FALL 2022

MSE 690 SEMINAR SERIES

FRIDAY, OCTOBER 28TH, 2022 | 3:30PM–5:00PM

ARMS 1010

GREGORY SMITH

Otto N. Frenzel III Senior Conservation Scientist at the Indianapolis Museum of Art at Newfields

"Cultural Heritage Chemistry Unravels Museum Textile Mysteries"

Abstract: The field of cultural heritage chemistry occupies a rich interface between the Arts and the Sciences. This talk will explore the many facets of museum science with a particular focus on textile colorants and their chemical analysis. Accessioning ancient textiles into museum collections often requires objective information regarding the object's appropriateness and authenticity before purchase or acceptance as a gift. In the case of dyed fibers, evidence of period appropriate dyestuffs builds confidence and reduces the chances of the object being a simple fake produced using modern materials. Identification of textile dyes can often reveal the hidden histories of historic objects. Examples of textile investigations will be presented to show applications in technical art history and authentication as well as the application of analytical techniques such as diagnostic imaging, microscopy, chromatography, spectroscopy, and radiocarbon dating. These case studies will serve as an introduction to a forgery analysis of a 19th century Moroccan embroidery included in the Purdue University Galleries' exhibition Analyzing Artistry, running October 28th – December 16th, 2022.

Biography: Gregory Dale Smith received a B.S. degree from Centre College of Kentucky in anthropology/sociology and chemistry before pursuing graduate studies at Duke University as an NSF graduate fellow in time-domain vibrational spectroscopy and archaeological fieldwork in Israel's Galilee region. His post-graduate training included investigations of pigment degradation processes and palette studies of illuminated manuscripts at the British Library and the V & A Museum in London, the development of synchrotron infrared microscopy facilities at the National Synchrotron Light Source at Brookhaven, and researching cleaning issues related to artists' acrylic emulsion paints at the National Gallery of Art in Washington, DC. In 2004, Dr. Smith joined the faculty of the conservation training program at SUNY Buffalo State College as the Andrew W. Mellon Assistant Professor of Conservation Science. In 2010 Dr. Smith became the Otto N. Frenzel III Senior Conservation Scientist at the Indianapolis Museum of Art at Newfields where he constructed and now operates a state-of-the-art research facility to study and preserve the museum's encyclopedic collection. Dr. Smith's research interests include undergraduate education at the Arts-Science interface, assessing pollution off-gassing of museum construction materials, and understanding the chemical degradation of artists' materials. In 2018, Dr. Smith was selected to receive the American Institute for Conservation's national award for advocacy for his work in public lecturing and curating exhibitions that focus on the role of Science in the Arts.

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