

FURTHER READING

The comments in italic are personal opinions and intended only to help one determine where to most effectively pursue additional research. All knowledge is valuable, and more is always better. While it is impossible to learn everything, it is important to know what information is available and where to find it. We hope this helps.

Appelbaum, Barbara. Guide to Environmental Protection of Collections. Madison, Connecticut: Sound View Press, 1991.

A very readable book filled with well thought out ideas and much practical information. Recommended as required reading for anyone responsible for or interested in the preservation of collections. The insights into relative humidity and temperature control are particularly valuable.

Agnew, Neville. "The Corrosion of Egg Shells by Acetic Acid Vapour" Queensland: Queensland Museum.

A detailed and specialized scientific study of the discovery of a conservation problem, the identification of its cause and steps for prevention of similar problems. Special thanks go to Jay Fowler at the University of Florida for providing us with a copy of this paper.

Ashley-Smith, Jonathan ed. Science for Conservators Volume 1, An Introduction to Materials. Conservation Teaching Series. London and New York: Routledge, 1983.

Basic chemistry from a conservation point of view.

Baer, Norteb S. and Banks, Paul N. "Indoor Air Pollution: Effects of Cultural and Historical Materials." In Care of Collections. Leicester Readers in Museum Studies. Ed. Simon Knell. London and New York: Routledge, 1994), pp. 135-46.

A very useful monograph on indoor pollution in museums.

Belcher, Michael. Exhibitions in Museums. Leicester Museum Studies Series. Washington, DC: Smithsonian Institution Press, 1991.

An overview of museum exhibition from the perspectives of policy, goals and effectiveness of communication. Most of the information is philosophical rather than technical.

Davis, Nancy. Short List of Stable and Unstable Materials. Provided by Wendy Jessup, Jessup and Associates at the Small Museum Association Winter Conference, Ocean City, MD. 2002

Dilque, Craig. "Are We There Yet? The Status of White LEDs in the Marketplace," Architectural Lighting. April/May 2002, p. 68

The answer is no, not even close!

Feller, Robert L. Artists's Pigments, A Handbook of their History and Characteristics. Volume 1. Washington D.C.: National Gallery of Art, 1986.

Along with volume 2 of the same title, edited by Roy Ashok, this book is an awesome resource on pigments. The information presented is invaluable for artists and conservators.

Feller, Robert L. "The deterioration of organic substances and the analysis of paints and varnishes." In Preservation and Conservation: Principles and Practices. Ed. Sharon Timmons. Washington, DC: Smithsonian Institution Press, 1976, Pp. 287-99.

The title says it all.

Feynman, Richard P. The Strange Theory of Light and Matter. Princeton, New Jersey: Princeton University Press, 1985.

If you would like to go deeply into the subjects of light and matter, this book was written by one of the greatest minds of our age. Even if you are not into quantum physics, this ought to be required reading for the background and the conclusions.

Gardner, Helen. Art Through the Ages. New York: Harcourt, Brace and Company, 1936.

A wonderful old book, a classic introduction to art and the development of architecture, painting, and sculpture.

Goldberg, Lisa and Weintraub, Steven. "Regulations Change for Cobalt Indicating Silica Gel." AIC News, January 2001, p. 14.

Gribbin, John. In Search of Schrodinger's Cat: Quantum Physics and Reality. New York: Bantam Books, 1984.

All photochemical damage is the reality of quantum physics. Many in museum and conservation science miss reading this valuable, science classic. If nothing else it will give you hours and hours of things to think and talk about.

Harvey, David. "New Materials and Research: Irradiation of Mail by U.S. Postal Service." AIC News. Volume 27, Number 2 (March 2002), pp. 14-15.

A short overview of the dangers to artifacts of biocidal radiation.

Januszczak, Waldemar, et al. Techniques of the Great Masters of Art. Hong Kong: Chartwell Books Inc., 1985).

A relatively inexpensive and informative book investigating the painting techniques of a number of great painters.

Jessup, Wendy Claire, "Integrated Pest Management." **AIC News**. Volume 22, Number 3 (May 1977), pp. 1-5.

A short overview of IPM.

Knell, Simon, ed. Care of Collections. Leister Readers in Museum Studies. London and New York: Routledge, 1994.

This collection of monographs covers subjects from conservation ethics to detecting and controlling carpet beetles. A useful reference for subjects covered.

Keene, Suzanne. "Real-Time Survival Rates for Treatments of Archaeological Iron." In Ancient & Historic Metals: Conservation and Scientific Research. Ed. David Scott, Jerry Podnay, and Brian B. Considine. Los Angeles: The Getty Conservation Institute, 1994. pp. 249-264.

Included here to document chloride dangers to metals, their presence historic metals (especially iron) and the difficulties of treating metals contaminated with chlorides.

Kristy Ogg. "Round Exhibition - - Square Gallery." Exhibit Builder. March/April 2002, pp. 6-7.

