the body with what appears to be a hexagonal architectural structure with vessels set in arched niches or aediculae. The vessels are typical of late Hellenistic metalwares. Every tympanum contains an egg-shaped object, and between the columns stands a vessel—alternately, a jug, a bowl, and an amphora. Under the base line a curved fillet is hanging from the center of one panel to the adjacent panel with a piece of fruit at its center. This particular vessel belongs to Stern's (1995) series A, widely distributed in the eastern Mediterranean, Levant, Aegean islands, and the Black Sea coast. Finds include: Kunina 1973, pp. 113–114, fig. 14; 54, no. 105, fig. 105,

plate 5; Abdul-Hak and Abdul-Hak 1951, p. 114, no. 20, plate XLIX, no. 1; Zouhdi 1964, fig. 39 right; Clairmont 1963, p. 39, no. 146, plate XXI; Fitzwilliam 1978, no. 54a, ill. p. 44; Matheson 1980, p. 46, no. 122, fig. 122; *Holy Land* 1986, pp. 257–258, no. 138, ill.; Price and Cottam 1998, pp. 33–44, fig. 3, no. 27; Stern 1995, pp. 74–78, 113–129, with full bibliography; Antonaras 2012, p. 78, no. 79.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1968, p. 16, no. 20.

von Saldern et al. 1974, pp. 142–143, no. 401.

Wight 2011, pp. 75, 81, fig. 51.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



191. Hexagonal Bottle with High-Relief Vessels / Flask

<b>Accession Number</b>	2003.298
<b>Dimensions</b>	H. 7.0, Diam. rim 2.0–2.2, Diam. base 2.4 cm; Wt. 15.50 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Phoenician region
<b>Material</b>	Opaque white glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a four-part mold of three vertical sections joined to a disk-shaped base section; mold seams between panels 2 and 3, 4 and 5, 6 and 1; free-blown and tooled neck and rim

**CONDITION** Incrustation on the interior and large parts of the exterior. Severely weathered. The flaking surface is covered with iridescence and accretions. The shoulder has been repaired with a large fill. Red striations are visible on the rim and upper neck, probably from a vessel previously held at the tip of the same blowpipe.

**DESCRIPTION** Uneven, slightly flaring, in-folded, tubular rim, mildly pressed to form a spout; short, cylindrical neck; the body overall has an ovoid shape, comprising convex shoulder and lower part, and hexagonal central area. The bottom is flat. The condition of the mold was not good. Either it was worn out or it was not a good copy of its prototype.

On the body, six rectangular panels divided are by seven smooth columns that rest on a double torus base and support a torus capital. A wide abacus is set over each capital and holds a horizontal architrave, which supports six arches formed on the shoulder, each one containing a large, ovoid, indistinct object. In the panels are rendered six vessels, from left to right:

[Seam, concealed in the fruit below the column and the column's shaft]

1. Amphora, a footed wide-mouthed vessel with two vertical handles on the shoulder. If not an amphora, probably a hydria, with the third handle turned to the back.
2. Krater, a footed bowl with wide opening and two curving handles from shoulder to rim, the opening containing three rows of rounded objects, probably fruits.

[Seam, concealed in the fruit below the column and the column's shaft]

3. Oinochoe, a footed jug with a round mouth and high handle to the right.



4. Amphora, a second footed wide-mouthed vessel, as in panel 1.

[Seam, concealed in the fruit below the column and the column's shaft]

5. Oinochoe, a spouted jug with handle to the right.
6. Krater, a footed bowl with tall cylindrical neck with vertical grooves, oblate body, and tall crooked stem, the mouth with two rows of rounded objects.

The columns stand on a continuous baseline under which six fillets are suspended from the center of one panel to the center of the adjacent panel, with alternating large and small fruits with knobbed surfaces below each column, the larger ones on the seams and covering the fillet. The flat base is impressed with three concentric circles around a central knob.

**COMMENTS AND COMPARANDA** See cat. 190.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 142, 193, no. 402.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 192. Hexagonal Bottle with High-Relief Vessels / Flask

<b>Accession Number</b>	2003.299
<b>Dimensions</b>	H. 8.5, Diam. rim 1.8, Diam. base 1.9 cm; Wt. 26.13 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Phoenician region
<b>Material</b>	Translucent blue glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a four-part mold of three vertical sections joined to a disk-shaped base section; mold seams between panels 2 and 3, 4 and 5, 6 and 1; free-blown and tooled neck and rim

**CONDITION** Intact. Some incrustation on the interior and small areas of the exterior.

**DESCRIPTION** Flaring, in-folded tubular rim; long cylindrical neck mildly constricted toward the body; hexagonal body; low base on flat, mildly concave bottom with three straight mold seams that meet at the center.

On the shoulder, six pointed arches, each containing an unidentified large, egg-shaped object. On the body, six rectangular panels divided by columns, each with an abacus and torus capital, smooth shaft, and high double torus base. In the panels appear six vessels from left to right:

[Seam, concealed in the bunch of fruit and the shaft of the column]

1. Oinochoe, a spouted jug with handle to the right.
2. Krater, a footed bowl with tall cylindrical neck with vertical grooves, oblate body, and tall crooked stem, the mouth with two rows of rounded objects.

[Seam, concealed in the bunch of fruit and the shaft of the column]

3. Amphora, a footed wide-mouthed vessel with two vertical handles on the shoulder. If not an amphora, probably a hydria, with the third handle turned to the back.
4. Krater, a footed bowl with wide opening and two curving handles from shoulder to rim, the opening containing three rows of rounded objects, probably fruits.

[Seam, concealed in the bunch of fruits and the shaft of the column]

5. Oinochoe, a footed jug with a round mouth and high handle to the right.
6. Amphora, a second footed wide-mouthed vessel, as in panel 3.

Around the bottom, fillets suspended from the center of one panel to the center of the adjacent panel, with alternating large and small fruits with knobbed surfaces below each column, the larger ones on the seams and covering the fillet.

**COMMENTS AND COMPARANDA** See cat. 190.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 142, no. 404.

Wight 2011, pp. 75, 81, fig. 51.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 193. Hexagonal Bottle with High-Relief Birds / Flask

<b>Accession Number</b>	2003.300
<b>Dimensions</b>	H. 9.2, Diam. rim 2.5, Diam. base 2.5, body 3.7 × 3.7, Th. 0.1 cm; Wt. 48.51 g (with the Plexiglas base)
<b>Date</b>	Middle of the first century CE
<b>Production Area</b>	Syro-Palestinian region, maybe Sidon
<b>Material</b>	Opaque white glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a three-part mold of three vertical sections; vertical mold seams visible after panels 1, 3, 5; free-blown and tooled neck and rim; relief is not crisp

**CONDITION** Intact. Some incrustation on the interior and small areas of the exterior. The surface is weathered and presents some iridescence and brown accretions.

**DESCRIPTION** Slightly flaring, in-folded, tubular rim; long cylindrical neck; hexagonal shoulders and upper body; cup-shaped lower part of the body. The bottom is flat.

The mold-blown relief decoration is arranged in three registers. The central area is divided by seven smooth posts, each pair of them supporting an empty triangular pediment that covers part of the shoulder. A bucranium is placed over each post in the area between the pediments. Each square panel of the central area contains a bird or an insect perching or flying over a nest or rock in relief:

(1) a simplified butterfly to the right on a rock; (2) a bird with a long spoon-shaped bill to the right, on a nest; (3) a small songbird swooping down to the left to feed invisible young in its nest; (4) a bird, a small raptor with diagonally outspread wings, flying to the left over a rock or nest; (5) a bird, perhaps an ibis, to the right, perched on a round mass, probably a rock or possibly a pot; (6) a bird, perhaps a falcon, to the left, perched on an irregularly shaped rock. The columns stand on a continuous baseline, below which 26 adjacent vertical petals cover the lower part of the body to the bottom. The bottom is flat and the seams of the three-part mold are visible.

**COMMENTS AND COMPARANDA** Vessels with birds represented on the central frieze are a small distinct group among mold-blown Hexagonal Bottles with High Relief (see comments on cat. 190) because of their relatively low relief and the cup-shaped lower part covered with petals. It has been suggested that the birds refer to this type's production site, Ornithopolis on the Phoenician coast, which has been said to belong to Sidon (Eisen and Kouchakji 1927, I, 249; Stern 1995, p. 144). In Stern (1995) this particular vessel belongs to Bird Type, series A1. For direct comparanda, see Eisen and Kouchakji 1927, I, 249; Stern 1995, pp. 81–82, nos. 45–46, with further bibliography and detailed examination of the form in general. Reported find places include modern Türkiye and Syria: see de Ridder 1909, p. 152, no. 271, plate X; Abdul-Hak and Abdul-Hak 1951, p. 114, no. 22; Akat, Firatlı, and Kocabaş 1984, pp. 24, 55, nos. 97, 98, figs. 46a and b. Other unprovenanced examples are known from private collections, including *3000 Jahre Glaskunst*, p. 77, nos. 243–244, ill.; Christie's 2016, pp. 20–21, nos. 224–226.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 143–44, no. 410.

Stern 1995, p. 144 n. 9f.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 194. Hexagonal Bottle with High-Relief Birds / Flask

<b>Accession Number</b>	2003.301
<b>Dimensions</b>	H. 8.0, Diam. rim 2.5, max. Diam. 3.8, Th. 0.1 cm; Wt. 29.60 g
<b>Date</b>	Middle of the first century CE
<b>Production Area</b>	Syro-Palestinian region, maybe Sidon
<b>Material</b>	Opaque light blue glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a three-part mold of three vertical sections; vertical mold seams visible after panels 1, 3, and 5; free-blown and tooled neck and rim

**CONDITION** Intact. The surface is weathered and presents an iridescent sheen, brown accretions, and flaking.

**DESCRIPTION** Flaring, tubular rim, first folded out, then up- and inward flattened; cylindrical neck mildly constricted at its base; hexagonal body; downward-sloping shoulder and upward-sloping bottom joined by a hexagonal central part of the body; low, offset base with flat underside.

The mold-blown relief decoration, which is not crisp, is arranged in three registers. The central area is divided by seven smooth posts, each pair of them supporting an empty triangular pediment that covers part of the shoulder. A bucranium is placed over each post in the area between the pediments. Each square panel of the central area contains a bird or an insect perching or

flying over a nest or rock in relief: (1) a simplified butterfly to the right, on a rock; (2) a bird with a long spoon-shaped bill to the right, on a nest; (3) a small songbird swooping down to left to feed invisible young in its nest; (4) a bird, a small raptor with diagonally outspread wings, flying to the left over a rock or nest; (5) a bird, perhaps a falcon, to the left, perched on an irregularly shaped rock; (6) a bird, perhaps an ibis, to the right, perched on a pot. The columns stand on a continuous baseline below which 26 adjacent vertical petals cover the lower part of the body to the bottom. The bottom is flat and the seams of the three-part mold are visible.

**COMMENTS AND COMPARANDA** See cat. 193.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 144, no. 411. Stern 1995, p. 144 n. 9g.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 195. Date-Shaped Unguentarium

**Accession Number** 2003.333

**Dimensions** H. 7.1, Diam. rim 2.5, max. Diam. 3.2 cm; Wt. 19.89 g

<b>Date</b>	First–early second centuries CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Transparent bluish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; the rim was made complete with a small fill. Some iridescence; few pinprick bubbles.

**DESCRIPTION** In-folded, tubular, flaring rim; short, cylindrical neck, crooked; body in the shape of a date. Made in a bipartite mold with two vertical sections.

**COMMENTS AND COMPARANDA** These vessels render naturalistically the fruit of the palm tree (*Phoenix dactylifera*), dates. The entire surface of the vessel is covered by wrinkles, similar to those of a ripe date, and its size, which is approximately 7 cm, is also identical to the size of many of these fruits. Generally this is a widely known and distributed form of unguentarium (Isings 1957, p. 94, form 78d; Antonaras 2009 = Antonaras 2017, pp. 141–142, form 117) that appears in many regions of the Roman Empire. Other comparanda include the following: Clairmont 1963, p. 40, no. 150; Carington-Smith 1982, p. 280, nos. 65–68; Scatozza Höricht 1986, p. 52, no. 105; Stern 1995, pp. 91–94; Kunina 1997, nos. 146–148; Whitehouse 2001b, pp. 47–48, nos. 520–521; Antonaras 2012, pp. 78–79, nos. 80–82.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 174, no. 476. Stern 1995, p. 92, n. 171.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 196. Date-Shaped Unguentarium

<b>Accession Number</b>	2003.334
<b>Dimensions</b>	H. 7.1, Diam. rim 1.9, max. Diam. 3.2 cm; Wt. 16.42 g
<b>Date</b>	First–early second centuries CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Transparent yellow-brown glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; the rim was made complete with a small fill. Some iridescence; few pinprick bubbles.

**DESCRIPTION** In-folded, tubular, flaring rim; short, cylindrical neck; body in the shape of a date. Made in a bipartite mold with two vertical sections.

**COMMENTS AND COMPARANDA** See cat. 195.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 174, no. 477. Stern 1995, p. 92, n. 171.

Wight 2011, pp. 2, 76, 84, fig. 1, fig. 55.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 197. Unguentarium / Grape Flask

<b>Accession Number</b>	2003.331
<b>Dimensions</b>	H. 10.3, Diam. rim 3.1, max. Diam. 5.4 × 4.1, Diam. base 2.8 cm; Wt. 25.72 g
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Probably Syro-Palestinian region
<b>Material</b>	Transparent purple-colored glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact.

**DESCRIPTION** Rounded, fire-polished, flaring rim; cylindrical neck with tooling marks. The body is in the shape of a trilobed cluster of grapes and is covered with 12 rows of large hemispherical knobs imitating grapes. Formed in a bipartite mold; vertical seam hardly noticeable among the knobs on the surface.

**COMMENTS AND COMPARANDA** Mold-blown vessels in the shape of wine grapes are a relatively widespread flask form, and they appear in three distinct periods of Roman history. The oldest examples reproduce the bunch with greater naturalism, as in this vessel and cat. 198 (Isings 1957, p. 94, form 78e; Antonaras 2017, pp. 142–143, form



118); they appear as early as the third quarter of the first century and continue into the early second century, and it has been assumed that they are Syro-Palestinian products (Stern 1995, p. 180). The later examples are dated to the end of the second century, and render the grape more schematically. Two-handled examples appear particularly in the northwestern provinces of the Roman Empire—probably locally produced there—in addition to the handleless variant that prevails in the east (Isings 1957, pp. 108–109, form 91a; Stern 1995, pp. 190–191, no. 119, with detailed bibliography). Finally, there is a third subgroup comprising vessels with body modeled like a grape bunch standing on a discoid base. They are mainly found and were probably made in the Syro-Palestinian region, and they are ascribed to the third century on the basis of stylistic features (Stern 1995, pp. 191–195, nos. 120–128). Other comparanda include the following: Isings 1957, pp. 108–109, form 91a; Auth 1976, p. 72, no. 71; Stern 1995, pp. 190–191, no. 119; Whitehouse 2001a, p. 125, no. 630; La Baume and Salomonson 1976, p. 38, no. 76, plate 8:4; Moirin and Arveiller-Dulong 2010, pp. 215–217, figs. 3–4.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 173, no. 473.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 198. Unguentarium / Grape Flask

<b>Accession Number</b>	2003.330
<b>Dimensions</b>	H. 13.7, Diam. rim 3.6, max. Diam. 6.0 × 6.0 cm; Wt. 72.30 g
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Probably Syro-Palestinian region
<b>Material</b>	Transparent purple-colored glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact. Small part of the rim is restored.

**DESCRIPTION** In-folded, tubular, flaring rim; cylindrical neck partly lopsided on its upper part. The body is square in cross section and is covered with 12 rows of large hemispherical knobs imitating grapes. Formed in a bipartite mold; vertical seam barely noticeable among the knobs on the surface and along the first centimeter of the neck.

**COMMENTS AND COMPARANDA** See cat. 197.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 173, no. 472.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 199. Unguentarium / Pine-Cone Flask

<b>Accession Number</b>	2003.329
<b>Dimensions</b>	H. 10.0, Diam. rim 3.4, max. Diam. 7.4 cm; Wt. 41.82 g
<b>Date</b>	Middle to second half of the first century CE
<b>Production Area</b>	Probably Syro-Palestinian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; small part of the body is missing; surface iridescent.

**DESCRIPTION** In-folded, tubular, flaring rim; cylindrical neck with tooling marks. The body, in the shape of a pine cone, is covered with 10 rows of large hemispherical knobs imitating the scales of a pine cone. Formed in a bipartite mold; vertical seam hardly noticeable among the knobs on the surface.

**COMMENTS AND COMPARANDA** This form of mold-blown flask rendered in the shape of a pine cone with pointed base is quite rare (Stern 1995, pp. 181–182, no.

110). The type appears in two variants: one with broken-off rim, appearing predominantly in southern and western Switzerland and northern Italy; and vessels with folded rim like this vessel, known from Crete (Carrington-Smith 1982, p. 280, nos. 63–64) and other private collections (Auth 1976, p. 73, no. 73; La Baume and Salomonson 1976, p. 39, no. 79, plate 9:2).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 172–173, no. 471.

Stern 1995, p. 181, n. 3f.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 200. Janiform Unguentarium

<b>Accession Number</b>	2003.325
<b>Dimensions</b>	H. 9.8, Diam. rim 4.0, Diam. base 3.7 cm; Wt. 42.43 g
<b>Date</b>	Third–fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, possibly Syro-Palestinian region
<b>Material</b>	Transparent light green glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact; milky crust on some parts.

**DESCRIPTION** In-folded, tubular, horizontal rim; cylindrical neck, tapering toward the body; flat, slightly concave bottom. Body in shape of two young, beardless male faces—boyish, chubby, and with curly hair—arranged back-to-back. One face is a little bit lower than the other. Blown into a bipartite mold of two vertical sections, open at the base. Neck and rim free-blown and tooled. Mold seams concealed in hair at the junction of the heads.

**COMMENTS AND COMPARANDA** Janiform vessels belong to a large group of mold-blown vessels that quite naturalistically depict human heads. The body of the vessel features either a whole head or the frontal part of two heads placed back-to-back. There are also a few examples with more than two heads forming the body. The vessels of the first and second group are occasionally supplemented with a handle. Most of the examples in general are handleless flasks or unguentaria; some are single-handled cups; and a very few are double-handled, close-shaped vessels.

Janiform unguentaria are typically products of the eastern Mediterranean, probably from the Syro-Palestinian region, where many of the extant examples are found; they traveled to the western Mediterranean provinces, the Balkans, and the Black Sea. They are dated from the third (Isings 1957, p. 94, form 78b; Stern 1995, p. 203, form A4) to the middle of the fifth century CE (Antonaras 2009, pp. 324–326, form 146 = Antonaras 2017, pp. 163–164; Foy 2010b, pp. 264–266), characterized by heavy cheeks and chin, and accentuated curly hair. Other comparanda include the following: Hayes 1975, p. 50, no. 94, plate 7; Auth 1976, p. 74, no. 74; Matheson 1980, p. 73, no. 191; Stern 1995, pp. 210, 232–238, nos. 149–157; Foy 2010b, pp. 261–266; Antonaras 2012, p. 82, no. 82; Antonaras 2017, pp. 163–165, form 146.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1968, p. 17, no. 24.

von Saldern et al. 1974, p. 170, no. 466.

Stern 1995, p. 234, nt. 1.b.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



## 201. Flask

<b>Accession Number</b>	2003.345
<b>Dimensions</b>	H. 4.8, Diam. rim 1.4, L. side 2.0, Th. 0.2 cm; Wt. 25.25 g
<b>Date</b>	Fifth–seventh or seventh–eighth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Palestine
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Severely weathered; repaired with small fills near the rim. The surface is iridescent and pitted.

**DESCRIPTION** The rim is vertical and flattened. On the exterior of the rim and 0.5 cm beneath it, a tooled horizontal ridge marks the transition to a wide, cylindrical neck, which tapers toward the body. Mold-blown, rectangular body; rounded shoulder; rests on a flat bottom.

Identical relief, mold-blown decoration appears on all four sides of the body: at the center of each side there is a six-pointed star. At the upper two corners of the side

there are two hardly noticeable reliefs, probably circular blobs, and on the lower two corners triangular reliefs. The relief is not crisp and it is mostly faded. On the bottom is visible a scar of a solid pontil ( $1.4 \times 1$  cm).

**COMMENTS AND COMPARANDA** This flask belongs to a small group of square mold-blown vessels, apparently made in the eastern Mediterranean, decorated mostly with vegetal motifs; their date remains unclear and they have been ascribed either to the Byzantine (fourth–seventh centuries) or the early Islamic (eighth–ninth centuries) periods: Jenkins 1986, p. 17, nos. 11–12 (no. 11 bears identical decoration), dated between the seventh and ninth centuries CE; Bauer 1938, p. 544, no. 100, plate CXLB, fig. 30, from a Byzantine (fourth–seventh centuries) context; Lane 1937, p. 68, fig. 12.H, from a nonstratified context; Oliver 1980, p. 131, no. 230; Whitehouse 2001a, p. 135, nos. 644–645, dated to the period either between the fifth and seventh centuries or between the ninth and twelfth centuries CE; Goldstein et al. 2005, p. 44, nos. 24–26, dated between the fifth and seventh centuries; Ratković-Bukovčan 2004, p. 94, no. 51.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 182, no. 506.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 202. Sprinkler

<b>Accession Number</b>	2003.336
<b>Dimensions</b>	H. 8.3, Diam. rim 5.4, Diam. base 2.6 cm; Wt. 49.96 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent light greenish-yellow glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a bipartite mold; neck, diaphragm, and rim free-tooled

**CONDITION** Complete; iridescent surface.

**DESCRIPTION** In-folded, tubular rim; flaring mouth; short, cylindrical neck, strongly constricted at its base; spherical body; flat base. At the center of the bottom is the straight mold seam. On the body are five mold-blown rows consisting of eight squares each. At the center of each square there is a boss. Irregularities on the pattern are visible.

**COMMENTS AND COMPARANDA** Vessels with a diaphragm formed at the bottom of the neck are known as sprinklers or dropper flasks due to the fact that the diaphragm allowed only individual drops of the fluid content to flow through it. In addition to flasks, jars and amphoriskoi were occasionally finished as sprinklers. They are often decorated with mold-blown and cut motifs, pinched fins, and applied trails, and they mostly appear in the Levant, Syria, eastern Palestine, and Mesopotamia, indicating a production site in the region, although a workshop seems to have been operating in Cologne too—

one that specialized in snake-thread decoration. Sprinklers appeared in the third century CE and continued in the fourth and probably into the early fifth century CE (Stern 2001, pp. 152–153; on other sprinklers, see Antonaras 2012, pp. 91–93, nos. 106–110, esp. pp. 109–110, no. 108, wherein further bibliography). Direct parallels include the following: Auth 1976, p. 78, no. 281; Stern 2001, p. 246, no. 132; Hayes 1975, p. 78, no. 281, plate 7, Royal Ontario Museum, 950.157.185 <https://collections.rom.on.ca/objects/522258>. See also the comparanda for cat. 203.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 175, no. 483.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



203. Sprinkler

**Accession Number** 2003.337

**Dimensions** H. 7.3, Diam. rim 4.2, max. Diam. 5.2 cm; Wt. 31.10 g

<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent light blueish glass
<b>Modeling Technique and Decoration</b>	Mold-blown; blown in a bipartite mold

**CONDITION** Complete; iridescent surface and dark accretions.

**DESCRIPTION** In-folded, tubular rim; flaring mouth; short, cylindrical neck, strongly constricted at its base; spherical body; flat base. The body is covered with a mold-blown network pattern composed of five rows of lozenges. At the center of each lozenge there is a boss. At the center of the bottom is an annular pontil mark (W. 1.6 cm).

**COMMENTS AND COMPARANDA** On sprinkler flasks, see comments on cat. 202. Published parallels include the following: Oliver 1980, p. 120, no. 208; Stern 1995, p. 196, nos. 129, 130; Antonaras 2012, p. 97, no. 93.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 175, no. 484.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



204. Sprinkler Flask



<b>Accession Number</b>	2003.335
<b>Dimensions</b>	H. 12.2, Diam. rim 6.2, max. Diam. 9.5 cm; Wt. 99.59 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Translucent purplish glass
<b>Modeling Technique and Decoration</b>	Mold-blown body; free-blown neck and rim

**CONDITION** Intact. Whitish weathering, especially present in the depths of the cells.

**DESCRIPTION** In-folded, tubular, flaring rim; wide, short, cylindrical neck, constricted at its base to create a diaphragm; spherical body; convex bottom. Neck and rim are free-blown. The mold-blown body is covered with a network of rows of lozenges. The cells are quite uniform in most parts of the body, but along the seam of the mold they are irregular. The mold consisted of two vertical parts, and the vertical seam is visible on the body.

**COMMENTS AND COMPARANDA** On sprinkler flasks, see comments on cat. 202. Published parallels include the following: Sorokina 1967, fig. 4:19; Negro Ponzi 1968–69, pp. 341–342, no. 42; Stern 1995, pp. 195–196, no. 130; Hizmi 1997, p. 45, fig. 8:2; Stern 2001, p. 244, no. 130; Israeli 2003, p. 223, no. 274; Antonaras 2012, p. 83, no. 92.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 174, no. 480.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 205. Amphoriskos / Bulbous Bottle with Two Handles

<b>Accession Number</b>	2003.302
<b>Dimensions</b>	H. 7.0, Diam. rim 2.7, Diam. base 2.0, Th. 0.1 cm; Wt. 26.60 g
<b>Date</b>	Probably second half of the first century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent amber-colored and dark gray (with purple striations) glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; small fill on the rim; some iridescence in the interior.

**DESCRIPTION** Slightly flaring, in-folded, tubular rim; short, cylindrical neck; oval body, resting on a flat base. The seam mark indicates that this piece was blown in a mold of two vertical, hemispherical parts. Along the bottom the straight seam between the two parts of the mold is visible. The entire body is decorated with mold-blown relief designs; namely, 28 elongated tongues cover the upper body, and 29 petals cover the lower body. The central part of the body is covered by a tendril scroll, flanked by a groove with raised ridges above and below. Two vertical, coil handles have been applied to the shoulder and drawn up to the mouth. One handle is dark gray with purple striations, and the second is purple with dark gray striations.

**COMMENTS AND COMPARANDA** There are several published mold-blown flasks decorated with a tendril scroll around the body that is flanked by tongues and petals, decoration that appears in at least three different variants. They have either one or two handles, and it has been suggested (Stern 1995, p. 152) that they represent a miniature version of glass amphorae like the ones signed by the famous glassblower Ennion (see Kunina 1997, p. 273, nos. 109–110; Lightfoot et al. 2014, pp. 74, 127, nos. 3, 35). For direct parallels, see Auth 1976, pp. 71, 199, nos. 66, 329–330; Platz-Horster 1976, p. 39, nos. 56–57; Kunina and Sorokina 1972, pp. 161–162, fig. 7, no. 34; Kunina 1973, pp. 118–120, fig. 16.1.3–5; Kunina 1997, p. 280, nos. 138, 140; Stern 1995, p. 153, no. 57; Dusenbery 1998, pp. 1079–1080; Weinberg and Stern 2009, p. 68, no. 151, fig. 8; Antonaras 2017, p. 139, form 114.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 146, no. 415.  
Stern 1995, p. 152, n. 3n.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



206. Amphoriskos / Bulbous Bottle with Two Handles

**Accession Number** 2003.303

<b>Dimensions</b>	H. 7.1, Diam. rim 2.7, Diam. base 2.7, Th. 0.1 cm; Wt. 26.30 g
<b>Date</b>	Probably second half of the first century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent amber-colored and dark blue glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact.

**DESCRIPTION** The seam mark indicates that this amphoriskos was made in a mold of two vertical, hemispherical parts; edges of mold sections not carefully aligned. Along the bottom the straight seam between the two parts of the mold is visible. Slightly flaring, in-folded tubular rim; short, cylindrical neck; spherical body resting on a flat base. The entire body is decorated with mold-blown relief designs; namely, 22 elongated tongues cover the upper and lower body, and the central part of the body is covered by a frieze of 12 Xs with thickened intersection point, bordered by a groove above and below. Two blue vertical coil handles with a few white striations have been applied to the shoulder and drawn up to the mouth at 90 degrees from the seam.

**COMMENTS AND COMPARANDA** There are several published mold-blown flasks decorated with a central band filled with Xs around the central part of their body and flanked by tongues and petals; this decoration appears in a number of variants. They have either one or two handles, and it has been convincingly suggested (Stern 1995, p. 151) that they were used as aryballoi, containing oil used to clean the bodies of athletes, as is indicated by the metal rings preserved on the handles of some of them, like the one in the Princeton University Art Museum (Antonaras 2012, p. 78, no. 78). For direct parallels, see Lightfoot 1989, p. 25, no. 8; Stern 1995, pp. 150–153, nos. 53–58; Froehner 1903, p. 156, no. 1124, plate 202.3–4; Antonaras 2012, p. 78, no. 78.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 146, no. 417.  
Stern 1995, p. 151 n. 5o.



## 207. Amphoriskos

<b>Accession Number</b>	2003.313
<b>Dimensions</b>	H. 9.4, Diam. rim 2.7, Diam. base 3.0 cm; Wt. 39.50 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Opaque white and translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a four-part mold of three vertical sections joined to a cup-shaped base section; neck and rim free-blown and tooled

**CONDITION** Mended; some areas are filled. The surface is weathered and bears an iridescent sheen; brown accretions around the base of the handles.

**DESCRIPTION** Flaring, in-folded, and flattened tubular rim; cylindrical neck, mildly constricted at its base; convex, sloping shoulder; cylindrical body with convex lower part; flat bottom. Two opposed, bifurcated strap handles of translucent dark blue glass applied on the shoulders, drawn upward, bent, and attached halfway up neck.

The mold-blown decoration consists of a frieze of 16 downturned tongues in raised outline with raised darts between them on the shoulder, and a frieze of 24

upturned identical tongues and darts on the lower part of the body. The central, cylindrical part of the body is bordered on the upper part by a raised ridge and a groove, and on the lower part by a concave band. The central part of the body is decorated with a wreath made of grape and ivy twigs ending in olive tree twigs at the front. On each mold section a different plant is depicted, arranged horizontally, tip to tip; from left to right: (1) ivy branch(es) with four pairs of trefoil leaves pointing toward the center, bundled at the center of the panel with three oblique ring fillets; (2) grape branch(es) with four pairs of multifoil leaves pointing toward the center, bundled at the center of the panel with three oblique fillets; (3) two probably stylized olive branches with two pairs of single-pointed leaves alternating with round fruits, each branch ending toward the center in an oblique, oval thickening. On the bottom are three raised concentric rings surrounding a central boss, the outer ring forming a base-ring 3 cm in diameter.

**COMMENTS AND COMPARANDA** There are several published mold-blown flasks decorated with a central band filled with floral sprays flanked by tongues and petals, decoration that appears in a number of variants. It has been suggested that the concept of the design can be connected to Aristéas, a famous first-century CE glassblower (Harden 1944, pp. 84–86; Stern 1995, p. 166). This vessel is a unique example with two handles from a well-known type of mold-blown vessel, all of which are finished as jugs. They constitute a quite widespread type (Harden 1944, pp. 84–86, 292; Stern 1995, pp. 116–168, nos. 75–77). Several finds originate from the Syro-Palestinian region, where they were quite probably produced (Harden 1944, pp. 84–85, 292; Israeli 1964, pp. 36–37, no. 4b, figs. 6–7), and Cyprus (Vessberg 1952, p. 130, plate VI, no. 20; Karageorghis 1988, pp. 799, 801, fig. 16). They are known also from Austria (Harden 1944, p. 85, no. d; Czurda-Ruth 1979, pp. 144–145, no. 1055, plates 9, 22) and Spain (Price 1974, p. 68, no. 2), and there are a few more with unrecorded findspots (Auth 1976, p. 66, no. 59; Oliver 1980, p. 62, no. 55; Bomford 1976, no. 42). Since the find from Magdalenburg (Czurda-Ruth 1979, pp. 144–145, no. 1055, plates 9, 22) is dated before 45 CE, the whole series is dated before that point. This earlier date is also supported by the fact that opaque glass went out of fashion by the 60s.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 158, no. 440.

Stern 1995, p. 167, n. 8j.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 208. Cylindrical Jug / Flask

<b>Accession Number</b>	2003.314
<b>Dimensions</b>	H. 7.2, Diam. rim 2.46, max. Diam. body 4.1, Diam. base 2.4, Th. 0.1 cm; Wt. 30.30 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Syro-Palestinian coast
<b>Material</b>	Translucent amber-colored and opaque turquoise and dark blue glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a four-part mold of three vertical sections joined to a cup-shaped base section; neck and rim free-blown and tooled

**CONDITION** The surface presents small patches of iridescence and pitting. The upper part was reattached to the body with large fills.

**DESCRIPTION** Flaring, in-folded, and flattened tubular rim; cylindrical neck mildly constricted at its base; convex sloping shoulder; cylindrical body with convex lower part; flat bottom. One bifurcated strap handle with an

elbow made of two layers of glass, dark blue on the upper side and turquoise on the lower, has been applied on the shoulder and drawn up to the lip, where it forms a vertical tab.

The mold-blown decoration consists of a frieze of 29 downturned flutes on the shoulder and a frieze of 29 upturned identical flutes on the lower part of the body. The central, cylindrical part of the body is bordered on the upper part by a raised ridge and on the lower part by two ridges. The ivy frieze on the central part conceals the seams of the mold. On each mold section is a pair of horizontal twigs with two pairs of heart-shaped ivy leaves intertwined in a knot at the center of the panel. On the bottom are three raised concentric rings surrounding a central boss, the outer ring forming a base-ring 2.4 cm in diameter.

**COMMENTS AND COMPARANDA** This piece belongs to a variant of a well-known type of mold-blown vessel, all of which are finished as jugs, with the exception of cat. 207, which is an amphoriskos (Harden 1944, pp. 84–86, 292; Stern 1995, pp. 116–168, nos. 75–77, with bibliography). Several finds originate from the Syro-Palestinian region, where they were quite probably produced (Harden 1944, pp. 84–85, 292; Israeli 1964, pp. 36–37, nos. 4a–b, figs. 6–7). Most of them are decorated with an open wreath of ivy, grape, and olive. This particular variant bears a continuous frieze of ivy sprays. Published parallels include the following: Platz-Horster 1976, p. 40, no. 59; *3000 Jahre Glaskunst*, p. 78, no. 250; Christie's 1985, p. 65, no. 105; Stern 1995, pp. 168–169, no. 77.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 158, no. 442.

Stern 1995, p. 169, n. 1a.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 209. Hexagonal Amphoriskos

<b>Accession Number</b>	2003.312
<b>Dimensions</b>	H. 9.0, Diam. rim 2.35, base 2.1 × 2.4 cm; Wt. 24.70 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue and dark greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown in a two-part mold

**CONDITION** Intact; small areas with iridescence and pitting.

**DESCRIPTION** Rounded, fire-polished, flaring rim; short, cylindrical neck; rounded, sloping shoulder; hexagonal body tapering toward the bottom; flat hexagonal bottom bisected by the mold seam. Two coil handles applied on the shoulder, drawn upward, and attached on the upper part of the neck. The handles are placed adjacent to the seam.

On the shoulder, six lunettes in raised outline and a tendril that stems from their side and stretches above them. On the body, six oblong panels framed by a double ridge at the top and a single ridge at the three other sides of each panel. One continuous seam around body and underside of base between panels. Each half of the mold consisted of three panels of equal width, and the motifs on each panel are separated by a ridge. One part of the mold has a palm frond at the central panel flanked by

panels with scrolls facing toward it. In the central panel of the other half of the mold are two ivy leaves flanked by panels with scrolls facing toward them. The upper part of the scrolls of each part are slightly different. In total, four panels bear scrolls and, on the upper part, a lunette with an X-shaped cross; one panel bears ivy leaves and, on the upper part, a plant with vertical stalk and two pairs of downcurved, elongated leaves; one panel bears a palm frond, and on the upper part are three dots. A tendril stems from the side of the lunettes and extends over them. It stems on the right side of the central panels and on the left side of the side ones, forming loose heart-shaped motifs.

Lunettes: (1) X / handle; (2) three dots; (3) X; (4) X / handle; (5) cross; (6) X.

Body panels: (1) scroll facing right; (2) palm frond with 10 pairs of leaves; (3) scroll facing right; (4) scroll facing left; (5) two ivy leaves pointing to the upper and lower ends of the panel; (6) scroll facing left.

**COMMENTS AND COMPARANDA** These hexagonal flasks are known in at least four different variants, which are distinguished by the arrangement and the themes of the decorative motifs. The form derives from a larger form of hexagonal bottles made by the famous glassblower Ennion, who probably drew inspiration for this form from architecture, likely either a shrine or a covered altar, possibly of Dionysus since the vegetation on them is associated with that god and his retinue (Lehrer 1979, p. 9, plate 3, nos. 1–4; Lightfoot et al. 2014, pp. 84–86, nos. 9–10). The only exact parallel, made of yellowish brown glass, is in the Israel Museum, Jerusalem (Israeli 2011, pp. 54–55). For parallels with similar but not identical arrangement of the motifs, see Auth 1976, pp. 66–67, no. 60; Matheson 1980, p. 51, no. 129; Stern 1995, pp. 156–157, no. 63 (second variant of the form, although the motifs are not exactly described, as per von Saldern et al. 1974, p. 158, no. 439); Stern 2001, p. 121, no. 50; Whitehouse 2001a, pp. 44–45, no. 515; Weinberg and McClellan 1992, pp. 125–126, no. 98; *3000 Jahre Glaskunst*, p. 78, no. 257; Israeli 2011, pp. 48–55; cf. also Ravagnan 1994, p. 33, no. 25, color plate III, a vessel with different motifs.

**PROVENANCE** By 1968–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** JGS 1968, pp. 180–181, no. 8.



Galerie am Neumarkt 1970, no. 129.

von Saldern et al. 1974, p. 158, no. 439, ill. on p. 156.

Stern 1995, p. 157n5.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 210. Amphoriskos

<b>Accession Number</b>	2003.304
<b>Dimensions</b>	H. 8.2, Diam. rim 2.4, max. Diam. 4.1, Th. 0.1 cm; Wt. 34.98 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Translucent green, purple, and dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a two-part mold of two vertical sections; edges of mold carefully aligned; splashware

**CONDITION** Intact.

**DESCRIPTION** In-folded, flattened, flaring, tubular rim; short, cylindrical neck; elongated oval, pointed body. The body of the vessel is purple, with the exception of a part of the rim and neck, which are made of greenish glass, possibly because a small layer of greenish glass was accidentally left on the tip of the blowpipe. The body was

rolled on white blobs of glass before its insertion in the mold and the formation of 20 horizontal, mold-blown ridges from neck to base. Two blue strap handles are applied on the shoulder, drawn up and out to attach the rim, and the end of the band was folded back. The upper part of the mold seams are partly covered by the handles.

**COMMENTS AND COMPARANDA** Several mold-blown miniature glass amphorae exist, all of them dated to the second half of the first century CE. They imitate three different forms of contemporaneous clay amphorae. The first variant, to which cat. 211 belongs, has a tall slender body; the second, to which this vessel belongs, has an ovoid body that turns abruptly inward, to a pointed end; and the third has a conical body with a circular flat base. There are several variations of these three basic forms, indicating that this popular shape was produced in a number of workshops in the eastern Mediterranean and possibly in the west as well (Stern 1995, pp. 157–159, nos. 64–67). For further parallels, see Clairmont 1963, pp. 40–41, no. 154; Arakelian, Tiratzian, and Khachatrian 1969, p. 58, nos. 119–120; Cermanović-Kuzmanović 1974, pp. 186, 188, plates 1:4, 3:16; Mikulčić 1974, pp. 200–201, 206, plate 4, no. 382; Hayes 1975, p. 48, no. 85; Auth 1976, p. 71, no. 69; De Tommaso 1990, p. 51, type 20; Ravagnan 1994, p. 34, nos. 26–27; Stern 1995, pp. 157–159, nos. 64–67; Israeli 2003, p. 139, no. 147; Whitehouse 2001a, pp. 46–47, no. 518; Mandruzzato and Marcante 2007, pp. 39, 59, no. 19 (splashware); Antonaras 2012, pp. 79–80, nos. 83–85.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 147, no. 423. Stern 1995, p. 159, n. 1e–h.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 211. Amphoriskos

<b>Accession Number</b>	2003.305
<b>Dimensions</b>	H. 10.5, Diam. rim 2.7, max. Diam. 4.5 cm; Wt. 35.20 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent green and blue glass
<b>Modeling Technique and Decoration</b>	Body mold-blown in a two-part mold of two vertical sections; edges of mold carefully aligned; the seam is visible along the middle of each side (90° away from the handles)

**CONDITION** Severely weathered; reassembled, with large fills on the body.

**DESCRIPTION** In-folded, everted rim; short, cylindrical neck; elongated, ovoid body; pointed bottom. Two blue coil handles attached on shoulder and upper part of neck. Body covered with 23 horizontal, mold-blown ridges from neck to base.

**COMMENTS AND COMPARANDA** Several mold-blown miniature glass amphorae exist, all of them dated to the second half of the first century CE. They render three different forms of contemporaneous clay amphorae. The first variant, to which this vessel belongs, has a tall slender body; the second, to which cat. 210 belongs, has an ovoid body that turns abruptly inward to a pointed end; and the third has a conical body with a circular flat base. There are several variations of these three basic

forms, indicating that this popular shape was produced in a number of workshops in the eastern Mediterranean and possibly in the west as well (Stern 1995, pp. 157–159, nos. 64–67). For further parallels, see cat. 210.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 147, 156, no. 424.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 212. Basket Amphoriskos

<b>Accession Number</b>	2003.309
<b>Dimensions</b>	H. 9.2, Diam. rim 2.2, max. Diam. 4.9, Diam. base 2.5 cm; Wt. 22.20 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Syro-Palestinian region, maybe Sidon
<b>Material</b>	Greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown in a two-part mold

**CONDITION** Intact; iridescence and pitting.

**DESCRIPTION** In-folded, flaring rim; concave neck; ovoid body; flat base bisected by the mold seam. Two opposing coil handles are attached to the underside of the rim and are drawn down to the shoulder, where they are left floating, not attached to it. Handles positioned over the mold seam. Vessel shaped like a miniature amphora encased in a wicker basket. The basket ends on the shoulder with a rope-like thickening and consists of eight and 13 rows, on the upper and lower part, respectively, divided by a central wreath of eight pairs of laurel leaves alternating with laurel berries around the middle of the basket. On one side of the vessel the leaves point to the right, and on the other side they point to the left.

**COMMENTS AND COMPARANDA** This flask is product of a Syro-Palestinian glass workshop that made handles in an unusual way, not adhering the lower attachment of the handle to the wall of the vessel. This peculiarity gave it the name the Workshop of the Floating Handles in scholarship. Technically it is closely related to Ennion's and Aristreas's workshops in Sidon, dated to the first half of the first century CE. Ten forms of mold-blown vessels, quite diverse among themselves, have been identified as products of this workshop: miniature amphorae, bulbous, bag-shaped, lenticular, and six-sided flasks; more peculiar flasks in the shapes of an acorn, a shell, and a ball; and head-shaped jugs. In addition, they produced free-blown vessels (Stern 1995, pp. 86–91). For this particular shape, see Israeli 1964, p. 39, no. 8a, b (juglets, not amphoriskoi); von Saldern 1968, p. 16, no. 34; Kunina 1973, pp. 111–112, fig. 13; Kunina 1997, p. 268, no. 94; Auth 1976, p. 68, no. 63; Matheson 1980, pp. 50–51, no. 128; *3000 Jahre Glaskunst*, p. 78, nos. 252, 253; Stern 1995, p. 154, no. 59; Mandruzzato and Marcante 2007, p. 58, no. 17 = Calvi 1968, p. 105, no. 246, plate 16:4.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 150, 155, no. 431.

Stern 1995, p. 154, no. 1b, p. 158, no. 2.

Wight 2011, pp. 73, 79, fig. 49.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 213. Basket Amphoriskos

<b>Accession Number</b>	2003.310
<b>Dimensions</b>	H. 8.3, Diam. rim 1.6 × 1.9, max. Diam. 3.9, Diam. base 2.2 cm; Wt. 25.90 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Syro-Palestinian region, maybe Sidon
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown in a two-part mold

**CONDITION** Intact; iridescence and pitting.

**DESCRIPTION** Flaring, in-folded, partly flattened rim; lopsided ovular body, wider at the points where the handles were applied; short conical neck or mouth; ovoid body; flat base. Two coil handles are applied to the underside of the rim, drawn down to the shoulder, and cut off, left floating, not attached to the body. Handles are positioned over the mold seam. Vessel is shaped like a miniature amphora encased in a wicker basket. The mold ended at the beginning of the neck. The vertical seam between the two parts of the mold is not visible along the body but is clearly visible along the center of the bottom.

**COMMENTS AND COMPARANDA** It should be noted that the lower end of the handle is cut off, but it is not pressed into a disk as is the case in other products of this workshop, the Workshop of the Floating Handles (e.g., Stern 1995, p. 154, no. 59). For the form and the workshop, see comments on cat. 212. For this particular shape, see Israeli 1964, p. 39; Stern 1995, p. 154, no. 59, n. 3a;

Mandruzzato and Marcante 2007, p. 58, no. 18 = Calvi 1968, p. 105, no. 248, plate 16:3; V&A nos. 1033–1868: <https://collections.vam.ac.uk/item/O48/toilet-flask-unguentarium/>; Israeli 2011, p. 84; Christie's 2016, p. 28, no. 237.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 150, no. 432, 155 ill.

Stern 1995, p. 88, n. 151, p. 154, n. 3a.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 214. Basket Amphoriskos

<b>Accession Number</b>	2003.308
<b>Dimensions</b>	H. 10.5, Diam. rim 2.8, Diam. base 2.6 cm; Wt. 46.65 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact; iridescence and pitting.

**DESCRIPTION** In-folded, flaring rim; concave neck; ovoid body; flat base. Two opposing coil handles are applied on the shoulder, drawn upward, and attached to the upper part of the neck. Handles positioned at 90 degrees from the mold seam. Vessel is shaped like a miniature amphora encased in a wicker basket of horizontal dashes. Two bands with herringbone, the upper facing to the left and the lower facing to the right, divide it into three parts. Flat base bisected by mold seam.

**COMMENTS AND COMPARANDA** The vessel renders the shape of a miniature amphora encased in a wicker basket in a similar fashion to the two examples in the Getty collection produced by the Workshop of the Floating Handles, cats. 212–213. The single published close parallel is held by Wheaton College, in Norton, Massachusetts (Dusenbery 1971, p. 14, no. 11, fig. 8).

**PROVENANCE** By 1969–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** JGS 1969, p. 109, no. 4.

von Saldern et al. 1974, pp. 150, 155, no. 430.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 215. Lenticular Amphoriskos

**Accession Number** 2003.311



<b>Dimensions</b>	H. 7.9, Diam. rim 2.5, base 2.1 × 2.0, Diam. body 5.9 × 3.7 cm; Wt. 22.15 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish and bluish glass
<b>Modeling Technique and Decoration</b>	Mold-blown in a two-part mold

**CONDITION** Intact; iridescence and pitting.

**DESCRIPTION** In-folded, flaring rim; short, cylindrical neck; lentoid body; small, flat, rectangular base. Two bluish coil handles are applied on the shoulder, drawn upward, and attached to the underside of the rim and top of neck. Handles positioned over mold seams. Raised, mold-blown decoration on each side of the body, consisting of a large, six-petaled rosette surrounded by a wide band filled with a continuous scrolled tendril. At the meeting point of the two halves there is a wide, slightly convex band with a central rib that conceals the seam, bordered by two raised ridges, and stops at the border of the rectangular bottom.

**COMMENTS AND COMPARANDA** Mold-blown lenticular flasks decorated with a rosette at the center of each side are known in four variants. They are mostly decorated with six-petaled rosettes, one with a seven-petaled rosette, and one with a five-petaled rosette. The distribution of the parallels, which were unearthed in the eastern Mediterranean, indicates that the production site of these flasks was also situated in that region dated to the first century CE (Stern 1995, pp. 154–156, nos. 60–61; Stern 2001, pp. 52–53). For parallels, see Saginashvili 1970, pp. 51, 96, no. 10; Israeli 1964, p. 41, no. 10, fig. 15; von Saldern 1968, no. 32; Dusenbery 1971, p. 13, no. 10, fig. 7; Platz-Horster 1976, p. 40, no. 58; Auth 1976, p. 70, no. 67; La Baume and Salomonson 1976, p. 36, no. 64; von Saldern 1980b, p. 50, no. 43; *3000 Jahre Glaskunst*, p. 79, no. 263; British Museum, 1868,0501.187 = Nesbitt 1871, p. 31, no. 187, fig. 44: [https://www.britishmuseum.org/collection/object/G\\_1868-0501-187](https://www.britishmuseum.org/collection/object/G_1868-0501-187); Whitehouse 2001a, pp. 43–44, no. 514. Examples with five-petaled rosettes: Stern 2001, no. 49; Israeli 2003, p. 137, no. 142. Examples with seven-petaled rosettes: Ravagnan 1994, p. 33, no. 23.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 154, no. 436.

Stern 1995, p. 155, n. 2k.

Wight 2011, pp. 76, 84, fig. 54.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 216. Oinochoe / Ribbed Bottle with One Handle

<b>Accession Number</b>	2003.307
<b>Dimensions</b>	H. 7.8, Diam. rim 2.5, Diam. base 3.5, Th. 0.2 cm; Wt. 19.92 g
<b>Date</b>	Probably second half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple and opaque white glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; some iridescence on the inside as well as dark accretions and discoloration; few pinprick bubbles and no impurities. A small fill has been added on the rim.

**DESCRIPTION** Neck and body blown in a two-part mold of two vertical sections. Edges of mold not very carefully aligned. One continuous mold seam around body and



base extends onto either side of neck and follows the line of vertical ribs on body. In-folded, tubular, slightly flaring rim; cylindrical neck; the spherical body is covered by 17 vertical ribs and stands on a flat bottom. An opaque white bifurcated strap handle has been applied on the shoulder and drawn up to the lip, with projecting thumb-rest tab above. Handle placed so that it is not adjacent to the seam. An opaque red striation runs along the interior surface of the handle, and some black inclusions are visible in it as well.

**COMMENTS AND COMPARANDA** There are several published melon-shaped jugs with vertical ribbing that belong to various molds, and those with firm archaeological data are dated to the second half of the first century CE. This form was circulating around the Black Sea coast and in the eastern Mediterranean, where it apparently was made, and it has not been identified in western sites (Stern 1995, pp. 149–150). For direct parallels, see Arakelian, Tiratzian, and Khachatrian 1969, pp. 57–58, nos. 116, 118; Kunina 1973, pp. 123–124, fig. 18 = Kunina 1997, p. 280, no. 139; Stern 1995, pp. 149–151, nos. 50–51.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 147, no. 427. Stern 1995, p. 149, n. 2.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 217. Oinochoe / Ribbed Bottle with One Handle

<b>Accession Number</b>	2003.306
<b>Dimensions</b>	H. 7.5, Diam. rim 2.5, Diam. base 2.9 cm; Wt. 20.14 g
<b>Date</b>	Probably second half of the first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple and greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Fully preserved; small chips missing on the body. Areas covered with weathering and accretions.

**DESCRIPTION** Neck and body blown in a two-part mold of two vertical sections. Edges of mold not very carefully aligned. One continuous mold seam, around body and base, extends onto either side of neck and follows the line of vertical ribs on body.

Fire-polished, horizontal rim; short, cylindrical neck; globular, melon-shaped body covered with 12 wide, vertical, mold-blown ridges; circular, flat base. An olive-green bifurcated strap handle has been applied on the shoulder and drawn up to the lip with projecting thumb-rest tab above. Handle placement not adjacent to the seam.

**COMMENTS AND COMPARANDA** See cat. 216.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 147, no. 426.

Stern 1995, p. 149, n. 2.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 218. Bowl

<b>Accession Number</b>	2003.339
<b>Dimensions</b>	H. 9.3, Diam. rim 10.4, Diam. base 3.3 cm; Wt. 145.40 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Roman Empire, probably western part
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Intact.

**DESCRIPTION** Cut-off, rough, slightly uneven, flaring rim; deep hemispherical body; small, slightly concave bottom. No pontil mark is visible on the bottom. The body is covered with a mold-blown honeycomb pattern comprising four rows of cells.

**COMMENTS AND COMPARANDA** Bowls featuring a honeycomb pattern on their walls are a relatively widespread form among dip mold-blown vessels, that is, vessels which were first blown in a small and shallow mold and then further expanded by free-blowing. They are found throughout the Roman Empire, and several regions have been proposed to be their production sites, including western parts of the empire, the Black Sea region, Syria, and Egypt (Hayes 1975, p. 147; Barkóczy 1971, p. 83; Dusenbery 1971, p. 16). Usually there is a band of vertical ribs below the rim, and below that is the web of hexagonal cells, which may be distorted due to the production technique. In addition, in some cases the honeycomb pattern is supplemented by concentric circles, applied blobs, or a rosette at the center of the bottom. Published examples include the following: Harden 1936, p. 165, no. 472, plate XVI; Isings 1957, p. 133, form 107a; Fremersdorf 1961, pp. 57–58, plate 113; Barkóczy 1971, p. 72, figs. 2–10; Dusenbery 1971, pp. 15–16, no. 15, fig. 12; Auth 1976, p. 85; Goethert-Polaschek 1977, p. 62, form 50, no. 237; Weinberg 1988, pp. 79–80, fig. 4-38: 350; Foy 1995, p. 200, form 13e, nos. 84–91, plate 10; Golofast 2001, pp. 126–127, drawings 81:11, 15–20; Whitehouse 2001a, pp. 110–113, nos. 606, 610; Lazar 2003, p. 121, form 3.10.3, fig. 35; Antonaras 2017, p. 64, form 14 (wherein further parallels are cited).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 176, no. 487.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 219. Beaker

<b>Accession Number</b>	2003.435
<b>Dimensions</b>	H. 14.2, Diam. rim 7.6, Diam. base 5.0 cm; Wt. 67.27 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Intact. Iridescence and on small areas a white layer of weathering.

**DESCRIPTION** Fire-polished, flaring rim; tall, cylindrical body tapering toward the pushed-in, conical base; concave bottom. The body and the base are covered with twisted dip mold-blown ribs. An annular pontil mark (W. 2.2, Th. 0.1 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** This particular shape of beaker is quite rare if not unique among dip mold-blown vessels, that is, vessels which were first blown in a small and shallow mold and then further expanded by free-blowing. For a similar body shape with different base shape, see Whitehouse 2001a, p. 147, no. 661. Spirally winding trails around the body were also used to give a very similar appearance to beakers, such as Vessberg 1952, p. 123, B.II.β, plate IV:11.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 233, no. 684.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 220. Amphora with Indentations

<b>Accession Number</b>	2003.414
<b>Dimensions</b>	H. 19.3, Diam. rim 4.6, max. Diam. 8.5, Diam. base 3.1, Th. approx. 0.2 cm; Wt. 128.21 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Palestinian region
<b>Material</b>	Translucent greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown; applied elements

**CONDITION** Fully preserved. A fracture on the neck and shoulder; faint layer of iridescence on the exterior and reddish incrustation in the interior.

**DESCRIPTION** In-folded, tubular rim; conical mouth; cylindrical neck with a slight constriction at its base; biconical body ending in a small, convex bottom. A thick turquoise coil has been wound three times under the

bottom, forming a base disk. On the body are visible faint, dip mold-blown ribs, slanting from left to right. In addition, ten deep vertical indentations are around the body from shoulder to bottom. Two turquoise coil handles start on the shoulder and end at mid-neck height.

**COMMENTS AND COMPARANDA** Small glass amphorae rendering in miniature the shape of large clay amphorae were quite popular, and they were used as tableware for serving wine. This vessel belongs to a distinctive group of Syro-Palestinian glass table amphorae, appearing in four different types, which have been dated to the fourth and fifth centuries CE (Stern 1977, pp. 84–85). This particular vessel, due to its tall, tubular neck, which is constricted at its base, is ascribed to type III. Like the majority of examples of this type, it is dip mold-blown, with spiraling ribbing and elongated indentations along the body. On the basis of its long, conical body, the presence of a base, and the absence of a decorative coil halfway down neck, it is ascribed to type IIIB1b (Stern 1977, pp. 84–85, fig. 3). The findspots indicate that these may have been produced in Palestine, possibly beginning in the first half of the fourth century CE (Barag 1970a, vol. 2, plate 37, type 10.5 [variant]; Auth 1976, p. 131, no. 164; Bomford 1976, no. 164; Oliver 1980, p. 124, no. 218; Stern 2001, pp. 146–149, nos. 100–101).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 219, no. 636. Wight 2011, pp. 63, 67, fig. 43.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 221. Flask

<b>Accession Number</b>	2003.429
<b>Dimensions</b>	H. 17.1, Diam. rim 4.4, Diam. base 4.0 cm; Wt. 92.53 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown; applied elements

**CONDITION** Mended; some small chips are missing from the body and rim. Iridescence and on small areas a white layer of weathering.

**DESCRIPTION** Fire-polished rim; conical mouth; tall biconical body; pushed-in, conical base; concave bottom. The body is covered with twisted, dip mold-blown ribs. A fine trail wound once on the bottom of the neck delineates the transition to the body.

**COMMENTS AND COMPARANDA** Vessels like this one, which were first blown in a small and shallow mold and then further expanded by free-blowing, that is, dip mold-blown, mainly appear in the fourth and early fifth centuries CE (Stern 2001, pp. 27, 133–134; Antonaras 2017, pp. 18–19). A quite close parallel is in the National Museums of Scotland (Lightfoot 2007, p. 96, no. 224).

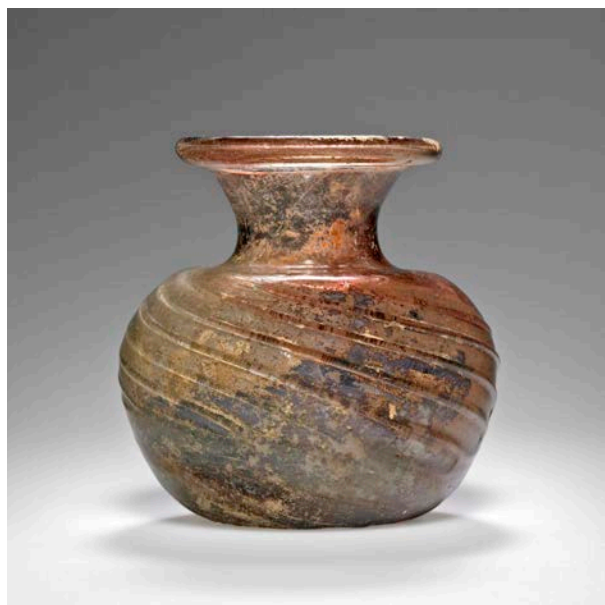
**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 230, no. 674.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 222. Flask

<b>Accession Number</b>	2003.340
<b>Dimensions</b>	H. 9.7, Diam. rim 6.7, max. Diam. 9.4, Diam. base 5.0 cm; Wt. 165.79 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purplish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Intact. One side presents iridescence and dark accretions. The surface is slightly pitted and discolored.

**DESCRIPTION** In-folded, tubular rim; flaring mouth; short, cylindrical neck; flat shoulders; globular body; flat, slightly concave bottom. The body is covered with dip mold-blown ribs, slanting from right at the top to left toward the bottom.

**COMMENTS AND COMPARANDA** Globular, free- and mold-blown flasks, usually with taller necks, are a very widespread form (Isings 1957, pp. 119–120, form 101), which appeared equally in the western European Roman provinces and the eastern Mediterranean from the late third century, and then remained in use throughout the fourth and up to the early fifth century. This particular ribbed example is dip mold-blown, that is, it was initially blown in a small, ribbed mold and then expanded to the final dimensions by further free-blowing and rotating. For a recent overview of examples from western Europe and the Balkans, dated predominantly to the fourth century CE, see Antonaras 2017, pp. 99–100, form 51b. For two very similar, purplish flasks—one with equally wide and short neck—in the Corning Museum of Glass, see Whitehouse 2001a, p. 122, no. 624, and another with a taller neck in the Yale University Art Gallery, Matheson 1980, p. 83, no. 224.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 178, no. 493.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 223. Sprinkler Flask

**Accession Number** 71.AF.81



<b>Dimensions</b>	H. 13.5, Diam. rim 5.5, Diam. base 5.2 cm; Wt. 151.30 g
<b>Date</b>	Second half of fourth to early fifth century CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Intact; iridescence.

**DESCRIPTION** In-folded, tubular, flaring rim; wide, conical mouth; cylindrical neck, wider toward the body. A constriction at the transition from the neck to the body forms a diaphragm. The globular body is covered with 22 well-defined, S-shaped mold-blown ribs. The vessel stands on a flat, slightly concave bottom. Annular pontil mark (W. 2.4, Th. 0.1 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** See cat. 202. For closer parallels, see Whitehouse 2001a, p. 120, no. 621; Hayes 1975, p. 78, no. 282; Stern 2001, p. 254, no. 140.

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Du Bois 2003, pp. 285–286, fig. 8.

**EXHIBITIONS** None



224. Sprinkler Flask

**Accession Number** 71.AF.82

<b>Dimensions</b>	H. 9.5, Diam. rim 6.1, Diam. base 3.1 cm; Wt. 54.65 g
<b>Date</b>	Second half of fourth to early fifth century CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Almost fully preserved. Mended; a small part of the rim area is missing. Covered by iridescence.

**DESCRIPTION** The vessel was initially blown in a small, slightly conical mold with 26 vertical ribs. In-folded, tubular, flaring rim; wide, conical mouth; cylindrical neck wider toward the body. A constriction at the transition from the neck to the body forms a diaphragm. The globular body is covered with well-defined, S-shaped mold-blown ribs. The vessel stands on a flat, slightly concave bottom. Annular pontil mark (W. 1.4, Th. 0.1 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** See cat. 202.

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



225. Flask

**Accession Number** 2003.341

<b>Dimensions</b>	H. 13.3, Diam. rim 3.2, Diam. base 4.0, Th. 0.1 cm; Wt. 45.80 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown; applied elements

**CONDITION** In fair condition. Surface bears a slight iridescent sheen on the body and some flaking on the neck.

**DESCRIPTION** The vessel was initially blown in a small, slightly conical mold with 19 vertical ribs. Fire-polished, vertical rim; wide, conical mouth; short neck—actually a constriction at the transition from the mouth to the body. The upper part of the body is cylindrical and the lower is bulbous; both covered with mold-blown ribs, well-defined and vertical on the upper part, faint and S-shaped on the lower part. The vessel stands on a flat, slightly concave bottom. No pontil mark is visible on the bottom.

A thick coil is wound once around the mouth at mid-height. A fine thread is spirally wound 10 times around the lower part of the mouth.

**COMMENTS AND COMPARANDA** Free- and mold-blown vessels of this particular shape, decorated with thick and thin trails of glass around the mouth, are known from eastern Mediterranean sites: Dussart 1998, p. 150, form BX 42, plate 42, from Kerak, dated between the fifth and seventh centuries CE; Kraeling 1962, p. 270, plate 64b, bottom, center, a find from Ptolemais from a post-fourth-century fill. Unprovenanced examples include one in the Newark Art Museum (Auth 1976, p. 217, no. 440); unpublished flask from the Toledo Museum of Art (no. 1923.1322). In addition, for a free-blown but very similar example from Israel, dated between the fifth and seventh centuries CE, see Barag 1974, p. 13\*, fig. 2:7, plate XXVII:5; for an unprovenanced, smooth example, see Auth 1976, p. 129, no. 161; Stern 2001, p. 305, no. 168; Israeli 2003, p. 172, no. 190; Antonaras 2012, p. 162, no. 230.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 179, no. 496.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 226. Flask

<b>Accession Number</b>	78.AF.37
<b>Dimensions</b>	H. 8.5, Diam. rim 5.0, Diam. base 5.7, Th. 0.2 cm; Wt. 59.60 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown; applied elements

**CONDITION** Intact; light iridescence on the exterior and incrustation on the interior.

**DESCRIPTION** Fire-polished rim; conical mouth; cylindrical neck; hemispherical body; domed bottom. The upper part of the body near the neck is sunken and smooth, giving a crooked stance to the vessel; below, it is covered with 28 dip mold-blown, vertical ribs. No pontil mark on the bottom. A coil is wound once around the mouth; only half of it is preserved.

**COMMENTS AND COMPARANDA** For other bottles with dip mold-blown vertical ribs, see Vessberg 1952, flask A.II.a, plate VII:16; Barag 1970a, vol. 2, plate 41, type XV:2.1; Dussart 1998, p. 164, type B.XIII.1121a2, plate 51:9; Arveiller-Dulong and Nenna 2005, p. 459, no. 1286; Antonaras 2012, pp. 87–89, no. 100–104.

**PROVENANCE** 1953, Spink & Son, Ltd., sold to J. Paul Getty, 1953; 1953–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978.

**BIBLIOGRAPHY** Stothart 1965, p. 21, no. F-30.

**EXHIBITIONS** None



## 227. Lentoid Flask

<b>Accession Number</b>	78.AF.20
<b>Dimensions</b>	H. 16.5, Diam. rim 4.8, Diam. base 9.5 × 4.0 cm; Wt. 161.60 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent amber-colored and greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Mended, fully preserved, and partly covered with incrustations; many pinprick bubbles.

**DESCRIPTION** In-folded, tubular, flaring rim; tall cylindrical neck, tapering toward the body, constricted at its base; lentoid body; flat, slightly concave bottom; a pair of looped coil handles of greenish-blue glass extend from shoulder to mid-neck. Body covered with 27 mold-blown oblique, S-shaped ribs up to the handle bases. Shoulders are smooth. Tool-mark depressions on both sides of upper

part of the body. At the center of the bottom is a solid pontil mark (W. 1.9 × 0.9 cm).

**COMMENTS AND COMPARANDA** Double-handled, lentoid flasks with oblique, mold-blown ribbing on the body are known from the Syro-Palestinian region in the fourth–fifth centuries CE (Barag 1970a, vol. 2, plate 37, type IX:8). On most of them the handles are made of a strikingly different glass color (Hayes 1975, p. 106, no. 389; Israeli 2003, p. 269, no. 359; Arveiller-Dulong and Nenna 2005, p. 396, nos. 1069–1070; Miho Museum 2001, p. 106, no. 156; Antonaras 2012, p. 96, no. 113), although single-colored examples are known as well (*3000 Jahre Glaskunst*, p. 88, nos. 317–318; Arveiller-Dulong and Nenna 2005, p. 397, nos. 1071–1072).

**PROVENANCE** 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 102, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 102, ill.

**EXHIBITIONS** None



## 228. Flask

<b>Accession Number</b>	2003.342
<b>Dimensions</b>	H. 14.5, Diam. rim 3.8, Diam. base 1.5 cm; Wt. 55.01 g
<b>Date</b>	Third–fourth centuries CE

<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Covered with iridescence and milky white crust.

**DESCRIPTION** In-folded, flaring, tubular rim; conical mouth constricted at its base, almost forming a diaphragm; skewed oblong, almost cylindrical body, wider toward the bottom, ending in a solid tubular toe with a globular finial. A pair of coil handles have been applied on the shoulders and drawn up to the rim. The mouth is free-blown and smooth; the body is dip mold-blown and decorated with 20 ribs, vertical at the top and on the toe, and S-shaped along the body. Mark of a solid pontil (W. 1 cm) is visible on the bottom.

**COMMENTS AND COMPARANDA** No direct comparanda have been found, but this flask can be connected to the free-blown tubular jars produced in the Syro-Palestinian region between the fourth and fifth centuries (Stern 2001, pp. 255–257, nos. 141–143), and the double kohl tubes from Palestine of the late fourth to the sixth centuries (Barag 1970a, vol. 2, plate 39, type 12; Stern 2001, pp. 317–320, nos. 179–182); both groups were decorated with spirally wound fine trails, in a fashion quite similar to the effect of the oblique mold-blown ribbing on this vessel. Furthermore, the vessel can also be associated with the conical flasks with similar handles from Palestine (Barag 1970a, vol. 2, plate 37, type 10:4-1, 511).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 180, no. 497.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 229. Plate

<b>Accession Number</b>	2003.387
<b>Dimensions</b>	H. 1.7, Diam. rim 14.7, Diam. base 13.2 cm; Wt. 140.09 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; small chips on the rim. Parts covered with crust and iridescent weathering.

**DESCRIPTION** Ground, vertical rim; conical body, flat bottom. A fine groove under the rim on the interior. Two incised concentric grooves at the middle of the bottom and a pair of small ones at the center of it.

**COMMENTS AND COMPARANDA** Plates of similar shape, usually with mildly convex—and not flat—bottom and with incised decoration, are mainly known in western Roman provinces, dated to the fourth and fifth centuries CE. For parallels, see comments on cat. 230.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 207, no. 583.

Wight 2011, pp. 104, 118, fig. 87.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 230. Bowl / Plate

<b>Accession Number</b>	78.AF.33
<b>Dimensions</b>	H. 4.2, Diam. rim 15.4, Diam. base 5.6 cm; Wt. 98.25 g
<b>Date</b>	Fourth–early fifth centuries CE
<b>Production Area</b>	Western or central Europe, or Italy
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended and weathered.

**DESCRIPTION** Fire-polished rim; concave walls tapering toward the flat, slightly concave bottom. On the interior there is incised decoration: 0.5 cm below the rim is one shallow groove, which is 0.4 cm wide; and at mid-body height (2.2 cm below the rim) is one band of parallel, shallow incisions.

**COMMENTS AND COMPARANDA** This form of plate is widely distributed, mainly in the western Roman provinces, and is dated to the fourth and fifth centuries CE. The incised decoration quite often found on them indicates that they must have been made in various sites, both in Italy and in the eastern Mediterranean (Isings 1957, pp. 36–37, form 18, or rather pp. 143–144, form 116; Fünfschilling 2015, pp. 322–323, form AR 55.1; Antonaras 2017, pp. 66–67, form 16, wherein many parallels are cited).

**PROVENANCE** 1950, Spink & Son, Ltd. (London, England), sold to J. Paul Getty, 1950; 1950–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 231. Dish

<b>Accession Number</b>	76.AF.29
<b>Dimensions</b>	H. 5.0, Diam. rim 22.3, Diam. base 10.5 cm; Wt. 286.25 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean. Probably Syro-Palestinian, with possible Egyptian influence
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; cracks and breaks visible on one area of the rim.

**DESCRIPTION** Fire-polished, slightly flaring rim; shallow body with convex walls; pushed-in, conical, band base; flat bottom. Faint, slanting tooling marks on the base. No pontil mark visible on the bottom.

**COMPARANDA** Barag 1970a, vol. 2, plate 30, type II:12; Hayes 1975, p. 103, no. 372; Barag 1978, pp. 16–17, no. 27, fig. 8; Aviamand and Gorin-Rosen 1997, p. 29, fig. 2:8; Shourkin 1999, p. 176, fig. 20:1; Antonaras 2012, pp. 106–107, no. 132.

**PROVENANCE** 1976, Dr. Sidney Port and Idelle Port (Santa Monica, California), donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





## 232. Plate

<b>Accession Number</b>	2003.351
<b>Dimensions</b>	H. 4.5, max. Diam. rim 23.0, min. Diam. rim 19.2 cm; Wt. 158.86 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** Intact. Iridescence and some areas with incrustation. An elongated notch, probably a broken air bubble, on the interior near the rim at the area of maximum diameter, where letter Γ is.

**DESCRIPTION** Oval plate with fire-polished rim; shallow, conical body; applied, band-shaped, conical base-ring.

Incised decoration on the exterior: the word *YTEIA hygeia* ("health") in capital Greek letters. The letters are formed with double parallel lines. The letters are arranged loosely around the plate, and each one of them is surrounded by four parallel slanting strokes. In the area in front of the Y is a wheat stalk with an ear of five rows of kernels. On the interior of the bottom is a motif that can be understood as another wheat stalk.

**COMMENTS AND COMPARANDA** This plate belongs to a quite diverse group of vessels, which include several different shapes—beakers, shallow bowls or dishes,

globular flasks or bottles, and one jug—which were decorated with incised decoration and inscriptions with double-line lettering. Finds are dated between the third and fifth centuries CE, mostly to the fourth century CE. This group was widely distributed, and it has been proposed that the vessels were produced in a number of dispersed workshops, predominantly in the eastern Mediterranean, western Asia Minor, and Egypt, but also probably Cologne (Fremersdorf 1967, pp. 105–108, plates 104–109; Harden 1967/8, pp. 43–55; Grose 1985, pp. 23–28; Stern 2001, pp. 137–138, 160–161; Lightfoot 2013b, pp. 358–362).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 118, no. 520.

Lightfoot 1990, app. no. 12.

Wight 2011, pp. 77, 91, fig. 64.

Lightfoot 2013b, p. 357, no. 15.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 233. One-Handled Cup / Modiolus

<b>Accession Number</b>	2003.290
<b>Dimensions</b>	H. 12.2, Diam. rim 14.5, Diam. base 6.7, Th. 0.1 cm; Wt. 212.37 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Italy, western Roman Empire
<b>Material</b>	Translucent dark blue and opaque light blue, white, and yellow glass
<b>Modeling Technique and Decoration</b>	Free-blown; splashware

**CONDITION** Mended; small body parts are missing.

**DESCRIPTION** Fire-polished, flaring rim; partly lopsided, conical mouth; bell-shaped body; pushed-in, tubular base-ring; flat bottom.

A thick white thread is applied flush on the rim. The body is covered with widely spaced light blue, white, and a few yellow specks, giving the impression of a mosaic vessel. A massive, ridged strap handle made of undecorated dark blue glass is attached on the body and on the mouth area, bent to form a wide ring.

**COMMENTS AND COMPARANDA** Modioli, a type of relatively wide and deep, one-handled cups, were a quite widespread form of vessel in the late first–early second centuries CE (Isings 1957, pp. 52–53, form 37; Haevernick [1978] 1981, pp. 367–374). Literary sources and pictorial testimony indicate that modioli were used as drinking cups, although the name is a diminutive of *modius*, a measuring vessel (Hilgers 1969, pp. 67–68, 224–225). Most examples have straight walls and bodies that are cylindrical or conical tapering toward the base-ring, like cat. 234. A folded tubular flange in the form of a figure eight at the transition from the vertical body to the rim is often present, but not among the JPGM examples. A single wide, circular strap handle is attached to the upper part of the body. The form is considered a western, probably Italian, product, but it is not uncommon in eastern parts of the empire as well. Several variant shapes have been identified, like this bell-shaped vessel, which suggest that modioli were produced in a number of workshops. For direct comparanda of this vessel, see Kunina 1997, pp. 149, 291, no. 185; Whitehouse 1998a, pp. 42–43, no. 101; Arveiller-Dulong and Nenna 2005, p. 295, no. 875; Lazar 2003, p. 58, fig. 19. In general for colored modioli, see Haevernick [1978] 1981, pp. 372–373.

**PROVENANCE** By 1972–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1972, p. 153, no. 9, ill.

von Saldern et al. 1974, p. 139, no. 390.

Wight 2011, pp. 62, 64, fig. 39.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 234. Modiolus

<b>Accession Number</b>	78.AF.31
<b>Dimensions</b>	H. 12.7, Diam. rim 15.6, Diam. base 19.0 cm; Wt. 236.45 g
<b>Date</b>	First century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Transparent light green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; partly covered with incrustations and iridescence.

**DESCRIPTION** Fire-polished, rounded, horizontal rim; deep, everted conical body; conical, pushed-in, and flattened base-ring; concave bottom. Wide strap handle,

looped on upper body. At the center of the bottom is an annular pontil mark (W. 3 cm).

**COMMENTS AND COMPARANDA** On modiolis in general, see cat. 233. For direct comparanda of this vessel, see Isings 1957, pp. 52–53, form 37; Calvi 1968, pp. 65, 73, plate 11:1, C:8, group D; Welker 1974, pp. 27–30; Haevernick [1978] 1981, pp. 328–330; Czurda-Ruth 1979, pp. 51–52; Stern 2001, pp. 87–88, no. 27; Antonaras 2012, p. 137, no. 165.

**PROVENANCE** 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1970, lot 107 through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 124, ill.

**EXHIBITIONS** None



## 235. One-Handled Cup

<b>Accession Number</b>	2003.287
<b>Dimensions</b>	H. 7.0, Diam. rim 6.8–6.5, Diam. base 3.7 cm; Wt. 54.20 g
<b>Date</b>	Late first century CE
<b>Production Area</b>	Western Roman Empire, probably Italy
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown mass of mosaic florets

**CONDITION** Reassembled from many fragments; small areas are filled.

**DESCRIPTION** Fire-polished, irregular flaring rim; bulbous body; concave bottom. A small part of a pontil scar is visible on the bottom. Coil handle applied on the upper body, drawn upward, bent to form a wide circle, and attached under the rim. Fine, elongated white stripes traverse the blue ground of the handle.

Made with floret segments of mosaic canes, fused together and then free-blown. Each floret is made of a thick blue ground of glass combined with a fine white layer, folded spirally, probably in two revolutions.

**COMMENTS AND COMPARANDA** The flask cat. 354 is made with the same technique as this vessel. The technique was used mainly for small vessels, such as jars, jugs, handled cups, and cylindrical cups. The distribution of findspots indicates that they were circulating from Britain through northwestern Europe to the northern coast of the Black Sea. Quite probably they were produced from the late first century to the second half of the second century CE, and they occasionally appear in third-century contexts. The mosaic pattern, even when appearing as curved lines, was probably made of florets with circles around a central dot. (On the technique, see Stern 2017, pp. 132–139; Stern and Fünfschilling 2020, pp. 41–68.)

The bulbous shape of the jug connects it to a well-known form of vessels, mainly from Italian sites, dated to the second half of the first century, although lacking the typical thumb-rest tab on the upper part of the handle (Isings 1957, p. 76, form 57; Beretta and Di Pasquale 2004, p. 241, nos. 2.39–2.40, p. 251, no. 2.69). The closest parallel, also made of dark blue and white florets, but a bit squat, is known from Nymphaion on the Black Sea coast (Kunina 1997, p. 317, no. 315, ill. 167). With regard to shape, equally close are three examples from Nymphaion (Kunina 1997, p. 317, nos. 312–314, ill. 166); another one, pale blue, is known from Cornus, Sardinia (Fortuna Canivet 1969, p. 24, fig. 23). Also, cf. von Saldern et al. 1974, no. 641.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 137, no. 383a.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)



## 236. Bowl, zarte Rippenschale

<b>Accession Number</b>	2003.226
<b>Dimensions</b>	H. 4.8, Diam. rim 8.5, Diam. base 5.5 cm; Wt. 91.05 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Western Roman Empire
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Condition is good, and vessel is intact. Some small areas of iridescence and some minor nicks and scratches. No impurities and very few pinprick bubbles.

