BY DANIEL M. BURGE

SCIENCE of Scrapbooking

A Tour of the Image Permanence Institute

PART I

Welcome to the Image Permanence Institute! IPI is the largest non-profit research laboratory in the world dedicated to developing ways to preserve photographic images. IPI's sole function is to perform scientific research into prolonging the useful life of photographic materials and other forms of recorded information.

YOU MAY BE WONDERING WHY A LAB like IPI is so important. It is part of our cultural heritage to make sure that the knowledge we have today is available to future generations. It is also important to our families and our society that we pass along to future generations the context from which they come in order to give them a sense of roots and identity. If we don't take steps to ensure that our photos last, much of that knowledge and context will be lost.

IPI's Accelerated Aging Lab

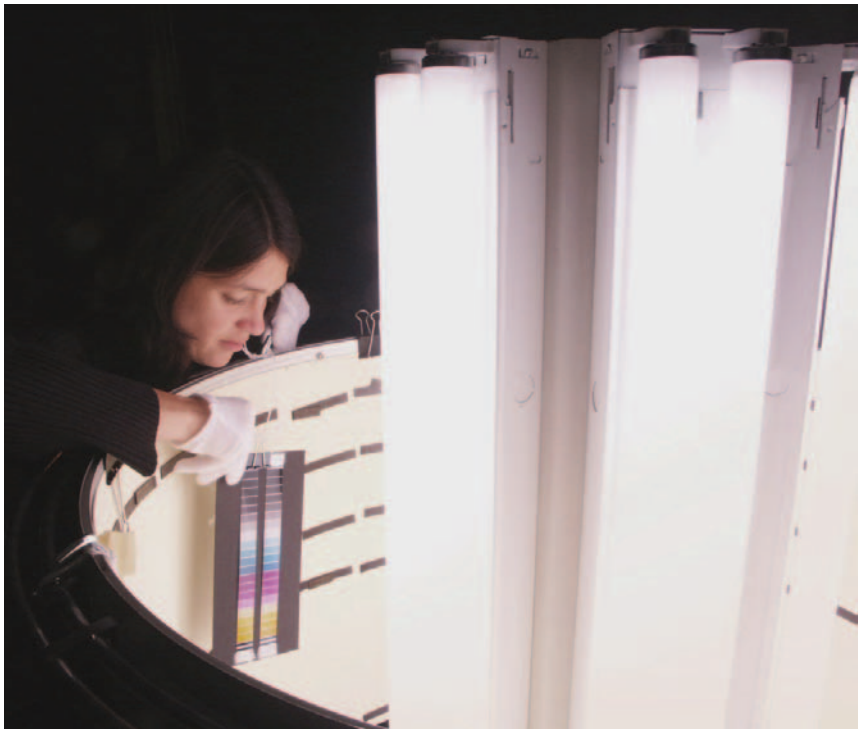
WHO IS IPI?

Our lab was founded in 1985 through the combined efforts and sponsorship of the Rochester Institute of Technology (RIT) and the Society for Imaging Science and Technology (IS&T). The IS&T is an international non-profit organization whose goal is to keep its members aware of the latest scientific and technological developments in the field of photography. The society currently has over 2,000 members located in 36 countries.

Since we are a non-profit, we depend on continually raising money from those who care about our collective photographic legacy. Most of our funding comes from the National Endowment for the Humanities (NEH), the Institute of Museum and Library Services (IMLS), and the Andrew W. Mellon Foundation. The NEH is the largest funding agency of humanities programs in the United States. Created in 1965, it is an independent federal grant-making agency of the U.S. government that supports research, education, preservation, and public programs all around the country.

The IMLS is the primary source of federal support for the nation's 122,000 libraries and 17,500 museums. The Institute's mission is "…to create strong libraries and museums to connect people to information and ideas. The Institute works at the national level and in coordination with state and local organizations to sustain culture, heritage, and knowledge; enhance learning and innovation; and support professional development."

The Andrew W. Mellon Foundation is a private foundation that makes grants to higher education, museums, and libraries. One of their programs funds the Mellon Advanced Residency Program in Photograph Conservation under the auspices of



IPI's Light Stability Testing Lab

George Eastman House and IPI. This program is a two-year professional development residency in photograph conservation with additional funding provided by the J. Paul Getty Grant Program. This program offers eight fellowships to conservators in an initiative to train future generations of conservators while stimulating advances in the field of photograph conservation science.

Generous financial contributions for the operation of IPI also come from corporations such as Creative Memories, Gaylord Brothers, Harman Technologies, Ilford Imaging, Iron Mountain, Lexmark International, Nielsen and Bainbridge, and Sakura of America. These companies plus Agfa-Gevaert, Eastman Kodak, Fuji Film, the George Eastman House, the Library of Congress, IS&T, and the U.S. National Archives and Records Administration make up IPI's board of advisors. Together they provide guidance on our operational affairs and help ensure the integrity of IPI's reputation.

IPI has a museum partner in The George Eastman House also located in Rochester, NY. George Eastman was the founder of Eastman Kodak Company and is heralded as the father of modern photography and inventor of motion picture film. The museum is an independent, non-profit, educational institution that tells the story of photography, motion pictures, and the life of George Eastman (1854–1932). It is also the world's oldest photography museum and one of the world's oldest film archives. It first opened its doors to the public in 1949. World-renowned for its photograph and motion picture archives, the museum is also a leader in film preservation and photograph conservation, educating the top archivists and conservators around the world. The collection contains more than 400,000 photographs and negatives; 25,000 film titles produced between 1894 and the present; more than five million film stills; 43,000 publications; and more than 25,000 pieces of technology. For more information about the museum, visit www.eastmanhouse.org.

