

#### IPI and RIT's Department of Packaging and Graphic Media Science received a Research and Development Grant from NEH to evaluate the use of phase change materials (PCMs) as a sustainable preventive conservation measure for local, passive temperature

control of microenvironments during display, storage, and transit in partially-controlled or uncontrolled environments. PCMs are inherently energy efficient materials that can be exploited for thermal energy storage and regulation. Their energy storage capacity is a transient process, suited for applications where repeated temperature cycles occur. A series of laboratory tests designed to simulate short-term temperature changes and periodic diurnal temperature loads experienced in partially-controlled and uncontrolled environments, will explore different microclimate applications for PCMs, namely vitrines and sealed frame packages for objects on open display, and storage enclosures. Furthermore, a cost-effectiveness and risk analysis will be undertaken to develop guidelines for adoption by collections care professionals. The project will be co-led by IPI's Director of Research, Emma Richardson, and Department of Packaging Science professor, Changfeng Ge. Read the RIT press release

# IPI is seeking a highly skilled and motivated Research Scientist to advance knowledge

and research in the chemical degradation and stability of cultural heritage collection materials. This position is ideal for individuals with expertise in materials testing,

atmospheric pollutants, chemical interactions, organic chemistry, or chemical engineering.

#### The appointed researcher will conduct independent research, collaborate on multi-scholar projects and lead specific components of larger research programs under the direction of a senior or principal researcher. This role involves publishing research results and findings

in peer-reviewed journals, producing reports and contributing to workshops and conferences, and supporting educational programs related to preservation science. Learn more about the position (RIT Career zone 9568BR) and apply 2025 Webinars & Workshops

#### collections care specialists 1) account for the complexities between deterioration of

**More Information and Registration** 

two-part webinar series serves as an introduction to using the IPI Preservation Metrics to evaluate and assess collection risks.

When evaluating a collection space environment, one of the primary questions to address is: how can I quantify the risks to my collection? The IPI environmental metrics for

Webinar Series: Monitoring Collection Storage Environments - May 29, June 12, and June 26, 2025 **Team Participation Encouraged -** In collecting institutions an environmental management team that includes both collections and facilities staff can create a structure to environmental management that includes regular meetings of collections and facilities staff to review data, discuss strategy, plan for changes, and generally inform each other about what is going on in their respective roles. For this webinar series we suggest team

participation and encourage facilities and collections staff to attend the webinar sessions

environmental conditions influence the preservation of collections, collecting

environmental data, and evaluating environmental data for collection storage spaces. These webinars will also discuss critical guiding principles for managing environmental

conditions for cultural collections, and introduce field guideposts such as ASHRAE's HVAC Applications for libraries, archives and museums, The Bizot Green Protocol, and PAS 198:2012. **More Information and Registration** Preservation Performance and Reuse of Sealed Frame Packages for Transit and Display - August 21, 2025 Paper-based objects that are sensitive to changes in relative humidity (RH) are commonly enclosed in sealed frame packages (SFP) to create microclimates for transit or display.

This webinar will summarize findings from a recent IPI research project in which twenty-six different SFP designs were investigated for their effectiveness at buffering against external RH changes. Following initial conditioning of paper-based objects and enclosure materials at 45% RH, dataloggers were placed inside each SFP and exposed to 70% RH for 12 weeks. The internal response of the SFPs to the external RH were quantitatively assessed, alongside qualitative assessments of material reusability. More Information and Registration Environmental Conditions in Shipping Crates During Transit - September 4, 2025 Historically, museum objects going out for loan travel by crate. As the cultural heritage

profession looks to address sustainability, institutions are re-evaluating all aspects of

#### there is limited data documenting what environmental conditions objects actually experience in museum shipping crates while traveling. This webinar will summarize the results from a 3-year field study monitoring crate performance during travel. It will address

**More Information and Registration** Upcoming Workshops Practical Introduction to Mechanical Analysis of Cultural Heritage Materials -October 14-16, 2025 This workshop will provide a theoretical and practical understanding of static mechanical analysis and dynamic mechanical analysis, with a view to characterizing the physical properties of organic heritage materials, and developing appropriate methodologies for conservation and preservation applications. Over the course of three days, participants

including the analysis of paint, films, textiles, and adhesives, providing tangible examples of how mechanical properties can inform the treatment, storage and display of objects,

Location: Center for Creative Photography, University of Arizona, Tucson, AZ

The history of photography includes almost 200 years of generating objects that have many similar visual characteristics, but that were made using a wide range of different technologies and materials. When examining a photograph, viewers must evaluate the clues that the physical object itself presents to properly identify the photographic

process(es) used to create the photograph. This skill—which is described in shorthand as

mechanical test method development, and test limitations.

Photographic Print Identification - October 15-16, 2025

## methodology and controlled vocabulary for organizing visual information, hands-on practice examining nineteenth, twentieth, and twenty-first century processes from IPI's study collection, and instruction on how to use www.graphicsatlas.org as a reference resource for identification. **More Information and Registration**

#### stewards must develop for itself. This workshop will teach participants the tools and skills necessary for successful photographic process identification using a structured

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## cturing Event

cultural heritage. She is a superb colleague to work with and her daily presence in the lab will be missed. We wish her all the best as she endeavors to concentrate effort on her family, and look forward to keeping in touch while she serves on the advisory committee to IPI's current 3D print mechanical analysis studies. Save 5% on HOBO monitoring products that are compatible with eClimateNotebook®

After almost 5 years with IPI, Meredith Sharps Noyes is stepping down from her position as Research Scientist. During her time in the lab, Meredith was IPI's lead representative to ISO standards work, managed ISO testing services, collaborated on multiple research projects, and served as principal investigator for a project focused on 3D printing in

#### compatible. Data logger options include manual, Bluetooth and wireless downloading models. Use promotional code eClimateNotebook5 at the time of purchase to save. Visit <a href="https://www.onsetcomp.com/eClimateNotebook/">https://www.onsetcomp.com/eClimateNotebook/</a> for more information. A portion of the proceeds from these sales will be returned to IPI to support our mission.

IPI has a partnership with HOBO Data Loggers that allows eClimateNotebook(eCNB)

The Image Permanence Institute® (IPI) is an academic research center within the College of Share Art and Design at Rochester Institute of Technology (RIT) dedicated to supporting the  $\mathbb X$  Tweet preservation of cultural heritage collections in libraries, archives, and museums around the world. in Share

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## **Job Opportunity** Research Scientist

# **Job Opportunity: Research Scientist**

### **Upcoming Webinars** Webinar Series: Best Practice for Using the IPI Preservation Metrics to Assess Risk in Organic Collections - April 24 and May 8, 2024

#### decision-making, Preservation Metrics, were first developed in the 1990s to help collection materials and their environmental exposure and 2) to provide balanced approximations of the risks posed by particular storage and display environments. This

This sequential three-part webinar series will serve as an introduction or refresher course on the fundamentals of environmental monitoring of collections storage spaces. Each webinar summarizes key concepts outlined in IPI's Guide to Sustainable Preservation Practices for Managing Storage Environments including understanding how

together.

museum operations, including how to address sustainability in crate design. Currently the types of risks associated with temperature and relative humidity conditions in crates during travel and will highlight best practices when weighing environmental risk with sustainability.

will be introduced to the fundamental concepts of mechanical analysis and data analysis, and participate in practical laboratory sessions using tensile testers, dynamic mechanical (thermal) analysis, and dynamic mechanical (humidity) analysis. These sessions will be supplemented with case study examples from the field of conservation and preservation,

'process identification'—is something that each new generation of scholars and collections

Staff Announcement

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