Lighting America’s Treasures: New Technologies at the Georgia O’Keeffe Museum

By Carl Dirk, James Druzik, and Dale Kronkright

On September 17, 2009, the exhibition Georgia O’Keeffe: Abstraction, assembled by a curatorial team lead by Barbara Haskell, opened at the Whitney Museum of American Art. The exhibition will travel to the Phillips Collection in Washington, D.C. in February 2010 and finish up at the Georgia O’Keeffe Museum (GOKM) in Santa Fe in May 2010. GOKM owns the largest single collection of O’Keeffe’s works and includes the majority of her early watercolors. This article describes how GOKM, in partnership with the Getty Conservation Institute (GCI) and the University of Texas at El Paso (UTEP) plans to protect these light-sensitive collections.

The exhibition draws on the extraordinary collections in the GOKM, which include 123 works on paper dating from 1916 through 1940 that had been stored by O’Keeffe inside portfolio cases in her Abiquiu studio during her lifetime (1887-1986). These works have rarely been exhibited; in 1917, 1923, and 1924, Alfred Stieglitz exhibited some of them, and in 1952 and 1958, Edith Halpert included some in exhibitions, all organized in New York. A conservation assessment carried out in 1997 by Judith Walsh, professor of paper conservation in the Art Conservation Department at Buffalo State College concluded that the condition of the works was astonishingly good, with fresh and intense colors, stable supports, and surprisingly little in the way of mechanical damage.

With the publication of Georgia O’Keeffe: Catalogue Raisonne (Yale Press, 1999) by Barbara Buhler Lynes, the Emily Fisher Landau Director of the Georgia O’Keeffe Museum Research Center and the curator of the GOKM, there has been an increasing awareness of these watercolors and pastels in remarkable condition. GOKM staff recognized that this would result in increased exhibition requests and decided to address strategies for an exhibition management plan that could help ensure the preservation of these remarkable collections.

Conventional museum management policies to prevent damage to light-sensitive materials prescribe exhibiting materials like these “as little as possible,” using illumination levels low enough to impair color acuity for older adults and without any reliable means of tracking the small, invisible changes that occur during every exhibition. However, the depth, quality, and condition of this collection required a much more rigorous, scientifically based approach that could be measured over the long term.

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From the President

Greetings! The AIC board and staff have so many projects and activities underway that it is hard to pick one or two to highlight. First, the conservation distlist on CoOL is back up and functional. Many thanks to Walter Henry, John Burke, Paul Messier, Brett Rodgers, and everyone for their efforts and contributions in making this invaluable resource available under the auspices of the FAIC. Please participate and enjoy this latest AIC-FAIC offering.

Planning for the 2010 Annual Meeting in Milwaukee is under way. I am especially looking forward to a special event: an IIC-sponsored roundtable entitled The Plus/Minus Dilemma: A Way Forward in Collections Environmental Guidelines that will be held during the AIC Annual Meeting. This will be a public event held on May 13 from 4:30 to 6:30 with a reception following. Organized by Jerry Podany, the discussion will address the need for and inevitability of environmental sustainability, current environmental standards for cultural property, and how conservators or other caretakers can responsibly respond. Roundtable participants include: Maxwell Anderson as moderator with Nancy Bell, Cecily Grzywacz, Stefan Michelski, Karen Colby Stophart, and Terry Drayman-Weisser as panelists. Please mark your calendars and plan to attend.

Conservators need to participate and advocate in the discussions regarding policies affecting cultural property. To this end, AIC is preparing a series of position papers to be posted on the AIC website. The position papers, directed toward collectors or agents responsible for cultural property, will argue AIC’s stance on important current topics. Two papers currently being developed address the dwindling resources for conservation training opportunities and the role of AIC-CERT in emergency preparedness. In addition, a paper addressing environmental guidelines is going to be presented in collaboration with several institutions.

Other upcoming activities include finalizing the new strategic plan for FAIC and investigations into using CoOL to its fullest potential. Stay tuned for new developments.

—Meg Loew Craft, President
The Walters Art Museum, mcraft@thewalters.org

USPS Statement of Ownership, Management, and Circulation
**AIC News**

**Conservation Wiki Launched!**

AIC is pleased to announce the launch of a new collaborative wiki website, based on the specialty group Catalogs. The site, www.conservation-wiki.com, was made possible by a generous grant from the National Center for Preservation Technology and Training (NCPTT).

In 2008, FAIC was awarded $23,000 from the NCPTT to convert the Conservation Catalogs to wiki format. These Catalogs are reference manuals that include descriptions of materials and techniques used to preserve and treat works of art and historic artifacts. There are currently four Catalogs in print produced on a volunteer basis by AIC specialty groups: the Book and Paper Catalogs, the Paintings Catalog, the Photographic Materials Catalog, and the Textiles Catalog. Together they comprise over a thousand pages of information that is crucial for the field of conservation.

The print Catalogs have now been converted into digital format on the wiki. The site is based on the MediaWiki platform, software that was designed for Wikipedia.org. The wiki version of the Catalogs will allow editors to work collaboratively and efficiently to update and augment the Catalogs, and will provide much broader access to these resources, ensuring that innovative methods and materials are documented and widely disseminated to practicing conservators and conservation scientists. While only the designated specialty group editors can directly edit the wiki entries, other visitors to the site can register and post relevant comments on selections.

If you would like to get involved with the wiki Catalogs, or if you would like to start a new Catalog entry, please contact your specialty group chair.

**Specialty Group Web Sites**

Until this summer, most of the AIC specialty group web sites were hosted on the servers of Stanford University Libraries, along with the other materials associated with Conservation Online (CoOL). When this arrangement expired, the sites became temporarily unavailable. These sites are once again available online, based at www.cool.conservation-us.org (links to the former URLs will automatically forward to the new one). We are still working to set up administrative access to these sites for specialty group webmasters.

**Did you know that there’s an alternative?** Space has been reserved within the new AIC web site for the specialty groups to create sub-sites. These can benefit from the content management system used, which allows multiple administrators to make updates to the sites with a minimum of technological knowledge and software. Some of the groups have already begun work on moving their sites to new locations—check out RATS at www.conservation-us.org/sgrats. If you would like to get involved, contact your specialty group webmaster, or the AIC publications manager at brodgers@conservation-us.org.

**Elections to the 2010 Board of Directors**

The AIC Nominating Committee is pleased to present the following slate of candidates who have, as of October 10, agreed to serve on the AIC Board of Directors. Nominations close on February 12, 2010. To nominate additional candidates, contact a member of the Nominating Committee, who will provide additional information about serving on the AIC Board of Directors, the willingness-to-serve statement for signature, and the format for the brief biographical sketch required.

**Secretary (2-year term):**

Lisa Bruno (running for second term)
Evan Kopelson
Stephanie Lussier

**Treasurer (2-year term):**

Brian Howard (running for second term)

**Director, Communications (3-year term):**

Barbara Heller
Richard McCoy
Nancie Ravenel

**Remaining in office through May 2011:**

Meg Craft, President (1st term)
Pamela Hatchfield, Vice President (1st term)
Catharine Hawks, Directors, Committees & Task Forces (2nd term)
Ralph Wiegandt, Director, Specialty Groups (1st term)
Karen Pavelka, Director, Professional Education (2nd term)

The Nominating Committee thanks those who have agreed to run for office, those who are considering running, and all those who have offered guidance and suggestions.

**JSTOR Access**

JSTOR (www.jstor.org) is an online archive of scholarly journals including JAIC, and is a useful resource for anyone conducting research. AIC has continued to pursue a means for AIC members to have access to relevant JSTOR collections. However, JSTOR does not currently offer a licensing model for membership organizations, focusing instead on universities, libraries, and other research institutions. Due to requests from AIC and similar organizations, JSTOR is actively developing a program that would meet our needs, expected to launch in 2010. AIC will review this program as soon as it is available.

In the meantime, AIC members that desire access to JSTOR should consult the list of participating institutions, available at www.jstor.org/page/info/about/organization/participantLists/participantsAll.jsp. The list includes a number of public libraries throughout the country that offer free access. Site entry may also be accessed through the numerous university and other research libraries among the participants.
Shelburne Museum Receives Award for Preservation and Care of Collections

On September 25, AIC Executive Director Eryl Wentworth presented the 2009 Award for Outstanding Commitment to the Preservation and Care of Collections to Richard Kerschner, director of preservation and conservation at Shelburne Museum. Pictured from left to right: Stephan Jost, director; Nancie Ravenel, objects conservator; Richard Kerschner; Eryl Wentworth; James Pizzagalli, chairman of the board of trustees; Michael Polemis, board member and chairman of the museum’s Collections Committee.