Now that you know who we are, let me take you on a little guided tour of our various laboratories.

THE IPI STAFF AND FACILITIES

The IPI staff has operated under the guidance of its director, James Reilly, since its inception. Currently there are eight research scientists on staff at IPI (one has 57 years experience in photo research). The staff members are diverse in their backgrounds, coming from the sciences, the arts, museum administration, information technology, and photography. They also hail from the US, Canada, France, and Argentina.

IPI's 6500-square-foot facility on the RIT campus is one of the finest and best-equipped independent centers in the world for testing imaging materials and for conducting preservation research. Our facility is divided into several distinct areas: our incubation lab contains a variety of temperature/humidity controlled chambers to perform accelerated-aging tests. Most of these tests predict what will happen to photos in "dark storage" (such as in albums or boxes) over generations. For photos intended for display, there is our light stability lab where the display life of photographic prints can be predicted using high-intensity simulated daylight or office lighting. In the air pollution lab, two custom-built chambers are used to examine the effects of airborne pollutants on photos and photo-storage products. Sulfur dioxide, nitrogen dioxide, hydrogen sulfide, and ozone gases have all been studied using a range of gas concentrations, temperatures, and humidity levels.

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In our physical testing lab, the physical properties of photos and photo-storage

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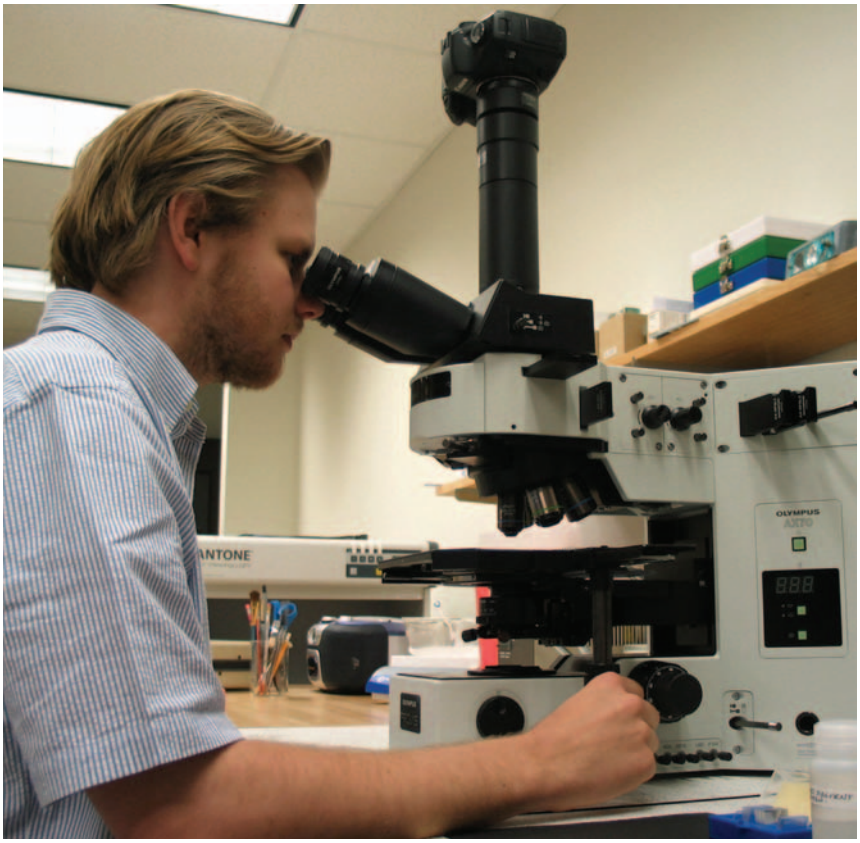
products are examined (e.g., strength, brittleness, curl, fold endurance, tear resistance, scratch resistance, and color). Measurements are made on commercial test equipment using standardized procedures wherever possible. The wet chemistry lab is where we test for properties such as wet-scratch resistance of photo emulsions, alkaline reserve of paper and paperboard, and the pH of films, papers, and scrapbook products.

And finally, there is our microscopy lab where both microscopy and high resolution digital scanning are used to study and characterize the various photographic processes used throughout history and their unique decay manifestations. This work helps professional conservators identify and treat precious objects in their care. In addition to all of the labs, IPI has its own special library that includes an extensive collection of literature on photographic history, technology, and preservation, as well as a 10,000-photograph study collection featuring examples of the different imaging processes used over the past one-hundred seventy-five years of photography.

Now that you've "visited" the lab, stay tuned for the next issue of *Scrapbook Retailer*, where we'll take a look at what IPI does and—most importantly—what it can do for you.



Microscopic Examination of Photos

IPI welcomes support from all who are concerned with the long-term survival of our photographic heritage. If your company is interested in donating to IPI or participating on its board of advisors, please contact Daniel at (585) 475-5931.

Daniel Burge is a Research Scientist at the Image Permanence Institute.

The Rochester Institute of Technology (RIT)

IPI is based on the RIT campus in Rochester, NY. Rochester has often been called the "Image Capital of the World" because of the numerous image-centric businesses in the area, namely Eastman Kodak, Bausch & Lomb, and Xerox.

Founded in 1829, RIT is an internationally recognized leader in professional and career-oriented university education offering a wide variety of academic programs within the fields of technology, science, and the arts. RIT enrolls more than 15,000 students per year from the U.S. and worldwide.

Within RIT is the School of Photographic Arts and Sciences (founded in 1903) which itself is part of the larger College of Imaging Arts and Sciences. Over 900 undergraduate and graduate students in the seven different programs in the School of Photographic Arts and Sciences study and explore the art, techniques, and history of photography. Visit www.rit.edu or call admissions at (585) 475-6631 to learn more.