

Inside

From the Executive Director	2
AIC News	3
FAIC News	4
Annual Meeting	5
JAIC News	6
In Memorium	7
Allied Organizations	12
Health and Safety	14
New Materials and Research	16
Worth Noting	17
Specialty Groups	20
Courses, Conferences, and Seminars	25
Positions, Internships, and Fellowships	27
Directory Corrections	27

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May 19-22
Los Angeles, CA

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See page 24 for a listing of
Specialty Group events.
See you in LA!



Some Reflections on the Use of Organic Solvents in Conservation

By *Alan Phenix*

As I sat and pondered how to tackle this article, it occurred to me that it was almost exactly 27 years ago when I first used organic solvents in the conservation treatment of a work of art. That was in London in 1982, and I was a first-year graduate student of paintings conservation doing my first cleaning of a painting, gently rolling a solvent-laden swab over the surface of the picture to remove discoloured varnish. A few weeks later, I would be varnishing the picture using solvent-borne resin varnishes and retouching (inpainting) with solvent-soluble resin paint media. Although I had frequently used organic solvents previously as an undergraduate student of chemistry, these were my first experiences of using this class of chemicals for the purposes of conservation-restoration. Much has changed in the field of solvents since 1982, and the following is an attempt to pick out a few of the more significant developments that have occurred since then.

In those first practical conservation treatments using solvents, I would have chosen from a fairly limited range of substances: white (mineral) spirits, toluene, xylene, propan-2-ol, ethanol (or a commercially-available grade of it), acetone, and perhaps the occasional 'exotic' such as diacetone alcohol (4-hydroxy-4-methylpentan-2-one), cellosolve (2-ethoxyethanol, ethylene glycol monomethyl ether), or cellosolve acetate (2-ethoxyethylethanoate). I think I tested dichloromethane (methylene chloride) for overpaint removal, but did not actually use it in a treatment. If I were to do the same treatments now, quite a few of the solvents listed above would not be among my selection. Cellosolve, cellosolve acetate, and toluene, in particular, would be gone: all are known reproductive hazards, and there exist similar solvents to each which have near-identical solvency properties, but which are intrinsically less hazardous. The safer, logical substitute for cellosolve and its acetate are 1-methoxypropan-2-ol (also known as propylene glycol monomethyl ether, Methyl Proxitol™ [Shell], Arcosolv™ PM [Lyondell], Dowanol™ PM [Dow]) and its corresponding acetate. Xylene (dimethylbenzene, mixed isomers), superficially, is the obvious substitute for toluene.

Xylene

As the article on p. 12 describes, xylene is not, at present, classed as a known human carcinogen, nor as a reproductive hazard. North American long-term (8 hour TWA) occupational exposure limits (ACGIH TLV, OSHA PEL,

AIC NEWS

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ADVERTISING

AIC accepts position-available ads only from equal opportunity employers. All position ads must conform to the standards for equal opportunity employment. The cost of Internships and Fellowships, Positions Available, and Classified Ads is: \$1.05 per word for members and \$2.15 per word for nonmembers; the minimum charge is \$75. The cost of display ads is: 1/6 page \$215; 1/3 page \$360; 1/2 page \$445; 2/3 page \$570; full page \$695. Deadlines for advertising copy are: February 10, April 10, June 10, August 10, October 10, and December 10. All ads should be submitted to Ruth Seyler at rseyler@aic-faic.org.

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From the Executive Director



By the time you receive this newsletter, the certification vote will be closed and the results tallied. Not knowing the outcome at this time, I will take this opportunity to thank all those who shared their time and expertise to develop a viable model and to all of those who made thoughtful suggestions or challenged us with excellent questions. No matter how the vote comes out, the Board and staff will assess all we have learned through the process and work with you to ensure that AIC is supporting its members in the best possible ways.

By the time you receive this newsletter, our new website will be in the final stages of launch. We on staff are thrilled to have such an accessible, interactive website to serve as a primary communication tool for members and the public. Over time, we will be evolving the site to meet our growing needs. Please do send me your comments and suggestions!

By the time you receive this newsletter, the 2009 Annual Meeting will be only two months away. If you have not yet done so, please make your reservations. The general session and many of the specialty group sessions will be exploring advances in technology and, thanks to the generosity of the J. Paul Getty Trust, our opening reception will be exceptional! Also, don't forget to check out all the excellent workshops and tours that have been organized. This meeting is not to be missed!

On a final note, we continue to do our best to keep costs as low as possible for our members, particularly in this economic downturn. In addition, we will continue to add new tools and resources to the website, including a series of business marketing tips. We sympathize with members who have suffered lost work and will strive to keep you as connected as possible to AIC, opportunities in the field, and your colleagues.

—Eryl P. Wentworth
Executive Director, AIC/FAIC

Economic Recovery Bill

Congress has dropped museums, theaters, and art centers from exclusion in the stimulus package. This came after thousands of letters were sent to Congress, thousands of calls were made, and hundreds of op-eds, letters to the editor, news stories, and blog entries were generated in print and online media about the role of the arts in the economy. Thank you to those who called or wrote their representatives in Congress!

AIC News

Greater Communication and Inter-disciplinary Initiatives by Specialty Groups

The November 2008 meeting of the Internal Advisory Group (IAG) was the genesis of a conversation about creating new opportunities for Specialty Groups to share ideas and common interests. These conversations were a direct result of years spent encouraging inter-Specialty Group discussions about annual meeting issues, standardization of procedures, protocols, and publications.

One outcome of the IAG meeting was recognition of the need to build networking capacities among the Specialty Groups. Such networks can foster professional connections and opportunities that will allow the groups to share successful organizational functions and activities. Informal discussions further articulated interests in such topics of cross disciplinary exchange as: wider uses of analytical techniques and materials databases; imaging and documentation; and treatment techniques developed within one specialty area that have applications across the field.

As the current Director for Specialty Groups, this initiative is of special interest to me. I have recently incorporated photographic materials training into my career as an objects conservator. I see many benefits to sharing techniques and experiences that cross the Specialty Group boundaries and have wider applications than may have been considered previously. I would like to encourage specific ideas for ways we can build on this momentum and channel it through the new website, meetings, conference calls, and other forums to emerge from our collective efforts. Please email your ideas to me at rwiegandt@geh.org, or get in touch with your Specialty Group officers so they can bring them to the table.

—*Ralph Wiegandt*
Assistant Director for Conservation Education, George Eastman House International Museum of Photography & Film

Staff Update

We are pleased to announce that **Eric Pouchot** has taken on additional responsibilities in the newly created position of Institutional Advancement Director. Working with Eryl Wentworth, Eric will be developing an overall funding and program strategy for FAIC. He will continue to plan and oversee professional development activities.

Lisa Avent has recently begun work as Education Manager and is working closely with Eric to develop and implement programming in professional development. Lisa, who holds a Master of Teaching/Education from the University of Virginia, has taught high school English for four years. She has also worked as a legal assistant and litigation paralegal/project assistant.

On February 2, **Kelsey Ray** began work as the Outreach & Development Assistant. Her primary responsibilities are to assist in the planning and implementation of the Transforming FAIC project, which includes building the Foundation board of directors and developing a strategic plan for the organization. In May 2008, Kelsey received her Master of Art-Business Degree from Sotheby's Institute of Art (London)/University of Manchester (UK). Over the past seven years, Kelsey has also gained excellent museum experience by working for several types of museums in a variety of departments.

In addition, we are very pleased that **Philip Lynch** is now working full time as Membership Assistant, rather than splitting his time between membership and education. Since coming to AIC over a year ago, Phil has been proactive in seeking improved ways serve our members and the public. We look forward to continuing to benefit from this work.

Website Update

As of printing, the new AIC website is expected to launch in March. Check your email for current updates and more information on accessing the site and learning about some of its features.

Vote in the 2009 Board of Directors Election!

The electronic ballot will be open for you to cast your vote for AIC Board positions between March 20 and April 20. If you need a paper ballot, please contact the AIC office at (202) 661-8066 or plynch@aic-faic.org

For additional information about the ballot, go to the AIC website at www.aic-faic.org.

Wiki Site in Development

The proposal for AIC's new wiki site has been approved and development is under way. When complete, the wiki will integrate with the new AIC site and will be a new way for members to compose, edit, and view specialty group catalogue chapters.

AIC Computer Access Survey

In January, AIC members were asked to respond to a survey of computer access and usage. 389 individuals completed the online survey, which will provide important information for planning future computer- and internet-based projects by AIC and FAIC. Here are some highlights:

Computer Usage

94% of respondents have access to a computer with an Internet connection at work; 95% have access to a computer with an Internet connection at home. At least 16% of respondents use their home computer as their primary work computer.

PC vs. Mac

23% of respondents use a Mac at their work location, while 38% use a Mac at home.