On September 25, AIC Executive Director Eryl Wentworth presented the 2009 Award for Outstanding Commitment to the Preservation and Care of Collections to Richard Kerschner, director of preservation and conservation at Shelburne Museum. Pictured from left to right: Stephan Jost, director; Nancie Ravenel, objects conservator; Richard Kerschner; Eryl Wentworth; James Pizzagalli, chairman of the board of trustees; Michael Polemis, board member and chairman of the museum’s Collections Committee.

Shelburne Museum was selected for showing a sustained and exemplary commitment to preserving America’s heritage and for enriching the community by caring for its unique and varied collections through dedicated planning and effort. These efforts include the gamut of collections care from innovative lighting to environmental control and security measures that allow the public safe access to artifacts.

The Award for Outstanding Commitment to the Preservation and Care of Collections has been presented annually since 1999. Previous recipients include Colonial Williamsburg and the Museum of Fine Arts, Boston.

FAIC News

Deadlines for FAIC Grant and Scholarship Applications

December 15 is the deadline for receipt of applications for FAIC George Stout Memorial Awards.

February 1 is the deadline for receipt of applications for the following FAIC grants and scholarships:

- Christa Gaehde Scholarships
- Carolyn Horton Scholarships
- Carolyn Rose “Take A Chance” Grants

February 15 is the deadline for receipt of applications for:

- FAIC Individual Professional Development Scholarships
- Workshop Development Grants
- Regional Angels Grants
- Lecture Grants

Guidelines and application forms are available at www.conservation-us.org/grants or from the AIC office. All materials must be received by the published deadlines for consideration.

Electronic submissions are encouraged, if prepared according to the guidelines published with each grant category. Letters of support may be sent electronically, but only if signature is included. Text-only emails and faxed materials will not be accepted. For more information, contact Eric Pourchot at epourchot@conservation-us.org or (202) 452-9545, ext. 5.

CoOL and the Conservation DistList

AIC and FAIC are pleased to announce that the Conservation DistList has been reactivated from a new server, and is actively sending postings again. We thank the DistList subscribers for their patience and support over the last few months as we assumed responsibility for these vital resources. Our deep appreciation also goes to Walter Henry and John Burke for the time and energy they have invested in ensuring the continuation of the DistList and Conservation Online (CoOL).

CoOL and the DistList are now based at www.cool.conservation-us.org. To submit material to the DistList, send it, as plain text, to consdistlist@cool.conservation-us.org. Any messages not intended for distribution, such as administrative...
request changes to your email address or contact information, should be sent to request@cool.conervation-us.org.

While much of the initial setup is now complete and the DistList has been reactivated, we ask that you continue to bear with us as we complete the task of configuring the additional email lists, archives, and websites associated with CoOL. We are committed to maintaining and improving these invaluable resources into the future.

Annual Meeting

IIC Roundtable in Milwaukee

For well over four decades the guidelines for museum environmental conditions have been defined within fairly narrow parameters. While a variety of factors influenced what became standards, the narrowest range of conditions and the greatest insistence on them came when energy was relatively inexpensive, global climate considerations were not yet mainstream discussions, and the technology of HVAC systems dealt more with control than efficiency.

Given the looming energy crisis, the global economic downturn, and a rising awareness of green technology that equates to good stewardship of our natural resources, an insistence on environmental control has come under increasing scrutiny. Budgets are tight, and museums increasingly depend upon loan exhibitions to keep their audience support. Internationally, the standards do not maintain cohesive strength under scrutiny and are weakened by daily compromises.

Please join us in Milwaukee on May 13 when an expert panel will discuss environmental guidelines issues, advances in research, and the way forward to solve the plus/minus dilemma. The panel will include:

- Maxwell L. Anderson, The Melvin & Bren Simon Director and CEO, Indianapolis Museum of Art, will serve as the moderator and provocateur for panel members
- Nancy Bell, Head of Conservation Services, National Archives, London, and Principle Investigator of the Environment Guidelines, Opportunities, and Risks (EGOR) initiative
- Cecily Grzywacz, Scientist, Getty Conservation Institute, and involved in the development of the ASHRAE guidelines for museum environments
- Stefan Michalski, Manager, Preventive Conservation Services Division, Canadian Conservation Institute
- Karen Colby Stohtar, Deputy Director, Exhibitions and Installations, National Gallery of Canada
- Terry Drayman-Weisser, Chief Conservator, Walters Art Museum

Allied Organizations

HERITAGE PRESERVATION

CAP Application Now Available

Do you know a small museum that could benefit from a Conservation Assessment? Encourage them to participate in CAP! Applications for the FY2010 Conservation Assessment Program (CAP) are now available online at www.heritagepreservation.org/CAP. The postmark deadline for submitting applications is December 1, 2009. For more information, call (202) 233-0800 or email cap@heritagepreservation.org. CAP is supported through a cooperative agreement with Heritage Preservation and the Institute of Museum and Library Services.

Conservation Tutorials

Looking to brush up on some basic conservation science principles, or to find a resource that will help you teach about anything from describing color to redox reactions? Check out AIC’s online tutorials.

Visit www.conservation-us.org/education and scroll down to click on “Tutorials on Conservation Science.” You’ll find 13 self-paced modules, provided by FAIC with the support of the Getty Foundation.

The tutorials are available to AIC members only; log-in is required to access the files.

Rescue Public Murals

Rescue Public Murals, an initiative of Heritage Preservation, recently completed its first mural restoration project, Homage to Seurat: La Grande Jatte, in Harlem by the late Eva Cockcroft. The mural is in New York City on Amsterdam Avenue at West 142nd Street and covers two 30’ x 30’ sections of the side of an apartment building that faces Hope Steven Garden, an active community garden. The restoration team was lead by Janet Braun-Reinitz and included artists Maria Dominguez and Rochelle Shicoff as well as local artist apprentices. Conservator Harriet Irgang Alden of Rustin Levenson Art Conservation consulted on the project. The project was made possible with funding from Friends of Heritage Preservation, a small, private association of individuals that seeks to promote cultural identity through the preservation of significant endangered artistic and historic works, artifacts, and sites. Golden Artist Colors has also provided support.

Rescue Public Murals is working to be a clearinghouse for outdoor mural best practices (www.heritagepreservation.org/RPM/muralbestpractices.html) so that artists can use techniques and materials that ensure the longest life for their work. However, much research is needed to learn what those best practices are.

Register Online for the Milwaukee Annual Meeting!

Visit www.conservation-us.org/meetings for up-to-date information on workshops and tours, as well as other announcements and details. If you register at the preview rate now, you will be notified as soon as workshops and tours are made available and will have the first chance to sign up online!
The restoration of Homage to Seurat provided a unique case study for conservators who focus on materials research.

More about the project, including photographs, may be found at www.heritagepreservation.org/RPM.

THE INSTITUTE OF CONSERVATION (ICON)

Your Help Urgently Requested!

Icon is assisting the British Standards Institution (BSI) in monitoring draft conservation standards proposed by conservators and scientists across Europe under the aegis of the European Committee for Normalisation (CEN) (see Icon News, May 2009). The project covers all cultural heritage, both moveable and built. If you are prepared to read and comment on documents from one of the five areas of work (General guidelines and terminology; Characterisation of materials constituting cultural property; Evaluation of methods and products for conservation; Environment; Transportation and packing methods) your help would be greatly appreciated. A few hours work would be called for about once a month. If you can assist the conservation community in this way, please email web@icon.org.uk the relevant BSI Chairman.

New Publications

The Craftsman Revealed: Adriaen de Vries, Sculptor in Bronze, by Jane Bassett, presents results of the technical study of 25 of de Vries (1556-1626) bronzes. Background on the artist and technical methodologies, as well as case studies of the statues that reveal the methods and materials used in their creation, are presented. 352 pages, 100 color and 220 b/w ill. Published by the Getty Conservation Institute, 2008.

The Office Copying Revolution: History, Identification and Preservation, by Ian Batterham, is a comprehensive history of office technology throughout the 20th century, with detailed descriptions of the copies produced. Equipment, trade names, copying methods, papers, dyes, and stencils are all covered. 216 pages, over 400 illustrations. Published by the National Archives of Australia, 2008.

Time Honored: A Global View of Architectural Conservation, by John H. Stubbs, provides a comprehensive and balanced survey of the practice, theory, and structure of architectural heritage conservation throughout the world. This is the first in a multi-part series that will help define the physical and conceptual parameters of the field of architectural conservation, its background, and its position today. 434 pages, over 300 illustrations. Published by John Wiley & Sons, Inc., 2009.

Beneath the Surface: The Making of Paintings, by the artist and conservator Philippa Abrahams, illustrates the tools, techniques, and processes used by western artists to create drawings and paintings in a variety of media, including tempera, fresco, oil, and acrylic. 159 pages. Published by Frances Lincoln, 2008.

Donatello: il David restaurato, edited by Beatrice Paolozzi Strozzi, chronicles the restoration of Donatello’s bronze sculpture David in 2007-2008 and includes a report on the scientific analysis of the work carried out at the time. 214 pages. Published by Firenze Musei and Giunti, 2008.

