

THE  
ALCHEMY  
OF COLOR

IN MEDIEVAL MANUSCRIPTS



# THE ALCHEMY OF COLOR IN MEDIEVAL MANUSCRIPTS

Appreciated today for its aesthetic qualities, color during the Middle Ages was also understood for its material, scientific, and medicinal properties. The manufacture of colored pigments and inks was part of the science of alchemy. Concerned with the transformation of matter, alchemy is generally associated with the fruitless endeavor to transmute base metals into gold. But it was also closely tied to artistic practice, as evidenced by the many surviving medieval scientific manuscripts that contain recipes for making pigments. Current research into the materials used to produce the sumptuous colors that enliven the pages of manuscripts reveals a remarkably diverse “alchemical rainbow” of hues derived from plants, minerals, and metals.



Non-flash photography and video permitted unless otherwise noted.

The pages of manuscripts are made of parchment (specially prepared animal skin) painted with tempera. Because these materials are sensitive to light, this exhibition is presented at low light levels.

This exhibition complements *The Shimmer of Gold: Giovanni di Paolo in Renaissance Siena* (October 11, 2016–January 8, 2017), in the Museum, North Pavilion, and *The Art of Alchemy* (October 11, 2016–March 6, 2017), on view at the Research Institute.







# ALCHEMICAL HERITAGE IN MANUSCRIPTS

Alchemy was an ancient tradition, known to medieval readers mainly through texts compiled and copied into manuscripts over centuries. Alchemical knowledge from antiquity entered into medieval encyclopedias, craft manuals, household miscellanies, and literary texts. Technical instructions typically began with such imperatives as “take,” “make,” “mix,” “grind,” or “purify,” hence their nomenclature as “recipes.” Such alchemical texts often included recipes for manufacturing pigments as well as medicines, which sometimes contained the same materials.



# THE ALCHEMICAL RAINBOW

As the medieval forerunner to chemistry, alchemy was concerned with the basic transformation of matter, including the fabrication of beautiful coloring materials for painting. Some pigments were simply made from colored earths or semiprecious stones ground to a fine powder and mixed with a sticky medium. Other pigments required chemical separations or synthesis by heating or exposing metals to corrosive or reactive agents. Highly toxic products and materials often yielded the most brilliant colors, creating a remarkably varied “alchemical rainbow.”

