

Contributors

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Jacques Brunet is an engineer at the Laboratoire de Recherche des Monuments Historiques, Paris, and chief of the Grottes Ornées section. He received his master's degree in earth sciences, a certificate of higher studies in geochemistry, and a Diplôme d'Etudes Approfondies in sedimentology. He has been working on the problems of the conservation of rock art since 1973 and has carried out several missions in Algeria, Malta, Brazil, and India. He is a member of the International Council of Museums.

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Sharon Cather has been a member of the Courtauld Institute's Conservation of Wall Painting Department since it was established in 1985. Her undergraduate training in the history of art was followed by a master's degree from Princeton University in 1981. During 1981–82, she was a Fellow of the American Academy in Rome, specializing in Italian Renaissance architecture. She then taught at Cambridge University until joining the Courtauld. Her professional activities have included organizing international conferences with the Getty Conservation Institute and the Royal Academy, London. Her current research interests focus on environmental causes of deterioration and the development of improved methods of monitoring.

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Robertson E. Collins is an author, lecturer, and consultant and is chairman of the Committee on Cultural Tourism, International Council on Monuments and Sites, Paris. He has worked throughout Asia developing tourism concepts and guidelines for management of cultural heritage resources by national agencies and local community leaders. He is a former vice-chairman of the National Trust for Historic Preservation, a trustee of the Victorian Society, and a member of the Society of Architectural Historians. Collins now lives in Singapore and is the president of Tourism Development and Heritage Conservation Pte. Ltd.

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Fan Jinshi is deputy director of the Dunhuang Academy and vice president of the Dunhuang Grottoes Conservation Research Foundation. She came to the Dunhuang Academy after graduation from the archaeology division of Beijing University's history department in 1963. She has participated in many archaeological studies, including the survey and excavation of ancient tombs, the ruins in front of the Mogao grottoes, the ruins of the city of Dunhuang, and the age and contents of the Mogao grottoes. Her publications cover such topics as ancient water wells at Dunhuang, embroidery and other objects of the Tang dynasty, wall paintings depicting the story of Buddhism at Mogao, and the grottoes of the Northern, Sui, and early Tang dynasties.

Csilla Felker-Dennis is a native of Hungary. She received her degree in art history and studio art from the University of Massachusetts, Amherst, and completed her graduate professional conservation training at the George Washington University, the Smithsonian Institution, and the Harvard University Art Museums. She held a conservator's position at the Fogg Museum's Objects Conservation Laboratory for eight years, where she worked on the Chinese lead pigments with John Dennis. Currently, she is a conservator in private practice in Texas and has been involved in conservation surveys of the region's museums and historic sites including Texas, Oklahoma, Louisiana, and Kansas.

Lore Erwin "Winnie" Fleming attended the Camberwell College of Arts to study paper conservation, after working as a physiotherapist for nineteen years. Her first position in conservation was in the Department of Oriental Manuscripts and Printed Books of the British Museum. After about two years, she transferred to the Department of Oriental Antiquities. In 1975, the Department of Conservation was created; until her retirement in 1995, she was the head of the Eastern Pictorial Art Section.

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Gerd Gudehus studied civil engineering in Berlin, where he also completed his doctoral thesis in soil mechanics. In 1973, he became full professor and chairman of the Department of Soil Mechanics and Foundation Engineering at the Institute of Soil and Rock Mechanics, Karlsruhe University. He is head of the Soil Mechanics Section of the German National Geotechnical Society and is engaged in the conservation and restoration of historical retaining walls and in the stabilization of the foundations of historical buildings situated on soft ground. He is also working on a research project of the German Ministry for Science and Technologies in which the Dafosi grotto is included.

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Emile C. Joel is a research chemist who received her B.S. degree from the University of the District of Columbia. Her research specialties include the application of mass spectrometric techniques to provenance studies of archaeological and historical materials through lead isotope analysis and the development of a lead isotope ratio database. She has completed projects characterizing artifacts from Turkey, Spain, Nigeria, and China.