Greek Painting Techniques and Materials from the Fourth to the First Century BC, by Ioanna Kakoulli, describes the techniques and materials used in a range of monumental paintings from the ancient Greek world, using scientific studies, art historical and archaeological documents, and surviving texts by ancient Greek writers as evidence. 157 pages. Published by Archetype, 2009.


—Sheila Cummins, Research Associate for Collection Development, Getty Conservation Institute

In Memoriam

Bonnie Baskin (1944-2009)

Bonnie Baskin, an objects conservator from Oakland, California, and a member of AIC, the Western Association of Art Conservators, and the Bay Area Art Conservation Guild, passed on peacefully on July 30, 2009, after an extended battle with cancer. Bonnie was particularly skilled as a ceramics conservator. She entered the conservation profession after an initial career as a museum educator at the Oakland Museum and the Fine Arts Museums of San Francisco where she taught many docents. After
studying chemistry and several years of pre-conservation training at museum labs in the San Francisco Bay Area, she received a Certificate in Archaeological Conservation from the Institute of Archaeology of the University of London. Returning to the Bay Area in 1997, Bonnie worked at the San Francisco Airport Museum and assisted on numerous projects at the Fine Arts Museums of San Francisco and Oakland Museum, eventually establishing a private practice in objects conservation.

Between 1999 and 2007, Bonnie spent over half her time in Laos, Cambodia and elsewhere in Southeast Asia. She was instrumental in helping to conserve the artifacts housed at the Royal Palace Museum in Luangprabang, Laos, and helping the Museum and its staff to conform to standards of display, signage, security, and proper handling of objects. In Phnom Penh, Cambodia, Bonnie created the Ceramics Conservation Laboratory, so that she could transfer her skills in ceramics conservation and in laboratory management to young Cambodian conservators. She also taught many conservation workshops in Laos, Cambodia, and Thailand. Bonnie’s travel logs and conservation stories have enchanted many of us and have inspired us to share our conservation knowledge with the world.

Bonnie is survived by her beloved husband Bob Acker.

—Elisabeth Cornu, Head Objects Conservator, Fine Arts Museums of San Francisco, ecornu@famsf.org

José Orraca (1938–2009)

José Orraca died the morning of September 14, 2009. He was a passionate and charismatic leader, and the contemporary practice of conservation is a reflection of his achievements and his causes.

José Orraca was born in Cayay, Puerto Rico to a family of prestige and prominence; his father owned swaths of agricultural property and movie theaters. Though his love for Puerto Rico never waned, José set his own course, leaving the island as a teenager. José studied theater, speech, law and religion at Midwestern State University and Baylor University, eventually entering the seminary and emerging an ordained Baptist minister.

At the time, the Library of Congress (LOC) had embarked on a course to professionalize its approach to conservation, partly in response to the catastrophic Florence flood of 1966. Esteemed conservators such as Marilyn Kemp Weidner were hired to reshape the Library’s approach to the care of its diverse collections. Answering a classified advertisement in 1968, José joined the campaign and was handed the task of remounting photographs. He immersed himself in historical photographic processes and techniques.

The LOC sent him to the Rochester Institute of Technology in 1971 to conduct independent research on the preservation of photographs. Concurrently, as part of her conservatorship of Alfred Stieglitz’s photographic prints, Georgia O’Keeffe contacted Caroline and Sheldon Keck seeking preservation guidance, which resulted in funding for José’s studies through a personal grant. This three-year project culminated in a comprehensive conservation survey of Stieglitz prints within numerous institutional collections. Also during this period, José was appointed the first professional conservator of photographs by the George Eastman House in 1972.

What emerged as a deep, lifelong commitment to conservation education began with a temporary position at the Winterthur/University of Delaware Program in Art Conservation where he designed and implemented the first graduate-level curriculum in photograph conservation. Partially in response to the growing fine art photography market, José moved to New York City where he established a private practice in photograph conservation in 1981, likely the first of its kind anywhere in the world.

A co-founder of the Association for the Preservation of the Cultural Patrimony of the Americas (APOYO) in 1988, José was always supremely proud of his Latin-American identity and maintained an enduring interest in forwarding conservation practice in Caribbean, Central, and South America. OJO, a newsletter he founded in 1991, exemplified his approach to conservation as a melding of superior craft practice and a deep knowledge of materials with an understanding of art history and connoisseurship.

Established around the same time as APOYO, the Kent Workshops were a manifestation of José’s continued dedication to learning and his prescient recognition of the need for mid-career opportunities for advanced, ongoing conservation education. An outward commitment to his “students” (a term he applied to any number of graduate-level students, apprentices, interns, and protégés) was matched by his own inward drive for knowledge. His diverse interests incorporated cooking, architecture, horticulture, and politics. Never idle, José enrolled in Trinity College in Hartford, Connecticut and received a Master of Arts degree in public policy with an emphasis on the conservation of cultural property in 1996.

An enthusiastic organizer and vocal advocate, José’s contributions to the AIC have had a profound impact. In 1978, he founded the Photographic Materials Group (PMG), paving the way for the growth and influence of specialty groups within the organization. An abiding concern for elevating the professional standing of conservators in private practice led José to help found CIPP in 1986 and, more recently, was revealed in his strong support of AIC’s proposed certification program. An AIC fellow since 1972, José was presented with two of the organization’s highest awards. His career-long commitment to education was recognized by a Caroline and Sheldon Keck Award in 2000. His contributions to the profession

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Microfading Testing (MFT): A Brief Explanation

The microfading tester (MFT) was conceived by Paul Whitmore at Carnegie Mellon University to fulfill the need for a method that could detect highly light-sensitive regions on works of art rapidly, reproducibly, and without leaving a visible trace (Whitmore, Pan, and Bailie 1999; Whitmore, Bailie, and Connors 2000). In the last decade, instruments have been built at a dozen major institutions, including, but not limited to, the National Gallery of Art, Museum of Modern Art, Library of Congress, Smithsonian Institution, Los Angeles County Museum of Art, Canadian Conservation Institute, Tate, the conservation department at Buffalo State College, and the Getty Conservation Institute. In early 2009, the first meeting of microfading users met at ICN in Amsterdam to discuss the state of the art.

For a number of reasons, simply knowing a broad chemical identification for a colorant may be insufficient to describe its future behavior. Formulations, density of pigment particles, and a colorant’s previous level of light exposure all influence the rate of detectable visible change (Michalski 2007). Even artistic composition plays a role, usually to inhibit early detection of color change (Brokerhof 2008; Richardson and Saunders 2007). In situ testing can detect sensitivity regardless of these factors or be equally informative when it is not detected.

The MFT is a system of components that includes an intense but very small light source with an electronic feedback loop that insures the source is highly stable. Light focused and filtered to remove infrared and ultraviolet wavelengths is then focused to a tiny point at the end of an optical fiber. The fiber routes the light to the surface to be tested. Reflected light is then passed to a spectrophotometer where the spectrum is converted to CIE L*a*b* color space and saved. Thus the MFT can fade and record color change at a user-selected interval over a specified period of time. The luminous output of the fiber is not particularly high, but the spot is so small that the equivalent amount of light spread over a large area is 5-7 million lux and the length of testing is selected to insure that meaningful data is acquired before any visual effect occurs. This can be as little as 10-20 minutes.

Whitmore only intended the MFT to serve as a detector for materials that might be as vulnerable as the ISO Blue Wools 1 through 3, because these would be most highly at risk. Verification of its predictive capability could further assist in formulating more complex exhibition and loan policies and is one important long-range goal of the O’Keeffe project. To use the MFT for routine monitoring would be ideal.

The MFT was never intended to measure small long-term changes repeatedly because measured locations are too small to be reliably relocated. Pastels and delicate watercolors present difficulties due to their high surface fragility and others have explored non-contact methods for color measurement (Picollo 2009). By broadening the “aperture” from 0.4 millimeters to 4-10 millimeters and measuring multiple areas, these problems might be overcome.

—James Druzik, Senior Scientist at the Getty Conservation Institute

REFERENCES


Ideally, the goals in establishing this approach include the need for precise, replicable data about the light sensitivity of each color in each work, in order to estimate the length of time (in lux-hours) before these sensitive colors would first begin to appear noticeably different – faded, darkened, or color-shifted. For a collection like this with complex color schemes painted on a variety of supports, the light sensitivity tests would preferably be made directly on the works of art, without sampling or direct contact and without inferring fade rates from tests done on purified pigment controls. To check the validity of these estimates, additional repeated testing would be needed to monitor before- and after-exhibition color and support conditions over the life of the work. Finally, because incandescent lighting is the most commonly used light source in American museums and because it is considered the safest method of illumination for works of art, best practices dictate filtering these light sources to remove radiant energies outside the range of human color sensitivity, including all ultraviolet and infra-red wavelengths.