**DESCRIPTION** Rough, uneven, cracked-off, slightly flaring rim; hemispherical body; slightly concave bottom. Around the body, 1.7 cm below the rim, are 16 unevenly spaced, vertical pinched ribs. A white thread is wound around the vessel from the center of the bottom to just below the rim: nine rotations in the area below the rim, 10 rotations on the ribs (almost invisible between the ribs), and at least two more on the lowest part of the body to the center of the bottom.

**COMMENTS AND COMPARANDA** One of the earliest free-blown forms of tableware are the ribbed bowls, known by the German term “zarte Rippenschalen.” They appear at the beginning of the first century CE and cease to be produced shortly after the middle of the century. They were made in natural bluish and yellowish glass

(cat. 238), but also in intense colors, including translucent brown, blue (this vessel), and purple (cat. 237). Milky white threads were often used to decorate the intensely colored vases, and opaque white examples were decorated with translucent blue threads. These threads were spirally wound from the center of the bottom to the transition to the rim of the vessel, and then the ribs were pinched around the body. A considerable number of published examples are monochrome and do not have any additional applied decoration. On the form and many direct parallels from controlled excavation sites, see Haevernick [1958] 1981, pp. XI–XXVIII; Haevernick [1967] 1981; Isings 1957, pp. 35–36, form 17; Lith 1977, pp. 29–38; Biaggio-Simona 1991, pp. 71–74; Rütli 1991a; Fünfschilling 2015, AR 28; Stern 2001, pp. 82–83, no. 24; Weinberg and Stern 2009, pp. 45–46; Antonaras 2017, pp. 57–58, form 8.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 100, no. 262; p. 103, plate no. 262.

Wight 2011, pp. 94, 98, fig. 67.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 237. Bowl, zarte Rippenschale

**Accession Number** 2004.20



<b>Dimensions</b>	H. 6.5, Diam. rim 8.1, Diam. base 4.5 cm; Wt. 110.38 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Italy
<b>Material</b>	Translucent purple and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. No impurities and very few pinprick bubbles.

**DESCRIPTION** Rough, cracked-off, slightly flaring rim; hemispherical body; slightly concave bottom. Around the body, 2 cm below the rim, are 22 unevenly spaced, vertical pinched ribs. A white thread is wound around the vessel from the center of the bottom to just below the rim. Four rotations in the area below the rim, 10 rotations on the ribs (faint between the ribs), and at least two more on the lowest part of the body. An additional thread is applied on the neck and wound three times, continuing the thread that covers the body, which finishes right above the ribs.

**COMMENTS AND COMPARANDA** See cat. 236.

**PROVENANCE** Giorgio Sangiorgi, Italian, 1886–1965 (Rome, Italy); by 1968–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern 1968, p. 15, no. 17.

von Saldern et al. 1974, p. 100, no. 260.

Wight 2011, pp. 94, 98, fig. 67.

**EXHIBITIONS** Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)

Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 238. Bowl, zarte Rippenschale

<b>Accession Number</b>	2003.227
<b>Dimensions</b>	H. 4.4, Diam. rim 6.4, max. Diam. 7.3, Diam. base 3.0, Th. 0.09 cm; Wt. 29.60 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Western Roman Empire
<b>Material</b>	Translucent yellow glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Some small areas of iridescence, and some minor nicks and scratches. No impurities and very few pinprick bubbles.

**DESCRIPTION** Rough, uneven, cracked-off, slightly flaring rim; deep hemispherical body; flat bottom. Around the body, 1.5 cm below rim, are 15 unevenly spaced, vertical pinched ribs.

**COMMENTS AND COMPARANDA** See cat. 236.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 101, no. 266.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 239. Bowl

<b>Accession Number</b>	2003.294
<b>Dimensions</b>	H. 6.5, Diam. rim 8.0, max. Diam. 8.5, Th. 0.1 cm; Wt. 93.01 g
<b>Date</b>	Second–third quarters of the first century CE
<b>Production Area</b>	Western Roman Empire
<b>Material</b>	Translucent green and opaque red and yellow glass
<b>Modeling Technique and Decoration</b>	Free-blown; painted, enameled

**CONDITION** Mended; part of the rim is filled.

**DESCRIPTION** Cracked-off, slightly inward-leaning rim; wide body, curving in toward the flat bottom. A faint horizontal incision is visible 0.4 cm below the rim.

Around the body painted decoration is arranged, comprising four main features:

1. A reddish-brown gazelle, with short strokes along its belly and long, nearly straight antlers, is presented in profile, moving to the right. The gazelle is mid-stride, with its hind legs shown at some distance from one another, while its front are shown parallel and very close to one another, as if standing. The animal has a large eye, open mouth, and ears bent back. The body of the animal partly conceals a bush with big lanceolate leaves.
2. In front of the gazelle is a large bow of three garlands—ribbons—tied together whose central part is decorated with flowers. The lateral garlands are held up by both ends while one end of the

central garland hangs down in a loose spiral. The two lateral garlands have yellow flowers, and the central one has red flowers.

3. To the right of the garlands, a bird is depicted in profile, standing on short grass and in front of a bush. Its body is outlined in red, black, and yellow, and its feet are red. The bird has a round head and short beak; it is possibly a partridge.
4. Further to the right are depicted two more birds of the same species, apparently dead, hanging by their feet.

The decoration concludes with a large bow of three ribbons, whose central part is decorated with flowers. Two are yellow, and the one at the center is red. The perimeter of the vessel's bottom is delineated with 36 strokes. Four ends of what was once an eight-pointed star are visible on the bottom of the vessel.

**COMMENTS AND COMPARANDA** This form of first-century bowl is quite widely distributed (Isings 1957, pp. 27–30, form 12). There are 80 known vessels with enameled decoration like this one; aside from these predominantly identical bowls, there are two amphoriskoi (Rütti 1991b, pp. 124–130; Whitehouse 2001a, pp. 255–258, nos. 846–852; Rütti 2003, pp. 341–349; Mandruzzato and Marcante 2005, pp. 46, 93, no. 215; Czurda-Ruth 2007, pp. 59–60, no. 104, plates 7, 34; Nenna 2008, pp. 15–29). They were mostly made of a dark-colored glass acting as a contrasting background for the polychrome decoration. The decoration was pulverized colored glass, bound with oil or water, applied with a brush onto the vessel's surface, and subsequently fired at a relatively low temperature, enough to fuse it but not so high as to deform the vessel. The decoration of these enameled vessels included vine tendrils, ivy leaves, garlands, and animals (bird, fish, gazelle); a few bear Nilotic scenes. Usually, the underside of the bottoms was decorated with a bird, a rosette, or a star, like this example. They are dated in the period between 20 and 70 CE, and it is still not established whether they were produced in Italy or, less probably, in the eastern Mediterranean. Among the overall similar decorations appearing on this group of vessels, the closest to this bowl are three bowls from Piedmont, Olbia, and Greece (Rütti 1991b, plate 35b, fig. 25a–c).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 140, 152, no. 397, ill.

Rütti 1991b, p. 130, plate 35, fig. 25b.

Wight 2011, pp. 63, 71, fig. 47.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 240. “Hofheim” Cup

<b>Accession Number</b>	2003.362
<b>Dimensions</b>	H. 6.0, Diam. rim 6.3, Th. 0.2 cm; Wt. 118.40 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Italy or northwestern Europe
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; engraved

**CONDITION** Intact; surface is weathered, with patchy iridescence and chalky accretions.

**DESCRIPTION** The rim is cracked-off; truncated conical upper part of body, and convex lower part; flat bottom; wheel-engraved lines 0.3 cm below the rim and a fine horizontal incision on the lower part of the body (3.7 cm from rim).

**COMMENTS AND COMPARANDA** Among the earliest examples of free-blown vessels are those known as “Hofheim cups.” They are thick, usually bluish but occasionally intensely colored vessels, with wheel-cut horizontal grooves on the exterior, bulbous bodies, and high kicks at the bottom, characteristics that date them to the second half of the first century CE. They are ascribed to Italian or northwestern European workshops. The form generally appears in late Augustan and mainly Tiberian–Claudian contexts. Earlier examples are straight-walled with flat bottom; later ones are more bulbous, with sharp, high kicks on the bottom. Both features lead to an earlier date for this vessel (Isings 1957, pp. 27–30, form 12; Barag 1970a, vol. 2, plate 31, type III:1; Czurda-Ruth 1979, pp. 37–43; Oliver 1980, p. 255, no. 51, fig. 4; Stern 2001, pp. 73–74, nos. 16, 17; Antonaras 2012, p. 108, nos. 134–135).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 195, no. 535.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 241. Cup

<b>Accession Number</b>	2003.421
<b>Dimensions</b>	H. 6.8, Diam. rim 7.0, Diam. base 4.2 cm; Wt. 58.91 g

<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire, eastern Mediterranean, possibly Cyprus
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; covered with iridescent weathering; encrusted on the interior. Decorative thread has partly fallen off.

**DESCRIPTION** Fire-polished rim; slightly everted, cylindrical body curving in toward the pushed-in base-ring. No sign of pontil mark on the bottom. A fine thread was spirally wound 16 times from the bottom to under the rim. It is not preserved anywhere; only traces of its path remain visible on the upper five revolutions.

**COMMENTS AND COMPARANDA** This beaker belongs to a long-known, probably Cypriot, vessel form (Vessberg 1952, beaker B.II.y, p. 123, plate IV:10). Published parallels include Hayes 1975, p. 65, no. 186; La Baume and Salomonson 1976, no. 158; Antonaras 2012, p. 130, no. 177; also, cf. Whitehouse 2001a, pp. 145–146, no. 658.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 222, no. 649.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



242. Bowl

**Accession Number** 2003.388

<b>Dimensions</b>	H. 4.0, Diam. rim 8.5, Diam. base 4.5, Th. 0.1 cm; Wt. 33.69 g
<b>Date</b>	First–early second centuries CE
<b>Production Area</b>	Mediterranean, probably Italy
<b>Material</b>	Transparent amber-colored glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; some areas covered with iridescent weathering; very few pinprick bubbles.

**DESCRIPTION** In-folded and flattened, flaring rim; conical body; pushed-in base-ring; concave bottom. Pair of crimped coil (pseudo-)handles on opposite sides of the rim. At the center of the bottom is a faint annular pontil mark.

**COMMENTS AND COMPARANDA** These conical bowls with the characteristic horizontal, crimped pseudo-handles are widely distributed in both the eastern and western provinces of the Roman Empire. They were produced during the first century CE, and they occasionally appear in the early second century as well; considered to be an Italian product (Isings 1957, p. 59, form 43; Stern 1977, pp. 57–58; Antonaras 2017, p. 59, form 11). Published parallels include Biaggio-Simona 1991, vol. 2, no. 176.2.092; Lancel 1967, pp. 9, 94, no. 195; Vessberg 1952, p. 116, B.I.β.3; Price 1992, pp. 431, 450, nos. 224–225; Davidson 1952, p. 80, nos. 612–613, plate 54; von Saldern 1980a, p. 21, nos. 94–99; Hayes 1975, p. 64, no. 179, fig. 6.194; Auth 1976, p. 95, no. 103.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 207, no. 584.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 243. Bowl

<b>Accession Number</b>	2003.238
<b>Dimensions</b>	H. 3.5, Diam. rim 7.4, Diam. base 3.7, Th. 0.1 cm; Wt. 49.40 g
<b>Date</b>	First century CE
<b>Production Area</b>	Mediterranean, probably Italy
<b>Material</b>	Opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; very few nicks and scratches. Some brown discoloration on both the interior and exterior surfaces.

**DESCRIPTION** Fire-polished, rounded, everted rim; folded tubular flange below the rim; inverted conical body, slightly convex; solid, pushed-in, and uneven base-ring. At center of the bottom is an annular pontil mark (W. 1.6 cm).

**COMMENTS AND COMPARANDA** This form of bowl, with cutout collars below a fire-polished rim, is widely distributed in both the eastern and the western provinces of the Roman Empire. They were produced, possibly in Italy, before 45 CE and continued during the first century CE, occasionally appearing in the second century as well. Similar vessels include Isings 1957, form 69a; Barag 1970a, vol. 2, plate 31, type 3.10; Czurda-Ruth 1979, pp. 62–65; Stern 2001, pp. 47–48, 84–85, no. 25; Vessberg 1952, pyxis type B:II, plate IX:40–41; Auth 1976, no. 97; Whitehouse 1997a, pp. 84–86, nos. 115–122; Israeli 2003, p. 120, no. 116; Antonaras 2012, pp. 123–124, nos. 138–141.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 108, no. 293; p. 109, plate no. 293.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 244. Bowl

<b>Accession Number</b>	2003.372
<b>Dimensions</b>	H. 3.3, Diam. rim 7.2, Diam. base 5.3, Th. 0.1 cm; Wt. 43.75 g
<b>Date</b>	First century CE
<b>Production Area</b>	Mediterranean, probably Italy
<b>Material</b>	Transparent yellowish green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; small chip is missing from the underside. Parts covered with milky crust and iridescence; very few pinprick bubbles

**DESCRIPTION** Flaring, out-folded rim; conical body; folded, tubular base-ring; flat bottom. At the center of the undersurface there is an annular pontil mark (W. 2.1, Th. 0.3 cm).

**COMMENTS AND COMPARANDA** See cat. 243. In addition, compare Harden 1940–48, p. 49, fig. 20:I; Auth 1976, p. 95, no. 102; Boosen 1984, p. 39, no. 48:1, 2; Kunina 1997, p. 311, no. 287; Antonaras 2012, p. 111, no. 142.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his



son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 200, no. 559.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 245. Bowl

<b>Accession Number</b>	79.AF.184.5
<b>Dimensions</b>	H. 4.9, Diam. rim 8.3, Diam. base 5.2 cm; Wt. 94.05 g
<b>Date</b>	First century CE
<b>Production Area</b>	Mediterranean, probably Italy
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; surface severely pitted.

**DESCRIPTION** Fire-polished, vertical rim—folded out, down, and up, forming a tubular flange; hemispherical body; slightly concave, solid, pushed-in, and uneven base-ring. At the center of the bottom is an annular pontil mark (W. 1.8 cm).

**COMMENTS AND COMPARANDA** See cat. 243. In addition, compare Kunina 1997, p. 311, no. 286; Antonaras 2012, p. 109, no. 137.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 246. Bowl

<b>Accession Number</b>	2003.363
<b>Dimensions</b>	H. 3.8, Diam. rim 7.7, Diam. base 3.7, Th. 0.1 cm; Wt. 47.30 g
<b>Date</b>	First century CE
<b>Production Area</b>	Italy
<b>Material</b>	Transparent yellowish green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; parts covered with milky crust and iridescence; very few pinprick bubbles.

**DESCRIPTION** Out-folded, tubular rim; convex body walls form a hemispherical body that tapers toward the flat bottom. The vessel rests on an applied pad base. In the interior of the vessel a relief ring (W. 1.5, Th. 0.5 cm) is visible at the center of the bottom. This was probably formed when the pontil, which was attached on the bottom for the shaping of the rim, was removed, before the pad base was applied. At the center of the base, a circular pontil scar (W. 1.1 cm) is visible.

**COMMENTS AND COMPARANDA** This form of bowl is defined by the out-folded tubular rim, which in most cases is inward-leaning, and only occasionally vertical or everted, and the hemispherical body on a pushed-in base. The form appears around the middle of the first century CE and becomes very popular in Flavian times (Isings 1957, pp. 59–60, form 44a). There are dozens of comparanda from Italy and the Adriatic region, all of them dated to the first century CE and ascribed to a North



Italian workshop (Calvi 1968, pp. 67–68, group C, plate C:7; Roffia 1993, p. 78, no. 47; Mandruzzato and Marcante 2005, pp. 28, 96–97, nos. 232–235, 237; Bonomi 1996, p. 163, nos. 368, 369; Pesavento-Mattioli and Cipriano 1992, p. 135, tomb 1, fig. 4:12–13; Toniolo 2000, p. 124; Casagrande and Ceselin 2003, p. 177, nos. 266–267; Larese 2004, pp. 49–50; Alfano 1997, p. 175, no. 156; Facchini 1999, pp. 252–253, nos. 606–609; Roffia 1993, p. 78, no. 47; Biaggio-Simona 1991, pp. 83–85, form 5.3.4, figs. 41–42). Further examples include Whitehouse 1997a, p. 83, no. 113; Antonaras 2012, p. 126, no. 145.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 196, no. 537.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 247. Bowl

<b>Accession Number</b>	2003.379.2
<b>Dimensions</b>	H. 4.6, Diam. rim 7.7, Diam. base 4.5 cm; Wt. 19.41 g
<b>Date</b>	Second half of the first–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent slightly greenish glass

**Modeling Technique and Decoration** Free-blown

**CONDITION** Intact; some iridescent weathering on the interior.

**DESCRIPTION** Flaring rim, folded out and down to form a collar; cylindrical body, slightly tapering and curving toward the bottom, which is slightly concave. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** Acquired with the beaker cat. 258. The shape of the vessel and its rim permit us to hypothesize that it was used as a liner for a metal lamp. There are known parallels from Herculaneum, dated before 79 CE (Scatozza Hörich 1986, p. 37, no. 53, form 14b); Zadar (Ravagnan 1994, p. 192, no. 383); Siphnos, from a grave dated to the first century CE (Mackworth-Young 1949, pp. 82, 85, plate 28,1); and Cyprus (Vessberg 1956, p. 170, fig. 50, no. 37); and at least two more of unrecorded provenance (Hayes 1975, p. 56, no. 131, fig. 3, plate 8; Whitehouse 1997a, p. 76, no. 95).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 204, no. 573b.

Wight 2011, pp. 103, 117, fig. 86.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 248. Bowl

<b>Accession Number</b>	78.AF.21
<b>Dimensions</b>	H. 6.4, Diam. rim 13.1, Diam. base 4.8 cm; Wt. 72.91 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Egypt, or Syro-Palestinian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; surface dulled, covered by iridescence and incrustations; many pinprick bubbles.

**DESCRIPTION** Fire-polished lip; wide, down-leaning rim; gently tapering, everted, conical body with slightly convex sides; flat bottom. Applied conical base with slanting tooling marks. At the center of the bottom is a solid, circular pontil mark (W. 0.8 cm).

**COMMENTS AND COMPARANDA** Among the finds from Egyptian sites there are several deep bowls with conical and convex-shaped body, standing on a base-ring. There is a group with a distinctive, considerably wide, horizontal rim that had either a fire-polished lip or one that was folded at the end, forming a vertical lip suited for the securing of a lid; they are dated to the fifth–sixth centuries CE (Harden 1936, pp. 95–98, form deep bowls A.I.b.I, A.III.a; Whitehouse 1997a, pp. 81–82, nos. 107–110; Hayes 1975, pp. 2–3, for their re-dating, on the basis of pottery co-finds from the third–fourth to the fifth–sixth centuries). For parallels, see Edgar 1905, p. 11, no. 32.446, plate II; von Saldern 1974, p. 103, no. 113; Harden 1936, p. 110, nos. 246–248. Cf. also Harden 1936, pp. 106–107, nos. 228–234, bowls with wide horizontal rim and vertically raised lip.

**PROVENANCE** 1931, Robert Weeks de Forest, American, 1848–1931; 1931–1936, Estate of Robert Weeks de Forest, American, 1848–1931; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 106, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978.

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 106, ill.

**EXHIBITIONS** None



## 249. Bowl

<b>Accession Number</b>	78.AF.22
<b>Dimensions</b>	H. 8.4, Diam. rim 14.0, Diam. base 6.5 cm; Wt. 183.70 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact; surface dulled, covered by iridescence and incrustations; many pinprick bubbles.

**DESCRIPTION** Fire-polished, horizontal rim, pinched to form 13 shallow scallops; a horizontal flange on the underside of the rim, at the transition to the body. The body is cylindrical, gently tapering toward the slightly convex bottom. Tooled, conical base with slanting tooling marks. At the center of the bottom is a solid, circular pontil mark (W. 0.9 cm).

**COMMENTS AND COMPARANDA** Vessels of this form have a horizontal rim with fire-polished, scalloped edge; vertical body walls; flat bottom; and low, pushed-in, slightly conical base-ring (Isings 1957, p. 58, form 42d). The edge of the rim and the transition from the body to the rim are occasionally emphasized by winding a fine thread of strongly-colored glass around them. The form is dated mainly to the fourth century CE. The fact, however, that vessels of the same shape appear in pottery in the fifth and sixth centuries (Hayes 1972, pp. 50–51, 82–83; Robinson 1959, p. 116, no. 349, plate 71), and also in silverware in the sixth century (Boyd 1992, p. 29, S44.1, S44.2), makes it quite likely that glass vessels continued to be produced at least during the fifth century, as is also indicated by glass finds from several western Mediterranean sites (Antonaras 2017, p. 67, form 18). Published parallels include the following: Harden 1936, pp. 97, 111, plate XIV; von Saldern 1974, p. 125, no. 164; Fremersdorf 1975, p. 63, no. 576, plate 25; Auth 1975, p. 160, nos. 66, 67, plate 32; Platz-Horster 1976, p. 88, no. 176; La Baume and Salomonson 1976, p. 57, no. 183, plate 25, 4; von Saldern 1980b, p. 108, no. 107; Tatton-Brown 1984, p. 195, no. 10; Duncan-Jones 1994, p. 11; Pastorino 2000, p. 111, no. 16; Whitehouse 2001a, p. 141, no. 650.

**PROVENANCE** 1936, Private Collection [sold, Anderson Galleries, Inc., New York, March 6, 1936, lot 9]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1970, lot 107 through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978.

**BIBLIOGRAPHY** Anderson Galleries 1936a, lot 9, ill.

Parke-Bernet Galleries 1940, lot 107, ill.

Stothart 1965, p. 20, no. F-11.

Lees-Causey 1983, pp. 153–154, fig. 2.

**EXHIBITIONS** None



## 250. Cup

<b>Accession Number</b>	2003.348
<b>Dimensions</b>	H. 6.8, Diam. rim 9.8, Diam. base 4.3 cm; Wt. 136.78 g
<b>Date</b>	Second–third centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Transparent, slightly bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown; wheel-cut

**CONDITION** Fully preserved. Severely weathered, with iridescence and flaking. Some small chips are missing on the rim.

**DESCRIPTION** Slightly flaring, cracked-off rim; deep hemispherical body that rests on a flattened bottom. Wide, horizontal wheel-cut grooves decorate the body: one under the rim, a pair at mid-height, and one more at one-third height.

**COMMENTS AND COMPARANDA** Hemispherical bowls with slightly everted, unworked rim; hemispherical or even deeper body, flat base, and flat, occasionally slightly concave bottom are a very widely distributed form of glass vessel. They appear from the second century CE, and they were most widely distributed during the late third and fourth centuries, surviving into the fifth century (Isings 1957, pp. 113–114, 131–133, form 96; Goethert-Polaschek 1977, pp. 50–59, form 49a; Antonaras 2017, pp. 60–63, form 12). The majority are undecorated, but there are many examples bearing engraved/wheel-cut

decoration (cats. 251–253) with geometrical and figural representations, and there are examples with applied decoration, consisting occasionally of blue threads and mostly of blue blobs (cats. 254–255).

Hemispherical bowls with incised decoration can be grouped into those with shallow horizontal bands, which are the simplest and most numerous group, and those with bands of ovular or rice grain-shaped strokes, which present a well-defined group both aesthetically and chronologically. Their decoration presents a simplified variant of the first-century vessels with multifaceted engraving, and they are dated to the third–fourth centuries.

Single deeper and wider grooves are found on vessels of the late first or early second century CE, which are ascribed to Italian workshops (Isings 1957, pp. 37–38, form 21; Whitehouse 2001a, p. 224, no. 378). Hemispherical bowls, some of them decorated with incised grooves, are dated to the third and fourth centuries CE (Isings 1957, pp. 114–116, form 96b; Antonaras 2017, p. 61, form 12.ii.a). Published examples of bowls decorated with simple incised bands are numerous (Cool and Price 1995, pp. 88–90, plate 5:16; Arveiller-Dulong and Arveiller 1985, p. 105, nos. 201–204; Goethert-Polaschek 1977, pp. 59–61, form 49b, nos. 222–232, figs. 20, 21, plates 38, 39; Follmann-Schulz 1988, pp. 103–105, nos. 376–378, 385, plates 43, 44; Fünfschilling 2015, pp. 119–121, 310, fig. 157, form AR 40; Weinberg and Stern 2009, pp. 50, 75, no. 98, fig. 6, plate 9, and pp. 92–96). Bowls of the third century CE with wheel-cut geometric decoration are also well known (Isings 1957, pp. 113–116, form 96; Antonaras 2009, pp. 117–124, form 12.2.a = Antonaras 2017, p. 61; Sennequier 1985, pp. 54–55, no. 26; Arveiller-Dulong and Arveiller 1985, pp. 106–107, nos. 205, 206; Fremersdorf 1967, pp. 68–70, 73, 90–93, plates 32–35, 40, 72, 74–78, 80; Sorokina 1967, pp. 72–73, 76, figs. 3:24–26, 5:12; Lightfoot 1993, pp. 90–95, plate 1; von Saldern 1980a, pp. 15–18, no. 64, plate 3; Harden 1936, p. 120, no. 317, plate 14). Zoned facet cutting was a widespread motif, and the decoration continued that of earlier, first- and second-century examples, which bore more densely and regularly arranged interlocking facets (Isings 1957, pp. 113–116, form 96; Davidson 1952, p. 95, no. 592, fig. 6). For third–fourth-century parallels, see Clairmont 1963, pp. 55–74, esp. 65–68; Sorokina 1978; Barkóczi 1986; Cool and Price 1995, pp. 76–78; Foy and Nenna 2003b, pp. 277–278; Antonaras 2009, pp. 117–124, form 12.2.a = Antonaras 2017, p. 61; Barkóczi 1988, pp. 77–78, nos. 39, 42; Paolucci 1997, pp. 119–120.

Several workshops have been identified on the basis of the distribution patterns and the shape of the cuts (circular, oval, and rice grain) and their combinations. Namely, they have been ascribed to four production centers at Cologne, in Pannonia, in Syria—possibly at Dura-Europos—and at Tanais on the Black Sea coast (Weinberg and Stern 2009, pp. 94–96, with further bibliography). Colorless glass was almost always used for faceting because it made this type of decoration more pronounced (cat. 251, cat. 256, possibly cat. 273 as well). The facets were usually left unpolished and a bit rough, and this difference between the smooth surface of the vessel and the darker areas of the facets created a striking appearance. This is visible, for example, on bowls cats. 251–252.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 185, no. 509.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 251. Bowl

<b>Accession Number</b>	2003.349
<b>Dimensions</b>	H. 3.8, Diam. rim 8.1, Diam. base 3.8 cm; Wt. 51.26 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Colorless glass
<b>Modeling Technique and Decoration</b>	Free-blown; faceted



**CONDITION** Intact. Small parts covered with brownish weathering and iridescence.

**DESCRIPTION** Cracked-off and ground, mildly flaring rim; hemispherical body, standing on a flat bottom. Beneath the rim is a fine, horizontal wheel-cut groove. At mid-body height is another groove, below which is arranged a row of 26 wide, oval, wheel-cut incisions. Further below is a row of 11 horizontally arranged, oval wheel-cut incisions flanked by two grooves. Six radiantly arranged oval wheel-cut incisions form a star-shaped motif at the center of the bottom.

**COMMENTS AND COMPARANDA** The vessel is made of decolorized glass, which was much more valuable and expensive than ordinary greenish glass. In Roman times glass decolorized with manganese or antimony appears from the last third of the first century CE until the beginning of the fourth century CE, but it was most in fashion and had its highest distribution levels from the second quarter of the second to the mid-third century, which includes the production period of this bowl. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear in colorless glass as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). On the shape and the decoration, see comments on cat. 250.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 185, no. 510.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 252. Bowl

<b>Accession Number</b>	2004.38
<b>Dimensions</b>	H. 8.1, Diam. rim 11.2, Diam. base 5.5, Th. 0.2 cm; Wt. 200.35 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean or Europe
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; faceted

**CONDITION** Intact. Small parts covered with brownish weathering and iridescence.

**DESCRIPTION** Cracked-off and ground, slightly uneven rim; conical body, standing on a flat bottom. Under the rim, two fine, horizontal wheel-cut grooves flank a row of sparsely arranged rice-shaped, wheel-cut incisions. Further below, the body is covered with six rows of loosely arranged wheel-cut incisions, which leave small lozenge-shaped flat areas among them. The four upper rows comprise oval incisions, and the lower two are circular. On the bottom is a central circular incision surrounded by a row of six oval incisions.

**COMMENTS AND COMPARANDA** On the shape and the decoration, see comments on cat. 250.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser



(Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 185, no. 512.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 253. Bowl

<b>Accession Number</b>	2004.37
<b>Dimensions</b>	H. 8.3, Diam. rim 8.7, max. Diam. 9.7 cm; Wt. 96.96 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean or Europe
<b>Material</b>	Transparent greenish glass, probably decolorized
<b>Modeling Technique and Decoration</b>	Free-blown; faceted

**CONDITION** Intact. Almost entirely covered with a brownish layer of weathering and iridescence.

**DESCRIPTION** Cracked-off, flaring rim; almost globular body, with greatest diameter above midpoint; convex bottom. Six rows of rice-shaped wheel-cut facets decorate the body.

**COMMENTS AND COMPARANDA** See comments on cat. 250. On vessels made of decolorized glass, see comments on cat. 251. For close parallels, see Davidson 1952, p. 95,

no. 595, plate 6; Isings 1957, pp. 115–116, form 96b; Arveiller-Dulong and Arveiller 1985, pp. 106–107, nos. 205–206; Fremersdorf 1967, pp. 68–70, 73, 90–93; Sorokina 1967, p. 72, fig. 3:24–26, fig. 5:12; Šaranović-Svetek 1986, p. 58, nos. 9:11–12; Lightfoot 1993, pp. 90–95, plate 1; Whitehouse 2001a, pp. 257–258, no. 440; Antonaras 2017, pp. 61–62, form 12.2; Weinberg and Stern 2009, pp. 94–96, nos. 195–200.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 185, no. 511.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 254. Bowl or Lamp

<b>Accession Number</b>	2003.454
<b>Dimensions</b>	Diam. rim 10.2, Diam. base 3.2 cm; Wt. 114.54 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean or Europe
<b>Material</b>	Transparent greenish and translucent blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; engraved; applied elements

**CONDITION** Intact; small areas covered with weathering and slight iridescence.

**DESCRIPTION** Rough, cracked-off, vertical rim; deep, truncated, conical body with convex walls, tapering gradually toward the flat bottom. No pontil mark visible on the bottom. A pair of fine, horizontal grooves—2 cm beneath the rim and a single wide groove 4 cm lower—form a wide register within which are arranged two large oval blue blobs and two groups of four smaller, round blue blobs forming a lozenge.

**COMMENTS AND COMPARANDA** Hemispherical bowls with slightly everted, unworked rim; hemispherical or even deeper body, flat base, and flat, occasionally slightly concave bottom are a very widely distributed form of glass vessels. They appear from the third century CE, and they were most widely distributed during the fourth century, surviving into the fifth century (Isings 1957, pp. 113–114, 131–133, form 96; Goethert-Polaschek 1977, form 49a, pp. 50–59; Antonaras 2017, pp. 60–63, form 12). The majority are undecorated, but there are many examples bearing engraved or wheel-cut decoration (cats. 251–253) with geometrical and figural representations, and there are examples with applied decoration consisting occasionally of blue threads and mostly of blue blobs (this vessel and cat. 255). This last type of decoration includes the *patoria gemmata*, expensive metal vessels decorated with enamel or with semiprecious stones and/or with colorful glass gems (Fremersdorf 1962, p. 11). This subgroup of the hemispherical bowls is known in both the east and the west (Isings 1957, p. 133, form 96b2; Antonaras 2017, pp. 62–63, form 12ii.3, wherein numerous dated comparanda are cited). The decoration was made while the vessel was still attached to the blowpipe and still adequately warm; it was marvered on a marble surface where lumps of glass were arranged in such a way that once they were attached to the vessel they would form the desired motif. After that the vessel was reheated to polish the surface and render the blobs shiny and smooth. Another probable method of applying blobs was by touching the heated tip of a rod of glass briefly onto the vessel and then swiftly removing it. After this procedure was repeated as many times as necessary to create the desired motifs, the vessel was reheated and the blobs smoothed. Mainly dark-blue blobs were used for the decoration, occasionally supplemented by red and green ones. They were arranged around the body of the vessel in a single or a double row, or in triangular formations, occasionally alternating with large single blobs. Published parallels include the following: Calvi 1968, plate 26:4–5; Goethert-Polaschek 1977, pp. 50–62, forms 49a–d, nos. 188,

210, 233–234, 268, plates 38–39, 41; Arveiller-Dulong and Arveiller 1985, pp. 112–113, nos. 209–210; Harden et al. 1987, p. 113, no. 46; Barkóczi 1988, pp. 97–98, nos. 146–147, plate XIII; Sazanov 1995, pp. 332–333; Cohen 1997, p. 408, plate III:6; Whitehouse 1997a, p. 216, no. 371; Antonaras 2012, p. 136, no. 136.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 250, no. 727.

Wight 2011, pp. 104, 123, fig. 93.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 255. Bowl or Lamp

<b>Accession Number</b>	2003.455
<b>Dimensions</b>	H. 7.0, Diam. rim 10.0, Diam. base 2.6 cm; Wt. 131.89 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean or Europe
<b>Material</b>	Transparent greenish and translucent blue glass

**Modeling Technique and Decoration** Free-blown; engraved; applied elements

**CONDITION** Intact; areas covered with weathering and slight iridescence.

**DESCRIPTION** Rough, cracked-off, vertical rim; deep, truncated conical body with convex walls tapering gradually toward the flat bottom. No pontil mark visible on the bottom. Two horizontal grooves beneath the rim. A wide register is formed by a horizontal groove, at 2.6 cm below the rim, and two fine incisions 2 cm lower. Within this register, 19 round blobs are arranged.

**COMMENTS AND COMPARANDA** See cat. 254.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 251, no. 728.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 256. Beaker

**Accession Number** 96.AF.320  
**Dimensions** H. 8.1, Diam. rim 6.5, Diam. base 3.9, Th. 0.3 cm; Wt. 95.33 g  
**Date** Late first–early second centuries CE  
**Production Area** Italy or northwestern Europe  
**Material** Decolorized glass

**Modeling Technique and Decoration** Free-blown or molded; wheel-cut and polished

**CONDITION** Intact.

**DESCRIPTION** Flaring rim; elongated ovoid body; conical base. The entire vessel bears wheel-cut decoration. There are two parallel incisions below the lip, followed by a wide smooth band on the transition to the body that is delineated by a relief rib. The main body area is covered with three rows of lozenge-shaped facets, forming a very regular and tight-faceted pattern. The top and bottom rows have rounded upper ends. Below this band there is a wide, smooth band that has eliminated the ending of the bottom row of facets; this band is delineated at the bottom by a high and angular rib. The edge of the base is also carefully cut at an angle. At the center of the bottom there is a raised ring (W. 0.55 cm).

**COMMENTS AND COMPARANDA** For comments on the material, see cat. 251.

This beaker belongs to a group of possibly molded, probably blown and polished vessels, comprising conical and ovoid beakers, bowls, jars, and spoons, which are all made of thick decolorized glass (Foy et al. 2019, vol. 1, pp. 13–14). The technique of facet-cutting on glass was invented in Italy in the late 60s or early 70s CE, when transparent colorless glass became fashionable; facets are clearly visible on transparent glass and thus the result was much appreciated. In particular, ovoid beakers—sometimes elongated like this vessel and sometimes almost spherical—decorated at the center of the body with oval, circular, or lozenge facets flanked by flat or protruding zones are dated to the late first through early second centuries CE, and all published examples are found in the western and northern provinces of the Roman Empire (Foy et al. 2019, vol. 1, pp. 26–27, form IN 18).

**PROVENANCE** 1986, Private Collection [sold, Ancient and Islamic Glass, Ancient Jewellery and Silver, Middle Eastern, Egyptian, Greek, Etruscan, and Roman Antiquities, Sotheby's, London, July 14, 1986, lot 60, to Hans Benzian]; 1986–1994, Hans Benzian (Lucerne, Switzerland) [sold, The Benzian Collection of Ancient and Islamic Glass, Sotheby's, London, July 7, 1994, lot 138]; 1996, Phoenix Ancient Art S.A. (Geneva, Switzerland), by exchange with the J. Paul Getty Museum, 1996

**BIBLIOGRAPHY** Sotheby's 1986, lot no. 60.

Benzian 1994, lot no. 138.

Report 97–98, p. 68.

Wight 2011, pp. 77, 89, fig. 62.

**EXHIBITIONS** None



## 257. Beaker

<b>Accession Number</b>	2003.347
<b>Dimensions</b>	H. 10.1, Diam. rim 7.2, Diam. base 4.0, Th. 0.09 cm; Wt. 77.12 g
<b>Date</b>	End of first–first half of the second centuries CE
<b>Production Area</b>	Italy or eastern Mediterranean
<b>Material</b>	Colorless glass
<b>Modeling Technique and Decoration</b>	Free-blown or molded; wheel-cut and polished

**CONDITION** This beaker is severely weathered. Its surface bears extensive iridescence, dark accretions, and flaking.

**DESCRIPTION** Cut-off, probably mildly polished rim; conical body, standing on a low, slightly protruding bottom. The vessel is decorated with wheel-cutting. Two parallel, horizontal grooves form a rib at mid-body height. Another set of grooves forms a rib at the lower end of the body. The base is conical, wheel-cut as well. The bottom is wheel-cut at its perimeter, leaving a central raised disk (Diam. 2.5 cm). In addition, some anomalies at the center of the bottom might be interpreted as a pontil scar (1 × 0.9 cm).

**COMMENTS AND COMPARANDA** For comments on the material, see cat. 251. For comments on the technique, see cat. 256.

Truncated conical beakers in particular, decorated at different parts exclusively with horizontal ribs, are dated to the end of the first–first half of the second century CE, and findspots of published examples include all parts of the Roman Empire (Foy et al. 2019, vol. 1, pp. 22, form IN 13; Fünfschilling 2015, pp. 312–313, form AR 44).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 184, no. 508.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 258. Beaker

<b>Accession Number</b>	2003.379.1
<b>Dimensions</b>	H. 8.2, Diam. rim 8.3, Diam. base 4.3 cm; Wt. 52.21 g
<b>Date</b>	Second half of the first–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements



**CONDITION** Fully preserved; mended.

**DESCRIPTION** Fire-polished, flaring rim; wide, bell-shaped body, with cylindrical upper part and concave lower part; convex bottom. The vessel stands on a tall, conical, applied base. A fine trail is wound once at the transition from the rim to the body. An annular pontil mark (W. 1.5, Th. 0.3 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** Acquired with the bowl cat. 247. This shape of beaker is known from several sites, mostly in the western Roman Empire (Isings 1957, p. 51, form 36b; Whitehouse 1997a, p. 228, no. 387; von Saldern 1980b, p. 118, no. 117; Fünfschilling 2015, pp. 310–311, form AR 42). Furthermore, beakers with a slightly different bell-shaped body but with applied conical base and thread around the neck are known from Milan (Roffia 1993, pp. 89, 92, no. 79) and Croatia (Alfano 1997, p. 198, no. 203). Also, very similar beakers with the same body but with folded base are known from Samothrace (Dusenbery 1967, p. 46, no. 42) and Crete (von Saldern 1968, no. 54) as well as unknown provenances (Auth 1976, p. 206, no. 376; Matheson 1980, p. 42, no. 113; Hayes 1975, p. 57, no. 137, fig. 3, plate 10).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 204, no. 573a. Wight 2011, pp. 103, 117, fig. 86.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 259. Beaker

<b>Accession Number</b>	71.AF.84
<b>Dimensions</b>	H. 8.5, Diam. rim 7.1, max. Diam. 7.3, Diam. base 3.4 cm; Wt. 88.25 g
<b>Date</b>	First century CE
<b>Production Area</b>	Italy or northwestern Europe
<b>Material</b>	Translucent amber-greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** Fully preserved; mended; missing a fragment from the rim.

**DESCRIPTION** Cut-off rim; conical body with convex walls mildly tapering toward the rim and the flat, slightly concave bottom. A faint, annular pontil scar preserved on the bottom (W. approx. 1 cm). Three bands (W. 0.5 cm) of fine horizontal incisions divide the surface of the vessel into three registers, roughly equal in height.

**COMMENTS AND COMPARANDA** This beaker belongs to a well-known first-century CE form with ground rim and cylindrical, ovoid, and truncated conical body (Isings 1957, p. 44, form 29; Rütli 1991a, form AR 35; Stern 2001, pp. 46, 77, no. 19; Antonaras 2017, p. 74, form 25). The form appears in the Augustan period (27 BCE–14 CE), but the majority of the extant examples date to the reign of Tiberius or Claudius (14–54 CE), and they continue to be produced into the third quarter of the first century (Cool and Price 1995, pp. 68–69; Stern 2001, pp. 46, 79–80). It seems that this form imitates fine eggshell pottery vessels produced in Italy and the northwestern provinces as early as the second quarter of the first century BCE (Robinson 1959, pp. 11–13, nos. F18, F19, plate 1, group F).



**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 260. Beaker

<b>Accession Number</b>	78.AF.28
<b>Dimensions</b>	H. 14.0, Diam. rim 9.9, Diam. base 5.5 cm; Wt. 111.98 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent green glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. Incrustation around the top of the body and inside the mouth.

**DESCRIPTION** Fire-polished, mildly flaring rim; bell-shaped body tapering toward the pushed-in, conical base. Slightly convex bottom with an annular pontil mark (W. 1.5, Th. 0.5 cm) at the center. A coil of glass is wound three times around the body at approximately one-third body-height below the rim.

**COMMENTS AND COMPARANDA** These tall, conical beakers with a pushed-in base-ring, usually plain vessels but also occasionally bearing applied or incised decoration, are known from sites mainly in the eastern

Mediterranean but also in the northwestern provinces. See Antonaras 2017, pp. 79–80, form 32a; Vessberg 1956, p. 144, fig. 45:11, beaker form B.II.y; Goethert-Polaschek 1977, pp. 76–80, nos. 323–358, plates 16/175a, 16/176b, 21/230d, 23/249a, 25/295a, 44–45, form 58a; Barkóczy 1988, p. 78, nos. 84–85, form 42; Lightfoot 2007, p. 93, no. 212, with traces of a similarly wound thread; Lightfoot 2017, p. 101, no. 90.

**PROVENANCE** 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, Inc., New York, April 5, 1940, lot 119, through French and Co. to J. Paul Getty, 1940]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 119.

**EXHIBITIONS** None



## 261. Beaker

<b>Accession Number</b>	2003.412
<b>Dimensions</b>	H. 11.8, Diam. rim 6.0, Diam. base 4.6 cm; Wt. 27.83 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent light yellowish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; large areas covered with whitish weathering.

**DESCRIPTION** Thickened, fire-polished rim; flaring mouth; conical body with four vertical indentations on its lower part. It stands on a tall, pushed-in, conical base. An annular pontil mark (W. 2.1, Th. 0.1 cm) is visible on the underside.

**COMMENTS AND COMPARANDA** This particular form of beaker is probably a descendant of the mid-imperial (second–third centuries) indented beakers without a base-ring known from eastern Mediterranean sites (Isings 1957, pp. 49–50, form 35; Cyprus: Vessberg 1956, beaker type IV.α.2., pp. 142–143, fig. 44:34; Lightfoot 2007, pp. 92–97, nos. 77–83; Thera: Dragendorff et al. 1903, p. 286 fig. 481:t–u). Published examples with pushed-in, conical base are known from Cologne (La Baume and Salomonson 1976, no. 161), Hungary (Barkóczi 1988, p. 87, no. 117, plate XLXXV), Türkiye (Akat, Fıratlı, and Kocabaş 1984, no. 291), and Myrina (Arveiller-Dulong and Nenna 2005, p. 450, no. 1264, plate 112), as well as two that are unprovenanced (Whitehouse 1997a, p. 113, no. 173; Israeli 2003, p. 163, no. 171). In addition, a flask from Syria, dated to the third–fourth centuries, is essentially a narrow and slender variant of this form (Kunina 1997, p. 333, no. 403).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 218, no. 634.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 262. Beaker

<b>Accession Number</b>	2004.41
<b>Dimensions</b>	H. 9.8, Diam. rim 8.3, Diam. base 4.1 cm; Wt. 63.73 g
<b>Date</b>	Second half of the first–early second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact. Some weathering has produced iridescence, primarily on the inside of the vessel.

**DESCRIPTION** Mildly flaring, uneven, lopsided, fire-polished rim; conical body; pushed-in conical base; flat bottom, slightly concave at the very center. Nineteen pinched vertical ribs, unequal in height and distance, most of them slightly slanting to the right toward the rim. No pontil mark on the bottom.

**COMMENTS AND COMPARANDA** This beaker is a rare variant of well-known first-century glass beakers (Isings 1957, pp. 47–50, forms 33, 35), differing in the pinched, vertical ribs. The only really close parallel was found in Aquincum, Hungary (Barkóczi 1988, p. 91, no. 129, plates XII, LXXV), from a grave dated to the early second century CE. Also cf. Loeschke, Niessen, and Willers 1911, plate XLIV: 1109, a ribbed beaker with additional horizontal threads.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 223, no. 650.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 263. Beaker

<b>Accession Number</b>	2003.423
<b>Dimensions</b>	H. 12.5, Diam. rim 7.7, Diam. base 4.2, Th. 0.2 cm; Wt. 67.45 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Northwestern European Roman provinces
<b>Material</b>	Transparent bluish-green glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Mended; small part filled. Iridescent weathering on the interior.

**DESCRIPTION** Fire-polished, flaring rim; conical body with flat bottom. Standing on an applied, conical base. Two applied coils; pinched to form a continuous frieze of seven ovals around the body. A fine thread is carelessly wound twice, 2 cm below the rim. An annular pontil mark (W. 1.4, Th. 0.4 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** In general this form of beaker probably derives from the beakers with applied decoration and pushed-in base that were in fashion in western Europe from the middle of the first century to the early second century CE (Isings 1957, pp. 47–48, form 33; Berger 1960, p. 47, plate 7; Cool and Price 1995, p. 71; Ravagnan 1994, n. 248, p. 131). True parallels are known from Hungary (Barkóczy 1988, p. 91, no. 128, plate XI, LXXV), dating to the third century CE. Examples with the lower ends of the decoration freely hanging are also known from Cologne (Fremersdorf 1959, pp. 71–72, plates 108, 109; Doppelfeld 1966, pp. 58–59, plate 132), dated to the third–fourth centuries CE. In addition, an unprovenanced parallel in the Corning Museum of Art has been published (Whitehouse 2001a, p. 137, no. 675).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 225, no. 658.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 264. Goblet-Stemmed Beaker

**Accession Number** 2003.443

<b>Dimensions</b>	H. 9.0, Diam. rim 7.6, Diam. base 3.9 cm; Wt. 47.02 g
<b>Date</b>	Fifth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended from fragments; iridescence and in some areas incrustation on the exterior; few pinprick bubbles.

**DESCRIPTION** Fire-polished, slightly flaring rim; long, conical body, curving and sloping toward the bottom. The body is standing, slightly off-center, on a low, cylindrical stem; conical, slightly deformed, pushed-in base, forming a disk foot. Faint pontil mark (W. approx. 0.8 cm) is visible on the undersurface of the base.

**COMMENTS AND COMPARANDA** Free-blown stemmed goblets appear from the first century CE, with several fine, ornate examples extant (Isings 1957, pp. 50–52, 56, forms 36, 40). Stemmed beakers were reintroduced in the Early Byzantine period (fifth–seventh centuries), probably sometime in the fifth century; these were simple utilitarian vessels, mostly undecorated, used as drinking vessels and lamps (Isings 1957, pp. 139–140, form 111; Antonaras 2009, pp. 162–167, form 35 = Antonaras 2017, pp. 82–83). Stemmed beakers are the most widespread form of glass vessel in the entire Mediterranean and Black Sea region from the fifth century and at least until the seventh century CE (Barag 1970a, vol. 2, plate 33, type V:9; Dussart 1998, pp. 115–120, type B.IX.1, plates 27–28; Stern 2001, pp. 310–311, nos. 173–174; Israeli 2003, p. 198, no. 237; Antonaras 2012, p. 139, nos. 192–193). The broad distribution and the variations in the shape of the body and the base indicate that stemmed beakers were produced in many places (Foy 1995, pp. 208–209, form 23a; Sternini 1995, p. 257; Antonaras 2010b; Antonaras 2014a). It seems that their production underwent a great expansion when glassblowers devised a method to form the entire vessel from a single mass of glass (Stern 2001, pp. 270–271; Weinberg and Stern 2009, pp. 148–149). The lower part of the paraison was folded in and squeezed to form the base and the stem quite quickly (Antonaras 2009, pp. 162–167, form 35 = Antonaras 2017, pp. 82–83). This new technique required much less glass than the earlier technique, in which the bowl and the base of the vessel were made from two different paraisons (Antonaras 2009, pp. 165–166, form 37 = Antonaras 2017, pp. 85–87). Stemmed beakers are found in great numbers in the

excavations of churches, where they were apparently used chiefly as lamps (Antonaras 2007, pp. 51–54; Antonaras 2014b, pp. 100–101, 103).

**PROVENANCE** Robert Forrer, Swiss, 1866–1947 (Strasburg, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 240, no. 705.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 265. Goblet-Stemmed Beaker

<b>Accession Number</b>	2003.444
<b>Dimensions</b>	H. 8.3, Diam. rim 8.3, Diam. base 4.7 cm; Wt. 44.86 g
<b>Date</b>	Fifth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended from fragments; iridescence and some areas of incrustation on the exterior; few pinprick bubbles.

**DESCRIPTION** Fire-polished, slightly flaring rim; cylindrical body, curving and sloping toward the bottom.



The body is standing slightly off-center on a fine, low, cylindrical stem; conical, slightly deformed, pushed-in base, forming a disk foot. No pontil mark is visible on the undersurface of the base.

**COMMENTS AND COMPARANDA** See cat. 264.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 241, no. 707.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 266. Skyphos

<b>Accession Number</b>	2003.361
<b>Dimensions</b>	H. 8.3, Diam. rim 7.0, max. Diam. 8.5, Diam. base 4.5 cm; Wt. 93.67 g
<b>Date</b>	First century CE
<b>Production Area</b>	Mediterranean area, probably Italy
<b>Material</b>	Transparent bluish-green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Good condition. Large fills have been added on the base.

**DESCRIPTION** The lip is fire-polished and rounded, and it turns inward. The mastoid body rests, a little bit off-

center, on a conical applied base. There is no pontil mark visible on the bottom of the base.

Two angular handles with two horizontal plates (M-shaped) have been applied on the lower part of the body and drawn up to the rim. Each handle starts as a flat band at lower body, goes up, and reaches the rim. There, it is bent at a right angle, continues horizontally, and is pressed to form a thumb-rest tab. Then it continues back down vertically and at mid-height is pressed, forming an angular shape; at the lower end, it is pinched to form a smaller tab, and finally it is attached to the body on the middle of the underlying band.

**COMMENTS AND COMPARANDA** Glass skyphoi first appear in the second century BCE, and by the late first century BCE–early first century CE they were produced and decorated in several techniques, creating luxurious products. For examples of glass skyphoi in luxurious techniques, including molded mosaic, translucent monochrome, and colorless glass, see Oliver 1967, pp. 27–33. Cat. 82 represents a glass cameo example, probably the most luxurious extant vessel; see Harden et al. 1987, pp. 68–69, no. 31. An overview of Hellenistic glass skyphoi has been presented by Marie-Dominique Nenna (Nenna 1999a, pp. 100–101, with further bibliography).

Free-blown skyphoi, shallow and cylindrical or deep and ovoid, both on low base-rings, appear in the Tiberian period and continue into the Flavian. They are reminiscent of contemporaneous silver vessels (Zampieri 1998, p. 176, for further bibliography; Lapatin et al. 2014, pp. 46–51). They are a relatively widely distributed form known mostly in the western provinces of the Roman Empire (Isings 1957, pp. 55–56, form 39; Czurdza-Ruth 1979, p. 56, no. 190; Van Lith 1991; Fünfschilling 2015, p. 372, form AR 97; Arveiller-Dulong and Nenna 2005, p. 199, nos. 544–545; Zampieri 1998, p. 178, no. 293; Sternini 1991, pp. 144–145, nos. 547, 577, plate 55), Greece (Davidson 1952, p. 103, nos. 649, 650, figs. 9, 10; Wright 1980, p. 163, no. 126, fig. 8; Weinberg and Stern 2009, pp. 54–55; *ArchDelt B* '3 1965 [1968], p. 566, plate 710), and Asia Minor (Goldman 1950, p. 401, no. 14). Typically the ends of the angular handles are pinched flat, and on them a few glassblowers stamped their name with pincers and occasionally added their place of origin, Sidon (Stern 1995, pp. 68–69).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003



**BIBLIOGRAPHY** von Saldern et al. 1974, p. 194, no. 533.

Wight 2011, pp. 54, 57, fig. 33.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 267. Kantharos

<b>Accession Number</b>	84.AF.30
<b>Dimensions</b>	H. 10.0, Diam. rim 5.0, Diam. base 5.0 cm; Wt. 151.51 g
<b>Date</b>	First century CE
<b>Production Area</b>	Possibly Italy
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended; almost fully preserved.

**DESCRIPTION** Thick, rounded rim, probably fire-polished, which is mildly inward-leaning. The rim forms an acute angle at the transition toward the mastoid body. An opaque white trail has been applied and marvered at the lower edge of the rim.

Fine, applied, conical base with sharp, vertical ending. No pontil mark visible on the undersurface of the base.

Two dark blue, twisted coil handles start on the upper body and are reattached at the lower body, where they

continue as a flat, slim trail all the way to the upper part of the base.

**COMMENTS AND COMPARANDA** A form of drinking vessel represented among early imperial Roman glassware is the kantharos (Hilgers 1969, pp. 46–48, 136–138). These two-handled cups, intended to be used for drinking wine, are known in three basic variants in the first century CE, mostly dated to the first part of the century: cups with handles curved high above the rim, which stand either on a stemmed base or on a base-ring, and cups with low handles that begin under the rim and do not rise above it (Isings 1957, pp. 53–54, forms 38a, b, and c, respectively). The particular form seen in this vessel was probably produced in Italy (Isings 1957, p. 53, form 38a); on the distribution of first-century kantharoi with stemmed bases, see Van Lith 1991, pp. 99–110. Published finds include Isings 1957, p. 53, from Pompeii; Ravagnan 1994, p. 203, no. 399, second half of the first century CE, from Zara; Mandruzzato and Marcante 2005, pp. 43, 50, 107–108, nos. 300, 301, from Aquileia, dated to the first century CE and ascribed to an Italian workshop. Cf. also Bonomi 1996, p. 168, no. 377, from Adria, dated to the second quarter of the first century CE; Zampieri 1998, p. 178, no. 292, first century CE, from Padua; Fünfschilling 2015, p. 369, form AR 91, first century, from Augst; Bonnet-Borel 1997, p. 36, from Avenches, dated between 20 and 60 CE.

**PROVENANCE** 1979, Mr. and Mrs. Andrew Constable Maxwell [sold, Sotheby's, London, June 4–5, 1979, lot 67]; 1984, Galerie Günter Puhze (Freiburg, Germany) [*Kunst der Antike*, Katalog 5 (1983), lot 294]; 1984, Dr. Max Gerchik, American, 1911–2008 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1984

**BIBLIOGRAPHY** Sotheby Parke Bernet 1979, lot 67, p. 50, no. 67.

Galerie Günter Puhze 1982, no. 294.

JPGM Acquisitions 1984, p. 174, no. 39.

**EXHIBITIONS** None



## 268. Pointed Amphoriskos

<b>Accession Number</b>	2003.402
<b>Dimensions</b>	H. 18.5, Diam. rim 2.3, max. Diam. 7.5 cm; Wt. 89.80 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syria
<b>Material</b>	Transparent greenish and translucent turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. Small areas with milky crust; some impurities; few pinpoint bubbles and several, larger, elongated air bubbles, particularly visible on the neck area.

**DESCRIPTION** Fire-polished, slightly flaring rim; cylindrical neck; horizontal shoulder; truncated, conical body; pointed, convex bottom. Pair of peacock blue, angular, coil handles from shoulder to mid-neck. Peacock blue coil wound once around neck at level of handles' attachment—apparently placed before the handles were attached. At the center of the bottom is an annular pontil mark (W. 1.5, Th. 0.1 cm).

**COMMENTS AND COMPARANDA** Small glass amphorae rendering in miniature the shape of large clay amphorae were quite popular and were used as tableware for serving wine. This vessel belongs to a distinctive group of Syro-Palestinian glass table amphorae, appearing in four different types, which have been dated to the fourth and

fifth centuries CE (Stern 1977, pp. 84–85). This particular vessel, due to its tall, tubular neck that is not constricted at its base, is ascribed to type I or II. The slightly flaring rim led us to ascribe it to the rarer type II. In particular, on the basis of its long conical body, the absence of a base, and the presence of a decorative coil halfway down neck, it is ascribed to type IIA2a (Stern 1977, pp. 84–85). The findspots indicate that these vessels may have been produced in Syria, possibly in the fourth century CE (Hayes 1975, p. 110, no. 411, plate 25; Stern 1977, pp. 84–85, type IIA2a; Stern 2001, no. 98, p. 208; Barag 1970a, vol. 2, plate 37, type 10.2; Dekoulakou 1976, p. 103, plate 81:β, γ; Papageorgiou 2014, p. 447, no. 130; cf. Matheson 1980, pp. 86–87, no. 234; Weinberg and Stern 2009, pp. 150–151, no. 356; Williams and Zervos 1983, p. 24, no. 64, plate 10; Antonaras 2022a, pp. 67–68, 118, nos. 431–432).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 214, no. 618.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 269. Amphora

<b>Accession Number</b>	78.AF.18
<b>Dimensions</b>	H. 36.2, Diam. rim 6.3, max. Diam. 8.3 cm; Wt. 281.00 g
<b>Date</b>	Fourth–fifth centuries CE

<b>Production Area</b>	Eastern Mediterranean, probably Palestine
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied handles

**CONDITION** Intact. Incrustation on the interior and especially around the handles and rim on the exterior.

**DESCRIPTION** In-folded, tubular rim; conical mouth; cylindrical neck, constricted at its base; long, conical body tapering toward the bottom; flat bottom covered by a circular pontil scar (approx. 1.2 cm in diameter), seemingly solid. No decoration is visible on the body. Two vertical, coil handles are applied at the shoulders and attached midway up the neck.

**COMMENTS AND COMPARANDA** Small glass amphorae rendering in miniature the shape of large clay amphorae were quite popular and were used as tableware for serving wine. This vessel belongs to a distinctive group of Syro-Palestinian table glass amphorae, appearing in four different types, which have been dated to the fourth and fifth centuries CE (Stern 1977, pp. 84–85). The tall, tubular neck, constricted at its base, led us to ascribe this vessel to type III. In particular, on the basis of its long, conical body, the presence of a base, and the absence of a decorative coil halfway down the neck, it is ascribed to type IIIB1b (Stern 1977, pp. 84–85, fig. 3). The findspots indicate that these vessels may have been produced in Palestine, possibly beginning in the first half of the fourth century CE: Barag 1970a, vol. 2, plate 37, type 10.6 (variant). Also cf. Auth 1976, p. 131, no. 164; Bomford 1976, no. 164; Oliver 1980, p. 124, no. 218; Stern 2001, pp. 146–149, pp. 210–211, nos. 100–101.

**PROVENANCE** 1935, George Dupont Pratt, American, 1869–1935; 1935–1937, Estate of George Dupont Pratt, American, 1869–1935 [sold, Anderson Galleries, New York, January 15, 1937, lot 61]; 1940, Harry Leonard Simmons [sold, Parke Bernet Galleries, Inc., New York, April 5, 1940, lot 136, through French & Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1937a, lot 61, ill.

Parke-Bernet Galleries 1940, lot 136, ill.

**EXHIBITIONS** None



## 270. Flask

<b>Accession Number</b>	96.AF.56
<b>Dimensions</b>	H. 14.2, Diam. rim 3.6, max. Diam. 11.6, Diam. base 5.7, Th. 0.4 cm; Wt. 193.56 g
<b>Date</b>	Late second–first half of the third century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent decolorized and opaque blue and white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved. Surface incrustation on interior and underside; some whitish iridescence on exterior; a few cracks and chipping.

**DESCRIPTION** Fire-polished rim; conical mouth; cylindrical neck; globular body; mildly concave bottom. A blue coil circles once, forming an applied base-ring and continues toward the center of the bottom, where it forms a central circle 1.7 cm wide.

Two fine blue threads are wound around the neck and at the transition from mouth to neck. The vessel has snake-thread floral decoration realized with applied threads in blue and white glass; on one side the blue motifs prevail, and on the other the white. The narrow, undulating parts of the threads, which represent stems and stalks, are left undecorated. The wider parts of the threads, representing oval, pointed leaves, bear cross-hatched, impressed decoration.

**COMMENTS AND COMPARANDA** The vessel is made of decolorized glass, which was much more valuable and expensive than ordinary greenish glass. In Roman times glass decolorized with manganese or antimony appears from the last third of the first century CE until the beginning of the fourth century CE, but it was most in fashion and had its highest distribution levels from the second quarter of the second to the mid-third century, which is exactly the production period of this flask. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear in colorless glass as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). This particular flask form appears mainly in the western provinces but occasionally in the Mediterranean region as well; plain examples appear from the middle of the second century CE, and those with snake-thread decoration from the late second to the middle of the third century (Foy et al. 2019, vol. 2, pp. 242–244, forms IN 242–243).

Snake-thread vessels were first produced in the late second century CE in the eastern Mediterranean, and the technique was transported soon after to the western provinces, where at least two workshops were active, one in Rhineland and the other in Pannonia (Harden et al. 1987, pp. 105–108; Stern 2001, p. 138; Dévai 2019, pp. 325–329). The vessels are grouped stylistically: those with freely applied trails, and the “flower and bird” variety, named after its representations. Eastern examples are made of and mostly decorated with colorless glass, the trails bearing often crosshatched lines, and the “flower and bird” pattern is found only among them (Barag 1969, pp. 55–66). Colored trails appear in the decoration of western products much more often, and the trails are usually smooth; when they are not, they bear oblique lines, not crosshatching.

This vessel presents features of products from both regions. The shape of the body finds its closest parallels in Cologne (Fremersdorf 1959, p. 42, N 119, plate 20; p. 49, N 6049, plate 48); the decoration, in “flower and bird” style with crosshatched leaves, however, locates the vessel quite securely in an eastern workshop.

**PROVENANCE** 1992, the Merrin Gallery (New York, New York), sold to Barbara and Lawrence Fleischman, 1992; 1992–1996, Barbara Fleischman and Lawrence Fleischman, American, 1925–1997 (New York, New York), sold to the J. Paul Getty Museum, 1996

**BIBLIOGRAPHY** True and Hamma 1994, pp. 331–332, no. 174 [Karol White].

Report 97–98, p. 68.

*JPGM Handbook Antiquities* 1st ed., p. 208.

*JPGM Handbook* 7th ed., p. 47, ill.

*JPGM Handbook Antiquities* rev. ed., p. 218.

Wight 2011, pp. 62, 66, 97, fig. 41.

**EXHIBITIONS** A Passion for Antiquities: Ancient Art from the Collection of Barbara and Lawrence Fleischman (Malibu, 1994–1995; Cleveland, 1995)

Ancient Art from the Permanent Collection (Los Angeles, 1999–2004)



## 271. Flask with Indentations

<b>Accession Number</b>	2003.408
<b>Dimensions</b>	H. 10.5, Diam. rim 1.7, max. Diam. 9.5, Th. 0.1 cm; Wt. 70.20 g
<b>Date</b>	Third century CE
<b>Production Area</b>	Western Europe, probably Rhine region
<b>Material</b>	Colorless, probably slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; indented

**CONDITION** Intact. Severely weathered and pitted, assuming an almost white color.

**DESCRIPTION** Cut-off, vertical rim; cylindrical neck with a constriction at its base; squat globular body; fine



base-ring; mildly concave bottom. Five irregular, oval, horizontal indentations are arranged at regular intervals around the body at its widest part. A slight variation in the weathering below the rim indicates the faint remains of an incised band. A wide incised band, 0.5 cm wide, is visible around the base-ring.

**COMMENTS AND COMPARANDA** The vessel is made of decolorized glass, which was much more valuable and expensive than ordinary greenish glass. In Roman times, glass decolorized with manganese or antimony appears from the last third of the first century CE until the beginning of the fourth century, but it was most in fashion and had its highest distribution levels from the second quarter of the second to the mid-third century. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear among in colorless glass as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). This particular form appears mainly in the western provinces and might originate from the area of the Rhine. It appears in two variants (Foy et al. 2019, vol. 2, p. 249, form IN 249): one without a base, standing on its bottom (Fremersdorf and Polónyi-Fremersdorf 1984, no. 129); the second variant has a pushed-in base-ring like this vessel (Isings 1971, no. 22, plate 2; Kunina 1997, pp. 298–299, no. 223; La Baume and Salomonson 1976, p. 50, no. 142 and plate 18). Occasionally they are decorated with faint horizontal incised bands.

**PROVENANCE** 1913, Private Collection [sold, Auktion: Antike und byzantinische Kleinkunst aus ausländischem und Münchener Privatbesitz Glas, Keramik, Bronzen, Arbeiten in Stein, ägyptische Kleinfunde, Galerie Helbing, Munich, October 28–30, 1913, lot 698]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Galerie Helbing 1913, p. 46, no. 698, plate 30.

von Saldern et al. 1974, p. 216, no. 628.

Wight 2011, pp. 63, 66, fig. 42.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 272. Flask

<b>Accession Number</b>	2003.390
<b>Dimensions</b>	H. 9.7, Diam. rim 2.3, max. Diam. 11.0, Th. 0.1 cm; Wt. 68.52 g
<b>Date</b>	Third century CE
<b>Production Area</b>	Western Europe, probably Rhine region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** Fully preserved; small dull and iridescent areas.

**DESCRIPTION** Cut-off, vertical rim; cylindrical neck with a constriction at its base; squat body; fine, pinched base-ring; flat bottom. Bears faint incised decoration. A fine horizontal band around the rim, one 0.5 cm below it, two more at mid-neck height; three concentric bands (W. 0.2, 1, 0.5 cm, respectively) on the upper body, and one more (W. 0.2 cm) on the lower body.

**COMMENTS AND COMPARANDA** This form is very close to a widely distributed spherical flask form (cat. 273) (Isings 1957, pp. 121–122, form 103; Antonaras 2009, pp. 190–92, form 50) regarding the shaping of the rim and neck; their main difference is that the originally spherical body was flattened into a lentoid shape with this vessel. In addition to the fine incising, some examples are decorated with indentations around the body, also known in decolorized glass (Foy et al. 2019, vol. 2, p. 249, IN 249). Examples with a pushed-in base-ring, like this vessel, and others without a base are known, and they are made of either greenish or decolorized glass (Fremersdorf and



Polónyi-Fremersdorf 1984, p. 53, no. 129 [example without base]; Doppelfeld 1966, p. 52, plates 98–99 [four examples with pushed-in base-ring]; Kunina 1997, pp. 298–299, no. 223 [example with pushed-in base-ring]). They are dated to the third century CE, and it has been assumed that they are products of the Rhine region.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 208, no. 587.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 273. Flask

<b>Accession Number</b>	2004.39
<b>Dimensions</b>	H. 12.0, Diam. rim 2.1, Diam. base 2.5, Th. 0.2–0.3 cm; Wt. 163.55 g
<b>Date</b>	Mid-third–early fourth centuries CE
<b>Production Area</b>	Western Europe, probably Rhine region
<b>Material</b>	Decolorized glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** Fully preserved; small areas of dullness and iridescence. Several visible breaks all over the vessel.

**DESCRIPTION** Cracked-off rim; cylindrical neck, bulging toward the constriction at its base; spherical body; flat bottom. Incised and wheel-cut decoration on body. Eight slanting, elongated incisions around the shoulder area. Eight large, oval, almost circular incisions on the upper body area and six on the lower body form a wide band that is filled with two rows of rice-shaped facets arranged at interchanging heights, forming a loose faceting motif. Six slanting, elongated incisions around the bottom.

**COMMENTS AND COMPARANDA** The vessel is made of decolorized glass, which was much more valuable and expensive than ordinary greenish glass. In Roman times glass decolorized with manganese or antimony appears from the last third of the first century CE until the beginning of the fourth century, but it was most in fashion and had its highest distribution levels from the second quarter of the second to the mid-third century. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear in colorless glass as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). This particular flask form appears in the western provinces, on the Black Sea coast, and in Asia Minor, produced in several centers during the third and fourth centuries CE (Foy et al. 2019, vol. 2, pp. 250–252, form IN 250; Isings 1957, pp. 121–122, form 103; Fünfschilling 2015, pp. 422–423, form AR 154.1; Antonaras 2009, pp. 190–92, form 50).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004.

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 185, no. 514.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 274. Flask

<b>Accession Number</b>	2003.352
<b>Dimensions</b>	H. 10.5, Diam. rim 3.2, Diam. base 3.5 cm; Wt. 64.24 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean, probably western Asia Minor
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** Intact; dull in the interior.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck wider toward the body. Flat shoulder; bulbous body, standing on a flat, slightly concave bottom. An annular pontil mark (W. 1.5, Th. 0.2 cm) is visible at the center of the bottom.

The vessel has engraved decoration: an inscription written in double-lined capital Greek letters, *YTIA Hygia* ("Health"); five slanting, parallel strokes cover the area between the last and the first letter of the word. In addition, the area above the inscription is covered with slanting strokes.

**COMMENTS AND COMPARANDA** This flask belongs to a quite diverse group of vessels, which include several different shapes—beakers, shallow bowls or dishes, globular flasks or bottles, and one jug—that were decorated with incised decoration and inscriptions with

double-line lettering. Finds are dated between the third and fifth centuries CE, mostly to the fourth century. The finds are widely distributed, and it has been proposed that they were produced in a number of dispersed workshops, predominantly in the eastern Mediterranean, namely, goblets in Egypt, and flasks and bowls in western Asia Minor, but also probably Cologne (Fremersdorf 1967, pp. 105–108, plates 104–109; Harden 1967/8, pp. 43–55; Grose 1985, pp. 23–28; Stern 2001, pp. 137–138, 160–161; Lightfoot 2013b, pp. 358–362; Hill and Nenna 2003, p. 90, fig. 4:1, 2; Keller 2006, pp. 118, 211–212, plate 12). For a dish decorated with a double-line inscription, see cat. 232.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 190–191, no. 521.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 275. Flask

<b>Accession Number</b>	2003.424
<b>Dimensions</b>	H. 16.5, Diam. rim 3.2, Diam. base 6.0 cm; Wt. 75.41 g
<b>Date</b>	Second–third centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass

**Modeling Technique and Decoration** Free-blown; applied elements

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**CONDITION** Intact; iridescent layer of weathering on the inside.

**DESCRIPTION** Fire-polished, rounded, flaring rim; conical mouth; cylindrical neck, widening toward the body; conical body with rounded carination that curves in toward the tubular, folded base-ring. A fine thread of greenish glass is wound spirally five times on the lower part of the neck. A circular scar (W. 0.9 cm) of a solid pontil is visible on the center of the bottom.

**COMMENTS AND COMPARANDA** Flasks with similar carinated bodies are known in variants, usually standing on a base-ring and very often decorated with a simple, fine thread wound around the neck. At least some of them are considered products of Cyprus (Vessberg 1952, p. 135, flask type B.I, plate VIII:1–2), and they are found mainly in eastern Mediterranean sites, dated to the second–third centuries CE (Hayes 1975, p. 67, no. 201, fig. 6, plate 15, without base-ring; Spartz 1967, nos. 85–86, plate 19; Auth 1976, p. 124, no. 154; Kunina 1997, p. 299, no. 224; Whitehouse 2001a, p. 166, no. 695; Stern 2001, pp. 148, 212–213, no. 102, without base; Antonaras 2012, p. 173, no. 226).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 225, no. 660.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 276. Fish-Shaped Flask

<b>Accession Number</b>	2003.439
<b>Dimensions</b>	L. 21.0, H. 8.0, Diam. rim 2.5 × 2.9 cm; Wt. 86.90 g
<b>Date</b>	Second quarter of the second to the mid-third century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent slightly greenish, quite probably decolorized glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Weathered and pitted and thus discolored and brownish in large areas.

**DESCRIPTION** Fish-shaped flask. The vessel has infolded, slightly flaring rim; cylindrical neck; and originally oval body and flat bottom. The vessel body was pressed and formed into the body of the fish, and the neck was bent to form the tail of the fish. The bottom was pinched into two protruding sections for lips, probably to identify the aquatic creature with a dolphin, with the long lips representing a dolphin's rostrum. A trail of glass was wound four times around the upper part of the vessel neck. A coil of glass was applied along the upper flattened edge of the body and pinched in regular intervals, forming the dorsal fin. Along the wide sides of the body are four pinched ridges at equal distances. A vertically applied coil delineates the edge of the head. The eyes are applied blobs of glass. Toward the end of the body, on either side, one sizable blob of glass was applied and pinched to form a bent strap that might indicate some fictional anatomical feature or, more probably, serve as lugs or small handles to hang or handle the vessel.

**COMMENTS AND COMPARANDA** The vessel is quite probably made of decolorized glass, which was much

more valuable and expensive than ordinary greenish glass. In Roman times glass decolorized with manganese or antimony appears from the last third of the first century CE until the beginning of the fourth century, but it was most in fashion and had its highest distribution levels from the second quarter of the second to the mid-third century, which corresponds with the proposed production period of this flask. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear among them as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). This particular variant of fish-flask form (Foy et al. 2019, vol. 2, pp. 319–320, form IN 315 Var. c) has been recovered from the eastern Mediterranean region, where it was probably produced. Provenanced finds are reported from Syria (Abdul-Hak and Abdul-Hak 1951, p. 111, no. 5, plate L, fig. 2, from Tafas-Turbet el Ash'ari; Kunina 1997, p. 294, no. 201, E 1359); another was acquired in Lebanon (Whitehouse 2001a, pp. 199–200, no. 754 [with slightly different rim]; Corning Museum of Glass [55.1.94]); another is said to be from Palestine (Metropolitan Museum of Art 1915, p. 95, 15.43.168); while a few other examples do not have recorded find places (Whitehouse 2001a, pp. 199–200, no. 755; *JGS* 1969, p. 110, no. 6 = Silberg collection, Caracas; Oliver 1980, p. 98, no. 150, p. 109; Merrill 1989, pp. 20, 187, no. 11; Christie's 1985, p. 43, lot 68).

**PROVENANCE** By 1969–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1969, p. 110, no. 6, ill.

von Saldern et al. 1974, p. 238, no. 697.

Whitehouse 2001a, p. 200.

Wight 2011, pp. 63, 69, fig. 45.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 277. Mouse-Shaped Flask

<b>Accession Number</b>	2004.43
<b>Dimensions</b>	L. 14.0, Diam. rim 2.2, max. Diam. 5.2 cm; Wt. 76.60 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Complete. Heavy weathering has given the vessel a mottled gray, brown, and white coloring with an iridescent sheen. Visible breaks in many places.

**DESCRIPTION** Flask in the form of a mouse. The body is teardrop-shaped, with a narrow, curved neck terminating in a spout forming the tail. The head has been formed by pinching to create long ears, small eyes, and a mouth. The feet are applied folded lumps. There is a thread wrapped 1.5 times around the tail, which is the mouth of the vessel. There is a solid pontil mark (W. 0.9 cm) on the forehead, which is the bottom of the vessel.

**COMMENTS AND COMPARANDA** There are two more glass flasks that render this particular plump-bodied quadruped (Christie's 1985, p. 44, lots 69, 70), one of which reportedly comes from Syria (Christie's 1985, p. 44, lot 69; Whitehouse 2001a, p. 201, no. 756). In addition, there are three similar flasks, one from Egypt (Whitehouse 2001a, p. 201, no. 757), one from the eastern Mediterranean (Arveiller-Dulong and Nenna 2005, p. 450, no. 1267), and a third, unprovenanced example with snake-thread decoration, originally from the Kofler-Truniger Collection and now in the Metropolitan Museum of Art (Zanker et al.

2020, p. 213, no. 99, 2012.479.2). Also, two similar vessels were found in Aquileia (Mandruzzato and Marcante 2007, p. 102, nos. 281–282).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 238, no. 698.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 278. Hippopotamus-Shaped Flask

<b>Accession Number</b>	2003.440
<b>Dimensions</b>	H. 14.5, Diam. rim 5.3, max. Diam. 4.2 cm; Wt. 145.82 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syria
<b>Material</b>	Translucent dark green, yellow, and blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Some discoloration (silver on the exterior, black incrustation covering underlying silver weathering on the interior, particularly on areas around the inside of the mouth and neck). The upper lip of the animal is missing. One of the rear legs is probably missing, and the cavity has been filled with yellow glass very similar to the original. Small chip is missing from the rim.

**DESCRIPTION** Fire-polished, flaring rim with a cutout fold under the lip, imitating an applied coil. Wide,

cylindrical neck, at the bottom of which is a constriction that forms a diaphragm. The body has the shape of a hippopotamus. The wide mouth of the vessel extends from the tail end of the animal. The body is constructed of two bulbous shapes: one for the head and one for the body. A thick coil is wound around the head in front of the ears, framing the face of the animal. The head narrows and ends in a pinched, wide-open mouth. Each leg is formed with a blob of glass that was attached to the body and then squeezed and bent with pincers to form the foot. Each eye was formed by a lump of blue glass, which was twisted to be cut, and the revolution of the glass is visible. The ears are formed by blue lumps attached on the surface and then squeezed to flatten them and achieve their slightly elongated, semicircular shape. A striation in the glass on one side of the body shows the way the vessel was manipulated by the glassblower. The originally round, or rather ovular, body was squeezed toward its lower part, thus being transformed into two oblong, barrel-shaped parts, which represent the body and the head of the animal.