Operating Systems

Windows XP is used at work by 56% of respondents; Mac OS X is used by 17%. At home, Windows XP is used by 39%, while Mac OSX is used by 29%. Windows Vista is used in only 8% of work computers and 12% of home computers.

Internet Browsers

Some online software will work properly only with certain browsers. At work, conservators use more than

one browser. Internet Explorer was used by 68% of respondents, while 46% use Firefox and 18% use Safari. At home, Explorer is still the most commonly used browser (52%), but Safari use jumped to 30%.

Internet Access

Video, audio, and high-quality images can be useful learning tools, but don't work well with slow internet connection speeds. Fortunately, high-speed access is definitely the norm for conservators. At work, Internet access is commonly provided by DSL or similar high-speed phone line (35% of those identifying a connection); T1 or other dedicated high-speed connection (33%); cable or satellite (17%). At home, DSL accounts for 43% of connections, and cable or satellite for 32%. Dial-up connections using a regular phone line are used by only 3% of conservators at home, and by less than 2% at work.

Problems with Email

Attachments to email can be difficult to receive, with 37% reporting that they are sometimes or often a problem at work, and 27% reporting problems at home.

Learning Preferences

Distance learning is not for everyone, nor is it the best format for many topics. The survey revealed a range of preferences for learning. When asked about the level of interest for various instructional formats, the area of most interest was for recorded presentations that could be accessed at any time and for self-guided tutorials that could be completed at the learner's own pace. The third most favored format was for face-to-face instruction at a nearby location.

A complete summary of the survey can be found in the "education" area of the AIC website. Many thanks to all the AIC members who responded to the survey.

—Eric Pouchot

*FAIC Institutional Advancement Director
epouchot@aic-faic.org*

IMLS Connecting to Collections Forum

AIC is working in collaboration with IMLS and Heritage Preservation to develop and implement the forth and final IMLS Connecting

to Collections Forum, taking place in Buffalo, NY on June 16 and 17. This forum, with a working title of "Training in Collection Care," will focus on:

- The most effective techniques to provide information and training in collection care for the staffs and volunteers of small museums and libraries
- How to increase understanding and appreciation of conservation and preservation in America's communities

FAIC News

Transforming FAIC

With support from the Getty Foundation, strategic planning efforts are well underway. A series of surveys to members, allied professionals, and end users of conservation services are being developed. Look for a salary/career survey to arrive soon and please take the necessary time to respond. Your responses will assist us in determining FAIC priorities.

The survey results will also help inform our 2009 summits, which will focus on service to the profession, allied professional programming, and public awareness. The summits are part of the planning component of our strategic planning initiative that will help us determine the most effective role FAIC can play in promoting conservation, while determining the most effective way for FAIC to function in relation to AIC. Drawing from the expertise of our members, allied professionals, and other leaders in public education and outreach, we will develop a strategic plan that will focus our resources in such areas as research, education, publications, and dissemination.

FAIC George Stout Memorial Fund Scholarships Awarded

Fifteen students were awarded scholarships from the FAIC George Stout Memorial Fund to support costs to attend the AIC Annual Meeting in Los Angeles. AIC Specialty Groups made this year's awards possible through generous donations, with additional funds from the FAIC

endowment, earnings from the George Stout Memorial Fund, and donations from members and friends of AIC.

The 2009 recipients are:

Beth Antoine
Megan Berkey
Jennifer Dennis
Christina Finlayson
Elpidia Fregni
Amanda Sue Holden
Katherine Lechuga
Meghan McFarlane
Sharon Norquest
Beth Nunan
Louise Marie Orsini
Stephanie Porto
Katherine Sanderson
Eliza Spaulding
Melissa Tedone

The deadline for 2010 George Stout awards is December 15, 2009. Guidelines and application forms can be found on www.aic-faic.org.

FAIC and AAM Partner on Emergency Response Programs

FAIC and AIC are working with the American Association of Museums (AAM) on two programs to be held this May.

AIC-AAM Annual Meeting Session:

For the AAM Annual Meeting in Philadelphia, Barbara Moore, co-chair of the AIC Emergency Committee, is chairing a session for AIC on "Successful Disasters: Learning from Museums that Weathered the Storm" on Friday, May 1 from 2:15 – 3:30 p.m. Robert Herskovitz, outreach conservator for the Minnesota Historical Society, Jerome Thompson, state curator for the State Historical Society of Iowa, and Anna Harris, curator of the Orr-O'Keefe Museum of Art in Biloxi, will look at ways museums successfully prepared for and responded to emergencies. Others can adapt the strategies used by these museums to develop or strengthen their own disaster plans. For details on the AAM meeting in Philadelphia, April 30–May 4, 2009, visit www.aam-us.org/am09.

AIC-AAM "May Day" Program:

As part of the "May Day" focus on emergency preparation, AAM and FAIC are working together to present a web seminar on "Preparing for

Disaster.” AIC-CERT Coordinator Aimée Primeaux is organizing the 90-minute live session, which will also include conservator Steven Pine of the Museum of Fine Arts, Houston and Julie A. Page, Co-Coordinator, California Preservation Program (CPP) and Western States & Territories Preservation Assistance Service (WESTPAS). The program will cover low-cost, practical tips for emergency preparedness, a discussion of mutual aid networks, and lessons learned from the AIC-CERT teams responding to the damage from Hurricane Ike in Galveston, Texas.

Institutional members of AAM and AIC will be able to register for the program free of charge. Individual members will receive a significant discount. AIC members are asked to encourage clients and local institutions to register for this low-cost way to protect their collections. The program will be scheduled for the week of May 11. Details and registration will be on the AAM website at www.aam-us.org/getinvolved/learn/webinarindex.cfm.

Annual Meeting

Getting the Most Out of Your Annual Meeting—Workshops and Tours

There is an abundance of reasons to attend the upcoming AIC Annual Meeting in Los Angeles. From the lectures and papers presented at the general and specialty group sessions to the countless opportunities to network with your fellow conservators (especially the opening reception at the Getty Center), you are sure to find yourself engaged in thoughtful and stimulating discussions about the latest developments in the field. However, while most of the events at the meeting are included with your basic registration, some, such as the workshops and tours, require a pre-purchased ticket. Many of these unique opportunities do sell out quickly, so take some time to peruse the list of ticketed events that are being offered at this year’s meeting before you arrive in L.A. Highlighted below are just a few of the workshops and tours that you may want to take

advantage of.

Participants in the **Senior Officials Workshop for All Hazards Preparedness** will join with representatives of Los Angeles agencies and AIC-CERT members to learn more about strategic- and executive-level issues related to disaster preparedness; share proven strategies and best practices; and enhance coordination among officials responsible for emergency response to a disaster. The workshop lasts from 8:30 a.m. to 4:00 p.m., and the ticket price of \$59 includes lunch.

In keeping with this year’s theme of Conservation 2.0, the Conservators in Private Practice specialty group is sponsoring the **CIPP 2.0 Workshop**. This workshop will provide insights into new directions in business trends, and will feature presentations on such topics as databases, web design, marketing, and “greening” your practice. The course will be held from 8:00 a.m. to 12:00 p.m. and is open to all meeting attendees; however, CIPP members receive a discount (\$59 CIPP members, \$79 others).

Every year AIC teams up with museums and other institutions near the conference site to offer exclusive tours that are literally once-in-a-lifetime opportunities, and 2009 is no exception. This year AIC will offer tours on both Tuesday, May 19 and Saturday, May 23. Among Tuesday’s tours is **L.A.’s Prized Pair: The Fowler and Hammer Museums Conservation Labs and Collections Tour**. This tour, which lasts from 1:30 to 7:30 p.m., will begin at UCLA’s Fowler Museum, where, in addition to a guided tour of the museum’s collection of ethnographic objects from Africa, Asia, and the Americas, the group will be given an up-close look at the conservation labs and storage space. There, members of the conservation staff will share their insights on the conservation and storage needs of the Fowler’s unique collection. The tour will then proceed to the Hammer Museum, which boasts an impressive collection that features works by such 19th century French masters as Gustave Moreau, Edgar Degas, Paul Cézanne, and Vincent van Gogh. The museum is also home to a small but wide-ranging group of

JAIC Submission Deadline

May 1 is the next manuscript submission deadline for JAIC. To submit a manuscript, first read the guidelines for authors available on www.aic-faic.org. When you are ready to submit, send materials to the AIC publications manager at brodgers@aic-faic.org.

European old master paintings and works by American artists from the 18th to 20th centuries.