GOKM staff designed a scientifically defendable exhibition management plan for each work in the collection, reliably pushing the preservation target, the point of “Just Noticeable Difference” in each work to a 120-year time frame. Curator and conservator were determined to find ways of exhibiting the watercolors and pastels under lighting conditions that would allow most museum visitors to see the pristine colors more fully, a level that they empirically set at 65 lux, rather than the conventional museum standard of 50 lux or lower.

Since 2003, James Druzik (GCI) and Carl Dirk (UTEP) have been investigating these issues and evolved an overall strategy to reduce risks to light-sensitive works that included both microfading assessments and more extensive illuminant filtration than had been attempted previously. From the reflection spectra of master drawings of the Getty Museum, Carl Dirk calculated a theoretical optimum light filter. When mounted in front of a typical museum lamp, this filter removes all the ultraviolet and infrared frequencies plus some portion of additional wavelengths within the visual spectrum that fell both within the absorption spectra of the master drawings and outside the regions of maximum cone sensitivities of the viewer. The ability of many RGB (red/green/blue) systems to reasonably reproduce color appearances when viewed through the three cones in the human retina gave support to the idea that this approach could be further optimized.

The goals for this filter included attempting to reduce the part of the illuminant’s spectrum that was not essential for museum quality color rendering, with a simultaneous constraint of high luminosity relative to the power in the light. This reduction in power could be anticipated to slow photochemical changes in the object. However, attempts to balance high color rendering while optimizing radiant energy reduction resulted in a huge, theoretical practical science, and engineering, problem that could not easily be solved. Yet, by optimizing the theoretical filters so that the transmitted spectral distribution contained broad peaks in the areas of high cone sensitivities, Dirk was able to design a filter that had minimal effect on color temperature, appeared indistinguishable from a broad spectrum blackbody, and didn’t skew color appearance, like most 3 or 4 LED light sources. In addition, testing with Blue Wool standards and other pigments suggested that the filters did indeed reduce rates of light induced color change.

Filters to fit MR-16 lamps using multiple, chemically stable (tested to last at least several decades) interference layers on heat-stable glass substrates were subsequently manufactured. Several different spectral profiles were designed. The two most promising examples reduced total radiant energy at the same level of luminescence by 45% and 53% respectively. To further test these filters, both UTEP and GCI built independent visual assessment facilities and used students, as well as staff and docents from the Getty Center, to evaluate appearance using a variety of questionnaire formats. Each location addressed the visual assessments differently. The specific filter that was chosen for use at GOKM was either found to be indistinguishable when compared to the same lamps with just UV filter (Texas group) or was slightly preferred (California group).

Ongoing research concerning improved display lighting at the GCI and UTEP suggested the potential for a new methodology in the prevention of damage to light sensitive materials by using microfading testing (MFT) assessment combined with energy reducing filtration. The microfadenometer data points and CIE L*a*b* color-space values appeared replicable and, as Paul Whitmore had shown in earlier published research, comparable to other more common accelerated aging techniques without visual alteration or sampling. Additionally, use of MFT allowed for the continued collection of detailed, real-time absorption/reflection data that informed and documented light-induced change processes in order to help characterize complex, aged art surfaces.

While the protective GCI/UTEP systems clearly worked for rendering of monochromatic drawings, their preliminary work raised several questions:

- The filters are visually undetectable on old master drawings for which they were originally conceived. Would they work equally well for the richly colored and complex pigment mixtures typically found in watercolors and pastels?
- Can MFT be used equally to measure the differences between artwork with little previous light damage and artwork that has already undergone considerable light-induced color change? How reliable would this be when compared to real-time aging?
- Could MFT be used secondarily...
as a spectrophotometer to measure long-term color change in addition to fading?

Early in 2009, the three institutions, GCI, UTEP, and GOKM, entered into an agreement that would address these questions and deploy the technology, with a focus on 123 Georgia O’Keeffe watercolors and pastels.

Study of these artworks is enriched because the collections contain the studio materials that the artist owned at the time of her death in 1986, including hundreds of pigments, pastel sticks, charcoals, brushes, unused papers, and canvas supports. Reflection data from the facsimiles (made from these products) were used to assess the applicability of the color rendering for the filters that were considered for gallery use. These facsimiles could also be used to perform accelerated and normal aging tests to be used in evaluating the reliability of MFT color change-rate extrapolations. Importantly, all the works came with, and would continue to have, well-documented exhibition histories and known storage conditions.

To date, the project has conducted MFT, XRF, and Raman spectroscopy studies on 11 of the 109 O’Keeffe watercolors and on all 163 of O’Keeffe’s pastel sticks applied to Whatman filter paper. Experimental data in the laboratory indicated that

**New Filters Change the Way Light is Transmitted—Research Results from UTEP, GCI, and GOKM**

Currently, filter models under consideration for the collaborative research project between UTEP, GCI, and the GOKM have been optimized to maximize luminosity for the total—luminous and non-luminous—power of the light. By doing so, the filters place fewer photons on target in order to gain the same visual response as standard unfiltered illuminants. The filtered light may also be brighter and possibly offer more contrast than unfiltered light, though these effects are still uncertain and accurate assessment has not been completed. Theoretical prediction, supported by all current experimental findings, is that the filters chosen for GOKM will either reduce fading in many pigments, or at worse offer negligible benefit for other pigments.

Current research is underway to create filters that will be tailored to protect specific pigments while providing excellent color rendering to the object. These highly tuned filters can be designed to be painting-specific, and could offer extremely enhanced protection for the most valued or most light-sensitive objects. Any reference illumination is possible—candlelight, limelight, any type of incandescent—and the filtered light would have the same appearance as the reference. For instance, impressionist paintings could be displayed under a simulation of sunlight, which would be safer than actual sunlight. This transformation of spectral properties can be engineered for any illumination being used behind the filters. For the test work being done at GCI and GOKM, filters using 3000K lamps create a 2900K illumination.

Color balance is of concern in developing these filters because the filters are optimized for human visual response and not for other systems. For example, some photographic equipment may not provide the correct color balance, though this is a marginally detectable issue for the present generation of filters.

For this research, it was necessary to develop new color rendering methods because the standard CIE 13.3 method is insufficiently robust given the sometimes great difference between the illuminant used as a reference and that being optimized. The filters are manufactured using magnetron sputtering, and consist of alternating layers of different metal oxides. The filters tested at GOKM have 34 layers. Filters are defined as dielectric and the physical principle is interference. Optimizing spectral profiles for the filters involves nonlinear non-smooth regression of a curve that will simultaneously maintain excellent color rendering while minimizing the total radiant power and will maintain high luminosity with good transmission.

Besides the theoretical and computational advances that yielded the spectral profiles, the success of this approach depended on recent advances in coating technologies that permit the creation of filters of arbitrary spectral profile to allow for high precision and accuracy. Custom prototype filters for general application have cost $250-$750 each to manufacture, but the manufacturing cost should come down rapidly as demand provides scale-up cost savings, and as the advanced coating methods become more commonly available in the coatings industry. The same theory can be applied to optimizing LED illumination for excellent color rendering and enhanced safety for conservation, and this is currently under development also.

The future for reducing the effects of light damage will be tailored lighting. It will be possible to design illuminants specifically to reduce the change in appearance in objects and to compensate to some degree with an engineered offsetting change in order to bring back some of the original lost appearance if so desired.

—Dr. Carl Dirk (UTEP), via www.utep.edu/creie.
these filters definitely seem to provide protection for particular watercolor pigments in two ways. To date, some pigments show long-term benefits but no short-term gains, and others show a short-term reduction in fading. However, more research and testing will be required before the benefits can be quantified. In addition, we have begun reviewing other exhibition policies embodying the risk management principles published over the years by Stefan Michalski, Agnes Brokerhof, and others that make up policies used by such institutions as the Victoria & Albert Museum and the National Museum of Ethnology in Leiden, with the goal of creating policy statements that align experimental data on the use of these filters with actual practice.

A public test of GCI/UTEP filters has been underway since May 2008 in gallery 3 of GOKM, with no remarkable comments from the public about the lighting despite the 45% reduction of visible light energy transmitted to the works from the filters. After evaluation, a larger-scale implementation and test of this new lighting technology will soon take place, using more than 200 filters and fully in time for the May opening of Georgia O’Keeffe: Abstraction at the GOKM venue.

How well the photo physics, color science, microfading assessment, and risk management theory will mirror real behavior (physical and museum management) over time is currently subject to vigorous debate. Hopefully, the use of these filters, MFT, and risk management policies will lessen the impact of lighting and will assure the longevity of the artist’s materials used in creating these artworks by slowing the rate of damage to an imperceptible pace.