The vessel is made of a very thick mass of translucent, dark greenish glass. Features are applied: the front feet and a coil encircling the face are in the same-colored glass; the back feet are made of yellow glass; the eyes and ears are of dark blue glass.

**COMMENTS AND COMPARANDA** On sprinkler flasks and their production predominantly in Syria from the third century CE, mainly in the fourth, and probably even into the early fifth century CE, see comments on cat. 223. For a somewhat similar, mouse-like flask, see cat. 277, also dated to the third–fourth centuries CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 238, no. 699.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 279. Flask

<b>Accession Number</b>	2003.445
<b>Dimensions</b>	H. 5.4, Diam. rim 3.1, Diam. base 7.0, Th. 0.1 cm; Wt. 31.80 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Roman Empire, possibly western part
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended; fully preserved. Weathering has given it a blue-purple iridescence; incrustation occurs on the inside and under the foot.

**DESCRIPTION** Fire-polished, flaring rim; short neck; hemispherical body that folds, forming a very high, domed bottom. This type of bottom reduces the capacity of the flask to a mere fraction of what it externally appears to contain. It has been previously interpreted as a stemmed beaker, but the fact that the rim remains open and fully usable indicates that the vessel actually was shaped and finished as a flask. No pontil mark on the bottom, but also no constriction on the base of the neck.

**COMMENTS AND COMPARANDA** This vessel, with its minuscule capacity and ability to stand on either end, can be regarded as a trinket or trick vessel. A well-dated example from Slovenia dates the form to the second half of the first century CE (Lazar 2003, 3.7.3, fig. 33, pp. 103, 108, from a Flavian-era grave), as does another, contemporaneous one from the ancient necropolis of

Zadar in Croatia (Eterović Borzić and Štefanac 2021, p. 447, no. 1442). Other published examples are from the Newark Museum (Auth 1976, p. 91, no. 98, dated to the first–second centuries CE) and the Royal Ontario Museum (Hayes 1975, p. 53, no. 117, plate 8, dated to probably the second or early third century CE). Finally, a vessel similar in concept has been interpreted as a goblet tentatively dated to the fourth–sixth centuries, although an earlier or later date was not excluded; it belongs to the Corning Museum of Glass (Whitehouse 1997a, p. 106, no. 159).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 241, no. 708.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 280. Flask

<b>Accession Number</b>	2003.366
<b>Dimensions</b>	H. 9.4, Diam. rim 2.2, Diam. base 4.2 cm; Wt. 60.83 g
<b>Date</b>	First century CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Covered with iridescent weathering.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck, tapering toward the body; globular body; flat, concave bottom. A circular, solid pontil mark (W. 1.5 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** This flask belongs to a variant of the well-known short-necked, bulbous unguentaria that appear in the first century in all Mediterranean Roman provinces (Isings 1957, pp. 22–23, form 6). In this variant, the body is considerably more voluminous and the bottom is wider than in some comparable finds from Italy (De Tommaso 1990, p. 39, type 4; Mandruzzato and Marcante 2007, pp. 65–66, nos. 59–61) and Dalmatia (Ravagnan 1994, p. 83, nos. 148–149), all of them dated to the first century CE.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 198, no. 543.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



281. Flask

**Accession Number** 71.AF.85

<b>Dimensions</b>	H. 13.6, Diam. rim 3.2, Diam. base 4.3 cm; Wt. 88.27 g
<b>Date</b>	Mid-sixth to first half of seventh century CE
<b>Production Area</b>	Eastern Mediterranean, Palestine
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Cracked; fully preserved; iridescent. Parts of the neck are covered with crust. Some of the ornamental thread is missing.

**DESCRIPTION** Fire-polished, vertical rim; cylindrical neck, constricted toward the body; globular body; flat, slightly concave bottom. Three thick coils are wound around the central part of the neck at equal distances. A fine thread is spirally wound eight times around the central part of the neck and over the three coils.

Inside the body four thin tubular threads descend from the lower body to the shoulder. Three of them remain detached at the lower part of the body. The threads were made with the insertion of a pointed tool into the lower part of the initial paraision, creating a tubular opening that would end at the inside surface of the shoulder. With further expansion of the vessel the tubular hole would assume the shape of a thread.

**COMMENTS AND COMPARANDA** The shape of the rim and neck are characteristic of sixth- and seventh-century Syro-Palestinian products, as are the applied coils and threads (Stern 2001, p. 263), all features appearing in this vessel. For the classification of this type of vessel, see Barag 1970a, vol. 2, plate 43, type 15.22. Provenanced finds include a vessel from an archaeological context of the second half of the seventh century CE at Kourion, Cyprus (Young 1993, pp. 44, 47, fig. 8, no. 9); another reportedly from the vicinity of the Sea of Galilee (Auth 1976, p. 128, no. 158). At least three unprovenanced examples have been published (Bomford 1976, p. 34, no. 159; Harden et al. 1968, p. 90, no. 125; Stern 2001, pp. 263–264, 266, 268–270, 302, no. 165; Harden et al. 1968, p. 90, no. 125, British Museum).

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Lees-Causey 1983, p. 154, fig. 3.

Wight 2011, pp. 63, 70, fig. 46.

**EXHIBITIONS** None



## 282. Flask

<b>Accession Number</b>	2003.436
<b>Dimensions</b>	H. 7.0, Diam. rim 1.2, max. Diam. 3.7, Diam. base 2.0, Th. (rim) 0.3 cm; Wt. 18.95 g
<b>Date</b>	Fifth–seventh centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact. Some incrustation on the interior.

**DESCRIPTION** Cracked-off, very thick rim; short, cylindrical neck, tapering toward the body; pear-shaped body; flat, slightly concave bottom. On the body are 24 pinched warts arranged loosely in three rows. No pontil mark is visible on the undersurface, and a constriction is evident at the base of the neck.

**COMMENTS AND COMPARANDA** Several pear-shaped vessels decorated with pinched warts are known from the eastern Mediterranean and they are dated between the fifth and seventh centuries. Parallels include the following: Whitehouse 2003, pp. 149–150, no. 1152; Spartz 1967, no. 134, plate 32, said to be from Syria; Auth 1976, p. 230, nos. 524, 526; Matheson 1980, p. 127, nos. 341, 342, said to be from Syria; Barakat Gallery 1985, p. 103, no. GF115; Loudmer and Kevorkian 1985, pp. 214–215, nos. 524–525; *Yemen* 1997, p. 209, found in Al-Jawf, Yemen.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 236, no. 690.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 283. Flask

<b>Accession Number</b>	2003.449
<b>Dimensions</b>	H. 7.0, Diam. rim 3.8, max. Diam. 7.0, Diam. base 3.8 cm; Wt. 36.40 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent yellow-greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact; small areas with incrustation, especially on the inside; few pinprick bubbles.

**DESCRIPTION** Flaring, in-folded, tubular rim; short, cylindrical neck; squat globular body; slightly concave bottom. Twelve small, pinched projections around widest diameter. No pontil mark on the bottom. There is a thread of the same-colored glass looped along one side of the

interior of the mouth and neck, apparently applied by mistake.

**COMMENTS AND COMPARANDA** Squat globular flasks with a row of pinched warts around their greatest diameter are known from several Syro-Palestinian sites (Barag 1970a, vol. 2, plate 43, type 15.33-1; Delougaz and Haines 1960, plate 50, no. 9, from a grave at Khirbat al-Karak, sixth to mid-seventh century CE; Harden 1964, pp. 53–54, fig. 13, top row, no. 5, from Ajlun, sixth to early seventh century CE; Bauer 1938, p. 540, no. 87, fig. 28:4, plate 151:a, undecorated example from Jerash; Stern 2001, p. 354, no. 201; Antonaras 2012, p. 155, no. 218). Also comparable are pinched vessels with tall and wide neck: Barag 1970a, vol. 2, plate 43, type XV:27-1 (variant); Matheson 1980, p. 111, no. 289; cf. Gawlikowska and As'ad 1994, nos. 34–40, plate III:9–17; Antonaras 2012, p. 154, no. 214.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 244, no. 714.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



284. Flask with Spout

**Accession Number** 2003.245

<b>Dimensions</b>	H. 7.8, Diam. rim 1.3, Diam. base 3.4 cm; Wt. 27.99 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Italy or eastern Mediterranean
<b>Material</b>	Opaque white and probably yellow glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied thread; pierced spout

**CONDITION** Probably intact; it is possible that the spout is mended. Some calcination and pitting.

**DESCRIPTION** Fire-polished, flaring rim; fine cylindrical neck; spherical body; flat bottom. No pontil mark visible on the bottom. On the shoulder, a conical spout was formed by puncturing and drawing out the body. From the lower body to the rim, a fine thread, probably originally yellow, is spirally wound seven times.

**COMMENTS AND COMPARANDA** This flask can be ascribed to a generic form of globular flasks, very widely distributed in the early first century CE (Isings 1957, p. 16, form 26a), distinguished though by the spout on its shoulder, which is a feature known in larger, mostly bag-shaped vessels of that time known as *guti* (see comments on cat. 285). The vessel is decorated with a thread that was melted flush with the surface, a feature present in both the eastern and western provinces of the Roman Empire in the first century CE (Isings 1957, pp. 22–23, form 6); see comments and parallels for cat. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 114, no. 308; p. 110, plate no. 308.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 285. Bird-Shaped Flask

<b>Accession Number</b>	2003.381
<b>Dimensions</b>	H. 7.8, Diam. rim 3.3 × 3.6, L. 9.0, Th. 0.1 cm; Wt. 25.71 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent bluish-green glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled

**CONDITION** Intact. Iridescence and even black crust cover the interior.

**DESCRIPTION** Fire-polished, flaring rim; trefoil mouth; wide, cylindrical neck; body pulled to form a spout at its end, assuming the shape of a bird; mildly concave bottom. The tip of the tail is open and has been open from the beginning, as its fire-rounded tip clearly indicates. The pouring slit of the trefoil mouth is inconveniently placed over the body, making it difficult to pour the liquid contents of the vessel from there.

**COMMENTS AND COMPARANDA** The actual use of these vessels, known as *guti*, remains uncertain. There is a testimony in the sources that they were used as baby feeders (Hilgers 1969, s.v. “titina” or “ubuppa,” p. 80), but it has also been proposed that they were used for the filling of oil lamps (McFadden 1946, p. 475, no. 32; Isings 1957, p. 118) or some sort of a drip feeder for medicinal liquids (Welker 1974, pp. 95–98). The more likely hypothesis seems to be that they were used for filling oil lamps, especially clay lamps: their very small filling holes would seem to necessitate the use of a funnel or a spout. However, the obvious discrepancy between the large

number of lamps found in excavations and the small number of glass “lamp fillers” does not support this hypothesis unreservedly (Antonaras 2017, pp. 102–103). For parallels with baby feeders (*guti*), see Vessberg 1952, pp. 148–149, *gutis* type, plates X:1–2, XX:4–5; Barag 1970a, vol. 2, plate 47, type XXIII:2; Antonaras 2012, p. 165, nos. 234–235; Antonaras 2009, form 53a = Antonaras 2017, p. 102.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 204–205, no. 574.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 286. Bird-Shaped Flask

<b>Accession Number</b>	2003.382
<b>Dimensions</b>	H. 5.2, L. (body) 8.4, Th. 0.1 cm; Wt. 13.60 g (with the resin)
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled



**CONDITION** Broken and mended in different places. Some weathering has produced iridescence, with incrustation around the outside of the mouth; several pinprick bubbles. Rim is reconstructed by some resin.

**DESCRIPTION** Cylindrical neck; bird-shaped body. The pressing marks of the pucellas used to shape the vessel are visible on the tip of the tail. Originally blown as a globular flask, it was manipulated while still hot and malleable to produce the desired shape.

**COMMENTS AND COMPARANDA** Very similar to baby feeders (guti) (see cat. 285), except for the sealed end in this flask type. This is a small and simplified version—with its simple, pinched bottom—of a relatively well-known form of askos (a wineskin in ancient Greek, that is, a container for wine made of animal skin) (see comments on cat. 287). Several parallels for this particular form of flask with trefoil rim are known (Froehner 1903, no. 813, p. 117, plate 128.1 [now Metropolitan Museum of Art, 17.194.134: <https://www.metmuseum.org/art/collection/search/249378>]; Dusenbery 1971, p. 17, no. 19; Canav 1985, p. 39, no. 24; *3000 Jahre Glaskunst*, no. 203; Whitehouse 2001a, pp. 121–122, nos. 188–189).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 205, no. 575.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



287. Askos, Bird-Shaped Flask

<b>Accession Number</b>	2003.383
<b>Dimensions</b>	H. 8.3, L. 14.0, Diam. rim 4.8, Diam. base 4.5 × 2.5 cm; Wt. 71.44 g
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled

**CONDITION** Complete; a few small chips are broken from the rim. Areas with iridescence and gray crust.

**DESCRIPTION** Cracked-off, vertical rim; conical mouth and neck, tapering toward the body, which is ovular with pinched, pointed end. The flask stands on a slightly conical bottom. No pontil scar.

**COMMENTS AND COMPARANDA** A simplified version—with its simple, pinched bottom—of a relatively well-known form of askos (a wineskin in ancient Greek, that is, a container for wine made of animal skin) with an S-shaped ending for the bottom (Berger 1960, p. 84, no. 224, plates 15, 22; Hayes 1975, p. 66, no. 197; von Saldern 1974, p. 157, no. 237; Bomford 1976, p. 22, no. 67; Stern 2001, p. 113, no. 43; Massabò 2001, pp. 118–119, no. 69; Israeli 2003, p. 118, no. 109; Arveiller-Dulong and Nenna 2005, p. 197, no. 548). Exact parallels have been found in Pantikapaion on the Black Sea coast, dated to the second half of the first century CE, and are considered to be eastern Mediterranean products (Kunina 1997, p. 327, nos. 377–378, figs. 180–181).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 205, no. 577.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 288. Baby-Feeder Flask

<b>Accession Number</b>	2003.447
<b>Dimensions</b>	H. 15.8, Diam. rim 3.7, Diam. base 4.2 cm; Wt. 40.49 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled

**CONDITION** Heavy weathering, incrustation, and iridescence have given the vessel a marbled brown and cream-colored appearance. A small chip is missing from the end of the spout.

**DESCRIPTION** Fire-polished rim; funnel mouth; long, cylindrical neck; globular body; flat, slightly concave bottom. No pontil mark visible on the bottom. On one side of the body is a small, applied, conical spout.

**COMMENTS AND COMPARANDA** In general, on baby feeder flasks (*guti*), see Isings 1957, p. 118, form 99; on their probable use either as baby feeders or as lamp-fillers, see Antonaras 2017, p. 102, form 53. For this particular form, see Barag 1970a, vol. 2, plate 47, type XXIII:3; Dusenbery 1971, p. 18, no. 20; von Saldern 1974, p. 156, no. 235; Hayes 1975, p. 91, no. 299; Weinberg 1988, p. 79, nos. 341–342.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 865]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, no. 865, plates 13, 31.

von Saldern et al. 1974, p. 244, no. 712.

Wight 2011, pp. 104, 124, fig. 94.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 289. Jug

<b>Accession Number</b>	2003.476
<b>Dimensions</b>	H. 17.0, Diam. rim 7.5, Diam. base 5.8 cm; Wt. 194.50 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Semitranslucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. White soil inside.

**DESCRIPTION** Flaring, fire-polished rim; wide neck widening toward the conical body; conical, pushed-in base; concave bottom. Strap handle applied on the rim, forming triangular projections, pulled out and down to the shoulder; a small thread was pulled back up toward the rim, forming a central rib. On the body, S-shaped whitish striations are visible, probably signs of the rotation of the vase during the blowing process. On the bottom, an annular pontil mark (W. 3 cm) is visible. The entire vessel is a bit off-center, leaning forward.

**COMMENTS AND COMPARANDA** Jugs with wide necks are known from the first century CE, although they differ in the shape of the handle (Isings 1957, pp. 71–72, form 54). Among glass vessels, this vessel is quite unique in its shape. A similar, dark blue jug has been published from Pompeii (Scatozza Höricht 2012, p. 93, no. 6837, plate II, fig. 6). The shape derives from metal prototypes known among finds from Pompeii (Painter 2001, p. 65, plate 18, fig. 2, jug M20, wherein relevant metal parallels). Vessels made of the same glass in the Getty collection are the alabastron cat. 30 and the patella cat. 77, also dated to the early first century CE.

**PROVENANCE** 1979, Mr. and Mrs. Andrew Constable Maxwell [sold, Sotheby's, London, 4–5 June 1979, lot 110.]; by 1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Sotheby Parke Bernet 1979, lot 110.

Wight 2011, pp. 103, 116, fig. 85.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)



## 290. Jug

<b>Accession Number</b>	2003.346
<b>Dimensions</b>	H. 10.2, Diam. rim 7.0, Diam. base 4.5, Th. 0.3 cm; Wt. 210.86 g
<b>Date</b>	Late first–early second centuries CE
<b>Production Area</b>	Italy or northwestern Europe
<b>Material</b>	Decolorized glass
<b>Modeling Technique and Decoration</b>	Free-blown; wheel-cut and polished

**CONDITION** Reassembled, with a large fill near the handle.

**DESCRIPTION** Ground rim; flaring mouth; ovular body, standing on a conical base. At the upper part of the mouth are two fine horizontal incisions, and a relief rib delineates the transition to the body, which bears faceted decoration comprising five rows of wheel-cut, elongated, lozenge-shaped facets, forming a very regular and tight faceted pattern. The top and bottom rows have a rounded upper and lower end, respectively. Below this is a horizontal relief rib. A raised disk (W. 0.7 cm) is at the center of the bottom. A small strap handle was applied on the middle of the body and drawn up to the upper part. The handle has wheel-cut decoration as well, namely, two parallel, vertical strokes along its height, flanked by three perpendicular to it, two on the upper part and one on the lower.

**COMMENTS AND COMPARANDA** This jug belongs to a group of possibly molded, probably blown and polished

vessels—comprising conical and ovoid beakers, bowls, jars, jugs, and spoons—that are all made of thick decolorized glass (Foy et al. 2019, vol. 1, pp. 13–14). For more on decolorized glass, see cat. 270. The technique of facet-cutting on glass was invented in Italy in the late 60s or early 70s CE, when transparent colorless glass became fashionable due to the fact that facets are best visible on transparent glass and thus the result was much appreciated. Facet-cutting was applied with great success on a wide variety of forms made of decolorized glass (Foy et al. 2019, vol. 1, pp. 343–344). This jug is unique, though it is extremely close to beakers like cat. 256 dated to the late first–early second century CE. All published parallels are found in the western and northern provinces of the Roman Empire (Foy et al. 2019, vol. 1, pp. 26–27, form IN 18). Other vessels quite similar in shape include one found in Begram, Afghanistan (Hamelin 1953, plate VIII, type b), and one from Szombathely, Hungary (Barkóczi 1988, p. 171, no. 402, plate XXXVI, XCIV). Faceted jugs are also known in blue glass (Whitehouse 1997a, pp. 235–236, no. 399; Delacour 1993, pp. 60–62).

**PROVENANCE** By 1965–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** *JGS* 1965, pp. 120–121, no. 4.

von Saldern et al. 1974, p. 184, no. 507.

Wight 2011, pp. 1, 2, fig. 1.

**EXHIBITIONS** *Molten Color: Glassmaking in Antiquity* (Malibu, 2005–2006; 2007; 2009–2010)

*Gläser der Antike: Sammlung Erwin Oppenländer* (Hamburg and Cologne, 1974–1975)



## 291. Jug

<b>Accession Number</b>	2003.377
<b>Dimensions</b>	H. 9.4, Diam. rim 3.2, Diam. base 2.8 cm; Wt. 55.89 g
<b>Date</b>	Possibly second century CE, probably third–fourth centuries CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque blue and white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved; part of the base and the thread on the shoulder are missing.

**DESCRIPTION** Fire-polished rim; conical mouth; cylindrical neck, wider toward the sloping shoulder that leads to the everted conical body; slightly concave bottom. The vessel stands on an applied base-ring made of a thick coil of white glass. Thick, white coil is wound under the rim and a fine thread is wound four times at the transition to the shoulder. A fine, coil handle made of white glass with bluish striation in it is applied on the shoulder and ends on the coil under the rim.

**COMMENTS AND COMPARANDA** The shape of the vessel, as well as the applied base and the decorative thread around the neck, are very well known among jugs dated to the third–fourth centuries CE (Isings 1957, p. 152, form 121a; Antonaras 2017, pp. 125–126, forms 88, 90–92, wherein several parallels are cited). Nevertheless, this small jug shares the colors of several first-century

translucent dark blue vessels with opaque white handles, bases, or purely decorative threads and coils, such as kantharos cat. 267, trefoil flask cat. 292, flasks cats. 331–332, and amphoriskos cat. 357 (Stern 2001, p. 70, no. 13; Antonaras 2017, p. 138, form 112, no. 460, where other parallels are cited).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 203, no. 570.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



292. Flask

<b>Accession Number</b>	2003.373
<b>Dimensions</b>	H. 6.0, Diam. rim 2.4 × 2.6, max. Diam. 5.7, Diam. base 3.2 cm; Wt. 12.28 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. Small areas covered by white incrustation.

**DESCRIPTION** Trefoil rim with an applied opaque white coil; conical mouth; short, cylindrical neck; globular body; flat bottom. No sign of pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** This vessel appears to be quite rare; the only parallel identical in colors and shape is kept at the Carnegie Museum of Natural History in Pittsburgh (Oliver 1980, p. 51, no. 36). In general for the shape of the vessel, cf. Isings 1957, form 88b, jugs; Vessberg 1956, p.147, form I.3, β.3.y, fig. 46:13. Additionally, it can be noted that during the first century CE the use of opaque white glass on translucent blue vessels to form handles and bases or in the shape of purely decorative threads and coils is well represented in the Getty collection, e.g., kantharos cat. 267, jug cat. 291, flasks cats. 331–332, and amphoriskos cat. 357. In addition, for amphoriskoi, see Stern 2001, p. 70, no. 13; Antonaras 2017, p. 138, form 112, no. 460, where other parallels are cited.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 201, no. 562.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



293. Juglet

**Accession Number** 2003.391



<b>Dimensions</b>	H. 6.5, Diam. rim 2.0, Diam. base 1.9, Th. 0.1 cm; Wt. 7.40 g
<b>Date</b>	Second–third centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved. The weathered surface gives the vessel an iridescent blue and brown color.

**DESCRIPTION** Fire-polished, flaring rim, a small part in-folded; ovoid body, gradually tapering along the elongated upper part, which ends smoothly under the rim. A thick coil of transparent bluish glass forms the applied base-ring. The coil handle, of transparent blue glass, starts at the lower body and, forming a high curve, attaches at the rim.

**COMMENTS AND COMPARANDA** Jugs of this ovular shape appear in the late second or third century CE (Price and Cottam 1998, pp. 161–162, fig. 71a), and with small modifications they continue to be in fashion in the fourth century (Isings 1957, pp. 149–150, form 120a; Antonaras 2017, p. 121, form 83; for dip mold-blown examples, see Antonaras 2017, p. 120, form 81).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 208, no. 588.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 294. Jug

<b>Accession Number</b>	78.AF.34
<b>Dimensions</b>	H. 13.3, Diam. rim 3.1, Diam. base 5.0 cm; Wt. 68.66 g
<b>Date</b>	First half to mid-first century CE
<b>Production Area</b>	Western Roman Empire
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; crust of weathering and iridescence on parts of the vessel.

**DESCRIPTION** Unevenly in-folded, tubular, flaring rim; cylindrical neck; globular body; pushed-in base-ring; flat, slightly concave bottom. No pontil mark visible on the bottom. A lopsided strap handle with three grooves is applied on the shoulder, stretches upward, folds (forming a thumb-rest tab), and ends on the upper neck.

**COMMENTS AND COMPARANDA** This jug belongs to a quite widespread form known mainly from the western parts of the Roman Empire (Isings 1957, pp. 69–70, form 52a; Sternini 1991, vol. 2, p. 121, nos. 492–493; Stern 2001, p. 92, no. 30) and Cyprus (Vessberg 1952, plate VI:11–13; Lightfoot 2007, p. 81, no. 175). The form also appears in examples with a squatter body, including: Matheson 1980, p. 32, no. 92; Kunina 1997, p. 303, no. 250; Arveiller-Dulong and Nenna 2005, pp. 45–46, nos. 44–45.

**PROVENANCE** 1950, Spink & Son, Ltd. (London, England), sold to J. Paul Getty, 1950; 1950–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Stothart 1965, p. 21, no. F-27.

**EXHIBITIONS** None



295. Jug

<b>Accession Number</b>	2003.284
<b>Dimensions</b>	H. 12.2, Diam. rim 2.8, max. Diam. 3.9, Diam. base 2.4, Th. 0.1 cm; Wt. 39.40 g (including Plexiglas base)
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark greenish glass with striations of opaque red glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Severely weathered. Blue iridescence and patchy accretions cover one side. A fill has been added on the rim.

**DESCRIPTION** In-folded, flaring rim; cylindrical neck, wider toward the biconical body; flat bottom. A fine strap handle has been applied on the shoulder and drawn up, stretching beyond the rim and bent in an acute angle to

meet the upper surface of the rim, where it is bent once more at a right angle, ending in a small thumb rest.

**COMMENTS AND COMPARANDA** There are opaque red striations on the body and the handle, indicating that red glass was used in the same workshop either to decorate transparent vessels or even to form entire vessels. This jug is made of dark green glass, known mainly from finds dated in the fourth century CE. For a close parallel, see Antonaras 2012, p. 172, no. 248. Also, see comparable jugs in Israeli 2003, p. 175, no. 194; Arveiller-Dulong and Nenna 2005, p. 380, no. 1013. In addition, handleless flasks with the same characteristic body have been ascribed to the Syro-Palestinian region, dated to the third–fourth centuries CE (see Abdul Hak 1965, p. 31, fig. 12; Stern 1977, pp. 80–82; Stern 2001, p. 241, no. 127; Auth 1976, p. 217, no. 442).

**PROVENANCE** Louis de Clercq, French, 1836–1901 (Paris, France); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** de Ridder 1909, p. 185, no. 348.

von Saldern et al. 1974, p. 136, no. 378.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



296. Jug

<b>Accession Number</b>	2003.376
<b>Dimensions</b>	H. 14.5, Diam. rim 3.9, Diam. base 3.5, Th. 0.1 cm; Wt. 70.20 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Most of the outside surface is covered with a marbled brown layer of weathering.

**DESCRIPTION** Fire-polished, partly in-folded, short, conical mouth; cylindrical neck, wider toward the body; ovular body; pushed-in, tubular base-ring; flat bottom. On the bottom an annular pontil mark (W. 1.5, Th. 0.1 cm) is visible. A large strap handle with two vertical grooves is added at mid-body and ends folded underneath the rim.

**COMMENTS AND COMPARANDA** Jugs of this ovular shape appear in the late second or third century CE (Price and Cottam 1998, pp. 161–162, fig. 71a), and they continue to be in fashion in the fourth century (Isings 1957, pp. 149–150, form 120a; Antonaras 2017, p. 121, form 83; for dip mold-blown examples, see Antonaras 2017, p. 120, form 81).

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 770]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, no. 770, plates 12, 13.

von Saldern et al. 1974, p. 203, no. 569.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 297. Oinochoe

<b>Accession Number</b>	2003.393
<b>Dimensions</b>	H. 21.0, Diam. rim 6.8–7.1, max. Diam. 12.3, Diam. base 8.7 cm; Wt. 330.50 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent dark greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended; small areas of slight weathering.

**DESCRIPTION** Fine, in-folded rim; trefoil mouth; wide, cylindrical neck; horizontal shoulder; pear-shaped body, standing on a pushed-in, conical base-ring; concave bottom with a central kick. An annular pontil mark (W. 2.8, Th. 0.12 cm) is visible at the center of the bottom. A wide strap handle with three ribs is applied on the shoulder and ends on the rim, where it folds, forming a thumb-rest tab.

**COMMENTS AND COMPARANDA** Jugs with pear-shaped or bulbous body are known from western (Isings 1957, p. 152, form 121a) as well as eastern Roman provinces (cf. Israeli 2003, p. 175, no. 195; Arveiller-Dulong and Nenna 2005, p. 380, no. 1014; Antonaras 2017, p. 125, form 88), dated to the third–fourth centuries CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 211, no. 598.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 298. Jug

<b>Accession Number</b>	2003.428
<b>Dimensions</b>	H. 11.0, Diam. rim 5.0 × 4.5, Diam. base 4.5, Th. 0.1 cm; Wt. 58.10 g
<b>Date</b>	Second half of the fourth–early fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; a small crack is visible on the lip. Some iridescence visible on the exterior and some reddish soil in the interior.

**DESCRIPTION** Fire-polished rim; trefoil mouth; cylindrical neck; globular body; concave bottom. An annular pontil mark (1.5 × 1 cm) is visible at the center of the bottom.

A greenish coil is wound under the rim and at mid-neck height. In addition, a turquoise thread is wound five times around the upper body, and below it is a zigzag thread. A coil handle was added on the shoulder and ends on the lip.

**COMMENTS AND COMPARANDA** This jug is a characteristic example of Syro-Palestinian glass production in the late fourth century CE. It is very close to the mold-blown jug cat. 186. This group, known as the Blue Zigzag Group, includes several similar vessels—jugs, jars, and spouted flasks—that are made of the same greenish glass and decorated with threads of turquoise glass spirally wound or in zigzags (Stern 1977, pp. 120–122). Several examples are published. Jugs with round mouth: Arveiller-Dulong and Nenna 2005, pp. 358, 381, nos. 1017–1019; Zouhdi 1964, no. 61; Auth 1976, p. 208, no. 387; Israeli 2003, p. 182, no. 215. Jars: Stern 1977, pp. 120–122; Auth 1976, p. 223, nos. 476, 477; Barag 1970a, type 6: 11-1, 12-1, 13-1; Stern 2001, p. 230, no. 117; Dussart 1998, pp. 93–94, forms BVII.261, 2621.2, plate 20; Arveiller-Dulong and Nenna 2005, pp. 422–423, nos. 1174–1176; Israeli 2003, p. 239, no. 307. Spouted flask: Arveiller-Dulong and Nenna 2005, p. 381, no. 1016.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 228, no. 671.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 299. Jug

<b>Accession Number</b>	2003.422
<b>Dimensions</b>	H. 9.0, Diam. rim 3.8, Diam. base 4.5 cm; Wt. 46.93 g
<b>Date</b>	Second–third centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Iridescence and white layer of weathering.

**DESCRIPTION** Partly in-folded, flaring rim; short, wide, cylindrical neck; conical body; flat, slightly concave bottom. A fine trail of greenish glass is wound spirally eight times from the center of the bottom to the rim. A strap handle extends from shoulder to rim. The handle is pinched at its base to form four horizontal notches and folded twice more near the rim to create two thumb-rest tabs.

**COMMENTS AND COMPARANDA** A plain example of this form is known from Cyprus (Lightfoot 2007, p. 81, no. 174; Lightfoot 2017, pp. 143–145, nos. 157–158). Quite similar jugs are known with trefoil mouth (Barag 1970a, vol. 2, plate 36, type VIII:13-1), some of them with globular body (Antonaras 2012, pp. 191, 192, nos. 254–257; Dussart 1998, p. 177, type B.XIV.1221, plates 60:2, 74).

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer

südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 925]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, no. 925, plates 12, 17.

von Saldern et al. 1974, p. 224, no. 657.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 300. Trefoil Oinochoe

<b>Accession Number</b>	2003.410
<b>Dimensions</b>	H. 8.8, Diam. rim 5.0, Diam. base 4.4 cm; Wt. 39.96 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved; mended. Iridescence covers the interior and small areas on the ends of the handle and the mouth on the exterior.

**DESCRIPTION** Fire-polished rim; trefoil mouth; cylindrical neck; globular body decorated at maximum



diameter with five indentations; concave bottom. At the center of the bottom an annular pontil mark (W. 1.6 cm) is visible. A fine thread is spirally wound five times around the mouth. A fine coil handle is applied on the shoulder and terminates, folded, under the rim. A coil was wound twice around the lower neck; now only the wide wad of glass where it was applied on the vessel is preserved, along with a trace of the rest of its path.

**COMMENTS AND COMPARANDA** Jugs with the same body shape are known from Syro-Palestinian sites, usually with smooth body and plain rim (Filarska 1952, p. 153, no. 148, plate 33; Weinberg 1988, pp. 66–67, nos. 207–214; Crowfoot 1957, p. 416, fig. 96:9; Matheson 1980, p. 89, no. 241; Whitehouse 2001a, p. 183, nos. 726–727) or rarely with trefoil mouth (Auth 1976, p. 208, no. 386), dated to the fourth or fifth century CE.

The indentation around the body is not noted among the parallels cited above. Glassworkers aimed to imitate hammered silver vessels, which were often decorated with smaller or bigger indentations from the first century CE, and during the fourth century this style became very popular for Syro-Palestinian products, mostly on small unguentaria, whose bodies were rendered practically square by these indentations (Antonaras 2017, pp. 159–160, form 141, nos. 668–680, plate 41; Antonaras 2012, pp. 195–196, nos. 282–285, jars).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 217, no. 630.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 301. Jug

<b>Accession Number</b>	2003.413
<b>Dimensions</b>	H. 13.0, Diam. rim 4.0–4.2, Diam. base 1.7, Th. 0.1 cm; Wt. 48.41 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Palestinian region
<b>Material</b>	Translucent greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; some areas with iridescence, mostly on the neck and mouth area.

**DESCRIPTION** Fire-polished rim; wide conical mouth; cylindrical neck wider toward the conical body. Thick turquoise coil wound under the rim, and another at the base of the neck. The body bears nine vertical elongated indentations, which cover it almost entirely. The vessel ends in a small, pad base made of a thick coil of turquoise glass wound three times and pressed flat, similar to the toes of clay amphorae. A coil handle, made of greenish glass with remains of turquoise glass in its upper part, starts on the shoulder and ends on the mouth, which is mildly deformed at that spot.

**COMMENTS AND COMPARANDA** This jug has many common features with the distinctive group of Syro-Palestinian amphorae, free- and mold-blown ones dated to the fourth and fifth centuries CE (Stern 1977, pp. 84–85; Stern 2001, pp. 146–149, nos. 100–101). These common

features, beginning with the characteristic color and quality of both green and turquoise glass, the shape of the base and the handle, the indentations along the body, and the decorative colored coil on the neck and under the rim, indicate that this jug was produced in the same workshop. For further comments on this production, see cat. 220.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 992]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, p. 78, no. 992, fig. 50.

von Saldern et al. 1974, p. 218, no. 635.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 302. Jug

<b>Accession Number</b>	2003.433
<b>Dimensions</b>	H. 18.0, Diam. rim 6.4, max. Diam. 9.0, Diam. base 6.0, Th. 0.2 cm; Wt. 227.40 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent amber-colored and purple glass

**Modeling Technique and Decoration** Free-blown; applied elements

**CONDITION** Intact. Visible areas with iridescence, mainly in the interior.

**DESCRIPTION** Fire-polished rim; conical mouth; cylindrical neck, wider toward the body; convex shoulders; conical body, standing on an irregular, pushed-in, and flattened base-ring. The lower part of the body is mildly distorted in one place due to some mishap in the formation of the base. A thick annular pontil mark (W. 2.2, Th. up to 0.7 cm) is visible on the bottom. A strap handle, mostly purplish—only a small part is bluish-greenish—in a different hue than that of the body, starts on the shoulder, stretches almost vertically to the height of the rim, where it bends, and attaches on the mouth and under the rim. The edges of the handle appear to be raised due to a deep and wide groove that runs along the central part of the handle. One purplish coil is wound twice under the rim, and another is wound once around the base of the neck.

**COMMENTS AND COMPARANDA** Jugs of this form are known among fourth-century vessels from western sites (Isings 1957, pp. 150–151, form 120b). In addition, dip mold-blown parallels are known mainly from the Balkans and Trier (Antonaras 2017, pp. 121–122, form 84), also dated to the fourth century CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 232, no. 682.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 303. Jug

<b>Accession Number</b>	2003.434
<b>Dimensions</b>	H. 17.5, Diam. rim 5.3–5.6, max. Diam. 6.3, Diam. base 4.4 cm; Wt. 62.48 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; iridescent in parts, with patches of white layer of weathering.

**DESCRIPTION** In-folded trefoil rim; conical mouth; cylindrical neck, wider toward the body; tall ovular body; pushed-in, discoid base; flat bottom. No pontil mark visible on the bottom. Coil handle applied on the shoulder, stretched vertically and bent in a right angle, and attached to the rim. A thick coil is applied on the underside of the rim. The handle and the decorative coil are made of turquoise glass with opaque red striations at the ends.

**COMMENTS AND COMPARANDA** For the same use of the same combination of colors in body, handle, and decorative coil in a mold-blown juglet from Syria, see Antonaras 2012, p. 83, no. 91, dated to the fourth century CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 232, no. 683.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 304. Jug

<b>Accession Number</b>	2003.452
<b>Dimensions</b>	H. 9.0, Diam. rim 3.0, Diam. base 4.0 cm; Wt. 45.06 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syria
<b>Material</b>	Translucent bluish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. Whitish weathering on the interior.

**DESCRIPTION** Fire-polished, flaring rim; long, conical neck; globular body; slightly concave bottom. On the bottom, a faint scar of a solid pontil (W. approx. 0.9 cm) is visible. Coil handle applied on the shoulder, stretched to the rim, where it is folded twice, forming a thumb rest extending beyond the rim. Decorated with applied, undulating trails: one trail horizontal on the shoulder,

and three vertical trails arranged at equal distances around the body from the bottom to the shoulder.

**COMMENTS AND COMPARANDA** The use of turquoise blue coil in the decoration of bowls and various forms of flasks and jugs is typical for the Syrian region in the sixth–seventh centuries CE (Jennings 2004/5, pp. 155–168; Foy 2000, pp. 259–268, and particularly on jugs pp. 266–267).

No handled parallels have been located. The closest parallel is a bottle in the Metropolitan Museum of Art made of the same glass and bearing the same decoration; in color and shape it is dated to the seventh–eighth centuries CE (x.21.178: <https://www.metmuseum.org/art/collection/search/442864>).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 249, no. 723.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



305. Jug

**Accession Number** 2003.450

<b>Dimensions</b>	H. 10.5, Diam. rim 3.0, Diam. base 3.8 cm; Wt. 31.53 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syria
<b>Material</b>	Translucent greenish and dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact.

**DESCRIPTION** Slightly in-folded rim; short conical mouth; cylindrical neck; globular body with four indentations around it, giving it an uneven octagonal shape; concave bottom. At the center of the bottom, an annular pontil mark (Diam. 1 × 0.7 cm) is visible.

A dark blue coil with several ferrous impurities is attached on the shoulder and, bending, forms a curved handle that is reattached on the neck at mid-height. The same coil continues, spirally wound six times around the mouth.

**COMMENTS AND COMPARANDA** The use of turquoise blue coil in the decoration of bowls and various forms of flasks and jugs is typical for the Syrian region in the sixth–seventh centuries CE (Jennings 2004/5, pp. 155–168; Foy 2000, pp. 259–268, and particularly on jugs pp. 266–267). For very similarly shaped jugs, see Israeli 2003, p. 282, no. 381; Arveiller-Dulong and Nenna 2005, p. 478, no. 1300.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 247, no. 718.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 306. Jug

<b>Accession Number</b>	2003.288
<b>Dimensions</b>	H. 12.8, Diam. rim 7.1, max. Diam. 10.0, Diam. base 4.5, Th. 0.2 cm; Wt. 259.00 g
<b>Date</b>	Between the fourth and eighth centuries, probably seventh–eighth centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent amber-colored and opaque white and red glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; areas covered with off-white/beige weathering.

**DESCRIPTION** Flaring rim; short, conical mouth that leads directly to the ovular body. A thick coil is wound once around the lower end of the mouth at the transition to the body. The vessel stands on a flat bottom, where an annular pontil mark (W. 2.5 cm, Th. 0.1 cm) is visible. A strap handle was applied on the body and drawn up to the base of the mouth, covering the decorative coil there.

Body, handle, and the decorative coil are made of amber-colored glass with few pinprick bubbles in it. In addition, the vessel is covered with applied decoration. One white and one opaque red-brick thread are wound nine times around the vessel, from the center of the bottom to the

end of the rim. The threads are combed on body and neck, forming festoons.

**COMMENTS AND COMPARANDA** The same decoration of a fine red trail dragged to form festoons appears on vessels from the Syro-Palestinian region from the fourth up to the eighth century CE; see comments on cat. 348. The dark translucent color and the thick walls of the body connect it with jars dated to the seventh–eighth centuries (e.g., Whitehouse 2014, pp. 194, nos. 940–941). For other parallels, see Metropolitan Museum of Art 1930, p. 111 (not illustrated), a jar (29.100.89.) dated to the fifth century CE or later: <https://www.metmuseum.org/art/collection/search/253001>; Platz-Horster 1976, pp. 92–93, nos. 183–186, flasks in different shapes and an amphoriskos dated to the fourth–fifth or seventh–eighth centuries CE; Oliver 1980, p. 139, no. 240, globular jar dated to the seventh–eighth centuries CE; Whitehouse 2001a, pp. 212–213, nos. 777–778, a bottle dated to the fourth–fifth centuries CE, and a jar dated to the fifth century CE, or later; Carboni and Whitehouse 2001, pp. 136–137, no. 53, a cylindrical bottle ascribed to Egypt or Syria; the same in Carboni 2001, pp. 296–297, no. 75a, dated to the eighth, possibly early ninth century CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 138, no. 386.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 307. Bottle

<b>Accession Number</b>	71.AF.79
<b>Dimensions</b>	H. 18.0, Diam. rim 5.0, Diam. base 9.0 × 9.0 cm; Wt. 428.52 g
<b>Date</b>	Second–third centuries CE
<b>Production Area</b>	Asia Minor
<b>Material</b>	Translucent blue-green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; dark brown and iridescent weathering cover the interior and parts of the exterior.

**DESCRIPTION** Rim folded out, down, and up; cylindrical neck; sloping shoulders; square body; flat bottom. A smooth strap handle of the same material is attached on the shoulder and bent at a right angle, ending at the upper neck area below the rim. Three concentric circular ridges (Diam. 1.5, 3.5, 5 cm) are faintly visible on three sides of the body—possibly remains of the mold used to shape the sides, or probably the result of the uneven cooling down of the glass. As none of the body edges are straight and the sides are quite different, the vessel may be either a crooked mold-blown product or a free-blown product.

**COMPARANDA** Isings 1957, form 50a; Charlesworth 1966, pp. 26–40; Goethert-Polaschek 1977, form 114; Matheson 1980, pp. 33–34, no. 95; Sorokina 1987, pp. 55–60; Cool and Price 1995, pp. 84–85; Israeli 2003, p. 255, no. 326; Antonaras 2012, p. 85, no. 97.

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 308. Cinerary Urn

<b>Accession Number</b>	80.AF.125
<b>Dimensions</b>	H. 26.0, Diam. rim 17.6, max. Diam. 13.2, Diam. base 13.2 cm; Wt. 1,194.73 g
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Western Roman Empire, probably Italy
<b>Material</b>	Transparent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended, with some fills, and iridescence in different areas. No lid.

**DESCRIPTION** Wide, in-folded rim, flaring to form a conical mouth; short, rudimentary neck; globular body; conical, pushed-in base; flat, slightly concave bottom. No pontil mark visible on bottom, as is normal for these vessels. Massive, M-shaped handles have been applied at the shoulders, beginning from the left and ending at the right.

**COMMENTS AND COMPARANDA** Lidded, large-sized glass vessels with wide neck, usually with two heavy, M-, U-, or Omega-shaped handles but occasionally handleless

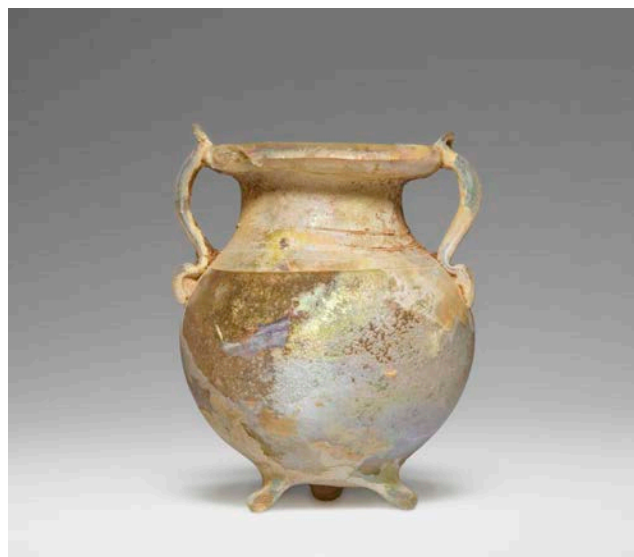
or single-handled, were used as cinerary urns in Roman times, during the late first and throughout the second centuries CE. The ashes of cremated Romans were placed in them, and usually they were placed in a marble or lead case to avoid fracture and the consequent spilling of the human remains. These glass receptacles were mostly unearthed in the western Roman provinces, where the custom of cremation was prevalent, or at eastern Mediterranean sites with direct connections to the west. See Isings 1957, pp. 81–83, form 63; Goethert-Polaschek 1977, pp. 244–246, form 150, plate 11; Zampieri 1998, p. 187, no. 310; Wiseman 1969, plate 31.1; Cool and Price 1995, pp. 88–92; Weinberg and McClellan 1992, pp. 121–122, no. 91; Arveiller-Dulong and Nenna 2005, pp. 167–179, nos. 469–515; Whitehouse 1997a, pp. 172–174, nos. 302–305.

**PROVENANCE** 1980, Richard C. Swingler, American, 1918–1993, donated to the J. Paul Getty Museum, 1980

**BIBLIOGRAPHY** Lees-Causey 1983, p. 153, fig. 1.

Wight 2011, pp. 104, 125, fig. 96.

**EXHIBITIONS** Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)



### 309. Jar

<b>Accession Number</b>	2003.392
<b>Dimensions</b>	H. 7.0, Diam. rim 4.6, max. Diam. 6.0, Diam. base 2.6 cm; Wt. 37.50 g
<b>Date</b>	Third century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent yellowish glass

**Modeling Technique and Decoration** Free-blown; applied elements

**CONDITION** Fully preserved; a chip missing from the rim. Mostly covered by yellowish iridescence and opaque whitish weathering.

**DESCRIPTION** In-folded, flaring rim; short, wide, cylindrical neck; globular body, standing on three pinched toes. Two handles are applied around the neck. Each handle starts from the neck, forming a tiny thumb rest on the top, and stretches, forming a fine curve that ends on the upper body. A fine thread starting on the shoulder is wound seven times around the shoulders and the lower part of the neck. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** Flasks with three feet with flat, band-like pinched toes are well-known from the first century (considered to be Italian products: see Stern 1977, pp. 53–54, no. 13; De Tommaso 1990, p. 54, type 25; Lightfoot 2017, p. 188, no. 229). Simpler pinched toes are known from the second–third centuries CE (Antonaras 2012, p. 213, no. 320). A fourth-century amphoriskos with identical toes is in the collection of the Allard Pierson Museum, Amsterdam (no. 6069).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 209, no. 595.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 310. Handled Bowl / Jar

<b>Accession Number</b>	2003.394
<b>Dimensions</b>	H. 16.0, Diam. rim 11.5, Diam. base 6.1 cm; Wt. 182.00 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent amber-colored and greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; white iridescence in some areas.

**DESCRIPTION** Out-folded and flattened rim; calyx-shaped body; concave bottom. Stands on an applied conical base with slanting tooling marks on it. No pontil mark visible on the bottom. The body is made of amber-colored glass, and on its lower part some darker, probably purplish, striations are visible. A high coil handle, dark green with a few opaque red striations, is applied on the rim and rises, forming a trapezoidal arch. On one end, a curly ending of the coil is left on the rim.

**COMMENTS AND COMPARANDA** This is a rare type of bowl, with a tall, vertical handle that gives it an overall shape similar to a bucket. A similar vessel, standing on three toes and not on a conical base, is in the Louvre, acquired in Syria and dated to the third century CE (Arveiller-Dulong and Nenna 2005, p. 376, no. 998). In addition, cylindrical, bucket-shaped vessels standing on their bottom are known from the Syro-Palestinian region:

two from Hammat Gader (Cohen 1997, p. 411, plate IV:1–2); possibly also another in Jalame (Weinberg 1988, p. 82, no. 369, fig. 4-42); one in the Israel Museum (Israeli 2003, p. 291, no. 385); and another appeared in an auction in New York (Fortuna 2002, no. 123).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 211, no. 600.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 311. Jar

<b>Accession Number</b>	2003.400
<b>Dimensions</b>	H. 7.0, Diam. rim 5.7, max. Diam. 6.5, Diam. base 3.0 cm; Wt. 58.13 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian coast
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Weathering has created a layer of bluish-purple iridescence and some cloudy white areas.

**DESCRIPTION** In-folded, tubular rim, slightly lopsided; funnel mouth; horizontal shoulder; squat globular body; slightly concave bottom. At the center of the bottom, an annular pontil mark (W. 2.1, Th. 0.1 cm) is visible.

**COMMENTS AND COMPARANDA** This jar belongs to an almost-generic vessel form known from many eastern Mediterranean and European sites and dated to the third and fourth centuries CE: Vessberg 1952, plate VII:13; Abdul Hak 1965, pp. 29–30, figs. 10:5–6; Barag 1970a, vol. 2, plate 42, type XV:16; Hayes 1975, pp. 79, 80, nos. 292, 294, plate 20; Sussman 1976, p. 99, plate XXVIII:6; Barkóczi 1988, p. 206, form 181, no. 520, plates LX, CXI; Dussart 1998, p. 91, type B.VII.2422a, plate 18:10; Arveiller-Dulong and Nenna 2005, p. 420, nos. 1165–1167; Antonaras 2012, p. 194, nos. 280–281; Antonaras 2017, p. 134, form 104.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 213, no. 611. Wight 2011, pp. 104, 119, fig. 88.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 312. Jar

**Accession Number** 2003.398

<b>Dimensions</b>	H. 8.2, Diam. rim 7.8, Diam. base 5.4, Th. 0.3 cm; Wt. 153.54 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent purple and blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** White incrustation in the interior; very few signs of weathering on the exterior.

**DESCRIPTION** Fire-polished, horizontal rim; short and very wide neck; squat globular body; conical, applied, and tooled base. The base is partly irregular, and slanting tooling marks are visible on it. A fine blue thread is wound four times around the neck, starting from the upper shoulder. Thirteen dark blue coil handles are placed around the rim, each starting on the shoulder and ending with a bend on the edge of the rim. Part of a pontil mark is visible on the bottom, off-center.

**COMMENTS AND COMPARANDA** In Levantine glass production, the use of bent trails forming zigzags covering the area between the shoulders and the neck of jars is common in the fourth and fifth centuries (Barag 1970a, vol. 2, plate 34, types VI:9, 10; Antonaras 2012, pp. 205–206, nos. 302–304). In the same spirit, contemporaneous jars are adorned with many handles around the neck; these are made of individual lengths of glass, often in a different color from the body. Parallels include the following: Abdul Hak 1965, p. 31, fig. 14; Barag 1970a, vol. 2, plate 34, type VI:20; Matheson 1980, no. 315; Stern 2001, no. 126; Arveiller-Dulong and Nenna 2005, p. 425, no. 1185, plate 107, example without base; Arveiller-Dulong and Nenna 2005, p. 425, no. 1187, plate 107, example with three pinched toes; Antonaras 2012, p. 205, no. 301.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 212, no. 609. Wight 2011, pp. 1, 2, fig. 1.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 313. Jar

<b>Accession Number</b>	2003.399
<b>Dimensions</b>	H. 7.0, Diam. rim 5.8, Diam. base 3.7, Th. 0.2 cm; Wt. 79.20 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent greenish and dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Almost fully preserved. One of the handles has been replaced. Patches of iridescence on different parts of the body and darker incrustation on the neck.

**DESCRIPTION** Fire-polished, horizontal rim; short and very wide neck; almost horizontal shoulder; hemispherical body; folded, conical tubular base-ring; flat bottom. At the center of the bottom, an annular pontil mark (W. 1.8 cm) is visible. Eight coil handles start on the tip of the shoulder and end on the edge of the rim. They are made of dark blue glass, which contains striations of red glass.

**COMMENTS AND COMPARANDA** See cat. 312.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 212, no. 610.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 314. Jar

<b>Accession Number</b>	2003.411
<b>Dimensions</b>	H. 8.0, Diam. rim 6.3, Diam. base 4.4 cm; Wt. 69.19 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent purple glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Almost fully preserved. Some fragments have been reattached, and some are still missing from the body. The vessel bears only light weathering.

**DESCRIPTION** Fire-polished, rounded rim; funnel mouth with a tubular horizontal flange; ovular body with slightly concave bottom. It has a fairly deep kick and a solid pontil mark (W. 1.2 cm). Seven vertical indentations around the body.

**COMMENTS AND COMPARANDA** This form of jar, with the characteristic flange at mid-height of the neck, is widely distributed in the Syro-Palestinian region, known in examples with globular and ovular body occasionally decorated with applied threads, indentations, or dip mold-blown or pinched ribs. The flange indicates that



these jars were not used for drinking or pouring liquids (Stern 2001, pp. 150–151). Published comparanda include the following: indented jars: Barag 1970a, vol. 2, plate 34, type VI:7-1; Israeli 2003, p. 237, no. 302 (handled example); plain examples: Bagatti and Milik 1958, p. 147, fig. 35:3; Seligman et al. 1996, p. 50, fig. 15:4; Whitehouse 1997a, p. 164, no. 285; Israeli 2003, p. 238, nos. 305, 306; Antonaras 2012, pp. 197–198, nos. 288–291. For handled examples, see Barag 1970a, vol. 2, plate 34, type VI:12-1; Israeli 2003, p. 239, nos. 307–308 (trailed), 309 (plain); for ribbed examples, see cat. 315.

**PROVENANCE** 1957, Private Collection [sold, Sammlungen gesandter a. D. Von Blucher, Heye, Hamburg, Obernkirchen; Werner Melder, Köln; Hofrat Dr. Ignaz Streber, Bad Tölz; und Anderer Kunstbesitz, Kunsthaus Lempertz, Cologne, November 28, 1957, lot 701]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Kunsthaus Lempertz 1957, no. 701.

von Saldern et al. 1974, p. 217, no. 631.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



315. Jar

**Accession Number** 78.AF.25

<b>Dimensions</b>	H. 13.3, Diam. rim 9.4, Diam. base 4.4 cm; Wt. 163.00 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent amber-colored glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact; partly covered with iridescent weathering; very few pinprick bubbles; no impurities.

**DESCRIPTION** Fire-polished, almost vertical rim; funnel mouth with a tubular flange and a mild constriction at the bottom; globular body; flat, slightly concave bottom. No pontil mark visible on the bottom. Thirteen pinched, vertical ribs are visible from lower body to rim, made before the inflation of the body to its final size.

**COMMENTS AND COMPARANDA** This form of jar, with the characteristic flange at mid-height of the neck, is widely distributed in the Syro-Palestinian region, known in examples with globular and ovular body, occasionally decorated with applied threads, indentations, or dip mold-blown or pinched ribs. The flange indicates that these jars were not used for drinking or pouring liquids (Stern 2001, pp. 150–151). For plain examples, see cat. 314; for ribbed examples, see Barag 1970a, vol. 2, plate 33, type VI:6-1; Hayes 1975, p. 95, no. 327, plate 22; Stern 2001, p. 229, no. 116; Israeli 2003, p. 238, no. 306.

**PROVENANCE** 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, Inc., New York, April 5, 1940, lot 123, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Parke-Bernet Galleries 1940, lot 123, ill.

Stothart 1965, p. 20, no. F-14.

**EXHIBITIONS** None



### 316. Double-Handled Jar

<b>Accession Number</b>	2003.375
<b>Dimensions</b>	H. 9.0, Diam. rim 6.4, max. Diam. 7.9, Diam. base 4.1 cm; Wt. 73.67 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Part of the rim has been replaced with resin. Most of the surface is weathered, giving the vessel iridescence and an opaque, whitish layer.

**DESCRIPTION** Fire-polished, flaring almost horizontal rim; wide, cylindrical neck; globular body, standing on a conical, pushed-in base. Two tiny ring handles are applied on the shoulder, stretched upward, forming a curve and folded over upon themselves; one is made of turquoise glass. A turquoise thread is applied to the underside of the rim so that it can be seen through the colorless glass of the rim. At the center of the bottom there is an annular pontil scar (W. 1.5, Th. 0.2 cm).

**COMMENTS AND COMPARANDA** This jar is quite unusual in the shape and size of its two handles. Early Imperial jars are almost always handleless and without a base (see Isings 1957, pp. 81–88, forms 63–68; Antonaras 2017, pp. 131–136, forms 98–110; and comments on cat. 308). The majority of Late Roman jars lack handles as

well, and those that do have them have thick, large handles, often several of them around the neck (see comments on cats. 311–312, cats. 314–315). Small ring handles, almost always three in number, are known on bowl lamps from the fifth century onward (Isings 1957, p. 162, form 134; Antonaras 2017, pp. 63, 84, forms 13, 36; Antonaras 2022a, pp. 31–33, 56, nos. 260–263). The particular hue of the turquoise thread seems identical to the one used in Syrian products of the sixth–seventh centuries. See comments on cat. 304.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 203, no. 568.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 317. Flask

<b>Accession Number</b>	2003.270
<b>Dimensions</b>	H. 5.4, Diam. rim 1.1, max. Diam. 4.1, Th. 0.1 cm; Wt. 16.30 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Large portions of the thread are missing, as indicated only by the cavities where it originally lay. Small areas with iridescent weathering, especially on the rim.

**DESCRIPTION** Fire-polished, flaring rim; long cylindrical neck, wider toward the squat, bulbous body, which is standing on a flat, slightly concave bottom. A white thread of glass has been spirally wound 16 times from the center of the bottom to the rim and dragged up five times, forming a pattern of festoons on the upper body and neck area. The fusion of the thread into the body of the vessel was achieved by applying it at an early stage of the blowing and marvering it before the vessel was given its final dimensions.

**COMMENTS AND COMPARANDA** This form of small flask, known also as an unguentarium or balsamarium, is quite common in both the east and the west in the first half of the first century CE. They appear either undecorated or with spirally wound trails, more often marvered flush with the surface. For parallels, see Isings 1957, pp. 22–23, form 6; Barag 1970a, vol. 2, plate 41, type XV:1; Stern 1977, pp. 32–33, no. 6A; Czurda-Ruth 1979, pp. 105–111, plates 14, 21; Matheson 1980, pp. 26–27, no. 70; Kaltsas 1983, pp. 24–25, plate 32:d; De Tommaso 1990, pp. 39–40, type 5; Weinberg and McClellan 1992, p. 117, no. 83; Stern 2001, pp. 58, 60, nos. 2, 4; Israeli 2003, p. 115, nos. 100–102; Antonaras 2012, p. 209, no. 308.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 130, no. 351.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 318. Flask

<b>Accession Number</b>	2003.269
<b>Dimensions</b>	H. 7.8, Diam. rim 2.4, Diam. base 3.5, Th. 0.1 cm; Wt. 32.75 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Partly preserved; mended and filled. Small areas with iridescent weathering.

**DESCRIPTION** Fine, in-folded, flaring rim; cylindrical neck; squat bulbous body, standing on a flat bottom. A white thread of glass has been spirally wound approximately 30 times from the center of the bottom, where a large circular dot is visible, to the rim. The thread has been dragged upward five times to form a festooned pattern, imitating agate.

**COMMENTS AND COMPARANDA** See cat. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 128, no. 343.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 319. Flask

<b>Accession Number</b>	2003.271
<b>Dimensions</b>	H. 11.2, Diam. rim 1.9, max. Diam. 6.5, Diam. base 6.5, Th. 0.1 cm; Wt. 75.96 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Partly preserved; mended and filled.

**DESCRIPTION** The rim is not preserved but has been replaced with a fire-polished one; cylindrical neck; globular body, standing on a flat bottom. A white thread of glass has been spirally wound 11 times from the bottom to the rim.

**COMMENTS AND COMPARANDA** See cat. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 129, no. 349.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 320. Flask

<b>Accession Number</b>	2003.272
<b>Dimensions</b>	H. 6.5, Diam. rim 1.8, max. Diam. 4.5, Diam. base 1.8 cm; Wt. 18.93 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended and filled.

**DESCRIPTION** Fire-polished rim; cylindrical neck; globular body, standing on a flat bottom. A white thread of glass has been spirally wound 10 times from the bottom to the rim.

**COMMENTS AND COMPARANDA** See cat. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 130, no. 352.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 321. Flask

<b>Accession Number</b>	2003.282
<b>Dimensions</b>	H. 8.3, Diam. rim 2.3, max. Diam. 3.7, Diam. base 2.4 cm; Wt. 22.20 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Mostly Italian product, known in the east as well
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact.

**DESCRIPTION** In-folded and flattened rim; cylindrical neck, constricted twice at its base; elongated piriform body; flat bottom. A white thread of glass has been spirally wound six times from the bottom to the rim and dragged upward two times, forming an irregular feather pattern. The thread is considerably wider on the lower part of the vessel and finer on the neck. The thread was probably applied on the initial bubble and became wider at the lower part of the body because it expanded more. On the bottom, a projection of a tiny part of the same multicolored glass is visible, as well as another one that is barely visible, both probably pontil marks (W. approx. 1.7 cm).

**COMMENTS AND COMPARANDA** This form of small piriform flask is quite common in both the east and the west in the first half of the first century CE. They appear either undecorated or with spirally wound trails, more often marvered flush with the surface. For parallels, see Stern 1977, pp. 35–38, no. 7A; Matheson 1980, p. 30, no. 84; Oliver 1980, p. 49, nos. 30, 31; Stern 2001, p. 61, no. 5.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 134, no. 374.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 322. Flask

<b>Accession Number</b>	2003.286
<b>Dimensions</b>	H. 12.5, Diam. rim 2.0, max. Diam. 2.7 cm; Wt. 14.93 g
<b>Date</b>	First half of the first century CE
<b>Production Area</b>	Eastern Mediterranean, probably Aegean
<b>Material</b>	Translucent amber-colored and opaque white glass



**CONDITION** Lower part of the body and neck restored.

**DESCRIPTION** In-folded and flattened, flaring rim; in its current state, short neck; biconical body. A white trail of glass has been spirally wound approximately 15 times from the bottom to the rim and dragged upward four times, forming an irregular feathering pattern. The trail was tooled and melted flush with the vessel surface. The neck originally was probably much longer, as it is in all cited parallels.

**COMMENTS AND COMPARANDA** Tear- or drop-shaped flasks for unguents are a relatively widespread form of unguentarium, dated to the first century CE. This particular variant is considered to be an eastern Mediterranean product. They are either plain or decorated with a fine thread of glass, either left in relief, as in cats. 332–333, or marvered flush, as in this vessel.

Published examples include several plain ones from Pompeii (Scatozza Hörich 2012, p. 140, no. 11294A, plate XXVIII); Venice (Larese 2004, no. 393, plate XI); Cyprus (McFadden 1946, p. 486, no. 114, plate 45; Vessberg 1952, p. 141, plate IX:30); Amphipolis (Weinberg 1963, pp. 1–2); Palestine (Barag 1970a, vol. 2, type XXII:2); Adana region (Stern 1989, p. 590, fig. 10:5–8); Amorgos (Weinberg and McClellan 1992, pp. 115–116, no. 80); Aquileia (Mandrizzato and Marcante 2007, pp. 104, 139, nos. 289–290); and unprovenanced (Antonaras 2012, p. 214, no. 323).

In addition, unprovenanced examples decorated with a trail left in relief are reported from several museums: Whitehouse 2001a, p. 170, no. 702; *3000 Jahre Glaskunst*, p. 220, no. 638; Bomford 1976, p. 20, no. 57; Fleming 1999, p. 30; Antonaras 2012, p. 214, no. 324. Parallels with trails marvered and dragged upward include the following unprovenanced examples: Stern 2001, p. 62, no. 6; Matheson 1980, pp. 24–25, no. 65; Oliver 1980, pp. 52, 56, nos. 37–38.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 136, no.381.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)



### 323. Flask

<b>Accession Number</b>	2003.244
<b>Dimensions</b>	H. 7.6, Diam. rim 2.1, Diam. base 1.0, Th. 0.2 cm; Wt. 16.96 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent purple glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact, with a few scratches and nicks. Some incrustation on the interior of the mouth, and some discoloration and iridescence on the body.

**DESCRIPTION** In-folded and flattened, flaring rim; cylindrical neck, constricted at its base; biconical body, standing on three pinched toes created by pinching the gather, pulling it down, and bending it out 90 degrees.

**COMMENTS AND COMPARANDA** Flasks of this form, with the characteristic flat, band-like pinched toes, are known mainly from Italy, and they are dated to the first century CE (De Tommaso 1990, p. 54, type 25; Ravagnan 1994, p. 106, no. 200; Stern 1977, pp. 53–54, no. 13; Mandrizzato and Marcante 2007, p. 78, no. 133; Antonaras 2012, p. 213, no. 320).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 114, no. 307; p. 113, plate no. 307.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 324. Flask

<b>Accession Number</b>	2003.285
<b>Dimensions</b>	H. 11.3, Diam. rim 2.2, max. Diam. 4.4 cm; Wt. 47.88 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent purple and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact, with a few scratches and nicks. Some incrustation on the interior of the mouth and some discoloration and iridescence on the body.

**DESCRIPTION** In-folded and flattened, flaring rim; cylindrical neck, constricted at its base; ovular body, standing on three pinched toes created by pinching the gather, pulling it down, and bending it out 90 degrees. A

white thread of glass has been spirally wound 17 times from the center of the bottom to the rim. The pinching necessary for the shaping of the toes distorted the pattern of the spirals on the lower part of the vessel, forming a wavy pattern.

**COMMENTS AND COMPARANDA** See cat. 323.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 136, no. 379.

Wight 2011, pp. 2, 103, 114, fig. 1, fig. 81.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 325. Flask

<b>Accession Number</b>	2003.268
<b>Dimensions</b>	H. 10.3, Diam. rim 2.5, Diam. base 3.8, Th. 0.1 cm; Wt. 89.91 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent purple and opaque white glass

**Modeling Technique and Decoration** Free-blown

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**CONDITION** Fully preserved; a small part of the rim has been replaced. Small areas with iridescent weathering.

**DESCRIPTION** In-folded, flaring rim; cylindrical neck; globular body, standing on a flat bottom. A marvered white thread of glass has been spirally wound 10 times before the vessel was expanded to its final dimensions, from the center of the bottom, where a large, circular dot is visible, to the rim and dragged downward four times to form a wavy pattern.

**COMMENTS AND COMPARANDA** See cat. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 128, no. 342.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Pompeii and the Roman Villa: Art and Culture around the Bay of Naples (Los Angeles, 2009)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



326. Flask

**Accession Number** 2003.280  
**Dimensions** H. 7.2, Diam. rim 1.7, max. Diam. 6.2 cm; Wt. 43.70 g  
**Date** Early first century CE  
**Production Area** Eastern Mediterranean or Italy  
**Material** Translucent purple and opaque white glass  
**Modeling Technique and Decoration** Free-blown; applied elements; pinched

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**CONDITION** Rim and upper neck repaired; weathering mostly along the white cane on the exterior.

**DESCRIPTION** Out-turned and flattened rim; short, cylindrical neck, tapering toward the squat, piriform body; flat bottom. From base to rim, a spiral white trail with at least 14 revolutions from bottom to neck. Seven pinched vertical ribs around the body from bottom to neck.

**COMMENTS AND COMPARANDA** Piriform flasks with spiraling thread around the body and pinched ribs are a well-known form in the first century CE (Isings 1957, pp. 40, form 26b). It has been proposed that they originate from the eastern Mediterranean and were copied in Italy (De Tommaso 1990, pp. 53–54, type 24). Published examples are from sites like Cologne (Fremersdorf 1961, p. 40, plate 60); Trier (Goethert-Polaschek 1977, form 70c, pp. 114–115, nos. 618–619, plate 1:4d, 8:94d); Aquileia (Mandrizzato and Marcante 2007, p. 77, no. 129, p. 36 color ill.); Marone (Facchini 2007, pp. 69–70, no. 114); Cyzicus (Arveiller-Dulong and Nenna 2005, p. 276, no. 826); Dura-Europos (Clairmont 1963, p. 47, no. 179, plate 23); and museum collections, such as the Yale Art Gallery (Matheson 1980, p. 27, nos. 72–73); Landesmuseum Württemberg, Stuttgart (Stern 2001, p. 63, no. 7).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 134, no. 370.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 327. Flask

<b>Accession Number</b>	2003.283
<b>Dimensions</b>	H. 22.7, Diam. rim 4.3, Diam. base 7.2 cm; Wt. 171.00 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. The surface bears iridescent patches and brownish accretions.

**DESCRIPTION** Horizontal, in-folded, and flattened rim; long, cylindrical neck, slightly constricted at its base; conical body; concave base. At the center of the bottom, a circular pontil mark (W. 1.7, Th. 0.5 cm) is visible. White, marvered trail spirally wound five times before the final expansion of the vessel decorates the body and neck of the flask.

**COMMENTS AND COMPARANDA** Vessels in this form of flask—with the extremely long neck compared to the short, conical body—are known as Candlestick Unguentaria, and they are widely present in the eastern Mediterranean from the late first to the second century CE (Isings 1957, pp. 97–98, form 82.A.2, Karanis class XIII.A.1.; Antonaras 2017, pp. 152–154, form 131). In most cases these are plain, undecorated vessels (e.g., Whitehouse 1997a, p. 154, no. 263; Whitehouse 2003, p.

142, no. 1135), but there are decorated examples like this vessel with a spirally wound, opaque white thread that was marvered flush to the surface, datable to the late first and second centuries CE. An almost identical flask, probably from Egypt, is now in the Corning Museum of Glass (53.1.27, Whitehouse 2001a, p. 209, no. 773).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 136, no. 376.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 328. Flask

<b>Accession Number</b>	2003.397
<b>Dimensions</b>	H. 3.0, Diam. rim 1.7 × 2.0, Diam. base 1.5 cm; Wt. 6.57 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Lip is folded over the inside edge. Almost the entire vessel is covered with a weathered layer

of iridescent white, silver, and yellow. The inside and much of the outside are also encrusted.

**DESCRIPTION** Miniature flask. In-folded, slightly flaring rim; wide, conical neck, constricted at its base; conical body; flat, slightly concave at the center bottom.

**COMMENTS AND COMPARANDA** Miniature flasks with conical neck are ascribed to the Syro-Palestinian region, and they are dated to the late third and fourth centuries CE (Hayes 1975, pp. 75–76, nos. 266, 267, fig. 9, plate 18; Arveiller-Dulong and Nenna 2005, p. 407, no. 1115; Clairmont 1963, p. 142, no. 752, plate 36).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 212, no. 608.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 329. Flask

<b>Accession Number</b>	2003.420
<b>Dimensions</b>	H. 7.8, Diam. rim 2.2, Diam. base 2.3, Th. 0.2 cm; Wt. 23.77 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent amber-colored and opaque white glass

**Modeling Technique and Decoration** Free-blown; applied elements

**CONDITION** Fully preserved. Some cracks along the body; some iridescence on the exterior.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck, widening toward the squat, bulbous body; slightly convex bottom. No pontil mark visible. A fine white thread was spirally wound 18 times from the middle of the neck to the bottom.

**COMMENTS AND COMPARANDA** Bulbous and globular unguentaria appear from the early first century CE, and during the same century they become one of the most widespread forms of flask, known in both the eastern and the western Roman provinces (Stern 1977, p. 35; De Tommaso 1990, pp. 39–40, type 5). They are often decorated with spirally wound threads, more often than not left unmarvered (Antonaras 2017, p. 146, form 122a, wherein several parallels are cited). For additional parallels, see Dusenbery 1967, p. 41, nos. 16–17, figs. 17–18; Barag 1970a, vol. 2, plate 41, type XV:1-1; Stern 2001, p. 57, no. 1; Israeli 2003, p. 116, no. 103; Arveiller-Dulong and Nenna 2005, p. 201, no. 564; Antonaras 2012, p. 212, no. 317.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 222, no. 647.

Wight 2011, pp. 62, 65, fig. 40.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





330. Flask

<b>Accession Number</b>	2004.40
<b>Dimensions</b>	H. 9.6, Diam. rim 2.0, max. Diam. 6.0, Diam. base 2.3, Th. 0.2 cm; Wt. 18.29 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; some iridescence on the exterior.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck; globular body; slightly concave bottom. No pontil mark visible. A fine white thread was spirally wound 15 times from the middle of the neck to the bottom, where it ends.

**COMMENTS AND COMPARANDA** See comments on cat. 329.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 221, no. 646.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)



331. Flask

<b>Accession Number</b>	2003.418
<b>Dimensions</b>	H. 7.0, Diam. rim 2.1, max. Diam. 4.5, Diam. base 2.2, Th. 0.2 cm; Wt. 18.94 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved. Some weathering has given the vessel a blue-purple iridescence. There is also some incrustation. The white thread has almost entirely fallen off.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck; bulbous body constricted above the middle, forming a wide concave band at the largest diameter; flat bottom. No pontil mark visible on the underside. A fine white thread was spirally wound 10 times from the base of the neck to the bottom.

**COMMENTS AND COMPARANDA** See comments on cat. 329. For a parallel with a similarly squat body, see Arveiller-Dulong and Nenna 2005, p. 277, no. 828.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 221, no. 643.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 332. Flask

<b>Accession Number</b>	2003.415
<b>Dimensions</b>	H. 12.0, Diam. rim 1.8, Diam. base 0.4, Th. 0.1 cm; Wt. 30.51 g (it is filled with soil)
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved; a large part of the rim is mended. Some iridescence on the inside.

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck, splaying and merging with the biconical body, which ends in a pointed toe. A thread of opaque white glass spirals 11 times around the body, from mid-height of the neck to the toe.

**COMMENTS AND COMPARANDA** See comments on cat. 322.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 220, no. 638.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 333. Flask

<b>Accession Number</b>	2003.416
<b>Dimensions</b>	H. 15.3, Diam. rim 2.4, max. Diam. 3.0, Th. 0.1 cm; Wt. 14.80 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved. A large part of the glass trail is missing. Silver and white iridescence over much of the vessel.

**DESCRIPTION** Flaring, in-folded tubular rim; cylindrical neck splaying and merging with the biconical body, which ends in a pointed toe. A thread of white glass spirals nine times around the body, from the base of the neck to the toe.

**COMMENTS AND COMPARANDA** See comments on cat. 322.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 931]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, no. 931, plates 13, 48.  
von Saldern et al. 1974, p. 220, no. 639.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 334. Flask

<b>Accession Number</b>	2003.242
<b>Dimensions</b>	H. 6.2, Diam. rim 2.1, Diam. base 2.3, Th. 0.1 cm; Wt. 11.00 g
<b>Date</b>	First century CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Opaque red glass

**Modeling Technique and Decoration** Free-blown

**CONDITION** Fully preserved. A small, repaired break on the lip, and very few nicks and scratches. Large areas covered with weathering.

**DESCRIPTION** In-folded, slightly everted rim; cylindrical neck with a horizontal constriction at the transition to the ovular body, which is standing on a folded, tubular base-ring; the bottom is slightly concave. An anomaly or a semi-annular fold on the undersurface could be interpreted as a pontil scar, yet the constriction at the bottom of the neck indicates that the rim was shaped while it was held with pincers/jacks from the neck.

**COMPARANDA** Small-size flasks with ovular body are one of the most widely appearing forms during the first century CE (Vessberg 1952, plate VII:27; Isings 1957, form 28a [variant]; Barag 1970a, vol. 2, plate 44, type XVI:4; Stern 1977, pp. 38–41, no. 8; De Tommaso 1990, p. 81, type 67; Antonaras 2012, p. 211, no. 314). Opaque red (or white, like cat. 335) unguentaria are known in the first century CE. The base-ring of this vessel is set apart, bringing it closer to the form of elongated flask known from Aquileia, Italy (De Tommaso 1990, p. 81, type 66; Mandruzzato and Marcante 2007, p. 100, no. 269) and eastern Mediterranean sites, dated to the second–third centuries CE (Vessberg 1956, p. 151, plate 47:28; Clairmont 1963, p. 140, no. 743, plate XVI).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 112, no. 304.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 335. Flask

<b>Accession Number</b>	2003.243
<b>Dimensions</b>	H. 9.0, Diam. rim 2.3, Diam. base 3.1 cm; Wt. 13.72 g
<b>Date</b>	First century CE
<b>Production Area</b>	Italy or eastern Mediterranean
<b>Material</b>	Opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Large areas covered by brownish incrustation.

**DESCRIPTION** In-folded, slightly everted rim; long, cylindrical neck, wider toward the body, with two horizontal constrictions, one at its lowest part and the other at the transition to the slender, truncated conical body. The body is folded to form a wide, low, conical base. At the center of the undersurface there are remains of glass on the tip of the pontil (W. 0.7 cm).

**COMMENTS AND COMPARANDA** See comments on cat. 334.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 114, no. 305.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 336. Flask

<b>Accession Number</b>	2003.365
<b>Dimensions</b>	H. 9.8, Diam. rim 2.2, max. Diam. 6.5, Diam. base 3.0 cm; Wt. 31.75 g
<b>Date</b>	Second half of the first–early second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark purple glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** In fair condition; has been reassembled. Surface bears patches of iridescence.