Lighting Handbook. Bloomfield, New Jersey: Westinghouse Electric Corporation. 1971

Mostly out of date, there is some information here that just isn't available elsewhere. There is no really comprehensive reference work on light and lighting. That is why we are writing one!

Maekawa, Shin, ed. Oxygen-Free Museum Cases. Research in Conservation. Los Angeles: The Getty Conservation Institute. 1998.

This work is particularly focused on the development of an anoxic environment case design for Egyptian mummies. The practical aspects are applicable to any hermetically-sealed or inert gas filled case design. As with all of the Getty Institute Research in Conservation works, it is a reasonably inexpensive, technically detailed and valuable reference.

Mathiesen, Paul. "Cut, Color and Clarity." Lighting Design & Application. October 1994, pp. 22-26.

Short description of glass fiber optic installation at the Royal Ontario Museum in Toronto, Ontario, Canada.

Miller, Jack V. Evaluating Fading Characteristics of Light Sources. Seaford, DE: NoUVIR Research. 1993.

The precursor to Fading of Fugitive Colors by Museum Light Sources by the same author listed below, this monograph describes detailed fade testing of ISO blue wool standards using a number of common lighting sources and filters. The paper particularly presents the preservation effects on ISO blue wool samples achieved with IR and UV free lighting and the use of the principles of Reflected Energy Matching.

Miller, Jack V. Light and Matter: The Dangerous Romance. Seaford, DE: NoUVIR Research. 1995.

A wonderfully simple and practical explanation in story form of the physics of light including the processes of reflection, refraction and photochemical damage. Described by the author as "Quantum physics for art majors." An hour of so with this booklet will teach you more than most physics teachers know today.

Miller, Ruth Ellen and Miller, Jack V. Fading of Fugitive Colors By Museum Light Sources. Seaford, DE: NoUVIR Research. 1993.

A monograph describing detailed fade testing of a number of variously colored samples using sources from sunlight and conventional lighting sources through UV and IR free lighting and light filtered to match artifact colors. There is a particular emphasis on the principles of Reflected Energy Matching, actual test data showing extension of artifact life by up to 70 times and practical solutions for applying this research in a museum setting. Available from NoUVIR Research.

Nazaroff, William W. et al. Airborne Particles in Museums. Research in Conservation. Los Angeles: The Getty Conservation Institute, 1993.

Valuable information on microparticulate pollution. Regretfully we were able to work only from a few photocopied excerpts.

Raphael, Toby. Exhibit Conservation Guidelines: Incorporating Conservation into the Exhibition Process. Washington, DC: National Park Service, 1999).

Although the CD format and landscape page layout make using this resource more difficult, it is filled with information, practical help and gives particular focus to conservation planning issues often overlooked in the early stages of exhibit design. Take the time to print out a copy for reference.

Rea, Mark S., ed. The IESNA Lighting Handbook: Reference and Application. New York: The Illuminating Engineering Society of North America, 2000.

Has some incredibly detailed information (like the section on human vision) and some places where information is missing. Very expensive (\$500) if you are not a member. Find a copy in the library.

Roosa, Mark. "Conservation Ideas." Roundtable at the Small Museum Association Winter Conference, Ocean City, MD, 2002.

Selwitz, Charles and Maekawa, Shin, Inert Gases in the Control of Museum Insect Pests. Research in Conservation. Los Angeles: The Getty Conservation Institute. 1998.

Just about everything you could need to know about using anoxic environments to control insects, this is another excellent Getty reference.

Schaeffer, Terry T. Effects of Light on Materials in Collections. Research in Conservation. Los Angeles: The Getty Conservation Institute, 2001.

Limited to the effects of photoflash, strobe and photocopier light sources, this work contains detailed information on a material by material basis.

Schrenk, Janet L. "The Royal Art of Benin: Surfaces, Past and Present." In Ancient & Historic Metals: Conservation and Scientific Research, ed. David Scott, Jerry Podnay, and Brian B. Considine. Los Angeles: The Getty Conservation Institute, 1994. pp. 51-62

Discusses fatty-acids and salts and their dangers to historic metal.

Shelley, Marjorie. The Care and Handling of Art Objects: Practices in the Metropolitan Museum of Art. New York: The Metropolitan Museum of Art, 1987.

Basic practical information that should be required reading for all museum personnel that might be required to physically handle artifacts. Lighting, humidity and environmental information is basic and needs supplementing. Lighting information is particularly out-of-date.

Thomson, Garry. The Museum Environment. 2nd ed. London and Boston: Butterworths, 1986.

An excellent basic resource that led the way toward environmental concerns in conservation. The information on light, particularly IR radiation, has been superceded by current research. Suggestions for relative humidity are climate specific to England and may be high for the United States. (See Appelbaum's comments on US humidity variations and controls.)

Weast, Robert C. and Shelby, Samuel M. , eds. The Handbook of Chemistry and Physics, 48th ed. Cleveland, Ohio: The Chemical Rubber Company, 1967.

This standard reference work contains just about every scientific definition, formula or table ever devised. It is an excellent reference for someone separated by some years from college chemistry or physics.