—Carl Dirk, Professor of Chemistry, University of Texas at El Paso; James Druzik, Senior Scientist at the Getty Conservation Institute; and Dale Kronkright, Head of Conservation, Georgia O’Keeffe Museum

JAIC Publication Reviews

The editors of the Journal of the American Institute for Conservation are always looking for book reviewers to assess titles that have been published in recent years. Please contact Harriet Stratis, Book Editor, at hstratis@artic.edu, or Michele Derrick, Editor-in-Chief, at MDerrick@mfa.org for more information.

Four minutes from not breathing to brain damage. Do you have emergency training? Do your colleagues? Ask your local Red Cross, call your health department, or consult your fire department to find out where you can take a class in first aid and CPR.

—A reminder from the Health & Safety Committee

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over four decades culminated in an Honorary Membership in AIC, conferred in 2009.

José’s continued journey was guided by his deep faith and the love of the many friends he valued so highly. José Hipólito Orraca y Pérez is survived by Sadako, his wife of over forty years, his adored son Carlos, daughter-in-law Marie, and granddaughter Emma. A memorial service in the Connecticut Berkshires was conducted on September 19, 2009. Contributions in José’s honor may be made to the Foundation of the American Institute for Conservation.

—Paul Messier and Debra Hess Norris, reprinted in part from the Cons DistList, Instance 23:18

Grants and Fellowships

The Division of Preservation and Access at the National Endowment for the Humanities (NEH) announces a new preventive conservation grant program, Sustaining Cultural Heritage Collections. Information on the program can be found at www.neh.gov/grants/guidelines/SCHC.html. The program offers U.S. nonprofit museums, libraries, and archives, as well as state and local governmental agencies and tribal governments with humanities collections, either planning and evaluation grants or implementation grants, with awards up to $400,000. E-mail preservation@neh.gov or call (202) 606-8570 for more information. The deadline for applications is December 8.

People

Gregory Dale Smith has taken a new position as the senior conservation scientist at the Indianapolis Museum of Art, a position funded by a grant from the Andrew W. Mellon Foundation. Greg will lead the IMA team in establishing a comprehensive plan for outfitting the laboratory with scientific equipment funded through a previously announced grant of $2.6 million provided by Lilly Endowment, Inc.

Joyce Hill Stoner has been named Edward F. and Elizabeth Goodman Rosenberg Professor in Material Culture at the University of Delaware College of Arts and Sciences. Stoner, who became the head paintings conservator at Winterthur in 1976, also was director of the Winterthur-University of Delaware Program in Art Conservation (WUDPAC) from 1982-97. She became chair in 1990 when WUDPAC became part of a department, along with the new doctoral program in Art Conservation Research, which she squired through University and Winterthur Academic Committee approval. Stoner currently is director of the UD Preservation Studies Doctoral Program.

Timothy Barrett received one of the 24 MacArthur Foundation Fellowships on September 22, 2009. The “genius awards” come with a $500,000 grant over five years, without restrictions or reporting requirements. His plans for the available funding include writing a book about Western papermaking history and technique, and starting some new experiments related to the stability and aesthetics of 15th century European papers. Timothy Barrett is an internationally recognized master craftsman and paper historian and is the founding director of the papermaking facilities at the University of Iowa Center for the Book.

The UCLA/Getty Conservation Program in Archaeological and Ethnographic Materials is pleased to announce internship placements for its third year students: Siska Genbrugge—Los Angeles County Museum of Art (Los Angeles, CA), Museu Nacional de Arqueologia (Lisbon, Portugal), Luxor Temple Epigraphic Survey, University of Chicago (Luxor, Egypt), British Museum (London, UK); Lauren Horelick—Natural History Museum of Los Angeles County (Los Angeles, CA), Alaska State Museum (Juneau, AK), American Museum of Natural History (New York, NY); Jiafang Liang—Museum of Terracotta Warriors and Horses (Xi’an, China), Nelson Atkins Museum (Kansas City, MO); Linda Lin—Agora Excavations, American School of Classical Studies (Athens, Greece), Seattle Art Museum (Seattle, WA); Suzanne Morris—Santa Teresa Monastery Museum (Arequipa, Peru), UCLA/RUG Fayum Project (Fayum, Egypt), Aneta Zebala Conservation Studio (Los Angeles, CA).

New Materials and Research

Reflectance Transformation Imaging for Museum Collections: A Worcester Art Museum and Cultural Heritage Imaging Collaboration

Illuminating objects in different ways has long been an essential tool for enhancing surface information, and the use of raking light photography continues to be standard practice for documenting an object’s surface condition. However, raking light has substantial limitations as previously pointed out by Padfield et al (2005) when the technique of polynomial texture mapping (PTM) was first introduced to the conservation field. These limitations include restricted studio space or off-site conditions, both of which may prevent optimal illumination of surface relief features. In some cases, the object may be too large or intricately shaped to capture an image with sufficient surface texture information across the entire object. Precise comparative analysis of surface features is impractical using raking light, for instance before and after treatment, due to the difficulties involved in setting up lights and objects in the exact same position. Furthermore, each raking light image has only a single light direction per photograph, which greatly limits the amount of information available.

In 2005, Dr. Philip Klausmeyer and Chief Conservator Rita Albertson of the Worcester Art Museum set out to develop a viable alternative for recording surface topography of artworks. With support from the Andrew W. Mellon Foundation, a variety of possibilities were explored, and their usefulness to the broader conservation community evaluated against the following criteria: cost; ease of use; maintenance requirements; ability to provide visual, topographical
information of large surface areas accurate down to microscopic levels; and ease of file exchange among users. Based on this, efforts were soon focused on building an improved PTM instrument based on the manually operated prototypes of Padfield et al (2005) and Malzbender (2001).

Conversations with Malzbender during a 2006 Mellon-funded Conservation Science Series Symposium at the Art Institute of Chicago led to contacts between Worcester and Cultural Heritage Imaging (CHI), a non-profit corporation dedicated to advancing digital imaging techniques for documentation of cultural heritage. CHI was already actively developing a number of surface imaging technologies referred to as reflectance transformation imaging (RTI) in a manner consistent with the above criteria. As a result of collaboration with CHI, Worcester now makes use of two RTI capture methods for examining and documenting surfaces.

The first method utilizes a dome-shaped instrument called a Reflectance Transformation Light Array, which is used for objects up to 10 inches square, or details of objects within that dimension. The dome was designed to automate the process of photographing an object from different pre-calculated fixed light positions. The dome has 40 halogen lights that individually turn on and off automatically as the camera takes 40 photographs. The lights have continuous and full spectral distribution in the visible region, minimal UV light output, and IR-absorbing reflectors that minimize the amount of IR energy reaching the surface being imaged. The light array and camera are remotely operated by the user at a computer, allowing for a quick and simple capture process.

The instrument is mobile, has limited set-up time and employs straightforward technology. The dome is on a counter-weighted stand that enables height adjustments to accommodate a variety of objects, and it can be moved from a vertical position to a horizontal position as well as the 90 degrees between those points to ensure that the camera lens is parallel with the object’s surface. A digital SLR camera located at the apex of the dome is on a sliding mount to provide greater flexibility when determining the distance from camera to object.

In combination with other source files and processing steps, the 40 digitally captured images are mathematically synthesized using software developed by CHI and Malzbender to generate a file that reveals the fine details of the subject’s 3D surface in an interactive format. Using the RTI viewer software, the angle of illumination is controlled by the mouse cursor. This allows the viewer to find the best raking light angle for improved surface legibility and thereby discloses features that are difficult or impossible to discern with direct physical examination.

RTIs yield even more information through various functions within the software. For example, specular enhancement displays the object surface as if it were highly reflective. This function is based on the individual surface normal mathematically determined for every pixel in the digital image. A surface normal is defined as the point on a surface at which incoming light is reflected at a perpendicular angle and as such is critical in imaging 3D properties. Additionally, a zoom function enables enlarged views of areas within the high resolution RTI, for which the angle of illumination can again be adjusted to further inspect the surface.

The second RTI method in use at Worcester is referred to as Highlight RTI. Co-invented by CHI and Malzbender in 2006, Highlight RTI dramatically reduces the equipment necessary to capture an RTI and allows larger surfaces to be imaged. This method does not rely upon a dome instrument with fixed light positions but instead uses a handheld strobe, a tripod-mounted camera, a laptop computer, and a shiny black sphere placed at the edge of the

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**Suggested RTI and PTM Readings and Resources**


Cultural Heritage Imaging (CHI), a non-profit corporation dedicated to advancing digital imaging techniques for documentation of cultural heritage. www.c-h-i.org
imaged surface.

In Highlight RTI, one roughly recreates a dome of light around the surface being imaged by repositioning the strobe prior to each image capture. In each capture, the light makes a sharp highlight on the black sphere’s surface. After the capture session, the RTI builder software uses the location of the highlight on the sphere in each image to mathematically determine the angle of light and then creates an RTI file. By enabling users to produce quality RTI files with a minimal amount of instrumentation, Highlight RTI brings powerful, adoptable, and inexpensive digital technology to those who would otherwise not have the opportunity to conduct such analysis.