**DESCRIPTION** In-folded, tubular, flaring rim; cylindrical neck, constricted at its base; pear-shaped body with a constriction on upper third; flat bottom. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** Flasks with a constriction at mid-height or at the upper third of their ovular or pear-shaped body are a well-known form mainly in the eastern Mediterranean and the Aegean area, and occasionally in Italy too, during the second half of the first and into the early second century CE; see Vessberg 1952, plate VII:35, 36; Hayes 1975, p. 69, no. 2115, fig. 8, plate 16; De Tommaso 1990, p. 87, type 76; Dusenbery 1998, p. 1105, nos. S180-3 and 4; Kolonas 2002,

no. 39; Trakosopoulou 2002, p. 84, fig. 11; Adam-Veleni and Ignatiadou 2010, pp. 398, 415, nos. 461, 517; Israeli 2003, p. 210, no. 247; Arveiller-Dulong and Nenna 2005, pp. 215–219, 279, nos. 619–634, 838; Mandruzzato and Marcante 2007, p. 93, no. 224; Antonaras 2012, p. no. 388.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 197, no. 540.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 337. Flask

<b>Accession Number</b>	82.AI.76.21
<b>Dimensions</b>	H. 9.1, Diam. rim 3.7, Diam. base 3.6 cm; Wt. 26.20 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean, possibly Egypt
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown and pressed

**CONDITION** Intact. In some areas a black crust in the interior.

**DESCRIPTION** In-folded, tubular, flaring rim; short neck; ovular body compressed at four spots along its greatest diameter, thereby acquiring an irregular polygonal shape. Stands on a concave bottom. No signs of pontil mark are visible.

**COMMENTS AND COMPARANDA** A well-known form ascribed to the production of fourth-century eastern workshops is the group of relatively small flasks with tubular, in-folded rim and a very wide, short, cylindrical neck leading to a pear-shaped body that almost always bears four indentations that render the body squarish (Stern 1977, pp. 100–101, no. 28; Barkóczy 1988, p. 151, form 131; Roffia 1993, p. 108; Antonaras 2017, p. 133, form 102). Analogous items have been located in the following sites and museums: Royal Ontario Museum, Toronto (Hayes 1975, pp. 39, 66, plate 12, no. 153); Mainz (Harter 1999, pp. 104, 246, form D21b, no. 726, plate 30); Syria: Bosra (Dussart 1998, p. 92, form BVII.2423, plate 18); Israel: Samaria (Crowfoot 1957, p. 409, no. 5, fig. 94/5); and Jordan: Mahayy (Dussart 1998, p. 92 n. 7).

The flask was acquired with a leather-covered lidded basket, and both are part of a group of miscellaneous objects once associated with a painted wood sarcophagus (Getty Museum, 82.AP.75). The absence of sediments on the glass vessel and the shape of the basket, which does not correspond to that of the flask but quite faithfully renders a first-century mold-blown pyxis like cat. 165, suggest that they were not an original assemblage.

**PROVENANCE** 1982, Galerie Nefer (Zurich, Switzerland), sold to the J. Paul Getty Museum, 1982

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





### 338. Unguentarium

<b>Accession Number</b>	2003.369
<b>Dimensions</b>	H. 8.0, Diam. rim 2.0, Diam. base 2.6 cm; Wt. 56.85 g (contains a considerable amount of soil)
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Complete but cracked; heavily weathered and highly iridescent.

**DESCRIPTION** Tubular, in-folded, and out-splayed rim; cylindrical neck mildly constricted at its base; globular body with flat bottom. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** This flask belongs to a form very widespread in the western and the eastern Mediterranean areas from the late first and into the second centuries CE (Isings 1957, pp. 40–41, form 26a; Stern 1977, p. 47, no. 11, plate 2; De Tommaso 1990, pp. 39–40, 42–43, 55, forms 4, 5, 7, 27; Antonaras 2017, p. 147, form 122b).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 199, no. 551.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 339. Unguentarium

<b>Accession Number</b>	2003.370
<b>Dimensions</b>	H. 9.2, Diam. rim 2.0, Diam. base approx. 2.2 cm; Wt. 11.92 g
<b>Date</b>	First–early second centuries CE
<b>Production Area</b>	Eastern Mediterranean or western Roman Empire
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Complete; distorted by fire. Milky weathering covers the surface; few pinprick bubbles.

**DESCRIPTION** Tubular, in-folded, and slightly out-splayed rim; long, cylindrical neck; probably oval body with flat bottom. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** This unguentarium belongs to one of the most common groups and was widely distributed all over the Mediterranean region during the first and early second centuries CE; see Isings 1957, p. 24, form 8; Vessberg 1952, plate IX:17; Barag 1970a, vol. 2, plate 44, type XVI:2; Nicolaou 1984, p. 245,

no. 184, plate LIII:184; De Tommaso 1990, pp. 84–85, types 70–72; Antonaras 2012, pp. 214–215, nos. 325–328. They are very often found in burials, both inhumations and cremations. Those that were placed in the burial pyre, like this vessel, are heavily distorted.

**PROVENANCE** Arnold Vogell, 1857–1911 (Karlsruhe, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 199, no. 552.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 340. Unguentarium

<b>Accession Number</b>	79.AF.184.2
<b>Dimensions</b>	H. 14.8, Diam. rim 2.3, Diam. base 4.0 cm; Wt. 21.88 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean or western Roman Empire
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Complete; cracked. Milky weathering covers the surface; few pinprick bubbles.

**DESCRIPTION** Uneven rim, in-folded and out-splayed; long, cylindrical neck, widening at top and bottom; squat globular body with slightly concave bottom. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** This unguentarium is a quite common form that is present in both the eastern and the western areas of the Mediterranean. For western Mediterranean finds, see Antonaras 2012, p. 224, no. 350; De Tommaso 1990, pp. 59–60, type 33; Larese 2004, p. 68, tab. 77, 117, plate 15; Mandruzzato and Marcante 2007, p. 92, nos. 218–219. For eastern Mediterranean finds, see Delougaz and Haines 1960, plate 50:4–5; Fortuna 1965, fig. 10; Barag 1970a, vol. 2, plate 46, type XXI:1; Mazar 1994, pp. 79–80, fig. 5; Dussart 1998, pp. 162–163, type B.XIII.1111a, plate 50:1–12; Israeli 2003, p. 212, no. 251; Shourkin 2004, p. 153, plate 20:2.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 341. Unguentarium

<b>Accession Number</b>	79.AF.184.3
<b>Dimensions</b>	H. 11.6, Diam. rim 2.0, Diam. base 2.5 cm; Wt. 28.00 g
<b>Date</b>	Late first–second centuries CE
<b>Production Area</b>	Eastern Mediterranean

**Material** Transparent bluish glass  
**Modeling Technique and Decoration** Free-blown

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**CONDITION** Fully preserved; small crack on the rim.

**DESCRIPTION** Slightly flaring rim, in-folded and flattened; cylindrical neck, constricted at its base; tear-shaped body; flat, slightly concave bottom. At the center of the bottom is an annular, circular pontil mark (W. 1.4, Th. 0.1 cm).

**COMMENTS AND COMPARANDA** This unguentarium belongs to a quite common eastern Mediterranean form. For finds, see Vessberg 1952, pp. 140–141, plate IX:24; Isings 1957, p. 24, form 8; Barag 1970a, vol. 2, plate 44, type XVI:1; Kunina and Sorokina 1972, p. 158, fig. 6:22; Stern 1977, pp. 35–38, no. 7, plate 10; De Tommaso 1990, p. 66, type 43; Antonaras 2012, pp. 218–219, nos. 335–339; Antonaras 2017, pp. 149–150, form 126b.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 342. Flask (Pastiche)

**Accession Number** 79.AF.184.18  
**Dimensions** H. 4.9, Diam. rim 3.0, Diam. base 3.0 cm;  
Wt. 21.97 g

**Date** Second–third centuries CE  
**Production Area** Eastern Mediterranean  
**Material** Translucent greenish glass  
**Modeling Technique and Decoration** Free-blown

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**CONDITION** Mended; a concealed join at the transition from the neck to the body. Iridescence on the exterior, incrustation on the interior. Pastiche (XRF and visual observation suggest the neck and body are from two different objects).

**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck; globular body; slightly concave bottom. A circular mark of a solid pontil (W. 0.8 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** The neck belonged to a taller unguentarium, either tear-shaped (e.g., Isings 1957, p. 24, form 8; Antonaras 2017, p. 149, form 126a) or, more probably, conical (Antonaras 2017, pp. 151–152, forms 128, 130), forms generally dated to the first and second centuries CE.

The body, which is made of a darker shade of green, belongs to a smaller globular unguentarium, a form that appears already from the early third, becomes popular in the fourth, and survives into the fifth century (Isings 1957, p. 120, miniature version of form 101; Antonaras 2017, p. 157, form 139).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979.

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 343. Unguentarium

<b>Accession Number</b>	98.AF.56
<b>Dimensions</b>	H. 7.5, Diam. rim 2.2, Diam. base 2.5 cm; Wt. 5.00 g
<b>Date</b>	First–early second centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fragmentary; composed of eight joined fragments. Chips from rim; half of lower part of vessel is broken and missing.

**DESCRIPTION** Fire-polished, flaring rim; short, cylindrical neck; oval body, flat; slightly concave bottom.

**COMPARANDA** Isings 1957, p. 24, form 8.

**PROVENANCE** 1998, the J. Paul Getty Museum, accessioned during inventory in 1998

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 344. Sprinkler Flask

<b>Accession Number</b>	2003.409
<b>Dimensions</b>	H. 9.8, Diam. rim 4.5, Diam. base 4.0, Th. 0.1 cm; Wt. 62.40 g
<b>Date</b>	Third–early fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent greenish, almost colorless glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved but mended.

**DESCRIPTION** Fire-polished, horizontal rim with a cutout fold beneath it, giving the impression of an applied coil. Short and wide neck ending in a diaphragm; pear-shaped body, standing on a mildly concave bottom. An annular pontil mark (W. 2, Th. 0.1 cm) is visible on its bottom. Around the body four deep, vertical indentations.

**COMMENTS AND COMPARANDA** Sprinklers, or dropper flasks, emerge before the middle of the third century CE and stand out among the extremely diverse fourth-century CE Syrian glass production. They are usually flasks of different shapes: amphoriskoi, tubes, animal- and head-shaped flasks, but also jars. They have in common the diaphragm at the base of their neck that allowed the content—apparently some costly liquid, oil or perfume—to exit one drop at the time. It has been proposed that the reference in Jewish sources to a “flask whose brim is squashed inside it” refers to sprinklers

(Tosefta Miqva'ot 6[7]:22 cited in Israeli 2003, p. 222). They were often decorated with expanded geometric motifs blown in full-size molds. Sprinklers were made in Syria, eastern Palestine, and Mesopotamia, although they appear occasionally in other regions too (Stern 1977, pp. 95–100; Stern 2001, pp. 133–134, 152–153; Dussart 1998, pp. 161–162, types BXII.211, 212, 2131, 2132, 22). The earliest examples from Dura-Europos predate the destruction of the city in 256 CE (Clairmont 1963, pp. 104–106, nos. 486–503, plate XII). The finds from the cemetery at Tell Mahuz in Mesopotamia are dated to the third–fourth centuries (Negro Ponzi 1984, pp. 33–40). For sprinkler flasks of the same form, with snake-thread decoration, see cat. 346 and cat. 349, and with pinched fins, see cat. 347.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 216, no. 629.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 345. Sprinkler Flask

**Accession Number** 2003.477  
**Dimensions** H. 5.4, Diam. rim 4.4, max. Diam. 5.4, Diam. base 3.4, Th. 0.1 cm; Wt. 39.69 g  
**Date** Third century CE

**Production Area** Syrian region  
**Material** Translucent greenish glass  
**Modeling Technique and Decoration** Free-blown; applied elements, pinched

**CONDITION** Fully preserved, but heavily weathered. Black crust and cracks. Has such strong iridescence that it is difficult to discern the original color, but the glass may have originally been colorless.

**DESCRIPTION** Fire-polished rim; conical mouth; wide, short neck with a constriction at its base that forms a diaphragm; piriform body; flat, slightly convex bottom. The short, fine base-ring hardly covers the curve of the bottom. At the center of the bottom, a crescent-shaped pontil mark (W. approx. 1 cm) is visible.

The body is decorated with snake-thread decoration formed by a thread with horizontal ridges. The one continuous thread, forming a wide triangle at the start—probably rendering the snake's head—is wavy, with two rows of higher coils dividing the vessel's body into three parts, ending with a high coil above the serpent's "head."

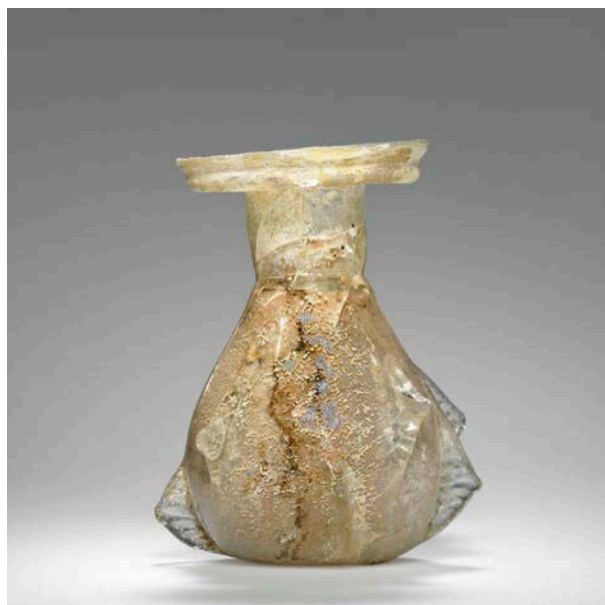
**COMMENTS AND COMPARANDA** On sprinklers, see cat. 344. For parallels, see Auth 1976, p. 121, no. 150; Bomford 1976, p. 26, no. 95; Oliver 1980, p. 96, no. 147; *3000 Jahre Glaskunst*, p. 108, nos. 422–424; Stern 2001, p. 166, no. 62; Whitehouse 2001a, p. 222, nos. 791–792.

**PROVENANCE** 1979, Mr. and Mrs. Andrew Constable Maxwell [sold, Sotheby's, London, 4–5 June 1979, lot 275.]; by 1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Sotheby Parke Bernet 1979, lot. 275.

**EXHIBITIONS** None





### 346. Sprinkler Flask

<b>Accession Number</b>	2003.437
<b>Dimensions</b>	H. 7.5, Diam. rim 4.6, Diam. base 2.7, Th. 0.1 cm; Wt. 45.80 g
<b>Date</b>	Third–early fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Fully preserved but mended.

**DESCRIPTION** Fire-polished, horizontal rim with a cutout fold underneath it, giving the impression of an applied coil; short and wide neck severely constricted at its base, creating a diaphragm; conical body, standing on a mildly concave bottom. No pontil mark is visible on its bottom. Around the body are eight vertical, pinched fins covered by horizontal indentations.

**COMMENTS AND COMPARANDA** On sprinklers, see cat. 344. For parallels, see Abdul Hak 1965, p. 29, fig. 8; Hayes 1975, pp. 60–61, no. 157, fig. 7; Stern 2001, p. 247, no. 133; Antonaras 2012, p. 255, no. 418.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 236, no. 692.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 347. Sprinkler Flask

<b>Accession Number</b>	2004.42
<b>Dimensions</b>	H. 9.5, Diam. rim 4.7, max. Diam. (with fins) 8.0, Th. 0.1 cm; Wt. 1.00 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Intact.

**DESCRIPTION** In-folded, horizontal rim; wide, cylindrical neck, severely constricted at its base, creating a diaphragm; globular body, standing on a flat bottom. At equal distances around the body are nine pinched, vertical fins. Each fin bears 19–21 horizontal pinches. The fins are of uneven length and unevenly spaced.

**COMMENTS AND COMPARANDA** On sprinklers, see cat. 344. For parallels, see Dussart 1998, forms BXI.33, BXII.211, 212, 21311, 2132, 22; Israeli 2003, p. 226, nos. 279–280; Neuburg 1949, plate XX:70; Negro Ponzi 1968–69, pp. 347–348, no. 51. For sprinkler flasks with snake-thread decoration, see cats. 345–346 and cat. 349.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004.

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 236, no. 691. Wight 2011, pp. 63, 68, fig. 44.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 348. Sprinkler Flask

<b>Accession Number</b>	2003.289
<b>Dimensions</b>	H. 11.2, Diam. rim 6.7, Diam. base 3.6 cm; Wt. 129.37 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syria
<b>Material</b>	Translucent amber-greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Mended and weathered. The surface is iridescent and pitted.

**DESCRIPTION** Fire-polished, flaring rim, with a cutout fold underneath it, giving the impression of an applied coil; short and wide neck severely constricted at its base,

creating a diaphragm; globular body; flat, slightly concave bottom. An annular pontil mark (W. 2.2, Th. 0.1 cm) is visible on the bottom. A red trail has been wound spirally around the vessel from rim to bottom; it has been dragged 14 times, forming festoons.

**COMMENTS AND COMPARANDA** On sprinklers, see cat. 344. The same decoration of a fine, red trail dragged to form festoons appears on vessels from the Syro-Palestinian region, dated from the fourth and up to the eighth centuries CE; see comments on cat. 306.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 138, no. 387.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 349. Sprinkler Flask

<b>Accession Number</b>	2003.438
<b>Dimensions</b>	H. 11.4, Diam. rim 5.3, max. Diam. 7.5, Diam. base 3.4 cm; Wt. 85.42 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syria
<b>Material</b>	Translucent amber-greenish glass

**Modeling Technique and Decoration** Free-blown; pinched

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**CONDITION** Intact. Some white weathering and iridescence on parts of the exterior; incrustation in areas of the interior.

**DESCRIPTION** Fire-polished, rounded rim; funnel mouth; short, cylindrical neck, severely constricted at its base, creating a diaphragm; globular body; slightly concave bottom. At the center of the bottom, an annular pontil mark (W. approx. 1, Th. 0.1 cm) is visible. Eight pinched protuberances are arranged roughly in two rows around the body.

**COMMENTS AND COMPARANDA** On sprinklers, see cat. 344. For parallels, see Antonaras 2012, p. 270, no. 420. For examples with multiple rows of pinches, see Auth 1976, p. 216, no. 43; Stern 2001, p. 248, no. 134; Dussart 1998, p. 161, type B.XII.211, 214, plate 49:2, 7. For sprinkler flasks of the same form, with pinched fins, see cat. 347.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 237, no. 695.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



350. Sprinkler Flask

<b>Accession Number</b>	2003.448
<b>Dimensions</b>	H. 7.8, Diam. rim 4.2, max. Diam. 5.0, Diam. base 2.9 cm; Wt. 76.79 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Syria
<b>Material</b>	Translucent amber-greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown, pinched

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**CONDITION** Mended. Composed of two parts from two vessels. The first one is the mouth, which is mostly covered with a wax-like substance concealing the true nature of the fragment. The second is the body of the vessel. Some white weathering and iridescence on parts of the exterior; incrustation in areas of the interior.

**DESCRIPTION** The rim is actually an everted, conical, pushed-in foot of a stemmed beaker; narrow neck probably once ended in a diaphragm; ovular body, slightly concave bottom; four pinched feet. At the center of the bottom, an annular pontil mark (W. approx. 1, Th. 0.1 cm) is visible. Two rows of pinched protuberances are arranged around the body, nine on the upper body and ten on the lower body.

**COMMENTS AND COMPARANDA** For parallels, see cat. 349.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 244, no. 713.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 351. Lentoid Flask

<b>Accession Number</b>	79.AF.184.8
<b>Dimensions</b>	H. 11.0, Diam. rim 1.9, max. Diam. 5.9 cm; Wt. 19.89 g
<b>Date</b>	Probably second–fourth centuries CE or possibly ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; cracked and mended. Iridescence on the exterior; dark incrustation in the interior.

**DESCRIPTION** In-folded and flattened, flaring rim; long cylindrical neck, constricted at its base; flattened circular body tapering toward the convex bottom.

**COMMENTS AND COMPARANDA** Small lentoid vessels, apparently to contain holy or medicinal liquids, or even perfumes, for personal use, are known from several eastern Mediterranean sites, both cemeteries and habitation areas, dated from Roman to Byzantine and Islamic contexts. Late Roman parallels include Vessberg 1952, p. 135, plate 7.46, 7.47; Abdul Hak 1965, p. 28, fig. 5; Barag 1970a, vol. 2, plate 37, type IX:6; Fortuna Canivet 1970, p. 65, no. 7, fig. 6; Auth 1976, pp. 135, 220, nos. 170, 455; Israeli 2003, p. 268, no. 356; Antonaras 2012, p. 258, no. 422; Slane 2017, pp. 67 and 204, plate 53; Lightfoot 2017, p. 290, nos. 439–440; Antonaras 2019, pp. 166–167,

nos. 209–210. For Islamic parallels, see Lightfoot 2005, p. 174, fig. 1; Scanlon and Pinder-Wilson 2001, p. 9; Lester 2003, pp. 161–162, fig. 4.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 352. Aryballos

<b>Accession Number</b>	2003.292
<b>Dimensions</b>	H. 7.0, Diam. rim 3.2, max. Diam. 6.8, Th. 0.2 cm; Wt. 75.50 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Asia Minor or Pergamon
<b>Material</b>	Translucent purple and greenish and opaque white, yellow, light blue, turquoise, and dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Some iridescence on the interior; few pinprick bubbles.

**DESCRIPTION** Horizontal rim, folded out, down, and up, with an overhanging flange; short, cylindrical neck; thick-walled, spherical body; flat, slightly concave bottom. A pair of flat strap handles extend from the shoulder to

halfway up the neck. The body is made of translucent purple glass, and the handles of transparent greenish glass.

The entire body is covered with picked-up color chips, that is, the splashware technique. The translucent purple glass paraison was marvered to incorporate flakes of variously colored glass chips (opaque white, yellow, light blue, turquoise, and dark blue). The vessel was subsequently inflated, whereby the chips were distorted in the areas of greatest expansion.

**COMMENTS AND COMPARANDA** The form is known in core-formed glass vessels from the sixth century BCE (cats. 53–56). Free-blown glass aryballoi are a well-represented form of globular flasks used to store and transport cosmetic oils in the first and second centuries CE. There are a few variants, identifiable in the shape of the rim. On the form, see Isings 1957, pp. 78–81, form 61; Sorokina 1987, pp. 40–46 (especially 42), fig. 2:7–8; Israeli 2003, pp. 42, 216; Antonaras 2009, pp. 271–272, form 111 = Antonaras 2017, p. 137; Antonaras 2012, p. 264, no. 410; Antonaras 2022a, p. 65, nos. 376–378. Examples decorated with splashware: Arakelian, Tiratzian, and Khachatryan 1969, p. 44, no. 68, fig. 68; Benzian 1994, no. 134; Stern 2001, p. 67, no. 10.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 40, no. 395.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 353. Aryballos

<b>Accession Number</b>	2003.374
<b>Dimensions</b>	H. 7.5, Diam. rim 3.8, Diam. base 2.4 cm; Wt. 81.74 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Asia Minor or Pergamon
<b>Material</b>	Transparent green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Some incrustation on the inside.

**DESCRIPTION** Flaring, in-folded rim, flattened on top, partly continuing down into the neck; short, cylindrical neck; thick-walled, globular body; flat, slightly concave bottom. Two coil handles are attached to the shoulder and to the sides of the neck, just under the rim.

**COMPARANDA** Isings 1957, form 61; Scatozza Höricht 1986, form 40, nos. 112–20; Stern 2001, pp. 50, 99, no. 35; Antonaras 2012, p. 264, no. 409; Štefanac 2013, pp. 169–172, groups 3–4, nos. 7–21.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 203, no. 565.



**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 354. Two-Handled Flask

<b>Accession Number</b>	2003.241
<b>Dimensions</b>	H. 7.8, Diam. rim 3.0, Diam. base 2.0 cm; Wt. 39.45 g
<b>Date</b>	End of second–early third centuries CE
<b>Production Area</b>	Western Roman Empire, probably Italy
<b>Material</b>	Opaque green, yellow, and red glass
<b>Modeling Technique and Decoration</b>	Free-blown matrix of mosaic florets

**CONDITION** Intact, with some weathering, more on the interior; some pitting and scratches. Several large, elongated bubbles on the surface.

**DESCRIPTION** In-folded, flaring rim; cylindrical neck, constricted at its bottom, forming a mild diaphragm; globular body; flat bottom. Two opposing red handles applied on the shoulder, drawn upward, and attached to the rim. Black striations along the red ground of the handles. Faint yellow spiraling in the green ground of the vessel. Made with florets—segments of mosaic canes—fused together and then free-blown. Each floret is made of green and yellow glass, probably a green matrix with a central yellow layer.

**COMMENTS AND COMPARANDA** The technique of free-blowing with mosaic florets was used mainly for small vessels such as jars, cylindrical cups, jugs, and handled cups. The distribution of findspots indicates that they were circulating from Britain through northwestern Europe to the northern coast of the Black Sea. Quite probably they were produced from the late first century until the second half of the second century CE, and occasionally they appear in third-century contexts. The pattern, even when appearing as curved lines, was probably made of florets with circles around a central dot. (On the technique, see Stern 2017, pp. 132–139; Stern and Fünfschilling 2020, pp. 41–68. The same technique made the handled cup cat. 235.)

Sprinklers, or dropper flasks, appear in archaeological contexts from the mid-third century CE onward in the Levantine region and are widespread during the fourth century CE. On sprinklers, see comments on cat. 344. There are some indications that sprinklers were produced earlier, at least from the late second century, on the basis of the “snake-thread” decoration they bore (Stern 2001, p. 166, no. 62). For an opaque yellow, pear-shaped dropper flask dated to the third century, see Whitehouse 1997a, p. 200, no. 350. For an opaque yellow jar with two handles dated to the first century CE, see Whitehouse 1997a, p. 167, no. 292.

In conclusion, given that—as far as we currently know—the technique of free-blowing with mosaic florets ceases to be used in the second half of the second century CE, but sprinklers appear before the middle of the third century CE, probably even at the end of the second century CE, this vessel may be dated around the end of the second century CE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 112, no. 303; p. 110, plate no. 303.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 355. Amphoriskos

<b>Accession Number</b>	2003.291
<b>Dimensions</b>	H. 12.8, Diam. rim 3.2, Diam. base 3.4, Th. 0.2 cm; Wt. 80.44 g
<b>Date</b>	First century CE, probably second-third quarter
<b>Production Area</b>	Italy, Ticino
<b>Material</b>	Translucent purple and opaque white, yellow, light blue, turquoise, and dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; splashware

**CONDITION** Reassembled, with small fills on the body.

**DESCRIPTION** Vertical rim, folded out, down, and up, with an overhanging flange; short, splaying neck merging with the oval body, which is standing on a folded base-ring and a concave bottom. Two opposing strap handles with two ridges attached on the shoulder, pulled up and in, under the rim. The body and the handles are made of translucent purple glass and are covered with opaque white, yellow, light blue, turquoise, and dark blue chips marvered to be incorporated in the body. The lower part of the handles is stretched downward on the body and pinched seven times.

**COMMENTS AND COMPARANDA** This form is a small-size tableware glass vessel that originated in the Tiberian-Claudian period and remained in use until the end of the first century CE (Isings 1957, pp. 32–34, form 15; Biaggio-

Simona 1991, vol. 1, pp. 209–213). Published parallels connect this form to northern Italy and the Ticino region in Switzerland. For amphoriskoi with splashware, see Berger 1960, pp. 34–37, plate 4; La Baume and Salomonson 1976, p. 26, no. 17; Auth 1976, p. 60, no. 55; Harden et al. 1987, p. 112, no. 45 = Whitehouse 1997a, pp. 209–10, no. 361, acquired in Lebanon; Kunina 1997, pp. 151–152, 293, nos. 187–191, from Pantikapaion near the Black Sea, in particular no. 188. In general on this decorative technique, see Fremersdorf 1938, pp. 116–121, summarized in English in Harden et al. 1987, pp. 101–103; and comments on cat. 158. This form is divided into three groups on the basis of the size of the speckles and whether they were marvered into the vessel's body or if they were left in relief. This vessel belongs to the third group, where the speckles of colored glass have been applied, heated in situ, and marvered flush; then the vessel was expanded to its final dimensions, greatly distorting the speckles on the areas that expanded the most, in this case on the upper part of the body and the neck.

**PROVENANCE** By 1966, Galerie Heidi Vollmoeller (Zürich, Switzerland); 1970, Private Collection [sold, Antiken-Auktion, Galerie Am Neumarkt and Galerie Heidi Vollmoeller, Zurich, Switzerland, November 27, 1970, lot 128]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Galerie Heidi Vollmoeller 1966, no. 2632.

Galerie am Neumarkt 1970, no. 128.

von Saldern et al. 1974, p. 139, no. 391.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 356. Amphoriskos

<b>Accession Number</b>	2003.367
<b>Dimensions</b>	H. 10.5, Diam. rim 2.1, Diam. base 2.0 cm; Wt. 22.80 g
<b>Date</b>	First century CE
<b>Production Area</b>	Mediterranean, probably Italy
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Several mended breaks are visible in the body, and some visible incrustation in the interior, probably glue.

**DESCRIPTION** In-folded and flattened, flaring rim; cylindrical neck; ovoid body, standing on a flat, slightly concave bottom. No pontil mark is visible on the bottom. Two coil handles are applied on the shoulder and pulled up to the upper neck, where the coil was bent twice and the minuscule, fine end of it was cracked off, as is visible from its free, flying endings. One of the handles was placed higher than the other. In the lower handle, a striation of opaque white glass is visible, suggesting the color of other products of this workshop or the decoration on them.

**COMMENTS AND COMPARANDA** This form is a small-sized tableware glass vessel that originated in the Tiberian-Claudian period and remained in use until the end of the first century CE (Isings 1957, pp. 32–34, form 15; Biaggio-Simona 1991, vol. 1, pp. 209–213; Vessberg

1952, pp. 142–143, 163, amphorisk B1; Goethert-Polaschek 1977, pp. 225–227, form 133). Published parallels connect this form to northern Italy and the Ticino region in Switzerland. For amphoriskoi with splashware, see comments on cat. 355. See also comments on cat. 357.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 198, no. 545.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 357. Amphoriskos

<b>Accession Number</b>	2003.368
<b>Dimensions</b>	H. 6.7, Diam. rim 2.6, Diam. base 1.1, Th. 0.1 cm; Wt. 12.30 g
<b>Date</b>	First century CE, probably first half of the century
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque white and translucent dark blue and greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Some weathering around the rim, neck, and handles, giving the vessel a chalky white coat.

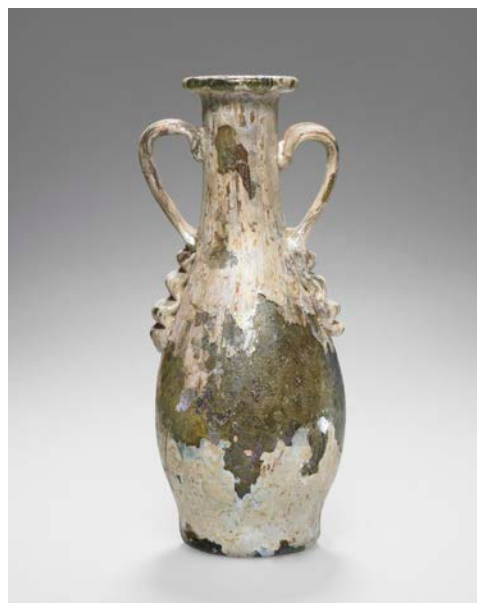
**DESCRIPTION** Fire-polished, flaring rim; cylindrical neck; ovular body, standing on a pushed-in tubular base-ring; flat bottom. Two opaque white coil handles, with translucent greenish striations, start on the upper body curve and end at mid-height on the neck. The remaining section of the glass thread was bent over the handle, forming a fine ridge along the central part of the coil. The handles are unevenly applied, one starting slightly lower. The body is slightly lopsided and an indentation is visible under the handle, which starts higher, probably induced when the blob of glass that formed the handle was pressed on this area.

**COMMENTS AND COMPARANDA** This form is a miniature variant of a contemporary glass tableware vessel (Isings 1957, pp. 32–34, form 15). Dated parallels, ranging from the early decades of the first century to the very end of the same century, have been published from several sites, including Heddernheim (Welker 1974, pp. 63–65, form 12); Locarno-Muralto (Carazzetti and Biaggio-Simona 1988, p. 45, no. 19, plate II); Albenga (Massabò 2001, pp. 108–109, 168–169, nos. 58–59, 125); Aquileia (Calvi 1968, p. 24, plates 1.2–1.4); Zadar, Nona, or Benkovac (Ravagnan 1994, pp. 36–37, nos. 29, 31, 33; Alfano 1997, no. 77); Starigrad (Fadić 1989, p. 39, no. 136, plate X.2); Kerch (Kunina 1997, p. 321, no. 339); Dura-Europos (Clairmont 1963, p. 30, no. 123, plate 20); Thessaloniki (Antonaras 2009, pp. 274–275, nos. 461–462 = Antonaras 2017, p. 138); and Athens (Alexandri 1972, pp. 115–118, plate 76δ). From the distribution pattern of the finds it is assumed that they were produced in northern Italy or Ticino (Ravagnan 1994, pp. 36–37; Antonaras 2009, pp. 274–275, form 113 = Antonaras 2017, p. 138).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 199, no. 548.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 358. Amphoriskos

<b>Accession Number</b>	2003.364
<b>Dimensions</b>	H. 11.5, Diam. rim 2.9, Diam. base 3.4 cm; Wt. 53.83 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Cyprus
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Surface presents severe iridescence, chalky accretions, and flaking; few pinprick bubbles. One handle mended.

**DESCRIPTION** Flaring, in-folded, and flattened rim; cylindrical neck; ovular body, standing on a flat, slightly concave bottom. At the center of the bottom, a circular pontil mark (W. 0.9 cm) is visible. Two handles were applied on the neck and drawn down to the shoulder. The remainder of the coils were stretched on the body of the vessel and pressed at four regular intervals, forming an undulating ribbon that ends at mid-height body.

**COMMENTS AND COMPARANDA** This form is a miniature variant of a contemporary glass tableware vessel (Isings 1957, pp. 32–34, form 15; Goethert-Polaschek 1977, pp. 225–227, form 133). Published parallels connect this form to the eastern Mediterranean, and more specifically the island of Cyprus (Vessberg 1952, pp. 142–143, 163, amphorisk B1, plate VI:25–26; Lightfoot

2007, p. 115, no. 270). Overall, apart from the crimped endings of the handles, it is very similar to a well-known form of amphoriskos produced in Italy, also dated to the first century (Antonaras 2009, pp. 274–275, form 113 = Antonaras 2017, p. 138). See also comments on cat. 357.

**PROVENANCE** Arnold Vogell, 1857–1911 (Karlsruhe, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 197, no. 539.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 359. Amphoriskos / Two-Handled Flask

<b>Accession Number</b>	2003.419
<b>Dimensions</b>	H. 8.0, Diam. rim 2.4, max. Diam. 5.3, Diam. base 2.5, Th. 0.1 cm; Wt. 15.80 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent, amber-colored glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved; part of the thread is missing.

**DESCRIPTION** In-folded, tubular, flaring rim; conical mouth; short, cylindrical neck, wider toward the globular body, which stands on a tubular, pushed-in base-ring. No sign of a pontil mark on the bottom. A fine thread is wound spirally 13 times around the body and stops at the transition to the base. Two coil handles are placed on the shoulders, over the white thread; they bend, forming an open ring, and end on the lower neck.

**COMMENTS AND COMPARANDA** Free-blown, small globular and bulbous flasks for oils, occasionally supplemented with small handles (Calvi 1969, plate 1:4; Mandruzzato and Marcante 2007, p. 76, no. 122), appeared in the early first century CE and soon became one of the most widespread forms of flask throughout the Roman Empire (Stern 1977, p. 35; De Tommaso 1990, pp. 39–40, type 5). They were often decorated with spirally wound threads, usually left unmarvered (Antonaras 2017, p. 146, form 122a, wherein several parallels are cited). For additional parallels, see comments on cat. 329.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 221, no. 644.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 360. Flask

<b>Accession Number</b>	2003.389
<b>Dimensions</b>	H. 12.0, Diam. rim 2.1, max. Diam. 3.0, Th. 0.1 cm; Wt. 25.65 g
<b>Date</b>	Second half of the first century CE
<b>Production Area</b>	Western Mediterranean
<b>Material</b>	Decolorized glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Almost fully preserved; part of the rim is replaced. Milky white cloudy weathering on large areas of the interior.

**DESCRIPTION** Fire-polished, flaring rim; short neck; biconical, pointed body, which is tooled to form a thick, discoid base stand. Two trails of glass are attached under the rim, looped six times against the body, and end on the upper body area.

The base is flat on the lower side and convex on the upper, indicating that it was probably made by pressing the entire vessel on a flat surface—i.e., the marver—while the blowpipe was still attached to the rim, an assumption corroborated by the fact that on the bottom there is no pontil mark visible.

**COMMENTS AND COMPARANDA** The vessel is made of decolorized glass, which was much more valuable and expensive than ordinary greenish glass. In Roman times glass decolorized with manganese or antimony appears

from the last third of the first century CE until the beginning of the fourth century CE, with the greatest distribution from the second quarter of the second to the mid-third century. It was used mainly in western Europe and mostly for tableware, although bottles and unguentaria appear in decolorized glass as well (Foy et al. 2019, vol. 1, pp. xiii–xvii; Stern 2020, pp. 769–774). This particular flask form appears in the western provinces (Foy et al. 2019, vol. 2, p. 188, form IN 185; Foy and Nenna 2001, p. 155, no. 201; Beretta and Di Pasquale 2004, p. 205, no. 1.16); plain examples without handles appear also in the first century CE (Scatozza Hörich 2012, p. 140, no. 11294A, plate XXVIII; Larese 2004, no. 393, plate XI; Antonaras 2012, p. 214, nos. 323–324).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 207, no. 585.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 361. Amphoriskos

<b>Accession Number</b>	2003.425
<b>Dimensions</b>	H. 11.0, Diam. rim 3.1, Diam. base 2.2, Th. (rim) 0.2 cm; Wt. 58.00 g

<b>Date</b>	Third century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** One handle is missing. Areas with incrustation.

**DESCRIPTION** Fire-polished rim; conical mouth; cylindrical neck; cylindrical body mildly tapering toward the flat, concave bottom. An annular pontil mark (W. 1.3, Th. 0.2 cm) is visible on the bottom. A fine thread is wound under the rim. Two opposing, smooth strap handles start on the tip of the shoulder, stretch vertically, and bend to the very top of the neck. The body of the second handle is not preserved.

The entire body is decorated with applied, curving, smooth threads of various thicknesses which form a snake-thread pattern. Two long-necked and long-legged birds, probably aquatic, are in profile turning to the right. In front of each bird is a fine thread that forms numerous loops stretching from shoulder to bottom, where it bends under and returns, ending on the shoulder.

**COMMENTS AND COMPARANDA** Snake-thread vessels were first produced in the late second century CE in the eastern Mediterranean, and the technique was transported soon after to the western provinces, where at least two workshops were active, one in Rhineland and the other in Pannonia (Harden et al. 1987, pp. 105–108; Stern 2001, p. 138; Dévai 2019, pp. 325–329). The vessels are grouped stylistically: those with freely applied trails, and the “flower and bird” variety, named after such representations. Eastern examples are made of and mostly decorated with colorless glass; the trails often bear crosshatched lines, and the “flower and bird” pattern is found only among them (Barag 1969). Colored trails appear in the decoration of western products much more often, and the trails sometimes are not smooth when they bear single lines instead of crosshatched ones.

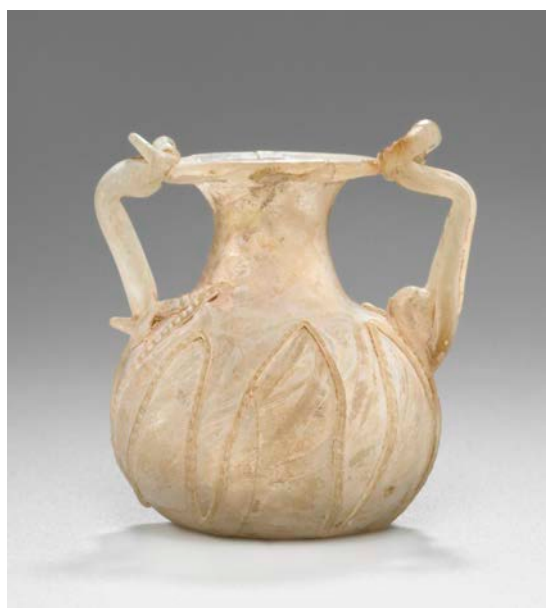
This form of small, undecorated amphoriskos (Isings 1957, pp. 157–158, form 127 miniature version) is known from sites in both eastern and western Roman provinces, and is dated to the third and fourth centuries (Antonaras 2017, p. 157, form 138, wherein further finds, mostly from the Balkans, are cited; also see Whitehouse 2001a, p. 184, no. 729). An almost identical vessel to this one is in the Corning Museum of Glass (64.1.17: Whitehouse 2001a, p. 223, no. 796).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 226, no. 663. Wight 2011, pp. 96, 99, fig. 69.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 362. Double-Handled Flask / Amphoriskos

<b>Accession Number</b>	2003.430
<b>Dimensions</b>	H. 5.0, Diam. rim 3.1, max. Diam. 3.9, Th. 0.1 cm; Wt. 26.20 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Mended; covered by beige weathering and iridescence.

**DESCRIPTION** In-folded tubular rim; flaring mouth; short, wide neck; squat, globular body resting on a flat bottom. Two coil handles applied on the shoulders and ending on the rim, forming a small protruding tab. The remaining end of the coil was stretched, bent, and attached along the handle.

The vessel is decorated with a hatched and flattened thread of glass applied in a zigzag pattern, bending 15 times all around the body, from the height of the handles to the bottom. The relief rendering of the surface of the decorative thread ascribes the vessel to the group with snake-thread decoration.

**COMMENTS AND COMPARANDA** Free-blown, glass amphoriskoi with wide neck and mouth and taller, ovular body appear in the middle of the first century CE, and they continue to circulate until the early second century (Isings 1957, pp. 32–34, form 15; Fünfschilling 2015, p. 436, form AR 165). This squatter version should be dated, on the basis of the snake-thread decoration, to the third or even fourth century CE. For the distribution and dates of snake-thread decoration, see comments on cat. 361.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 230, no. 675.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 363. Flask

<b>Accession Number</b>	2003.350
<b>Dimensions</b>	H. 9.9, max. Diam. 8.0, Diam. neck 1.8 cm; Wt. 85.82 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Roman Empire, possibly Rhineland
<b>Material</b>	Translucent dark blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised

**CONDITION** The rim and the handles seem to be modern additions. There are some fills on the body and the upper neck and rim area.

**DESCRIPTION** Cylindrical neck with a constriction at the transition to the spherical body, which stands on a flat bottom. Two white coil handles start at current mid-height of neck, bend, and end at the base of the neck. The body is covered by six partly overlapping, wheel-cut, circular medallions alternately formed by double and triple concentric circles. Along the middle of the body run two horizontal incisions. At mid-height of the neck is a horizontal incision.

**COMMENTS AND COMPARANDA** The original rim of the vessel would have been vertical and cut-off, and thus the vessel belongs to a well-known form characterized by the globular body, the constriction at the base of the neck, and the unworked, cut-off rim, which was widely distributed during the third and fourth centuries CE all

over the Roman Empire (Isings 1957, pp. 122–123, form 103; Antonaras 2017, pp. 162–163, form 145, wherein further bibliography).

The examples from this group often bear incised decorations, usually simple, consisting of parallel shallow grooves or bands of incisions. Less often, more complex geometrical motifs appear, such as concentric or intersecting circles and bands as on this vessel; quite rarely there are examples decorated with incised figural motifs (Painter 1975, pp. 54–67; Whitehouse 2001a, pp. 271–272, no. 865) or with painted themes (Doppelfeld 1966, p. 68, plate 165).

Finds with the intersecting circles and bands have appeared at both western and eastern sites, including Cologne (Fremersdorf 1967, pp. 109–111, plates 110, 112; La Baume and Salomonson 1976, p. 70, no. 250, plate 36:3); Bonn (Follmann-Schulz 1988, p. 38, plate 7:88); Ljubljana (Petru 1972, p. 62, no. 6, p. 127, n. 17); Susa in Turin and Castenaso in Bologna (Paolucci 1997, pp. 114–116, where a detailed bibliography of this decoration is compiled); Cherson (Kunina 1997, pp. 167, 299, no. 226); Duklja in Montenegro (Cermanović-Kuzmanović et al. 1975, pp. 154–155, figs. 12–13); Dura-Europos (Clairmont 1963, pp. 111–112, nos. 540–541, plate XII, XXXIV); and Tel el-Hosn, Syria, now in the Yale University Art Gallery (Matheson 1980, pp. 77–78, no. 203). Another example of unknown provenance is in the Los Angeles County Museum of Art (von Saldern 1980b, pp. 80–81, no. 76).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 187, no. 517. Wight 2011, pp. 77, 90, fig. 63.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 364. Amphoriskos

<b>Accession Number</b>	78.AF.35
<b>Dimensions</b>	H. 25.5, Diam. rim 7.1, max. Diam. 13.0, Diam. base 8.3, Th. 0.3 cm; Wt. 441.40 g
<b>Date</b>	Third or probably fourth century CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Heavily weathered, iridescent, and pitted areas on most of it.

**DESCRIPTION** Fire-polished rim, in-folded in a small area; wide, conical mouth; almost horizontal shoulder; pear-shaped body, standing on a concave bottom. The entire vessel is a bit crooked, sagging on one side. Two vertical, six-ribbed strap handles are applied on the shoulder, folded in upon themselves, and attached on the upper part of the mouth to the rim. A thick coil is wound once around the neck at mid-height.

**COMMENTS AND COMPARANDA** The vessel was probably made in third-century CE Syria. The features suggesting that attribution are the sagging, sack-shaped body; the distinctively shaped handles; and the single coil of glass decorating the neck. Quite similar to this amphoriskos is a jar with two handles in the Corning Museum of Glass (62.1.12; Whitehouse 2001a, p. 187, no.

733) and another in the Royal Ontario Museum (Hayes 1975, p. 114, no. 436).

**PROVENANCE** 1953, Spink & Son, Ltd. (London, England), sold to J. Paul Getty, 1953; 1953–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Stothart 1965, p. 21, no. F-28.

**EXHIBITIONS** None



### 365. Amphoriskos

<b>Accession Number</b>	2003.426
<b>Dimensions</b>	H. 10.7, Diam. rim 4.6, Diam. base 4.0 cm; Wt. 58.76 g
<b>Date</b>	Mid-third–mid-fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syria
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact. Iridescence and white layer of weathering.

**DESCRIPTION** In-folded rim; conical mouth; cylindrical neck wider toward the body; squat globular body; flat bottom, standing on an applied base-ring. At the center of the bottom, an annular pontil mark (W. 2.2, Th. 0.1 cm) is visible. A thick trail of glass is wound around, forming a

ring at the middle of the neck. A pair of coil handles are applied on the shoulders and stretch to mid-neck height, where they bend and attach to the neck and the decorative trail. The surplus of the coil is folded over the upper surface of the handle.

**COMMENTS AND COMPARANDA** Small glass amphorae rendering in miniature the shape of large clay amphorae were quite popular, used as tableware for serving wine. This vessel belongs to a distinctive group of Syro-Palestinian glass table amphorae, appearing in four different types, which have been dated mainly to the fourth and fifth centuries CE (Stern 1977, pp. 84–85). This particular vessel, due to its funnel mouth and tubular neck without a constriction at its base, is ascribed to type I, which is dated between the mid-third and mid-fourth centuries CE. Among the vessels of this group the shape of the body varies greatly. On the basis of its free-blown, squat spherical body, the presence of a base, and the presence of a decorative coil halfway down the neck, this example is ascribed to type IB3a (Stern 1977, pp. 84–85, fig. 2; Dusenbery 1971, p. 24, fig. 39; La Baume 1973, D94, plate 38:4). Quite similar but with conical base are the following parallels: Platz-Horster 1976, p. 60, no. 110; Stern 1977, pp. 84–85, type IB2a, fig. 2; Israeli 2003, p. 262, no. 343; Antonaras 2012, p. 142, no. 196.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 227, no. 665.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 366. Amphoriskos

<b>Accession Number</b>	2003.417
<b>Dimensions</b>	H. 12.0, Diam. rim 2.8, max. Diam. 3.6, Th. 0.16 cm; Wt. 26.20 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean or Italy
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Heavily weathered, with a resulting yellow-green iridescence. Heavily encrusted in areas around the neck and foot. Hair cracks visible on the shoulders. Part of one handle has been replaced with some other substance. The real color of the handles and the toe remains unclear due to the thick layer of iridescence that covers these areas.

**DESCRIPTION** Fire-polished rim; wide, conical mouth; elongated conical or carrot-shaped body, ending in a beaded toe. Two strap handles start on the shoulder and end at the top of the rim. A thick coil is wound six times around the neck. Faint remains of the trail of a fine thread that was wound 25 times around the vessel from the upper body to the toe.

**COMMENTS AND COMPARANDA** Glass amphoriskoi with elongated and pointed body are a relatively well known form for first-century CE flasks (Isings 1957, pp. 77–78, form 60; Scatozza Höricht 1986, p. 66, form 51; De Tommaso 1990, p. 77, type 59bis), and this vessel, albeit

different in the shape of its mouth, is quite close to that production. It has been plausibly proposed that they render in a miniature fashion the shape of contemporaneous clay amphorae. In this case, form Dressel 4 is the closest parallel, which was in use from about 70 BCE throughout the first century CE, for the transportation of wine (Dressel 1899, forms 2–4 = Peacock and Williams 1986, pp. 105–106, class 10; for an overview of this class and the relevant bibliography, see [https://archaeologydataservice.ac.uk/archives/view/amphora\\_ahrb\\_2005/details.cfm?id=102](https://archaeologydataservice.ac.uk/archives/view/amphora_ahrb_2005/details.cfm?id=102) [accessed November 18, 2022]). In addition, the decoration of this vessel is very similar to that of a group of glass flasks with elongated conical or teardrop pointed body with applied, spirally wound threads and/or coils, also a well-known form of first-century CE flasks; see cats. 332–333, in particular comments on cat. 322. A relatively close, painted parallel is in the Corning Museum of Glass (59.1.82a, b: Whitehouse 2001a, p. 258, no. 853), along with a larger parallel also dated to the first century CE (62.1.29: Whitehouse 1997a, p. 169, no. 296).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 220, no. 640.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 367. Flask

<b>Accession Number</b>	78.AF.19
<b>Dimensions</b>	H. 24.7, Diam. rim 4.7, Diam. base 6.6 cm; Wt. 247.00 g
<b>Date</b>	Sixth century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent light green glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact; some incrustations; few pinprick bubbles.

**DESCRIPTION** In-folded, tubular, everted rim; long, slightly lopsided, cylindrical neck; sloping shoulder with smooth transition to the ovoid body; pushed-in, conical base; flat bottom. Slanting tooling marks are visible on the base. No pontil mark is visible. A thread is wound in a spiral 10 times around the neck. A thicker, flattened thread is wound once around the lower part of the neck. After the application of threads, two pairs of handles were added. One pair of coil handles extends from shoulder to rim, looped one time against the neck, forming two arches. A second, opposing pair of coil handles extends also from shoulder to rim and is looped twice against the neck, forming a longer arch from shoulder to mid-high on the neck and two smaller arches on the upper part of the neck.

**COMMENTS AND COMPARANDA** Tall, multihandled flasks with a distinctively elongated neck decorated with a spirally wound fine thread and multiple coil handles applied to the shoulder and attached halfway up the neck, and occasionally pulled up to the rim, belong to a small group of vessels that has been proposed to be products of the same workshop that produced the kohl tubes in inland Palestine, in Galilee, or the Jordan valley (Stern 2001, p. 270). For parallels, see Antonaras 2012, p. 150, no. 208; Stern 2001, p. 308, no. 171; Israeli 2003, p. 265, no. 351. For an example without base and decorative coil, see Auth 1976, p. 219, no. 454.

**PROVENANCE** 1936, Robert Weeks de Forest, American, 1848–1931, and Emily Johnston de Forest, 1851–1942 [sold, Anderson Galleries, Inc., New York, January 30, 1936, lot 347]; 1940, Harry Leonard Simmons [sold, Parke Bernet Galleries, Inc., New York, April 5, 1940, lot 137, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1936b.

Parke-Bernet Galleries 1940, lot 137, ill.

Stothart 1965, p. 20, no. F-8.

**EXHIBITIONS** None



## 368. Flask

<b>Accession Number</b>	71.AF.80
<b>Dimensions</b>	H. 8.5, Diam. rim 5.1, Diam. base 3.8 cm; Wt. 117.83 g
<b>Date</b>	Sixth century CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Transparent amber-brown and greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact.

**DESCRIPTION** In-folded, tubular, and flattened flaring rim; short, wide neck; globular body, standing on a slightly concave bottom. Three thrusts with a blunt tool have given the globular body an almost square circumference at mid-height, where a wide, horizontal fold extends on three of the sides, while the fourth is left smooth. Three coil handles made of greenish glass extend from the shoulder to the tip of the rim arranged at equal distances. A circular scar (W. 1.2 cm) of a solid pontil is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** A very similar, two-handled flask was once in a private collection in Paris (Loudmer and Kevorkian 1985, p. 150, no. 386).

**PROVENANCE** 1971, Royal Athena Galleries (New York, New York), sold to the J. Paul Getty Museum, 1971

**BIBLIOGRAPHY** Hess 2004, pp. 76–77, plate 1.

**EXHIBITIONS** The Arts of Fire: Islamic Influences on the Italian Renaissance (Los Angeles, 2004)



### 369. Double Kohl Tube

<b>Accession Number</b>	2003.431
<b>Dimensions</b>	H. 11.5, max. W. with handles 7.0, Diam. rims 2.7 and 2.4 cm; Wt. 66.66 g
<b>Date</b>	Fifth century CE
<b>Production Area</b>	Palestinian region
<b>Material</b>	Transparent dark green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Almost complete; small portion of one handle missing; milky weathering over small areas; few pinprick bubbles and blowing spirals.

**DESCRIPTION** In-folded, flaring rim; body in the form of a double tube; flat base. Two coil handles on either side, each looped three times, from mid-body, to upper body, to rim. At the center of the bottom is an annular pontil mark

(W. 1.7 cm). A bronze rod is placed in one of the body tubes.

**COMMENTS AND COMPARANDA** Kohl tubes are widely distributed in the Syro-Palestinian region, found mostly in tombs dated between the middle of the fourth and sixth centuries CE (Barag 1970a, pp. 175–177, types 12:2–3, plate 39:2, 3; Dussart 1998, pp. 173–175, types B.XIII.2211–2232; Gorin-Rosen and Katsnelson 2007, pp. 36–42). The basic concept of the vessel is always the same: a glass tube bent to form a vessel with two parallel compartments. Variants with one, two, or even more tubes are known, with or without handles. Their content and use are evident because in some cases remains of kohl and/or metal or bone applicators were found in them (Seligman et al. 1996, p. 50). This particular type with elaborate handles has been dated to the fifth century CE (Barag 1970a, pp. 177–178, type 12:5–1, plate 39:5–1; Gorin-Rosen and Katsnelson 2007, p. 42). Other comparanda include the following: Barag 1970a, vol. 2, plate 39, type XII, variation of subtype 7; Dussart 1998, p. 174, type B.XIII.222, plates 58:1, 2; Arveiller-Dulong and Nenna 2005, p. 483, no. 1320; Antonaras 2012, p. 267, no. 438.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 232, no. 681a.

Wight 2011, pp. 103, 115, fig. 83.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 370. Quadripartite Kohl Tube

<b>Accession Number</b>	2003.432
<b>Dimensions</b>	H. with handle 22.5, Diam. base 4.0–6.0, Diam. rims approx. 2.4 cm; Wt. 327.38 g
<b>Date</b>	Sixth–seventh centuries CE
<b>Production Area</b>	Palestinian region
<b>Material</b>	Transparent light green glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Intact.

**DESCRIPTION** The vessel comprises two glass tubes, each bent at the middle and fused together, forming a four-compartment body on a flat bottom. The tubes have in-folded, slightly everted rims. At the center of the bottom is a solid, circular pontil mark (W. 1.7 cm). A fine thread is wound spirally 21 times around the body. On the four corners of the vessel a thick trail stretches from the bottom to the rim, looped eight to nine times against the body. A pair of vertical basket handles rise from the rims, bridged at the top by a third handle, perpendicular to them. At mid-height the handles are bridged with a pair of smaller basket handles placed on opposite sides.

**COMMENTS AND COMPARANDA** On kohl tubes, see comments on cat. 369. In addition, for direct comparanda, see Harden 1964, p. 53, fig. 12, top right; Barag 1970a, vol. 2, plate 39, type XII:9; Stern 2001, p. 320, no. 182; Antonaras 2012, p. 283, no. 441.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern 1968, p. 18, no. 29.

von Saldern et al. 1974, p. 232, no. 681b.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Meisterwerke der Glaskunst aus internationalem Privatbesitz (Düsseldorf, 1968–1969)



### 371. Juglet

<b>Accession Number</b>	2003.396
<b>Dimensions</b>	H. 9.7, Diam. base 3.5 cm; Wt. 23.55 g
<b>Date</b>	Third–fourth centuries CE or much later
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Translucent purple and bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; some incrustation in the interior.

**DESCRIPTION** Trefoil, fire-polished rim; cutaway conical mouth; conical body; flat bottom.

**COMMENTS AND COMPARANDA** No parallels have been located. The glass appears to be late antique. Possibly connected to Syro-Palestinian production, but the shape and the rendering of the rim remain unparalleled.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 212, no. 604.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 372. Inkwell and Cover

<b>Accession Number</b>	2003.239
<b>Dimensions</b>	Body: H. 6.3, Diam. rim 2.8, max. Diam. shoulder 6.5, Diam. base 5.7 cm; Wt. 43.34 g. Lid: pres. H. 5.0, max. Diam. 3.2 cm; Wt. 5.44 g
<b>Date</b>	First century CE
<b>Production Area</b>	Possibly eastern Mediterranean
<b>Material</b>	Transparent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; partly covered by white crust from weathering. The tip of the lid is missing.

**DESCRIPTION** Horizontal rim with fire-polished lip; cylindrical body with folded, horizontal flange at top and bottom; flat, slightly concave bottom. No pontil mark is visible on the bottom.

Conical, lopsided lid. It is free-blown, like a small vessel with flaring fire-polished rim; wide neck widening toward the bulbous body, which was folded and pressed, forming a wide horizontal, slightly convex band. This band secured the lid on the opening of the vessel. The rim of the lid is tapered, ending in a tubular tip.

**COMMENTS AND COMPARANDA** In Roman times, inkwells, *atramentaria* in Latin (Hilgers 1969, s.v. “atramentarium,” pp. 39, 112), were predominantly made of metal and clay, but in the first century CE they were also rendered in glass. Three forms of glass inkwells have been identified: two with cylindrical body and one with short hemispherical body. Their use becomes evident from the narrow opening with fire-polished edge that is placed at the center of the horizontal upper surface of the vessel, as in the clay and metal inkwells (Fünfschilling 2012, pp. 194–195; Eckardt 2017, pp. 53–107). The more widely distributed shorter and wider cylindrical form was probably produced in the west. The form was supplemented with three loop handles on the upper surface of the vase (Isings 1957, p. 93, form 77). A slender, handleless cylindrical form is ascribed to eastern Mediterranean workshops (Whitehouse 1997a, p. 199, no. 347, and particularly comments on no. 360; Israeli 2003, p. 121, no. 118) (this vessel, cat. 373). This form was supplemented with a lid, either biconical or cylindrical. A less widely distributed variant, rendered in clay as well (Broneer 1935, pp. 72–73, fig. 17; Eckardt 2017, pp. 55–57), has a hemispherical body and a seemingly flat or slightly convex upper surface with narrow fire-rounded rim at the center and one handle (cats. 374–375). There are parallels from the eastern Mediterranean that date the form to the first–second centuries CE (Lightfoot 2013a, pp. 426–427, figs. 3–4: <http://www.metmuseum.org/collection/the-collection-online/search/249364>; Arveiller-Dulong and Nenna 2005, pp. 187, 249, no. 752; Davidson 1952, p. 101, no. 636, fig. 8; Antonaras 2022a, pp. 68–69, no. 443). For direct parallels, see Dusenbery 1971, p. 19, no. 23; Hayes 1975, p. 55, no. 129; Auth 1976, p. 119, nos. 145, 146; Alexander and Greuel 1990, no. 71 (Art Institute of Chicago, 1943.1166a-b: <https://www.artic.edu/artworks/119257/inkwell>); Whitehouse 1997a, pp. 199, 209, nos. 347, 360; Israeli 2003, p. 121, no. 118; Fünfschilling 2012, p. 195, fig. 47; Antonaras 2012, p. 252, nos. 411, 412; Lightfoot 2013a, p. 426, n. 6, fig. 1.



**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 112, no. 298; p. 114, plate no. 298.

Wight 2011, pp. 104, 124, fig. 95.

Lightfoot 2013a, pp. 425–426.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 373. Inkwell

<b>Accession Number</b>	2003.240
<b>Dimensions</b>	Body: H. 6.2, Diam. rim 2.6, max. Diam. 6.1, Diam. body 5.8 cm; Wt. 35.69 g. Lid: pres. H. 3.8, max. Diam. 4.2 cm; Wt. 9.48 g
<b>Date</b>	First century CE
<b>Production Area</b>	Possibly eastern Mediterranean
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled

**CONDITION** Mostly covered by white crust from weathering.

**DESCRIPTION** In-folded, horizontal, fire-polished rim; shallow, sloping shoulder; cylindrical body, slightly wider moving downward, with horizontal flange at top and bottom, which forms base-ring; slightly convex bottom, pushed in at center, no pontil mark visible.

Free-blown and tooled, circular lid with an oval protuberance at the center of the upper surface. It is formed like a small vessel with a wide, cylindrical neck and bulbous body, then folded and pressed, forming a wide horizontal, slightly convex band. This band secured the lid on the opening of the vessel. It continues as a wide, cylindrical tube, mildly tapering toward its end. The end is broken, and its exact shape remains unknown, but a small, preserved part of it indicates that it was bent and protruding.

**COMMENTS AND COMPARANDA** See cat. 372.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 112, no. 299; p. 114, plate no. 299.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 374. Inkwell

<b>Accession Number</b>	2003.378
<b>Dimensions</b>	H. 3.3, Diam. opening 2.1, Diam. rim 6.3, Diam. base 2.8 cm; Wt. 39.28 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire

<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Incrustation on the inside.

**DESCRIPTION** Small, circular opening at the center of a wide, horizontal, concave rim. A fold of the glass forms a ridge at the transition to the conical body, which tapers to the base; the bottom is slightly concave. A thick coil handle starts on the lower part of the body, forms a small ring, and ends on the ridge. A very fine annular pontil scar (W. 1.8, Th. 0.1 cm) is visible in the center of the bottom.

**COMMENTS AND COMPARANDA** On inkwells in general, see comments on cat. 372. The closest parallel to this vessel is an unpublished find from the collection of the Metropolitan Museum of Art (17.194.119): <http://www.metmuseum.org/collection/the-collection-online/search/249364>. For a one-handled example with similar body shape from Syria, ascribed to a Syro-Palestinian production and dated to the second century CE, see Arveiller-Dulong and Nenna 2005, pp. 187, 249, no. 752, with further bibliography. Two other examples are known from Corinth, dated to the first and early second centuries, respectively: Davidson 1952, p. 101, no. 636, fig. 8; Antonaras 2022a, pp. 68–69, 119, no. 443.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 203, no. 571.

Wight 2011, pp. 104, 122, fig. 92.

Lightfoot 2013a, pp. 425–426.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 375. Inkwell

<b>Accession Number</b>	2003.453
<b>Dimensions</b>	H. 3.5, Diam. rim 1.5, max. Diam. 5.0, Diam. base 3.6, Th. 0.1 cm; Wt. 32.00 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent yellow-green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Some incrustation on the inside.

**DESCRIPTION** Vessel made of translucent yellow-green glass. The small, circular opening of the inkwell is at the center of a wide horizontal rim. A fold of the glass forms a ridge at the transition to the cylindrical body, which tapers to the base; the bottom is flat and slightly concave. A thick coil handle starts on the body, forms a small ring, and ends on the ridge. The excess of the coil has been stretched and bent on the handle, forming an almost decorative ridge along its central part. A very fine annular pontil scar (W. 2.1, Th. 0.1 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** On inkwells in general, see comments on cat. 372. For comparanda, see cat. 374.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 250, no. 725.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 376. Kohl Tube

<b>Accession Number</b>	2003.470
<b>Dimensions</b>	H. 9.5, Diam. rim 2.0, Diam. base 1.7 cm; Wt. 49.90 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Part of the rim replaced with painted plaster or gypsum. A little weathering and some incrustation.

**DESCRIPTION** Thick, slightly flaring rim; long, twisted, tubular body bearing seven ribs; a slight constriction, 1 cm below the rim, forms the short neck. The small, integral disk base does not allow the vessel to stand. A pair of small, curved, coil handles extend from the upper body to over the rim.

**COMPARANDA COMMENTARY** Thick unguentaria made of opaque glass, formed around a metal rod, appear both in a slender, cylindrical shape with twisted ribs and in a smaller, squat, jar-shaped variant with ribbed or smooth body. They had two tiny handles. They are usually

in dark green, appearing black (this vessel, cat. 379), opaque turquoise (cat. 377), or blue (cat. 378) glass. They are dated provisionally between the fourth and the fifth centuries, and they are ascribed to the Syrian region (Abdul Hak 1965, pp. 27–28, figs. 2–3; Barag 1975, p. 30 n. 29). The majority of the kohl tubes bear spiraling ribs formed by twisting the vessel while it was still hot and malleable. A small group, dated to the seventh–eighth centuries CE, includes tubes with applied—i.e., trailed on—decoration either of the same color as the body or of opaque red and white glass (see comments on cat. 379). Based on tooling marks, it has been assumed that they were made by glass bead makers and not glassblowers (Stern 2001, p. 78). They were possibly used as kohl containers.

Published comparanda include Lamm 1930, vol. 1, pp. 46–47, nos. 2–4 and vol. 2, plate 8, in the British Museum (nos. 3 and 4 were acquired in Aleppo, Syria); Abdul Hak 1965, p. 28, fig. 2; Barag 1970a, vol. 2, type VII:7; von Saldern 1974, p. 188, no. 279, from the Hentrich Collection, now in the Kunstpalast, Düsseldorf; Auth 1976, pp. 147, 225, nos. 189, 490; Carboni 2001, p. 36, no. 1.1, from the al-Sabah Collection, now in the Kuwait National Museum; Miho Museum 2001, p. 116, no. 168; Stern 2001, pp. 133, 144, 186, 361, no. 78; Israeli 2003, p. 294, nos. 391–92; Whitehouse 2003, pp. 47–48, no. 960; Goldstein et al. 2005, p. 35, no. 8, from the Khalili collection.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 257, no. 752.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 377. Kohl Tube

<b>Accession Number</b>	2003.469
<b>Dimensions</b>	H. 10.8, Diam. rim 2.0, Diam. base 2.0 cm; Wt. 59.00 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Opaque turquoise glass
<b>Modeling Technique and Decoration</b>	Rod-formed; applied elements

**CONDITION** One handle and a small part of the rim are missing and have been filled by a resin(?). A little weathering and some incrustation. Large air bubbles have cracked at three points on the body ribs. Also, a void area is visible just below the surface on the lower part of the body.

**DESCRIPTION** Thick, slightly lopsided rim; long, twisted, tubular body bearing eight ribs; a slight constriction, 1 cm below the rim, forms the short neck. The small, integral disk base is slightly off-center and does not allow the vessel to stand. At the center of the undersurface, a straight notch is visible, the result of the manipulation of the disk base when the body was pressed on it. A pair of small, curved, coil handles extend from upper body to rim.

**COMMENTS AND COMPARANDA** See cat. 376.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 256, no. 751.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 378. Kohl Tube

<b>Accession Number</b>	2003.468
<b>Dimensions</b>	H. 13.8, Diam. rim 2.1, Diam. base 2.3, Th. 0.4 cm; Wt. 49.80 g
<b>Date</b>	Fourth–fifth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Rod-formed; applied elements

**CONDITION** Fully preserved. A little weathering and some incrustation on the lower part of the body.

**DESCRIPTION** Thick, slightly flaring, long rim; long tubular body bearing six vertical, twisted ribs; a slight constriction, 1.1 cm below the rim, forms the short neck. Two thin, short, angular coil handles extend from the upper body to over the rim. The small, integral disk base does not allow the vessel to stand.

**COMMENTS AND COMPARANDA** See cat. 376.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 256, no. 750.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 379. Kohl Tube

<b>Accession Number</b>	2003.463
<b>Dimensions</b>	H. 10.5, Diam. rim 1.6, Diam. base 1.7, Th. 0.1 cm; Wt. 39.70 g
<b>Date</b>	Seventh–eighth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Dark green, seemingly black, glass
<b>Modeling Technique and Decoration</b>	Rod-formed; applied elements

**CONDITION** One handle missing. A little weathering and some incrustation.

**DESCRIPTION** Faint remains of a turquoise thread, which was wound three times around the rim, are noticeable. Body cylindrical; pad disk base. Some tooling marks on the underside of the base indicate that it was made with a thick coil of glass wound three times and flattened, forming a disk.

On the body, there are five rows of decoration. Each row consists of a pair of fine threads (currently appearing white due to weathering) that curve and intertwine, forming three conjoined ovals. At the center of each oval is a round blob of turquoise glass. The vessel is noticeably heavier compared to other glass vessels of similar size and shape.

**COMMENTS AND COMPARANDA** Small, tubular vessels, known as kohl tubes, are separated into two groups on the basis of their decoration. The majority bear spiraling ribs formed by twisting the vessel while it was still hot and malleable (on rod-formed kohl tubes with spiraled ribbed decoration, see cat. 376). A much more concise group includes tubes that bear applied decoration, with just a few published examples, among which is this vessel. Parallels include a vessel from the al-Sabah Collection, now in the Kuwait National Museum (Carboni 2001, p. 294, no. 74); one from the Israel Museum, Jerusalem (Israeli 2003, p. 381, no. 516), one in the Okayama Orient Museum (Taniichi 1987, p. 90, no. 111, illustrated on p. 53), and one in the Corning Museum of Glass (Whitehouse 2014, pp. 187–188, no. 931).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 254, no. 744.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 380. Flask

<b>Accession Number</b>	79.AF.184.19
<b>Dimensions</b>	H. 5.9, Diam. rim 2.0, Diam. base 2.0 cm; Wt. 30.57 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless (body) and slightly greenish glass (neck)
<b>Modeling Technique and Decoration</b>	Mold-blown; wheel-cutting

**CONDITION** Mended. Probably a pastiche: The neck seems to belong to another vessel and has been glued on the body of another. Iridescence on the exterior; in the grooves and in the interior, incrustation.

**DESCRIPTION** Cut-off rim; conical neck, tapering toward the body, covered with 12 vertical grooves. Horizontal shoulder; rectangular body, square in cross section; flat bottom. On the bottom, an annular pontil scar (0.8 cm wide) is visible. On two of the four sides of the body, there are three grooves that drop slightly to the left. The other two sides are covered with two long oblique strokes that form an everted triangle. Two short vertical strokes flank the central strokes in the middle of each side.

**COMMENTS AND COMPARANDA** Wheel-cutting and wheel-engraving were popular decorative techniques in Islamic glassware between the ninth and eleventh centuries, as numerous finds from various sites in Syria,

Palestine, Iraq, Iran, Egypt, and Tunis attest. Six categories of cut and engraved objects are defined on the basis of the decoration: scratch-engraved, faceted, with disks and related motifs, with raised outlines, slant-cut, and linear. In the twelfth century cutting gradually went out of fashion, replaced by enameling, the technique that prevailed during the next two centuries in Islamic glassware.

Cutting was employed mostly for the embellishment of colorless vessels of various forms, for example bowls, bottles, goblets, and flasks, although colorful and even cameo vessels occur too. There are indications that quite similar products were made in Iran, Iraq, Syria, Lebanon, Israel, and Egypt (Kröger 1995, pp. 116–175; Kröger 1999, pp. 219–232; Carboni 2001, pp. 71–136; Whitehouse 2001b, pp. 155–161; Foy 2020, pp. 85–98). For flasks with square or polygonal body, see comments and comparanda for cat. 390. For flasks with cut decoration that are square in cross section, see comments and comparanda for cat. 392. Also, for similar prismatic flasks, cf. Whitehouse 2014, pp. 73–74, nos. 727 and 728. For a vessel with polygonal neck and globular body covered with cut, multifaceted decoration, see Musée Curtius 1958, pp. 52–53, no. 66 (B.A.A.R. 1460). For miniature flasks with cut decoration, see cat. 383, with several parallels from various sites.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 381. Molar Flask

<b>Accession Number</b>	79.AF.184.33
<b>Dimensions</b>	H. 5.2, Diam. rim 1.2, Diam. body 1.9 × 1.9 cm; Wt. 21.45 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Colorless, slightly yellowish glass
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Pastiche of two fragments. Covered with weathering and incrustation. Repaired break between neck and body. “Fake weathering” (resin and chunks of weathered glass) present on the neck to make it look like it goes with the body. Neck belongs to a different vessel, glued to the body in modern times. The feet probably were originally longer.

**DESCRIPTION** Round, vertical rim; cylindrical neck; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Deep horizontal groove along the middle of the body. Triangular, oblique strokes transect the body diagonally, forming a lozenge-shape motif. Two deep, triangular bevels on each corner, pointing to the top and bottom of the vessel, leaving a prunt along the central groove. Below the horizontal groove, a deep bevel at the center of each side delineates four pyramidal, wedge-shaped feet.

**COMMENTS AND COMPARANDA** Molar flasks, named for the wedge-shaped feet reminiscent of the shape of the roots of a human tooth, and usually decorated with deep-cut motifs, are typical for the entire Islamic world of the ninth–tenth centuries, unearthed more often in Egyptian sites. They were probably produced in several regions. They were used as containers for scented oils and perfumes. Examples include finds from Egypt (Fustat: Shindo 1992, p. 185, nos. 6–11; Scanlon and Pinder-Wilson 2001, pp. 95–97, figs. 42–43); the Sinai Peninsula (Raya and al-Tur: Kawatoko 1996, plate 37, no. 15, plate 40:7; Shindo 2003, fig. 3: 8); Palestine (Hadad 2005, pp. 45 and 172–173, no. 868); Syria (Lane 1937, p. 66, fig. 10:E; Salam-Liebich 1978, p. 146; Riis 1957, p. 53, figs. 138–145, no. 140); Iraq (Samarra: Lamm 1928, pp. 215–219); Iran (Susa: Kervran 1984, fig. 8, no. 26; Nishapur: Kröger 1995, pp. 135–137; Siraf: Whitehouse 1968, p. 19); the Arabian Peninsula (Zarins et Zahrani 1985, plate 18, no. 31); the East African coast (Chittick 1974, fig. 154a); southeastern Asia (Swan Needell 2018, plate 6, no. 71); Eretz, Israel, and Tunis (Sabra al-Mansuriyya: Foy 2020, p. 84, no. 123). Most private collections possess some examples, including the Kuwait National Museum (Carboni 2001, pp. 98–99, 124–127, nos. 27a–c, 2.28a–r); Israel Museum (Brosh 2003, p. 368, no. 503); Eretz Israel Museum (Carboni and Whitehouse 2001, p. 153, no. 67); Corning Museum of Glass (Whitehouse 2010, pp. 67–68, 90, nos. 103–112, 138–139); Metropolitan Museum of Art, New York (Lamm 1930, p. 165, plate 61, no. 11); Los Angeles County Museum of Art (von Saldern 1980b, p. 164, nos. 161–162); Kunstpalast, Düsseldorf (von Saldern 1974, p. 273, nos. 419–420); Museum für Islamische Kunst, Berlin (Kröger 1984, pp. 176, 183–184, nos. 153, 162); Benaki Museum, Athens (Clairmont 1977, pp. 91–93, nos. 304–309, plate XVII); and Khalili Collection (Goldstein et al. 2005, pp. 156–157, nos. 176–177).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 382. Molar Flask

<b>Accession Number</b>	79.AF.184.43
<b>Dimensions</b>	H. 5.7, Diam. rim 1.7, Diam. base 2.5 × 2.5 cm; Wt. 22.90 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Probably pastiche: neck belongs to a different, wider vessel. The feet were probably pointed originally.

**DESCRIPTION** Round, vertical rim; cylindrical neck; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Horizontal grooves on the upper and lower end of the preserved neck. Deep horizontal groove along the middle of the body. Oblique strokes transect the body diagonally, forming a lozenge-shaped motif. On the corners, short triangular bevels pointing to the shoulder and the feet, leaving a prunt along the central groove. Below the horizontal groove, a deep bevel at the center of each side delineates four pyramidal, wedge-shaped feet.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 383. Flask

<b>Accession Number</b>	2003.472
<b>Dimensions</b>	H. 5.1, Diam. rim 3.1, max. Diam. 4.5, Diam. base 3.2, Th. 0.2 cm; Wt. 41.81 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent, colorless glass
<b>Modeling Technique and Decoration</b>	Mold-blown; wheel-cutting

**CONDITION** Part of the neck and rim are missing, and they have been filled with a resin. Covered by whitish and iridescent weathering.

**DESCRIPTION** Fire-polished, vertical rim; short, wide, conical neck; cylindrical body, tapering toward the flat bottom. From the shoulder and along the body are four relief rows of wide zigzags, each one with six spikes, that continue on the bottom. At the center of the bottom, a solid, elongated pontil scar (1.1 × 0.6 cm) is visible.

**COMMENTS AND COMPARANDA** Miniature flasks with cut decoration are known from various sites dated in the

Abbasid–Fatimid periods between the late eighth and the eleventh centuries, but mainly between the ninth and tenth centuries. Sites include Sabra al-Mansuriyya, Tunis (Foy 2020, p. 81, type Sb18, fig. 34); Beit She'an (Hadad 2005, p. 41, plate 41, no. 856); Hama (Riis 1957, p. 531, fig. 141); Fustat (Scanlon and Pinder-Wilson 2001, pp. 92, 94, fig. 42c); Samarra (Lamm 1928, p. 73, no. 21:5); Susa (Lamm 1931, p. 366, plate LXXIX:5; Lamm 1930, p. 156, plate 58:10); Nishapur (Kröger 1995, p. 132, no. 177). One bottle is in the Benaki Museum (Clairmont 1977, p. 93, no. 311, plate XVII); one in the Corning Museum of Glass (Whitehouse 2014, p. 107, no. 791); and one in the Israel Museum (Brosh 2003, p. 370, no. 506).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 259, no. 756.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



384. Molar Flask

<b>Accession Number</b>	79.AF.184.39
<b>Dimensions</b>	H. body 3.4, H. neck 2.3, Diam. rim 1.2, Diam. base 2.5 cm; Wt. 29.00 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Translucent greenish glass

**Modeling Technique and Decoration** Molded and cut

**CONDITION** Pastiche: neck is probably a modern amendment. Body iridescent and partly covered by weathering and incrustation on the exterior and interior.