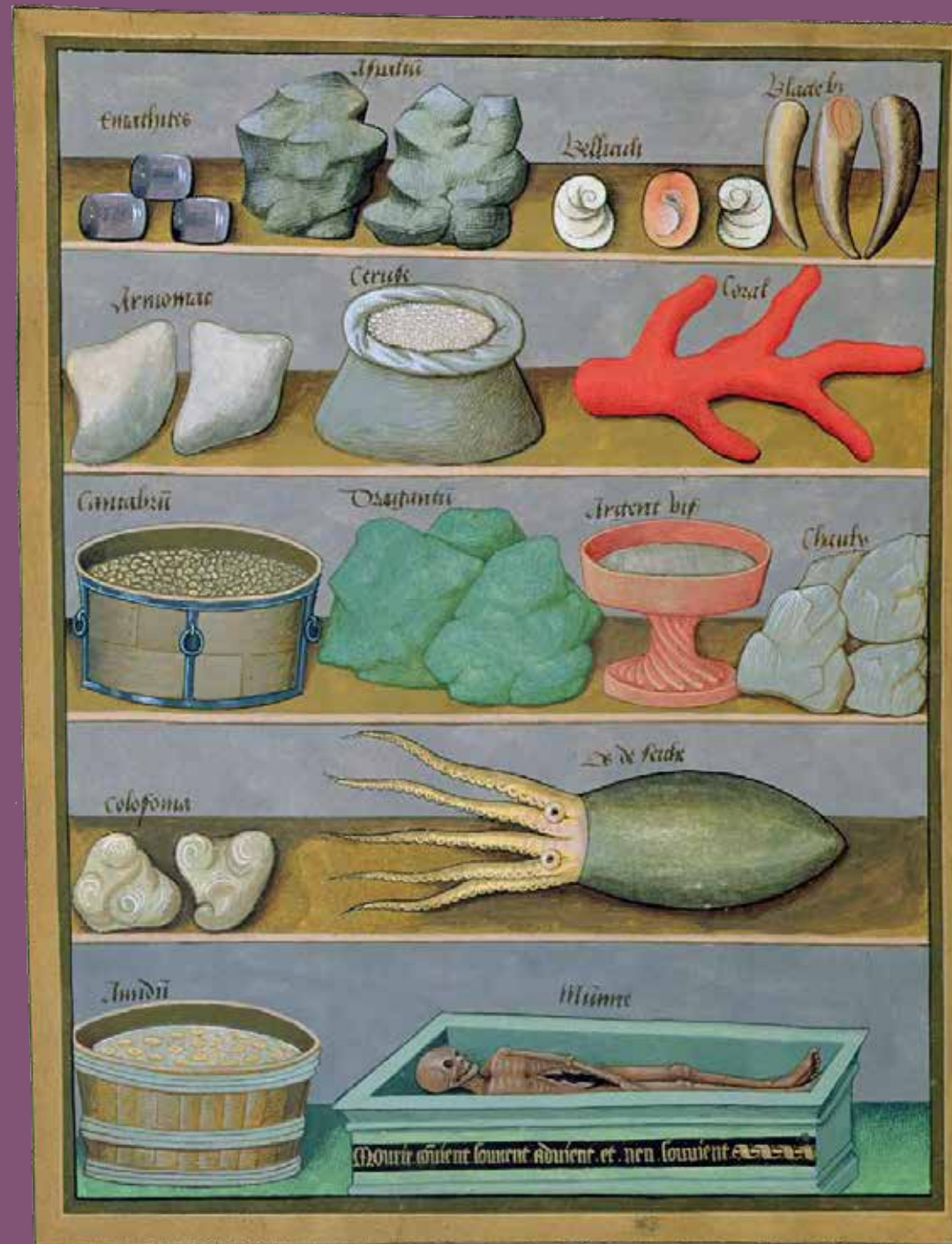
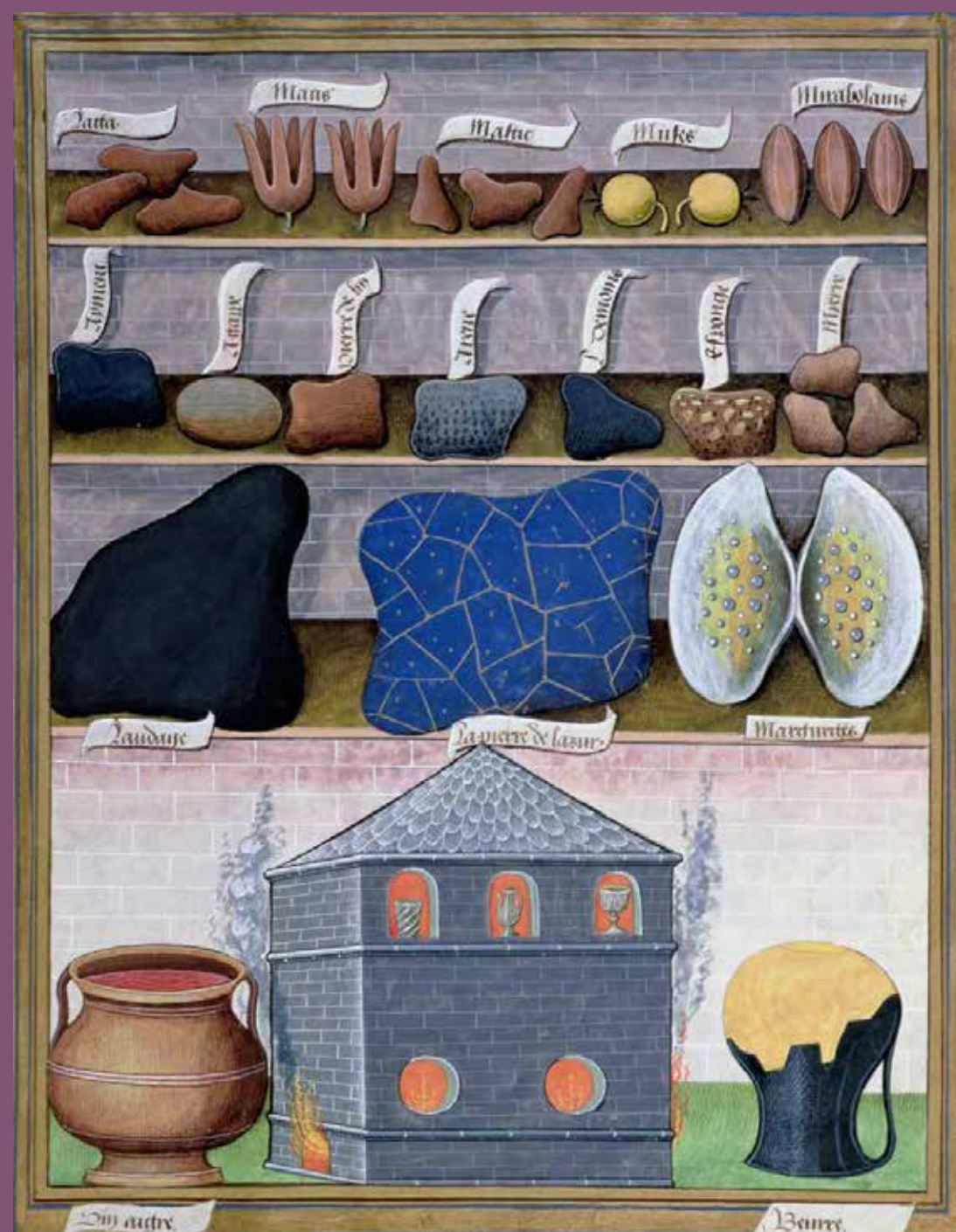


# ILLUMINATING WITH PRECIOUS METALS

The term used to refer to paintings within books—“illuminations”—derives from the Latin *illuminare* and refers to the pages being “lit up with gold.” Gold has come to epitomize the art of book painting, used not only for its incorruptibility, purity, and high value as a material but also for its spiritual connotations. Medieval technical treatises are full of recipes for gold substitutes. Like alchemists, illuminators were clearly obsessed with gold and other metallic substances. They sought new ways to manipulate these materials on the page to imbue their books with the light and luxury of precious metals.



# A DRUG CABINET FOR MEDICINE AND ART



Natural products are arrayed in a copy of the famous medieval treatise *The Book of Simple Medicines*, written between 1130 and 1150 by Mattheaus Platearius (died 1161). Assembled in this cabinet are many widely used pharmacological materials, including resin, nutmeg, mastic, pearls, vinegar, lapis lazuli, lead white, sal ammoniac, mercury, chalk, and other substances. Many of these ingredients formed the basis of not only medicines but also pigments for painting.

Illustrations from *The Book of Simple Medicines*, by Mattheaus Platearius, about 1170. National Library, St. Petersburg, Russia/Bridgeman Images. Ms. Fr. Fv VI #1, folio 166r, 166v



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