

Smithsonian Museum Conservation Institute

Mitigation of Pesticides on Museum Collections Workshop/Symposium Monday and Tuesday, April 23 and 24, 2007

Museum Conservation Institute Theater Museum Support Center 4210 Silver Hill Road, Suitland, Maryland 20746 Phone 301-238-1205

The Smithsonian Institution, along with other museums and collections, has an obligation to provide access to cultural artifacts and natural history collections. Unfortunately, many of these objects and collections have been treated with hazardous substances, including heavy metals – arsenic, lead, and/or mercury in an effort to protect them from insect damage. However, as our staff and visitors handle these materials they may be exposed to dangerous levels of these contaminants. When these collections are returned to Native American tribes under the repatriation legislation (the NAGPRA and the NMAI Act), their communities may be exposed to these potential hazards.

The Smithsonian Institution's Museum Conservation Institute (MCI) in collaboration with the National Museum of Natural History (NMNH) and the National Museum of the American Indian (NMAI) is initiating a research program on mitigation of pesticide on museum collections. As a first step, this workshop/symposium will feature ongoing research relating to mitigation of pesticides and other contaminants. Museums and tribes with particular interest in this topic are welcome to attend the presentations and discussions. If you are interested in attending, please contact:

Dr. Paula T. DePriest Telephone 301-238-1206 Email depriestp@si.edu

Arriving from Downtown Washington, DC. Take South Capital across the Anacostia River, take Suitland Parkway until the exit for Silver Hill South, exit right onto Silver Hill Road and go about 2 blocks to guard building inside black wrought iron gate on right (second driveway on right after get off ramp), bear toward the building on the left.

Free Shuttle from the National Mall. Free hourly Smithsonian shuttles are provided to the Museum Support Center (MSC) from the Natural History Museum and the Museum of the American Indian on the National Mall. Contact Paula DePriest for instructions in accessing the shuttles.

Mitigation of Pesticides on Museum Collections Workshop/Symposium

Monday, April 23, 2007 Museum Conservation Institute Theater

9:30-9:45 am Coffee, MCI Entry

9:45-10:00 am Welcome by Robert Koestler, MCI Director

10:00-10:45 am Peter Reuben, Tonawanda Band of Seneca

Mitigation of Surface Contaminants on Haudenosaunee Medicine Masks.

10:45-11:00 am Coffee Break

11:00-11:45 am **Peggi Cross,** Arizona State Museum, University of Arizona

The Removal of Arsenic (III) and Mercury Salts from Materials using Aqueous alpha-Lipoic Acid Solutions

12:00-1:00 pm Lunch

1:00- 1:45 pm **Timberley Roane**, University of Colorado at Denver and Health Sciences Center

Bacterial Removal of Mercury from Museum Materials: A New Remediation Technology?

1:45-2:45 pm Open Discussion led by **Nancy Odegaard**, Arizona State Museum, University of Arizona

2:45-3:00 pm Coffee Break

3:00-4:00 pm MCI facilities tour

Tuesday, April 24, 2007 Museum Conservation Institute Theater

9:30-9:45 am Coffee, MCI Entry

9:45-10:00 am Welcome by Robert Koestler, MCI Director

10:00-10:45 am **Helene Tello,** Ethnologisches Museum Staatliche Museen zu Berlin with **Achim Unger**, Rathgen-Forschungslabor Staatliche Museen zu Berlin, *The Decontamination of Ethnological Objects with Supercritical and Liquid Carbon Dioxide*

10:45-11:00 am Coffee Break

11:00-11:45 am Werner S. Zimmt, Arizona State Museum,

Presented by David Smith, University of Arizona

Pesticide Mitigation Using Supercritical Carbon Dioxide

12:00-1:00 pm Lunch

1:00- 1:45 pm Werner S. Zimmt, Arizona State Museum,

Presented by David Smith, University of Arizona

Suggestions For New Approaches To Remove Pesticide Residues

1:45-2:45 pm Open Discussion led by **David Smith**, University of Arizona

2:45-3:00 pm Coffee Break

3:00-4:00 pm Wrap-up panel discussion by **Robert Koestler**, **Nancy Odegaard**, and **David Smith**

Museum Conservation Institute

The Smithsonian's Museum Conservation Institute (MCI) team of conservators and scientists develop scientific solutions to advance the understanding, care, and preservation of cultural and natural heritage. The MCI staff collaborates with and serves as a resource for indepth studies of artistic, anthropological, and historical objects using state-of-the-art analytical techniques to elucidate their provenance, composition, and cultural context. Such technical studies require the latest instrumentation, analytical expertise, art historical knowledge, and interpretive abilities, all of which are available through MCI. MCI also provides specialized knowledge to assist our natural history collections in assessing current storage practices and possible new storage solutions, and in remediation of pesticide contamination.