

WAAC Pre-Meeting Workshop

Getty Center, Los Angeles, California

November 5, 2019, 9:00AM – 5:00PM

Microfade Testing: Fundamentals and Practice

Instructors: Vincent Laudato Beltran, Sarah Freeman, Mark Benson, Laura Maccarelli

This workshop is intended for recent microfading tester (MFT) users and those in the process of acquiring an MFT. The course will introduce fundamental concepts underpinning the technique, the basic components and operation of an MFT, and how the resulting data can be used to assess light sensitivity and inform light exposure guidelines. Participants will have hands-on access to MFT and will assess the light sensitivity of various samples.



The MFT was introduced to the field of heritage conservation by Paul Whitmore (then at Carnegie Mellon University, now at the Institute for the Preservation of Cultural Heritage at Yale University) in the mid-1990's, and provides a means of understanding the in situ light sensitivity of an artwork. The technique exposes a small spot (less than ~0.5 mm in diameter) to an extremely bright light and monitors the resulting color change with a spectrometer. The high light intensity accelerates the color change and data is

obtained rapidly, giving one the ability to evaluate an artwork's fugitivity before exhibition. Real-time monitoring allows the test to be stopped before color change is visible, rendering it virtually non-destructive. The comparison of MFT data to the fading rates of Blue Wool standards can refine the sensitivity assessment of an artwork and allow for the development of object-specific light exposure guidelines.

MFT has become generally accepted as a preventive conservation tool, but there remain obstacles to its more widespread use. While the original 'Whitmore MFT' setup remains in active use in the field, subsequent MFT designs have explored the use of different components, potentially causing ambiguity as to which iteration is most appropriate for a specific context. Once an MFT design has been selected, issues can then arise in the acquisition and setup of a non-turnkey instrument, as well as sustaining institutional knowledge for an instrument that may be operated and maintained intermittently. Finally, there can be uncertainty in how to interpret MFT data and how it influences museum lighting policy.

In recent years, several meetings focused on MFT have been convened by the Rathgen Laboratory, Conservation Science Annual, and the Getty Conservation Institute to discuss these issues. This workshop helps to further this dialogue and ultimately seeks to advance MFT practice in the conservation community.

Capacity: 12 participants

Cost: \$100.00 (includes continental breakfast and breaks)

Workshop registration will be opening soon.

www.waac-us.org. You must be a member of WAAC to register.

For inquiries please contact **president@waac-us.org**

Vincent Laudato Beltran, Getty Conservation Institute, joined the GCI Science Department in 2002. He has been active in research on a range of topics including the mechanical characterization of historic materials, the effect of reduced oxygen environments on color change, evaluations of packing case performance during transport, and assessments of environmental management systems in hot and humid climates. He is a co-author with Shin Maekawa and Michael C. Henry of Environmental Management for Collections: Alternative Conservation Strategies for Hot and Humid Climates. He holds a BS in General Chemistry from the University of California, Los Angeles and an MS in Oceanography (Geochemistry) from the University of Hawaii at Manoa.

Sarah Freeman, J. Paul Getty Museum, joined the Paper Conservation Department in 2006. She earned her M.A., C.A.S. in art conservation at the State University College at Buffalo, and a B.S. in art history at the University of Wisconsin, Madison. Her interests include preventative care of photographs and experimental photography. Sarah has participated in research and non-destructive analysis on photographs in the museum's collection, which includes extensive holdings of 19th and 20th century photography from all over the world. She has presented and published on the use of microfadeometry to assess light sensitivity of photographs, technical studies on 19th century photographic processes, as well as mounting and storage of large format prints.

Mark Benson, Getty Research Institute, is an Assistant Conservator in the GRI's Conservation and Preservation Department. He earned an undergraduate degree in Art History from the University of California, Los Angeles and has worked in Museums and Special Collections for over ten years. Mark's primary research interest related to museum lighting is reducing the damaging effects of light on works on paper with minimal impact on access. Currently, he is working on a series of experiments pairing microfadeometry and color monitoring to investigate differences between real-time and accelerated color change for various types of media.

Laura Maccarelli, Los Angeles County Museum of Art, is an Assistant Conservation Scientist in LACMA's Conservation Center. She graduated with an M.Sc. in Conservation Science from the University of Bologna, and has had internships in England and Malta before serving as an Andrew W. Mellon Fellow the Science lab at LACMA. Her work focuses on the material identification of art objects from the LACMA collection, including a research project to identify natural organic dyes on textiles using destructive and non-destructive techniques.

Sponsored by the Getty Conservation Institute and the J. Paul Getty Museum