**DESCRIPTION** Ground rim; cylindrical neck, probably modern. Four-sided body, square in cross section; short, wedge-shaped feet.

Cut decoration. On the upper part of each side is a continuous horizontal stroke; below this stroke, a triangular cut pointing upward. A deep bevel at the center of each side delineates four feet; feet originally pyramidal, wedge-shaped, but currently almost totally ground off.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



385. Molar Flask

<b>Accession Number</b>	79.AF.184.37
<b>Dimensions</b>	H. 8.0, Diam. rim 1.5, Diam. body 1.4 × 1.4 cm; Wt. 30.80 g
<b>Date</b>	Ninth–tenth centuries CE

<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Probably pastiche; mended. Iridescence on the exterior and a dark incrustation on the interior. Repaired break at neck. Unclear if the neck and body go together. Neck fragment is probably not from the same vessel. Chemical analyses could not specify this, due to the thick layer of patina on them.

**DESCRIPTION** Flat, ground, vertical rim; conical neck, constricted at its bottom; rounded shoulder; four-sided body, square in cross section; short, wedge-shaped feet.

Deeply cut decoration. Around the bottom of the neck there are semicircular facets. Horizontal groove along the middle of the body; two vertical strokes from there to the shoulder. Two horizontal strokes on the upper end of each corner, leaving a prunt below it and another one further down at mid-body.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 386. Molar Flask

<b>Accession Number</b>	79.AF.184.35
<b>Dimensions</b>	H. 6.2, Diam. rim 1.1, Diam. body 2 × 2 cm; Wt. 22.23 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Transparent greenish glass (neck); transparent, almost colorless, slightly yellowish glass (body)
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Pastiche. Repaired break present at neck. Neck is a notably different color than the body. XRF suggests neck and body do not go together. The feet were probably longer and pointed originally.

**DESCRIPTION** Round, vertical rim; cylindrical neck; rounded shoulder; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Deep stroke on each side of the body under the shoulder. Deep, triangular bevel on the corners of upper body. A deep bevel at the center of each side delineates four pyramidal, wedge-shaped feet.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979



**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 387. Molar Flask

<b>Accession Number</b>	79.AF.184.36
<b>Dimensions</b>	H. 5.6, Diam. rim 1.8, Diam. body 2.4 × 2.4 cm; Wt. 40.50 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Probably pastiche. Neck probably belongs to a different vessel. One of the feet is partly missing and restored with resin. The feet were probably pointed originally.

**DESCRIPTION** Round, vertical rim; conical neck; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Short bevel on the upper corners, leaving a prunt on the shoulder. Below this prunt is a longer bevel which ends, leaving a small prunt that delineates the body. Below that is a horizontal stroke, which, in combination with a deep bevel at the center of each side, delineates four pyramidal, wedge-shaped feet.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 388. Molar Flask

<b>Accession Number</b>	79.AF.184.44
<b>Dimensions</b>	H. 5.9, Diam. rim 1.8, Diam. base 2.8 × 2.8 cm; Wt. 30.20 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Translucent greenish glass (neck); colorless, slightly greenish glass (body)
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Pastiche. Repair at one foot; repaired break at neck. XRF suggests these combined elements do not go together.

**DESCRIPTION** In-folded, flattened rim; conical neck with five horizontal constrictions; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Horizontal grooves on the upper and lower end of the preserved part of the neck. Deep horizontal groove along the middle of the body. On the corners, short, triangular bevels pointing downward, leaving a prunt at top and bottom of the vessel. On the

lower part of the body, a deep, triangular bevel at the center of each side delineates four pyramidal, wedge-shaped feet.

**COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 389. Molar Flask

<b>Accession Number</b>	79.AF.184.45
<b>Dimensions</b>	H. 6.3, Diam. rim 2.3, Diam. base 2 × 2 cm; Wt. 33.38 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Translucent greenish glass (neck); colorless, slightly greenish glass (body)
<b>Modeling Technique and Decoration</b>	Molded and cut

**CONDITION** Pastiche. Repaired break at neck, between the neck and the body. Body has a smaller opening than the neck.

**DESCRIPTION** In-folded, flattened rim; conical neck with a coil wound spirally five times around it; four-sided body, square in cross section; wedge-shaped feet.

Deeply cut decoration. Triangular bevels pointing upward are cut on the corners of the upper body, leaving a prunt below them that delineates a deep horizontal groove that run along the middle of the body. Below the groove on the corners are small semicircular bevels, and at the center of each side, a deep, triangular bevel delineates four pyramidal, wedge-shaped feet.

**COMMENTS AND COMPARANDA** See comments on cat. 381.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 390. Flask

<b>Accession Number</b>	79.AF.184.28
<b>Dimensions</b>	H. 5.8, Diam. rim 1.5, Diam. base 2.2 × 2.2 cm; Wt. 42.00 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Cracked and mended. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Fire-polished rim; cylindrical neck, tapering toward the sloping shoulder; four-sided body, square in cross section; flat, slightly concave bottom.

**COMMENTS AND COMPARANDA** Vessels with square or polygonal body, usually mold-blown, first appear in the Umayyad period, but they become quite common in the Abbasid–Fatimid periods. The shape was very convenient for packing and probably evolved for this reason. Many sites in the Syro-Palestinian region, but also in Iraq, Egypt, and East Africa, have yielded finds dated between the eighth and tenth centuries: Pella (Edwards et al. 1990, p. 86, fig. 13:8); Beirut (Jennings 2004/5, p. 214); al-Mina (Lane 1937, p. 65, fig. 10:H); Seleucia (Negro Ponzi 1970–71, p. 79, no. 40); Jerusalem (Crowfoot and Fitzgerald 1929, p. 98, plate XXI:2); Beit She'an (Hadad 2005, pp. 39–40, nos. 696–703, wherein all previous bibliography is cited); Yoqne'am (Lester 1996, pp. 206–208, fig. XVII.6:1–8, photo XVIII.1. no. 38); Ramla (Gorin-Rosen and Katsnelson 2005, p. 112, no. 41; Pollak 2007, p. 126, fig. 11:7); Fustat (Scanlon and Pinder-Wilson 2001, pp. 66–67, forms 34a–e, f; Shindo 1992, fig. IV-6–15:7–11); Kom el-Dikka (Shindo 2004, p. 33, fig. 1:12–13); Raya (Shindo 2004, pp. 51–53, plate 12:13); Soba (Morrison 1991, p. 257, no. 79, fig. 147:79); Iraq (Hunein 1983, pp. 248–250, fig. 29); 'Ana (Bamber 1988: 124, fig. 53:10); Samarra (Lamm 1928, p. 24, nos. 79, 87); Iran (Lamm 1935, p. 9, plate II:E–N, P; Kröger 1995, p. 150, no. 201); Tunisia (Foy 2020, pp. 75, 78, fig. 31, type Sb11); Manda island on the coast of Kenya (Morrison 1984, p. 171, fig. 138:b); Mafia in East Africa (Morrison 1987, p. 303, fig. 4:2). The latest-known bottle of this type was discovered in the Crusader fortress of Montfort (Qal'at al-Qurein), dated to the thirteenth century (Dean 1927, p. 40, fig. 47).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 391. Flask

<b>Accession Number</b>	79.AF.184.40
<b>Dimensions</b>	H. 6.2, Diam. rim 1.6, Diam. base 2.5 cm; Wt. 32.43 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Pastiche. Neck is part of another vessel, quite probably a modern amendment. The body and the neck are iridescent and partly covered by weathering and incrustation on the exterior and interior. Cracks visible on the body.

**DESCRIPTION** Round rim; cylindrical neck. Four-sided body, square cross section; flat bottom. The neck is wider than the opening on the body and gives the impression of a diaphragm. A scar of a solid pontil mark (W. 0.8 cm) is visible on the bottom.

**COMMENTS AND COMPARANDA** See comments for cat. 390.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 392. Flask

<b>Accession Number</b>	79.AF.184.42
<b>Dimensions</b>	H. 5.7, Diam. rim 1.5, Diam. base 2.1 × 2.2 cm; Wt. 30.03 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown and cut

**CONDITION** Repaired break at the neck. XRF suggests pieces could go together, and visual inspection supports this, although the neck and the body present slightly different weathering. Iridescence on the exterior; in the grooves and on the interior, incrustation.

**DESCRIPTION** Flattened, vertical rim; cylindrical neck. Horizontal shoulder; four-sided body, square in cross section; flat bottom. On the bottom, an annular pontil scar (W. 0.8 cm) is visible. Two sides bear at the center three slightly oblique grooves, dropping to the left. The other two sides are covered with an everted triangle, one short vertical stroke at the center of the top and two short, oblique downward strokes at the center of the sides. The strokes on the left side are placed slightly higher than the ones on the right side of the triangle. Along the bottom, three straight grooves. Thick bottom and lower part of the body form the trapezoid interior of the vessel.

**COMMENTS AND COMPARANDA** For other small, square flasks, see comments and comparanda for cat. 390.

Small, square flasks with cut decoration are believed to be from Iran, dated in the ninth–tenth centuries (Lamm 1935, pls. 36H, 37C; Carboni 2001, p. 116, no. 2.14; Carboni 2001, pp. 130–133, nos. 2.32a–b, 2.34a); Nishapur (Kröger 1995, p. 150, no. 201, ninth–tenth centuries); Israel Museum (Brosh 2003, p. 367, no. 500).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 393. Flask

<b>Accession Number</b>	79.AF.184.7
<b>Dimensions</b>	H. body 4.1, H. neck-rim 1.6, Diam. rim 2.6, Diam. body 2.0, max. Diam. 4.3 cm; Wt. 42.38 g
<b>Date</b>	Eighth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent light greenish glass (neck); translucent emerald green glass (body)
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Exterior partly iridescent; interior covered with incrustation. Consists of two pieces, rim and neck, and body piece. Probably a pastiche. The body is ground

and flattened around the neck, probably in modern times, so that it could fit with the neck piece.

**DESCRIPTION** Flaring end, in-folded and flattened, forming a horizontal flange that considerably shrinks the width of the opening; short, cylindrical neck; globular body decorated with 20 deep vertical ribs arranged all around; mildly convex bottom. On the bottom, a scar, probably annular pontil scar (W. approx. 1.3, Th. 0.1 cm). Signs of a diaphragm at the bottom of the neck, which was later ground flat.

**COMMENTS AND COMPARANDA** A very close parallel was in a private collection (Loudmer and Kevorkian 1985, p. 224, no. 546), dated in the seventh–eighth centuries CE. Various forms bearing mold-blown ribbing have been published from Fustat, Egypt, dated in the eighth–ninth centuries CE (Scanlon and Pinder-Wilson 2001, pp. 70–73, form 35a–p). For a jar with finer mold-blown vertical ribbing dated in the eighth–tenth century, in the Israel Museum, see Brosh 2003, p. 353, no. 471.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



394. Flask

**Accession Number** 2003.471

<b>Dimensions</b>	H. 10.0, Diam. rim 2.5, Diam. base 3.5 cm; Wt. 26.58 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact; a small chip missing from the bottom. Heavy weathering, especially on the inside, and iridescence on the exterior.

**DESCRIPTION** Fire-polished, rounded rim; conical neck, constricted at its base; pear-shaped body; slightly raised base-ring; flat bottom. Slightly lopsided neck. The body is covered with a mold-blown honeycomb pattern of six horizontal rows of hexagonal cells. Blown on a three-part mold with two vertical parts and one for the base, with a slightly raised circle at the periphery of the bottom rendering a base-ring.

**COMMENTS AND COMPARANDA** Mold-blown and dip mold-blown glass vessels are present in various periods of Islamic glassware (Whitehouse 2001c, pp. 81–83). The honeycomb pattern appears in Islamic glassware on jugs, juglets, bowls, and jars in the tenth–eleventh centuries (e.g., Brosh 2003, pp. 356–357, nos. 479–482) and in the twelfth–thirteenth centuries (e.g., Whitehouse 2014, pp. 97–102, nos. 771–782). Some of them were probably made in Iran (von Saldern 1974, pp. 194, 197–199, 204, nos. 290–291, 293–294, 296, 306; Carboni and Whitehouse 2001, pp. 98–99, nos. 24–25).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 258, no. 755.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





### 395. Flask

<b>Accession Number</b>	2003.338
<b>Dimensions</b>	H. 11.0, Diam. rim 3.7, Diam. base 3.6 cm; Wt. 73.98 g
<b>Date</b>	Probably ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Mold-blown

**CONDITION** Intact; iridescent sheen on the exterior and dark accretion on the interior.

**DESCRIPTION** Fire-polished, flaring rim; relatively wide, cylindrical neck; bulbous body; slightly concave bottom. The body is covered with a mold-blown honeycomb pattern in twelve rows of hexagonal cells.

**COMMENTS AND COMPARANDA** The mold-blown honeycomb pattern appears in the third and fourth centuries CE on Syrian sprinklers like cat. 204. The tint and the overall quality of the glass of 2003.338, however, does not fit with that of Late Roman products; it rather seems closer to Islamic glassware. Mold-blown flasks with wide neck and globular body decorated with the honeycomb pattern, among other motifs, are also known from the Abbasid and Fatimid periods. See examples from Fustat (Scanlon and Pinder-Wilson 2001, p. 76, forms 36-f, 36-g) and Egypt (Clairmont 1977: for the decoration, see p. 64, no. 204; for the shape p. 65, no. 209).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 176, no. 486.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 396. Flask

<b>Accession Number</b>	78.AF.36
<b>Dimensions</b>	H. 8.8, Diam. rim 3.6, Diam. base 2.8 cm; Wt. 88.31 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean, or Iran
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Dip mold-blown

**CONDITION** Intact; iridescence covers the exterior, and black incrustation the interior.

**DESCRIPTION** In-folded, tubular, upright rim; wide, cylindrical neck; globular body; slightly concave bottom. The shoulder is smooth, and below it the body is covered by 30 dip mold-blown, S-shaped oblique ribs. There is a mark of a solid pontil (W. 0.8 cm).

**COMMENTS AND COMPARANDA** For examples with dip mold-blown oblique ribbing, see von Saldern 1974, p. 90, nos. 281–282, dated in the seventh–ninth centuries CE; with vertical ribs: Clairmont 1977, p. 62, plate XI, nos. 196–197; Loudmer and Kevorkian 1985, p. 242, no. 602, dated in the ninth century CE; Auth 1976, p. 232, nos. 537–538; Brosh 2003, p. 353, no. 471, dated in the eighth–tenth centuries CE. For examples with more complex mold-blown decor, see Harden 1955, pp. 64, 67, no. 26, fig. 37, dated to the ninth–twelfth centuries CE; Harden 1978, p. 87, no. 49, plate II, dated to the tenth–twelfth centuries CE; Kröger 1995, p. 92, no. 128, dated to the tenth century CE; Goldstein et al. 2005, pp. 104–105, no. 119, cf. also nos. 120, 123, 138.

**PROVENANCE** 1953, Spink & Son, Ltd., sold to J. Paul Getty, 1953; 1953–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 397. Bowl

<b>Accession Number</b>	79.AF.184.47
<b>Dimensions</b>	H. 4.0, Diam. rim 12.6, Diam. base 8.8 cm; Wt. 197.69 g
<b>Date</b>	Tenth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended and filled with resin.

**DESCRIPTION** Fire-polished, thickened rim; conical body; flat, slightly concave bottom, irregular with small bumps. Scar of a solid pontil (W. 1.3 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** Conical bowls are a very popular shape among Islamic glassware. They occur either undecorated, like this example, or with mold-blown motifs, such as ribs or crosshatching (cf. von Saldern 1974, pp. 207–209, nos. 312–317; Kröger 1995, p. 93, no. 130). Parallels include finds from Fustat (Scanlon and Pinder-Wilson 2001, pp. 23–24, 26 form 2e, or 5b) and in museum collections, such as the Kunstpalast Düsseldorf (von Saldern 1974, p. 352, nos. 349–350) and the Corning Museum of Glass (Whitehouse 2014, p. 33, nos. 638–639). The thickened rim and the flat bottom link this bowl to a form of bowls with vertical sides that have this type of rim and bottom; they are dated to the tenth century, e.g., Kröger 1995, p. 45, nos. 11–12.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 398. Opaque Red Bowl

<b>Accession Number</b>	2003.478
<b>Dimensions</b>	H. 4.5, Diam. rim 14.6, Diam. base 4.8–4.9 cm; Wt. 89.90g
<b>Date</b>	Eighth–ninth centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Opaque red glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended. Patches of flaky weathering.

**DESCRIPTION** Flaring, out-folded, flattened, tubular rim; biconical body, upper part slightly concave, lower part slightly convex. Irregular, splaying, pushed-in tubular foot-ring. The floor is sharply kicked, forming a steep conical projection inside. At the center of the underside, a round pontil mark (W. approx. 1 cm) is visible.

**COMMENTS AND COMPARANDA** Shallow bowls and bottles made of sealing-wax red glass, occasionally with a reddish-brown tint and dark brown or black veins running through it, have been plausibly proposed to have been made in Palestine, and they are dated in the eighth–ninth centuries CE (Carboni and Whitehouse 2001, pp. 16–17; Brosh 2004). They have been found in excavations at Hama (Riis 1957, pp. 48, 61, fig. 178), Jerusalem (Brosh 2004, pp. 54–55), and Corinth (Davidson 1952, pp. 107–109, 112, 116, 121, nos. 694, 699, 730, 759, 802, 807) and they are also noted in museum collections, namely in Eretz Israel Museum (Brosh 2004, p. 54; Carboni and Whitehouse 2001, p. 17, fig. 2), the Kuwait National Museum (Carboni 2001, p. 153, nos. 3.3.a–h), the Ashmolean Museum, Oxford (Brosh 2004, p. 54), and previously in the Smith Collection (*Glass from the Ancient World* 1957, p. 201, no. 398) and the Benizian Collection (Benzian 1994, p. 105, no. 195).

**PROVENANCE** 1966, Adra M. Newell, 1885–1966 (New York, New York), by bequest to Wheaton College, 1966; 1966–1978, Wheaton College (Norton, Massachusetts) [sold, Important Egyptian, Classical, and Western Asiatic Antiquities, Sotheby's, New York, December 14, 1978, lot 20]; by 1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Dusenbery 1971, no. 26, figs. 24–25.

Sotheby Parke Bernet 1978, lot 20, ill.

Niederstadt 2018, p. 123, n. 171.

**EXHIBITIONS** None



### 399. “Cage”-Animal Flask

<b>Accession Number</b>	2003.467
<b>Dimensions</b>	Flask: H. 7.0, Diam. rim 4.2 cm, max. Diam. 4.9, Diam. base approx. 4.0 cm; Animal: H. 7.5, L. 10.0 cm; Basket: H. 4.3, Diam. rim 7.0, Diam. base 5.8 cm; Overall: H. 9.8, W. (from forehead to tail) 9.8 cm; Wt. 105.26 g
<b>Date</b>	Seventh–eighth centuries CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Greenish and turquoise glass
<b>Modeling Technique and Decoration</b>	Free-blown; tooled

**CONDITION** Part of the tail is missing. The flask is cracked. Heavy weathering gives the entire ensemble a brown and whitish coloring.

**DESCRIPTION** Flask in the shape of a quadruped with spread legs, as in movement, with a basket on its back carrying a flask.

The flask has flaring, in-folded rim; short, wide neck; globular body; and concave bottom. The rim was pushed onto its upper surface, forming a groove that gives the impression of an applied thick coil around it.

The legs of the animal are fashioned from a single, originally rectangular, flattened mass of glass that was folded and bent at its four ends. Above that, a flattened discoid lump was applied and encircled by a flattened trail pinched in 12 places all around, on which the lower

trail of the basket stands. The flask was then added onto this base, and the basket was formed around it. The basket consists of a two-tiered lattice: 12 turquoise folds make up the upper row, and 12 yellowish folds the lower. At that point, the neck, head, and the greenish ears were added. At the center of the animal's belly, an annular pontil mark (W. 1.4, Th. 0.5 cm) is visible.

**COMMENTS AND COMPARANDA** Many perfume vases of this type—representing a flask mounted on an animal—are preserved. They are usually referred to as camels, probably because of the long neck, although no sign of a haunch is rendered. In addition, these glass animals usually appear with curved elongated lumps of glass on the top of the head, which can easily be interpreted as long ears, identifying them thus with donkeys, a very widespread pack animal in that time and the region.

These vessels were made in Syrian and Mesopotamian workshops under Sassanian and Islamic rule (Jenkins 1986, p. 11). Among published examples are the following: Lamm 1930, plates 20–21; Lamm 1931, pp. 361–362, fig. 77:4; von Saldern 1968, no. 64; *Art in Glass* 1969, p. 36, three examples; von Saldern 1980b, p. 180, no. 184; Oliver 1980, pp. 128, 141, no. 244; Jenkins 1986, p. 11, no. 1; Merrill 1989, fig. 13; Pinder-Wilson 1991, p. 122, no. 153; Carboni 2001, pp. 24–25, nos. 4a–b; Carboni and Whitehouse 2001, pp. 112–113, nos. 29–30; Israeli 2003, p. 338, no. 441; Goldstein et al. 2005, pp. 40, 41, nos. 18, 19; Caron and Zoitopoulou 2008, pp. 199–200, no. 188; Wright 2017, pp. 44–45, no. 6.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 256, no. 749.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 400. “Cage”-Animal Flask

<b>Accession Number</b>	78.AF.29
<b>Dimensions</b>	Flask: H. 8.7, Diam. rim 2.8, max. Diam. 3.9 cm; Basket: H. 5.0, Diam. rim 5.8, Diam. base 4.9 cm; Pack animal: H. 7.3, L. 8.2, W. 3.4 cm; Overall: H. 11.8 cm; Wt. 84.10 g
<b>Date</b>	Seventh–eighth century CE
<b>Production Area</b>	Syrian region
<b>Material</b>	Translucent greenish and yellowish glass
<b>Modeling Technique and Decoration</b>	Free-blown and tooled

**CONDITION** Most of the object is covered with an iridescent layer of weathering. There is a small hole at the lower part of the body. Repairs have been made, and parts of the glass trail of the basket are missing .

**DESCRIPTION** In-folded, tubular, flaring rim; long, cylindrical neck; globular body; flat, slightly concave bottom. Annular pontil mark (Diam. 1.3 cm) is visible on the underside of the body.

The animal's body and head are made of yellowish glass, horns and tail of dark green glass. The basket is formed by two rows of trails curved ten times in zigzags. The lower row is made of yellowish glass and the upper of dark greenish glass.

A lump of glass was flattened into a roughly square shape and held by a pontil. To form the legs of the animal, the

four corners were stretched out, pressed, and curved. On the upper surface of this mass, a thick disk was attached, around which was added a pinched band of glass. A trail was attached to this band, forming ten zigzags. Above the tips of these zigzags, another zigzagged trail was added, forming an open-shaped conical basket in which a vessel was placed and attached. A curved band of glass added at the front end was pinched and tooled at its upper end to form the long neck and elongated head of the animal. A band attached to the upper part of the head, covered with horizontal pinching, forms the long, back-turned ears of the animal, probably a donkey. Finally, a small coil of glass bent into a small ring forms the short tail of the animal.

The vessel currently sitting in the basket is not the original: a layer of greenish substance is visible under and around it, which was used to connect it to the animal in modern times.

**COMMENTS AND COMPARANDA** See comments for cat. 399.

**PROVENANCE** 1921, Enrico Caruso, Italian, 1873–1921; 1921–1923, Estate of Enrico Caruso, Italian, 1873–1921 [sold, the American Art Galleries, New York, March 5–8, 1923, lot 184, to Emile Tabbagh]; 1923–1933, Emile Tabbagh, 1879–1933 (Paris, France; New York, New York); 1933–1936, Estate of Emile Tabbagh, 1879–1933 [sold, Anderson Galleries, New York, January 3, 1936, lot 24]; 1940, Harry Leonard Simmons (New York, New York) [sold, Parke-Bernet Galleries, Inc., New York, April 5, 1940, lot 99, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** American Art Association 1923, lot 184, ill.

Anderson Galleries 1936c, lot 24, ill.

Parke-Bernet Galleries 1940, lot 99, ill.

Frel 1981, p. 69 n. 4 (cited as 78.AJ.29).

**EXHIBITIONS** None



## 401. Flask

<b>Accession Number</b>	79.AF.184.12
<b>Dimensions</b>	H. 6.6, Diam. rim 1.6 × 1.8, Diam. base 2.1 cm; Wt. 7.38 g
<b>Date</b>	Possibly fourth–fifth, probably ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Iridescence and incrustation on the interior and exterior.

**DESCRIPTION** Fire-polished, vertical rim, bent slightly inward; cylindrical neck, tapering toward its constricted base; ovular body; tubular base-ring; flat bottom. A faint scar on the bottom, probably from a solid pontil.

**COMMENTS AND COMPARANDA** No direct parallels have been located.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





## 402. Flask

<b>Accession Number</b>	79.AF.184.9
<b>Dimensions</b>	H. 6.3, Diam. rim 1.7, Diam. base 2.2 cm; Wt. 20.75 g
<b>Date</b>	Possibly third–fourth, probably ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent bluish glass
<b>Modeling Technique and Decoration</b>	Free-blown, applied base

**CONDITION** Fully preserved; mended. Exterior partly iridescent; interior covered with incrustation.

**DESCRIPTION** Cut-off, ground, vertical rim; wide, cylindrical neck, tapering toward the body; oval body; slightly concave bottom. An applied, flattened mass of glass, wound twice, forms a pad base. Round mark of a solid pontil (W. 0.8 cm) at the center of the base.

**COMMENTS AND COMPARANDA** See a similar vessel in the Newark Museum identified as an Islamic glass production, Auth 1976, p. 233, no. 545.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 403. Bottle

<b>Accession Number</b>	78.AF.23
<b>Dimensions</b>	H. 15.3, Diam. rim 4.0, max. Diam. 12.5 cm; Wt. 344.20 g
<b>Date</b>	Eighth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Heavily weathered and incrustated with a blue and green iridescence, especially around the shoulder and the interior of the lip.

**DESCRIPTION** Fire-polished, flaring rim, slightly thicker on one side; cylindrical neck with constriction at mid-height; spherical body; bottom flat, slightly convex. A deep pontil scar (2 × 1.5 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** This is a very simple form of utilitarian vessel that was produced at many sites in the Islamic world, its shape suitable for meeting everyday needs without any particular modifications. A similar vessel was found in Fustat, Egypt (Scanlon and Pinder-Wilson 2001, p. 31, form 10a), and Nishapur, Iran (Kröger 1995, pp. 72–73, nos. 90–92); another is in the Newark Museum (Auth 1976, p. 164, no. 220). Cf. also von Saldern 1974, p. 221, no. 336, for a parallel decorated with an applied thread.

**PROVENANCE** 1930, Valentine Everit Macy, Sr., American, 1871–1930; 1930–1938, Estate of Valentine Everit Macy, Sr., American, 1871–1930 [sold, Anderson Galleries, Inc., New York, January 6–8, 1938, lot 223]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 122, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries 1937b, lot 223, ill.

Parke-Bernet Galleries 1940, lot 122, ill.

Stothart 1965, p. 20, no. F-12.

Hess 2004, pp. 78–79, plate 2.

**EXHIBITIONS** The Arts of Fire: Islamic Influences on the Italian Renaissance (Los Angeles, 2004)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)



## 404. Flask

<b>Accession Number</b>	2003.464
<b>Dimensions</b>	H. 12, Diam. rim 0.6, max. Diam. 8.2, Diam. base 1.1 cm; Wt. 211.80 g
<b>Date</b>	Tenth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Opaque gray-bluish glass

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**CONDITION** Fully preserved. Cracked and mended. Bluish-gray surface in areas with calcination; black and off-white weathering. Interior covered with a black layer of weathering.

**DESCRIPTION** Flat, fire-polished rim, smooth at the periphery, rough toward the opening, probably as a result of weathering; globular neck and sphero-conical body; small, flat bottom, possibly the area where the pontil was attached.

**COMMENTS AND COMPARANDA** This vessel belongs to a group of thick-walled glass flasks that have been identified with ceramic “grenades” of the same shape and size, sometimes with molded decoration, which are well known in the Islamic word (Ettinghausen 1965, pp. 218–229). It has been assumed that they were either actual grenades, or that they were used for the transportation of valuable liquids, or, more plausibly, that they were beer containers (*fuqqā’a* in Arabic) (Ghouchani and Adle 1992, pp. 72–92; Whitehouse 2014, pp. 92–93, no. 767). For other glass parallels, see Mostafa 1959, pp. 89–92; Ettinghausen 1965, pp. 218–229; von Saldern et al. 1974, p. 255, no. 746; Maddison and Savage-Smith 1997, nos. 210, 211; Carboni 2001, pp. 212–213, no. 53b; Valiulina 2005, p. 48, fig. 21:3; Whitehouse 2014, pp. 92–93, no. 767.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 255, no. 745.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 405. Flask

<b>Accession Number</b>	2003.465
<b>Dimensions</b>	H. 5.5, Diam. rim 2.9, max. Diam. 5.2, Th. 0.25 cm; Wt. 76.00 g
<b>Date</b>	Sixth–eighth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown; pinched

**CONDITION** Small piece of rim missing. Small parts of the body covered with calcination and off-white weathering.

**DESCRIPTION** Very thick, free-blown flask. Out-folded, flattened, horizontal rim; short, cylindrical neck, with a constriction at its base; ribbed, globular body, standing on a very small flat bottom.

Eight heavy ribs start under the neck and continue all the way to the center of the undersurface. Mild notches are noticeable in the places where the pucellas were pressed on the surface and started the pinching that resulted in the formation of the rib. Large chips of opaque white glass were irregularly dispersed throughout the vessel, from neck to undersurface.

**COMMENTS AND COMPARANDA** This flask is quite unusual, and no proper parallels have been found. The great thickness of the vessel is quite uncommon among blown Roman glassware. Thinner, dark blue jars and

flasks with white and yellow chips marvered on their surface are ascribed to the Egyptian region and dated in the sixth–eighth centuries (Carboni 2001, pp. 36–37, nos. 1.2a–d).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988.; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 256, no. 747.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 406. Flask

<b>Accession Number</b>	2004.33
<b>Dimensions</b>	H. 8.3, Diam. rim 3.9, Diam. body 4.2 cm; Wt. 83.31 g
<b>Date</b>	Fourth–fifth centuries CE, or up to eighth century CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region
<b>Material</b>	Translucent purple and opaque yellow and red glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

**CONDITION** Fully preserved. Decorative threads have fallen off a small part of the body. Other parts of the body have incrustation.

**DESCRIPTION** In-folded, flaring rim; conical mouth; cylindrical neck; squat, globular body; flat, slightly concave bottom. No pontil mark is visible on the bottom. Two opaque trails, a thicker red one and a finer yellow one, are spirally wound 16 times from the tip of the rim to the center of the bottom and dragged upward 23 times, forming a festoon motif.

**COMMENTS AND COMPARANDA** See comments on cats. 306 and 348.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 138, no. 385.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 407. Flask

<b>Accession Number</b>	78.AK.30
<b>Dimensions</b>	H. 12.1, Diam. rim 2.3, max. Diam. 4.4, Diam. base 2.5 cm; Wt. 53.50 g
<b>Date</b>	Tenth and eighteenth–nineteenth centuries CE
<b>Production Area</b>	Middle East

<b>Material</b>	Transparent, slightly greenish and translucent dark blue glass
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<b>Modeling Technique and Decoration</b>	Free-blown; cutting
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**CONDITION** Composed of two different vessels. The rim and neck to the transition to the body is one vessel. The lower end of this part is ground to fit with the crack on the shoulder of the lower vessel. This lower vessel is mended and covered by corrosion and iridescence. The only area where the original cut surface is preserved is on the opposite side of the “handle-lump.”

**DESCRIPTION** Upper part: Fire-polished, flaring rim; long, cylindrical neck, decorated on the upper part with a fine thread, spirally wound five times, and further below that a wavy coil, a fine thread wound once, and a thick, wavy coil that forms three plastic protuberances, one of which is genuine (the other two are modern plaster additions—and one of those is only partly preserved).

Lower part: Globular, bicolor body. The upper part is made of dark blue glass and is smooth. The lower part of the body is made of colorless glass and stands on a pad base. Around the colorless part of the body are five oval, pincered ring-and-dot motifs. At the transition to the blue shoulder part, a colorless lump is preserved, probably the base of a handle.

**COMMENTS AND COMPARANDA** The flask was made of two gathers of glass that were blown separately; the lower one was decorated, and then they were joined by fusing. The decoration was formed on the still-hot vessel with one or more tools shaped like pincers or tongs. The jaws of the tool used for this flask bore intaglio decoration, which, when the tongs were applied to the glass and squeezed, produced ornament that is in relief. Most vessels have a single motif repeated several times, and the repertoire includes representations of animals, inscriptions, rosettes, ring-and-dot motifs (like 78.AK.30), and other geometric features. Vessels decorated with pincered motifs are found in various regions and sites in Egypt, Syria, Iraq, the Caucasus, Iran, and China (Carboni 2001, pp. 102–103; Whitehouse 2014, p. 129; Scanlon and Pinder-Wilson 2001, pp. 80–82, type 38a–j; Kröger 1995, pp. 95–99, nos. 135–140; An 1991, p. 124, fig. 9; von Saldern 1980b, p. 177, no. 180). Pincered decoration is usually dated to the ninth and tenth centuries.

The piece for the neck belongs to a much more modern vessel, probably dated to the eighteenth or nineteenth century, possibly from Persia or the Arab world (cf. Goldstein et al. 2005, pp. 303–307, nos. 324–329).

**PROVENANCE** 1933, Emile Tabbagh, 1879–1933; 1933–1936, Estate of Emile Tabbagh, 1879–1933 [sold, Anderson Galleries, New York, January 3, 1936, lot 13]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 99, through French and Co. to J. Paul Getty.]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1978, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Anderson Galleries, New York. Sale cat., Emile Tabbagh collection, January 3–4, 1936, lot 13, ill.

Parke-Bernet Galleries 1940, lot 99.

Frel 1981, p. 69 n. 4 (where cited as 78.AJ.30).

**EXHIBITIONS** None



## 408. Flask

<b>Accession Number</b>	79.AF.184.11
<b>Dimensions</b>	H. 18.5, Diam. rim 1.0, Diam. base 2.1 cm; Wt. 37.30 g
<b>Date</b>	Late ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Dark blue glass
<b>Modeling Technique and Decoration</b>	Blown

**CONDITION** Intact; iridescent weathering all over the body.

**DESCRIPTION** Cracked-off rim; short, narrow, cylindrical neck; sloping shoulder; cylindrical body tapering toward the convex bottom. No pontil mark visible on the bottom. On the upper body there is a pinched fold, probably a repair of a tear in the vessel's thin wall that was pressed shut by the glassblower while he was still forming the hot and malleable material into a vessel.

**COMMENTS AND COMPARANDA** This vessel belongs to a well-known form of quite tall and slender flasks, always with cracked-off, upright rim and very thin walls, mostly made with dark blue glass, occasionally with one flattened side. They are found in tenth-century contexts, and they may have survived up to the early eleventh century CE. Due to the extremely wide distribution of the finds it has been proposed that they were produced at several sites, but the fact that they are always made of the same dark blue glass, with the same typological characteristics, indicates that they were more probably produced at one site, probably in Egypt, as the large numbers of finds from that region would indicate (Foy 2020, pp. 105–106).

The wide array of find sites throughout the Muslim world has recently been collated by Danièle Foy in discussing the finds from Sabra al-Mansuriyya, Tunisia (Foy 2020, pp. 105–106, 109–110, nos. 184–190), including the following: Iraq (Lamm 1928, p. 27, no. 105); Iran (Kervran 1984, fig. 7, no. 19); Nishapur, Iran (Kröger 1995, pp. 74–75); Kush (Worrell and Price 2003, p. 246, fig. 8); Al-Mabiyat, Hijaz (Gilmore et al. 1985, plate 104, no. 33); the coast of Yemen (Foy 2015, pp. 350–351, nos. 183–185); Manda on the East African coast (Morrison 1984, p. 172, fig. 139); Al Mina, Syria (Lane 1937, p. 65, fig. 10:C); Fustat, Egypt (Shindo 1992, p. 597, nos. 1–19; Shindo 2000, fig. 6, no. 9); Tebtunis, Fayum (Foy 2001, nos. 118, 146, 151); Sina, Raya (Shindo 2003, p. 180); Palestine (Brosh 2003, p. 348, no. 459); Caesarea (Pollak 2003, fig. 3, no. 45); Tiberias, Israel (Lester 2003, fig. 2, no. 18); Ramla (Gorin-Rosen 2010, pp. 227–228); Sumatra (Guillot 2003, p. 239, no. 14). In addition, several examples are known from museum collections: the Corning Museum of Glass (55.1.12: Whitehouse 2014, p. 46, no. 663, allegedly acquired in Lebanon = *Glass from the Ancient World* 1957, p. 235, no. 461); Kunstpalast Düsseldorf (P. 1973-39: von Saldern 1974, p. 243, no. 382); Newark Museum (50.1823: Auth 1976, p. 166, no. 222); L. A. Mayer Memorial Institute for Islamic Art, Jerusalem (G 37: Hasson 1979, pp. 5 and 35, no. 3); Los Angeles County Museum of Art (von Saldern 1980b, p. 186, no. 191).



**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 409. Flask

<b>Accession Number</b>	2003.446
<b>Dimensions</b>	H. 13.5, Diam. rim 1.9, Diam. base 0.9 cm; Wt. 26.05 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Some weathering that has caused iridescence.

**DESCRIPTION** Fire-polished, flaring rim; conical neck with large bulge under the rim and a smaller one at its base; elongated, conical body, narrowing to a small flat bottom with a pontil scar (W. 0.5 cm).

**COMMENTS AND COMPARANDA** Vessels of this shape are known as “spearhead flasks” due to the tapering of the body toward the narrow bottom. They were recognized as containers for kohl, a cosmetic substance for the decoration of the eyelids, which was

archaeologically attested in different sites in Israel and the Sinai Peninsula (Brosh 1993; Shindo 1992, pp. 303–304).

Predecessors of the spearlike flasks with pointed body but smooth neck are known and have been dated between the seventh and ninth centuries (Goldstein et al. 2005, p. 67, no. 55, pp. 72–73, no. 67). The spearhead flasks have been dated from the eighth to the twelfth centuries. In addition to the numerous undecorated free-blown examples (e.g., Auth 1976, p. 231, nos. 534–536, esp. no. 535; Dzanpoladian and Kalantarian 1988, p. 24, no. 55, plate XLIII:7; Arakelian, Tiratzian, and Khachatrian 1969, p. 64, no. 148; von Saldern 1974, p. 243, no. 381; Scanlon and Pinder-Wilson 2001, p. 43, forms 18a–d; Foy 2020, pp. 68–69 type Sb44; Goldstein et al. 2005, p. 222, no. 256; Whitehouse 2014, pp. 51–53, nos. 671, 674, 676; Hadad 2005, pp. 40–41, 164–165, plate 38:784–786), there are published several examples with marvered decoration (Lamm 1930, plate 32:5–7; Harden 1955, p. 63, no. 14, fig. 37; Whitecomb 1983, p. 102, fig. 2.cc, ee, mm, nn; Taniichi 1987, pp. 53, 90, no. 108; von Saldern 1968, no. 69, plate 68; Carboni and Whitehouse 2001, p. 139, no. 55; Carboni 2001, pp. 304–305, nos. 80a–c; Goldstein et al. 2005, p. 261, nos. 300–303) and with spiraling or vertical ribbing (Carboni 2001, p. 242, no. 3.29a; Whitehouse 2014, pp. 105, 114, no. 805) and with mold-blown motifs (von Saldern 1968, p. 94, no. 68; Scanlon and Pinder-Wilson 2001, p. 43, form 18e; Whitehouse 2014, pp. 105, 107–108, nos. 788, 792).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 244, no. 711.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 410. Flask

<b>Accession Number</b>	2003.466
<b>Dimensions</b>	H. 8.1, Diam. rim 1.5, Diam. base 1.0 cm; Wt. 15.50 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple and opaque light blue-gray, green, yellow, and red glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements, marvered

**CONDITION** Mended with a fill on the rim and the shoulder.

**DESCRIPTION** Fire-polished rim; conical neck with large bulge at its base; elongated, conical body narrowing to a bulb-like bottom, which is flat, with a pontil scar (W. 0.5 cm).

Decorated with colorful, marvered chips of opaque glass applied on the vessel while it was still globular, which stretched when the vessel was inflated and tooled to its final dimensions.

**COMMENTS AND COMPARANDA** On spearhead flasks such as this, see comments and comparanda cited in cat. 409, with various parallels dated from the seventh to the twelfth centuries.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 256, no. 748.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 411. Flask

<b>Accession Number</b>	2003.461
<b>Dimensions</b>	H. 9.3, Diam. rim 1.9–2.1, Diam. base 1.6, Th. 0.25 cm; Wt. 22.67 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark green and opaque red glass
<b>Modeling Technique and Decoration</b>	Free-blown; marvered, tooled

**CONDITION** Intact.

**DESCRIPTION** Fire-polished rim; conical neck with a constriction at its base; sloping shoulders; six-sided, elongated body; flat bottom. On the bottom, an annular pontil scar (W. 1.3, Th. 0.2 cm) is visible. A small area at the bottom of two sides is rough and uneven. A marvered, opaque red thread is spirally wound 11 times from the bottom of the vessel to the tip of the rim and dragged upward nine times, forming unequal festoons. Along the upper half of one of the sides is a fold that was formed accidentally.

**COMMENTS AND COMPARANDA** This six-sided flask, sloping toward the bottom, is quite similar to the group of flasks called “spearhead flasks” due to the pointed shape of the body; it is believed that they were used as containers for kohl (Brosh 1993, pp. 289–295). On spearhead flasks, see comments and comparanda cited in cat. 409, with various parallels dated from the seventh to the twelfth centuries. A four-sided parallel with threads in three colors, which is in the Kuwait National Museum, has been assigned to the Egyptian or Syrian region and is dated in the seventh–eighth centuries, as are two undecorated flasks of a very similar shape from the same collection dated in the ninth–tenth centuries (Carboni 2001, p. 297, no. 75b and p. 155, nos. 3.7a–b, respectively). Published examples of quite similar pointed flasks with a spirally wound thread in a striking color, but circular in cross section, include: Carnegie Museum of Natural History 25141 (Oliver 1980, p. 140, no. 241); Museum of Fine Arts, Boston 18.273 (von Saldern 1968, no. 69); Musée Curtius, Liège, BAAR 1482 (Musée Curtius 1958, p. 91, no. 196); Newark Museum 50.1334 (Auth 1976, p. 174, no. 241); formerly the collection of R. W. Smith (*Glass from the Ancient World* 1957, p. 255, no. 515).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 253, no. 740.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 412. Flask

<b>Accession Number</b>	79.AF.184.23
<b>Dimensions</b>	H. 8.4, Diam. rim 1.7, Diam. base 2.1 × 2.2 cm; Wt. 56.63 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended. Pastiche: the neck is glued onto the body. The lower end of the neck is wider than the opening on the body, giving the impression of a slight diaphragm. Iridescence on the exterior, incrustation on the interior.

**DESCRIPTION** Flat, ground rim; wide, cylindrical neck. Sloping shoulder; rectangular body, square in cross section; flat bottom. No pontil mark visible on the corroded bottom. An elongated vertical indentation mark is visible along the center and particularly on the upper part of each side, probably a mark from the tool used for the angular shaping of the body.

**COMMENTS AND COMPARANDA** On vessels with square or polygonal body, see comments and comparanda for cat. 390.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 413. Flask

<b>Accession Number</b>	79.AF.184.46
<b>Dimensions</b>	H. 6.9, Diam. rim 1.7, Diam. base 2.1 × 2.1 cm; Wt. 27.96 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless (neck) and colorless, slightly greenish glass (body)
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended.

**DESCRIPTION** Ground rim; cylindrical neck, tapering toward the body; sloping shoulders; four-sided body, square in cross section, curving in toward the flat bottom. No pontil mark visible. Two rows of four pairs of oblique cut strokes on the neck, pointing downward.

**COMMENTS AND COMPARANDA** On vessels with square or polygonal body, see comments for cat. 390. On wheel-cut decoration on Islamic flasks, see comments for cat. 380.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 414. Flask

<b>Accession Number</b>	79.AF.184.27
<b>Dimensions</b>	H. [with restoration] 4.8, Diam. rim 1.6, Diam. base 1.9 × 1.9 cm; Wt. 13.22 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Neck missing; completed with filling. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Sloping shoulders; four-sided body, square in cross section; wall tapers, then curves in at bottom; slightly concave bottom. Sides slightly concave.

**COMMENTS AND COMPARANDA** On vessels with square or polygonal body, see comments for cat. 390.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 415. Flask

<b>Accession Number</b>	79.AF.184.21
<b>Dimensions</b>	H. 5.2, Diam. rim 1.5, Diam. base 1.8 × 2.5 cm; Wt. 32.50 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended; fully preserved. Iridescence on the exterior; in the interior, incrustation.

**DESCRIPTION** Flat but rounded rim; wide, cylindrical neck; sloping shoulder; rectangular body with unequal sides; flat bottom. At the center of the bottom, a circular scar from a solid pontil (W. 1 cm) is visible.

**COMMENTS AND COMPARANDA** On vessels with square or polygonal body, see comments for cat. 390.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 416. Flask

<b>Accession Number</b>	79.AF.184.41
<b>Dimensions</b>	pres. H. 3.6, Diam. rim 1.3, Diam. base 2.1 cm; Wt. 14.85 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Upper part of the neck is missing. Ground in modern times. Both the body and the neck are iridescent and partly covered by weathering and incrustation on the exterior and interior.

**DESCRIPTION** Seemingly cylindrical neck; sloping shoulder; four-sided body with square cross section that curves in toward the flat bottom. A scar of a solid pontil mark (W. 0.6 cm) is visible on the bottom.

**COMMENTS AND COMPARANDA** On vessels with square or polygonal body, see comments for cat. 390.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





## 417. Miniature Flask

<b>Accession Number</b>	2003.473
<b>Dimensions</b>	H. 2.8, Diam. rim 1.6, Diam. base 2.2, Th. 0.1–0.2 cm; Wt. 10.65 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless, slightly greenish, glass
<b>Modeling Technique and Decoration</b>	Free-blown; wheel-cutting

**CONDITION** Some weathering and milky iridescence. A fragment of the neck has been reattached.

**DESCRIPTION** Vertical rim; wide, short neck; horizontal shoulder; cylindrical body; flat bottom. The vessel is made of a thick mass of glass and bears wheel-cut decoration. The upper neck and rim area are cut into a seven-faceted profile. In addition, the following motif is repeated four times around the body: two vertical grooves flanking a diagonally set square with a horizontal stroke running across its center.

On the lower, cylindrical part of the neck, a groove is faintly visible, possibly a tooling mark. At the center of the flat bottom, the circular scar of a solid pontil (W. approx. 1 cm) is visible.

**COMMENTS AND COMPARANDA** This type of miniature cylindrical flask in decolorized glass with cut decoration is dated to the ninth–tenth centuries CE. Sites with published parallels include the following: Sabra al-

Mansuriyya, Tunisia (Foy 2020, p. 81, type Sb18, fig. 34), Beit She'an (Hadaad 2005, pp. 44–45, plate 41:856), Hama (Riis 1957, p. 531, fig. 141), Fustat (Scanlon and Pinder-Wilson 2001, pp. 92, 94, fig. 42c), Samarra (Lamm 1928, p. 73, no. 215), Susa (Lamm 1931, p. 366, plate LXXIX:5; Lamm 1930, p. 156, plate 58:10), and Nishapur (Kröger 1995, p. 150, no. 201). One bottle is in the Benaki Museum (Clairmont 1977, p. 93, plate XVII no. 311), one in the Corning Museum of Glass (Whitehouse 2014, p. 107, no. 791), and one in the Israel Museum (Brosh 2003, p. 370, no. 506).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 260, no. 762.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 418. Flask

<b>Accession Number</b>	79.AF.184.24
<b>Dimensions</b>	H. 5.2, Diam. rim 1.6, Diam. base 2.2 × 2.3 cm; Wt. 181.80 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Free-blown and ground

**CONDITION** Mended: adhesive join at neck; resin/adhesive embedded with chunks of weathering from glass cover on the neck. The neck and body are likely from different objects. Iridescence on the exterior, incrustation on the interior.

**DESCRIPTION** Flat, cut-off rim; short, wide, cylindrical neck, wider toward the body; sloping shoulder with an overblow visible on two of the sides; prismatic body, almost square in cross section, with cut edges, which turn it into an octagon. The body walls taper toward the flat bottom. At the center of the bottom, the circular scar of a solid pontil (W. 1.2 cm) is visible.

**COMMENTS AND COMPARANDA** See comments for cat. 390. In addition, for similar prismatic flasks, cf. Whitehouse 2014, pp. 73–74, nos. 727 and 728.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 419. Flask

**Accession Number** 79.AF.184.15

**Dimensions** H. 11.0, Diam. rim 1.8, Diam. base 2.6 cm; Wt. 54.26 g

**Date** Ninth–eleventh centuries CE (body and neck) and twentieth century CE (bottom)

**Production Area** Eastern Mediterranean

**Material** Colorless glass

**Modeling Technique and Decoration** Free-blown and ground

**CONDITION** Mended: a concealed join at the transition from the neck to the body. Iridescence on the exterior and incrustation on the interior. The bottom is probably a modern amendment.

**DESCRIPTION** Ground, vertical rim; cylindrical neck; horizontal shoulder; seven-sided body. All facets are ground. The bottom is made of a glue-grozed glass disk.

**COMMENTS AND COMPARANDA** Facet-cut, small-size vessels are a well-known form, reflecting the fashion that appreciated cut decoration on various forms of tableware and smaller flasks. They have been attributed to Iranian workshops, since this technique was known in sixth-century Sassanian glassware, although they may have been produced in other regions as well (Carboni 2001, p. 131, no. 2.34b; Brosh 2003, p. 363, no. 491). Sites yielding finds include Fustat in Egypt (Scanlon and Pinder-Wilson 2001, pp. 86–88, form 41, and especially 41c–f, which are elongated examples like 79.AF.184.15, dated in the ninth–tenth centuries); Sabra al-Mansuriyya, Tunisia (Foy 2020, p. 98, type Sb23, fig. 42); a flask in the Israel Museum (Brosh 2003, p. 363, no. 495); and two more in the Khalili Collection (Goldstein et al. 2005, p. 159, nos. 185–186).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



420. Flask

<b>Accession Number</b>	79.AF.184.25
<b>Dimensions</b>	H. 8.6, Diam. rim 1.6, Diam. base 2.5 cm; Wt. 38.09 g
<b>Date</b>	Ninth–tenth centuries CE (neck and body) and twentieth century CE (bottom)
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended: adhesive join at neck; inserted piece in underside of flask. The vessel has been constructed in modern times from three separate elements: neck, cylindrical body, and inserted disk in foot. Iridescence on the exterior and the interior.

**DESCRIPTION** Flat, rounded rim; wide, cylindrical neck, wider toward the body; horizontal shoulder; cylindrical body; flat, irregular bottom.

**COMMENTS AND COMPARANDA** The original vessel was taller, and after breakage it was ground and a disk of glass was set in place to seal the opening. For parallels, see comments on cat. 422.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



421. Flask

<b>Accession Number</b>	79.AF.184.29
<b>Dimensions</b>	H. 9.4, Diam. rim 2.1, Diam. base 2.6 cm; Wt. 45.47 g
<b>Date</b>	Ninth–eleventh centuries CE (neck and body) and twentieth century CE (bottom)
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended. Pastiche consisting of three different glass parts: neck, body, and bottom. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Flat, ground rim; cylindrical neck, tapering toward the body; cylindrical body; flat, irregular bottom.

**COMMENTS AND COMPARANDA** The original vessel was taller, and after breakage it was ground on both ends; a disk of glass was set in place to seal the lower opening, and the neck was reattached with the addition of some resin, quite probably in modern times. See comments on cat. 422.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 422. Flask

<b>Accession Number</b>	79.AF.184.14
<b>Dimensions</b>	H. 7.0, Diam. rim 1.6, Diam. base 2.2 cm; Wt. 15.32 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended with a concealed join at the transition from the neck to the body. Iridescence on the exterior and incrustation on the interior.

**DESCRIPTION** Cut-off rim; conical neck; sloping shoulder; cylindrical body, mildly tapering toward the base; slightly concave bottom. No pontil mark visible on the bottom.

**COMMENTS AND COMPARANDA** This form of small, cylindrical flask with relatively short, conical neck is well documented from various sites, dated between the ninth and eleventh centuries. Tunisia: Sabra al-Mansuriyya (Foy

2020, pp. 71–73, form Sb7, wherein numerous parallels are cited); Raqqa (Skik 1971/72, fig. 82; Yacoub 2000, fig. 125). Egypt: Fustat (Scanlon and Pinder-Wilson 2001, pp. 41–43, form 17g = Whitehouse 2014, p. 58, no. 689, 69.1.47). Palestine: Tiberias (Lester 1996, pp. 206–207, plate XVII:7–8, Early Islamic; Hadad 2008, p. 171, plate 5.4, no. 45); Beit She'an (Hadad 2005, pp. 39–40, plate 35: no. 695); Ramla (Gorin-Rosen 2010, pp. 230–231, fig. 10.5, no. 3); Lebanon: Beirut (Jennings 2004/5, p. 214). Yemen: Sharma (Foy 2015, pp. 327, 348–349). Türkiye: Serçe Limanı (Cullen 2009, pp. 236–241).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 423. Flask

<b>Accession Number</b>	79.AF.184.16
<b>Dimensions</b>	H. 6.3, Diam. rim 1.7, Diam. base 2.7 cm; Wt. 17.58 g
<b>Date</b>	Probably ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown; incised and tooled

**CONDITION** Mended with a concealed join at the transition from the neck to the body. Iridescence and pitting on the exterior, whitish incrustation on the interior.

**DESCRIPTION** Fire-polished rim, bent slightly inward; conical neck with five horizontal constrictions; sloping shoulder; everted conical body; slightly concave bottom. Circular mark of a solid pontil (W. 0.6 cm) at the center of the bottom.

On the body, incised decoration: On the rounded shoulder on the uppermost part of the body there is a frieze of ovals. Below this frieze is a horizontal groove, and another one near the bottom. Between these two grooves, six truncated triangles are arranged all around the body, each one inscribing a dash at the upper part and a semicircular groove at the bottom. Between the triangles there is a semicircular groove hanging from the upper horizontal groove.

**COMMENTS AND COMPARANDA** Small flasks with globular or squat, cylindrical body and neck with consequent constrictions are quite well-known, dated between the late eighth and the eleventh centuries. See comments on cat. 427.

Wheel-cutting and wheel-engraving were popular decorative techniques between the ninth and eleventh centuries in Islamic glassware, as numerous finds from various sites in Syria, Palestine, Iraq, Iran, Egypt, and Tunisia attest. Six categories of cut and engraved objects are defined on the basis of the decoration, which can be: scratch-engraved, faceted, with disks and related motifs, with raised outlines, slant-cut, and linear. In the twelfth century, cutting gradually went out of fashion, being replaced by enameling, which was the technique that prevailed during the next two centuries in Islamic glassware.

Cutting was employed mostly for the embellishment of colorless vessels of various forms, such as bowls, bottles, goblets, and flasks, although colorful and even cameo vessels occur too. There are indications that quite similar products were made in Iran, Iraq, Syria, Lebanon, Israel, and Egypt (Kröger 1995, pp. 116–175; Kröger 1999, pp. 219–232; Carboni 2001, pp. 71–136; Whitehouse 2001b, pp. 155–161; Foy 2020, pp. 85–98). For miniature flasks with cut decoration, see cat. 383, with several parallels from various sites.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 424. Flask

<b>Accession Number</b>	79.AF.184.6
<b>Dimensions</b>	H. 4.9, Diam. rim 1.9, Diam. body 2.5, Th. 0.4 cm; Wt. 20.22 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent emerald green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Thick, sturdy vessel. Neck is mended and probably belongs to a different vessel. Exterior partly iridescent; interior covered with incrustation.

**DESCRIPTION** Cut-off, vertical rim; conical neck; sloping shoulder. The body is everted and conical, standing on a slightly concave bottom. At the center of the bottom is the circular mark of a solid pontil (W. 1 cm). At mid-height on the body is a faint tooling mark.

**COMMENTS AND COMPARANDA** For the body, parallels include Lamm 1930, plate 3:36; Scanlon and Pinder-



Wilson 2001, p. 42, form 17e. Also, for decorated flasks of closely similar shape, see parallels of cat. 423.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 425. Flask

<b>Accession Number</b>	79.AF.184.10
<b>Dimensions</b>	H. 6.0, Diam. rim 3.3, Diam. base 2.7 cm; Wt. 31.29 g
<b>Date</b>	Late first–second centuries CE and ca. ninth century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Material</b>	Translucent green glass. The neck is dark green and the body lighter green
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Pastiche of two different vessels, joined at the bottom of the neck. Exterior partly iridescent; interior covered with incrustation.

**DESCRIPTION** In-folded, flattened, flaring rim; cylindrical neck; sloping shoulder; cylindrical body tapering toward the bottom; slightly concave bottom. Round mark of a solid pontil (W. 1.2 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** The neck and rim part probably belong to a Roman flask, likely conical with long neck, made in Egypt, that can be dated to the late first–second centuries CE (Edgar 1905, plate VIII, no. 32.640; Harden 1936, plate XX, no. 797; Antonaras 2012, p. 222, no. 347). The body belongs to an Islamic flask (Lamm 1930, plate 3:36; Scanlon and Pinder-Wilson 2001, p. 42, form 17e). Cat. 424 has a quite similar body shape.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 426. Flask

<b>Accession Number</b>	79.AF.184.31
<b>Dimensions</b>	pres. H. 3.8, Diam. rim 1.9, Diam. base 2.3 cm; Wt. 8.89 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Colorless, slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Upper part of the neck missing. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Vertical, fire-polished rim; short, wide, cylindrical neck, with one constriction visible at the top of the preserved part; mildly sloping shoulder; short, cylindrical body, curving in at bottom; slightly concave bottom. An annular pontil mark (W. 0.8 cm) is visible at the center of the bottom. On the neck, a small trace of what could be either a fine thread wound on the rim or a tooling mark; probably the latter.

**COMMENTS AND COMPARANDA** See cat. 427.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 427. Flask

<b>Accession Number</b>	79.AF.184.32
<b>Dimensions</b>	H. 4.9, Diam. rim 1.9, Diam. base 3.2 cm; Wt. 38.94 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Repaired break between neck and the body. Lifting, flaking resin/adhesive on neck

interior. It is likely that the neck and body come from different objects. Iridescence, pitting, and incrustation on both the exterior and the interior.

**DESCRIPTION** Fire-polished, vertical rim; cylindrical neck with six horizontal constrictions on its upper part; mildly sloping shoulder; short, cylindrical body, curving in at bottom; slightly concave bottom. A circular mark of a solid pontil (W. 0.8 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** In general small, plain, undecorated flasks with relatively long neck appear in several variants, with globular, squat, ovoid, and even biconical body, dated between the ninth and eleventh centuries. Sites with relevant finds include Fustat (Scanlon and Pinder-Wilson 2001, pp. 38–39, fig. 15-f; Whitehouse 2014, pp. 43–44, no. 659); Beit She'an (Hadad 2005, pp. 39, 158–159, nos. 691–292); Abu Skhair, Iraq (Negro Ponzi Mancini 1972, nos. 3–6); Sabra al-Mansuriyya, Tunisia (Foy 2020, pp. 62–65, type Sb1, fig. 27).

Small flasks with globular or squat, cylindrical body, and neck with consequent constrictions are quite well-known, dated between the late eighth and the eleventh centuries. See examples from Fustat, Cairo (Scanlon and Pinder-Wilson 2001, p. 47, type 20a–i and in particular 20f, with the same body shape as 79.AF.184.32; Shindo 1992, fig. IV-6–14:26–31). Another probably Egyptian flask is in the Corning Museum of Glass (Whitehouse 2014, p. 66, no. 714). Numerous parallels from Syro-Palestinian sites, and sites in Egypt, Iraq, Iran, the east African coast, Armenia, and Greece are published, indicating the wide distribution these vessels had: Beit She'an (Hadad 2005, pp. 40–41, plate 38, nos. 762–779, wherein exhaustive bibliography); other published sites include Tiberias (Lester 2004, p. 185, no. 95), Yoque'am (Lester 1996, p. 204, fig. XVII.4:7), Caesarea (Pollak 2003, p. 166, fig. 2:25–26, 28), Nessana (Harden 1962, p. 87, nos. 66–69), Manda (Morrison 1984, pp. 164–167, fig. 134:j), Seleucia (Negro Ponzi 1970–71, pp. 67–71, fig. 50:42), Iran (Lamm 1935, p. 9, plate 28:F), and Corinth (Davidson 1952, p. 107, no. 684).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 428. Flask

<b>Accession Number</b>	79.AF.184.34
<b>Dimensions</b>	H. 6.1, Diam. rim 2.1, Diam. base 3.7 cm; Wt. 15.10 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent slightly greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved; mended. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Fire-polished, slightly flaring rim; cylindrical neck; globular body; flat bottom. A circular mark of a solid pontil (W. 1.1 cm) is visible at the center of the bottom.

**COMMENTS AND COMPARANDA** See cat. 427.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 429. Flask

<b>Accession Number</b>	79.AF.184.38
<b>Dimensions</b>	H. 5.0, Diam. rim 1.6, Diam. base 2.0 cm; Wt. 8.29 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. Completely covered by weathering and incrustation on the exterior; thick black layer of soil on the interior.

**DESCRIPTION** Fire-polished rim, bent inward; flaring mouth; conical neck; globular body; convex bottom. Possibly a faint pontil mark (W. approx. 0.8 cm).

**COMMENTS AND COMPARANDA** See cat. 427.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



430. Flask

<b>Accession Number</b>	79.AF.184.26
<b>Dimensions</b>	H. 4.8, Diam. rim 2.4, Diam. base 3.0 cm; Wt. 13.40 g
<b>Date</b>	Ninth–tenth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Cracked and mended. Iridescence and incrustation on both the exterior and the interior.

**DESCRIPTION** Fire-polished rim, bent inward; conical neck; sloping shoulder. Twelve faint thrusts turned the lower part of the body into a multifaceted shape; slightly concave bottom.

**COMMENTS AND COMPARANDA** See cat. 427.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



431. Flask

<b>Accession Number</b>	81.AF.1
<b>Dimensions</b>	H. 14.6, Diam. rim 5.1, Diam. base 4.1 cm; Wt. 88.80 g
<b>Date</b>	Eighth–ninth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple and opaque green glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements, incised

**CONDITION** Fully preserved; heavily weathered.

**DESCRIPTION** Fire-polished, slightly in-turned, vertical rim; wide, cylindrical neck, severely constricted at its base; horizontal shoulder; biconical body with larger and slightly convex upper part and smaller and concave lower part; conical, folded base-ring; concave bottom. At the center of the bottom is the scar (W. 0.8 cm) of a solid pontil. The vessel is slightly lopsided. The tip of the rim is topped with an opaque green trail. On the neck and body from rim to base are incised about 22 horizontal bands (0.4 cm wide) composed of fine incisions, leaving void bands 0.4 cm wide. A zigzag pattern is visible around the bottom of the neck.

**COMMENTS AND COMPARANDA** Probably the zigzag pattern, or rather the small triangles between which the zigzag is now visible, was covered with some substance, such as gold foil, that left the surface under it smooth and unaffected by the weathering that has covered the vessel

in general. Note the traces of gilding in the incised lines of two of the six deep-blue, ninth-century plates found in the crypt of Famen Temple (Famensi) in Shaanxi Province, China: An 1991, pp. 123–124, figs. 3–8; compare Michaelson 1999, pp. 158–159, no. 115.

For an opaque red vessel with very similar body shape dated in the twelfth–thirteenth century or later, see Whitehouse 2014, p. 444, no. 661.

**PROVENANCE** By 1911–1924, Frank Gair Macomber, American, 1849–1941 [sold, American Art Galleries, February 27, 1924, lot 42]; 1933, Emile Tabbagh, 1879–1933; 1933–1936, Estate of Emile Tabbagh, 1879–1933 [sold, Anderson Galleries, New York, January 3, 1936, lot 23]; 1940, Harry Leonard Simmons [sold, Parke-Bernet Galleries, New York, April 5, 1940, lot 118, through French and Co. to J. Paul Getty]; 1940–1976, J. Paul Getty, American, 1892–1976, upon his death, held in trust by the estate; 1976–1981, Estate of J. Paul Getty, American, 1892–1976, distributed to the J. Paul Getty Museum, 1981

**BIBLIOGRAPHY** American Art Association 1924, lot 42.

Anderson Galleries 1936c, lot 23, ill.

Parke-Bernet Galleries 1940, lot 118, ill.

**EXHIBITIONS** None



432. Ibrik

**Accession Number** 79.AF.184.17

**Dimensions** L. 10.5, W. 5.1 cm; Wt. 61.10 g

<b>Date</b>	Islamic or Ottoman
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Pastiche. The glass object is part of a flattened spout, quite probably from an ibrik. The upper, curved part of the object is some kind of plaster.

**DESCRIPTION** Conical tube, part of a spout, sealed on one end with some plaster-like substance.

**COMMENTS AND COMPARANDA** This fragment belongs to a spouted ewer, known as an ibrik in the Islamic and Ottoman worlds. Glass examples are known from the tenth–twelfth centuries (Goldstein et al. 2005, p. 222, no. 257; Taniichi 1987, p. 52 no. 95) and up to the nineteenth-century Ottoman Empire (Carboni and Whitehouse 2001, p. 294, no. 149; Goldstein et al. 2005, pp. 304–305, nos. 325–328).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



433. Miniature Jar

**Accession Number** 2003.451



<b>Dimensions</b>	H. 3.5, Diam. rim 2.6, max. Diam. 4.1, Diam. base 1.5 cm; Wt. 18.37 g
<b>Date</b>	Seventh–eighth centuries CE
<b>Production Area</b>	Syro-Palestinian region
<b>Material</b>	Translucent olive-green and opaque red, turquoise, and white glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact. There is a little weathering, mostly on the zigzag thread.

**DESCRIPTION** Fire-polished, flaring rim, constricted at the transition to the squat globular body, standing on a slightly convex bottom. A circular scar of a solid pontil (W.  $0.6 \times 0.4$  cm) is visible at the center of the bottom.

The vessel is decorated with a thick coil comprising marbled red, turquoise, and white threads brought around the body in a zigzag pattern (eight times) and around the rim.

**COMMENTS AND COMPARANDA** Similar vessels with thick, unmarvered coil are rare but known: a small bottle made of the same translucent olive-green glass decorated with an opaque red thread dated to the seventh–eighth centuries CE, ascribed to a Syrian workshop (Carboni 2001, p. 41, no. 1.7b); and a flask that is similar in craftsmanship, with applied thick coils, dated to the fifth–seventh centuries and ascribed to an Islamic workshop (Musée Curtius 1958, pp. 97–98, no. 212). Very similar thick, globular jars with marvered red and white threads are known from various collections, dated between the fifth and eighth centuries, ascribed to Syro-Palestinian workshops (Oliver 1980, p. 139, no. 240; Platz-Horster 1976, no. 185; von Saldern et al. 1974, p. 128, no. 388; Goldstein et al. 2005, pp. 42–43, no. 22; Whitehouse 2001a, pp. 212–213, nos. 778). See also comments on cat. 306.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 247, no. 721.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 434. Jar with Bronze Handle

<b>Accession Number</b>	2003.384
<b>Dimensions</b>	H. 2.7, Diam. rim 2.5, Diam. base 2.6 cm; Wt. 24.82 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark blue glass, appearing opaque black
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Weathering has caused iridescence on the inside and around the mouth. The bronze wire is weathered, appearing greenish, and the hoop around the neck is broken.

**DESCRIPTION** Flaring, fire-polished, rounded rim; short, funnel mouth; wide, convex shoulder, ending in a horizontal bulge, below which the body gradually tapers toward the flat, slightly concave bottom. A solid relief pontil scar (W. 1 cm) is visible at the center of the bottom.

A twisted bronze wire, wound around the neck, forms a hoop—now an open ring—from which two figure-eight-shaped loops are suspended; the bent ends of the long, horseshoe-shaped handle pass through these two loops. Each loop is made of a ring, pushed in to form two oval eyelets and then folded again, bringing the eyelets next to each other and thus forming a loop.

**COMMENTS AND COMPARANDA** Small-sized jars of similar shape and quality are known from excavations at Fustat, the center of medieval Cairo in Egypt (Scanlon and Pinder-Wilson 2001, pp. 50–51, type 22b), dated in the ninth–eleventh centuries; see also a jar at the Corning Museum of Glass (Whitehouse 2014, pp. 42–43, nos. 656–658), dated between the ninth and eleventh centuries CE, and another at the Newark Museum (Auth 1976, p. 229, no. 518). For a similar miniature, but more open, vessel form from Sabra al-Mansuriyya, Tunisia, see Foy 2020, form Sb16. For the general form, see Lamm 1930, plate 3:24.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 206, no. 579.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



435. Miniature Jar

<b>Accession Number</b>	2003.385
<b>Dimensions</b>	H. 2.8, Diam. rim 2.8, max. Diam. 3.1, Th. 0.2 cm; Wt. 13.20 g
<b>Date</b>	Ninth–eleventh centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Opaque dark blue glass

**Modeling Technique and Decoration** Free-blown

**CONDITION** Covered with a layer of iridescent weathering, thicker around the neck.

**DESCRIPTION** Flaring, fire-polished rim; a simple constriction indicates the transition to the body. Convex shoulder and everted, conical body. The body has been pressed all around ten times, gaining thus an irregular decagonal shape. The bottom is flat, with two deep scars and parts of an annular pontil mark (W. 1.1 cm) visible on it.

**COMMENTS AND COMPARANDA** See cat. 434.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 206, no. 578.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



436. Miniature Jar

<b>Accession Number</b>	2003.386
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<b>Dimensions</b>	H. 3.8, Diam. rim 2.7, Diam. base 2.7, Th. 0.1 cm; Wt. 13.80 g
<b>Date</b>	Eleventh century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; most of the vessel is covered with iridescent and in other areas milky white weathering. A few pinprick bubbles, no impurities.

**DESCRIPTION** The vessel has a flaring, fire-polished rim; practically no neck at all, just a constriction leading to the ovular body. The lower part of the body is folded, forming a tubular base-ring. The bottom of the vessel is mildly concave, and at the center of the undersurface the scar of a solid pontil (Diam. 0.6 cm) is visible.

**COMMENTS AND COMPARANDA** This particular variant of globular jar with a pushed-in base-ring is known from excavations at Fustat, an area of medieval Cairo in Egypt (Scanlon and Pinder-Wilson 2001, pp. 50–51, type 22c, from a pit dated in the early eleventh century). For simpler globular jars, see comments on cat. 434.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 207, no. 582.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 437. Bowl

**Accession Number** 2003.254

<b>Dimensions</b>	H. 4.4, Diam. 15.7 cm; Wt. 203.60 g
<b>Date</b>	1880s
<b>Production Area</b>	Venice (possibly), Italy
<b>Material</b>	Opaque white, yellow, and blue; translucent purple; transparent glass
<b>Modeling Technique and Decoration</b>	Made from a polychrome disk-shaped blank assembled from fused together lengths of round mosaic canes; slumped; applied rim. Polished inside and outside

**CONDITION** Fully preserved; reassembled.

**DESCRIPTION** The bowl was created from 36 glass canes, fused together in the following pattern: a composite cane of a blue band is flanked on either side by a rod of colorless glass in which two white rods spiral; this cane is flanked by a yellow band, which is in turn flanked by a complex cane composed of a white band flanked on either side by a rod of colorless-purplish glass in which spiral two white rods. The rim of the bowl forms a spiraled cane of colorless-purplish glass in which are spiraling two white rods.

**COMMENTS AND COMPARANDA** This vessel is a replica of Roman imperial striped mosaic vessels, similar to cats. 125–126. It is a copy very close to the Roman prototypes produced in Venice. Mosaic glass had been attracting more and more attention from rich clientele since the discovery of Pompeii in 1748, and imitations are known from the late eighteenth–early nineteenth centuries. The technique met a great revival in Venice in the second half of the nineteenth century when large companies like those run by Antonio Salviati and Vincenzo Moretti operated there (Whitehouse 2007, pp. 36–39). This particular bowl has been tentatively ascribed to the Compagnia di Venezia e Murano (Italian; founded 1866, dissolved 1909) (Whitehouse 2007, p. 170, no. 74).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988.; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 122, no. 327; p. 123, plate no. 327.

**EXHIBITIONS** Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)



## 438. Pseudo Vetro d'Oro Medallion

<b>Accession Number</b>	2003.296
<b>Dimensions</b>	Diam. 13.5 cm; Wt. 116.80 g
<b>Date</b>	Late nineteenth–early twentieth centuries CE
<b>Production Area</b>	Italy?
<b>Material</b>	Colorless and blue glass; gold foil
<b>Modeling Technique and Decoration</b>	Free-blown; gold glass

**CONDITION** The rim is heavily chipped. A large fragment was reattached.

**DESCRIPTION** Disk made of colorless, blue, and gold glass. The circular body is slightly convex. In its center, a standing female figure drawn on gold leaf wears a long tunic and an elaborate headdress. She opens her arms in a gesture of prayer. Gold inscriptions flank her: on the left of the figure, BELUCIA / FEDELISSIMA / VIRGO / IM PACE / IIIIX / CALENDAS / BENTURAS / SEPTEMBRES / Belucia fedelissima virgo im pace IIIIX calendas benturas Septembres, i.e., Belucia the most faithful virgin in peace (slept) August the 19th. On the right of the figure: OUE VIXYT / ANNOS / XVIII. Oue vixyt annos XVIII, i.e., which lived 18 years. A wide gold vine with tendrils set between two bands encircles the scene. At the center of the

underside, the circular scar of a solid pontil (W. 0.7 cm) is visible.

The glassblower made a small plate of dark blue glass, which was annealed; later a gold foil was applied to it, which was cut and incised to form the desired representation. This was reheated and a transparent bubble of glass was blown onto it, which formed the interior bottom and walls of the bowl. In addition, a coil of colorless glass was wound around the disk, forming a coil base for the vessel. The base coil is pressed along its center where a horizontal groove is formed, creating the illusion that it consists of two different coils, the upper thicker and the lower finer.

**COMMENTS AND COMPARANDA** This disk is a replica of well-known late antique vetri d'oro or gold-glass medallions and bowls. (On the ancient gold glass objects, see Pillinger 1984. For a recent, updated overview of this production and the examples in the rich collection of the British Museum, see Howells 2015.)

There are several known examples of these replicas, made and sold in Italy during the late nineteenth century, that today are part of museum collections. (For a general overview on these objects as a group, see Pillinger 1984, pp. 15–26; Whitehouse 2007, pp. 19–23.) Characteristic examples include those in the British Museum collection (Howells 2015, pp. 146–152), the Yale University Art Gallery (Matheson 1980, pp. 142–144), and the Corning Museum of Glass (Whitehouse 1994, pp. 133–135).

The inscription and the standing female figure in a praying gesture replicate those carved on a marble epitaph from the Catacomba Ciriaca (San Lorenzo fuori la Mura) on Tiburtina Street in Rome, which is housed in the Musei Vaticani, Museo Pio Cristiano, dated between 325 and 374. This epitaph is published in ILCV, 1, 1354, and depicted in Perret 1851, pl. IX, no. 18. Notably, the glassmaker misinterpreted the figure's name, rendering it as “Belucia” instead of “Bellicia.”

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Elbern 1967.

von Saldern et al. 1974, p. 142, no. 400, ill.



**EXHIBITIONS** Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 439. Fragment of Gold Sandwich Glass

<b>Accession Number</b>	83.AK.29
<b>Dimensions</b>	pres. H. 1.8, Diam. base 5.2, max. pres. Diam. 8.2 cm; Wt. 45.50 g
<b>Date</b>	Late nineteenth or early twentieth century
<b>Production Area</b>	Europe, possibly Italy
<b>Material</b>	Colorless glass; gold foil
<b>Modeling Technique and Decoration</b>	Free-blown; gold-glass trail

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Part of the bottom of a bowl. A gold-glass-trail inscription in two rows divided by a line: INNO / CENTI innocenti, i.e., innocents; set in a rectangular frame with a straight, fine line and a folded exterior one.

**COMMENTS AND COMPARANDA** This is a replica imitating a special group of glass vessels with an inscription in gold placed between two layers of transparent glass, in the gilt-glass-trail technique. On the taste for copies of late Roman gold-glass vessels in the late

nineteenth century, see comments on cat. 438. In a rectangular, often colored—for example, blue or red—frame, a generic “cheers” phrase was written in two lines, such as ANNI / BONI, etc. They are dated to the second half of the third century CE and are products of a western, probably Italian workshop. See Fremersdorf 1959, pp. 65–66, plate 86; Alarcão 1968, pp. 71–79; Mandruzzato and Marcante 2005, p. 105, no. 285; Howells 2015, p. 144, no. 55.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** JPGM Acquisitions 1983, p. 259, no. 160.

**EXHIBITIONS** None



### 440. Miniature Beaker

<b>Accession Number</b>	2003.442
<b>Dimensions</b>	H. 4.5, Diam. rim 5.5, Diam. base 3.6 cm; Wt. 31.70 g
<b>Date</b>	Ca. third–fourth centuries CE and twentieth century
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Pastiche of two rim fragments.



**DESCRIPTION** This pastiche consists of the rims of two different flasks, which have been conjoined, creating the form of a miniature stemmed beaker.

The body of the beaker is made from the out-folded rim and wide upper neck, part of the neck of a vessel dated probably in the fourth century from Egypt (e.g., Antonaras 2017, pp. 105–106, form 58 or 59). The funnel-shaped mouth with in-folded, tubular rim of a flask that has been placed upside-down forms the stem and base of the pastiche. It is probably dated to about the third–fourth centuries CE (e.g., Antonaras 2012, p. 146, no. 202). The interior of this part is filled with what appears to be a glass lump, which forms the flat bottom of the body. It has been painted carefully to the exact same tone of green as the glass fragments. The seam between the two fragments is covered with a fine layer of some kind of plaster painted appropriately.