If you’re planning to be in the Los Angeles area on Saturday, May 23 you won’t want to miss the **Huntington Library, Art Collections, and Norton Simon Museum of Art** tour. This all-day tour first takes you to the exquisite Huntington Library & Gardens, home to such priceless works as an original Gutenberg Bible, Shakespeare’s first folios, and Chaucer’s *Canterbury Tales*. After arriving at the library the group will enjoy a welcoming coffee before setting off on tours of the conservation labs, storage facilities, and the library itself, and will view manuscripts not on display to the public. There will be some time to wander the mansion, art galleries, and gardens on your own before the bus leaves for the Norton Simon Museum of Art. The Norton Simon Museum houses a varied collection of European art from the renaissance to the 20th century, a stellar collection of South and Southeast Asian art spanning 2,000 years, and modern and contemporary works from Europe and the United States. The group will be given a specialized, two-hour private tour of both the European and Southeast Asian collections, with some free time to explore on your own.

Make the most of your Annual Meeting experience by developing your professional expertise with a rare training opportunity, or enriching your appreciation for the arts with a one-of-a-kind tour. See you in L.A.!

—Philip Lynch, Membership Assistant

History of Peer Review System

JAIC uses the peer review method for internal examination of manuscripts submitted for publication. This process is vital to the production of a trusted professional journal because it indicates that experienced practitioners working in similar areas have assessed the quality and credibility of the articles. Since the peer review system is so important, I would like to take this opportunity to summarize its development within the publication field.

Peer review has been used for hundreds of years in diverse professions, such as academic and scientific research, medicine, law, social science, accounting, and software development. Forms of the review system are used for publications, research grants, employment/tenure applications, certification processes, and legal actions (i.e., trial by jury).

One of the first documented customs for a peer review system in

medicine was described by Ishaq bin Ali al-Rahwi (854-931) of Syria, in his book *Ethics of the Physician*. Physicians were required to make duplicate notes for their examination and treatment of a patient's illness. Once the patient was either cured or died, a local medical council evaluated all relating documents. This council, composed of other physicians, would assess the treatment based on the accepted standards and knowledge. This practice was instituted to ensure high quality medical care within the community and to detect instances of malpractice.

The use of the peer review system in publishing dates to the mid 17th century with the creation of the world's first scientific journal by Henry Oldenburg. In March 1665, the journal, *Philosophical Transactions*, was published for the Royal Society of London to provide a venue for acknowledging and documenting new scientific discoveries. As part of the manuscript selection process, the periodical established a review system to evaluate all contributed manuscripts

and select papers for publication. After its inception, the journal quickly became an archive that registered the author's name, the article's submission date, and the discovery details. Thus, Oldenburg's journal established four functions (registration, dissemination, peer review, and archival record) that was, and still is, the basis for all professional journal publications. Of these functions, it is the review process that provides the formal validation and scholarly recognition, which directly results in the elite standing that peer reviewed journals have among the other communication venues.

Thus, peer review has an auspicious history that is ingrained in the presentation and acceptance of intellectual studies. However, it is not without its problems; in my next column, I will summarize the some of the recent practices, controversies, and criticisms of the peer review system.

—Michele Derrick, Editor-in-chief,
JAIC, mderrick@mfa.org



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FURTHER READING

Ray Spier (2002), "The history of the peer-review process," *Trends in Biotechnology* 20 (8), p. 357-358.

"The Origin of the Scientific Journal and the Process of Peer Review," *House of Commons Select Committee Report*, House of Parliament, 2004. [accessed online at <http://eprints.ecs.soton.ac.uk/13105/1/399we23.htm>].

In Memorium

Steven D. Starling (1953-2008)

Steven Douglas Starling died peacefully at 54, on February 9, 2008 in Oak Park, Illinois after a brief and sudden illness. Steve was a gifted frame conservator and an accomplished musician, as well as a fine artist, cook, and a talented quilter. Known to many by his wry sense of humor, Steve contributed much to the study of the history of frames.

Starling was born in Lima, Ohio on August 6, 1953, son to John and Armeda Starling. He graduated from Dublin High School in 1971. Prior to his career in conservation, Starling studied bassoon at Julliard School of Music for two years before transferring to Case Western Reserve University where he received a degree in art history. He then moved to Chicago where he pursued the harp and a career at the Art Institute of Chicago.

Starling's interest in research began in 1984 when he assisted frame historian Paul Levi in an historical and condition survey of the Art Institute of Chicago's entire frame collection. In 1986, at a time when there was scant published material on frames, he ignited vital new interest in the topic as co-author with Richard Brettell for the 1986 exhibition catalogue, *The Art of the Edge: European Frames, 1300-1900*. His longtime colleague, Tim Lennon, commented that Steve's love of Victorian and earlier English literature is reflected in his writing style as revealed in this publication.

Most recently Starling worked independently as a frame conservator for museums and private collectors across the country. Previously he was

employed as Conservator of Frames and Gilded Objects for the Chicago Conservation Center from 2004 to 2006. The majority of Starling's professional endeavors were lived out at the Art Institute from 1979 to 2003. He joined the museum in 1979 as an art handler in Museum Registration and later became preparator for the Department of American Arts. Starling joined the Conservation Department as Frame Technician in 1982 and began attending intermediate and advanced seminars in traditional gilding techniques at Sotheby's Restoration in New York and by working on the restoration of gilded wood at Hearst Castle, San Simeon during the summer of 1984.

At the Art Institute of Chicago, Starling earned the museum's first position as Assistant Conservator of Frames in 1988 and continued to refine his expertise by regularly participating in specialized training events, including most of the major conferences and seminars on gilded and painted wood spanning the past 20 years. Starling's knowledge of frames brought him an invitation to lecture on *Traditional Gilding Techniques* in the Visiting Artist Program at the School of The Art Institute of Chicago, Continuing Studies Division during the fall term of 1994. Friends have commented that he enjoyed helping them with their framing and gilding projects, and that he was a gentle and patient teacher. He also served as a visiting conservator to The J. Paul Getty Museum over the summer of 1995.

By 1997 Starling had become Associate Conservator of Frames at the Art Institute and was working closely with the Director of Conservation and the Curators of the American, European and Twentieth Century paintings collections to establish frame treatment priorities and to assist with decisions about frame purchases and long term reframing goals. Starling became proficient in image editing and developed a data bank of frame images and inventory information. He was instrumental in the museum's major reframing projects for the Barbizon School, Dutch, and Impressionist paintings among numerous others in

the collection. His judicious eye and beautiful work on the selection and conservation of these frames will grace the Art Institute's collection for years to come.

Art and music were Steve's lifelong passions. He did something creative everyday. He was vested in restoring frames and playing harp, for which he wrote his own compositions. He also donated his entire harp collection to the Historical Harp Society.

Starling was a Professional Associate of the American Institute for Conservation, a member of the AIC Wooden Artifacts Specialty Group and the International Society of Gilders, as well as a member of the International Harp Society.

Starling is survived by his father, John Starling; his brother, David; his sister, Susie (Jeff) Gafford; and his two nephews, A.J. (Jennifer) and Jordan Gafford. Memorial services to celebrate Steve Starling's life were held in Dublin, Ohio and at the Art Institute of Chicago. Donations can be made to the Dublin Arts Council, 7125 Riverside Drive, Dublin, Ohio.

This tribute hardly touches upon the countless talents and kindnesses of my dear friend, who will be truly missed by me and his many Chicago friends and colleagues.

—*Cynthia Kuniej Berry, with excerpts from Steve's résumé courtesy of his sister, Susie Gafford*

Mervin B. Martin (1933-2009)

Mervin B. Martin, one of the premier conservators of American antique furniture, passed away on January 18, 2009. He was 76. Over a career spanning nearly 60 years, Martin conserved some of America's finest and most important historical furniture treasures for major museums throughout the country, including an eleven year career at the Winterthur Museum in Wilmington, Delaware.

Martin was sought out by major museums and private collectors for work on furniture projects throughout the country. Over the course of three decades following his Winterthur work, he restored and conserved antiques for the White House, the

Continued from page 1

NIOSH REL) for xylene isomers are set at 100ppm, (435 mg/m³), which is indicative of solvent generally in the category of intermediate health hazard [1]. To my mind, however, xylene is one of the more difficult solvents to evaluate with regard to health risk. A complicating factor is that many commercial grades contain substantial proportions (up to 30%) of ethylbenzene, which is a suspect carcinogen [2]. If, for peace of mind, one wants to avoid, or at least limit, problems deriving from ethylbenzene in products of mixed isomers xylene, with a bit of searching it is possible to find xylene products from laboratory chemical suppliers that are reportedly low in ethylbenzene. A quick search of MSDS sheets for general laboratory grade xylene products in the ranges offered by big U.S. lab suppliers identified, for example, a Fisher Scientific product with just 4% ethylbenzene. Other low ethylbenzene products could, no doubt, be found with a little more probing.