Using these two RTI methods, Worcester has already examined a variety of objects ranging from small coins to large-scale bas-reliefs. In some cases these examinations have led to new discoveries, and RTI continues to establish itself as an immensely useful tool for the exchange of information-rich visual records between scholars and conservators. Scholarship is facilitated by the fact that the viewer software is freely available for non-commercial use. Files can be sent electronically around the world, enabling research that might otherwise be deterred by the need to travel.

Awareness is rapidly growing of the usefulness of RTI throughout the conservation community. At this year’s general session of the AIC Annual Meeting in Los Angeles, the collaborative team of Worcester and CHI presented some of their RTI work and offered a brief overview of current projects and future research directions. In addition, another paper was presented at the same conference by Giacomo Chiari of the Getty Conservation Institute on a novel application of RTI technology for use with a microscope.

Further evidence of the accelerated pace of development in RTI technology is found in other collaborative projects involving CHI. One research project funded in part by a National Leadership Grant from the IMLS was recently conducted by an international team of collaborators and led to an improved software for RTI image processing known as Hemi-spherical Harmonics (HSH). This technology produces superior quality RTI files in regard to sharpness, contrast, and reflective properties. CHI has also collaborated with the National Research Council of Italy in developing multi-view RTI software that integrates individual RTIs, which when captured in four degree increments around a subject, produces an interactive view of the subject in-the-round.

Currently, CHI is active in countries around the world training archaeologists and art conservators in the use of RTI methods. Typically, four days of training are required to learn how to capture, process, and view/analyze RTIs. Meanwhile, conservators at Worcester and a growing number of other institutions continue to explore new applications of this technology in the study and care of their collections.

—Philip Klausmeyer, philipklausmeyer@worcesterart.org, and Carla Schroer, carla@c-h-i.org

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AIC 2010 Annual Meeting: As you all have heard, the annual meeting will be held May 11-14, 2010 in Milwaukee, WI. The deadlines for papers and poster submissions are past, but proposals for panel discussions or other ideas for the ASG session are welcome and should be submitted to Joshua Freedland at jfreedland@wje.com. Register now! The early registration rate is available until December 15. After that, the rate goes up.


Wiki: Check it out! AIC has launched the wiki website, which is based on the specialty group Catalogs at www.conservation-wiki.com. Read the article about this exciting new project on page 3. ASG does not currently have any entries, so if you would like to get involved with the wiki Catalog, or if you would like to start a new Catalog entry, please contact Kevin Daly at KDaly@wbmelvin.com.

ASGList: A bit of shocking news brought to my attention by the Communications Chair Jenn Cappeto: only 34% of ASG members subscribe to the listserve! We need to increase that number so the listserve is more representative of ASG members, and so that all ASG members are utilizing their membership benefits. To join ASGList, members should go visit https://mailman.stanford.edu/mailman/listinfo/asglst or follow the link provided on the AIC website at www.conservation-us.org/architecture. ASG members can also go to the same website to update their listserve email addresses or subscriptions. Recent conversation topics on ASGList have concerned federal specifications for architectural conservation work, materials testing techniques, networking ideas, volunteer opportunities within ASG, and conference announcements. It should be noted that the ASGList differs from the Conservation DistList (CoOL). The ASG list is only open to ASG members and is formatted as individual emails rather than as weekly digests.

Cons DistList (CoOL): The Cons DistList has been reactivated, now operated by AIC. The new online home of CoOL and the DistList is http://cool.conservation-us.org. See page 4 for the full announcement. Thank you to Walter Henry, John Burke, and everyone who has been working on this.

Lastly, thanks to our members who have volunteered their time to manage the AIC booth at the APT (Association for Preservation Technology) meeting in November in Los Angeles!

Please send me an email if you have any news or information you would like included in the next column.

—Leslie Friedman
ASG Secretary/Treasurer
friedman.la@gmail.com

ACDG Call for Presenters for Milwaukee 2010: Once again the Archives Conservation Discussion Group (ACDG) and the Library Collections Conservation Discussion Group (LCCDG) are working together to prepare sessions that complement each other. In keeping with this year’s theme, both groups would like to highlight treatment techniques for collection materials as they have been applied, modified, and/or maintained over time. ACDG’s session will focus on treatments done by private conservators, and LCCDG’s session will focus on treatments done in institutional settings.

Speakers will be asked to prepare a ten to fifteen minute presentation and provide a one-page handout for reference and Web-posting. If you are interested in participating and sharing your experiences, please contact the discussion group chairs at the email addresses below with a short description of your project no later than December 11, 2009.

The ACDG session topic is “Working in an Unstable Economy: Experiences and Insight on the Conservation of Paper-based Materials in Private Practice.” The theme aims to highlight treatment techniques for paper-based materials such as books, paper, and photographs as they have been used, modified, or maintained in the private practice setting. The co-chairs are seeking individuals to present on topics such as:

- How the business is run, especially in light of tough economic times
- Types of projects and how they may have changed over the years
- Use of professional development opportunities
- Adaptation of treatments with limited resources
- Specific treatments typical of a private practice (such as book conservators often having to work on family bibles, etc.) and how they may differ from conservators working for institutions

If you have experience working as a private conservator of paper-based materials and are interested in sharing your insight and experiences, please contact the chairs at acdg.chair@ gmail.com with a description of your
visible among our peers, other professionals, and the public. Please contact us with your ideas. It is up to us, the CIPP members, to create a program that will address our needs and expectations. We welcome any comments and suggestions.

**Template for Contracting Conservation Services:** You’ve been patient and it’s finally here! The new Template for Contracting Conservation Services should have arrived in your email by now. If you do not have email access, please contact us to make other arrangements to receive the template. As noted on the listserv announcement, there’s also an introductory letter and a list of FAQ’s that will help familiarize you with the template. Attorney Jessica Darraby, who crafted the document, recently participated in a CIPP online session and she’s scheduled to join us for another session next May. A webinar is also planned for early November. We hope you will find the template informative and useful.

**New Members:** I wanted to remind the Emerging Conservation Professionals Network that CIPP welcomes you at a symbolic student rate of $5.00. Please go to the AIC website at www.conservation-us.org/privatepractice to sign up for membership or contact any one of us on the Board.

—Joanna S. Pietruszewski, CIPP Chair joanna@acgisrestauro.com

**AIC 2010 Annual Meeting:** Our CIPP annual meeting committee is working hard and putting together a workshop designed to help us be more visible among our peers, other professionals, and the public. Please contact us with your ideas. It is up to us, the CIPP members, to create a program that will address our needs and expectations. We welcome any comments and suggestions.

**Template for Contracting Conservation Services:** You’ve been patient and it’s finally here! The new Template for Contracting Conservation Services should have arrived in your email by now. If you do not have email access, please contact us to make other arrangements to receive the template. As noted on the listserv announcement, there’s also an introductory letter and a list of FAQ’s that will help familiarize you with the template. Attorney Jessica Darraby, who crafted the document, recently participated in a CIPP online session and she’s scheduled to join us for another session next May. A webinar is also planned for early November. We hope you will find the template informative and useful.

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—Joanna S. Pietruszewski, CIPP Chair joanna@acgisrestauro.com

**Website and Listserv Migration:** EMG is working to transition its site, including the significant resources authored by EMG members/affiliates and hosted in the EMG Library, to the new AIC website and content management system. This transition should be complete by mid-November 2009. Until that time, the EMG website is available at http://cool.conservation-us.org/coolac/sg/emg/ dt/ (the former address will automatically forward) and the EMG listserv is active. If you are interested in electronic media conservation issues and have not joined the EMG listserv, please visit the “Join” page of the EMG website for instructions.

If you are not an EMG member yet, please consider joining for only $20 to support our initiatives and programs. With the membership, you will receive the EMG Optical Pen for proper labeling of optical media.

We are looking forward to welcome you to our tech savvy group!

—Christine Frohnert, EMG Chair c.frohnert@verizon.net
about the rapidly dwindling OSG cash reserve; every year we spend more than we take in. Now that we are holding two half-day sessions at the request of members and AIC, we are spending more on the annual meeting. A proposal will be brought to the membership at our business meeting in Milwaukee to raise dues by $5 for all levels of membership, the first increase in many years. Another cost-cutting measure would be to find sponsors to help defray annual meeting costs such as lunches and breaks.

AIC Newsletter Lead Article: In May 2010, the OSG is responsible for the lead article in the AIC News. We are looking for volunteers to write this article. Send article ideas and author recommendations to Helen Alten.

AIC Wiki: Interested in an objects group wiki? Nancie Ravenel is taking the lead and would welcome discussion and support in launching one.