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Sadatoshi Miura is a conservation scientist and director of the Department of Conservation Science, Tokyo National Research Institute of Cultural Properties. He is a member of the Technical Committee for the Joint Conservation Project of Mogao Grottoes between China and Japan. His main research interests include microclimate and nondestructive examination.

Elizabeth A. Moffatt received the degrees of Bachelor of Science (Honors) from Memorial University of Newfoundland in 1975 and Master of Science in organic chemistry from the University of Ottawa in 1977. She joined the Canadian Conservation Institute in 1978, where she is currently a senior conservation scientist in the Analytical Research Services laboratory. Her interests include the application of Fourier-transform infrared spectroscopy to conservation science and the analysis of artists' materials and ethnographic paints.

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Stephen Rickerby received his M.A. in art history before undertaking the Courtauld Institute of Art-Getty Conservation Institute postgraduate diploma in the conservation of wall paintings, followed by a one-year Courtauld Institute-GCI internship working as a conservator for English Heritage and member of the GCI Tomb of Nefertari project in Egypt. He remained with the Nefertari project until its completion in 1992 and has worked as a private wall-paintings conservator in various countries since 1989.

Lynn G. Salmon received her S.B. degree in materials science from the Massachusetts Institute of Technology and her M.S. degree in engineering from the University of California at Los Angeles. Since 1986 she has been a research engineer at the California Institute of Technology, where she specializes in the study of effects of atmospheric pollution on works of art. Her research projects have included studies of the fading of artists' colorants and numerous studies of airborne pollutants in national parks, museums, and archaeological sites around the world.

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Sharon Sullivan initiated and managed the Cultural Resource Management Unit of the New South Wales National Parks and Wildlife Service, which is responsible for the management of Aboriginal and historic places in New South Wales. Later, she became a regional manager for the service, and then deputy director. She is now director of the Australian Heritage Commission, responsible for the development of a comprehensive register of areas of cultural and natural significance in Australia and for the promotion of its conservation. She has worked in the area of cultural resource planning throughout Australia and has published and lectured extensively in this field.

Sun Rujian, a specialist in architecture, began working at the Mogao grottoes in Dunhuang in the 1940s. He was responsible for repair and stabilization projects at the Mogao grottoes from the 1950s to the 1980s and managed the project on environmental protection in the 1980s. He was formerly director and research fellow of the Protection Research Institute in Dunhuang. He retired in 1993.

Cristina Thieme was born in Milan, Italy. From 1987 to 1990, she studied the conservation of art at the Hochschule für Gestaltung HFG, Bern, Fachklasse für Konservierung und Restaurierung, Switzerland. She has taught conservation at Gibilmanna (Palermo), Italy, and has worked for the Bayerisches Landesamt für Denkmalpflege, München, Germany since 1991.

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Wang Baoyi graduated from the Faculty of Solid State Physics of Lanzhou University in 1984. He joined the conservation research team at Dunhuang Academy in 1990, after receiving his M.S. degree. He has been involved in research projects dealing with grottoes environments and the digital imaging process. He has published four technical papers on related subjects.

Wang Jinyu, assistant research fellow with the Dunhuang Academy, has been working in the conservation of the Dunhuang grotto relics for seventeen years. He has been engaged in a number of provincial and international (China–Japan and China–U.S.) collaboration projects. He received a bronze medal from the State Bureau of Cultural Relics and a medal from the Chemical Engineering Ministry. He has written more than fifty scientific reports and publications.

Wang Wanfu is a junior botanist. After graduating from the Lanzhou University in 1992, he joined the Dunhuang Academy. Since then, he has been in charge of monitoring and maintenance programs for both synthetic and vegetation windbreak fences.

Wang Xudong, geologist, is on the junior staff of the Dunhuang Academy. He graduated from Geology Department of the Lanzhou University in 1991 and assisted in the supervision implementation of this project. He has also been involved in the conservation of the wall paintings at Yulin grottoes.

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Luk et al. *The Treatment of Two Chinese Wall Painting Fragments*

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