Aromatic Hydrocarbons: Other Problems of Minor Constituents

Many conservators are familiar with aromatic naphthas: proprietary aromatic hydrocarbon solvent products, such as ShellSol™ A100, ShellSol™ A150, ExxonMobil's Aromatic (in Europe Solvesso™) 100, 150, 200, etc [3]. These solvents, which are higher boiling point analogues of toluene and xylene composed mostly of mixtures of aromatic hydrocarbons (aromatic 100 grades mostly C9-10 aromatic hydrocarbons; aromatic 150 grades mostly C10-11 aromatic hydrocarbons; and aromatic 200 grades mostly C10-14 aromatics), have similar solvency properties to the pure compounds and can be very useful in situations where lower volatility and slower evaporation are desirable. These are good solvents for acrylic resins, such as Paraloid™ B72, and most waxes. But most regular grades of the higher boiling point aromatic naphthas (150 and 200 grades) contain moderate amounts, usually 8 - 12%, of naphthalene.

Naphthalene is classified by

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	Occupational Safety and Health Administration (U.S.)
PEL	Permissible Exposure Limit
NIOSH	National Institute for Occupational Safety and Health (U.S.)
REL	Recommended Exposure Limit
ppm	Parts per million
mg/m ³	milligrams per cubic meter of air
IARC	International Agency for Research on Cancer
MSDS	Material Safety Data Sheet
TWA	Time Weighted Average (typically 8-hour)
WEL	Workplace Exposure Limit (U.K.)
MEL	Maximum Exposure Limit (U.K.)
EU	European Union
EEC	European Economic Commission

the IARC (International Agency for Research on Cancer) as a category 2B carcinogen (possibly carcinogenic to humans) and, in the U.S., products containing greater than 0.1 weight percent naphthalene are required to reflect this classification on the Material Safety Data Sheet (MSDS). As well as being a category 2B carcinogen, naphthalene is a compound that is quite smelly; and being a planar aromatic molecule it adsorbs strongly onto surfaces, including hair and clothing. This problem can be reduced by using special grades of the high flash aromatic naphthas which have lower naphthalene contents. ExxonMobil, for example, manufactures ND (naphthalene depleted) grades of Aromatic 150 and 200 which have naphthalene contents of less than 1% w/w. ExxonMobil has at times also produced ULN (ultra-low naphthalene) grades containing less than 0.1%, about which I have heard positive comments from conservators. Although not presently reported in the range of products offered in North America on the ExxonMobil products website, I understand that some specialist industrial chemicals distributors can still obtain supplies of ULN Aromatic 150 and 200 on request [4].

Naphthenic Hydrocarbon Solvents

Finding safer, effective alternatives to aromatic hydrocarbon

solvents remains a challenge, both for conservators as users and for the solvent manufacturers. By virtue of their chemistry, aromatic hydrocarbons have particularly good solvency properties in relation to their polarity; from the technical point of view, they are often hard to replace with alternatives that match in performance. A common approach to substitution of aromatics is to combine a non-aromatic (i.e. aliphatic) hydrocarbon solvent with, usually, minor amounts of a more polar solvent, typically from the group of alcohols, ketones, esters, or other oxygenated solvents. In this situation, there is an advantage to using an aliphatic hydrocarbon solvent with the strongest solvency properties. That position is held by saturated, cyclic hydrocarbon compounds: cyclohexane and its higher homologues, decalin, and related compounds, which are known in industry as cycloparaffinic or naphthenic hydrocarbons. Several specialty naphthenic solvent products are - or at least have been - available in the U.S. Some conservators may be familiar with two Shell products from this class that were near 100% cycloparaffins, Cypar™ 7 and Cypar™ 9, but unfortunately these solvents are now obsolete and have not been replaced with alternative grades [5]. Indeed, considering the good solvency and low health hazards of naphthenic solvents, it is interesting - though frustrating - that the major U.S.

hydrocarbon solvents manufacturers (Shell, ExxonMobil) currently do not offer many products of this type. ExxonMobil offers a naphthenic solvent with interesting and useful properties, Nappar™ 10 (bp. 155–190°C) in Europe and the Asia/Pacific region, but no similar product appears in the ExxonMobil range for North America. However, some naphthenic hydrocarbon solvents are available here in the U.S. in the form of products specifically formulated as replacements for xylene. One such product is Formula 83™ (boiling range: 119–145°C / 246–293°F) which is marketed as a substitute for xylene as a clearing solvent in histology [6].

Solvent Mixtures: Azeotropes

There are two main technical challenges to creating safer substitutes for aromatics by blending other solvents. One is to reproduce the same level of solvent power. The other is to control evaporation of the various individual components, which may have different boiling points or boiling ranges and rates of evaporation. The latter issue is especially important for solvent-based coatings (paints, varnishes, consolidants) where dry film properties may be strongly affected by any differential solvent evaporation. One solution to the problem of ensuring uniform evaporation of multi-component combinations is to use an azeotropic solvent mixture. A useful characteristic of an azeotrope is that the components evaporate at the same rate and the composition is maintained during the course of evaporation. In the past few years there has been a definite increase in applications of azeotropes within conservation, and this area of solvent technology offers still more potential for practical conservation operations, especially application of solvent-borne resin coatings, such as varnishes and retouching/inpainting media [7]. For paintings conservation practice, a reproducible azeotropic mixture of an aliphatic hydrocarbon solvent and a polar, oxygenated solvent which had a boiling point of about 150°C and a polarity/solvent power similar

Polarity Indicators

The polarity of an organic solvent cannot be measured absolutely, but to some degree it can be deduced from other measurable physical properties, such as the dipole moment (μ ; unit = Debye, D) or the dielectric constant (ϵ , also called *relative permittivity*; dimensionless). Dipole moments of solvents fall within the approximate range 0 – 5 D. The dielectric constant ranges from about 2 for solvents with low polarity such as tetrachloromethane, up to 80 for water.

A number of solvent polarity scales rely on the property of *solvatochromism*, a term which is used to describe a pronounced shift in an absorption band in the uv/visible spectrum of a compound as a consequence of a change in the polarity of the medium. Reichardt proposed a scale of solvent polarity, E_T , based on colour changes caused in a pyridinium-N-phenoxide betaine dyestuff in solution. The Reichardt E_T scale has the dimension of kcal/mol and ranges from about 30 for non-polar solvents, such as paraffins, to 63 for water. More recently, Reichardt's normalised polarity values, E_T^N , have been recommended. E_T^N values range from zero for very non-polar liquids, such as tetramethylsilane, up to 1.00 for water.

Solvatochromatographic parameters (π^* , α , β) of Kamlet, Abboud, Taft and co-workers

Kamlet, Abboud & Taft created a solubility parameter equation – a

linear solvation energy relationship (LSER) – that was intended to be able to predict every kind of interaction between solvents and solutes. The solvatochromatographic comparison method, as it was called, was claimed as a means to “unravel, quantify, correlate, and rationalize multiple interacting solvent effects on many types of physicochemical properties and reactivity parameters.” The Kamlet, Abboud & Taft system is essentially a three-parameter system that focuses on the strong, polar intermolecular interactions:

- π^* is an index of solvent polarity/polarizability, which measures the ability of the solvent to stabilize a charge or a dipole by virtue of its dielectric effect;
- α is a scale of hydrogen-bonding donor acidity, which is the ability of the solvent to donate a proton in a solvent-solute hydrogen bond; and
- β is a scale of hydrogen-bonding acceptor basicity, which is the ability of the solvent to accept a proton (or donate an electron pair) in a solvent-solute hydrogen bond.

A fourth, polarizability correction factor, δ , is included for some solvents (e.g. aromatics and polyhalogenated solvents) to correct for differences in the polarizability contribution to π^* .

to xylene would be really useful as a diluent, for example, for the Gamblin Conservation Colors. I'm sure one must exist.

Halogenated Solvents

Of all the main chemical types of solvents, perhaps the greatest changes in regulation of use have occurred with the halogenated solvents, because of hazards to human health

and to the environment. The latter concern derives from the adverse effects of this type of compound on atmospheric ozone and on aquatic organisms. The health hazards associated with the fully halogenated compound tetrachloromethane (carbon tetrachloride) were well known even when I was a conservation student in 1982, and this substance rightly was effectively obsolete by

then. However, its sister compound dichloromethane (methylene chloride) has remained an important solvent, primarily as the principal ingredient in many commercial paint and varnish strippers. In most parts of the world, use of dichloromethane is now highly restricted, primarily by very low permissible occupational exposure limits: OSHA PEL values are long-term 25ppm (87 mg/m³), short-term 125ppm (435 mg/m³); in the U.S. it is classed as a category 3A carcinogen.

In Europe, at least at the time of writing, use of dichloromethane is less tightly controlled by occupational exposure limits (UK WEL/MEL 8hr TWA long-term 100ppm (350 mg/m³), short-term 300ppm (1060 mg/m³), and its classification as a carcinogen is less firmly imposed: dichloromethane is a Category 3 carcinogen in the EU where it is assigned the risk phase R40 'Limited evidence of carcinogenic effect'. However, this situation is changing rapidly, and it is probable that by June 2009 legislation will be in place within the EU that prohibits the supply of dichloromethane-based paint strippers to the general public and to professional users [8].

