



March Meeting

Wednesday, March 7, 2012

The March 2012 meeting will be held at the Holiday Inn, located at 1000 Busse Road, Elk Grove Village, IL 60007. See the map on the last page.

Social Hour: 5:30 PM Dinner: 6:30 PM Speaker: 7:30 PM

Advanced Spectral Imaging for Non-Invasive Characterization and Long-Term Preservation of Cultural Heritage Materials

Fenella G. France, Ph.D., MBA FAIC

Chief, Preservation Research and Testing Division Library of Congress

Hyperspectral imaging was originally developed for remote sensing and astronomical applications, and adaptations of this technology have been of great benefit to the preservation of cultural heritage. This customized spectral imaging system has been used as a tool for non-invasive characterization of cultural heritage, allow the collection of chemical identification information about materials without sampling, a critical factor for cultural heritage materials.

A range of case studies will be utilized to discuss the challenges associated with characterizing cultural heritage materials and the creation of a standardized data set for preservation scientists and scholars. These will include maps, historic

manuscripts in US history, and representative manuscripts from other cultures including Portolan Charts, L'Enfant Plan of Washington D.C., Jefferson's handwritten draft of the Declaration of Independence, and James Madison debate papers. Modern collection case studies include Herblock drawings and political cartoons, and H.R. Haldemann papers from the Nixon tape erasure investigations. The objects illustrate non-invasive characterization of colorants and substrates, in addition distinguishing deterioration, and detection of non-visible changes due to exhibition and storage. The imaging program includes the development of a spectral reference database, and the integration of data from other non-invasive analytical techniques, to create a full analytical mapping of objects for non-destructive analyses of collection materials.



Please make your dinner reservations for the upcoming meeting by email at sas.chicago1@gmail.com, using our online form mailto:http://www.sas-chicago.org/Online%20Registration%20at%20Elk%20Grove%20Holiday%20Inn%20.htm or by calling Slav Stepanovich at 847-421-2056. Leave your name, company affiliation, a telephone number, the number of reservations and your choice of entree. Please call by noon Monday, March 5th, so that proper arrangements can be made with the restaurant. Credit card payments muse-chicago.bbnow.org prior to the meeting. Only payment by cash and check will be accepted at the meeting. Contact us if you can't attend; the SAS is charged for no-shows.

Entree choices: Rib Eye Steak, Roasted Chicken, Pasta Primavera, or Caribbean Tilapia

Dinner Cost Members: \$30 Students and Unemployed Members: \$10 Non-members: \$30

Fenella G. France

Fenella is Chief of the Preservation Research and Testing Division at the Library of Congress. She received her Ph.D from Otago University, New Zealand and has research interests that include advanced non-invasive and spectral imaging technologies, as well as anoxic and other storage and exhibition environments for "Top Treasures" such as the Waldseemüller 1507 Map, draft of the Declaration of Independence, drafts of the Gettysburg address and others. An international specialist on polymer aging, she focuses on environmental damage to cultural objects – both traditional and modern media issues. Dr. France was the research scientist for the Star-Spangled Banner project at the Smithsonian Institution's National Museum of American History, and has worked as research scientist on the preservation of World Trade Center artifacts, pre-Columbian mummies and textiles, Ellis Island Immigration Museum, and other cultural heritage institutions. She serves on a range of standards and professional committees for both textiles and cultural heritage preservation, as well as the development of lighting standards for preservation.

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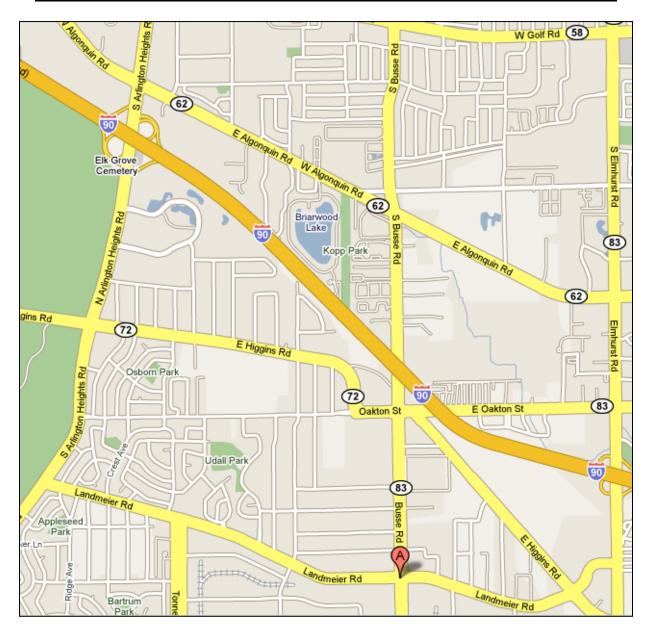
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