—Helen Alten, OSG Chair, helen@collectioncare.org

AIC Wiki: Interested in an objects group wiki? Nancie Ravenel is taking the lead and would welcome discussion and support in launching one.

Photographic Print Sample Set: This set of photographic samples includes one each of a cyanotype, albumen print, salted paper print, glossy gelatin silver printed-out print, and matte gelatin silver developed-out print, and has been reprinted due to popular demand. Visit the AIC website at www.conservation-us.org/shop and select “Shop Photographic,” where you will find the Photographic Print Sample Set listed.

PMG Web Site: Work on the transition of the PMG web pages to the AIC server continues. The old PMG web site is still accessible, but is not up-to-date and functions primarily as a placeholder for now. We will keep you informed via the AIC photographic listserv, the AIC web site at www.conservation-us.org/photographica materials, and this column on the latest information and news for PMG. We will announce when the PMG site becomes fully operational on the AIC server.

AIC Conservation Wiki: AIC and FAIC launched the Conservation Wiki at the beginning of October 2009, at www.conservation-wiki.com. See the article on page 3 of this issue for more information about this project! Thanks to a generous grant from the National Center for Preservation Technology and Training (NCPPTT), and the hard work of Brett Rodgers, AIC Publications Manager, and Luisa Casella of PMG, among others, the Photographic Materials Conservation Catalog (PMCC) chapters are now available in wiki format. PMCC chapters that are up include all the published ones.

Photographic Print Sample Set: This set of photographic samples includes one each of a cyanotype, albumen print, salted paper print, glossy gelatin silver printed-out print, and matte gelatin silver developed-out print, and has been reprinted due to popular demand. Visit the AIC website at www.conservation-us.org/shop and select “Shop Photographic,” where you will find the Photographic Print Sample Set listed.

IAG Meeting: I will be representing PSG at the Internal Advisory Group meeting on November 14, 2009. If any of you have concerns or suggestions that you would like me to bring up, please email them to me.

PSG Web Site: As I write this, we are still working out the kinks for the new PSG website. Once we establish the system, it will be easy to make changes. If you have something you would like to see posted, please contact me.

Workshops: At the PSG business meeting our members expressed a desire to see more workshops for painting conservators. In response, PSG is subsidizing a Modular Cleaning Program workshop in Skaneateles, NY in order to allow PSG members to attend for a reduced rate. We are also trying to arrange a thread-counting software workshop in conjunction with the 2010 Annual Meeting in Milwaukee, WI. If you have ideas for additional workshops that you would like to see PSG sponsor, please contact me.

—Joanna Dunn, PSG Chair j-dunn@nga.gov

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IAG Meeting: I will be representing PSG at the Internal Advisory Group meeting on November 14, 2009. If any of you have concerns or suggestions that you would like me to bring up, please email them to me.

2010 AIC Annual Meeting: The PMG session will be a very full day and the program is shaping up quite well. We would like to include a tribute to José Orraca as part of the program, and if you have images you would like to share as part of this, please contact me at the email address below.

As always, if there are questions or if I can be of assistance or service, let me know.

—Barbara Brown, PMG Chair bnbrown@mail.utexas.edu
A few pieces of news this fall:

- Planning for the RATS sessions at the AIC 2010 Annual Meeting is going well. We will likely have two sessions in our program: one devoted to microfading and a second, broader session highlighting a range of recent work.
- RATS has decided not to raise rates for next year, so membership will continue to cost $15 ($8 for students). We’re working hard to expand our benefits for members, so stay tuned!
- Check out the AIC’s online tutorials on basic conservation science principles. Go to www.conservation-us.org/education and scroll down to click on “Tutorials on Conservation Science.” You’ll find 13 self-paced modules, provided by FAIC with the support of the Getty Foundation.
- We are pleased to congratulate our very own RATS Chair, Dr. Gregory Dale Smith, as he takes a new position as the senior conservation scientist at the Indianapolis Museum of Art, a position funded by a grant from the Andrew W. Mellon Foundation. Greg will lead the IMA team in establishing a comprehensive plan for outfitting the laboratory with scientific equipment funded through a previously announced grant of $2.6 million provided by Lilly Endowment, Inc. We wish him luck!

Other News: Rebecca Rushfield has agreed to create an index for our TSG Postprints, a most useful tool. Seta Webbe is continuing with the textile reference list. The list notes all new textile publications including topics on conservation, history, ethnographic, fashion, etc. She is exploring the idea of using a database to collect this information and expand it to include reference journal articles on textile conservation. We welcome input on this topic from TSG members.

Meg Geiss-Mooney, Board Treasurer, and I submitted this year’s budget to the AIC office.

—Patricia Ewer, TSG Chair, pewer@citlink.net

2010 AIC Annual Meeting: The submission deadline for proposals for the meeting has passed, and program chair Susanne Grieve is putting together an outstanding program. If you have questions about the program, or haven’t heard from her regarding a submission, you can reach her at grieves@ecu.edu. Susanne is also looking for the best location for our WAG dinner. I hope everyone who can make it to Milwaukee will come!

WAG Website: The site has been an invaluable resource for many of us as an archive of information, including postprints from years past, abstracts, and individual research projects. Many of us also receive WAG Announce emails from Arlen Heginbotham on a regular basis, which keep us up to date on current happenings, publications, conferences, courses, etc.

Now, as the incoming WAG chair, I want to combine these two roles, and start a WAG Chair “What’s New” webpage on the WAG website, which will include all the current information which we now receive in WAG Announce emails. The emails from Arlen won’t stop. This will simply be another way WAG members can access this information. I’ll also include my own thoughts from time to time about issues of interest or concern to WAG members. If you have a topic that you would like addressed, or an announcement that you would like to make, please, don’t hesitate to let me know. My email address is: jchilds@historicnewengland.org, or you can also reach me at john_d_childs@yahoo.com.

Thanks to Jennie Baker for making this information. I’ll also include my own thoughts from time to time about issues of interest or concern to WAG members. If you have a topic that you would like addressed, or an announcement that you would like to make, please, don’t hesitate to let me know. My email address is: jchilds@historicnewengland.org, or you can also reach me at john_d_childs@yahoo.com. Thanks to Jennie Baker for making this work and setting up the page for me.

—John Childs, WAG Chair jchilds@historicnewengland.org
CALL FOR PAPERS


GENERAL

November 13, 2009. Fundraising for Collections Preservation and Conservation, North Carolina Preservation Consortium Annual Conference, Chapel Hill, NC—Contact: Robert James, (252) 328-6114, robertjamesncpc@gmail.com


March 25-26, 2010. 2010 ICON CONFERENCE, Cardiff University, U.K.—Contact: ICON website or HendersonLJ@cardiff.ac.uk.

May 5-6, 2010. 2nd International Mountmakers Forum, Smithsonian Institution, Washington, D.C.—Contact: Shelly Uhlir, uhlir@si.edu


May 31-June 1, 2010. “Biodiversity, 2010 and beyond, science and collections, 25th anniversary!,” SPNHC, Ottawa, Canada—Contact: http://140.247.98.87/?q=announcements/annual_meetings.html


September 22-25, 2010, AASLH Annual Meeting, Oklahoma, OH—Contact: aaslh.org

ARCHITECTURE


BOOK AND PAPER

Spring, 2010. “Out of Sight—Out of Mind?” International Association of Book and Paper Conservators Symposium, Prague, Czech Republic—Contact: Birgit Reissland, birgit.reissland@icn.nl


OBJECTS

May 24-28, 2010. The 11th ICOM-CC Wet Organic Archaeological Materials Working Group Conference, Greenville, NC—Contact: Kristiane.straetkvern@natmus.dk

October 8-9, 2010. Experts’ Meeting on Enamel Conservation – Enamel Group of the ICOM-CC Glass and Ceramic WG. The Frick Collection, New York, NY—Contact: Agnès Gall-Ortl, gallortlik@yahoo.fr

October 11-15, 2010, International Conference on Historic Metals Conservation Interim Meeting of the ICOM-CC Metal WG, Charleston, South Carolina —Contact: ICOMCC. Metal2010@gmail.com

PHOTOGRAFIC MATERIALS


RESEARCH & TECHNICAL STUDIES


July 1-3, 2010. Chemistry for Cultural Heritage (ChemCH), Ravenna, Italy—Contact: www.socchimdabc.it/pages/OrgDivis.htm

TEXTILES

COURSES, CONFERENCES, AND SEMINARS

Lowengard, researchandwriting.nyc@gmail.com

International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM)
Wood Conservation Technology (May – July, 2010, Oslo, Norway); Documentation of Heritage Sites in the Arab Region (January 3-14, 2010, Sharjah, United Arab Emirates)
Contact: Via di San Michele 13, I-00153, Rome, ITALY, +39 06 58553 1, www.iccrom.org

Institute of Conservation (ICON)

McCrone Research Institute

ViaJapan Holidays
Educational Study Trip in Japan on Japanese Paper- and Print-making (February 14-24, 2010)—Contact: Megumi Mizumura, megumimizumura@aol.com

Please note, individual course listings are now listed once a year in print. Complete CCS listings and institutional contact info are available online at www.conservation-us.org/ccs

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THE FINE ARTS CONSERVANCY

Senior Paintings Conservator

FAC seeks a highly skilled Senior Paintings Conservator. Duties include examination, technical analysis, written and photographic documentation and treatment of traditional and contemporary works. Will perform highly skilled tasks requiring manual dexterity (emphasis on color matching, fills and in-painting), intense concentration, connoisseurship and aesthetic sensitivity. Incumbent will interface with senior administrative personnel, and will be involved with a wide range of conservation projects, ranging from old master to post modern in a busy, collegial environment.