The move away from dichloromethane as the basis of paint strippers has been underway for some time [9] and it seems likely that commercial developments will continue apace in light of the probable changes in European regulations. For many years, conservators have explored alternatives to dichloromethane for use in paint removal. One group of solvents which seems promising is that of dibasic esters (DBEs), which includes such compounds as dimethyl adipate, dimethyl succinate and dimethyl glutarate [10]. Although they have rather high boiling points and probably don't quite match the solvency/swelling power of dichloromethane, it is likely that these environmentally-friendly, water-miscible solvents will become increasingly familiar in years to come. DBEs are now seemingly used in quite a number of commercial paint stripper products, usually in combination

with other solvents, often strongly dipolar, highly active substances, such as N-methyl-2-pyrrolidone (NMP), dimethylsulphoxide (DMSO), propylene carbonate and the like [11].

Green Solvents

The dibasic esters mentioned above are sometimes referred to as 'green' solvents or biosolvents, since they are mostly manufactured from biological, usually plant, sources. Another increasingly popular green solvent is ethyl lactate (ethyl 2-hydroxypropanoate), which finds use in products such as degreasers, paint strippers, and graffiti removers. Current interest in green solvents (and in 'green chemistry', generally) among both chemists and within the industry is escalating to the point where whole journals, books, and conferences are devoted to these subjects [12].

Although some principal areas of green solvent chemistry research, such as ionic liquids, will be of marginal relevance to conservation, the emergence of new, environment-friendly organic solvents is worth keeping an eye on. For example, it was interesting to discover that Sigma-Aldrich is now marketing two products, 2-methyltetrahydrofuran (2-MeTHF) and cyclopentyl methyl ether (CPME), specifically as 'green' alternatives. Additionally, supercritical carbon dioxide is now finally being used in conservation, mostly for cleaning purposes, after delays in acceptance that perhaps can be attributed to cost and accessibility of the necessary equipment [13]. Liquid carbon dioxide is just one of several approaches that have been adopted as a substitute for the once ubiquitous dry cleaning solvent perchloroethylene (1,1,2,2-tetrachloroethene), now also a suspect carcinogen, for which a variety of other solvents have also been proposed: hydrocarbons, *n*-propyl bromide, siloxane (silicone) fluids, and others.

The Teas Fractional Solubility Parameter Diagram

Back in 1982, the primary vehicle for explaining solvent

behaviour from the theoretical point of view was the fractional solubility parameter system of J-P Teas and his now familiar triangular solubility diagram, which was first published in 1967. It is interesting that the Teas fractional solubility parameter system remains still the principal system used in conservation for describing solvent power and selectivity, even though its shortcomings are now well established [14]. Currently, the Teas chart is rarely used in fields of science/technology outside of conservation; other solvent descriptor systems are preferred. Nowadays, the focus is on *polarity* and indicators of this chemical characteristic, such as the Reichardt, solvent polarity scales, E_T and E_T^N , and on solvatochromatographic solubility descriptor approaches which, again, focus on various types of polar intermolecular interaction. Of the latter, the π^* (solvent polarity/polarizability), α (hydrogen-bonding donor acidity), β (hydrogen-bonding acceptor basicity) parameters of Kamlet, Abboud, Taft and co-workers are perhaps the most widely recognized.

Alongside other, more scientifically rigorous, solubility parameter systems, there remains a use for the Teas chart within conservation, which is after all a visual discipline. Its primary virtue is that it allows easy graphic representation of solvent characteristics; it's a kind of map - albeit an imperfect one - to safer solubility. The important thing, perhaps, is to understand its theoretical shortcomings insofar as these influence how one uses the map to navigate the murky waters of solubility.

Conclusion

Reflecting on these developments in solvent technology over the past quarter of a century or so, it is evident that conservators now have a much broader range of options open to them when it comes to selecting organic solvents for treatment operations. At one level, better understanding of the shortcomings of some of the customary solvents has been complemented by increased awareness of effective,

safer, less-polluting alternatives. But I have become aware, too, that some misconceptions about solvents pervade the discipline of conservation. The notion that “all organic solvents are toxic,” which one encounters occasionally in our field, is one such example which does not hold up under close analysis.

It might be observed also that, as a field, we are still perhaps a little too attached to a rather outdated theoretical framework (i.e. the Teas chart) for understanding the properties and activity of organic liquids as solvents, and we have some collective catching up to do in order to properly integrate current perspectives on solvency science into conservation theory and practice.

—Alan Phenix, *The J. Paul Getty Museum*, APhenix@getty.edu,

Note: This article follows British style conventions, by author's request.

Notes and References

[1] Permissible levels of xylene in the workplace are more tightly restricted in Europe: for example, the current U.K. long-term (8 hour TWA) Workplace Exposure Limit (WEL) is set at 50ppm (220 mg/m³).

[2] At the present time (2009), neither toluene nor xylene is available as a specific product in the range of solvents offered in the Americas by Shell Chemicals or by Exxon Mobil. Xylene is manufactured and distributed by Shell in Europe and the Asia/Pacific regions: ethylbenzene content of those products is said to be 10–30%.

[3] These solvents are usually manufactured to be compliant with ASTM D-3734-05 Standard Specification for High-Flash Aromatic naphthas. The suffixes ‘100’ and ‘150’ derive from their approximate flash points in °F.

[4] For example, Univar, Commerce, CA 90040. www.xunivarusa.com

[5] A few current Shell aliphatic hydrocarbon solvents are noted as having high naphthenic content;

for example, VM&P Naphtha HT (Americas, 67% cycloparaffins) and ShellSol™ W HT (Americas, 55% cycloparaffins).

[6] CBG Biotech, 2211 Lake Club Drive, Columbus, Ohio 43232. See: <http://www.cbgbiochem.com/f83.html>

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FAIC Samuel H. Kress Foundation Conservation Publication Fellowship

FAIC is pleased to announce that the FAIC Samuel H. Kress Conservation Publication Fellowship Committee has awarded a 2009 fellowship to Mary-Lou E. Florian.

This is the first time that the Fellowship Committee has recommended funding for an author who was previously awarded a Fellowship. Ms. Florian's 1999 Fellowship led to the publication of her widely-used books, “Fungal Facts” and “Protein Facts.”

Ms. Florian will be writing on “Cellulosic Facts: Cellulosic Materials in Heritage Objects; Structure, Chemistry, Identification, and Conservation Concerns.” The book will be a general reference on the topic, and will cover common cellulosic material used in historic, ethnological, and archaeological textiles, paper, wooden objects, baskets, ropes, etc. The materials' structural morphology, cellular anatomy, and alteration by manufacturing processes, relevant to its physical stability and deterioration, will be presented. The relevant chemistry of cellulose will be discussed in reference to chemical, physical, and biological deterioration. Methods of identification and analysis of deterioration will also be covered.

FAIC anticipates awarding two fellowships in 2010. The application deadline is November 1, 2009. Guidelines and forms can be found on the AIC-FAIC website.

and Chris McGlinchey, the Sally and Michael Gordon Conservation Scientist at the Museum of Modern Art, have received the award in recognition of their work on the exhibition *Imageless: The Scientific Study and Experimental Treatment of an Ad Reinhardt Black Painting*, and for the research project that led to the exhibition.

The project came about when the insurance company AXA Art offered to donate Reinhardt's *Black Painting* (1960-66), which had been deemed a total loss because of damage during exhibition-related travel, to the Guggenheim Museum. Funded by a research grant from AXA, Carol Stringari led a seven-year research effort to resolve its problems through aggressive examination and experimental treatment, as is only possible with a work that most likely cannot be salvaged.

The research and exhibit have received national media attention in such publications as the *New York*

Times and in ARTINFO.com.

The College Art Association/Heritage Preservation Award for Distinction in Scholarship and Conservation recognizes outstanding contributions to the understanding of art through the application of knowledge and experience in conservation, art history, and art. Heritage Preservation is proud to co-sponsor this award, and applauds Carol Stingari, Chris McGlinchey and the team at the Guggenheim for their valuable contributions to the field.

Guidelines for nominations for the 2010 award can be found at www.collegeart.org/awards/info-heritage.html or by contacting Emmanuel Lemakis of CAA at atelemakis@collegeart.org.

IMLS Offers "Six Tips to Preserve Your Election Collections"

Americans are saving newspapers, posters, buttons, and bumper stickers to commemorate the recent election

Give up a beautiful Saturday for first aid training? Are you crazy? Or, are you crazy not to? Ask your local Red Cross, call your health department, or consult your fire department when you can take a class in CPR and first aid.