**COMMENTS AND COMPARANDA** For the “body” part see Antonaras 2017, pp. 105–6, form 58 or 59. For the “base” part see Antonaras 2012, p. 146, no. 202.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 240, no. 703.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 441. Jar with Three Handles

<b>Accession Number</b>	2003.395
<b>Dimensions</b>	H. 9.0, Diam. rim 5.4, Diam. base 4.2, Th. 0.3 cm; Wt. 63.20 g
<b>Date</b>	Probably nineteenth–twentieth centuries CE
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; small patches of white weathering.

**DESCRIPTION** In-folded, flaring rim. The lip was in-folded for 1.4 cm and then it was flattened only in the interior, leaving the exterior walls convex. The neck is extremely short and wide; the body is ovular and stands on an applied conical base. At the center of the bottom there is a circular excess of colorless glass, remainder of a solid pontil (W. 1 cm) that was used for holding the vessel during the shaping of the rim and the attachment of the handles. There are three coil handles attached on the shoulder and stretched up ending on the tip of the rim, forming an almost circular loop.

**COMMENTS AND COMPARANDA** This jar may be modern, as indicated by the abundance of air bubbles in its mass, as well as the shape and curvature of the handles. The handles are not cut, as a modern glassblower would have done. Instead, the end of the coil is stretched and bent onto the body of the handle as one

would expect, consistent with ancient technique. The extremely elongated fold of glass in the interior of the rim is unprecedented among ancient vessels. The truly colorless glass of the solid pontil scar appears modern. If it was indeed ancient, this quality of glass would have been very rare and expensive, unlikely to be “wasted” on the tip of the pontil for the production of such an average vessel.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 211, no. 602.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 442. Inlay in the Form of a Face

<b>Accession Number</b>	2003.149
<b>Dimensions</b>	H. 3.1, W. 2.3, Th. 0.9 cm; Wt. 8.80 g
<b>Date</b>	Thirtieth Dynasty to early Ptolemaic period, fourth–third centuries BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque red and white glass
<b>Modeling Technique and Decoration</b>	Cast in an open, one-piece mold

**CONDITION** Upper part missing.

**DESCRIPTION** Profile head to the right. Facial features well articulated. Almond-shaped, oval eye; straight nose; chubby cheeks; full lips; small, round chin; large ear; wide neck, ending in a semicircle. The once-inlaid eye is not preserved and the cavity is rough. A small part of the white headdress is still attached to the top of the head over the ear and along the neck. Underside flat.

**COMMENTS AND COMPARANDA** In ancient Egypt prefabricated, colorful glass inlays were often used as parts of decorative composite reliefs in figural scenes and inscriptions on wooden, ivory, and stone objects such as shrines, statues and statuettes, mummies, mummy masks, coffins, and expensive furniture. The body parts of the kings were rendered mostly in red and those of the gods in blue-greenish glass. These inlays either protruded in relief or were placed in individual cells half- or completely sunken in the surface of the object. They appeared from the Eighteenth Dynasty, during the reign of Amenhotep III (1387–1350 BCE) (Cooney 1960, pp. 11–33; Stern and Schlick-Nolte 1994, p. 143, comments on no. 11).

For comparanda, see von Saldern et al. 1974, p. 27, no. 28; p. 25, plate no. 28; Goldstein 1979, p. 88, no. 164, p. 227, no. 659; Stern and Schlick-Nolte 1994, pp. 340–345, nos. 105–108; “Per-neb” Collection 1992, no. 30, p. 21 top left; Maeda 2001, pp. 72, 199, nos. 86–87; Bianchi 2002, pp. 141–142, nos. EG-25, EG-26; Arveiller-Dulong and Nenna 2011, p. 375, nos. 591–592.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 27, no. 28; p. 25, plate no. 28.

Wight 2011, pp. 16, 21, fig. 10.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



#### 443. Inlay in the Form of a face

<b>Accession Number</b>	2003.150
<b>Dimensions</b>	H. 1.7, W. 1.3, Th. 0.8 cm; Wt. 2.86 g
<b>Date</b>	Thirtieth Dynasty to early Ptolemaic period, fourth–third centuries BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque red glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Fully preserved. Covered with greenish weathering.

**DESCRIPTION** Head facing forward. All facial features are rendered but not very crisply. Accentuated eyebrows; almond-shaped, oval eyes; smooth cheeks; heavy lips; large ears; long neck terminating in a flat end. Upper and lower ends are flat and smooth, and sides are tapered toward the back side, which is smooth and flat.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442. Frontal depiction of the face is quite rare in Egyptian art, mostly used as a hieroglyph with the sound value *hr* (meaning “on, around, over, for”). This piece is small and may have been used in an inlaid band of inscriptions in a miniature shrine, or may have been the inlaid face of an ushabti figurine (on glass in statuettes in general, see Cooney 1960, pp. 21–29, fig. 19).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 25, no. 29; p. 27, plate no. 29.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



#### 444. Inlay in the Form of a Face

<b>Accession Number</b>	2003.151
<b>Dimensions</b>	H. 2.7, W. 2.0, Th. 0.9 cm; Wt. 9.42 g
<b>Date</b>	Thirtieth Dynasty to early Ptolemaic period, fourth–third centuries BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque red glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Covered with white weathering.

**DESCRIPTION** Profile head facing to the left. Facial features well articulated. Almond-shaped, oval eye; chubby cheeks; heavy lips; large ear; wide neck, ending in a semicircle. Eyebrow and eyelids rendered as fine, delicately raised lines.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 25, no. 30; p. 27, plate no. 30.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 445. Inlay in the Form of a Leg

<b>Accession Number</b>	2003.152
<b>Dimensions</b>	H. 5.9, W. foot 4.2, W. leg 5.5, Th. 1.0 cm; Wt. 16.32 g
<b>Date</b>	Thirtieth Dynasty to early Ptolemaic period, fourth–third centuries BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque turquoise glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Broken; some pitting.

**DESCRIPTION** Leg and foot striding to the right. The leg is broken below the knee. Rendering of the anatomy is not detailed. Sides are smooth, back is rough. Above the knee is a beveled end. The opaque turquoise color, similar to the blue of lapis lazuli, indicates that it was representing the leg of a god.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442. For comparanda, see cat. 446.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 27, no. 32.

Wight 2011, pp. 16, 20, fig. 9.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 446. Inlay in the Form of a Leg

<b>Accession Number</b>	2003.153
<b>Dimensions</b>	H. 4.1, W. foot 2.1, W. leg 3.9, Th. 0.8 cm; Wt. 4.93 g
<b>Date</b>	Thirtieth Dynasty to early Ptolemaic period, fourth–third centuries BCE
<b>Production Area</b>	Egypt

**Material** Dark blue glass  
**Modeling Technique and Decoration** Cast

**CONDITION** Broken; some pitting and iridescence.

**DESCRIPTION** Part of a nude god or pharaoh inlay. Leg and foot striding to the right. The leg is broken at the knee. Cast to display some details of anatomy, like the rendering of the musculature and the toes. Sides and back are smooth.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442. For direct comparanda, see Goldstein 1979, pp. 242–243, no. 702, plate 33; Brooklyn Museum, 05.391; Arveiller-Dulong and Nenna 2011, p. 377, no. 602.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 30, no. 33.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 447. Statuette of an Ibis

**Accession Number** 2003.158  
**Dimensions** H. 6.3, W. 8.0 cm; Wt. 67.47 g  
**Date** Third century BCE–first century CE

**Production Area** Egypt  
**Material** Bronze and opaque blue and red glass  
**Modeling Technique and Decoration** Casting

**CONDITION** The statuette is intact and in good condition, with some minor weathering of the bronze. The body and wings have very few minor scratches.

**DESCRIPTION** Bronze statuette of a squatting Ibis. The head and feet are separately cast in bronze, and the feet have tangs for attachment. The splayed talons are naturalistically cast and incised. The ibis head has a sinuous neck and a long, down-curved bill with two triple grooves along its length. The eyes are recessed for the insertion of inlay. Of the eye inlays, only the plaster bed that once connected them has survived. The body is a dark, opaque blue and the tail feathers are inlaid opaque red glass with engraved details, perfectly fitted to the blue body.

**COMMENTS AND COMPARANDA** The ibis is a cult symbol and a manifestation of the ancient Egyptian god Thoth, worshiped as the god of the moon, wisdom, writing, magic, art, and knowledge. There are several bronze statuettes of crouching ibis figures with glass or wooden body, especially from the Ptolemaic period, when the custom of making votive statues of sacred animals was extremely popular. On the god Thoth, see Bonnet 1952, s.v. “Thot,” pp. 805–812. For ibis statuettes, see, among others, Clark 1955, pp. 181–184; Sotheby’s, June 6, 2006, lot 87: <https://www.sothebys.com/en/auctions/ecatalogue/2006/antiquities-n08215/lot.87.html>, Egyptian statue of an ibis in bronze with blue glass past inlay; Christoph Bacher, Statuette of a Glass and Bronze Ibis, ref. 1366: <https://www.cb-gallery.com/en/produkt/statuette-eines-ibises-aus-glas-und-bronze/>; Statuette of a gilt wood and bronze ibis, in *Hindman Ancient Art and Natural History: A Cabinet of Curiosities 10 November 2022*, no. 1009, p. 35, no. 49 = <https://hindmanauctions.com/items/10621871-an-egyptian-gilt-wood-and-bronze-ibis>.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 41, no. 73; p. 29, plate no. 73.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





#### 448. Fragment of an Inlay in the Form of an Eye

<b>Accession Number</b>	2003.154
<b>Dimensions</b>	L. 1.6, W. 4.7, Th. 0.8 cm; Wt. 6.22 g
<b>Date</b>	New Kingdom; 1540–1070 BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Dark blue glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** The condition is good, with some signs of wear such as small nicks and scratches; some minor traces of discoloration visible on the blue areas.

**DESCRIPTION** Cast inlay in the form of a right human eye. The eye is outlined in blue glass and has an opaque white sclera, and the pupil is black and lentoid in cross section.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442. Inlaid eyes were often used in statues and statuettes, mummies, mummy masks, and coffins. It is not only human mummies that had inlaid eyes, but those of animals as well, when they were considered personifications of deities or otherwise connected to deities, like the sacred bull Apis (Stern and Schlick-Nolte 1994, pp. 174–175, no. 27; Lucas and Harris 1962, pp. 124–127). For direct comparanda, see Lucas and Harris 1962, pp. 98–127; Spaer 2001, p. 239; Bianchi et al. 2002, nos. EG-7–8; Antonaras 2012, p. 298, no. 504; Brooklyn Museum, 37.1951E (1539–1530 BCE).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 30, no. 35.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

The Color of Life (Malibu, 2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



#### 449. Fragment of an Inlay with a Female Theater Mask

<b>Accession Number</b>	2003.260
<b>Dimensions</b>	H. 3.0, W. 1.1, Th. 0.3 cm; Wt. 1.45 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white, green, red, black/purple, and beige glass, on opaque turquoise background
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Complete; broken into two parts and mended; slight chipping on edges; some pinprick bubbles. Deformed by exposure to high temperature.

**DESCRIPTION** Milky white half-mask of a female, set in an opaque turquoise ground. Vertical rows of locks

rendered with tiny “black” spirals in purple ground; red and black vertical strands in three corkscrew locks on side of head to below the neck. Eyebrow, eyelid, eye, and nose finely outlined in black. Wide-open black mouth outlined in red. On the forehead is arranged a row of seven elongated, pointed purple strands of hair bangs. The back side is porous and full of burst pinprick bubbles.

**COMMENTS AND COMPARANDA** On Pharaonic Egyptian glass inlays in general, see comments on cat. 442.

Incrustation with glass inlays predominantly on wooden objects is known in Egypt throughout the Late Pharaonic and Ptolemaic periods (see comments on cats. 442 and 448; also, for a thorough recent overview, see Arveiller-Dulong and Nenna 2011, pp. 350–395, esp. 350–353, 378; Stern and Schlick-Nolte 1994, pp. 376–385, 404–407, nos. 126–132, 146, 147; Auth 1999; Nenna 2002; Antonaras 2012, pp. 286–289, nos. 472–483). In the Augustan era, production of mosaic glass was transplanted from Egypt to Rome, and several new products appeared that imitated colorful types of marble, including finds from Rome and Patras, Greece (Capriata 2005, pp. 229–262; Kolonas 2002, p. 116, no. 17; Antonaras 2012, pp. 291–297, nos. 490–502). In addition, during the late first century BCE–early first century CE plaques with theatrical masks (cats. 449–451), deities (cat. 452), and floral compositions (cats. 460–461, cats. 464–479) became fashionable, the latter occasionally joined to form elongated bands (cats. 453–458), all of the them used in incrustation. They are dated in the last half of the first century BCE–early first century CE, and they were made in Egypt or in Rome. Sixteen different iconographical types are represented on these plaques with deities and theatrical masks: bull-Apis (cat. 452), Thoth-ibis (cat. 447), udjat-eyes, bird-Ba, falcons, panthers, Bes, Isis, Hathor, satyroi, silenoi, Dionysus (cat. 450), concubines (cat. 451), maenads, brother keeper, old servant. The most delicate and artistically adept products of ancient incrustation, they form a closely connected group that must have been products of one single center and made within a relatively short period of time (Mahnke 2008; Arveiller-Dulong and Nenna 2011, pp. 385–395).

Later on, mosaic glass vessels and glass incrustation became increasingly popular in Egypt and possibly in Rome as well, during the third through the fifth centuries CE, with published finds known from Rome, Ostia, Corinth, Kenchreai, and in Egypt proper, Fayum, and Antinoöpolis as well. On them were depicted simpler geometrical patterns and more often complex, colorful representations of maritime (cats. 496–498) and Nilotic

scenes, figures of philosophers, and Christian iconographical themes as well (Becatti 1969; Ibrahim, Scranton, and Brill 1976, pp. 262–265; Brill and Whitehouse 1988; Nenna 2002; Auth 2007; Silvano 2012, p. 273, fig. 3, top; Rassart-Debergh and Weidmann 2013; Küllerich 2014, pp. 179–181; Antonaras 2022a, pp. 30, 71–73). The tradition of using colorful glass plaques in opus sectile decoration continued in the Byzantine Empire, known in sixth-century basilicas and in Middle Byzantine-period (ninth–twelfth centuries) palaces (Antonaras 2013, p. 193, plate 13; Antonaras 2022b, pp. 196–197, figs. 1–3).

The earliest glass inlays that appeared in Egypt, from at least the middle of the second millennium BCE, were made of brightly colored glass (see cats. 442–446), and in the fourth century BCE mosaic canes were invented and introduced in inlays. Composite glass mosaic canes with miniature designs, such as rosettes and other floral motifs, checkers, imitations of stone with flakes or veins, masks, and deities, were made from bundled cold canes (e.g., cats. 96, 227, 486, 488, 491–493). The motif was formed on their inside and was visible only in transverse sections. Slices of these prefabricated mosaic canes together with monochrome canes were heated and lengthened repeatedly, each time rendering the design smaller. These sections with geometrical or floral motifs were used to form larger mosaic inlays (for a longer section of such a bar, see cat. 554). They were placed face down on a mold and fused together; often the space between them was filled with monochrome glass chips that formed the background against which the motifs would stand out. These larger plaques occasionally have a backing of scraps of mosaic glass that provided extra strength and leveled out the individual sections (cats. 114, 143, 460–462, 466–469, 473–475, 477, 480, 483, 489, 491, 494, and 501). Finally, the front side of the plaque, which was dull because of its contact with the mold, had to be ground and polished in order to make it shiny and the colors bright. For the production technique of glass mosaics, see Dawes 2002 and comments on cat. 86. On the trade of small fragments of mosaic glass in nineteenth century and on the entries that different techniques and classes of mosaic glass present in the Getty collection, see comments on cat. 95.

For comparanda, see *3000 Jahre Glaskunst*, p. 11, no. 26; “Per-neb” Collection 1992, p. 12, lot no. 12; Newby 2006, p. 16, no. 9; Mahnke 2008, pp. 127–132, nos. 79–89, with prior bibliography.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 335a; p. 120, plate no. 335a.

Mahnke 2008, p. 130, no. 84.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 450. Fragment of an Inlay with a Mask of Dionysus

<b>Accession Number</b>	2004.27
<b>Dimensions</b>	H. 3.1, W. 1.2 cm; Wt. 1.20 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white, green, red, black/purple, and beige glass, on translucent blue background
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Complete; slight chipping on edges; some pinprick bubbles. Encased in a resin in modern times.

**DESCRIPTION** Milky white half-mask of Dionysus, set on a dark blue ground. Red hair rendered with tiny “black” spirals in red ground at upper part of the head and forehead; red and black vertical strands and three corkscrew locks at sideburns and below the neck. Eyebrow, eyelid, eye, and nose outlined in black. Small, open black mouth outlined in red. Indicating a wreath in the hair are four green, trilobed ivy leaves, outlined in yellow, along with an ivy flower-cluster, of green circles outlined in yellow and black. A green band, outlined in yellow and black, is on the forehead below the hair.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For close parallels, see Ettinghausen 1962, p. 19, nos. 36, 37, 39, 40, 45; Tatton-Brown and Andrews 1991, p. 52, fig. 59; Stern and Schlick-Nolte 1994, pp. 376–378, nos. 126–127; Maeda 2001, p. 77, no. 101; Bianchi 2002, p. 145, no. EG-30a–c; Mahnke 2008, 105–113, nos. 40–52, with prior bibliography; Antonaras 2012, p. 286, no. 472.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 335b, illus. color plate p. 121, no. 335b.

Mahnke 2008, pp. 109–110, no. 47.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 451. Fragment of an Inlay with a Theatrical Female Mask

<b>Accession Number</b>	2004.28
<b>Dimensions</b>	H. 3.5, W. 1.4, Th. 0.2–0.3 cm; Wt. 2.30 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white, green, red, black/purple, and beige glass, on translucent light blue background
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Complete; broken in two pieces; part of the face is missing; some pinprick bubbles.

**DESCRIPTION** Milky white half of theatrical mask, set on a light blue ground. Yellow, multilobed hairdo or wig rendered with straight, radiating rows of tiny “black” angular curls in yellow ground all around the head and forehead. These are framed with a single thick black line that follows the shape of the face and externally with two undulating lines set in yellow that forms triangular, crown-like projections at the upper part of the head. Rows of red and cream, eight-petaled rosettes set in white form radiating bands that connect the outer and inner ends of the wig. Three locks extend, freely and partly bent, from the lower end of the wig to the edge of the plaque. Eyebrow, eyelid, eye, and nose outlined in light blue. Wide-open black mouth outlined in red.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For close parallels, see Ettinghausen 1962, p. 19, no. 37; Mahnke 2008, pp. 147–152, nos. 112–119, with prior bibliography.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 335c, illus. color plate p. 121, no. 335c.

Mahnke 2008, pp. 151–152, no. 119.

Wight 2011, pp. 42, 47, fig. 25.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Reflecting Antiquity: Modern Glass Inspired by Ancient Rome (Malibu, 2007–2008; Corning, 2008)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 452. Fragment of a Mosaic Inlay with the Apis Bull

<b>Accession Number</b>	2003.264
<b>Dimensions</b>	H. 0.9, W. 1.4 cm; Wt. 1.76 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque orange, red, white, black, green, and yellow glass

**CONDITION** Fragment; the lower part is broken.

**DESCRIPTION** The bull-god is depicted within a frame in the shape of a naos, that is, a portable shrine, the appropriate backdrop for a god. The surviving part of the frame consists of three straight pieces of orange glass—the flat sides and the protruding lintel—where the composite mosaic cane depicting the Apis bull was placed. The black and white bull stands against a deep green background, walking to the left on a red groundline. Between his horns is the sacred sun disk of Hathor in red, with a uraeus at the center. On his back is a black and yellow motif, probably the folds of his neck, although possibly the outline of a vulture's wing, one of the characteristics associated with the Apis bull. In front of the bull stands an indiscernible object, probably a table for offerings. It rests on a biconical pedestal, which is yellow decorated with red lozenges, topped by a white surface with a semicircular yellow object, probably an offering. The area of the bull's face and the object in front of him is distorted and discolored. The motif is clearly visible on both sides.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

Several glass inlays with the Apis bull on them are preserved in various museum collections. None is identical to this particular one, differing in both the combination of colors and the details, such as the table offering. For parallels, see Goldstein 1979, p. 235, no. 683: <https://glasscollection.cmog.org/objects/4875/inlay>; Freer Gallery of Art, Ettinghausen 1962, p. 19, fig. 53; Auth 1983, pp. 160–163, fig. 7; Gunter 2002, p. 110, fig. 4.16 upper row, F1909.530a–b, Liu 2008, p. 63: <https://asia.si.edu/object/F1909.530a-b/>; current whereabouts unknown, from the collection of George John Gregory: <https://auctions.bertolamifinearts.com/it/lot/55466/egyptian-apis-bull-mosaic-glass-inlay-/>; Museum of Fine Arts Boston, 1972.1079: <https://collections.mfa.org/objects/164316>; Virginia Museum of Fine Arts, 59.9.63: <https://www.vmfamuseum/piction/6027262-15465744/>; Miho Museum 2001, p. 73, no. 91: <http://www.miho.or.jp/booth/html/artcon/00002028e.htm>. On the Virginia piece, the biconical yellow construction with a red central rod and a hemispherical mass at the center is identical to the one in the Getty collection. It also has a frame—this one in blue—that might have resembled the shrine lintel in the missing

upper part. The ones in the Miho Museum and the Freer Gallery are probably cuts of the same glass rod.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336j, illus. color plate p. 124.

Kater-Sibbes and Vermaseren 1975, p. 78, no. 558, plate CXCv.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



453. Fragment of a Mosaic Inlay with Floral Motif

<b>Accession Number</b>	2003.261
<b>Dimensions</b>	H. 4.7, W. 2.9, Th. 0.5 cm; Wt. 14.19 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow, turquoise, and red and translucent purple glass
<b>Modeling Technique and Decoration</b>	Fusion



**CONDITION** Fragment; the two sides of the band preserve the original edges; the upper and lower ends are broken. Small areas with iridescence and pitting. The back side is severely pitted and covered with incrustation. One fully preserved motif and the upper part of a second one are visible on the extant fragment.

**DESCRIPTION** Plaque with vertical, floral pattern. On the front side, a multicolored floral decoration is encased in yellow glass. The lower part of the motif comprises a truncated conical pot, formed of three red and two black horizontal bands. From the pot stem rise three elongated turquoise leaves outlined in black. Between the leaves are two tall (seemingly black, probably dark red) stems, each topped by a red globular feature, probably a flower, that extends higher than the leaves. One of these flowers is square and the other is roughly circular.

The back side of the plaque is covered with translucent purple glass that fits into a yellow outline along the long sides of the plaque.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

The band was made in the following way: The cane with the motif on it was sliced and each slice was placed “above” the previous, forming a band. This strap of adjoining slices was reheated and a thin (0.1–0.2 cm) layer of translucent purple glass was applied to it, bonding the slices together into a solid mass. The front side, after assembly into bands of the desired length, was polished. The seam between the two slices that were fused together to form the band is visible just below the bottom of the pot. For close parallels, see Grose 1989, pp. 346, 364, no. 642; Maeda 2001, p. 85, no. 117.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336a, plate 336a.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 454. Fragment of a Mosaic Inlay with Floral Motif

<b>Accession Number</b>	2003.262
<b>Dimensions</b>	L. 2.0, W. 1.6, Th. 0.2 cm; Wt. 1.77 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent dark blue and opaque red and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; broken all around.

**DESCRIPTION** Rectangular inlay, broken on both ends. Front and back sides flat. The design extends through the thickness of the plaque.

Partly preserved lotus flower and a palmette. On white ground, a frieze of alternating lotus flowers and palmettes, that is, the fan-shaped leaves of a palm tree. White and red, six-petaled palmette outlined in dark blue; stems from a red calyx-shaped pod. Below the pod two opposing blue tendrils. Open flower of a blue lotus, with pointed, dark blue external petals, and yellow with red top, upright, calyx-shaped petals at the center; stems from a red calyx-shaped pod. Below the pod are two opposing blue tendrils.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

For palmettes, see Grose 1989, pp. 362, 364, nos. 628, 641. For lotus, see Bomford 1976, p. 16, no. 24; Stern and Schlick-Nolte 1994, p. 394, no. 138; *Glass from the Ancient World* 1957, no. 119; Spaer 2001, p. 250, nos. 608–609. For lotus and palmette bands: Goldstein 1979, p. 222, no. 644; Bianchi 2002, p. 152, no. EG-36; Miho Museum 2001, pp. 81, 201, no. 113 (where the one on the lower row is identical to 2003.262).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336d; p. 121, plate 336d.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 455. Fragment of a Mosaic Inlay with Floral Motif

<b>Accession Number</b>	2003.263
<b>Dimensions</b>	H. 5.0, W. 2.0, Th. 0.49 cm; Wt. 13.25 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy

**Material** Translucent blue and opaque red, white, and yellow glass

**Modeling Technique and Decoration** Fusion

**CONDITION** Fragment. A missing part has been filled with resin. Front side seems to have been polished in modern times. On the back, the lower part is covered by a glassy layer.

**DESCRIPTION** Rectangular inlay, broken on both ends. Front and back sides flat. The design extends through the thickness of the plaque. The upper part is uneven but clear and the motifs are clearly visible. Only the left edge is straight and probably preserves the original edge of the band.

Part of an elongated decorative band with palmettes, the fan-shaped leaves of a palm tree. In the preserved part, the same motif appears partially three times: palmette with six leaves and yellow lanceolate stem standing on two spiral tendrils. The motif is outlined in white glass on a dark blue background, and only the palmette stem is made of opaque yellow glass. The lower preserved palmette differs in the red used in an oval at the upper end of the lanceolate stem and at the outer edges of the petals.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

For close parallels, see Grose 1989, pp. 346, 364, no. 643; Miho Museum 2001, pp. 81, 201, no. 113.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 121, plate 336e; p. 126.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 456. Fragment of an Inlay with Papyrus and Lotus Flower

<b>Accession Number</b>	2004.29
<b>Dimensions</b>	H. 2.2, W. 1.3 cm; Wt. 2.38 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque white, red, and yellow and translucent blue glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Decorative band with vertically arranged papyrus and lotus flowers. Only parts of both types of flowers appear on the preserved fragment: namely, a conical red papyrus flower, outlined in yellow, standing on a thick stem made of dark blue and yellow rods, and lower, a lotus flower with pointed, flaring white petals and a pointed, conical central bud made of red glass outlined in white. Two vertical, yellow tendrils extend over the petals, ending in spirals.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

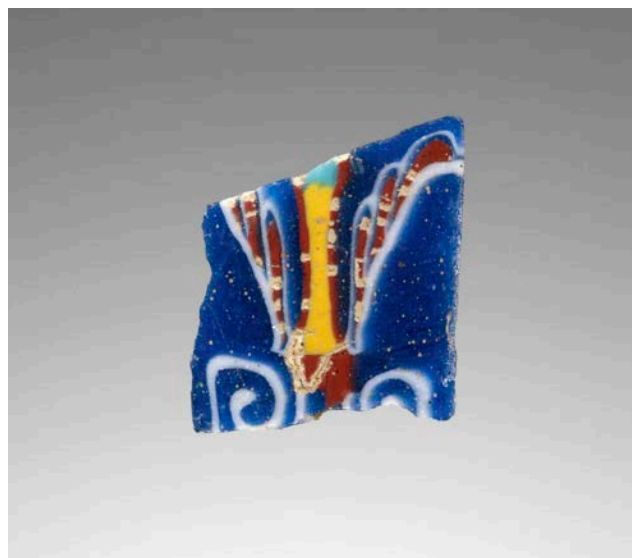
For close parallels, see cat. 457.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336c.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 457. Fragment of an Inlay with Lotus Flower

<b>Accession Number</b>	2004.30
<b>Dimensions</b>	H. 2.2, W. 2.0 cm; Wt. 2.48 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent (?) dark blue and opaque white, red, turquoise, and yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; broken on both ends and one side. Only one side preserves the original edge.

**DESCRIPTION** On dark blue ground, a central yellow stem topped by a turquoise hemisphere outlined in red. Flanked by three red petals outlined in white on each side. It stands on a red square base from which stem two opposing opaque white spiral tendrils.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

For close parallels, see Grose 1989, pp. 346, 364, no. 643; Miho Museum 2001, pp. 81, 201, no. 113.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336f.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



458. Fragment of an Inlay with Floral Motif

<b>Accession Number</b>	2004.31
<b>Dimensions</b>	H. 2.8, W. 2.4 cm; Wt. 8.18 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent (?) blue and opaque white and yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; broken on upper and lower end. Sides preserve the original edges of the band.

**DESCRIPTION** On dark blue ground, a flower with five pointed, opaque white petals and a pentagonal center in

yellow outlined in red. Front and back sides flat, broken all around.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

For close parallels, see Grose 1989, p. 363, no. 633; Miho Museum 2001, p. 84, no. 115, third row right end.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 336h.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



459. Fragment of a Plaque

<b>Accession Number</b>	2004.32
<b>Dimensions</b>	L. 2.7, W. 1.9 cm; Wt. 8.06 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent blue and opaque red, white, and yellow glass
<b>Modeling Technique and Decoration</b>	Fusion



**CONDITION** Fully preserved. Small part of one edge is missing. There is some discoloration around the edges.

**DESCRIPTION** A rectangular mosaic plaque fragment decorated with a pattern of four-petaled flowers set in opaque red glass, with white petals, outlined in turquoise, around yellow centers. Each tessera consists of two of the petals and the yellow central dot. The ends of the tesserae of each row were placed between the lower row's tesserae, thus forming in a loose manner the pattern of the flower.

The decoration runs through the entire plaque and is clear on the back side too.

One of the sides is mildly curved, apparently meant to be the edge of the original band or decorative motif. The other three sides are vertical, with the lowest 0.2 cm on the bottom edge beveled, which would have facilitated the juxtaposition of similar rectangular plaques.

The quatrefoil motif was used for millennia in ancient Egypt in connection with the goddesses Isis and Nephthys, represented also on mummy-shaped divine figures and on beaded mummy nets. In the Ptolemaic period, it was translated into mosaic glass. It appears that originally it represented stars and not flowers. In only a few cases, like in the example from JPM, do the quatrefoils have a yellow central rod, probably recalling the central gold nail of ancient cloisonné work (Stern and Schlick-Nolte 1994, p. 400, no. 143).

This piece was probably part of a garment of a figurine, given the motif and the curved side, as in Arveiller-Dulong and Nenna 2011, p. 380, no. 618.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For close parallels, see Goldstein 1979, pp. 218–219, nos. 627, 630; Müller 1964, p. 144, no. A 199a (formerly Kofler-Truniger Collection). For the same motif without the central yellow rod: Stern and Schlick-Nolte 1994, pp. 400–401, no. 143; Platz-Horster 2002, pp. 149–150, fig. 6; Arveiller-Dulong and Nenna 2011, p. 380, no. 617; Antonaras 2012, p. 291, no. 489.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 132, no. 361.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 460. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	2004.26.2
<b>Dimensions</b>	L. 4.4, W. 2.5 cm; Wt. 6.13 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Opaque red, yellow, white, and green and translucent green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; one straight edge of the original is preserved.

**DESCRIPTION** Plaque with floral decoration. Set on a translucent dark green-blue ground, the following motifs are discernible: one green and yellow poppy-like lotus fruit; a quatrefoil rosette formed by sequential layers (read from center to outer edge) of yellow, white, and red glass; a six-petal white flower with yellow center.

On the back side are visible the reinforcements of irregular pieces of ribbed glass of the different florets that compose the decorative theme.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.



This object is part of the largest known group of mosaic plaques, those decorated with floral motifs. They are almost exclusively found in Egypt, where they were made between the end of the first century BCE and the early first century CE. It has been estimated that the plaques were rectangles about 12–15 cm in height and 6–7 cm in width. The front side of the plaques is always ground and polished (Grose 1989, pp. 355–356). The motifs extend through the thickness, and the back side is partially covered by a backing of waste and chips of mosaic glass. The plaques adorned architectural elements and furniture. Two groups are distinguished on the basis of their quality: the finer and rarer one is characterized by a translucent cobalt blue or dark blue ground and carefully executed mosaic motifs; the second group, which is much more numerous, consists of thicker plaques with a translucent to transparent greenish-blue ground, with the motifs less regularly shaped and the backings usually made from a crude, uneven matrix of short, rectangular cane lengths.

Among the pieces in the Getty collection those on dark blue background prevail, with five examples (cats. 462, 464–466, 479), while those on greenish background number only two (cats. 460–461). The plants depicted are mostly lotus stalks and flowers (*Nelumbo nucifera*), ears of wheat, a bunch of grapes, all in profile; a four-petaled red and white flower, a star-shaped white flower, white and yellow circles, all three motifs as would be viewed from above.

For parallels, see Cooney 1976, pp. 132–134, nos. 1642–1663; Grose 1989, pp. 355–356, nos. 646–653, Ptolemaic cast floral plaques; Tatton-Brown 1991, p. 61, fig. 74; “Per-neb” Collection 1992, p. 11, no. 7; Stern and Schlick-Nolte 1994, pp. 404–407, nos. 146–147; Allen et al. 2001, p. 17; Miho Museum 2001, p. 86, no. 118; Spaer 2001, pp. 248–249, nos. 600–603; Platz-Horster 2002, pp. 147–149, fig. 1; Arveiller-Dulong and Nenna 2011, pp. 393–395, nos. 649–651; Antonaras 2012, pp. 288–289, nos. 478–482.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 461. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	2004.26.5
<b>Dimensions</b>	L. 4.0, W. 2.0 cm; Wt. 5.77 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Italy or Egypt
<b>Material</b>	Translucent light blue and opaque white, yellow, and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Parts of three flowers are visible: one with long yellow petals outlined in white; two more multipetaled flowers with yellow outlined in white and red, one smaller and the other much larger in size. The motifs are generally visible on the back side. Banded olive-green and murky colored patches of glass are visible in small areas.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449 and cat. 460.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 462. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	83.AF.28.21
<b>Dimensions</b>	L. 3.4, W. 2.9 cm; Wt. 7.28 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent green and opaque yellow, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Part of a mosaic inlay with floral motifs. On the preserved fragment, the following are depicted: a central vertical yellow stem with five elongated yellow-green leaves; two large, fan-shaped red and white flowers flank the stem; above it are three greenish-yellow stems with light blue and white leaves that probably ended in red, tulip-shaped flowers (cf. Grose 1989, no. 647).

On the back side are visible banded red and dark-colored reinforcing patches of glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 463. Fragment of a Mosaic Glass Plaque

<b>Accession Number</b>	83.AF.28.24
<b>Dimensions</b>	L. 1.9, W. 1.0, Th. 0.5 cm; Wt. 7.28 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent green and purple and opaque yellow, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The plaque consists of two types of florets: (a) square floret: eight angular yellow petals with a fine translucent purple central nerve-like center are set in a green square tile; (b) circular floret: a central yellow rod set in red is surrounded by eight angular yellow petals set in translucent green glass. On both sides, the same pattern.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



464. Fragment of a Mosaic Inlay  
with Floral Theme

<b>Accession Number</b>	76.AF.70.40
<b>Dimensions</b>	L. 1.6, W. 2.1, Th. 0.5 cm; Wt. 2.61 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent green and opaque turquoise, yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Translucent green matrix. One six-petal white flower with red circular center; a yellow stem with green and turquoise lanceolate leaves; and a row of yellow dots outlined in white, probably a wheat ear.

On the back side the motifs are distorted, forming banded patterns.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



465. Fragment of a Mosaic Inlay  
with Floral Theme

<b>Accession Number</b>	76.AF.70.38
<b>Dimensions</b>	L. 2.4, W. 2.2, Th. 0.3–0.5 cm; Wt. 3.76 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque yellow and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; two of the original edges, which form a right angle, are preserved.

**DESCRIPTION** In a dark blue matrix are partly preserved two yellow-and-white ribbed leaves and a small part of a red flower. On the back side behind the yellow leaves is a banded green, red, and white patch. The flower is a bit more visible there: it seems that it was quatrefoil, the petals white outlined in red (like those in cats. 460–461).

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



466. Fragment of a Mosaic Inlay  
with Floral Theme

<b>Accession Number</b>	76.AF.70.42
<b>Dimensions</b>	L. 1.2, W. 2.0, Th. 0.3 cm; Wt. 1.54 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque yellow, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; one straight edge of the original band is preserved.

**DESCRIPTION** Small fragment with part of a flower, probably quatrefoil, with white petals outlined in red. Yellow parts are visible in the cross section that, given the current state of the band, are not discernible on the surface. On the back side behind the flower is an opaque off-white patch.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



467. Fragment of a Mosaic Inlay  
with Floral Theme

<b>Accession Number</b>	76.AF.70.3
<b>Dimensions</b>	L. 1.9, W. 1.8, Th. 0.8 cm; Wt. 4.12 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, white, yellow, and turquoise and translucent green and purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment. Possibly one curved edge from the original piece.

**DESCRIPTION** Indiscernible motif on an olive-green background. Along the curved edge is a light blue and a green band. Two individual motifs are partly preserved. One, which is closer to the outer edge, consists of dark purple (seemingly black) concentric ovals in red, white, and black layers; over and adjacent to this shape, red and purplish features. The second consists of concentric ovals with a central green set in yellow, in red, and in green; adjacent is a turquoise blob on the one side and an elongated red and purplish one on the other.

On the back side, bands are visible, and for the part, the olive-green background is visible.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



468. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.25
<b>Dimensions</b>	L. 2.8, W. 1.0, Th. 0.3 cm; Wt. 1.88 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque purple, red, and white and translucent light blue glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** One side is covered with a thin (less than 1 mm) layer of purple, red, and white mixed in a wavy pattern that is not clearly defined. Possibly part of a floral motif. The matrix of the plaque is a variegated turquoise marble-like pattern composed of mixed blue and white glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



469. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.29
<b>Dimensions</b>	L. 1.2, W. 1.1, Th. 0.3–0.2 cm; Wt. 2.44 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque yellow, green, and turquoise glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Parts of a floral motif. From a seemingly circular yellow mass with white center stem four yellow stalks with green and turquoise lanceolate leaves. On the back side, a large part is covered by dark-colored pieces in which red, yellow, and turquoise bands are visible.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.



**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



#### 470. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.41
<b>Dimensions</b>	L. 1.3, W. 1.7, Th. 0.5 cm; Wt. 2.37 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow, white, and red and translucent blue glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment cut into a rectangular shape and polished all around.

**DESCRIPTION** White and transparent greenish central square within thick yellow circle set on translucent blue background. Some red features appear around one of the yellow motifs. Possibly a floral motif. On the back side appear the same motifs, mildly distorted.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



#### 471. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.1
<b>Dimensions</b>	L. 5, W. 2.6, Th. 0.6 cm; Wt. 10.40 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, white, and yellow; translucent grayish-green and turquoise glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Parts of three flowers appear on an olive-green background: (1) large part of a multipetaled flower with a central part consisting of a red rod set in white and grayish-green layers, surrounded by elongated turquoise petals outlined in grayish-green with a wide central nerve of the same glass; (2) quatrefoil flower with yellow central part and four white petals with red endings; (3) flower, probably a bud, with red petals and white and yellow striped interior.

On the back side, the motifs are partly visible, surrounded by variegated areas.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 472. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.6
<b>Dimensions</b>	L. 3.1, W. 2.0, Th. 0.3 cm; Wt. 3.21 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque white, yellow, and green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** On a dark blue background, parts of a flower with elongated white petals and green sepals with faint yellow strokes are preserved. The motif is clearly visible on the back side of the fragment.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 473. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.28
<b>Dimensions</b>	L. 2.2, W. 1.7, Th. 0.5 cm; Wt. 4.38 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque yellow, green, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment polished all around into a rectangular shape in modern times.

**DESCRIPTION** On a dark blue background, parts of a red and white flower and parts of distorted lanceolate green and turquoise leaves.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

EXHIBITIONS None



#### 474. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.30
<b>Dimensions</b>	L. 3.1, W. 2.4, Th. 0.5 cm; Wt. 7.00 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent dark blue and opaque green, yellow, turquoise, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The following floral features are partly preserved on a translucent dark blue (appearing black) background: two long stems with five rows of green and turquoise lanceolate leaves; two quatrefoil white and red flowers; three yellow rods set in white spots, probably buds or grains.

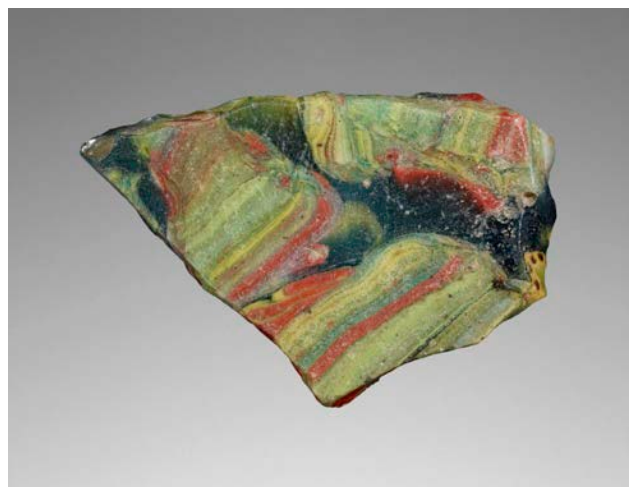
Most of the motifs are distorted on the back side.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

EXHIBITIONS None



#### 475. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.34
<b>Dimensions</b>	L. 3.4, W. 2.2, Th. 0.5 cm; Wt. 6.29 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque green, red, and yellow and translucent purple and blue
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The following floral features are partly preserved on a translucent dark green (appearing black) background: one large white and red flower and another whose center is a fine green cross surrounded by yellow, white, greenish, and yellow layers; a cluster of five white and red grains hanging from a curved green branch.

Parts of a lotus seed pod: circular green in the center surrounded by purple dots outlined in yellow. Turquoise elongated feature, probably part of a leaf or a petal.

All motifs are distorted on the back side, appearing variegated.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 476. Floral Plaque Fragment

<b>Accession Number</b>	76.AF.70.5
<b>Dimensions</b>	L. 3.4, W. 2.2, Th. 0.6 cm; Wt. 5.38 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent blue and opaque red and yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** In a dark blue matrix, parts of three red flowers. The one better preserved is a closed bud with red petals stemming from a yellow stalk and sepals.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 477. Floral Plaque Fragment

<b>Accession Number</b>	76.AF.70.12
<b>Dimensions</b>	L. 3.0, W. 1.6, Th. 0.6 cm; Wt. 5.87 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent dark blue-green and opaque yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment ground into a rectangular shape.

**DESCRIPTION** Floral features in a translucent dark blue-green matrix. A cluster of eight grapes hanging from a yellow stem. Each grape consists of yellow, white, and red semicircular features. One large, round flower with a red rod at the center surrounded by four white petals set in a green background, rendering the sepals. This is set in light green, white, and yellow layers. A larger plant with yellow stalk ending in a large, round flower, quite probably identical to the one described above. From the stalk stem four lanceolate leaves with a central red nerve; one half of the leaf is rendered in green and the other in turquoise glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 478. Floral Plaque Fragment

<b>Accession Number</b>	76.AF.70.20
<b>Dimensions</b>	L. 2.7, W. 1.8, Th. 0.3 cm; Wt. 3.23 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow and white and translucent bluish and purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment ground into an oval.

**DESCRIPTION** In a translucent bluish matrix three flowers are visible. The first has six yellow petals set in white arranged around a central yellow rod set in white. The second is round with a white square crossed by a translucent purple X, set in three concentric layers of yellow, becoming less intense toward the outer edge. The third has a wide central green rod surrounded by a layer of small purple dots set in yellow. Along one edge, an elongated, striped feature is partly preserved.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 479. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	76.AF.70.37
<b>Dimensions</b>	L. 1.5, W. 1.5, Th. 0.5 cm; Wt. 2.68 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent dark blue and opaque yellow, turquoise, and green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Two joining pieces. Fragment; two straight edges that form a right angle, probably from the original shaping of the object, are preserved.

**DESCRIPTION** On dark blue matrix, a central yellow stem with turquoise and green lanceolate leaves (like those on cat. 469) and a small part of a red flower, probably identical with that of cat. 462.

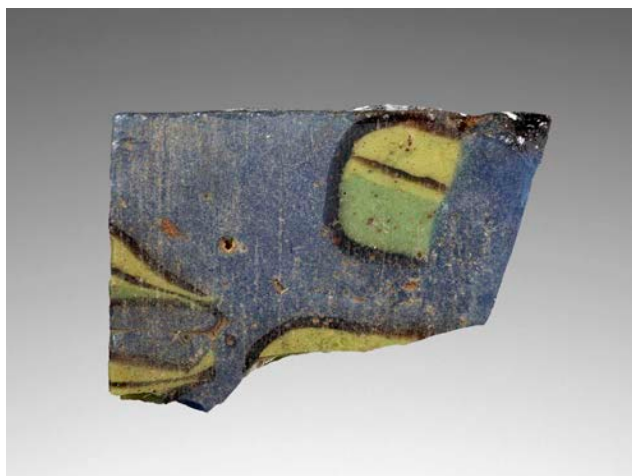
**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





## 480. Fragment of a Mosaic Inlay with Floral Theme

<b>Accession Number</b>	83.AF.28.15.a-b
<b>Dimensions</b>	Group record for two-part records with dimensions: 83.AF.28.15.a: L. 3.0, W. 2.1 cm; 83.AF.28.15.b: L. 2.7, W. 2.5 cm, W. (of the entire band) 3.8, pres. H. 2.9 cm; Wt. 8.95 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow and green and translucent dark blue and purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Two fragments; parts of two straight original edges forming a right angle are preserved.

**DESCRIPTION** Plaque or band with vertical floral pattern. Parts of two rows of decorative leaves appear in dark blue matrix in the preserved fragments. The elongated leaves are green and yellow outlined in translucent purple (appearing black). One half of the leaf is rendered with darker green glass and the other half with lighter, yellowish green glass, as if part of the plant was in shadow and the other in direct sunlight.

On the back side, the same motifs appear, distorted, and in big areas covered by translucent purple glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For closer parallels, see cat. 453.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 481. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	76.AF.70.8
<b>Dimensions</b>	W. 4.3, L. 2.2, Th. 0.5 cm; Wt. 6.59 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white and translucent purple and amber-colored glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Indiscernible pattern. Florets of white rods set in purple and stripes of amber, beige, and white glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 482. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	76.AF.70.43
<b>Dimensions</b>	L. 1.4, W. 1.7, Th. 0.2 cm; Wt. 1.19 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow and translucent green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; two straight sides that form a right angle are preserved.

**DESCRIPTION** On a green background, yellow circles are arranged. Motifs appear on both sides.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 483. Fragment of a Mosaic Inlay with Marbled Motif

<b>Accession Number</b>	76.AF.70.26
<b>Dimensions</b>	L. 3.3, W. 2.4, Th. 0.7 cm; Wt. 7.00 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow and purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** On one side is a wavy pattern of yellow and purple glass imitating agate or onyx. The other side bears a multicolored pattern of layers of green, blue, red, white, and yellow glass.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



484. Fragment of a Mosaic Inlay  
with Marbled Motif

<b>Accession Number</b>	76.AF.70.13
<b>Dimensions</b>	L. 2.1, W. 1.6, Th. 0.2 cm; Wt. 1.84 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Assembled from fused composite canes; slumped and rotary pressed

**CONDITION** Fragment; two straight edges that form a right angle are preserved.

**DESCRIPTION** The pattern is marbled, with irregular white veins on dark purple background.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For vessels with the same pattern, see cat. 132.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



485. Fragment of a Mosaic Inlay  
with Marbled Motif

<b>Accession Number</b>	76.AF.70.45
<b>Dimensions</b>	L. 1.7, W. 1.6, Th. 0.2 cm; Wt. 1.70 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque white and translucent purple glass
<b>Modeling Technique and Decoration</b>	Assembled from fused composite canes; slumped and rotary pressed

**CONDITION** Fragment; three straight sides that form a rectangle are preserved.

**DESCRIPTION** The pattern is marbled, with faint, irregular white veins on dark purple background.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For vessels with the same pattern, see cat. 132.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 486. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	76.AF.70.27
<b>Dimensions</b>	L. 2.4, W. 2.4, Th. 0.2 cm; Wt. 3.36 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent green and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The fragment was cut into a square tile, probably in antiquity. Three sides are carefully grozed; the edge of the fourth side is broken. The green body is decorated with yellow rods, which appear, faintly, lengthwise due to the distortion of the mass when it was formed by slumping.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 487. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	76.AF.70.7
<b>Dimensions</b>	L. 4.0, W. 2.3, Th. 0.2 cm; Wt. 3.67 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent olive-green and opaque green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The fragment was cut into an angular tile, possibly a lozenge, probably in antiquity. The dark olive-green body is decorated with opaque green rods, which appear lengthwise due to the distortion of the matrix when it was formed by slumping.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 488. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	76.AF.70.35
<b>Dimensions</b>	L. 1.5, W. 1.5, Th. 0.3 cm; Wt. 1.60 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent green and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The fragment seems to have been cut into a square tile, probably in antiquity. The green body is decorated with yellow rods that appear obliquely lengthwise due to the distortion of the matrix when it was formed by slumping.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 489. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	83.AF.28.25
<b>Dimensions</b>	L. 1.4, W. 1.0, Th. 0.5 cm; Wt. 1.01 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent purple and green and opaque yellow glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Translucent purple ground that appears as black, against which are yellow rods set on a translucent green background; distortion makes these appear as yellow lengths set in green.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None





490. Fragment of a Mosaic Inlay  
with Marbled Motif

<b>Accession Number</b>	2004.26.1
<b>Dimensions</b>	L. 4.5, W. 3.9 cm; Wt. 6.13 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent light and dark amber-colored and opaque white glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** On both sides, slightly differing wavy pattern of opaque white and translucent amber-color glass imitating agate or onyx.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



491. Fragment of a Mosaic Inlay  
with Floral Motif

<b>Accession Number</b>	2004.26.4
<b>Dimensions</b>	L. 3.2, W. 2.9 cm; Wt. 6.00 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, yellow, green, and white and translucent blue glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Mosaic inlay with floral motif. The basic motif, set in a checkerboard pattern, consists of a flower with four triangular green petals outlined in yellow, set in a red square with concave sides framed by four blue ovals outlined in white. Each tessera is lozenge-shaped, and along each center is placed the oval motif that stretches to the two corners. On each of the other two corners is a green triangle set in yellow. Four such tesserae form the quatrefoil flower motif, framed by ovals, which is set in a checkerboard pattern that covers the plaque.

Back side mainly murky green with some red areas only partly visible.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For a closer parallel, see Arveiller-Dulong and Nenna 2011, p. 380, no. 617.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 492. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	2003.258.7
<b>Dimensions</b>	W. 3.3, L. 4.0 cm; Wt. 9.78 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent purple and opaque green, yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** Flat mosaic inlay. A checkerboard pattern of adjoining lozenges comprising tiny polychrome square tesserae arranged to form a diamond pattern. Each floret consists of a lozenge composed of a square central

translucent purple tessera surrounded by bands of white, red, purple, green, yellow, purple, white, and red glass tesserae set in a translucent purple band.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449. For parallels with identical motifs, see Fitzwilliam 1978, p. 28, no. 45, from Egypt; Grose 1989, p. 363, no. 634; Arveiller-Dulong and Nenna 2011, p. 390, nos. 644–645; unpublished example at Metropolitan Museum of Art (26.7.1243): <https://www.metmuseum.org/art/collection/search/571962>; also, same pattern in slightly different combinations, Metropolitan Museum of Art (26.7.1242), unpublished: <https://www.metmuseum.org/art/collection/search/571961>.

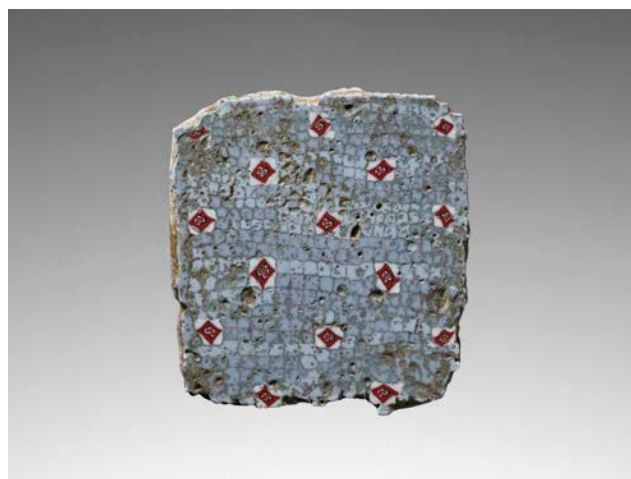
For a double-convex bowl made of mosaic glass with this checkerboard motif, see Christie's 1985, p. 97, no. 173.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 332; p. 121, plate no. 332.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 493. Fragment of a Mosaic Inlay with Geometrical Motif

<b>Accession Number</b>	2003.265
<b>Dimensions</b>	H. 3.6, W. 3.8, Th. 0.14 cm; Wt. 9.20 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, white, and gray and translucent purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Square tile.

**DESCRIPTION** A kind of checkerboard motif covers the plaque, on which are preserved 27 columns with 23 rows. The background contains square gray tesserae (1.5 × 1.5 cm) and slightly smaller light gray (approx. 1.2 × 1.2 cm) ones, which appear every few (two to six) rows. Aligned with the light gray tesserae are fifteen mosaic tesserae present in six rows; these are four times larger (3.4 × 3.4 cm) than the gray ones, and they form a loose network of lozenges. In each mosaic tessera, a freely designed, four-petaled rosette is set in a red square background, which is set diagonally in a white square. The petals are formed by white and black (translucent purple?) curved lines. The mosaic tesserae are aligned with lighter gray tesserae every few rows of darker gray tesserae, which form the main background.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 121, 126, no. 336k.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 494. Fragment of a Mosaic Inlay with Floral Motif

<b>Accession Number</b>	76.AF.70.31
<b>Dimensions</b>	L. 1.9, W. 1.6, Th. 0.5 cm; Wt. 3.90 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, yellow, and green and translucent purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; two of its original sides, which almost form a right angle, are preserved.

**DESCRIPTION** Front side: One floret with central red rod set in yellow, set in red, surrounded by a layer of green petals outlined in yellow; set in green background.

Back side: Covered by a dark purple (seemingly black) layer.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cat. 449.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Wight 2011, pp. 104, 122, fig. 91.

**EXHIBITIONS** None



## 495. Statuette of a Snake

<b>Accession Number</b>	2003.257
<b>Dimensions</b>	L. 36.0, avg. W. 2.0 cm; Wt. 66.82 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque yellow, dark blue, and white glass
<b>Modeling Technique and Decoration</b>	Free-modeled with tools; applied marvered threads

**CONDITION** Large parts are restored. Iridescence and pitting on glass sections. Stress marks on the underside.

**DESCRIPTION** Free-formed mosaic glass snake made up of sections of glass. Curvilinear body of a snake, hemispherical in cross section, underside flat but uneven. Yellow marvered trails were applied on the body (which may be modern) to represent the scales. The head in its current condition is in profile and is made of dark blue canes embedded in opaque white glass, with a section of axially cut opaque white for the mouth and a section of black for the pupil of the eye.

**COMMENTS AND COMPARANDA** This is a rare surviving product of modeled Roman glass, consisting of colored threads marvered into a colorless or lightly colored matrix and tooled into a serpentine, wavy shape. In its original form it showed the lozenge-shaped head of the reptile from above, as the rest of the body is presented. The single fully preserved known example (Miho Museum 2001, p. 96, no. 128 [A. Yoko]: H. 13, W. 10.6

cm, reddish brown glass wrapped in white and pale blue cords of glass) has its body curling into two large folds, assuming an approximately figure eight-shaped form that is evident in other partly preserved examples (Corning 1962, p. 8, fig. 5; Goldstein 1979, pp. 212–213, nos. 601–604; Grose 1989, pp. 359, 372, nos. 678–680; also, New Orleans Museum of Art 69.79, illustrated in Grose 1989, p. 359, fig. 174). Finally, six partly preserved examples, possibly included among the previously mentioned examples, were part of the Collection Julien Gréau, bought by Pierpont Morgan and donated to the Metropolitan Museum of Art (Froehner 1903, plate LXXI, nos. 10–15).

The exact use is not known, but the flat underside indicates that it was or could have been a decorative inlay in furniture or an architectural element. It seems logical to connect this statuette with depictions of Agathodaimon, a lesser god in the form of a benevolent serpent. In urban contexts, it appears as a household god, protector of the home in which it was worshiped. Agathodaimon in different contexts was a guarantor of agrarian fertility (*LIMC* I, pp. 277–282, s.v. “Agathodaimon” by F. Dunand). For a relief snake in the wall of a lararium in a Pompeian house in Regio IX that predates the Vesuvian eruption of 79 CE, see Curuz 2023.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 123, no. 331. Wight 2011, pp. 103, 110, fig. 78.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 496. Fragment of a Mosaic Inlay with Maritime Motif

<b>Accession Number</b>	2003.266
<b>Dimensions</b>	L. 4.5, W. 2.6, Th. 0.4–0.3 cm; Wt. 7.21 g
<b>Date</b>	Probably third century CE
<b>Production Area</b>	Egypt or Rome
<b>Material</b>	Opaque yellow, red, green, white, blue, and turquoise glass
<b>Modeling Technique and Decoration</b>	Mosaic

**CONDITION** Fragment, broken all around. The surface is slightly pitted.

**DESCRIPTION** The head and upper body of a multicolored fish appear against a turquoise background. All the colorful elements of the motif are a form of incrustation (Th. approx. 1 mm), set in the turquoise ground (Th. 2 cm) of the plaque. Originally the decoration was thicker too, but it was polished, probably in antiquity, as the pitting on the front surface indicates. Most probably the multicolored features of the fish were arranged on a surface and then the turquoise layer was applied over them. The back side is anomalous, uneven and rough, with elongated indentations, tooling marks of the production procedure.

The lower part of the fish is turquoise and outlined with a white band. The upper part has also green areas and is outlined with dark blue. A vertical wavy band of three red and two thinner dark green stripes indicate the gill slits. A wide white band delineates either the end of the head or some striping of the actual fish species rendered on the plaque. The fins are very long, and they are made of a

series of wider green and fine dark green, yellow, and red stripes, outlined with a fine red stripe. The eye is made of a wide green oval with a small white triangle, which renders the reflection of the light in the pupil, surrounded with fine yellow and red rings.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

The fish most resembles the yellowfin tuna in the colors of the body and the fins, in addition to their characteristic elongated form and the shape of the head. This species has its habitat in the Atlantic Ocean; there are other species of tuna that migrate in the Mediterranean, especially bluefin tuna, which is known to have been fished from prehistoric times and in a more organized fashion at least from the sixth century BCE by Phoenicians on the Atlantic and in the western Mediterranean and by Greeks in the Black Sea, even appearing on third- and second-century BCE coins minted in Spain, Portugal, Italy, Greece, and Asia Minor, showing the economic importance of this trade in that period (Mastromarco 1988; Curtis 2005; Pepe 2006; Di Natale 2012; Di Natale 2014).

Fragments of several inlay plaques and plates with fish motifs are known, apparently products of a specialized workshop; it has even been proposed that they were sold as half-finished products for use by glassworkers and other artisans (Weinberg and Stern 2009, p. 86). Published parallels include the following: finds from Athenian Agora, dated around the middle of the third century CE (Weinberg 1962, pp. 29–36; Brill 1962, pp. 37–48; Weinberg and Stern 2009, pp. 84–86, no. 153); Corinth, dated in the third century CE (Williams and Zervos 1982, pp. 133–134, plates 42a, 43; Oliver 2001; Antonaras 2022a, pp. 71–73, no. 447); Rimini, dated in the third century CE (Ortalli 2000, pp. 516, 519–520, no. 183); Narbone, dated in the third century CE (Feugère 2001, pp. 15–16, fig. 5); Lechaion (Ibrahim, Scranton, and Brill 1976, panels 16–17, pp. 72, 86, figs. 31, 87, 88, 91, 92). Other, unprovenanced finds are in museum and private collections: the Fitzwilliam Museum, Cambridge (Fitzwilliam 1978, p. 28, no. 43); Corning Museum of Glass (Goldstein 1979, pp. 195–196, 264–265, nos. 532, 533, 792–796, color plates 29, 35, 36); formerly in the Kofler-Truniger Collection (Christie's 1985, p. 118, no. 226, color ill.); Toledo Museum of Art (Grose 1989, pp. 367–368, nos. 654–656); Württembergisches Museum Stuttgart (Stern and Schlick-Nolte 1994, pp. 408–409, no. 148); Borowski Collection



(Bianchi 2002, p. 154 nos. EG-39a–c); Metropolitan Museum of Art (17.194.1504a–d: <https://www.metmuseum.org/art/collection/search/250145>; 10.130.2692: <https://www.metmuseum.org/art/collection/search/570436>; 26.7.1199: <https://www.metmuseum.org/art/collection/search/551563>).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 337.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



497. Fragment of a Mosaic Inlay with Maritime Motif

<b>Accession Number</b>	76.AF.70.14
<b>Dimensions</b>	L. 3.5, W. 1.9, Th. 0.2 cm; Wt. 3.05 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent purple and opaque green, white, and red glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; two of the original, rounded edges preserved.

**DESCRIPTION** Wide, wavy bands of red and light green divided by three fine dark green lines and white glass. On one edge of this band, a short, bending, applied, red feature is preserved.

**COMMENTS AND COMPARANDA** Possibly part of a maritime presentation, part of the body of a fish. Probably from the same object as cat. 498, although that piece is thicker (Th. 0.5 cm). For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460. For maritime motifs on incrustations, see comments on cat. 496.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



498. Fragment of a Mosaic Inlay with Maritime Motif

<b>Accession Number</b>	76.AF.70.16
<b>Dimensions</b>	L. 2.5, W. 1.9, Th. 0.5 cm; Wt. 3.87 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red and yellow and translucent green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment; two of the original, rounded edges are preserved.

**DESCRIPTION** Wavy lines of green and yellow glass converging toward the edge, which is not preserved. On one edge of this band, a tiny remnant of a red feature is preserved. The motifs are visible, partly distorted, on the back side of the plaque.

**COMMENTS AND COMPARANDA** Possibly part of a maritime presentation, part of the body of a fish. Probably from the same object as cat. 497, although that piece is only 0.2 cm thick. For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460. For maritime motifs on incrustations, see comments on cat. 496.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



499. Fragment of a Mosaic Inlay with Marine (?) Motif

<b>Accession Number</b>	83.AF.28.9
<b>Dimensions</b>	L. 1.5, W. 2.3, Th. 0.2 cm; Wt. 1.70 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, yellow, and green and translucent olive-green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** The same pattern appears on both sides. Could be the body of a fish or eel. Rectangular piece, cut in this shape in antiquity. Along the upper edge, a translucent olive-green band. Along the lower edge, an applied opaque red band. The body is made of rows of florets, each of them composed of a red central rod set in green and yellow layers, on a green background, giving the impression of fish scales.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460. For maritime motifs on incrustations, see comments on cat. 496.

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



500. Fragment of a Mosaic Inlay with a Fish

<b>Accession Number</b>	83.AF.28.26
<b>Dimensions</b>	L. 3.1, W. 1.8, Th. 0.4 cm; Wt. 3.12 g
<b>Date</b>	Possibly first century BCE–first century CE; more probably third century CE
<b>Production Area</b>	Egypt or Rome
<b>Material</b>	Dark blue and opaque green, red, and white glass
<b>Modeling Technique and Decoration</b>	Fused lengths and sections of mosaic canes with details fused on the surface

**CONDITION** Fragment; part of one edge is preserved.

**DESCRIPTION** Part of the representation of a fish. Rows of greenish and blue semicircular motifs, representing fish scales, outlined with a white straight band, probably the outline of the body, below which are obliquely arranged red and green sections on a dark blue background, probably a fin. On the back side, the motifs are clearly visible, undistorted.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460. On glass panels and vessels with mosaic fish motifs, see comments and parallels cited for cat. 496.

In the rendering of the scales, the colors of the fins, and even the white outline of the body, this vessel is connected directly with fragments in the Corning Museum of Glass (Goldstein 1979, p. 265, no. 794, plate 35; Harden et al. 1987, p. 31, no. 9, 61.1.6: <https://glasscollection.cmog.org/objects/6202>) and the Metropolitan Museum of Art (10.130.2692: <https://www.metmuseum.org/art/collection/search/570436>; 26.7.1199: <https://www.metmuseum.org/art/collection/search/551563>).

**PROVENANCE** 1983, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



501. Fragment of a Mosaic Inlay with Geometrical Motif

**Accession Number** 76.AF.70.11  
**Dimensions** L. 3.5, W. 2.0, Th. 0.3 cm (matrix: 0.2 cm; colored elements: 0.1 cm); Wt. 3.21 g  
**Date** First century BCE–first century CE

**Production Area** Egypt or Italy  
**Material** Opaque white and turquoise and translucent purple glass  
**Modeling Technique and Decoration** Fusion

**CONDITION** Fragment, broken all around.

**DESCRIPTION** White and turquoise stripes of various widths curving on a dark, translucent purple background. The back of the inlay was scored, while still hot, with parallel and crosshatched grooves that form a loose network of lozenges, probably for better adhesion of the tile to the object in which it was set.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see comments on cats. 449 and 460.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



502. Vessel Fragment with a Man Holding the Bridle of a Horse

**Accession Number** 2003.353  
**Dimensions** pres. H. 2.8, Th. 0.4 [green 0.3; white 0.1] cm; Wt. 4.15 g  
**Date** Perhaps first century CE  
**Production Area** Eastern Mediterranean, probably Italy  
**Material** Opaque white and green glass

**Modeling Technique and Decoration** Cast in a mold, ground and polished

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**CONDITION** Vessel fragment in fair condition. Surface is slightly pitted.

**DESCRIPTION** Body fragment, slightly convex in horizontal cross section, of a cameo glass vessel. The outside is decorated in cameo technique. The decoration is opaque white and the background is opaque green. The fragment shows the upper body of a frontal young male figure, facing to the left, beardless, with short hair, whose chest is bare and who wears a cloak (chlamys) attached around his neck and thrown back over his shoulders. The folds of the edge of the chlamys wrap over his extended left arm. He wears wide, loose trousers, the *braccae* or ἀναζυρίδες worn by barbarians, forming a fold around his waist and covering the drawstring that kept it in place (Mau 1893). The figure is a barbarian ostler. His right arm is extended upward to grasp the bridle of a rearing horse. All that is preserved of the horse is the end of the muzzle, the chest, and the two front legs. Next to the extended left arm at the end of the preserved fragment is a raising of the ground, quite probably the beginning of another figure or motif.

The back side is mildly uneven and generally smooth, except for three curved, slanting ridges. Practically no pitting observable.

**COMMENTS AND COMPARANDA** On cameo glass vessels, see comments on cat. 82. This fragment differs from the majority of glass cameos in its green lower layer, and no true parallels have been located.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 191, no. 522.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 503. Plaque Fragment with Floral Tendril Decorations

<b>Accession Number</b>	2003.355
<b>Dimensions</b>	pres. H. 3.5, pres. W. 2.5, Th. 0.7 cm; Wt. 10.00 g
<b>Date</b>	Early first century CE
<b>Production Area</b>	Probably Italy
<b>Material</b>	Opaque light blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed

**CONDITION** Fragment; the upper left corner of an originally rectangular plaque is preserved.

**DESCRIPTION** On the fragment is relief decoration in the form of a two-tiered tendril with voluminous, modular stems, which end in a tripartite tip. Four-petaled flowers hanging from minuscule stems fill the areas between the branches of the tendril. The plaque is opaque light blue glass throughout its thickness. The rear of the plaque is flat but rough, dull, and pitted. It preserves two of the original edges at the upper and left sides, which are vertical and smooth.

**COMMENTS AND COMPARANDA** In Roman times, in about the first century CE, molded glass inlay plaques, mainly rectangular or rounded in shape, appear in relatively large numbers. In general, Roman molded decorative plaques appear to be either single-colored, sometimes made throughout of one single color or having internally a core of a different color (white or translucent bluish), or they are cameos presenting the relief decoration usually in two—but less often in more—layers



of different colors. They are formed by pressing glass in an open mold, or in the case of multilayered polychromic objects, by the pressing and fusion of layers of powdered glass, one for each layer of different color (Lierke 1999, pp. 78–80). Medusa heads (Harden et al. 1987, p. 30, no. 8; Spaer 2001, p. 254, nos. 613–614; Arveiller-Dulong and Nenna 2011, pp. 399–401, nos. 655–662) are common motifs, and human portraits, masks, and other figurative motifs appear too (Alfano 1997, p. 210, no. 221; Whitehouse 1997a, pp. 20–22, 26–27, nos. 7–12, 20–22; Spaer 2001, p. 254, no. 612; Arveiller-Dulong and Nenna 2011, pp. 401–403, nos. 663–672; Gerspach 1885, p. 43, fig. 16 = Victoria and Albert Museum, C.126-1911 <https://collections.vam.ac.uk/item/O2354/panel-unknown/>; Victoria and Albert Museum, 1072-1868 <https://collections.vam.ac.uk/item/O127/panel/>), as are vegetal motifs, like oak leaves and acorns (Whitehouse 1997a, pp. 22–23, nos. 13–14, 16; Miho Museum 2001, p. 71, no. 83–84 [A. Yokoi]; Arveiller-Dulong and Nenna 2011, p. 403, nos. 673–676).

Identical to 2003.355 seem to be two pieces from old Italian collections (Arveiller-Dulong and Nenna 2011, p. 403, no. 674; Whitehouse 1997a, p. 22, no. 13); the second is fully preserved, providing information about the exact positioning of the fragment and the dimensions of the original plaque (H. 7.7, W. 4.5 cm). Regarding the rest of the motif, it becomes evident that it was even more diverse, with the two lower rows of the foliage bearing bell-shaped flowers, which might be the same as the four-petaled flowers on the top row, only presented in profile. In addition, the Oppenländer collection contained yet another fragment of a very similar plaque (von Saldern et al. 1974, p. 192, no. 525a).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 192, no. 525b.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 504. Appliqué with a Comic Mask / Jug

<b>Accession Number</b>	2003.358
<b>Dimensions</b>	H. 3.5, W. 3.9 cm; Wt. 29.44 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent olive-green glass
<b>Modeling Technique and Decoration</b>	Free-blown (jug) and mold pressed (medallion); applied elements (medallion)

**CONDITION** Fragment. Surface bears patches of iridescence.

**DESCRIPTION** A stamped, roughly discoid appliqué with a theater mask. Comical mask with small, circular eye openings, wide-open smiling mouth, a prominent wig composed of 26 radiantly arranged ribs, and a protuberance on the center of the forehead. Visible on the back side are traces of the strap handle and the body of the jug this once decorated.

**COMMENTS AND COMPARANDA** Discoid medallions decorated with molded relief motifs were used to embellish sumptuous tableware, predominantly jugs and bowls, from the first century CE and again in the third–fourth centuries CE (Antonaras 2017, pp. 167–169, form 149). The medallion was usually placed on the base of the jug handle. Alternatively, it may have been added either singly or as one of a group of stamped bosses on



the body of the vessel (von Saldern 1968, no. 55; Isings 1964, pp. 59–63; Harden et al. 1968, p. 85, no. 112; Harden et al. 1987, pp. 204–205, no. 113). In addition to theatrical masks, which have been associated with the role of the “hegemon therapon,” that is, the older, principal slave from Greek comedy (Arveiller-Dulong and Nenna 2005, p. 429), the repertoire included heads of Medusa, Silenus, and satyrs; several objects connected to the cult of Dionysus (such as the thyrsus and Pan pipes); and lion heads. For more parallels with theatrical masks, see Edgar 1905, plate 10, nos. 32.762–767; Auth 1976, p. 107, no. 123; Clairmont 1977, plate 12, no. 39; Welker 1987, p. 17, no. 10 (left, 87.61); Sangiorgi Collection 1999, p. 66 nos. 153–154 and 157; Whitehouse 2001b, pp. 232–233, nos. 811–812; Israeli 2003, p. 190, no. 224; Arveiller-Dulong and Nenna 2005, pp. 440–441, nos. 1227–1234; Lightfoot 2007, p. 180, no. 464; Antonaras 2012, p. 282, no. 464.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 193, no. 529.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



505. Appliqué Relief with a Comic Mask / Jug

<b>Accession Number</b>	2003.359
<b>Dimensions</b>	H. 3.3, W. 3.1 cm; Wt. 17.96 g
<b>Date</b>	Third–fourth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent blue (medallion) and colorless greenish glass (vessel)
<b>Modeling Technique and Decoration</b>	Free-blown (jug) and mold pressed (medallion); applied elements (medallion)

**CONDITION** Fragment. Surface bears patches of iridescence. Lower part of the stamp is missing.

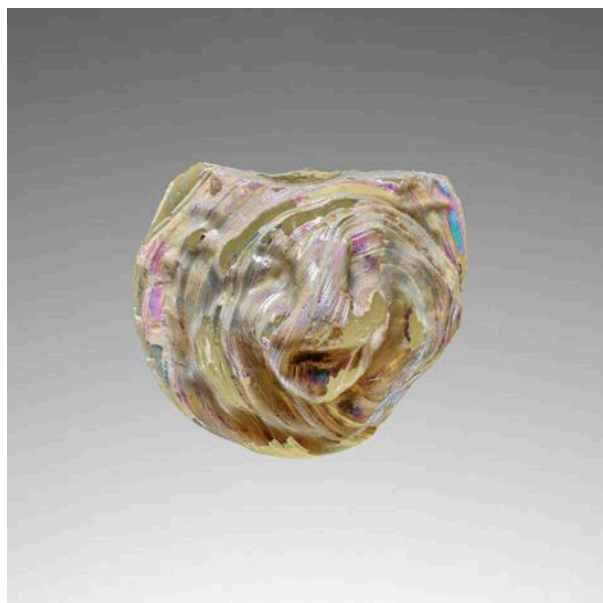
**DESCRIPTION** Roughly discoid appliqué, stamped in dark blue glass, with a theater mask. Comical, beardless, male mask with small, circular eye openings, wide-open smiling mouth, a prominent wig comprising 24 radiantly arranged ribs, and a protuberance on the center of the forehead. Visible on the back side are traces of the colorless greenish body of the vessel the medallion once decorated.

**COMMENTS AND COMPARANDA** See cat. 504.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 194, no. 531.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 506. Appliqué with a Lion's Head

<b>Accession Number</b>	2003.360
<b>Dimensions</b>	pres. H. 2.1, pres. W. 2.4, max. Th. 1.9 cm; Wt. 8.10 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Vessel: free-blown with applied element; appliqué: molded and applied

**CONDITION** Largely complete. Surface is covered with iridescence. Large fragments are missing around the edges above the head and under the chin.

**DESCRIPTION** Roughly circular appliqué medallion in the form of a lion's head. Rich mane surrounds the head on all sides; aquiline snout, pronounced eyebrows, and wide-open mouth.

On the back side is preserved the part of the vessel body (Th. 0.1 cm) to which this was attached.

These medallions were mostly placed at the base of a jug handle, or around the body of a bowl.

**COMMENTS AND COMPARANDA** See comments on cat. 504. In addition see Edgar 1905, p. 78, no. 32.768; Davidson 1952, plate 54, no. 618; Kunina 1997, p. 208, no. 175a, b; Hayes 1975, p. 144, nos. 605, 606; Whitehouse

2001b, pp. 233–234, nos. 814–816; Antonaras 2012, p. 282, no. 462.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 194, no. 532.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 507. Appliqué with a Lion's Head

<b>Accession Number</b>	80.AF.76
<b>Dimensions</b>	L. 2.5, W. 2.2 cm; Wt. 6.83 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Vessel: free-blown; appliqué: molded and applied

**CONDITION** Largely complete. Small fragments missing around the edges.

**DESCRIPTION** Roughly circular appliqué medallion in the form of a lion's head. Rich mane surrounds the head

on all sides; aquiline snout, pronounced eyebrows, and wide-open mouth.

On the back side is preserved the part of the vessel body to which this was attached.

**COMMENTS AND COMPARANDA** See cats. 504 and 506.

**PROVENANCE** 1980, David Swingler, American, born 1948, donated to the J. Paul Getty Museum, 1980

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 508. Fish-Shaped Appliqué / Conchylienbecher (Shell Beaker)

<b>Accession Number</b>	2003.405
<b>Dimensions</b>	L. 3.5, W. 1.1 cm; Wt. 4.92 g
<b>Date</b>	Late third–early fourth centuries CE
<b>Production Area</b>	Cologne or Trier
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown and tooled

**CONDITION** Fragment.

**DESCRIPTION** Appliqué in the shape of a fish. The mouth forms the opening, and there is a large dorsal fin with vertical striations separately applied. The end of the tail has broken off. On the back side of the fish's body is visible the scar from the point that connected the appliqué to the vessel.

**COMMENTS AND COMPARANDA** This appliqué belongs to a type of cup, known as conchylia cups, that was decorated with three or four rows of fish, shells, and other sea creatures. These faced left, like this example, or more rarely vertically (on the class, see Doppelfeld 1973; Doppelfeld 1976). Three of the known examples were found in Cologne (Fremersdorf 1961, pp. 23–24, plate 15 and pp. 26–27, plate 21; Doppelfeld 1973, pp. 281–283, figs. 1–3; *Glass from the Ancient World* 1957, p. 255, no. 144), one from Trier (Goethert-Polaschek 1977, pp. 63–64, no. 241, and p. 319, tomb 252, plate 24), and one from Rome (Fremersdorf 1975, pp. 72–73, no. 706, plate 32). Single fish have been found around the Mediterranean, such as at Corinth (Davidson 1952, p. 98, no. 619, plate 54; Antonaras 2022a, pp. 52, 98, no. 201) and on Crete (Price 1992, pp. 428, 447, no. 160); others were purchased in eastern Mediterranean cities, such as Cairo (*Glass from the Ancient World* 1957, p. 163, no. 336; Whitehouse 2001a, p. 237, no. 824) and Tyre (Arveiller-Dulong and Nenna 2005, no. 981); and yet another, unprovenanced, has been published (Schlick-Nolte 2002, p. 102, no. V-64). They are considered to be products of the region of Cologne or Trier, and of another production center on the Mediterranean. The few of them that have been dated independently are placed at the end of the third–early fourth century CE.