Eighty five percent of the job is conservation and restoration, and the balance is managing the studio, managing project flow in the lab, keeping track of paintings in the lab and storage rooms, weekly meetings to discuss work flow, supervising support personnel, meeting and consulting with clients, condition and treatment reports, consulting with framing department and stock control of conservation materials. There will be some travel, and frequent interaction with clients both at the labs and at their homes/museums et al. Participation in our profit sharing plan; opportunities are offered for continuing education and professional organization meetings, both nationally and internationally.

With 5000+ sq. feet of modern, well equipped laboratories, FAC is a highly regarded facility, noted for its commitment to excellence, providing conservation services to collectors, museums, historical societies and insurers throughout the southeast with some national and international clientele. The staff is augmented with contract conservators, art handlers and installers, packers and shippers. There are separate labs for painting conservation, paper conservation, framing, and a diagnostic and technical examination lab.

We are located in Palm Beach, Florida, one of the most beautiful areas in America. There are no state or local income taxes, and the cost of living is less expensive than most areas of the country.

Minimum Qualifications: graduate degree from a recognized program with 5 to 8+ years experience in traditional and contemporary paintings; US citizenship or Green Card; fluent in spoken and written English, strong interpersonal skills. Must have physical strength to lift large and heavy art works, crates, etc. PA or someone qualified to stand for PA. An independent worker, self-motivated and deadline driven.

Ideal Candidate: also skilled and knowledgeable in digital photography and graphics software, Photoshop specifically, and an understanding of three-dimensional objects is useful. Knowledgeable in modern and composite materials a definite advantage.

Cover letter, resume, supporting materials and references, please. Current employment will be kept confidential and not be contacted prior to mutual agreement. Selected candidates will be invited to interview and asked to submit a portfolio of projects. For more information about us, go to www.art-conservation.org.

THE FINE ARTS CONSERVANCY

Senior Paper Conservator

We are seeking a highly skilled Senior Paper Conservator to undertake projects for our clients who are private collectors, museums, historical societies, insurance companies, and the occasional governmental entity. Duties include examination, determining a need for treatment, writing proposals for treatment, performing both major and minor treatments, and photography and treatment reports. There is a wide range of projects, from Old Masters to contemporary works.

The Conservator will perform highly skilled tasks, requiring manual dexterity (emphasis on color matching, fills, in-painting, mending, consolidation, bleaching, hinging, et al), intense concentration, problem solving skills, connoisseurship and aesthetic sensitivity. Must be capable of working independently in a well-equipped lab, but there will be daily interaction and collaboration with other staff; there is some travel and frequent consulting with clients either at the lab or their location. We also perform several disaster recoveries annually, in which the Paper Conservator plays an important role. It is useful to have a fundamental knowledge of framing and framing materials. There are Adjunct Conservators in textiles, metals, outdoor sculpture, and objects. Some objects are done with internal staff.

Candidates must have a bachelor’s degree with significant experience practicing in the field of paper conservation, or a master’s degree from a conservation program and experience. Professional Associate in AIC or the necessary qualifications to become a PA are important. Computer skills and knowledge of Photoshop are helpful. Candidates must be qualified to work in the United States. We need someone who is an independent worker, self-motivated and deadline driven. Compensation is commensurate with experience and ability; there is participation in the company’s Profit Sharing Plan. Opportunities for continuing education and attending professional organization meetings, both nationally and internationally.

FAC has a 5000+ square foot highly modern facility with floor to ceiling UV shielded windows on two sides, and is well equipped for paper conservation. There are individual labs for paper, paintings, framing and a separate lab for diagnostics, technical analysis, and photography. Experience in various examination aids is useful. We are located in South Florida, the Palm Beaches; one of the country’s most beautiful areas. There are no state or local income taxes, and the cost of living is less expensive than most of the country. Our clientele, while mostly local from Miami to Vero Beach, extends across the country, with a few international projects. Please submit resume and salary requirements to:

Gordon A. Lewis, Jr.
POSITIONS, INTERNSHIPS, AND FELLOWSHIPS

The Fine Arts Conservancy
5840 Corporate Way, #110
West Palm Beach, FL 33407
gal@art-conservation.org
561.684.6133 (tel)
561.684.8508 (fax)

THE METROPOLITAN MUSEUM OF ART

Fellowships in Conservation

The Andrew W. Mellon Foundation and the Sherman Fairchild Foundation, through The Metropolitan Museum of Art, award a number of annual conservation fellowships for training and research in one or more of the following museum departments: Arms and Armor, Asian Art Conservation, The Costume Institute, Musical Instruments, Objects Conservation (including sculpture, metalwork, glass, ceramics, furniture, and archaeological objects), Paintings Conservation, Paper Conservation, Scientific Research, and Textile Conservation. Also available through The Metropolitan Museum of Art is a Polaire Weissman Fellowship for conservation work in The Costume Institute. Fellowships are typically one year in duration. Shorter-term fellowships for senior scholars are also available.

It is desirable that applicants should have reached an advanced level of experience or training. All fellowship recipients are required to spend the fellowship in residence in the department with which they are affiliated.

The stipend amount for one year is $40,000 for senior conservators/scientific researchers and $30,000 for junior conservators/scientific researchers, with up to an additional $5,000 for travel and miscellaneous expenses. Senior fellowships are intended for well-established professionals, with advanced training in the field and proven publication record. A typed application (in triplicate) should include: full resume of education and professional experience, statement (not to exceed one thousand words) describing what the applicant expects to accomplish during the fellowship period and how the Museum’s facilities can be utilized to achieve the applicant’s objectives, tentative schedule of work to be accomplished, official undergraduate and graduate transcripts, and three letters of recommendation (at least one academic and one professional). The deadline for completed applications is January 8, 2010. Applications should be sent to Attn: Marcie Karp, Fellowships in Conservation Program, The Metropolitan Museum of Art, 1000 Fifth Avenue, New York, New York 10028-0198. More information is available on the Metropolitan’s website at http://www.metmuseum.org/education/fellowship.asp.

THE METROPOLITAN MUSEUM OF ART

Research Scholarships in Photography Conservation 2010-2012

The Metropolitan Museum of Art seeks qualified applicants for the position of Research Scholar in Photography Conservation. The Research Scholar will have a two-year term with the possibility of renewal for a third year. The Scholar will work on-site in the photography conservation lab of the Sherman Fairchild Center for Works on Paper and Photograph Conservation. He or she will report to the Sherman Fairchild Conservator of Photographs who in turn reports to the Curator in Charge of the Department of Photographs. The stipend will be $40,000 per year, plus a $3,000 travel allowance and a $2,000 contribution to health insurance.

Research Scholars will be expected to have a graduate degree in conservation or equivalent experience and should be completely committed to the conservation of photographs as their area of specialization. The Scholar will be selected by a committee comprised of the Conservator of Photographs, the Curator in Charge of the Department of Photographs, the Associate Director for Administration, and the Senior Manager for Academic Programs.

The Research Scholar’s term will follow the academic calendar, with successful candidates beginning in September. Scholars may apply during the second year of their tenure for an extension to a third year.

A typed application (in triplicate) should include: full resume of education and professional experience, statement (not to exceed one thousand words) describing what the applicant expects to accomplish during the fellowship period and how the Museum’s facilities can be utilized to achieve the applicant’s objectives, tentative schedule of work to be accomplished, official undergraduate and graduate transcripts, and three letters of recommendation (at least one academic and one professional). The deadline for completed applications is January 8, 2010. Applications should be sent to Attn: Marcie Karp, Fellowships in Conservation Program, The Metropolitan Museum of Art, 1000 Fifth Avenue, New York, New York 10028-0198. More information is available on the Metropolitan’s Museum’s website at http://www.metmuseum.org/education/er_fellow.asp.

For more positions, internships, and fellowships, visit us online at
www.conservation-us.org/jobs

Some recent listings include the following:

THE WALTERS ART MUSEUM
Conservation Scientist

MUSEUM OF FINE ARTS BOSTON
Fellow in Asian Art Conservation

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