—A reminder from the Health & Safety Committee

and inauguration of Barack Obama. Anne-Imelda M. Radice, Director of the U.S. Institute of Museum and Library Services (IMLS), has encouraged citizen-collectors to make sure that their presidential inauguration collections will be preserved long into the future. IMLS has produced guidelines with six simple preventive steps that will help individuals keep treasures safe for the next generation.

For more information on preserving your collections, visit the Guide to Online Resources section on Care for Collections at www.ims.gov/collections/resources/care.htm.

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INTERNATIONAL COUNCIL OF MUSEUMS (ICOM)

Disaster Relief for Museums Task Force

Established after the tsunami of 2004, the ICOM Disaster Relief for Museums Task Force (DRFM Task Force) was recently re-approved by the ICOM Executive Council for another three years, with a confirmed chair, and newly appointed members. The new task force consists of Dr. Thomas Schuler (chair), Cori Wegener (vice-chair), Carla Bonomi (ICOM secretariat), Amar Galla (ICOM CCTF), Hans-Jurgen Harras (ICMS), Hongnam Kim (ICOM EC), Leif Pareli (Blue Shield - ANCBS), Hanna Pennock (ICOM EC), Wadum (ICOM-CC). Its mission is to assist museums in natural and man-made disasters if disaster response exceeds national capacities.

After a disaster, the task force tries to:

- Identify all museums situated in the affected region
- Check which museums are affected

and what kind of damage occurred

- Find out what kind of foreign assistance is needed
- Inform ICOM committees and members about the damage and needs

The task force may help by:

- Sending an assessment team to a museum or region
- Sharing expert knowledge
- Drawing attention to “forgotten” disasters
- Promoting international solidarity among museum colleagues
- Establishing twin relations between one of our Committees (or a major museum) and an affected museum
- Appealing to national and international Funds

Currently, the task force is:

- Researching damage of the museums in Myanmar (Cyclone Nargis), West China (Sichuan earthquake) and South Ossetia (Caucasian War)
- Investigating the impact of the hurricane season in the

Caribbean and the US, and the floods in Nepal and India.

For more information visit http://icom.museum/disaster_relief/

Health and Safety

Some Chemical Things Considered: Xylene/Xylenes

Characteristics

Chemical formula: C₈H₁₀

CAS#: See list below

Molecular wt.: 106.16

m-xylene: 108-38-3 BP 139.12°C

o-xylene: 95-47-6 BP 144.5°C

p-xylene: 106-42-3 BP 138.3°C

[isomer: ethylbenzene: 100-41-4 BP 136.1°C]

xylenes (blend): 1330-20-7 BP

139.12°C

Synonyms: Dimethylbenzene; xylol; methyl toluene

Xylenes are clear, colorless liquids with a distinctive sweet odor. They are derived primarily from petroleum distillation/refining. Commercial



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xylene is typically a mixture of three isomers: o-, m-, and p-xylene and the isomer ethylbenzene. Industrially xylenes are used as cleaning agents and as solvents for paints, adhesives, and resins. Conservators have typically used xylene as a solvent and diluent in a variety of treatment applications.

Xylene from some suppliers can contain as much as 30% ethylbenzene while others have very little or none. The amounts appear to vary by supplier, so consult the MSDS from your supplier to gauge how much ethylbenzene may be present. One popular brand only contains 4% ethylbenzene while another contains 15-25%.

Hazards

Xylenes are very flammable with a flash point of 29°C (CC), an autoignition temperature of 464°C, a lower explosive limit of 1.0%, and an upper explosive limit of 7.0% by volume in air.

Xylenes are listed by the EPA as a Group D chemical and the IARC as Group 3, both of which mean that it is considered not classifiable as a human carcinogen. From the EPA's IRIS listing:

“Data in both humans and animals are inadequate to evaluate potential associations between xylenes exposure and cancer. A number of human occupational studies have suggested possible carcinogenic effects of chronic inhalation exposure to xylenes. However, in each case co-exposure to other chemicals was a major confounding factor, leading to an inability to adequately assess the potential effects of chronic exposure to xylenes [4].”

Xylene, because of its lipophilic properties, is rapidly absorbed by all routes of exposure, rapidly distributed throughout the body, and, if not metabolized, quickly eliminated in exhaled air. In humans, absorption has been estimated as >50% through the lungs following inhalation exposure and <50% through the gastrointestinal system. In humans exposed by inhalation, up to 2% of the absorbed dose may be absorbed

through the skin. The major pathway for metabolism involves mixed function oxidases in the liver, resulting mainly in the formation of isomers of methylhippuric acid that are eliminated in the urine and are used as an index of exposure for occupational monitoring [2].

Ethylbenzene is classified by the IARC as a Group 2B, possibly carcinogenic to humans. Ethylbenzene is also on the Prop 65 list as a chemical known to the State of California to cause cancer. The EPA lists ethylbenzene as a Group D chemical (not classifiable as a human carcinogen), but the data has not been reviewed since 1991.

To confuse the information on carcinogenicity, the Carcinogenic Potency Project [8] has two listings for xylenes, each based in tests performed on four rats. The mixture of isomers containing 17% ethylbenzene shows “no positive” for rat and mouse while the xylene isomer containing only the o-, m-, and p-xylene isomers has a “Tumor Dose in fifty percent of test subjects” (TD₅₀) for rats of 3,110 milligrams of xylene per kilogram of body weight per day (mg/kg/day). In direct contradiction of these results, one must suspect that using xylenes with as little ethylbenzene as possible would be the safest option. Given the uncertainties in the safety information on xylenes, conservators should follow all recommended engineering controls or scrupulously use appropriate personal protective equipment (PPE) as outlined below.

A list of symptoms of varying degrees of severity is listed below, as well as the targeted organs and systems:

Exposure routes: inhalation is the most common exposure route, also dermal absorption and ingestion

Target organs and systems: Eyes, skin, respiratory system, central nervous system, gastrointestinal tract, blood, liver, kidneys

Acute Symptoms: (inhalation) cough, sore throat, dizziness, excitement, drowsiness, incoordination, staggering

gait, headache, nausea, (eyes/skin) irritated eyes, corneal vacuolization, dry skin, dermatitis, redness (ingestion) anorexia, nausea, vomiting, abdominal pain

Exposure Limits:

LD₅₀(rats): 3,523 mg/kg (ingestion) [2 & 3]

LD₅₀(rats): 5,000 ppm (inhalation) [5]

NIOSH does not include a guide to mixed xylenes, but does provide exposure limits for the individual isomers of xylene, all of which have the same exposure limits listed below: m-Xylene, o-Xylene, p-Xylene [5 & 6]

NIOSH REL: TWA 100 ppm (435 mg/m³) ST 150 ppm (655 mg/m³)
OSHA PEL: TWA 100 ppm (435 mg/m³)

ACGIH TLV: 100 ppm as TWA 150 ppm as STEL A4 (ACGIH 2001)
IDLH (immediately dangerous to life and health) concentration: 900 ppm

Odor Threshold Value: 1.0 ppm [2]

In Europe, the principal hazards for this solvent are classified as flammability and skin irritation.

Personal Protection:

For skin: prevent exposure to skin by wearing protective gloves and protective clothing. The Ansell glove guide recommends Nitrile and PVA coated gloves [7]. For eyes: prevent exposure by wearing protective eyewear such as goggles.

For ingestion: do not drink, eat, or smoke while working.

Respirator Recommendations NIOSH/OSHA [5]

For potential exposures up to IDLH levels of 900 ppm, NIOSH recommends wearing [6]:

- A chemical cartridge respirator with organic vapor cartridges
- A powered, air purifying respirator with organic vapor cartridges
- A supplied air respirator
- A self-contained breathing apparatus with a full face piece.

—The AIC Health and Safety Committee

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.

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[berkeley.edu/index.html](http://potency.berkeley.edu/index.html))

New Materials and Research

Union Carbide No Longer Manufacturing PVAC Resins

Union Carbide is no longer manufacturing PVAC resins (AYAA, AYAC, AYAF, and AYAT), as per information supplied by Dow, its parent company. Representatives of two conservation suppliers confirmed the change and stated that Union Carbide stopped supplying these resins approximately three years ago.

Readers should note that although some suppliers are currently selling resins labeled as AYAA, AYAC, AYAF, and AYAT, these products are not made by Union Carbide, unless the supplier has reserve stock of the discontinued resins. When Union Carbide stopped supplying the resins, at least one company, Talas, located

For more information and to register, visit the AIC website today.