The fact that several single fish appliqués have been unearthed as isolated excavation finds indicates that once they were separated from the body of the vessel they were kept and repurposed, probably as amulets (Stern 2001, p. 141).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 215, no. 623.

Wight 2011, pp. 97, 100, fig. 70.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 509. Spacer-Bead

<b>Accession Number</b>	2003.214.1
<b>Dimensions</b>	L. 4.2, W. 1.8, Th. 1.0 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Partly preserved.

**DESCRIPTION** Vertical rectangular panel tapering toward the base; uneven, flat back; straight sides (top and bottom missing); a large hole running horizontally through volute at bottom; one hole on the preserved upper part. Molded decoration on front: a series of two volutes appear on the preserved fragment; the entire bead quite probably comprised three volutes, each with a truncated pyramidal spike projecting out at left; three pairs of wavy lines in relief run vertically down the reels, with probably six finer lines between spikes on left.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526. For direct comparanda, see cat. 532.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 510. Spacer-Bead

<b>Accession Number</b>	2003.214.2
<b>Dimensions</b>	H. 4.4, W. 1.7, Th. 1.0 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Partly preserved.

**DESCRIPTION** Vertical rectangular panel tapering toward the base; uneven, flat back; straight sides, (top and bottom missing). One hole on the preserved upper part. Molded decoration on front: a series of two volutes appear on the preserved fragment; the entire bead quite probably comprised three volutes (a large hole was running horizontally through the volute at the bottom), each with a truncated pyramidal spike projecting out at

left; three pairs of wavy lines in relief run vertically down volutes, with probably six finer lines between spikes on left.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Römisch-Germanisches Museum (Cologne, June 20 to September 14, 1975)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Museum für Kunst und Gewerbe Hamburg (Hamburg, October 4 to November 17, 1974)



## 511. Spacer-Bead

**Accession Number** 2003.214.3

**Dimensions** H. 2.7, W. 1.0, Th. 0.5 cm

**Date** 1400–1200 BCE (LH IIIA–LH IIIB)

**Production Area** Aegean region

**Material** Translucent dark blue glass

**Modeling Technique and Decoration** Mold pressed in an open mold

**CONDITION** Intact.

**DESCRIPTION** Vertical rectangular panel tapering toward the base; uneven, flat back; straight sides, (top and bottom missing). One hole on the preserved upper part. Molded decoration on front: a series of two volutes appear on the preserved fragment; the entire bead quite probably comprised three volutes (a large hole was running horizontally through the volute at the bottom), each with a truncated pyramidal spike projecting out at left; three pairs of wavy lines in relief run vertically down volutes, with probably six finer lines between spikes on left.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)





## 512. Spacer-Bead

<b>Accession Number</b>	2003.214.4
<b>Dimensions</b>	H. 2.6, W. 1.0, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with two raised, six-petaled rosettes with rounded central knob.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 513. Spacer-Bead

<b>Accession Number</b>	2003.214.5
<b>Dimensions</b>	H. 1.9, W. 1.1, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact.

**DESCRIPTION** Spacer-bead in the shape of a rectangular plaque. The ends are pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized motif of two Argonauts placed back-to-back. The ribbed egg cases, or shells, cover the upper central part of the plaque. Three of the tentacles of each animal are presented, curved and extending to the ends of each side of the plaque; at the center of the plaque are the eyes.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 514. Spacer-Bead

<b>Accession Number</b>	2003.214.6
<b>Dimensions</b>	H. 2, W. 1.2, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact.

**DESCRIPTION** Spacer-bead in the shape of a rectangular plaque. The ends are pierced by a transverse thread hole.

The underside is glossy and concave; the upper side is decorated with a raised, stylized motif of two argonauts placed back-to-back. The ribbed egg cases, or shells, cover the upper central part of the plaque. Three of the tentacles of each animal are presented, curved and extending to the ends of each side of the plaque; at the center of the plaque are the eyes.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 515. Spacer-Bead

<b>Accession Number</b>	2003.214.7
<b>Dimensions</b>	H. 2.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)

<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact.

**DESCRIPTION** Spacer-bead in the shape of a rectangular plaque. The ends are pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized motif of two argonauts placed back-to-back. The ribbed egg cases, or shells, cover the upper central part of the plaque. Three of the tentacles of each animal are presented, curved and extending to the ends of each side of the plaque; at the center of the plaque are the eyes.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 516. Spacer-Bead

<b>Accession Number</b>	2003.214.8
<b>Dimensions</b>	H. 3.1, W. 1.2, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 517. Spacer-Bead

<b>Accession Number</b>	2003.214.9
<b>Dimensions</b>	H. 3.0, W. 1.4, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave, the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Römisch-Germanisches Museum (Cologne, June 20 to September 14, 1975)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

Museum für Kunst und Gewerbe Hamburg (Hamburg, October 4 to November 17, 1974)



### 518. Spacer-Bead

<b>Accession Number</b>	2003.214.10
<b>Dimensions</b>	H. 3.0, W. 1.6, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced

by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



519. Spacer-Bead

<b>Accession Number</b>	2003.214.11
<b>Dimensions</b>	H. 2.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass

**Modeling Technique and Decoration** Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised, figure-eight-shaped pelte shields, each surrounded by dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



520. Spacer-Bead

<b>Accession Number</b>	2003.214.12
<b>Dimensions</b>	H. 2.5, W. 1.3, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)



<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised, figure-eight-shaped pelte shields, each surrounded by dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 521. Spacer-Bead

<b>Accession Number</b>	2003.214.13
<b>Dimensions</b>	H. 2.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised, figure-eight-shaped pelte shields, each surrounded by dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 522. Spacer-Bead

<b>Accession Number</b>	2003.214.14
<b>Dimensions</b>	H. 2.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised, figure-eight-shaped pelte shields, each surrounded by raised dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 523. Spacer-Bead

<b>Accession Number</b>	2003.214.15
<b>Dimensions</b>	H. 2.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised, figure-eight-shaped pelte shields, each surrounded by dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 524. Spacer-Bead

<b>Accession Number</b>	2003.214.16
<b>Dimensions</b>	H. 2.5, W. 1.2, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with three raised,

figure-eight-shaped pelte shields, each surrounded by dots.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 525. Spacer-Bead

<b>Accession Number</b>	2003.214.17
<b>Dimensions</b>	H. 2.9, W. 1.3, Th. 0.5 cm
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, pp. 91–92, no. 240; p. 91, plate no. 240.

Wight 2011, pp. 16–17, 22–23, fig. 11.

Nightingale 2018, pp. 32–33, 36, 48, fig. 12, color plate 7.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2006; 2007)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 526. Spacer-Bead

<b>Accession Number</b>	2004.15.1
<b>Dimensions</b>	H. 3.1, W. 1.1 cm; Wt. 1.62 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)

<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact; light weathering.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** In Mycenaean Greece, the use of glass reached its peak between 1400 and 1200 BCE. Glass products were mostly beads—simple and relief ones—almost always of dark blue glass cast in open molds (Haevernick [1960] 1981; Haevernick [1963] 1981; Haevernick [1979] 1981, pp. 71–83, 109–112, 190–193, 440–447; Nightingale 2000, pp. 6–10; Nightingale 2018, pp. 30–60). Relief beads appear either as a plaque with the motif pressed on it, or else entirely in the shape of the depicted motif. The decoration on relief beads consists of floral, faunal, anthropomorphic, and mythological themes, objects, and other abstract motifs. The motifs most widely present are the rosette (cats. 511–512), the lily, the ivy leaf (cats. 516–518, cats. 525–527), and the papyrus flower. Common animal motifs are the single and double argonaut (cats. 513–515, cats. 530–531), the triton shell, and, rarely, the octopus. The most common object motifs are the curl, the volute (cats. 528–530), the wave or bracket (cats. 509–510, 532), the circular ornament, the figure-of-eight shield (cats. 519–524), a libation jug, and the bi-concave altar. Motifs of human and/or mythical figures include the sphinx, the Minoan/Mycenaean Genius, and the woman in formal Minoan/Mycenaean dress (Nightingale 2018, p. 36).

Molds have been unearthed in and around palaces, indicating centralized production of these items. In addition to beads (but only seldom), other objects, such as seals, sword hilts, gaming pieces, and pins, were made of glass. Although many of the beads have two holes and thus would have served as spacer-beads holding together several strings of beads, in the Mycenaean period they were strung together to form necklaces, sewn on garments, or even used as diadems.

For comparanda, see Haevernick [1960] 1981, pp. 71, 73, figs. 1, 3; Yalouris 1968, p. 11, figs. 5–6, LH IIIB–C; Harden 1981, p. 43, no. 42 [ivy leaf]; Stern and Schlick-Nolte 1994, p. 152, no. 16; Nightingale 2000, p. 6, type 1.7; Adam-Veleni

and Ignatiadou 2010, p. 226, no. 94, Olympus, thirteenth century BCE/LH IIIB.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



527. Spacer-Bead

<b>Accession Number</b>	2004.15.2
<b>Dimensions</b>	H. 3.1, W. 1.2 cm; Wt. 1.86 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Rectangular spacer-bead in the shape of an elongated plaque with raised and ribbed ends pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized ivy leaf, laid sideways in the center.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



528. Spacer-Bead

<b>Accession Number</b>	2004.15.3
<b>Dimensions</b>	H. 3.1, W. 1.3 cm; Wt. 1.76 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Elongated spacer-bead, one end straight, raised, and ribbed, and the other rounded. The underside is glossy and slightly convex; the upper side is decorated with a pattern of three volutes, each with a raised dot at the center, depended from a dotted line. The first and



third volutes are counterclockwise, and the middle one clockwise. One perforation in straight end; second perforation in the third volute.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526. For comparanda, see Haevernick [1960] 1981, pp. 71–83; Yalouris 1968, pp. 11–12, figs. 7–11, LH IIIB–C; Harden 1981, p. 46, nos. 56–59; Nightingale 2000, p. 7, type 2.1; Spaer 2001, p. 71, no. 35.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



529. Spacer-Bead

<b>Accession Number</b>	2004.15.4
<b>Dimensions</b>	H. 3.2, W. 1.3 cm; Wt. 1.98 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Elongated spacer-bead, one end straight, raised, and ribbed; the other end rounded. The underside is glossy and slightly convex; the upper side is decorated with a pattern of three volutes, each with a raised dot at the center, separated by dotted lines. One perforation in straight end; second perforation in the third volute.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526. For comparanda, see cat. 528.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



530. Spacer-Bead

<b>Accession Number</b>	2004.15.5
<b>Dimensions</b>	H. 2, W. 1.1 cm; Wt. 1.66 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass

**Modeling Technique and Decoration**      Mold pressed in an open mold

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**CONDITION**    Intact. Silvery weathering and incrustation.

**DESCRIPTION**    Spacer-bead in the shape of a rectangular plaque. The ends are pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized motif of two argonauts placed back-to-back. The ribbed egg cases, or shells, cover the upper central part of the plaque. Three of the tentacles of each animal are presented curved and extending to the ends of each edge of the plaque; at the center of the plaque are the eyes.

**COMMENTS AND COMPARANDA**    On Mycenaean beads, see cat. 526. For comparanda, see Haevernick [1960] 1981, pp. 71–83; Nightingale 2000, p. 7, type 1.16.

**PROVENANCE**    By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY**    von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS**    Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



531. Spacer-Bead

**Accession Number**      2004.15.6

**Dimensions**                      H. 2, W. 1.2 cm; Wt. 1.46 g  
**Date**                                  1400–1200 BCE (LH IIIA–LH IIIB)  
**Production Area**                  Aegean region  
**Material**                              Translucent dark blue glass  
**Modeling Technique and Decoration**      Mold pressed in an open mold

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**CONDITION**    Intact. Silvery weathering and incrustation.

**DESCRIPTION**    Spacer-bead in the shape of a rectangular plaque. Each end pierced by a transverse thread hole. The underside is glossy and concave; the upper side is decorated with a raised, stylized motif of two argonauts placed back-to-back. The ribbed egg cases, or shells, cover the upper central part of the plaque. Three of the tentacles of each animal are presented curved and extending to the ends of each edge of the plaque; at the center of the plaque are the eyes.

**COMMENTS AND COMPARANDA**    On Mycenaean beads, see cat. 526. For comparanda, see cat. 530.

**PROVENANCE**    By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY**    von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS**    Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 532. Bead

<b>Accession Number</b>	2004.15.7
<b>Dimensions</b>	H. 3.1, W. 2 cm; Wt. 6.45 g
<b>Date</b>	1400–1200 BCE (LH IIIA–LH IIIB)
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Mold pressed in an open mold

**CONDITION** Intact. Silvery weathering and incrustation.

**DESCRIPTION** Vertical rectangular panel tapering toward the base; uneven flat back; straight sides (top missing); a large hole running horizontally through volute at bottom. Molded decoration on front: a series of two volutes appear on the preserved fragment; the entire bead quite probably comprised three volutes like cats. 509 and 510, each with a truncated pyramidal spike projecting out at the left; three pairs of wavy lines in relief run vertically down the volutes, with other, finer lines between spikes on left.

**COMMENTS AND COMPARANDA** On Mycenaean beads, see cat. 526. For comparanda, see Wace 1921–1923, pp. 397–402, plate 25; Haevernick [1960] 1981, pp. 74–75, fig. 5:1–2; Goldstein 1979, pp. 90–91, nos. 167, 168; Harden 1981, pp. 43–44, no. 45; Wiener 1983, pp. 25–30, 73–74; Spaer 2001, p. 72, no. 39; Metropolitan Museum of Art, 25.78.22.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 240.

Walton et al. 2009.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 533. Bead

<b>Accession Number</b>	2003.209
<b>Dimensions</b>	H. 2.7, W. 1.0 cm; Wt. 1.10 g
<b>Date</b>	Second half of the first century BCE–first half of the first century CE
<b>Production Area</b>	Eastern Mediterranean, or Black Sea coast. Allegedly found in Panticapaeum (Kerch), Crimea
<b>Material</b>	Colorless glass; gold
<b>Modeling Technique and Decoration</b>	Rolled and molded

**CONDITION** Fully preserved with weathering and some small areas of iridescence. Mended.

**DESCRIPTION** Flattened, irregular cylindrical gold-glass bead. Thread hole along its longer dimension.

An impressed standing nude young male figure is depicted on the front of the bead. He is the god Harpocrates, the son of Isis and Osiris (*LIMC* IV.1 s.v. “Harpocrates,” pp. 415–445, esp. pp. 419–423 for representations with cornucopia). He rests his weight on his right leg, and his left leg is slightly bent so that the pelvis and torso are positioned in contrapposto. The figure has protruding belly. The head is presented en face. The figure bends his right hand up across his chest in the typical gesture of silence, with the index finger to his lips. With his left hand he holds a large cornucopia next to his body.

The back side of the bead is undecorated and smooth.

**COMMENTS AND COMPARANDA** Gold-glass beads appear from the Hellenistic period onward. They are made of two layers of glass with metal foil between them as their principal decoration. They were used as a substitute for metal beads and they were popular in Egypt, where they were probably produced, and in Nubia. Rhodes, Macedonia, and the Black Sea coast have also been identified as manufacturing centers of gold-glass beads (Alekseeva 1978, pp. 27–32; Weinberg 1971, pp. 147–148, figs. 1–2, plate 82a; Spaer 1993, pp. 9–25; Spaer 2001, pp. 130–135). Usually they are plain; occasionally they are decorated with ribbing or granular patterns and very rarely with impressed motifs like the god Harpocrates and a female deity (Spaer 2001, p. 137, nos. 234–235; Spaer 1993, p. 16, fig. 11). An almost identical bead is in the Metropolitan Museum of Art (10.130.2477: <https://www.metmuseum.org/art/collection/search/558843>) and another in the British Museum (1879,0522.33: [https://www.britishmuseum.org/collection/object/G\\_1879-0522-33](https://www.britishmuseum.org/collection/object/G_1879-0522-33)). Harpocrates was also represented on glass pendants, dating to the late second–first centuries BCE (Froehner 1903, no. 843, p. 122, plate 151.3, 151.5, now part of the Metropolitan Museum of Art collection; also one in the Louvre: Arveiller-Dulong and Nenna 2011, p. 39, no. 28).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 232.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 534. Necklace of Face Beads

<b>Accession Number</b>	2003.259
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** See Cats. 534.1–534.30

**DESCRIPTION** The necklace consists of 29 irregular globular mosaic face beads and one face pendant. Around the central part of each bead are mosaic florets representing female faces that in most cases alternate with florets with geometrical patterns, arranged in a band. This central band is framed on top and bottom with a wide colored band of glass. Beads 1–4, 8–15, 18–19, 21–28, and 30 have a vertical thread hole that tapers slightly upward. Beads 5–7, 17, 20, and 29 have a vertical thread hole that tapers slightly downward.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 535. For dating, see Stern and Schlick-Nolte 1994, pp. 410–413, nos. 149–153; Maeda 2001, no. 105. For another green pendant, but with faces set in red squares, see Sangiorgi 1914, no. 254; Sangiorgi Collection 1999, lot 81: <https://www.christies.com/lot/lot-1519732>.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert

Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 126, no. 334; p. 120, plate no. 334.

Wight 2011, pp. 102, 106, fig. 73.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 534.1. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.8, max. Diam. 1.2 cm, Wt. 2.79 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of opaque red glass. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark-colored. Four plaques each one with a Medusa's face placed in a white, roundish outline comprise the central band. There are no additional plaques between the plaques with the Medusas. The faces are partly deformed and not perfectly aligned. The red coil on one end is imperfectly wound,

permitting us to see that it was wound on the blue band with the embedded face florets. The other red coil is partly covered by two of the faces that appear to have "sagged" over it.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



### 534.2. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.4 cm, Wt. 2.79 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of white glass. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark colored. There are three Medusas, in a purple, rectangular outline. At the center of outline's lower edge is a yellow square. The upper white coil is not perfectly closed. The additional plaques are banded rectangular elements. The one that is not deformed presents a succession of a green, a red, a yellow, a very thin red, and a yellow band.



**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.3. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.4 cm, Wt. 2.34 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Mended; part missing

**DESCRIPTION** The upper and lower parts of the bead are made of blue glass, and at the edge of the thread hole is a fine red coil. The face floret visibly reaches the hole, and there is probably no matrix, just the florets one next to the other; the bands around the thread hole were added for extra strength and to cover the profile of the mosaic sections. There are three female faces wearing necklaces with long hair on their nude shoulders, outlined by a green square. The additional plaques are aligned in four rows of red lozenges flanked on either side by a white, yellow, and another white row of lozenges, which are framed by a row of red triangular tesserae pointing toward the interior of the plaque.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.4. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.35 cm, Wt. 2.70 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead appear black now but were originally dark green. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark colored. There are three female busts with short hair and necklaces, in a now-white, most probably purple field, outlined in red. The additional plaques are three squares, each filled with four triangular elements facing to the center: two yellow facing each other, and one red and one green facing each other.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.5. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.3 cm, Wt. 3.16 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** One end chipped

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark colored. There are five Medusas, outlined in a white and blue square frame. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.6. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.4 cm, Wt. 3.7 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the red bands appear to have been added onto the central band, which is a dark-colored green. There are two hairless faces with open mouths, outlined in a light blue, planoconvex frame that is straight on the upper part and curved on the lower part and sides. The additional plaques are two four-petaled rosettes. A central white square is set in red, surrounded by four wedge-shaped, white petals set in translucent green, surrounded by four outer, red wavy petals set in a round blue matrix.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



### 534.7. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.4 cm, Wt. 3.18 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. The base mass is invisible, and in the entire thread hole only one type of glass is visible, which is a dark-colored (possibly blue) glass. There are four female heads with short blue hair, set in a gray, square frame. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



### 534.8. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.7 cm, Wt. 3.46 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Small part chipped off

**DESCRIPTION** The upper and lower parts are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. The entire thread hole is covered with a dark, seemingly black color that appears to continue under the light green bands that encircle it. There are three faces outlined in square, white and blue frames. Two faces are consecutively placed and the third is flanked by the checkerboard tiles. The additional plaques are three polychrome mosaic squares made of triangular microtesserae: a central translucent green square surrounded by four red triangular tesserae facing outward and forming thus a lozenge, which is surrounded by a yellow and a dark-colored—probably dark blue—lozenge and white, red, and by white tesserae forming triangles.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



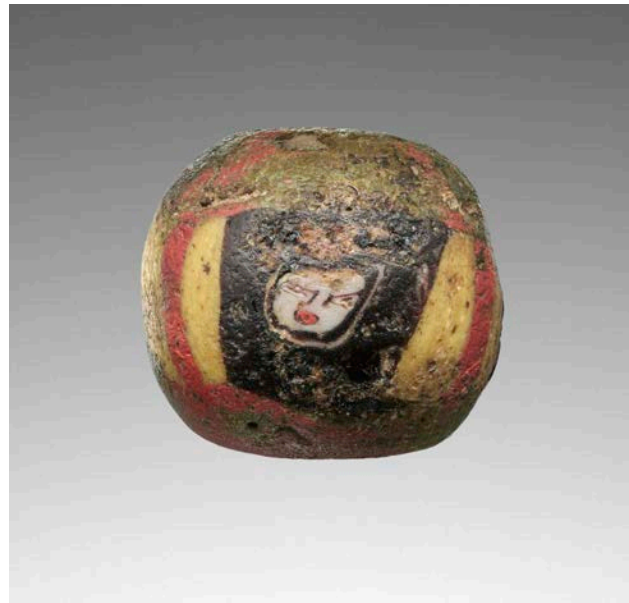
534.9. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.4 cm, Wt. 3.70 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of light yellow glass. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark colored. There are four Medusas, in a rectangular white and blue frame set in a larger white lozenge, which is set in a dark blue rectangular field. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.10. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.7 cm, Wt. 3.60 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is probably no base mass, and in the thread hole it appears to be black, probably the back side of the mosaic sections. The two bands appear olive-green in some areas, covered with a thin layer of opaque red glass, probably a red that has deteriorated and weathered to green. There are three faces, each surrounded by blue, thin hair, or hairless. They are enclosed in a fine blue frame outlined in white, set in a wide, square blue field. There is an additional plaque with a red band flanked by two yellow bands.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.11. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.5 cm, Wt. 3.96 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and at the lower, wider opening the thread hole is red at least to mid-height. On the upper thread hole, an interior gray layer is visible—the same as the one into which the face masks are applied—covered by a red layer. There are two almost-square faces; there is a thin purple layer around the head, set in a wide gray square field. The additional plaques are two oval features that flank the faces. In the center is a rectangular banded bit, with red, white, yellow, and translucent green and blue set in an oval light green. The pattern on the central bit is not understandable but is probably part of a larger motif. The second oval has only a small part of a red and white pattern at the edge, possibly the same with the other one.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.12. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.4 cm, Wt. 3.62 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Small area is missing from one end

**DESCRIPTION** The upper and lower parts of the bead are made of dark blue glass. Visible on one side, over the blue, is a fine red band, which has deteriorated into green in large areas. There is no base mass, and the back side of the mosaic sections is visible. In the thread hole, the bands appear to have been added onto the central band, which is dark colored. There are three Medusas in a fine round white and a square red frame. The additional plaques are three squares filled with four triangular elements facing toward the center: two yellow, which face each other, and one red and one green facing each other.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.





534.13. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.3 cm, Wt. 4.10 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and the back side of the mosaic sections is visible, onto which the two bands are applied. There are three Medusas in a fine white circle set in a dark blue square frame. The additional plaques are three squares filled with four triangular elements facing toward the center: two yellow facing each other and one red and one green facing each other.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.14. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.4 cm, Wt. 4.05 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts are probably dark green. There is no base mass, and the back side of the mosaic sections is visible, onto which the two bands are applied. There are three female busts with long hair and necklaces in a dark blue, square field. The additional plaques are three rosettes with eleven petals. At the center is a white circle (possibly a different color that has weathered into white) set in red, surrounded by eleven yellow petals, set in translucent purple. The flower shape is inscribed by a red ring with triangular projections in the interior covering the space between the petals. The whole motif is set in a translucent purple field.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.15. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.6, max. Diam. 1.5 cm, Wt. 5.27 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts are made of turquoise blue glass, and the base mass is also turquoise blue. There are three female faces with short hair, set in a lavender or light blue, square field. The additional plaques are three rectangular pieces with parts of spiral meander band. In each piece are two yellow waves in a translucent purple background.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.16. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.5, max. Diam. 1.2 cm, Wt. 3.23 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The pendant is arybaloid in shape. It has a spherical body with the thread hole on the neck at the transition to the flat, discoid upper part. It is made of opaque green mass. On the upper surface a red or mosaic core is visible. The base mass is light green. On the upper surface is visible a spiraling red and "black" core. A thread hole that sets the faces on the pendant is off-axis. There are three faces of Medusas in a fine white, round field set in dark blue squares, each one flanked by a rectangular plaque. The additional plaques are three squares filled with four colorful triangular elements facing to the center, each one outlined by translucent greenish glass: two yellow facing each other, and one red and one green facing each other.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.17. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.5, max. Diam. 1.7 cm, Wt. 5.45 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. The base mass is invisible, possibly red. Both red bands in the interior appear to be applied onto a central band. There are three female busts with long hair and necklaces. There is an opaque red band above and on the sides of the heads. The additional plaque is a vertical banded piece: a central red flanked by yellow bands.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.18. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.5, max. Diam. 1.5 cm, Wt. 4.86 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There are four faces; alternately, the following two types of florets: (1) Face set in round white frame set in a blue square; (2) Face set in round white frame, which is set in a blue square, which is set in a larger white lozenge, set in a blue square. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



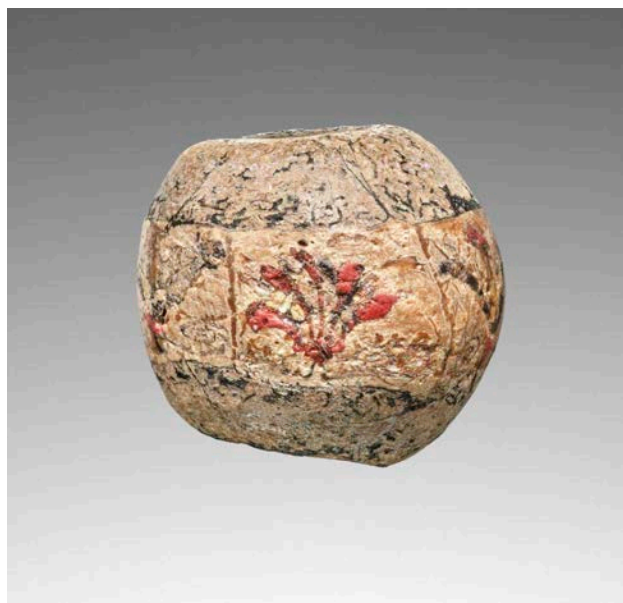
534.19. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.4 cm, Wt. 4.22 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. The base mass is red, and the two bands are part of it; onto this was applied the central green band. There are two hairless faces, off-axis, set in green. In one of the sections, hardly noticeable, the green outline is square. The color of this outer layer in the second face section is of the same color as the matrix of the bead. No outline is visible. The additional plaques are two round florets with two green and two red triangles facing toward the center, all of them outlined in yellow. There is a fine trail around them, giving the impression that they were not perfectly flush with the green surface.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.20. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.5, max. Diam. 1.4 cm, Wt. 3.62 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of blue glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There is a zone of anthesis: three palmettes with five red leaves set in white and outlined in a fine yellow; three lotus flowers with the yellow central stem capped in red; and two flaring blue petals, standing on two spiraling stems. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.21. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.5 cm, Wt. 3.45 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Parts missing

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible, onto which the two bands are applied. There are four faces set in a fine white and a wide blue field. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.22. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.5 cm, Wt. 3.42 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There are three faces rendered with more detail, extending to the bust (possibly with necklaces, but more probably a rendering of the neck with two horizontal lines). The bust is framed by a circular wreath, which is red, and the leaves are green, appearing similar to laurel leaves. The additional plaques are rectangular florets with a central vertical red band flanked by two green bands.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.





534.23. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.4, max. Diam. 1.5 cm, Wt. 4.00 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Small part is missing at one end

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There are four faces set in a blue square, which is set in a white lozenge, which is set in a blue square field. Three of them face the viewer while the fourth is upside down. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.24. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.3 cm, Wt. 3.48 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. The base mass is red, and the two bands are part of it; onto this was applied the central green band. There are two faces set freely in the green background without any outline, both set off-axis. The additional plaques are two disks, each divided into segments of green and red, separated by a thin yellow line.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.25. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.3 cm, Wt. 3.02 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of red glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There are four faces, each set in a round white and a square blue frame, set in a larger white lozenge, set in a dark blue square. There are no additional plaques.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.26. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.3 cm, Wt. 2.97 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. There are three faces, each set in a round white and a square blue frame. The additional plaques are three square tiles; in each one, set in translucent dark blue field, there are two yellow, one green, and one red triangles, all facing toward the center.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.27. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.3 cm, Wt. 2.46 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. In the thread hole, it can be seen that the green bands were added onto the finished central band; part of the back side of the floral floret is visible. There are three faces with short dark blue hair, set in a lighter blue square frame. The additional plaques are two square tiles. In each one are placed four trilobe leaves, green outlined in yellow facing outward, the upper two downward and the lower two upward, forming a lozenge-like void area in the center of the tile. They are set in one blue and one red layer of glass.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.28. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.2, max. Diam. 1.3 cm, Wt. 3.00 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Small part missing

**DESCRIPTION** The upper and lower parts of the bead are made of green glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. In the thread hole, it can be seen that there is a multicolored banded mass behind the central band of the florets; quite probably this is the distorted back side of the mosaic sections. What is visible, though, are alternating fine rows of red and blue. There are three Medusa heads with short, sleek hair all around the face. They are set in a fine round white frame, set in a larger, square blue field. The additional plaques are three square tiles. In each one are set, in a translucent dark blue field, two yellow, one green, and one red triangles, all facing toward the center.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.29. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.2 cm, Wt. 2.55 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Intact

**DESCRIPTION** The upper and lower parts of the bead are opaque white, possibly weathered green. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. Inside the thread hole, it can be seen that the back side of the mosaic sections slid toward the upper opening of the hole and was covered by the single-colored band. There are three Medusa heads set in a fine round white frame, set in a larger, square blue field. The additional plaques are three square tiles. In each one are set, in a translucent dark blue field, two yellow, one green, and one red triangles, all facing toward the center.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



534.30. Face Bead

<b>Accession Number</b>	2003.259
<b>Dimensions</b>	H. 1.3, max. Diam. 1.4 cm, Wt. 2.80 g
<b>Date</b>	First century CE
<b>Production Area</b>	Eastern Mediterranean, probably Egypt
<b>Modeling Technique and Decoration</b>	Wound around a mandrel and inlaid with sections of mosaic composite canes

**CONDITION** Small areas missing

**DESCRIPTION** The upper and lower parts of the bead are made of blue glass. There is no base mass, and the back side of the mosaic sections is visible. The two bands are applied onto this surface. Inside the thread hole, it can be seen that the back side of the mosaic sections slid toward the upper opening of the hole and was covered by the single-colored band. There are three female busts with long hair and necklaces, set in green outlines. The additional plaques are checkerboard: four rows of red lozenges at the center, flanked on either side by a white, a yellow, and another white row of lozenges, which are framed by a row of red triangular tesserae pointing toward the interior of the plaque.

**COMMENTS AND COMPARANDA** On mosaic face beads, see comments on cat. 534 and 535. For provenance, bibliography, and exhibitions, see group entry, cat. 534.



### 535. Discoid Mosaic Face Bead

<b>Accession Number</b>	78.AF.324.1
<b>Dimensions</b>	H. 1.3, W. 1.1, Th. 0.5 cm; Wt. 1.42 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque green, red, white, and blue and translucent dark purple glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Fully preserved; surface weathered and cracked.

**DESCRIPTION** Perforated section of a cylindrical mosaic cane, forming a flat, disk-shaped bead. The string hole cuts the cane horizontally behind the face.

A female face is represented, with almond-shaped eyes, curved eyebrows, straight nose, and oval, slightly parted red lips. A thin band, around the face to behind the ears, renders the hair. Eleven strands form a sparse fringe on the forehead, possibly representing snake heads, a feature that would identify the depicted female as Medusa. The facial features and the hair are rendered in dark-colored glass, seemingly black. A cobalt blue band sits under the chin. The face is set in a red and a green layer of glass.

**COMMENTS AND COMPARANDA** Mosaic face beads appear in the first century CE, either as globular beads with a row of faces at the greatest diameter or as flat, round, or square beads. Flat face beads, square in cross

section, require only one floret, as opposed to the spherical ones, which can accommodate between two and eight, with most having four faces in a single row spanning the mid-section of the bead, usually arranged in alternating pattern with florets with geometrical motifs (Selling type I; for an overview, see Stout 1985, pp. 22–29, map 1, appendix I; Stout 1986, pp. 58–59; Liu 2008). The face beads were not necessarily produced in the same workshops where the mosaic canes were produced. The canes, intact or cut into florets, may have been sold to other workshops, operating either nearby or farther afield. Mosaic glass quite often is ascribed to Alexandrian or other Egyptian workshops, but no glass workshops for this kind of product have been found, so this hypothesis remains unproven.

The beads are known in archaeologically dated contexts from Meroë-Nubia to Rome, Herculaneum, the Black Sea coast, and the Baltic region. Most of the beads have a schematic rendering of the face, in which the Gorgon has been identified due to the dentil-like projections that frame the upper part of the face, schematically depicting snakes. A few other beads have a more naturalistic presentation of the face, with longer hair and a necklace around the neck, like those found in Meroë, the Black Sea coast, and Poland, and the one kept in the Corning Museum of Glass (Dunham 1957, numbers 21-3-57b, 21-12-129b2, and 21-12-130d, figs. 80, 89, plate LXVII; Kazimierczak 1980; Alekseeva 1982, pp. 36, 40, color plate 48, no. 33; Goldstein 1979, pp. 274–275, no. 822). In the Corning Museum of Glass there is also a double-convex glass mosaic patella made of rhomboid florets, among which are interspersed four florets of this type of face cane (Goldstein 1979, pp. 186–187, no. 497). Two fragments of mosaic glass once in the Gréau collection also contained face canes (Froehner 1903, p. 119, plate 133.17, 19, no. 828).

In the fourth century CE there is a reappearance of face and checker mosaic beads (see comments on cat. 537), but significantly larger and with some differences in the rendering of the motifs. They are quite rare and are found exclusively north of the Alps. These later (fourth- and fifth-century) checker beads have three registers of designs, occasionally completed with florets of star-shaped motifs. New types of faces appear, with helmet and different hairstyle. It has been proposed that they are Constantinian and that they were presented either to northerners serving in the imperial guard or to chieftains, in return for their military assistance (Selling type II; see Stout 1985, pp. 30–46; Stout 1986, p. 60).



For comparanda from various collections, see Goldstein 1979, p. 274, no. 820; Alekseeva 1982, pp. 36, 40, color plate 48, nos. 33–42; Rütli 1988, pp. 91, 195, nos. 1905–1907, plate 26, color plate 31; Nenna 1993, pp. 49–50, fig. 3b; Stern and Schlick-Nolte 1994, pp. 414–415; Spaer 2001, p. 124, nos. 207–208, plate 16; Bianchi 2002, pp. 149–150, EG-34bis e–h.

**PROVENANCE** 1978, Ira Goldberg; Mark Goldberg and Larry Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 536. Rectangular Face Bead

<b>Accession Number</b>	76.AM.61.15
<b>Dimensions</b>	H. 1.3, W. 0.8, Th. 0.4 cm; Wt. 1.18 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Translucent purple and opaque yellow, white, and red glass
<b>Modeling Technique and Decoration</b>	Fusion, cutting off, reheating, piercing, flattening

**CONDITION** Heavily weathered; parts of the sides are missing.

**DESCRIPTION** Flat, rectangular bead consisting of a floret of a mosaic cane, square in cross section. The floret

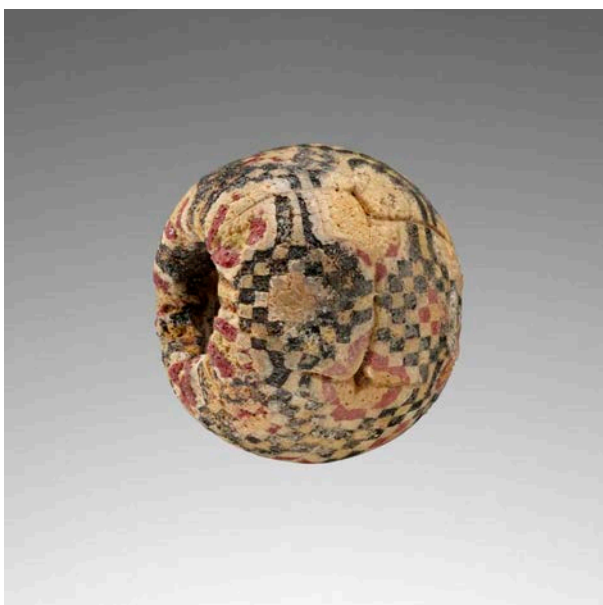
depicts a female face set at the center of the bead on both sides. Angular eyebrow; almond-shaped eye staring straight ahead; small, wide mouth with red lips. A thin band around the face to behind the ears renders the hair. Several strands form a sparse fringe on the forehead, possibly representing snake heads, a feature that would identify the depicted female as Medusa. The facial features and the hair are rendered in dark-colored glass, seemingly black but actually translucent purple. A thick band sits under the chin. The face is set in a yellow and translucent purple layer of glass. The thread hole crosses the bead horizontally, which positions the face correctly when the bead is strung on a necklace.

**COMMENTS AND COMPARANDA** See cat. 535.

**PROVENANCE** 1976, K. I. Homsy, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 537. Mosaic Bead

<b>Accession Number</b>	2004.12
<b>Dimensions</b>	H. 1.3, W. 1.4 cm; Wt. 3.83 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy. Reportedly found in Olbia, Ukraine
<b>Material</b>	Opaque yellow, red, white, and “black” glass

**Modeling Technique and Decoration** Fusion, folding, rolling

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**CONDITION** Reconstructed.

**DESCRIPTION** A spherical bead made of composite mosaic canes, with florets arranged in two rows and ca. five columns. These slices were fused together as a flat mass and were subsequently folded around a rod and rolled. The seam of this folding is still visible along the edge of the hole in the bead. Each floret consists of  $9 \times 9$  micro-tesserae in which a central yellow square tessera is surrounded by red, white, “black,” and white angular lozenges, which form a checkerboard pattern.

**COMMENTS AND COMPARANDA** Mosaic glass beads with checker pattern placed at the greatest diameter of the bead, in rhomboid position, appear in early Roman (mainly first century CE) graves, for example in Meroë (Dunham 1957, p. 122, fig. 80, no. 21-3-57a; pp. 130–131, fig. 86, no. 23-2-79c; pp. 135–136, fig. 89, no. 21-12-129b-9), Egypt (Fitzwilliam 1978, pp. 28–29, nos. 46a, b, c), Poland and Germany (Tempelmann-Maczynska 1985, pp. 59–60, type 364, with a band of rhomboids, type 368 in a carpet pattern), and on the Black Sea coast (Alekseeva 1982, pp. 36, 40, color plate 49, nos. 67–87, graves of the first–second centuries). They also appear in third-century graves in Denmark and Norway (Stout 1985, pp. 32–37). Most are globular and a few are barrel-shaped or flat. Checker patterns most often appear as multicolored diamonds. For mosaic beads with female faces on them, see comments on cat. 534 and 535.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 84, no. 234.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 538. Bead

<b>Accession Number</b>	2003.210
<b>Dimensions</b>	H. 2.1, max. Diam. 1.8 cm; Wt. 10.60 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy. Reportedly found in Olbia, Ukraine
<b>Material</b>	Opaque red, white, and yellow; translucent blue and greenish glass
<b>Modeling Technique and Decoration</b>	Fusion of mosaic tesserae and winding

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**CONDITION** Fully preserved, with a bright surface and very few scratches and nicks.

**DESCRIPTION** A spherical bead made of seven circular blue and seven or eight rectangular yellow slices of composite mosaic canes arranged in three rows and roughly five columns. These slices were fused together as a flat mass and were subsequently folded around a rod and pressed at the edges, forming a globular bead. The seam of this folding is still visible along the bead. Each circular floret contains an eight-petaled rosette. A central yellow rod is enclosed in a red layer, which is surrounded by eight white triangular petals fused in dark blue glass. Each square floret contains a checkerboard motif set in a layer of red glass. The checkerboard comprises six columns with six rows of square, tiny, alternately greenish and yellow tesserae.

**COMMENTS AND COMPARANDA** See cat. 537.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 84, no. 235.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 539. Mosaic Bead

<b>Accession Number</b>	2004.13
<b>Dimensions</b>	H. 2.0, W. 2.3 cm; Wt. 13.70 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy. Reportedly found in Olbia, Ukraine
<b>Material</b>	Translucent dark green, appearing black; opaque green, yellow, red, and white glass
<b>Modeling Technique and Decoration</b>	Fusion of mosaic tesserae and winding

**CONDITION** Complete.

**DESCRIPTION** A spherical bead made of six rows of florets from five composite mosaic canes. These slices were fused together as a flat mass and subsequently folded around a rod and rolled. The seam of this folding is still visible along the edge of the hole in the bead. Each

floret consists of a central green rod set in turn in yellow and red and then in a layer comprising 14 petals alternately dark green (appearing black) and white.

**COMMENTS AND COMPARANDA** See cat. 537.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 84, no. 237.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 540. Bead

<b>Accession Number</b>	2003.212
<b>Dimensions</b>	H. 2.3, max. Diam. 2.0 cm; Wt. 5.70 g
<b>Date</b>	First century CE
<b>Production Area</b>	Egypt or Italy
<b>Material</b>	Opaque red, white, green and blue; translucent greenish and dark purple(?) glass
<b>Modeling Technique and Decoration</b>	Fusion of mosaic tesserae and winding

**CONDITION** The bead shows signs of weathering and some discoloration. A crack runs down one side and there are a few abrasions.

**DESCRIPTION** Spherical bead. The central zone of the bead is decorated with a continuous frieze of two rows of adjoining lozenges, currently appearing white, bordering a central row of red lozenges, all flanked above and below by greenish triangles. All these motifs are outlined with a fine layer of glass, appearing black. Two dark blue bands form the upper and lower parts around the openings of the hole.

**COMMENTS AND COMPARANDA** On mosaic beads and in particular on beads with female faces and busts, see cat. 534. On mosaic beads with checkerboard motifs, see cat. 537.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 84, no. 237.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 541. Bead

**Accession Number** 2003.211  
**Dimensions** L. 2.1, Diam. 1.7 cm; Wt. 12.40 g  
**Date** First century CE  
**Production Area** Eastern Mediterranean

**Material** Opaque white and red and translucent green glass  
**Modeling Technique and Decoration** Fusion of mosaic tesserae and winding

**CONDITION** Fully preserved, with minor scratches.

**DESCRIPTION** A cylindrical bead made of 20 circular tesserae arranged in four rows and roughly five columns. These slices were fused together as a flat mass and subsequently folded around a rod and rolled. The seam of this folding is still visible along the edge of the hole in the bead. Each tessera comprises the following: a thick white rod surrounded by finer red and white layers, in turn surrounded by a translucent green layer in which are arranged at equal distances ten minuscule white rods.

**COMMENTS AND COMPARANDA** On mosaic beads and in particular on beads with female faces and busts, see cat. 534. On mosaic beads with checkerboard motifs, see cat. 537. For a revival of the technique with mosaic beads bearing similar motives from late-9th to early-10th-century CE Serbia, see Radičević and Ćirković 2023.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 84, no. 237.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 542. Bead

<b>Accession Number</b>	80.AH.20.850
<b>Dimensions</b>	H. 1.1, max. Diam. 1.1 cm; Wt. 1.13 g
<b>Date</b>	Sixth–fifth centuries BCE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Light blue, dark blue, and white glass
<b>Modeling Technique and Decoration</b>	Marvered; tooled

**CONDITION** Fully preserved.

**DESCRIPTION** Irregular, partly pressed, globular light blue body with three eyes around it. One eye is made of a dark blue central rod surrounded by a wide white, a thin blue, and another wide white layer. The second and third consist of a dark blue center surrounded by a wide white layer.

**COMMENTS AND COMPARANDA** Glass eye beads were used from the eighth century BCE, and widely during the sixth and fifth centuries BCE: Ignatiadou and Chatzinikolaou 2002, pp. 65–69, wherein further bibliography; Adam-Veleni and Ignatiadou 2010, pp. 189, 190, 191, 197–198, 208–209, 238–239, 318–320, 323–325, nos. 29, 31–31, 33, 45, 61–63, 118–119, 310–317, 319–320, 322, all dated by their archaeological contexts to the sixth and fifth centuries BCE. For small-size examples, see in particular pp. 189, 320, 323, nos. 29 and 317, 320, dated to the fifth century BCE; finds from Olynthos at pp. 371–373, nos. 422–429, are dated in the fourth century by the

destruction of the city, yet they may well be of the fifth century BCE as well.

**PROVENANCE** 1980, David Swingler, American, born 1948, donated to the J. Paul Getty Museum, 1980

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 543. Amulet / Figure of Astarte / Ishtar

<b>Accession Number</b>	2003.213
<b>Dimensions</b>	L. 7.0, W. 2.2, Th. 1.5 cm; Wt. 17.25 g
<b>Date</b>	Late sixteenth–fifteenth centuries BCE
<b>Production Area</b>	Western Asiatic
<b>Material</b>	Dark blue or turquoise translucent glass
<b>Modeling Technique and Decoration</b>	Cast in an open one-piece mold

**CONDITION** Severely weathered, covered by cream film. Most of it is grainy. The glass is visible only on the breakage at the lower end of the amulet. Parts of the plinth and the feet are missing.

**DESCRIPTION** Pendant in the shape of a nude female figure, probably the goddess Ishtar. Relief of a woman standing on a square plinth and holding her breasts. Hair is pulled back from forehead in vertical plaits and falls behind her ears to her neck. A broad necklace of



elongated, vertical beads encircle her neck. Belly and hips are accentuated. The forehead, where probably there was a headband, is severely weathered. The back side is flat but uneven. At the level of her breasts a horizontal thread hole was pierced through the bead.

**COMMENTS AND COMPARANDA** See *Glass from the Ancient World* 1957, p. 31, no. 25; Barag 1970b, pp. 188–189, appendix II, figs. 98–99; Grose 1989, p. 58, nos. 1–3.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 91, no. 239; p. 91, plate no. 239.

Wight 2011, pp. 16, 19, fig. 8.

**EXHIBITIONS** Aphrodite and the Gods of Love (Malibu, 2012)

Molten Color: Glassmaking in Antiquity (Malibu, 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 544. Head Pendant

**Accession Number** 2003.206

**Dimensions** H. 2.4, W. 1.7 cm; Wt. 6.27 g

<b>Date</b>	Second half of the fifth–early second centuries BCE
<b>Production Area</b>	Punic, probably Carthage. Reportedly found in Olbia, Ukraine
<b>Material</b>	Dark blue, white, and yellowish glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Lower part of the face is missing; surface has a layer of weathering in different areas.

**DESCRIPTION** Dark blue (appearing black), cylindrical, rod-formed pendant in the shape of a bearded male head. The basic dark purple mass includes the elongated beard as well. The eyes are made of white disks, which are probably ring beads, and smaller disks of dark blue glass render the pupils. The ears are made of small, yellowish ring beads. Lips are rendered with a disk of yellowish glass, pressed in the middle to form the mouth. The nose is made of an applied, triangular, black mass. A white dot is at the middle of the upper forehead. No traces of hair and eyebrows are preserved, and perhaps never existed. Suspension loop partly missing. Remains of dark brown sandy coating adhere to interior of tiny rod hole.

**COMMENTS AND COMPARANDA** A group of relatively large glass pendants found throughout the Mediterranean, dated from the sixth to the first centuries BCE, are ascribed to the Punic civilization. There is a wide variety of themes rendered in these pendants, including demon's heads; African heads; male heads with curly hair, with or without beard, which can be sleek, fluted, curly, or Newgate fringe; female heads with long neck or with twisted hairstyle; and animal heads, as of a ram, hen, cock, monkey, or dog; and various other motifs, including a bell, a wine grape, a phallus. They all have a suspension loop at the top and wide hole at the bottom; they were made around a core on a metal rod and the remains of the scraped-out core are still visible in the walls of the hole. The earliest pendants are the demon's heads that appear in the second part of the seventh century BCE in the eastern Mediterranean and Carthage. The production of pendants in general seems to go out of fashion in the first century BCE. In general, they are found in Egypt, Phoenicia, Cyprus, Rhodes, the Black Sea coast, Carthage—where a very large number of them were found and it has been proposed that they were produced—Italy, Spain, and the Balearic Islands. They had a clearly apotropaic character, and were probably meant to depict some form of demon or minor divinity (Seefried 1979, pp. 17–26; Seefried 1982).

Male heads present the largest group among Punic head pendants. 2003.206 is a bald variant of a subgroup made of dark (appearing black) glass representing heads of Africans, and in particular to the small group of the ones that do not have a beard (Seefried 1982, pp. 117–118, plate II, type B.I.a), which are dated between 450 and 200 BCE. Other published pendants of this type include one at the British Museum (Tatton-Brown 1981, pp. 148–149, no. 408) and one sold in an auction (Bonhams 2022, p. 130, no. 209).

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 82, no. 224; p. 82, plate no. 224.

Seefried 1982, p. 88, no. 9.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 545. Head Pendant

<b>Accession Number</b>	2003.208
<b>Dimensions</b>	H. 2.9, max. pres. W. 2.0, max. Th. 2.0 cm; Wt. 3.93 g
<b>Date</b>	Mid-fifth–fourth centuries BCE
<b>Production Area</b>	Punic, probably Carthage

<b>Material</b>	Opaque turquoise, yellow, and white; translucent dark blue and light blue glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Broken; only half of the face is preserved. The condition of the surface of the preserved part is good, with very few nicks or scratches. A pinching mark is visible at the end of the chin.

**DESCRIPTION** Turquoise, cylindrical, rod-formed pendant rendering a bearded male head. The turquoise base mass includes the hair and the elongated beard. This core was partly covered with yellow glass to represent the skin of the face, as was an elongated, pinched, yellow lump rendering the ear. An earring hanging from the preserved ear lobe is made of white glass. The eye was made of three overlapping disks of dark blue, white, and lighter blue glass of gradually smaller diameters so that they are all visible. Lips consist of a disk of white glass pressed in the middle to form the mouth. Translucent dark blue glass is curled around the forehead, forming relief locks, and a dark blue horizontal band forms the eyebrow.

Remains of dark red sandy coating adhere to interior of tiny rod hole.

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. Male heads represent the largest group among Punic head pendants. 2003.208 belongs to a subgroup of male heads with curly hair and sleek beard (Seefried 1982, pp. 27–28, 100–103, plate II, type C.I), which are dated between the middle of the fifth and into the fourth century BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 229; p. 82, plate no. 229.

Seefried 1982, p. 101, no. 13.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 546. Head Pendant

<b>Accession Number</b>	2004.9
<b>Dimensions</b>	H. 1.4, W. 1.2 cm; Wt. 2.18 g
<b>Date</b>	Mid-seventh–fifth centuries BCE
<b>Production Area</b>	Punic, probably Carthage
<b>Material</b>	Opaque yellow, dark blue, and red glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Part of the beard and the suspension loop are missing.

**DESCRIPTION** Dark blue, rod-formed pendant comprising two back-to-back-placed bearded male heads. The blue base mass renders the hair and the beard. A blob of yellow glass indicates the skin of the face, another the applied nose, and an elongated, yellow lump the ear. The eyes are made of three overlapping disks of dark blue, yellow, and lighter blue glass of gradually smaller diameters, allowing all to be visible. A disk of red glass formed the mouth, but only its upper end is preserved. A red blob placed on the upper center of the forehead is only partly preserved. Translucent dark blue glass formed a suspension loop at the center of the upper surface; only the base of it is preserved. Remains of dark red sandy coating adhere to the interior of a tiny rod hole.

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. Male heads present the largest group among Punic head pendants. 2004.9 belongs to a subgroup of double-faced

male heads with sleek hair and beard (Seefried 1982, p. 26–27, 85–87, plate I, type B.A.), which are dated between the middle of the seventh and the fifth century BCE.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 226.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 547. Head Pendant

<b>Accession Number</b>	2004.10
<b>Dimensions</b>	H. 2.1, W. 1.8 cm; Wt. 6.36 g
<b>Date</b>	Mid-seventh–fifth centuries BCE
<b>Production Area</b>	Punic, probably Carthage
<b>Material</b>	Opaque yellow, white, turquoise, and dark blue glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Parts are missing.

**DESCRIPTION** Turquoise, rod-formed pendant in the shape of a bearded male head. The turquoise base mass renders the hair and the beard. A blob of yellow glass

provides the skin of the face, another the applied nose, and two smaller ones the ears. The eyes are made of two overlapping disks of white and dark blue glass of gradually smaller diameters, allowing both to be visible. A thick band over the forehead and eyebrows of dark blue (appearing black) glass. Mouth, now missing, was an applied oval white mass of which tiny parts are still visible. Turquoise glass formed a suspension loop, now missing.

Remains of dark red sandy coating adhere to interior of tiny rod hole.

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. Male heads represent the largest group among Punic head pendants. 2004.10 belongs to a subgroup of male heads with sleek hair and beard (Seefried 1982, pp. 27, 92, plate I, type B.II), which are dated between the middle of the seventh and the fifth century BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 227. Seefried 1982, p. 92, no. 22.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



548. Head Pendant

<b>Accession Number</b>	2003.205
<b>Dimensions</b>	H. with the loop 3.0, without the loop 2.4, max. W. 2.0, max. Th. 2.0 cm; Wt. 8.84 g
<b>Date</b>	Third–mid-first centuries BCE
<b>Production Area</b>	Punic, probably Carthage
<b>Material</b>	Opaque white and translucent blue and purple glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Fully preserved; some minor abrasions and nicks visible on the nose and chin.

**DESCRIPTION** Rod-formed pendant rendering a female head. The head was formed with white glass wound around the tip of a rod covered with an organic mass; the hole has a maximum diameter of 0.6 cm and is clean inside, not retaining any remains of the core. This mass was pressed to form the nose. Then hair, eyes, ears, and mouth were applied, and finally a hanging loop. The hair is made of a thin layer of purple (seeming black) glass. The eyes are very large and are made of concentric overlapping disks of dark purple, white, and purple glass of gradually smaller diameter, allowing all to be visible. The ears and the mouth are made of glass that appears black, which is at its current condition totally impenetrable to light; its true color thus cannot be distinguished, but it was probably dark purple like the other features. A small loop for suspension, made of dark blue (seeming black) glass, is on top of the head. The same coil of glass continues as a wide band running across the forehead.

Some black, ferrous impurities are visible in the white mass of the pendant.

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. 2003.205 belongs to a subgroup of small-size female heads made in a very similar fashion to some male heads, being different because there is no beard (Seefried 1982, p. 19, plate III, type D.2.), which are dated between the middle of the third and the mid-first century BCE.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003



**BIBLIOGRAPHY** von Saldern et al. 1974, p. 82, no. 222; p. 82, plate no. 222.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 549. Head Pendant

<b>Accession Number</b>	2003.207
<b>Dimensions</b>	H. 1.8, W. 1.3 cm; Wt. 1.96 g
<b>Date</b>	Sixth–fourth centuries BCE
<b>Production Area</b>	Punic, probably Carthage. Reportedly found in Olbia, Ukraine
<b>Material</b>	Blue, yellow, and white glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Suspension ring and part of the mouth are missing. The overall surface is corroded.

**DESCRIPTION** Blue, rod-formed pendant in the shape of a bearded female head. The blue base mass renders the hair and the beard. A blob of yellow glass provides the skin of the face, pinched to form the nose, and two smaller ones the ears. The eyes are made of two overlapping disks of white and blue glass of gradually smaller diameters, allowing both to be visible. The mouth, now missing, was an applied oval white mass, tiny parts of which are still visible. Blue glass formed a suspension loop, now missing; only its base is still preserved.

No remains of coating are visible in the interior of the wide rod hole

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. Male heads represent the largest group among Punic head pendants. 2003.207 belongs to a subgroup of male heads with a twisted hairstyle and sleek beard (Seefried 1982, p. 27, 96, plate I, type B.III), dated between the sixth and the fourth centuries BCE.

**PROVENANCE** Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 225; p. 82, plate no. 225.

Seefried 1982, p. 96, no. 15.

Wight 2011, pp. 102, 107, fig. 74.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 550. Head Pendant

<b>Accession Number</b>	83.AM.1.1
<b>Dimensions</b>	H. 3.5, W. 2.2 cm
<b>Date</b>	Second half of the fourth–end of the third centuries BCE



<b>Production Area</b>	Punic, probably Carthage
<b>Material</b>	Dark blue, white, and yellowish glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Surface with layer of weathering in different areas.

**DESCRIPTION** Dark blue, appearing black, almost cylindrical, rod-formed pendant in the shape of a bearded male head. The face is made of an oval mass of white glass. On it are applied the eyebrows, the eyes, and the nose. The eyes are made of a blue disk over which is a slightly smaller white disk, and a smaller disk of dark blue glass renders the pupil. The eyebrows and the nose are made of a single applied, curving thread of glass. The end of the nose is a tiny yellow bead. Lips are rendered with a disk of yellowish glass pressed in the middle to form the mouth. The elongated beard was made of five coils of amber-colored glass (the first from the right is not preserved). On each side of the face are four yellow beads in a line. The ears are not indicated. Suspension loop, if it existed, is covered by the gold attachment. The back side of the pendant is notably shorter and the rod hole very wide.

This is displayed as the central pendant of a necklace of Etruscan golden beads. It is attached to a cylindrical golden bead with a stem and hemispherical element, from which it hangs. How it is suspended cannot be seen: possibly from a loop too, although there is not enough space for one in the gold “cup.”

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. This example belongs to a subgroup of Punic glass pendants representing male figures with hair or beard formed by coiling glass, dated between 350 and 200 BCE. If the hair of this example was not removed at a later period along with the suspension loop, then that is missing too, meaning the pendant does not correspond to any of the four published variants. If there was coiling hair, it would belong to the group (Seefried 1982, type C.III, pp. 8, 105–116, plate II) characterized by intense polychromy; these were occasionally made in a very large size, double that of 83.AM.1.1, which is an average-size example.

**PROVENANCE** By 1980, Private Collection; by 1982–1983, Robin Symes, Limited, founded 1977, dissolved 2005 (London, England), sold to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Taimsalu 1980, p. 37, fig. 1a–b.

Mattusch 1994.

JPGM Acquisitions 1983, p. 255, no. 138.1.B, fig. 138b.

**EXHIBITIONS** None



## 551. Ram Head Pendant

<b>Accession Number</b>	83.AM.1.2
<b>Dimensions</b>	H. 2.5 cm [with the suspension loop, which is 0.7 cm high], W. 1.5 cm
<b>Date</b>	Mid-fourth–late third centuries BCE
<b>Production Area</b>	Punic, probably Carthage
<b>Material</b>	Dark blue, white, and yellowish glass
<b>Modeling Technique and Decoration</b>	Rod-formed

**CONDITION** Surface has layer of weathering in different areas.

**DESCRIPTION** Opaque white ram head; curved amber-colored horns. Eyes are made of a dark green glass, appearing black, topped by a slightly smaller white disk; the pupil is a dark green lump of glass. The nostrils and the mouth are indicated with a dark green (appearing black) glass. Ears are made of spherical white beads. There is an amber-colored suspension loop between the horns.

Remains of dark red, sandy coating adhere to the interior of a tiny rod hole.

Used as the central pendant of a necklace of gold beads, this piece is attached to a golden cylindrical bead with a stem and hemispherical element, from which the suspension loop hangs.

**COMMENTS AND COMPARANDA** On Punic glass pendants in general, see comments on cat. 544. This belongs to a subgroup of Punic glass pendants representing small ram heads. This particular subgroup includes multicolored examples (H. 2–3 cm) with elongated snout, which are dated between 350 and 200 BCE (Seefried 1982, type E1b, pp. 8, 136–138, plate III).

**PROVENANCE** By 1980, Private Collection; by 1982–1983, Robin Symes, Limited, founded 1977, dissolved 2005 (London, England), sold to the J. Paul Getty Museum, 1983

**BIBLIOGRAPHY** Taimsalu 1980.

Mattusch 1994.

JPGM Acquisitions 1983, p. 255, no. 138.1; fig. 138a.

**EXHIBITIONS** None



## 552. Double-Faced Pendant

<b>Accession Number</b>	78.AF.324.3
<b>Dimensions</b>	H. 2.2, W. 1.9, Th. 0.09 cm; Wt. 1.97 g
<b>Date</b>	Late fourth–third centuries BCE
<b>Production Area</b>	Aegean region
<b>Material</b>	Translucent dark blue glass

### Modeling Technique and Decoration

**CONDITION** Nearly complete. Surface smooth. Incrustation remains; small chips. No bubbles or iridescence.

**DESCRIPTION** Ellipsoidal, double-faced pendant, with similar relief representations of bearded male heads en face on both sides. On the lower part, a cylindrical opening (D. approx. 2 mm). Glass overflow from the mold, mainly on the upper part.

Side A: Bearded male figure with hairstyle comprising elongated curls that frame his forehead and temples. Arched eyebrows; large eyes; pronounced cheekbones and nose; recessed areas around the eyes and the small mouth.

Side B: Bearded male figure with hairstyle comprising spherical curls that frame his forehead and temples. Arched eyebrows; large eyes; pronounced cheekbones and nose; pronounced, downturned mustache; small mouth.

**COMMENTS AND COMPARANDA** The bearded male figures depicted on the two sides have similar features in general but differ in individual details, such as the mustache and hairstyle. The round locks on the forehead of the face on side B can be identified as an ivy wreath and thus we may recognize in the figure Papposilenos (Ignatiadou 2021, pp. 102–103, Papposilenus-type A). Papposilenos is a mythical figure, a follower of the god Dionysus and the elderly father of the Silenoi. He is always shown bearded, usually wearing an ivy wreath, and with porcupine ears, which are not discernible on the glass examples (*LIMC* VII.1, s.v. “silenos,” p. 762).

Double-faced pendants with male or female busts are a well-known and studied group of glass artifacts (Haevernich [1968] 1981, pp. 188–197; Spaer 2001, pp. 160–161, 168, nos. 323–324). Most of them were used as the head of long metal hairpins, occasionally supplemented with a suspension ring and used as pendants. The pendant was formed by picking up and rolling a small mass of glass around the end of a metal rod, then it was pressed in a two-part mold; usually a lot of excess glass escapes from the seams, just like in our example (Spaer 2001, p. 161). The opening formed when the rod was removed is where the shaft of the hairpin was secured; in some cases a suspension ring was set there instead, converting it into a hanging pendant (Trakosopoulou 2002, p. 84, fig. 10, from a fourth-century

BCE grave from Akanthos; Mandruzzato et al. 2008, p. 38, cat. no. 134, from Aquileia). The breakage on the upper part makes it impossible to determine if this piece had a suspension ring.

Pendants with male faces have long been connected in archaeological studies with Punic civilization, and medallions representing a female head with long curly hair are oftentimes identified with the chief Punic goddess, Tanit (Haevernick [1968] 1981, pp. 188–197; Seefried 1982, pp. 61–62). A new, and convincing, approach has connected the male faces with the Aegean region and even probably with early fourth-century BCE northern Greece. Their iconography has been connected with purely Greek artworks, reflecting aspects of Greek mythology. Namely, in the different types of faces have been recognized Zeus, Dionysus, Hades, and Papposilenos (Ignatiadou 2021, pp. 95–117, with detailed bibliography). Most of these pendants are made of dark blue glass, with only very few in natural green or amber-colored glass. They are found in the eastern Mediterranean region and on the coast of the Black Sea.

**PROVENANCE** 1978, Ira Goldberg; Mark Goldberg and Larry Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 553. Double-Faced Pendant

**Accession Number** 2004.11

<b>Dimensions</b>	H. 3.0, W. 2.4, max. Th. 1.4 cm; Wt. 6.86 g
<b>Date</b>	Late fourth–third centuries BCE
<b>Production Area</b>	Western Mediterranean
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Molded

**CONDITION** Upper part chipped off below and along sides. Rough surface; weathered and iridescent.

**DESCRIPTION** Ellipsoidal double-head pendant.

Side A: The face of a young female figure with the following characteristics: oval face framed by a rich hairstyle, falling in curls to the neck; a beaded band over her forehead; arched eyebrows, large eyes, wide nose, and small mouth. At the center of the lower, straight side of the bust, a vertical pole is visible, indicating that a standing structure supported the bust of the figure.

Side B: Oval face, wider than face on side A, framed by a rich hairstyle, falling in curls to the neck; eyebrows are not discernible and the eyes are normal size; full cheeks, wide nose, and small mouth. Remains of an ornate band over the forehead visible. At the center of the lower, straight side of the bust, a vertical pole is visible, indicating that a standing structure supported the bust of the figure. A small part of an added band of glass is visible on the top of the head on this side, probably the remains of a loop.

On the bottom of the pendant is a cylindrical opening (W. 0.4, D. 1.2 cm).

**COMMENTS AND COMPARANDA** Double-faced pendants with female bust are a well-known and studied group of glass artifacts (Haevernick [1968] 1981, pp. 192–197; Spaer 2001, pp. 160–161, 167, nos. 321–322). They were used as the head of long metal hairpins. The pendant was formed by picking up and rolling a small mass of glass around the end of a metal rod; it then was pressed in a two-part mold. Quite usually a lot of excess glass escaped along the seams, as in our example (see also Spaer 2001, p. 161). The opening formed when the rod was removed is where the shaft of the hairpin was secured. The female figure with long curly hair represented on these pendants has been identified with the chief Punic goddess, Tanit (Haevernick [1968] 1981, pp. 188–197; Adam-Veleni and Ignatiadou 2010, p. 405, no. 495; Arveiller-Dulong and Nenna 2011, pp. 302–304, nos. 481–486, esp. 484). Most of these pendants are found in

the Punic region of the western Mediterranean. It is suspected that they were produced in a Punic center, possibly even Carthage itself. They are connected to the rod-formed head pendants (cats. 544–549).

On the pendants with male faces and their iconography, see comments on cat. 552.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his daughter, Ingrid Reisser, 1988; 1988–2004, Ingrid Reisser (Böblingen, Germany), sold to the J. Paul Getty Museum, 2004

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 83, no. 231.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



554. Mosaic Glass Pendant

<b>Accession Number</b>	76.AF.70.46
<b>Dimensions</b>	L. 2.2, W. 0.8 cm; Wt. 0.91 g
<b>Date</b>	First century BCE–first century CE; possibly second half of eighth–first half of ninth centuries CE
<b>Production Area</b>	Egypt or Italy or Samara region (Russia)
<b>Material</b>	Translucent purple and opaque white, red, yellow, and green glass
<b>Modeling Technique and Decoration</b>	Fusion

**CONDITION** Intact.

**DESCRIPTION** Section of a cylindrical composite mosaic rod that was tooled to an elongated, diagonal shape; a hole was pierced through the upper part. The motif comprises a dark purple rod set in consecutive layers of glass in white, red, yellow, and green with yellow rods.

**COMMENTS AND COMPARANDA** For the historical and technological evolution of glass inlays in Pharaonic Egypt and the Roman Empire, see cat. 449. The pendant could also belong to a much later production with parallels in the shape of mosaic beads from burials in Cheremshansky, Samara region, dated to the Khazarian period, in the second half of the eighth–first half of the ninth century CE; see Stashenkov 2015, fig. 8.

**PROVENANCE** By 1976, Bruce McNall, donated to the J. Paul Getty Museum, 1976

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



555. Amulet

<b>Accession Number</b>	2003.456
<b>Dimensions</b>	L. 2.4, W. 1.3 cm; Wt. 0.90 g
<b>Date</b>	Roman, third–fifth centuries CE
<b>Production Area</b>	Probably Syro-Palestinian region
<b>Material</b>	Translucent dark blue glass
<b>Modeling Technique and Decoration</b>	Tooled and rod-pierced

**CONDITION** Intact. Some weathering has occurred, causing iridescence.



**DESCRIPTION** Amulet in the shape of a dolphin in the round. The amulet is not perfectly flat; rather, both sides are slightly curved. It probably started as a loop or discoid bead and, with further pinching and tooling, shaped into a dolphin. The rostrum is clearly depicted as is the characteristic melon on the animal's forehead. The dorsal fin is pinched, and the flukes of the tail are clearly visible. A small protuberance on the underbelly might represent the pectoral fin. The threading hole is the eye of the animal. The animal is rendered in dynamic movement with its tail bent, at the moment of jumping above the sea.

**COMMENTS AND COMPARANDA** These pendants are usually made in a single color and occasionally are embellished with details like the fins and the rostrum in another color. Several examples are known from burials of the Roman imperial to early Byzantine period (fourth–seventh centuries) at Syro-Palestinian sites (Spaer 2001, p. 186, fig. 83, p. 188 no. 427, plate 32; Chebab 1986, p. 167, plate 27:1, 3–5) and on Cyprus (Lightfoot 2017, p. 314, nos. 478–479), as well as in Germany (Pirling 1979: tomb 2826), Hungary (Burger 1966, p. 104, fig. 97, tomb 47:10, with a ca. fourth-century glass jug), and the Black Sea coast (Alekseeva 1978, single-colored glass, pp. 73–74, form 184, plate 34, no. 21, ascribed to the first century CE).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 252, no. 732.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 556. Pendant

<b>Accession Number</b>	78.AF.321.1
<b>Dimensions</b>	H. 2.2, D. 1.6, Th. 0.3–0.4 cm; Wt. 1.46 g
<b>Date</b>	Mid-fourth–early fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Stamped

**CONDITION** Fully preserved. Tiny chips on the side.

**DESCRIPTION** Circular medallion with oval suspension ring on the top. The suspension ring is drawn out of a lump of glass folded backward over a rod and reattached when the device was stamped onto the medallion. Circular die. Crisp relief. Back side is smooth and flat.

Stamped, frontal bust of a beardless figure, flanked by an inscription that identifies her as Victory, NIKH, written in capital Greek letters: vertically arranged, on the left side, facing upward, NI, and on the right, facing downward, KH. The hair of the figure is quite voluminous and reaches the middle of the neck, where it ends in a wide foldover. A wide, triangular, beaded band is visible over the forehead. Large eyes, straight thick nose, mouth closed. Long, triangular neck rising from the oval, almost angular opening of the dress-chiton. The front edge of the dress has relief decoration.



**COMMENTS AND COMPARANDA** Pendants of this type are quite numerous, particularly in the Syro-Palestinian region. They are mainly made of yellowish glass, and less often of dark blue and olive-green.

They have been grouped by Dan Barag (Barag 2001, Barag 2002, pp. 307–308) into three types according to the shape of the suspension loop: (a) flattened in front, vertical (dated between the mid-fourth century and the early fifth century); (b) heavy and rounded, convex, not always vertical (dated to the late fourth to mid-fifth centuries); and (c) large annular on an irregularly shaped disk (dated between the second half of the fifth into the early sixth century). On the basis of the iconography of their ornament, six types have been discerned: (1) classical Greek themes, (2) biblical themes, (3) Jewish symbols, (4) Christian symbols, (5) animals, and (6) miscellaneous motifs. The three pendants in the Getty collection belong to the first type in terms of the shape of the loop, the size, and the quality and the theme of the stamped decoration. For other comparanda, see two medallions from Hauran in yellowish glass (Zouhdi 1977, p. 56, no. d, fig. 4:2). Several medallions from unknown findspots have been published: Stern 2001, p. 380, no. 213; Barag 2001, p. 179, no. 356; Barag 2002, p. 314, LA-17.

**PROVENANCE** 1978, Ira Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Lees-Causey 1983, pp. 154–155.

**EXHIBITIONS** None



557. Pendant

<b>Accession Number</b>	78.AF.321.2
<b>Dimensions</b>	H. 2.3, D. 1.7, Th. 0.3–0.4 cm; Wt. 1.46 g
<b>Date</b>	Mid-fourth–early fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Stamped

**CONDITION** Intact.

**DESCRIPTION** Circular medallion with oval suspension ring on the top. The suspension ring was drawn out of a lump of glass, folded backward over a rod, and reattached when the device was stamped onto the medallion. Circular die. Crisp relief. Back side is smooth and flat.

Stamped, frontal bust of a beardless figure, flanked by an inscription that identifies her as Victory, NIKH, written in capital Greek letters: vertically arranged, on the left side, facing upward, NI, and on the right, facing downward, KH. The hair of the figure is quite voluminous and reaches the middle of the neck, where it ends, forming a wide foldover. A wide, triangular, beaded band is visible over the forehead. Large eyes; straight, thick nose; closed mouth. Long, triangular neck rising from the oval, almost angular opening of the dress-chiton. The front edge of the dress has relief decoration.

**COMMENTS AND COMPARANDA** See cat. 556.

**PROVENANCE** 1978, Ira Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Lees-Causey 1983, pp. 154–155.

**EXHIBITIONS** None



### 558. Pendant

<b>Accession Number</b>	78.AF.321.3
<b>Dimensions</b>	H. 2.3, D. 1.5, Th. 0.3–0.4 cm; Wt. 1.32 g
<b>Date</b>	Mid-fourth–early fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Stamped

**CONDITION** Intact.

**DESCRIPTION** Elongated, irregularly circular medallion with oval suspension ring on the top. The suspension ring was drawn out of a lump of glass, folded backward over a rod, and reattached when the device was stamped onto the medallion. Circular die. Crisp relief. Back side is smooth and flat.

Stamped, frontal bust of a beardless figure, flanked by an inscription that identifies her as Victory, NIKH, written in capital Greek letters: vertically arranged, on the left side, facing upward, NI, and on the right, facing downward, KH. The hair of the figure is quite voluminous and reaches the middle of the neck, where it ends, forming a wide foldover. A wide, triangular, beaded band is visible over the forehead. Large eyes; straight, thick nose; closed mouth. Long, triangular neck rising from the oval, almost angular opening of the dress-chiton. The front edge of the dress has relief decoration.

**COMMENTS AND COMPARANDA** See cat. 556.

**PROVENANCE** 1978, Ira Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Lees-Causey 1983, pp. 154–155.

**EXHIBITIONS** None



### 559. Pendant

<b>Accession Number</b>	78.AF.321.4
<b>Dimensions</b>	H. 2.5, Diam. 1.8, Th. 0.3–0.4 cm; Wt. 1.90 g
<b>Date</b>	Mid-fourth–early fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Stamped

**CONDITION** Intact.

**DESCRIPTION** Circular medallion with oval suspension ring on the top. The suspension ring is drawn out of a lump of glass, folded backward over a rod, and reattached when the device was stamped onto the medallion. Circular die. Crisp relief. Back side is smooth and flat.

Stamped, frontal bust of a beardless figure, flanked by an inscription that identifies her as Victory, NIKH, written in capital Greek letters: vertically arranged, on the left side, facing upward, NI, and on the right, facing downward,

KH. The hair of the figure is quite voluminous and reaches the middle of the neck, where it ends, forming a wide foldover. A wide, triangular, beaded band is visible over the forehead. Large eyes; straight, thick nose; closed mouth. Long, triangular neck rising from the oval, almost angular opening of the dress-chiton. The front edge of the dress has relief decoration.

**COMMENTS AND COMPARANDA** See cat. 556.

**PROVENANCE** 1978, Ira Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Lees-Causey 1983, pp. 154–155.

**EXHIBITIONS** None



## 560. Pendant

<b>Accession Number</b>	78.AF.321.5
<b>Dimensions</b>	H. 2.3, Diam. 1.8, Th. 0.3–0.4 cm; Wt. 1.85 g
<b>Date</b>	Mid-fourth–early fifth centuries CE
<b>Production Area</b>	Eastern Mediterranean, probably Syro-Palestinian region
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Stamped

**CONDITION** Intact.

**DESCRIPTION** Circular medallion with oval suspension ring on the top. The suspension ring was drawn out of a

lump of glass, folded backward over a rod, and reattached when the device was stamped onto the medallion. Circular die. Crisp relief. Back side is smooth and flat. A stamped rooster, facing left, with well-defined comb and tail, covers almost the entire surface.

**COMMENTS AND COMPARANDA** See cat. 556.

**PROVENANCE** 1978, Ira Goldberg (Beverly Hills, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Lees-Causey 1983, pp. 154–155.

**EXHIBITIONS** None



## 561. Bracelet

<b>Accession Number</b>	79.AF.184.1
<b>Dimensions</b>	Diam. 4.9, Th. 0.6 cm; Wt. 5.26 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent greenish glass
<b>Modeling Technique and Decoration</b>	Tooling

**CONDITION** Intact. Iridescent weathering on some areas; many pinprick bubbles.

**DESCRIPTION** The bracelet is made of an irregular, seamless ring of glass, D-shaped in cross section. There are no signs of painted or other decoration on any part of it.

**COMMENTS AND COMPARANDA** Glass bracelets appear sporadically from the second half of the first millennium BCE (Spaer 1988, pp. 51–61). They are found in large numbers for the first time in the last centuries of the first

millennium BCE in central Europe, in Celtic regions (Haevernick [1952] 1981, pp. 8–12). Seamless and decorated with tooling and applied colored glass, they become fashionable in the eastern Mediterranean region in the third century, and in the fourth century they spread to the entire Roman Empire. These are dark-colored, probably in imitation of corresponding products of jet, a particularly popular material during this period. Most of them are plain, continuous rings, although examples with impressed decoration, such as ribbing (like cat. 565), protuberances, and stamped symbolic motifs are known as well (Jovanović 1978, pp. 27–28; Marijanski-Manojlović 1987, p. 33; Riha 1990, pp. 64–66; Golofast 1996, pp. 183–185; Spaer 2001, pp. 193–205, nos. 437–66; Dautova-Ruševljan 2003, plate XXVIII G. 48/5; Radulović 2006, p. 367; Mandruzzato et al. 2008, pp. 54–58, nos. 40–66; Antonaras 2010a, p. 323; Cosyns 2011, pp. 147–155; Arveiller-Dulong and Nenna 2011, pp. 249–260, esp. pp. 249–250; Antonaras 2019, pp. 226–228, nos. 323–328).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 562. Bracelet

<b>Accession Number</b>	79.AF.184.4
<b>Dimensions</b>	Diam. 5.0, Th. 0.6 cm; Wt. 6.17 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Translucent purple glass

**Modeling Technique and Decoration** Piercing and tooling

**CONDITION** Intact. Iridescent weathering in some areas; many pinprick bubbles.

**DESCRIPTION** The bracelet is made of an irregular, seamless ring of glass, D-shaped in cross section. There are no signs of painted or other decoration on any part of it.