The image is a circular logo for the 37th Annual Meeting of the American Institute for Conservation of Historic and Artistic Works. The central text reads "conservation 2.0 new directions". The outer ring of the logo contains the text "37th Annual Meeting" at the top, "AMERICAN INSTITUTE FOR CONSERVATION OF HISTORIC AND ARTISTIC WORKS" at the bottom, and "Los Angeles, CA" on the right side. Below "Los Angeles, CA" is "Hyatt Regency Century Plaza". At the top right, the dates "May 19-22, 2009" are displayed. The background of the logo features a stylized palm tree silhouette.

a new manufacturer and requested grades of polyvinyl acetates that were equivalent to the Union Carbide AYA_ series. Talas representatives report that they purchased these new products after being assured they were “comparable” by technicians who were familiar with the Union Carbide products. However, the technical data posted on the Talas website (molecular weight, Tg or glass transition temperature, etc.) for the new resins does not correspond to previously published data for the Union Carbide products. Talas has expressed their concern about these discrepancies, and has indicated that they plan to update their website in the future to make it clear that the resins they currently sell are not Union Carbide products.

Golden Artist Colors, Inc. uses AYAA and AYAC in the manufacture of their PVA Conservation Paints. They stockpiled a supply of these resins when they learned of the impending discontinuance and have informed me that they have enough stock to last for the foreseeable future and have not yet successfully identified a substitute.

Discovery of these facts has prompted me to investigate potential replacements for the Union Carbide resins, including the Mowilith resins (20, 30, & 50) sold by Kremer Pigments, McGean B-15 and B-25 (formally Vinac B-15 and B-25), and the line of PVAC resins now sold by Talas. Currently, I am collecting samples and information about these resins and trying to identify other potential candidates.

One difficulty I have encountered is that Tg measurements, which are useful in assessing and comparing resin properties, are not standardized, often resulting in a discrepancy of values from one manufacturer to another or from the same manufacturer over time. Fortunately, Jane Down and Greg Young at the CCI are currently measuring and examining the Tg of some of these PVAC resins and will make the results available to the conservation community when completed.

I welcome any suggestions or

comments regarding this issue and possible replacement resins. I would greatly appreciate hearing from anyone about particular PVAC resins they are currently using and why. Information from colleagues will be valuable in assessing replacement PVAC resins and determining which substitutes would be most useful for a majority of conservators.

—*Samantha Alderson, Conservator,
Division of Anthropology, American
Museum of Natural History,
salderson@amnh.org*

Worth Noting

Conservation Documentation; Carnegie Mellon Support

With funding from the Research in Information Technology Program of the Andrew W. Mellon Foundation (<http://rit.mellon.org>), two community design meetings for conservation documentation will be held in 2009, the first in early March at the Metropolitan Museum of Art, New York, primarily for North American participants; the second in early April at the National Gallery, London, primarily for UK and European participants.

The focus of these meetings is solely on the requirements, as described by professional conservators and conservation scientists, for a software application that would support and help to manage their work, its documentation, and related scientific data. This narrow focus on design is intended to increase the likelihood of achieving a comprehensive requirements document for application development later in the process, while setting aside for the present the related topics of specific technology and standards.

The core team, listed on the website, has been selected from a broad range of potential participants for these meetings, taking into account their individual engagement with information technology as well as their conservation and science expertise. Serving in an advisory capacity, they identified potential participants from a variety of collecting institutions: libraries, archives, and museums of

art, archeology, anthropology, natural history, and science.

While the number of participants that could be accommodated at each of these meetings is necessarily limited, all resulting documents will be public and available for community comment and input. This includes narrative summaries of the discussions as well as initial drafts of a requirements document for the development of an application. It is expected that there will be two such public drafts before a final document is prepared at the end of 2009. Their availability will be announced to the conservation field, and feedback will be solicited, as widely as possible.

The website identified above has additional information on the core project team, closely related efforts, and the full narrative from the application to the Research in Information Technology Program at the Andrew W. Mellon Foundation.

—*Kenneth Hamma, Project Manager,
From the ConsDist list Inst. 22:45*

New Online Conservator Outreach Service

California Public Arts Association, Inc (CALPAA) has introduced an online conservator outreach service. It allows conservation sponsors to post calls for conservators at www.calpaa.com and receive applications to the calls online. After conservator selection, project sponsors also receive the “Before and After” upload documents with images during the project. There is no charge to conservators for this service.

The steps for conservators to register and apply to RFQ/RFP’s are:

1. Register @ www.calpaa.com
2. Upload qualifications with before and after images and text
3. Check back by looking at the “Call for Conservators” page
4. Apply to Calls online by clicking the “apply” button on the “Call for Conservators” page

For more information, call (800) 454-6315 or visit the site and view demonstrations under “Take a Tour.”

Climate Management Strategies Papers Available Online

The Getty Conservation Institute (GCI) is pleased to announce that papers from the GCI's Experts' Roundtable on Sustainable Climate Management Strategies (Tenerife, Spain, 2007) are now available for download from the GCI's website at www.getty.edu/conservation/science/climate/climate_experts_roundtable.html.

Topics addressed include: current climate management strategies and emerging trends; the meaning of sustainability in relation to the preservation of cultural heritage; and whether cultural institutions such as museums, archives, and libraries can or should play a role in the debate about energy consumption. A transcript of the meeting and a bibliography on climate management supplements the participants' discussion papers.

Packing, Art Handling, Crating Information Network (PACIN)

Following several meetings of the PACIN-PIC Steering Committee at the 2008 AAM meeting in Denver, last May, we have been working to reinvigorate and rebuild our organization's structure. One of our primary foci has been to make the website, www.pacin.org, more dynamic and effective. Our goal is to create a network of professionals within the museum industry and promote the best standards in knowledge regarding art and artifact handling.

The PACIN-PIC website is our strongest tool for networking with colleagues and sharing information. Through it we can obtain and share current ideas, knowledge and technical advancements, as well as educational and employment opportunities within the museum industry. It has been active for seven years and we are now introducing the first in a series of new additions and changes that will broaden its appeal and usefulness. They are as follows:

- "Basics" addresses a range of topics in which entries will be collaborative in nature.
- "Forum" will be inclusive of a variety of content from technical

research, nuts and bolts (hardware) of what we do and other related articles. Calls for articles on specific topics will be presented and all ideas welcomed.

- "Featured Link" will highlight some of the many valuable resources already available on the web. Each new Featured Link is accompanied by a commentary to help place the subject into the context of the collections-care field.
- "Search Engine" has been added so that, as we grow, you will be able to find information easily.

Questions, comments, and contributions can be directed to Ashley McGrew at ashley@pacin.org or amcgrew@getty.edu.

—Brent Powell, PACIN - PIC Chair,
Head of Preparation, Asian Art Museum

Seeking Paint Samples Used on Modern Outdoor Painted Sculptures

The Modern and Contemporary Art Research initiative at the Getty Conservation Institute has recently launched a project aiming at improving the identification of the paint systems used to paint, repaint, or retouch outdoor painted sculptures. Unlike artists' quality paints, the analytical strategies required for the identification and understanding of industrial paints remains incomplete.

One of the first stages will be to collect as wide a range of paint samples as possible. Due to the rapidly changing paint market with solvent borne systems becoming harder to obtain (especially with the very strict VOC laws in California), we are seeking to obtain samples of paint that conservators, fabricators, studios and/or sculpture park managers may currently have at their disposal that have been used or are intended for use on outdoor works. We would like to get dry samples of these paints - either chunks of dried paint in vials or as films painted out on melinex/glass slides, along with as much information as possible regarding approximate date, manufacturer, brand, color, etc. Ideally, a photograph of the paint can and the sculpture for which it is intended or has already been applied is

Please see the AIC website for grant opportunities and deadlines. Visit www.aic-faic.org

desirable.

We would also be interested in receiving more general information from conservators involved with outdoor painted sculptures regarding what system they commonly use (primers, topcoats, clearcoats, etc;) and the brands and products that they normally favor.

Please contact Rachel Rivenc at rivenc@getty.edu. Thank you in advance for your help.

—Tom Learner

The Durham MA in Conservation Returns

Between 1975 and 2003, some North American students studied archaeological conservation through the Institute of Archaeology in London, Durham University, and Cardiff University. In 2003, the Durham course closed. It has now reopened and is again accepting students to study archaeological conservation.

The new course at Durham, MA in Conservation of Archaeological and Museum Objects, colloquially known as MACAMO, will be a two-year master's course like its predecessor. In the second year there are now two options: either a 9 month placement in the conservation laboratory of an major museum (assessed by a portfolio of work) or 6 months undertaking research in the laboratories at Durham (assessed by an 18,000 word dissertation).

Chris Caple remains the course leader and primary lecturer on the MACAMO course. Jennifer Jones, with over 30 years of archaeological conservation experience, will take on the role of teaching practical conservation skills, while Phil Clogg remains actively involved in teaching analytical techniques.

Information about the MA in Conservation of Archaeological and Museum Objects is available at: www.dur.ac.uk/archaeology, or contact Chris Caple's at christopher.caple@durham.ac.uk.