**COMMENTS AND COMPARANDA** See cat. 561.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 563. Bracelet

<b>Accession Number</b>	2003.457
<b>Dimensions</b>	Diam. 8.5, Th. 0.4 cm; Wt. 28.20 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Semitranslucent purple (seemingly black) glass
<b>Modeling Technique and Decoration</b>	Tooling

**CONDITION** Weathering has given parts a purple iridescence, and there is some incrustation in places.

**DESCRIPTION** The bracelet is made of a rod of glass, D-shaped in cross section, that was bent to form a closed circle. The area where the two ends meet was flattened to form a medallion. There are no signs of painted or other decoration on any part of it. A groove runs along part of the inside surface.

**COMMENTS AND COMPARANDA** See cat. 561.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 252, no. 733.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 564. Bracelet

<b>Accession Number</b>	2003.459
<b>Dimensions</b>	Diam. 5.0, Th. 0.3 cm; Wt. 5.80 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Semitranslucent dark blue (seemingly black) glass
<b>Modeling Technique and Decoration</b>	Tooling

**CONDITION** Intact, with minimal weathering.

**DESCRIPTION** A continuous ring of seemingly black glass, D-shaped in cross section. The actual color of the glass is not discernible. The seamless ring is slightly irregular, and there are no signs of painted or other decoration on it.

**COMMENTS AND COMPARANDA** See cat. 561.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 252, no. 736.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 565. Bracelet

<b>Accession Number</b>	2003.458
<b>Dimensions</b>	Diam. 7.0, Th. 1.0 cm; Wt. 25.20 g
<b>Date</b>	Fourth century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Semitranslucent dark green (seemingly black) glass
<b>Modeling Technique and Decoration</b>	Tooling



**CONDITION** Intact, with light weathering and incrustation.

**DESCRIPTION** A continuous ring of dark green (seemingly black) glass, D-shaped in cross section. Fifteen pinched, slanting ribs around the exterior surface.

**COMMENTS AND COMPARANDA** For glass bracelets, see comments on cat. 561. For similar ribbed and patterned bracelets, see Antonaras 2019, pp. 226, no. 323, wherein parallels are cited.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 252, no. 735.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 566. Armlet / Glass Loop

<b>Accession Number</b>	2003.407
<b>Dimensions</b>	W. 13.7, Th. 2.4 cm; Wt. 320 g
<b>Date</b>	Possibly late Roman or Byzantine period (third–fourth to twelfth centuries CE)
<b>Production Area</b>	Roman or Byzantine Empire
<b>Material</b>	Translucent greenish glass

### Modeling Technique and Decoration

Tooling

**CONDITION** Intact. Light iridescent weathering in small areas; many pinprick bubbles.

**DESCRIPTION** A thick, bent coil of translucent dark green glass. Several elongated bubbles are visible in the mass of the object, produced by the stretching of the originally globular mass of glass from which it was shaped. The ends are bent over and pressed to close the circumference. Uneven tooling marks, adjacent to the seam, had previously been interpreted as snake heads, but quite probably they were simply the result of the forming process of the armlet.

The size and weight of this particular object make it quite improbable that it was actually a jewelry piece.

**COMMENTS AND COMPARANDA** The great size and weight of the loop makes its identification as a bracelet dubious. It might have been a weight, almost equal to one Roman and Byzantine pound, i.e., libra, or 325 g (Lafaurie 1993; Morrisson 2002, p. 920-921). On glass bracelets, see cat. 561.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 216, no. 625.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 567. Two Chain Links, Possibly Part of a Necklace

<b>Accession Number</b>	2003.295.1–2
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<b>Dimensions</b>	2003.295.1: H. 0.5, Diam. 1.5 cm; Wt. 2.48 g; 2003.295.2: H. 0.5, Diam. 1.4 cm; Wt. 2.14 g
<b>Date</b>	Probably fourth century CE
<b>Production Area</b>	Perhaps Italy
<b>Material</b>	Glass, gold, bronze, iron
<b>Modeling Technique and Decoration</b>	Hammering, soldering

**CONDITION** Bronze parts are heavily corroded. Surface of the glass is clear and unweathered in both examples. 2003.295.2 is missing one part of the double loop. Glass medallion of 2003.295.2 is cracked.

**DESCRIPTION** Bronze medallion with gold-glass inset. Each medallion is made of a round bronze sheet from which emerge, on the two opposite sides, one and two, respectively, bands/strips, which have been folded to create loops. A fine band has been soldered on the periphery of the round sheet, forming a ring into which the gold-glass has been placed.

Remains of iron wire can be seen in the double loop of each medallion.

Only one band of the double link of the second medallion (2003.295.2) is preserved, and the area from which the second band broke away is visible.

It is evident that the single link was fitted into the space in the middle of the double link, while an iron wire passed through the three links, which ensured the cohesion of the “chain.”

The two gold-glass medallions are grozed all around, following the shape of the bronze band in which they are inset. A cut gold foil was placed under the glass, depicting a bird, in profile to the right, perched on a horizontal bar, apparently a branch. The birds have round head, large eye, and curved beak; they are similar but not identical. The birds are formed by cutting and scratching the gold foil to the desired shape. The foil is secured between two layers of clear-colored glass, which were set in a bronze circular ring. The grozed outline of the glass medallion was covered with a substance, which is still quite clearly visible on one of them.

**COMMENTS AND COMPARANDA** On gold-band and gold-glass objects, see cat. 145. No exact parallels have been located. For a bronze case for a wax sealing decorated with gold-glass decoration from Thessaloniki, Greece, see Adam-Veleni and Ignatiadou 2010, p. 257, no. 167, dated to the second half of the first century CE. For a

bronze ring in the British Museum with a chi-rho-monogrammed gold foil under a layer of glass dated to the fourth century CE, see Howells 2015, p. 12, plate 3, p. 20. For gold-glass in general, see Morey 1959; von Saldern 2004, pp. 461–474; Howells 2015, pp. 3–16. On the motif of birds, see Scarborough and Cutler 1991, pp. 289–290.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 152, no. 398. Wight 2011, pp. 102, 108, fig. 75.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 568. Spindle Whorl

<b>Accession Number</b>	2003.460
<b>Dimensions</b>	H. 1.6, Diam. 4.5 cm; Wt. 40.10 g
<b>Date</b>	First century CE
<b>Production Area</b>	Continental Europe or Mediterranean region
<b>Material</b>	Opaque dark green and white glass
<b>Modeling Technique and Decoration</b>	Tooled; applied elements

**CONDITION** Intact.

**DESCRIPTION** Perforated, truncated conical object of dark green (seemingly black) glass. Around the sloping sides of the body, 12 vertical ribs are tooled. A white thread is wound spirally seven or eight times; the lower and upper revolutions are straight, and the six central ones are combed and appear wavy. The lower side is slightly irregular and retains the profile of the surface where the mass of glass was shaped into the whorl. The walls of the hole are smooth; both edges are mildly curved, especially the one on the bottom surface, from the intrusion of the metal rod that pierced it.

**COMMENTS AND COMPARANDA** Glass spindle whorls are relatively common finds from the Early Roman period, and this particular form in particular, with a white thread wound spirally from bottom to top, is well-studied, with hundreds of published examples from all of Europe and the Mediterranean dated to the first century CE (Haevernich [1972] 1981, pp. 136–148; Ravagnan 1994, p. 175, no. 339; Barkóczy 1996, p. 111, no. 364; Larese and Zerbinati 1998, p. 92, no. 169; Spaer 2001, pp. 259–260; Beretta and Di Pasquale 2004, p. 334, no. 4.69; Foy 2010a, p. 484, nos. 1005–1007; Arveiller-Dulong and Nenna 2011, pp. 332–335; Antonaras 2019, p. 263 no. 423).

**PROVENANCE** Found: Olbia, Ukraine (first recorded in von Saldern 1974); Pierre Mavrogordato, Greek, 1870–1948 (Berlin, Germany); by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 253, no. 739.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 569. Astragalos

<b>Accession Number</b>	79.AF.171
<b>Dimensions</b>	H. 1.8, W. 1.1, Th. 1.0 cm; Wt. 2.86 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Cast

**CONDITION** Intact; covered with iridescence.

**DESCRIPTION** Naturalistic miniature representation of a sheep or goat knucklebone, cast in a two-part mold. Along the length of the long sides, traces of the join between the two parts of the mold in which it was cast are visible.

**COMMENTS AND COMPARANDA** Astragaloi were used in a much-loved children's game (*astragalismos*), played by both boys and girls in ancient Greek and medieval society, that survived down to the twentieth century in Greece as a game called *kotsia*. At least four or five astragaloi were required for the game. Each side of the astragalos had a specific value, and the players threw their knucklebones in turn, collecting the analogous points. Knucklebones were also used as a way of telling the future.

For the game, see Deonna et al. 1938, pp. 332–333; Robinson 1941, pp. 502–504; Broneer 1947, p. 241, plate LXI:20; Davidson 1952, p. 222. Glass astragaloi appear probably in the second century BCE, but most finds are dated between the first century BCE and the first century CE, equally present in the eastern and the western parts of the Roman Empire (Stern and Schlick-Nolte 1994, pp.

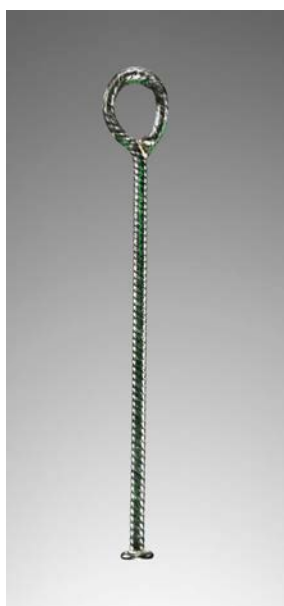
338–339, no. 104; Spaer 2001, p. 232; Bianchi et al. 2002, pp. 288–289, no. GR-12a–c; Adam-Veleni and Ignatiadou 2010, pp. 209, 359, nos. 65, 392; Antonaras 2019, no. 417).

**PROVENANCE** 1979, Nicolas Koutoulakis, 1910–1996 (Geneva, Switzerland), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Neils and Oakley 2003, p. 279, no. 90.

Kugler 2004, p. 10.

**EXHIBITIONS** Coming of Age in Ancient Greece: Images of Childhood from the Classical Past (Hanover, 2003; New York, 2004; Cincinnati, 2004; Los Angeles, 2004)



## 570. Stirring Rod

<b>Accession Number</b>	2003.403
<b>Dimensions</b>	L. 18.5, Diam. 0.6 cm; Wt. 12.11 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent dark green glass
<b>Modeling Technique and Decoration</b>	Tooled

**CONDITION** Fully preserved; mended.

**DESCRIPTION** Twisted stirring rod that was shaped into a flat disk at one end and bent into an oval loop at the other. On the disk, the spiraling that covers the entire body is visible.

**COMMENTS AND COMPARANDA** The solid glass rods known as stirring rods are quite sturdy implements and were used, or could have been used, for stirring drinks, such as wine with water, possibly in a specific context like banqueting. Nevertheless, they were probably used for other purposes as well, such as distaffs or spindles or else likenesses of distaffs and spindles. The majority of finds from controlled excavations are dated in the first and early second centuries CE, and are probably more common in the western than in the eastern areas of the Roman Empire. Stirring rods are usually twisted in one or two directions, and seldom smooth (Isings 1957, pp. 94–95, form 79; Antonaras 2009, pp. 330–332, form 148 = Antonaras 2017, pp. 166–167). Occasionally, examples like cat. 571 occur, with twisted shafts consisting of a main rod and a second, fine thread in a different color (Arveiller-Dulong and Nenna 2011, pp. 330–331, no. 538; Antonaras 2012, p. 312, no. 507; Grose 1989, pp. 356–358, nos. 670c, e, h, l; Spaer 2001, pp. 262–264, nos. 632, 634; pp. 330–331, nos. 536–539). In general, the ends of the rods were shaped in different ways. The simplest rods are straight, with a small disk attached at both ends. More elaborate types are often bent at one end, to form a closed ring, probably used as a handle, like this object, with a small disk attached at the other end. Occasionally on this disk a decorative finial—globular or of a more intriguing shape, e.g. of an amphora, bird, or dolphin—was applied (Fremersdorf and Polónyi-Fremersdorf 1984, p. 111, no. 249; Grose 1989, pp. 356–358, nos. 670c, e, h, l; Spaer 2001, pp. 262–264, nos. 631–635; Stern 2001, pp. 396–397, no. 228; Whitehouse 2003, p. 52, nos. 971–972; Arveiller-Dulong and Nenna 2011, pp. 306–307, 330–331, nos. 536–538; Antonaras 2012, p. 312, no. 507).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 214, no. 619.

Wight 2011, pp. 103, 115, fig. 84.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 571. Stirring Rod

<b>Accession Number</b>	82.AC.22.315
<b>Dimensions</b>	pres. L. 3.8, Th. 0.5 cm; Wt. 1.91 g
<b>Date</b>	First century BCE–first century CE
<b>Production Area</b>	Uncertain
<b>Material</b>	Translucent light blue and opaque white glass
<b>Modeling Technique and Decoration</b>	Tooled

**CONDITION** Fragment.

**DESCRIPTION** Twisted stirring rod that gets thicker toward its one preserved end, which was shaped into a disk. Consists of a light blue cane onto which is attached and twisted a fine white thread.

**COMMENTS AND COMPARANDA** For use and comparanda, see cat. 570.

**PROVENANCE** 1982, Antike Kunst Palladion; 1982, Jiří K. Frel, 1923–2006, donated to the J. Paul Getty Museum, 1982

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 572. Pin

<b>Accession Number</b>	2003.404
<b>Dimensions</b>	L. 13.4, max. Diam. 1.1 cm; Wt. 6.03 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent light yellow glass
<b>Modeling Technique and Decoration</b>	Tooled

**CONDITION** Intact; covered with iridescent weathering.

**DESCRIPTION** Smooth glass rod, circular in cross section, pointed at one end and with a conical head at the other.

**COMMENTS AND COMPARANDA** Glass pins are a rare find. They are similar to so-called stirring rods (see cat. 570), which have a tiny disk on one end and a vessel or animal on the other, if not bent into a closed ring; almost always their cylindrical shaft is twisted (Isings 1957, pp. 94–95, form 79; Antonaras 2017, pp. 166–167, form 148). They are even closer to twisted rods, pointed at one end and decorated with a vessel or animal on the other end, identified as distaffs (Gojković 2015, pp. 267–268) and glass needles (Antonaras 2017, pp. 166–167, form 148D).

Glass pins like 2003.404 recall the ancient Greek *kalamis* (καλαμίς) or the Latin *discerniculum*, that is, a long, thin object used by women to divide the locks of their hair when arranging a complicated hairstyle, thereby identifying it with a rare kind of hairpin (*Oxford Latin*

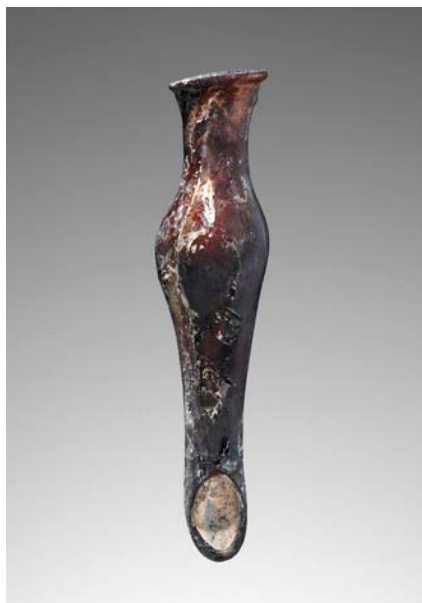


*Dictionary*, s.v. “discerniculum”; Liddell and Scott, s.v. “καλαμίσ”). For finds of this type, see Davaras 1985, p. 201; Platz-Horster 1976, p. 82, no. 166; Barkóczy 1996, p. 106, no. 341; Mandruzzato et al. 2008, p. 53, no. 34.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 215, no. 621.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 573. Medical Pipe

<b>Accession Number</b>	2003.401
<b>Dimensions</b>	L. 12.3, Diam. rim 2.5, max. Diam. 2.6 cm; Wt. 14.12 g
<b>Date</b>	Probably fourth–sixth centuries CE
<b>Production Area</b>	Eastern Mediterranean, Syro-Palestinian region?
<b>Material</b>	Translucent purple glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Intact; interior covered with iridescent, milky white weathering, which is also visible on areas of the exterior.

**DESCRIPTION** A biconical object. Formed as a vessel with in-folded and flattened rim; slightly flaring, short, cylindrical neck; biconical body, with lower part considerably longer; convex bottom. An oval opening on one side near the bottom; the rim of this opening was somehow cut and mildly fire-rounded. Around the vessel at its largest diameter are four indentations. The back side of the opening in the lower part is round, making it impossible to keep the opening facing upward should the vessel be left without a support.

**COMMENTS AND COMPARANDA** No direct comparanda have been found, but the color and the overall shape of the vessel indicate a late antique production period, e.g. fourth–sixth centuries CE. Possibly used to pour some liquid in a controlled manner, especially if the holder sealed the vessel’s mouth with their palm or finger. The large size of the opening compared to the small size of the vessel makes it difficult to understand its use.

**PROVENANCE** 1908, Arnold Vogell, 1857–1911 (Karlsruhe, Germany) [sold, Griechische Altertümer südrussischen Fundorts aus dem Besitze des Herrn A. Vogell, Karlsruhe (Versteigerung), Max Cramer, Cassel, Germany, May 26–30, 1908, lot 978]; by 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** Cramer 1908, lot 978.

von Saldern et al. 1974, p. 213, no. 613.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 574. Head of Sarapis

<b>Accession Number</b>	2003.356
<b>Dimensions</b>	H. 6.0, W. 5.6 cm; Wt. 245.60 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Translucent green glass
<b>Modeling Technique and Decoration</b>	Molded. No mold seams are noticeable

**CONDITION** Broken under the chin. The surface is severely weathered. Deep iridescent grooves and chalky accretions cover the pitted surface.

**DESCRIPTION** Head of a mature bearded man in the round. Long, rich, curly hair surrounds the face and covers part of the god's forehead. Facial characteristics are fine, and the heavy lips are partly covered by the high-relief beard. The base of a modius (a basket measure of grain) is visible on the crown of his head, which identifies the head, with its flowing locks and benign expression, as the god Serapis.

Sarapis was a popular Graeco-Egyptian deity venerated throughout the Roman Empire. He was depicted as a mature male in the Greek way, with wide face, long hair, and full beard, further identified by the kalathos or modius on his head and, typically, by the locks on his forehead. He was depicted either standing or, more often, seated and holding a scepter, with Cerberus, the three-headed dog and gatekeeper of the underworld, resting at

his feet (Hornbostel 1973; *LIMC* VII [1994], s.v. "Sarapis" [G. Clere and L. Leclant]).

**COMMENTS AND COMPARANDA** This type of Sarapis bust is quite widely known in stone examples (Kater-Sibbes 1973). Among others there is a direct parallel in opaque red glass in the Metropolitan Museum of Art, dated to the first–second centuries CE, allegedly from Rome (17.194.1475: <https://www.metmuseum.org/art/collection/search/250142>; Richter 1954, no. 165, p. 90, plate 118a–c.; Froehner 1903, p. 46, no. 271, plate 32.1–2); Hill 1946, p. 66, no. 11.

For other Roman glass sculptures, see parallels listed under cat. 575.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 192, no. 528.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 575. Head of a Bearded Man

<b>Accession Number</b>	2003.357
<b>Dimensions</b>	H. 3.8, Th. 4.0 cm; Wt. 96.40 g
<b>Date</b>	First–second centuries CE
<b>Production Area</b>	Roman Empire
<b>Material</b>	Red opaque glass

**Modeling Technique and Decoration**      Molded

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**CONDITION** Severely weathered. The lower part of the head, below the lips, is missing. Surface is covered with brownish accretions and green patina.

**DESCRIPTION** Miniature head of a bearded man. Hair rendered with eight parallel, horizontal tiers divided by vertical grooves, each one indicating a lock. The man has a rope-shaped band on his head. Two oblique grooves below the band on the back of the head may be interpreted as ends of the band hanging down, if they are not remnants of broken-off pieces. His facial features consist of wide forehead, pronounced eyebrows, oval eyes, wide and short nose, and full upper lip.

The seams of the mold are very well concealed, although possibly visible in the area behind the ears, particularly on the left side of the head.

**COMMENTS AND COMPARANDA** The rope-shaped band the man wears is a *strophion*, a symbol of priesthood, worn also by rulers, athletes, and gods such as Aesculapius (Bieber 1931; Krug 1968, pp. 41–47, 102–106, 128–130, 137–138, type 12). The head bears prosopographic features, like the rendering of the moustache, that resemble a portrait, and the original maybe from the Hellenistic era. For a dark blue glass portrait bust of Augustus dated in the second or third decade of the first century CE, see Doppelfeld 1966, pp. 7–11, plate 1–6; Harden et al. 1987, pp. 21–22, no. 1. For a dark blue glass miniature male bust identified as one of the Tetrarchs, and one of a prince, dated in the late third–early fourth century CE and the first half of the fourth century CE, respectively, see La Baume 1973, H 8, plate 46.1; *Glass from the Ancient World* 1957, p. 115, no. 190; Harden et al. 1987, pp. 23–24, nos. 3–4.

The goddess Aphrodite has also been rendered in translucent greenish glass, in a piece dated in the second century CE (von Saldern 1968, no. 28; *Glass from the Ancient World* 1957, pp. 112–113, no. 188; Harden et al. 1987, p. 29, no. 7).

A male head in red glass, much simpler in execution, dated to the first half of the fourth century is in the Metropolitan Museum of Art (17.194.1474: <https://www.metmuseum.org/art/collection/search/250141>; Froehner 1903, no. 257, p. 45, plate 31.6–7).

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his

son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 193, no. 528a.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 576. Earplug

<b>Accession Number</b>	2003.155
<b>Dimensions</b>	H. 14.7, Diam. rim 1.6, max. Diam. 0.7 cm; Wt. 9.34 g
<b>Date</b>	Late Eighteenth to Nineteenth Dynasty; mid-fourteenth to mid-thirteenth century BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque white and yellow glass; translucent turquoise glass; bronze
<b>Modeling Technique and Decoration</b>	Rod formed

**CONDITION** Fully preserved, with a tiny fragment missing near the top. In the interior a black matte mass is visible. The pin is partly corroded, and a greenish patina covers it entirely.

**DESCRIPTION** The object is hollow and has the form of a papyrus column. Flaring rim/capital; cylindrical body, wider toward the lower part; convex base. A white thread is wound spirally around the body six times. A yellow

thread is wound around the edge of the rim, and another one once around the bottom area. Within the interior of the body a long bronze pin is attached, slender at the free end. The visible part of its upper end has the shape of an oval bead with fine discoid endings and is flanked by hexagonal rings.

The pin is securely attached to the tube's interior, but it is not possible to tell if the pin is part of the original object, or if it has been added at a modern date, which seems quite probable.

**COMMENTS AND COMPARANDA** In ancient Egypt earplugs in the form of a papyrus column were associated with the regenerative powers of the plant, believed to be transferred to the person wearing them. They first appear during the reign of Amenhotep III (1387–1350 BCE) and continue to be used until after the end of the Ramesside period (1075 BCE). They were probably inserted in pierced earlobes, presumably with a fresh flower placed in the cavity (Stern and Schlick-Nolte 1994, pp. 136–137, no. 8). The exact function of these objects is unknown. It is equally probable that they were used as threaded beads, a use that would better display the decorated body, which would not be visible at all if they were used as earplugs (Andrews 1990, p. 114, fig. b, d, e). See further Bomford 1976, no. 2, illustrated; Cooney 1976, p. 92, nos. 975–983, 989–994, 996–998; Goldstein 1979, pp. 78–80, nos. 124, 128; Stern and Schlick-Nolte 1994, pp. 136–137, no. 8.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 31, no. 38.

**EXHIBITIONS** Molten Color: Glassmaking in Antiquity (Malibu, 2005–2006; 2007; 2009–2010)

Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 577. Earplug

<b>Accession Number</b>	2003.156
<b>Dimensions</b>	H. 2.6, Diam. rim 1.3 cm; Wt. 2.44 g
<b>Date</b>	Late Eighteenth to Nineteenth Dynasty; mid-fourteenth to mid-thirteenth century BCE
<b>Production Area</b>	Egypt
<b>Material</b>	Opaque white and yellow and translucent amber-colored glass
<b>Modeling Technique and Decoration</b>	Rod formed

**CONDITION** Fully preserved, with some encrustation visible near the top.

**DESCRIPTION** In the form of a papyrus column; hollow. Flaring rim/capital; cylindrical body, wider toward the lower part; convex base. A white thread is wound spirally around the body seven times. A yellow thread is wound around the edge of the rim and another one twice around the bottom area. In the interior of the body a small remainder of the bronze wire is visible through the center.

**COMMENTS AND COMPARANDA** See cat. 576.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 31, no. 39.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 578. Window Pane

<b>Accession Number</b>	2003.371
<b>Dimensions</b>	H. 2.0, Diam. 18.3, Th. 0.2 cm; Wt. 171.00 g
<b>Date</b>	Islamic, Byzantine, or Ottoman
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Transparent greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Fully preserved. Most of the surface is covered in a layer of iridescence of a pinkish hue.

**DESCRIPTION** A shallow, convex disk made of greenish glass with many large bubbles.

Fire-polished rim. The piece is slightly lopsided and cannot stand on its own. It was probably a windowpane. A difference in the weathering on both sides at the circumference forms a band (W. approx. 1.1 cm), probably indicating the area that was covered by plaster or was inset in a wood or stone frame. The increased thickness and consequent sturdiness also supports the interpretation of the piece as a windowpane. A circular scar of a solid pontil (1.5 × 1.3 cm) can be seen on the convex underside.

**COMMENTS AND COMPARANDA** Circular windowpanes of various diameters were already in use in the sixth century CE (Foy 2005a, p. 112; Nenna 2005, pp. 125–126) and continued to be used in the Islamic world (Foy 2005b; Foy 2005c; Hadad 2005, pp. 30, 49, 63) as well as in the Byzantine Empire (Ousterhout 1999, pp. 151–154; Antonaras and Ricci 2022, pp. 352–353), practically unaltered. The plain rim of this disk, though, may be an indication of an earlier date, before the thirteenth–fourteenth centuries, when a folded rim becomes the rule for windowpanes.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 200, no. 556.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



## 579. Small Lump of Glass / Glassworking Refuse

<b>Accession Number</b>	78.AC.381.77
<b>Dimensions</b>	2.4 × 2.2 cm; Wt. 9.63 g
<b>Date</b>	Fourth century CE or later
<b>Production Area</b>	Probably eastern Mediterranean
<b>Material</b>	Amber-colored translucent glass



**Modeling Technique and Decoration** Tooling

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**CONDITION** Fragment.

**DESCRIPTION** Amorphous lump of glass. Probably glassworking refuse.

**PROVENANCE** By 1977–1978, Herbert L. Lucas, Jr. (Los Angeles, California), donated to the J. Paul Getty Museum, 1978

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



## 580. Bleeding Cup

<b>Accession Number</b>	79.AF.184.20
<b>Dimensions</b>	H. 4.4, Diam. rim 3.2, Diam. base 1.0 cm; Wt. 13.68 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

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**CONDITION** Broken spout, preserved body iridescent from weathering.

**DESCRIPTION** Fire-polished, rounded rim; slightly flaring upper part; cylindrical body, tapering toward the convex bottom; a scar of a solid pontil (W. 1 cm) at the

center. An applied spout at the upper part of the body appears to be a continuous mass of glass internally. The spout was curved toward the bottom of the bowl.

**COMMENTS AND COMPARANDA** Glass bleeding cups were in use from the Roman period through the Byzantine era. Mentioned by the fourth-century CE Greek physician Oribasius—and, according to information repeated in the seventh century, by the great Byzantine physician Paulus Aegineta—glass bleeding cups were useful because physicians check the volume of blood they were letting (Antonaras 2010b, pp. 389–390). During the same period they were widely used in Islamic lands, as they still are today in traditional medicine in eastern Mediterranean and Middle Eastern lands (Lamm 1930, p. 33, plates 2:13–14; Lane 1937, p. 66, fig. 10T; Hasson 1979, p. 5, fig. 1–2; Oliver 1980, p. 142, no. 246; Abdullaev, Rtveladze, and Shishkina 1991, p. 152, no. 642; Kröger 1995, pp. 186–188, nos. 239–243, esp. 239–240; Carboni 2001, pp. 144–145, cat. nos. 34b, c; Scanlon and Pinder-Wilson 2001, pp. 56–59, nos. 29a–g, fig. 29, from an eighth–ninth-century context). What distinguishes bleeding cups from the relatively similar alembic cups is that the body is cylindrical and not so much conical, and that the spout, in order to facilitate the physician’s maneuvering, is turned toward the bottom of the vessel, rather than toward the opening. There is one case where bleeding cups were unearthed in an alchemist’s workshop in conjunction with sphericonical clay vessels, and assumed altogether to comprise alembics, but that should be considered as a solution driven by lack of actual alembic’s domes or by a special distilling technique or product (Valiulina 2005, pp. 44–47, figs. 15–17, 41 from twelfth–thirteenth-century contexts).

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 581. Bleeding Cup

<b>Accession Number</b>	79.AF.184.22
<b>Dimensions</b>	H. 4.7, Diam. rim 4.0, Diam. base 2.2 cm; Wt. 33.72 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended. Broken spout; preserved body iridescent from weathering.

**DESCRIPTION** Fire-polished, rounded rim; slightly flaring upper part; cylindrical body, tapering toward the convex bottom, with the scar of a solid pontil (W. 1.5 cm) at its center. An applied spout at the upper part of the body appears to be a continuous mass of glass internally. The spout was curved toward the bottom of the bowl.

**COMMENTS AND COMPARANDA** See cat. 580.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 582. Bleeding Cup

<b>Accession Number</b>	79.AF.184.30
<b>Dimensions</b>	H. 5.3, Diam. rim 4.7, Diam. base 1.4 cm; Wt. 46.35 g
<b>Date</b>	Ninth–twelfth centuries CE
<b>Production Area</b>	Eastern Mediterranean
<b>Material</b>	Dark greenish glass
<b>Modeling Technique and Decoration</b>	Free-blown

**CONDITION** Mended. Broken spout; iridescent from weathering, and large areas with whitish crust.

**DESCRIPTION** Fire-polished, rounded rim; slightly flaring upper part; cylindrical body tapering toward the convex bottom, with the scar of a solid pontil (W. 1.5 cm) at its center. An applied spout at the upper part of the body appears to be a continuous mass of glass internally. The spout was curved toward the bottom of the bowl.

**COMMENTS AND COMPARANDA** See cat. 580.

**PROVENANCE** 1979, Edwin A. Lipps, 1922–1988 (Pacific Palisades, California), donated to the J. Paul Getty Museum, 1979

**BIBLIOGRAPHY** Unpublished

**EXHIBITIONS** None



### 583. Statuette of a Bull

<b>Accession Number</b>	2003.462
<b>Dimensions</b>	L. 8.8, W. 5.4 cm; Wt. 89.50 g
<b>Date</b>	Ninth–twelfth and nineteenth–twentieth centuries CE
<b>Production Area</b>	Eastern Mediterranean and Europe
<b>Material</b>	Dark green, dark turquoise, and off-white glass; resin
<b>Modeling Technique and Decoration</b>	Free-blown; applied and tooled features

**CONDITION** Pastiche. Seams are concealed by weathering that has caused some discoloration, especially around the body of the animal.

**DESCRIPTION** Pastiche. Statuette of a quadruped animal, probably a bull. A large part of the conical body is made of dark green glass around which is wound in spirals a wide off-white band that was then dragged, forming a feathered motif. The applied legs are made of dark blue glass with red striations. Only a tiny part of the original animal's head is preserved, hidden almost entirely in the new head; original head was smaller and was bent toward the ground, which might indicate that it had horns, presented in a charging pose. The neck was also smaller than the current one. The head, legs, and tail are applied. The head is made of a greenish, bubbly resin, and the ears, eyes, nostrils, and mouth are rendered with red resin, imitating glass. Red and black resin is used for the rear part of the body, lower part of the legs, tail, and the drum that connects the animal to its circular base. In all four legs the lump attached to the body belongs to the

original object, made of very dark blue glass with opaque red striations, and the lower part of the legs is modern filling. The base comprises a discoid core of dark green glass, different from the body; it is possible that it is the rim of a flask and that the glass in the bottom was added from another vessel.

**COMMENTS AND COMPARANDA** The shape and the decoration of the original part of the body are very similar to bird-like Islamic flasks: Jenkins 1986, p. 11, no. 2 and Carboni 2001, pp. 302–303, no. 79, with bibliography; Whitehouse 2014, p. 218, no. 992. Further published examples of bird-like Islamic flasks include the following: Billups collection B271A: Corning 1962, p. 22, no. 28; Lamm 1930, vol. 1, p. 103, no. 9, and v. 2, plate 32.9; Clairmont 1977, p. 137, nos. 502 and 503; Riis 1957, p. 62, fig. 181, and pp. 67–68, fig. 203, excavated at Hama, Syria; Wightman 1989, plate 72:5, excavated in Jerusalem; Scanlon and Pinder-Wilson 2001, p. 108, type 44e, excavated at Fustat.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 253, no. 742.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)



### 584. Fragmentary Statuette of a Male Figure

<b>Accession Number</b>	2003.406
<b>Dimensions</b>	L. 6.9, W. max. (with handles) 2.9 cm; Wt. 6.97 g
<b>Date</b>	Possibly seventeenth–eighteenth centuries CE
<b>Production Area</b>	Probably Europe
<b>Material</b>	Translucent yellowish glass
<b>Modeling Technique and Decoration</b>	Free-blown; applied elements

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**CONDITION** Fragment. Heavily weathered and discolored with a milky yellow iridescence.

**DESCRIPTION** Hollow statuette of a human figure, probably male. It was formed of an originally conical hollow mass of glass that was squeezed to assume a lentoid cross section; three constrictions at regular intervals indicate the neck, the waist, and the beginning

of the legs. Fine threads are applied on the sides, forming small loops that render the arms and ears of the figure. The lower legs are broken off. Possibly the finial of a vessel.

**COMPARANDA** No parallels have been found.

**PROVENANCE** By 1974–1988, Erwin Oppenländer, 1901–1988 (Waiblingen, Germany), by inheritance to his son, Gert Oppenländer, 1988; 1988–2003, Gert Oppenländer (Waiblingen, Germany), sold to the J. Paul Getty Museum, 2003

**BIBLIOGRAPHY** von Saldern et al. 1974, p. 215, no. 624.

**EXHIBITIONS** Gläser der Antike: Sammlung Erwin Oppenländer (Hamburg and Cologne, 1974–1975)

# Look but Don't Touch: Noninvasive Analytical Strategies for Archaeological Glass

*Monica Ganio*

## THE ANALYSIS OF ANCIENT GLASS

One of the greatest technological achievements of the ancient world was the transition in glassmaking from mold-formed to free-blown objects. This development allowed glass to change from a luxury item to a widely available, everyday material that permeated all levels of society. Today, the study of ancient glass likewise benefits from technological advancements. Advanced instrumental techniques allow the composition of glass to be measured with increased precision and speed, and lower limits of detection. Advanced statistical data treatment methods enable researchers to better link the material findings with production methods, chronology, location, and degree of recycling. These findings in turn provide insight into the sociopolitical and economic impact of glass in the ancient world.

However, detailed analytical measurements typically depend on the ability to remove a sample of the glass for testing. Sampling from fragmentary archaeological specimens is usually permitted, as material removed from already broken edges generally will not impact the ability of the piece to provide archeological information. Such

samples enable a complete and precise determination of the elemental composition of the glass, when scientists employ techniques such as scanning electron microscopy with energy dispersive spectroscopy (SEM-EDS), electron probe micro-analysis (EPMA), solution-based inductively coupled plasma mass spectrometry (ICP-MS), and laser ablation ICP-MS (LA-ICP-MS). This compositional information sheds light on the glassmaking process by identifying the type of base glass used and the types of colorants added to achieve the final product. Other analytical techniques, such as thermal ionization mass spectrometry (TIMS) and multi-collector ICP-MS, allow even more in-depth analysis, providing isotopic information that can be used to infer the provenance of the raw materials, potential workshop locations, and/or commercial links between countries and cultures. All together, these analytical techniques allow scholars to draw a more complete picture of the glassmaking process at a specific time and place.

By contrast, glass objects in museum collections are typically less available for sampling, as removing even small amounts of material may impact the visual appearance of the object. While SEM-EDS and EPMA are noninvasive techniques (i.e., they do not require taking a sample of the item), the size of the objects that can be



studied is limited by the dimensions of the instrument chamber. Similarly, although LA-ICP-MS is considered a micro-invasive technique, its use on museum objects is limited because small, but visible, ablation spots accompanied by discoloration can occur, compromising the visual integrity of the object.

This dichotomy—that the availability of samples from fragmentary archaeological materials allows a fully quantitative characterization of the glass, while only a more limited understanding of complete glass objects from museum collections is currently achievable—has introduced a bias into the study of archaeological glass, the result being that those objects which, for whatever reason, have better survived the challenge of time are underrepresented in the data set.

To overcome this bias, the application of X-ray fluorescence (XRF) spectroscopy, a noninvasive technique that allows in situ elemental characterization of objects of almost any size or shape, has become more common (Adlington, Freestone, and Seliger 2021; Adlington et al. 2020; Adlington and Freestone 2017; Yatsuk et al. 2022; Scott et al. 2012; Abe et al. 2021). However, the accessibility and ease of use of XRF spectroscopy is offset by the intrinsic limitation of the technique to efficiently detect light elements important to glass, such as sodium, magnesium, aluminum, silicon, and potassium. As such, the results of XRF analysis are only semiquantitative, and direct comparison with the quantitative techniques described above presents challenges.

In the study presented here, twenty-four core-formed vessels from the collection of the J. Paul Getty Museum were studied using XRF spectroscopy coupled with statistical analysis (Principal Component Analysis [PCA]) to extract key compositional information without the need for quantification.<sup>1</sup> This approach allows similarities and differences in glass of different colors, shapes, and time periods to be relatively easily assessed, from which the glassmaking technology may be inferred. The results, although derived from a relatively small group of vessels, demonstrate the validity of the approach, and expand our current knowledge on glassmaking technology from the sixth to the first centuries BCE.

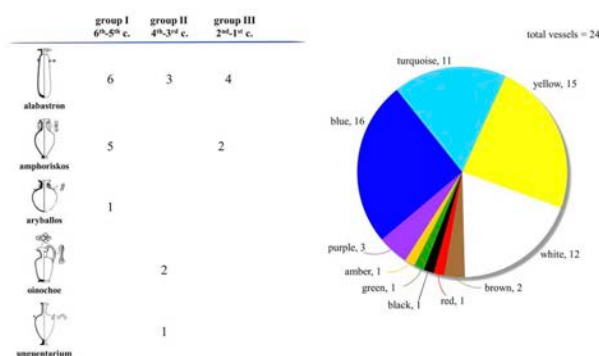
## THE SHAPES AND COLORS OF CORE-FORMED VESSELS

Often referred to as the “Mediterranean group,” core-formed vessels first appeared in the sixth century BCE and continued to be made until the middle of the first century BCE (McClellan 1984; Harden 1981). Three subgroups are defined based on their chronology and likely location of production: Group 1 includes objects produced in the sixth and fifth centuries BCE, the majority of which have been found on the island of Rhodes (Harden 1981; Shortland and Schroeder 2009; Rehren, Spencer, and Triantafyllidis 2005; Triantafyllidis 2009). Group 2 includes objects produced in the fourth and third centuries BCE; these vessels were probably produced in multiple workshops and are found predominantly in mainland Greece, as well as in Magna Graecia (central and southern Italy), and less often on the Greek islands (Harden 1981). Lastly, Group 3 includes vessels produced between the second century and the middle of the first century BCE, with production centers in Cyprus and on the Phoenician coast (McClellan 1984; Harden 1981; Jackson-Tal 2004). The production of core-formed vessels ceased with the discovery and spread of glassblowing, which by the first century CE had widely superseded the core-forming technique.

Core-formed vessels were produced in a limited number of shapes, the most common being alabastra, amphoriskoi, aryballoi, oinochoae, and one unguentarium (see Fig. 21) (McClellan 1984; Harden 1981). The size and volume of the different types of vessels is relatively consistent throughout the six centuries of manufacturing, suggesting a standardized production process across the many glassworking centers throughout the Mediterranean (Cosyns, Verhelst, and Nys 2017). In addition to size and shape, the iconic color scheme—with vessels being either of a dark blue glass decorated with applied white, yellow, and turquoise trails, or of a milky white glass decorated with purple trails—also seems to have been standardized (Harden 1981; McClellan 1984).

**Table 1.** Core-formed vessels investigated in the study, including their accession number, typology, attributed date, and colors analyzed.

Acc. Number	Typology	Attributed Date	Colors Analyzed
2003.165	Oinochoe	Fourth–third century BCE	Blue, yellow, turquoise
2003.167	Oinochoe	Fourth–third century BCE	Blue, turquoise, white
2003.169	Amphoriskos	Sixth–fifth century BCE	Dark green, white, turquoise
2003.170	Amphoriskos	Fifth century BCE	Red, turquoise, yellow, white
2003.171	Amphoriskos	Sixth–fifth century BCE	Blue, orange, turquoise
2003.172	Amphoriskos	Sixth–fifth century BCE	Blue, yellow
2003.175	Amphoriskos	Sixth–fifth century BCE	Black, white
2003.176	Aryballos	Sixth–fifth century BCE	Blue, orange, white
2003.180	Alabastron	Sixth–fifth century BCE	White, purple
2003.183	Alabastron	Fifth century BCE	Dark color (purple), white
2003.184	Alabastron	Fifth century BCE	Brown, turquoise, yellow
2003.187	Alabastron	Fourth–third century BCE	Blue, yellow
2003.189	Alabastron	Fifth century BCE	Brown, turquoise, yellow
2003.193	Alabastron	Fourth–third century BCE	Blue, yellow, turquoise, white
2003.194	Alabastron	Second–first century BCE	Black, white
2003.195	Alabastron	Second–first century BCE	Blue, light blue
2003.196	Alabastron	Sixth–fifth century BCE	Blue, turquoise, yellow
2003.197	Alabastron	Second–first century BCE	Blue, turquoise, yellow
2003.198	Alabastron	Second–first century BCE	Blue, white
2003.199	Alabastron	Second–first century BCE	Blue, white, yellow
2003.201	Amphoriskos	Second–first century BCE	Blue, yellow, amber, white
2003.203	Amphoriskos	Third century BCE	Blue, white, yellow
2004.6	Alabastron	Fifth century BCE	Dark (purple), white
2004.8	Alabastron	Fourth–third century BCE	Blue, yellow



**Figure 21.** Schematic showing the typology, chronology, and color distribution of the vessels investigated.

The twenty-four core-formed vessels in this study were selected to include representatives of all four main shapes and a wide range of colors. In total, ten colors (blue, turquoise, yellow, white, purple, brown, red, black, amber-color, green), with blue, turquoise, yellow, and white being the most common, are represented. Figure 21 shows how the vessels investigated are broken down according to typology, chronology, and color.<sup>2</sup>

The deep, bright colors typical of core-formed vessels were achieved by adding colorants and opacifiers, in the form of naturally occurring minerals, to the glass melt (see Fig. 22). For example, adding the element antimony (most commonly in the form of the mineral stibnite ( $\text{Sb}_2\text{S}_3$ )) to the glass melt produces an opaque white glass if calcium is also added, through the formation of calcium antimonate crystals (Nicholson and Shaw 2000; Henderson 2013; Shortland 2002; Lahlil et al. 2009). However, if lead is added instead of calcium, the antimony will form lead antimonate crystals, which give an opaque yellow appearance to the glass. Both white calcium antimonate and yellow lead antimonate are well known opacifiers of ancient glass, having been used from the beginning of glass production in the Near East and Egypt around 1500 BCE (Nicholson and Shaw 2000; Tite, Pradell, and Shortland 2008; Shortland 2002; Arletti et al. 2006).

Blue glass could be made in multiple ways. Most common was the addition of cobalt-containing minerals, such as alum (a composite mineral with variable composition that can contain significant amounts of manganese, zinc, nickel, and aluminum: Kaczmarczyk 1986; Shortland, Tite, and Ewart 2006; Shortland and Tite 2000; Rehren 2001; Tite and Shortland 2003; Walton et al. 2009), trianite ( $2\text{Co}_2\text{O} \cdot \text{CuO} \cdot 6\text{H}_2\text{O}$ ), cobaltite ( $\text{CoAsS}$ ), skutterudite ( $[\text{Co}, \text{Ni}, \text{Fe}] \text{As}_3$ ), or absolane (a mixture of  $\text{MnO}$  and  $\text{CoOOH}$ ) (Nicholson and Shaw 2000; Kaczmarczyk 1986). Cobalt is one of the strongest chromophores: even a

Color	Element detected	Possible sources
dark blue	cobalt	alum (variable composition), trianite ( $2\text{Co}_2\text{O} \cdot \text{CuO} \cdot 6\text{H}_2\text{O}$ ), cobaltite ( $\text{CoAsS}$ ), skutterudite ( $[\text{Co}, \text{Ni}, \text{Fe}] \text{As}_3$ ), absolane ( $\text{MnO}$ & $\text{CoOOH}$ mixture)
blue	copper	bronze/brass scraps from metalworking
opaque white	calcium, antimony	stibnite ( $\text{Sb}_2\text{S}_3$ )
opaque yellow	lead, antimony	stibnite ( $\text{Sb}_2\text{S}_3$ )
opaque turquoise	calcium, antimony, cobalt/copper	

**Figure 22.** Chart listing the chemicals detected in colored glass, with their most common sources.

minimal amount of cobalt is enough to produce a deep blue glass, so intensely colored it can lose its transparency and appear black. Several cobalt sources were available in antiquity, and the trace elements present in blue glass, such as aluminum, copper, manganese, iron, nickel, zinc, arsenic, antimony, and lead can provide an indication of which source was used, providing information about provenance and trade (Gratuze et al. 1992; Rehren 2001; Reade, Freestone, and Simpson 2005; Shortland, Tite, and Ewart 2006).

Blue glass could also be achieved by adding copper to the glass melt, resulting in glass with a blue-green hue. Copper was commonly added in the form of bronze or brass scraps from metalworking, which introduced additional trace elements, such as zinc, tin, and lead (Aerts et al. 1999; Mirti et al. 2001; Jackson et al. 2009; Nicholson and Shaw 2000; Shortland and Schroeder 2009; Shortland 2002). Similar to cobalt glasses, the analysis of the trace elements present in copper-based glass can provide information about provenance and workshop practice. It is not uncommon for both cobalt and copper to be detected in ancient blue glass. Whether this mixing was intentional, suggesting the ancient artisans were refining the final blue color by exploiting the slight differences in color produced by copper and cobalt, or, conversely, whether this simply suggests the artisans were using the two chromophores indiscriminately on the basis of material availability, would require further investigation on a wider range of blue glasses.

Turquoise glass is opaque white glass mixed with a small amount of blue glass. The major colorant elements could be antimony and cobalt, antimony and copper, or antimony with cobalt and copper, depending on the type of blue glass used. The color of turquoise glass could further be modified by the addition of opaque yellow glass, colored by lead antimonate, to produce greener hues (Shortland 2002; Nicholson and Shaw 2000; Shortland and Schroeder 2009; Shortland 2002).

## RESULTS FROM THE GETTY STUDY SET

The XRF spectra collected on the vessels in the Getty study set provide information on many of the elements present in the glass, but as mentioned above, due to inherent limitations of the method, major elements in the base glass—namely, silicon, potassium, and sodium—cannot be efficiently detected. However, the main colorant and opacifying elements, as well as trace elements that may be associated with different mineral sources, can easily be detected. To ascertain similarities and differences between vessels, Principal Component Analysis (PCA) was used, in which the entire suite of elements detected, and their relative proportions, is examined simultaneously.<sup>3</sup> PCA provides a way of visualizing the results of the XRF analyses in more accessible two- or three-dimensional plots; vessels and colors that are close to each other in the plots have similar compositions.

Figure 23 is a three-dimensional PCA plot in which each point represents an individual measurement of the color of glass found on each vessel.<sup>4</sup> For example, for vessel cat. 42, the blue, white, and yellow colors were analyzed separately, and appear as distinct points on this plot, colored blue, turquoise, and yellow, respectively, with a red outline. For simplicity, only data from the most abundant colors in the sample set—yellow, white, blue, and turquoise—are shown here. The yellow points, corresponding to yellow glass, form a tight grouping, indicating they all have a similar composition. Their position along PC 1 (see note 4) indicates they are high in lead, consistent with what would be expected for a glass colored with lead antimonate, as described above. The blue, white, and turquoise points form elongated clusters, generally dispersed along PC 1.

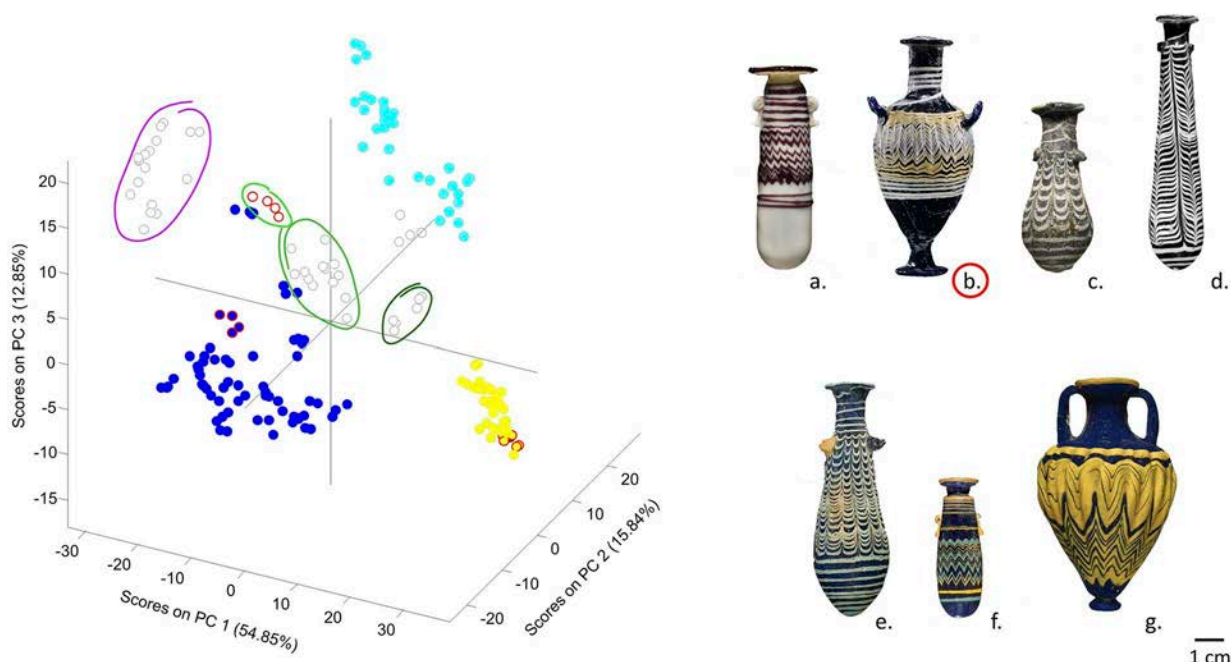
The white points may be subdivided into two groups, white 1 (W1) and white 2 (W2, further subdivided in W2a, W2b and W2c), dispersed along PC 1. Since PC 1 correlates with increasing amounts of lead, it is possible to infer a difference in the chemical composition of the white glasses: W1 includes those whites that contain only antimony, while W2 encompasses those whites that contain antimony associated with increasing amounts of lead. Although already noted in a handful of Iron Age specimens, mostly beads excavated along the Italian peninsula (Arletti et al. 2006; Arletti et al. 2010), the presence of lead is quite unusual in opaque white glass. The content of lead observed here, therefore, opens up questions related to its origins. Its presence does not seem to play any role in the development of opacity. It is possible that lead was added to the glass batch to enhance

the brilliance of the glass, or to improve the working temperature and viscosity of the melt (Arletti et al. 2010), but more research is needed to more fully understand how and why it was used.

This variation in lead content does appear to correlate with the chronological attribution of each vessel. Examples dated to the sixth and fifth centuries BCE all fall in W1. Showing a typical calcium- and antimony-rich white glass composition, their production often is believed to have originated on the island of Rhodes, based on the elevated number of examples excavated there. Vessels from the fourth to first centuries BCE instead belong to W2. Here, the presence of lead in addition to the traditional calcium antimonate opacifier suggests a change in the glassmaking practice. The limited examples of lead-containing opaque white glasses discussed in literature makes it hard to draw conclusions, but we can speculate the presence of lead could be indicative of production on the Italian peninsula, in contrast to the lead-free glass produced on the island of Rhodes. Additional analysis and a larger dataset with secure provenance and dating information will be needed to further address this hypothesis.

As discussed above, turquoise glass is essentially opaque white glass with added copper to impart a blue color (Nicholson and Shaw 2000; Shortland and Schroeder 2009; Shortland 2002). This is borne out in the three-dimensional scores plot shown in Figure 23, in which the turquoise points mirror the white points, but displaced along PC 2, corresponding to increased copper content. Vessels dated to the sixth–fifth centuries BCE present a typical calcium-, antimony-, and copper-rich composition, consistent with the glassmaking technology discussed above, that is, the mixing of an opaque white glass rich in calcium antimonate (subgroup W1) with a blue glass rich in copper. Vessels from the later periods show increasing amounts of lead, corresponding to the white subgroup W2. Once again, the reason for the presence of lead is unclear. In the case of turquoise glass, lead could have been introduced through the addition of lead antimonate (opaque yellow) to impart a specific shade to the glass (Panighello et al. 2012) but could also have been added for the same workability reasons speculated for the opaque white glass.

The data points from the blue glass are widely dispersed across the lower left quadrant in the three-dimensional plot (low in PC 1 and PC 3, suggesting the relative absence of lead and antimony and presence of cobalt and iron, and dispersed along PC 2, correlating to copper content) but do not appear to form clusters. One reason for this



**Figure 23.** Three-dimensional Principal Component Analysis (PCA) plot reporting data for the most abundant colors: blue, white, turquoise, and yellow. Each circle represents a data point for each color of glass found on an individual vessel; the data point color corresponds to the vessel's color. Individual points corresponding to the blue, white, and turquoise analyzed in vessel 2003.203 (cat. 42) are highlighted with a red outline. Circled data points correspond to the identified groups White 1 (W1 – purple) and White 2 (W2a, W2b, W2c in incrementally darker shades of green respectively). Representative vessels for each group discussed in the text: White 1 (W1), White 2 (including W2a, W2b, W2c), Turquoise 1 (T1), Turquoise 2 (T2), and yellow, are shown: a. 2003.180 (W1), b. 2003.203 (W2a), c. 2003.198 (W2b), d. 2003.199 (W3c), e. 2003.197 (T1), f. 2003.196 (T2), g. 2003.172 (Y).

may be that the amount of cobalt and copper used to create the blue color is very small, and there are insignificant differences between vessels. Trace elements, which may be more important for the separation of the data points, are below the detection limits of the XRF technique employed here, and thus likewise do not contribute to the separation of the points into groups.

Understanding these results is further complicated by yet another variable: recycling. Similar to today, the practice of remelting glass was already widespread in the ancient world (Triantafyllidis 2001), reaching its peak during the Roman period (Jackson and Paynter 2021). Recycling glass is energy efficient because previously formed glass melts at lower temperatures than those required for the production of glass from raw materials (Chinni et al. 2023). However, careful separation of glass by color is necessary to retain the fidelity of the color. For example, only colorless glass can be used to create new colorless glass, yellow to create new yellow glass, etc. Particular care had to be taken with deep colors: the accidental addition, for example, of blue glass into a melt meant to become colorless glass would require the introduction of significant amounts of decolorant to buffer the tinting of the reused material.

While careful separation of color is possible for monochrome glass, for polychrome glass, including vessels with multiple colors such as the core-formed vessels discussed here, the separation of colors is impossible. Nonetheless, polychrome glass was subject to recycling. When the recycled polychrome object was dominated by a very strong stable color, such as a dark cobalt blue vessel with decorations in white, turquoise, and yellow, the object could be remelted in its entirety and reused to create a dark blue glass. This was recently demonstrated experimentally by Jackson and Paynter (Jackson and Paynter 2022), who created and remelted a modern replica of a dark blue core-formed vessel, colored by cobalt and copper, with decorative trails in yellow (lead antimonate) and turquoise (calcium antimonate and copper). The remelted glass produced a dark blue, transparent glass, in which the decorative yellow and turquoise glass had little effect on the overall color. The composition of the recycled glass showed only a slight increase in lead compared to the original blue. Therefore, for the ancient blue glass discussed in this study, a certain degree of recycling is highly probable, especially for those examples higher along PC 1. Furthermore, in contrast with the white and turquoise glasses, no evident relationship with the attributed chronology could be



found from these data, supporting the idea that recycling and reusing broken glass to produce brand-new objects was a common practice.

## Conclusions

The long history of the production of ancient glass, with multiple centers of production, evolving technologies, diverse material source locations, and recycling of materials, means that the vessels that have come down to us through the ages may not be easily classified according to their composition. One purpose of this essay was to demonstrate the utility of a completely noninvasive approach for the analysis of glass vessels, using the set of Getty vessels as a case study. The use of X-ray fluorescence (XRF) spectroscopy eliminates the need for sampling, allowing the number of vessels examined to be greatly expanded, in particular to those vessels in museum collections. With compositional data on more vessels, together with archaeological dates and locations, it will be easier to identify groupings that are characteristic of a particular time, place, or even workshop. The use of statistical Principal Component Analysis (PCA) provides a rapid means of grouping vessels that have similar overall compositions and identifying the significant elements in those groups. Even if groups are not evident, that in and of itself is helpful information. It may mean that a different approach is necessary.

As has been demonstrated by studies on samples from archaeological glass fragments, quantification of the amounts of trace elements can help in the classification of ancient glass (Freestone 2006; Freestone, Ponting, and Hughes 2002; Aerts et al. 2003; Shortland, Rogers, and Eremin 2007; Silvestri, Molin, and Salviulo 2008; Degryse and Shortland 2009). Therefore, we propose a combined approach: an initial survey of a large number of glass vessels using XRF spectroscopy with PCA statistical analysis to identify clusters. This information can be used to target a limited subset of vessels for further analysis using a technique that can provide more precise data, such as SEM-EDS or ICP-MS (depending on the size of the object and the permission to sample), providing a “ground-truth” on which the rest of the XRF data set can be evaluated.

For the relatively small group of twenty-four core-formed vessels discussed here, in the case of white and turquoise glass XRF/PCA analysis was able to identify groups of vessels produced in different time periods. Why lead is present in the vessels from the later periods remains an open question, given the limited examples discussed in the literature. Data from an expanded group of vessels

with known dates and excavation locations would help in understanding the role played by lead in white glass. Additional research is also needed to understand the extent to which recycling occurred, and its role not only in the production of blue glass, as discussed above, but in the entire glassmaking industry. Ideally, given sufficient data, a specific set of characteristics may be identified for glass produced in different parts of the Mediterranean, at different time periods, and by different technologies.

## NOTES

1. XRF analyses were performed using a Bruker ARTAX spectrometer. A chromium (Cr) anode was selected for the analysis to avoid the rhodium (Rh) L-lines that overlap with low-Z elements. The spectrometer was operated at 50 kV and 600  $\mu$ A; a 100  $\mu$ m aluminum (Al) filter and helium (He) purge were used to enhance detection of elements in the low energy region. Spectra were collected in the range 0–40 keV with a measuring time of 240 seconds per spot and a 1.5  $\mu$ m spot diameter. Each vessel contains two (or more) colors, each of which investigated separately, conducting three replicate measurements per spot, and the respective spectra accumulated in the Bruker ARTAX software. Principal Component Analysis (PCA) was performed on the XRF spectra in the energy range 1.45–27.8 keV, following a preprocessing procedure consisting of a  $\log_{10}$  transformation, Standard Normal Variate (SNV) scaling, and Mean Centering. The first three principal components were used to tease apart compositional differences within the dataset.
2. For a complete list of the vessels investigated in this study, please refer to Table 1.
3. Principal Component Analysis (PCA) is a method in which the dimensionality of datasets is reduced by transforming a large set of variables into a smaller one that still contains most of the information in the large set. Principal Components (PCs) are new variables that are constructed as linear combinations of the initial variables. The loading plot identifies which variables have the largest effect on each component. Loadings can range from –1 to 1: loadings close to –1 or 1 indicate that the variable strongly influences the component, while loadings close to 0 indicate the variable has a weak influence on the component. The scores plot projects the observations, i.e. the objects under study, onto the PCs, allowing for an easy localization of the similarities and differences in the dataset (Holland 2008).
4. PC 1, the component that captures the most variation, is dominated by lead (Pb). PC 2 and PC 3 reflect the influence of less abundant elements; PC 2 is driven by an opposition between copper (Cu, positive PC 2) and manganese (Mn, negative PC 2), while PC 3 accounts for the variation in antimony (Sb, positive PC 3) versus manganese, iron, and cobalt (Mn, Fe, Co respectively, negative PC 3).

## Appendix 2

# Concordance of Accession and Catalogue Numbers

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
71.AF.79	307	76.AF.70.9	139	76.AF.70.27	486
71.AF.80	368	76.AF.70.11	501	76.AF.70.28	473
71.AF.81	223	76.AF.70.12	477	76.AF.70.29	469
71.AF.82	224	76.AF.70.13	484	76.AF.70.30	474
71.AF.83	187	76.AF.70.14	497	76.AF.70.31	494
71.AF.84	259	76.AF.70.15	135	76.AF.70.32	96
71.AF.85	281	76.AF.70.16	498	76.AF.70.33	142
72.AF.37	133	76.AF.70.17	113	76.AF.70.34	475
76.AF.29	231	76.AF.70.18	114	76.AF.70.35	488
76.AF.70.1	471	76.AF.70.19	140	76.AF.70.36	105
76.AF.70.2	137	76.AF.70.20	478	76.AF.70.37	479
76.AF.70.3	467	76.AF.70.21	95	76.AF.70.38	465
76.AF.70.4	138	76.AF.70.22	144	76.AF.70.39	141
76.AF.70.5	476	76.AF.70.23	115	76.AF.70.40	464
76.AF.70.6	472	76.AF.70.24	116	76.AF.70.41	470
76.AF.70.7	487	76.AF.70.25	468	76.AF.70.42	466
76.AF.70.8	481	76.AF.70.26	483	76.AF.70.43	482

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
76.AF.70.44	94	79.AF.171	569	79.AF.184.32	427
76.AF.70.45	485	79.AF.184.1	561	79.AF.184.33	381
76.AF.70.46	554	79.AF.184.2	340	79.AF.184.34	428
76.AM.61.15	536	79.AF.184.3	341	79.AF.184.35	386
78.AC.381.77	579	79.AF.184.4	562	79.AF.184.36	387
78.AF.18	269	79.AF.184.5	245	79.AF.184.37	385
78.AF.19	367	79.AF.184.6	424	79.AF.184.38	429
78.AF.20	227	79.AF.184.7	393	79.AF.184.39	384
78.AF.21	248	79.AF.184.8	351	79.AF.184.40	391
78.AF.22	249	79.AF.184.9	402	79.AF.184.41	416
78.AF.23	403	79.AF.184.10	425	79.AF.184.42	392
78.AF.24	188	79.AF.184.11	408	79.AF.184.43	382
78.AF.25	315	79.AF.184.12	401	79.AF.184.44	388
78.AF.26	179	79.AF.184.13	185	79.AF.184.45	389
78.AF.27	71	79.AF.184.14	422	79.AF.184.46	413
78.AF.28	260	79.AF.184.15	419	79.AF.184.47	397
78.AF.29	400	79.AF.184.16	423	80.AF.76	507
78.AF.31	234	79.AF.184.17	432	80.AF.125	308
78.AF.32	89	79.AF.184.18	342	80.AH.20.850	542
78.AF.33	230	79.AF.184.19	380	81.AF.1	431
78.AF.34	294	79.AF.184.20	580	82.AC.22.315	571
78.AF.35	364	79.AF.184.21	415	82.AI.76.21	337
78.AF.36	396	79.AF.184.22	581	83.AF.28.1	57
78.AF.37	226	79.AF.184.23	412	83.AF.28.2	58
78.AF.321.1	556	79.AF.184.24	418	83.AF.28.4	107
78.AF.321.2	557	79.AF.184.25	420	83.AF.28.6	99
78.AF.321.3	558	79.AF.184.26	430	83.AF.28.8	100
78.AF.321.4	559	79.AF.184.27	414	83.AF.28.9	499
78.AF.321.5	560	79.AF.184.28	390	83.AF.28.10	97
78.AF.324.1	535	79.AF.184.29	421	83.AF.28.11	103
78.AF.324.3	552	79.AF.184.30	582	83.AF.28.12	104
78.AK.30	407	79.AF.184.31	426	83.AF.28.14	111

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
83.AF.28.15.a-b	480	2003.4	311	2003.148	4
83.AF.28.16	98	2003.15	443	2003.149	442
83.AF.28.17	106	2003.16	7	2003.151	444
83.AF.28.18	101	2003.17	40	2003.152	445
83.AF.28.19	112	2003.18	10	2003.153	446
83.AF.28.21	462	2003.19	14	2003.154	448
83.AF.28.22	102	2003.21	538	2003.155	576
83.AF.28.23	143	2003.22	70	2003.156	577
83.AF.28.24	463	2003.23	146	2003.158	447
83.AF.28.25	489	2003.24	373	2003.162	8
83.AF.28.26	500	2003.25	92	2003.163	9
83.AF.28.27	124	2003.26	449	2003.164	52
83.AK.29	439	2003.27	317	2003.165	50
83.AM.1.1	550	2003.28	326	2003.166	49
83.AM.1.2	551	2003.29	233	2003.167	51
84.AF.30	267	2003.31	213	2003.168	35
84.AF.85	82	2003.32	172	2003.169	36
85.AF.83	169	2003.33	198	2003.171	37
85.AF.84	84	2003.34	222	2003.172	38
85.AF.85	86	2003.35	363	2003.173	39
85.AF.86	88	2003.36	506	2003.174	53
85.AF.90	171	2003.37	339	2003.175	41
85.AF.91	162	2003.39	272	2003.176	56
85.AF.320	181	2003.41	300	2003.177	54
95.AF.60	166	2003.42	329	2003.178	34
96.AF.56	270	2003.43	362	2003.179	48
96.AF.288	93	2003.44	278	2003.181	12
96.AF.289	85	2003.45	305	2003.182	17
96.AF.320	256	2003.46	568	2003.183	18
98.AF.56	343	2003.47	376	2003.184	19
2003.2	43	2003.146	1	2003.185	16
2003.3	193	2003.147	5	2003.186	21

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
2003.187	23	2003.214.9	517	2003.241	354
2003.188	28	2003.214.10	518	2003.242	334
2003.189	20	2003.214.11	519	2003.243	335
2003.191	24	2003.214.12	520	2003.244	323
2003.192	27	2003.214.13	521	2003.245	284
2003.193	22	2003.214.14	522	2003.246	119
2003.194	29	2003.214.15	523	2003.247	122
2003.195	31	2003.214.16	524	2003.248	90
2003.196	15	2003.214.17	525	2003.249	91
2003.197	32	2003.215	64	2003.251	120
2003.198	33	2003.216	63	2003.252	121
2003.199	47	2003.217	59	2003.253	132
2003.201	44	2003.218	73	2003.254	437
2003.202	45	2003.219	62	2003.255	157
2003.203	42	2003.221	66	2003.256	136
2003.204	46	2003.222	67	2003.257	495
2003.205	548	2003.223	68	2003.258.1	87
2003.206	544	2003.224	69	2003.258.2	131
2003.207	549	2003.225	74	2003.258.3	128
2003.208	545	2003.226	236	2003.258.4	129
2003.209	533	2003.227	238	2003.258.5	109
2003.211	541	2003.228	65	2003.258.6	126
2003.212	540	2003.229	145	2003.258.7	492
2003.213	543	2003.231	147	2003.259	534
2003.214.1	509	2003.232	75	2003.259	534-1
2003.214.2	510	2003.233	76	2003.259	534-2
2003.214.3	511	2003.234	77	2003.259	534-3
2003.214.4	512	2003.235	78	2003.259	534-4
2003.214.5	513	2003.236	79	2003.259	534-5
2003.214.6	514	2003.237	80	2003.259	534-6
2003.214.7	515	2003.238	243	2003.259	534-7
2003.214.8	516	2003.239	372	2003.259	534-8



Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
2003.259	534-9	2003.272	320	2003.307	216
2003.259	534-10	2003.273	149	2003.308	214
2003.259	534-11	2003.274	150	2003.309	212
2003.259	534-12	2003.275	152	2003.311	215
2003.259	534-13	2003.276	154	2003.312	209
2003.259	534-14	2003.277	148	2003.313	207
2003.259	534-15	2003.278	153	2003.314	208
2003.259	534-16	2003.279	151	2003.315	165
2003.259	534-17	2003.281	156	2003.316	164
2003.259	534-18	2003.282	321	2003.317	167
2003.259	534-19	2003.283	327	2003.318	163
2003.259	534-20	2003.284	295	2003.319	160
2003.259	534-21	2003.285	324	2003.321	173
2003.259	534-22	2003.286	322	2003.322	170
2003.259	534-23	2003.287	235	2003.323	174
2003.259	534-24	2003.288	306	2003.324	183
2003.259	534-25	2003.289	348	2003.325	200
2003.259	534-26	2003.291	355	2003.326	176
2003.259	534-27	2003.292	352	2003.327	177
2003.259	534-28	2003.293	158	2003.328	178
2003.259	534-29	2003.294	239	2003.329	199
2003.259	534-30	2003.295.1–2	567	2003.331	197
2003.261	453	2003.296	438	2003.332	184
2003.262	454	2003.297	190	2003.333	195
2003.263	455	2003.298	191	2003.334	196
2003.264	452	2003.299	192	2003.335	204
2003.265	493	2003.301	194	2003.336	202
2003.266	496	2003.302	205	2003.337	203
2003.267	155	2003.303	206	2003.338	395
2003.268	325	2003.304	210	2003.339	218
2003.269	318	2003.305	211	2003.341	225
2003.271	319	2003.306	217	2003.342	228

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
2003.343	180	2003.378	374	2003.413	301
2003.344	189	2003.379.1	258	2003.414	220
2003.345	201	2003.379.2	247	2003.415	332
2003.346	290	2003.381	285	2003.416	333
2003.347	257	2003.382	286	2003.417	366
2003.348	250	2003.383	287	2003.418	331
2003.349	251	2003.384	434	2003.419	359
2003.351	232	2003.385	435	2003.421	241
2003.352	274	2003.386	436	2003.422	299
2003.353	502	2003.387	229	2003.423	263
2003.354	83	2003.388	242	2003.424	275
2003.355	503	2003.389	360	2003.425	361
2003.356	574	2003.391	293	2003.426	365
2003.357	575	2003.392	309	2003.427	186
2003.358	504	2003.393	297	2003.428	298
2003.359	505	2003.394	310	2003.429	221
2003.361	266	2003.395	441	2003.431	369
2003.362	240	2003.396	371	2003.432	370
2003.363	246	2003.397	328	2003.433	302
2003.364	358	2003.398	312	2003.434	303
2003.365	336	2003.399	313	2003.435	219
2003.366	280	2003.401	573	2003.436	282
2003.367	356	2003.402	268	2003.437	346
2003.368	357	2003.403	570	2003.438	349
2003.369	338	2003.404	572	2003.439	276
2003.371	578	2003.405	508	2003.442	440
2003.372	244	2003.406	584	2003.443	264
2003.373	292	2003.407	566	2003.444	265
2003.374	353	2003.408	271	2003.445	279
2003.375	316	2003.409	344	2003.446	409
2003.376	296	2003.411	314	2003.447	288
2003.377	291	2003.412	261	2003.448	350

Accession Number	Catalogue Number	Accession Number	Catalogue Number	Accession Number	Catalogue Number
2003.449	283	2004.2	3	2004.24	123
2003.451	433	2004.2	237	2004.25	134
2003.452	304	2004.3	2	2004.26.1	490
2003.453	375	2004.3	457	2004.26.2	460
2003.454	254	2004.4	55	2004.26.3	108
2003.455	255	2004.4	330	2004.26.4	491
2003.456	555	2004.5	11	2004.26.5	461
2003.457	563	2004.6	13	2004.26.6	110
2003.458	565	2004.7	25	2004.26.7	125
2003.459	564	2004.8	26	2004.26.8	130
2003.461	411	2004.9	546	2004.26.9	127
2003.462	583	2004.11	553	2004.27	450
2003.463	379	2004.12	537	2004.28	451
2003.464	404	2004.13	539	2004.29	456
2003.465	405	2004.15.1	526	2004.31	458
2003.466	410	2004.15.2	527	2004.32	459
2003.467	399	2004.15.3	528	2004.33	406
2003.468	378	2004.15.4	529	2004.34	168
2003.469	377	2004.15.5	530	2004.35	161
2003.471	394	2004.15.6	531	2004.36	175
2003.472	383	2004.15.7	532	2004.37	253
2003.473	417	2004.16	6	2004.38	252
2003.474	159	2004.17	60	2004.39	273
2003.475	81	2004.18	61	2004.41	262
2003.476	289	2004.19	72	2004.42	347
2003.477	345	2004.21	117	2004.43	277
2003.478	398	2004.22	30	2004.44	182
2004.1	547	2004.23	118		

# Glossary

**annealing**

The gradual cooling down of a finished vessel or object. This process took place in a small subsidiary part of the furnace or in an annealing oven.

**blowing spirals**

Swirling streaks visible on the surface of the vessel resulting from the glassblower's rotary movements of the blowpipe during the shaping of the object.

**blowpipe**

A metal tube, usually iron, used to blow glass.

**cast vessel**

A glass vessel formed in a mold.

**chunk**

A piece of raw glass destined for secondary production.

**coil**

A thick thread of glass, usually circular or oval in section, used as part of a vessel (e.g., a handle or rim) or as embellishment.

**composite mosaic**

Thin sections or lengths of one or more mosaic canes fused together and embedded in a ground color to create a geometric or floral pattern.

**core-forming**

The construction of a vessel by forming around a rigid core that was subsequently scraped out. A core of organic and inorganic materials is made on the end of a metal rod. The rod is rolled on crushed glass and then inserted in the kiln until the glass melts and covers the core. The neck and rim of the vessel are formed with tools, and handles and bases are added. The decoration is usually made by winding threads of colored glass.

**corrosion**

See weathering

**dip mold-blowing**

The technique of partially forming a vessel by blowing into an intaglio or mold. The vessel then acquires its finished dimensions

through free-blowing, during which the original mold-made decoration is blunted or altered.

**fire-polishing**

The smoothing of a vessel or object through exposure to direct heat by inserting it momentarily into the glass furnace. This technique was used particularly often to finish the rims of vessels.

**former mold**

A convex mold of ceramic, plaster, or metal over which a disk of glass was sagged to acquire the desired shape.

**free-blowing**

The technique of forming an object by blowing air through a mass of hot glass using a blowpipe.

**gather**

See paraison

**groze**

To give shape to a piece of glass by trimming or chipping its circumference.

**marver**

A marver is a flat, level surface of stone, usually marble, atop which glass objects are rolled in various stages of secondary production. The purposes of the rolling, or *marvering*, can be to achieve the vessel's final form, to smooth the surface, or to incorporate inlays or attached elements.

**moil**

The upper segment of the paraison; i.e., the portion at or around the end of the blowpipe, which in the final stage of forming is cracked off as excess.

**mold-blowing**

The technique of forming a vessel by blowing into a concave or specially shaped mold. The vessel is completed by the free-blowing of its rim and handles.

**mosaic cane**

An elongated mass of glass, usually circular in section, consisting of strands of different colors, thin sections of which were used in the production of mosaic vessels.

**mosaic glass**

Glass created from prepared elements of colored glass. The elements (rods, mosaic cane sections, rosettes, bands) are placed in a mold and fused.

**paraison**

The bubble of glass at the end of the blowpipe in the free-blowing technique, from which the glass vessel is formed. Also known as the gather.

**pinprick bubbles**

Very small bubbles trapped in the mass of glass during the process of fusion.

**pontil mark**

The ring-shaped trace of the blowpipe, normally on the bottom of blown vessels and on Byzantine bracelets, caused by the process of cracking off the glass product from the blowpipe or rod after the forming is complete. The mark may have the form of either a pontil scar (concave) or an excess (convex).

**pontil scar**

*See* pontil mark

**raw glass**

Unused glass destined for secondary production.

**rod-forming**

The construction of a glass object around a metal mandrel.

**rotary pressing**

The technique of forming a vessel on a potter's wheel. The viscous glass is pressed down with a plunger, either directly on the rotating wheel or in a concave or convex mold.

**sagging**

The shaping of a vessel by reheating a glass disk or blank, which is allowed to flow by gravity into a concave mold or over a convex former mold.

**slumping**

*See* sagging

**thread**

A delicate filament of glass, formed by drawing or pulling, used as decoration on beads, pendants, and vessels made with the core-forming and free-blowing techniques.

**trail**

*See* thread

**weathering**

Alteration in the glass, first on its surface and then below the surface, as a result of environmental factors. It is due to the loss of alkaline ions and the creation of a siliceous layer on the surface, and is influenced by the composition of the glass. Weathering is a general term that includes the following specific types: discoloration, loss of vitreous nature, pitting, milky weathering, crusting, dulling, iridescence, crazing or crizzling, plowing, cracking or fracturing, sugaring, and lamination.



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Monica Ganio is an associate scientist at the Getty Conservation Institute (GCI). Since 2015 she has been part of the Technical Studies Research group within the GCI's Science Department, where she leads research into antiquities in the collection of the J. Paul Getty Museum and investigates the application and optimization of new techniques for the study of archaeological materials. Ganio is also active in creating opportunities to facilitate interdisciplinary exchanges through workshops and conferences.