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ZENTRUM FÜR BUCHERHALTUNG





SPECIALTY GROUPS



ARCHITECTURE

Historic Fasteners Database: At the last annual meeting, the ASG membership voted to help fund the development of a web-accessible database of historic screws and nails by objects conservator Arlen Heginbotham. Historic-Fasteners.com is a searchable database of historic screws and nails that will be accessible to the general public online. Researchers will be able to compare an unknown fastener with detailed technical descriptions and high resolution images of reference fasteners in the database. This resource will be an important compliment to the existing literature on patents and inventions, and will help to refine our understanding of how quickly or slowly new inventions were taken up in different parts of the world. Through its interactive features, the site will educate users in identification of key physical characteristics of a fastener, allowing them to appropriately classify the fastener and understand the technology used in its fabrication. As the database grows in the future, we hope that the pool of users and contributors will expand to include scholars and enthusiasts from many allied fields, both domestically and internationally.

2009 AIC Annual Meeting: The AIC Annual Meeting will be held in Los Angeles, CA from May 19–22, 2009. The ASG session will take place all day Friday, May 22nd. This year's speakers include Ellen Hagsten, John Lee, Tim MacFarlane, John Scott, Richard Wolbers, Batyah Shtrum, Erica Morasset, Lauren R. Hall, Mathew Webster, and Norman R.

Weiss. Please check the registration brochure for a detailed list of the conference papers and speakers.

—Linnaea Dawson
ASG Secretary/Treasurer
dixdawson@mindspring.com



BOOK AND PAPER

2009 AIC Annual Meeting: Both the Archives Conservation Discussion Group (ACDG) and Library Collection Conservation Discussion Group (LCCDG) have finalized their programs for their AIC sessions which are planned to run back-to-back on the morning of May 21. Presenters for the ACDG program will be addressing stabilization of large-scale collections: in particular, repair material, mold remediation, approaches to scrapbooks, and the preservation of photographs. LCCDG's program on New and/or Adaptive Materials, Methods and Technologies Used in the Conservation Treatment and Housing of Library Collections will feature short presentations or "tips" on the removal of excess leather dressing, a method of facing leather spines, soot removal techniques, preparation of adhesive coated repair materials, and the fabrication and use of a handheld surface suction device.

BPG Annual: To the BPG presenters and discussion groups at the AIC meeting in Los Angeles: as you work on your presentations, we urge you to also consider your contribution to the BPG Annual. The Annual serves as postprints for the meeting and you will have until July 1, 2009 to refine your paper or discussion group notes for publication. Papers in the Annual may be of any length from a short technical

tip to a full-length article. If you do not submit a full text of your presentation, the Annual will reprint your abstract as it appears in the AIC meeting Abstracts. Please consult a previous volume of the Annual for format requirements as they are detailed in the Guideline for Authors section at the back. Send submissions to Jim Hinz, BPGA Managing Editor, CCAHA, 264 South 23rd Street, Philadelphia, PA 19103, jhinz@ccaha.org.

Election: The election of BPG officers will be completed March 13. We are electing a new Secretary/Treasurer and Assistant Program Chair. Thanks to those of you who have already voted. Election results will be announced at the BPG business meeting in LA.

From the Treasurer: Although more detail will be given at our annual Business Meeting, the figures for our 2008 end of the year budget report are positive. As in previous years, we have overspent in the areas of "audio-visual" and "food and beverage," though our final balance came out to only \$3,636 over what we had anticipated, which is well covered by our fiscal reserves at this time.

Although some of our reserves are earmarked for pending projects and publications, some funds are available for project development. As usual, however, AIC encourages us to spend down our reserves to one year's expenses. If members have ideas for programs or projects that would benefit the membership, please contact Sue Murphy or Jennifer Hain Teper (jhain@illinois.edu).

—Sue Murphy, BPG Chair
suemurphy2@mac.com



CIPP

CIPP Business Meeting: Please note that on the evening of Tuesday, May 19 from 6:30-8:00 p.m. we will be holding our annual business meeting. The event is free, but you must indicate that you want to attend when you register for ticketed events on your registration form. Please be sure to add your intention to attend as a note at the bottom of the registration form. At the meeting, new officers will be introduced and you will have an opportunity to meet your colleagues. Unlike some business meetings you may have attended, you can actually have fun at ours! I look forward to seeing you in Los Angeles.

CIPP 2.0 Workshop: Spaces are filling up for the workshop on Tuesday, May 19th from 8:00 a.m. to 12:00 p.m. The fee for the workshop is \$59 for CIPP members and \$79 for non-members. Topics will include many business trends for conservators in private practice. Presentations will provide ideas and tips to help you learn how to improve your business efficiency and bottom line in the areas of marketing with AIC, web design, use of databases, and “greening” your practice.

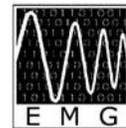
AIC Executive Director Eryl Wentworth and Membership & Marketing Director Ruth Seyler will be speaking with us about marketing with AIC and will be available to answer your questions on the topic. We’ve invited web-designer Will Sherwood to give a presentation on web-design for your business, titled “I need a web site, now what?” With a degree in computer engineering, Mr. Sherwood has been a web designer for 20 years in addition to his experience as an artist/photographer and musician.

Conservator Chris Stavroudis will talk about the advantages of using databases to improve the efficiency of your business record keeping – a definite must for improving the bottom line.

Finally, we will be having a round table discussion about how to make your business more “green.” Members of the round table will include Patricia Silence, Green Task Force Chair and Preventive Conservator at Colonial Williamsburg, CIPP members Mitchell and Katie Powell of MPF Conservation, and architect Kaitlin Drisko of Drisko Studio. We will be discussing our own experiences with going green and the ways individual conservators can increase the sustainability of their practice as well as give their clients guidance in this area. We’re hoping for a lively discussion, with the workshop participants providing some of their own tips and solutions.

Elections: Elections will be held from March 15-April 15. Nominations to the CIPP Board include Gary McGowan and Susan Lunas for Vice-chair, Catherine Williams for Treasurer, Fredrick Vogt for Director, and Jean Marie Easter for Nominating Committee. Nominee statements may be found on the CIPP website. Voting will take place online again this year. Please watch for your ballot in your email box and vote! Please contact Ruth Seyler at (202) 452-9545 or rseyler@aic-faic.org if you did not get an electronic ballot or you need a paper ballot mailed to you. Results will be announced at the Annual Business Meeting. Thank you to Nominating Committee members; Linda Roundhill (Chair), Paul Garbarini, and Scott Haskins, for their hard work in putting together an excellent slate of candidates.

—Victoria Montana Ryan, CIPP Chair
acs@artcareservices.com



ELECTRONIC MEDIA

Online Resources: The EMG board is currently creating an online archive of EMG board files and a communication forum to be available for the current EMG board members and future EMG officers.

Membership and EMG listserv: If you are a new EMG member, please make sure you subscribe to our EMG listserv. The EMG listserv is available for posting questions and comments.

Please check the EMG Website <http://aic.stanford.edu/sg/emg/about/listserv.html> for details. If you are an EMG member, don’t forget to renew your membership. If you are not a member yet, please consider joining us for only \$20 to support our initiatives and programs.

The AIC Guide to Digital Photography and Conservation

Documentation: *The AIC Guide to Digital Photography and Conservation Documentation* is available for sale through the AIC office (\$20 for members and \$ 30 for others). Please visit www.aic-faic.org and download the publications catalogue and ordering form.

—Christine Frohnert, EMG Chair
c.frohnert@verizon.net



OBJECTS

OSG Business Meeting: If you have any agenda items to present at the 2009 OSG Business Meeting in L.A., please forward them to me ASAP. I will add them to the agenda, and will circulate it to members via the OSG



listserv before the meeting. Current items include the standard reports from the Treasurer and various committees, as well as the “grant” question.

I have received a few comments about grants from members since my last column, as well as from the AIC board and staff. There are three preferred options that I will put before the membership for a vote at the meeting:

1. All applications will be REVIEWED AND DECIDED ON by a standing committee of volunteers or OSG officers; or
2. All applications will be REVIEWED by a standing committee of volunteers or OSG officers, with FINAL DECISION MADE by the members at the annual business meeting; or
3. ALL applications will be presented to the members at the annual business meeting for a decision by the membership.

If either 1 or 2 are chosen, we will need to solicit or appoint a review committee – this will also be decided at the business meeting.

Postprints: The 2007 *Postprints* should be in the mail to you before the L.A. meeting. Pat Griffin is still waiting for two revisions from authors and then she will finish final edits and technical editing for the *Occasional Papers*. This volume will be published on the same CD-Rom as the 2008 *Postprints*, which are being edited as I write this.

Elections: Just a reminder that online voting is approaching for 2009 OSG Program Chair. An email will be sent out to all members with a link to cast your electronic ballot. A postcard will be mailed out in March notifying those who would prefer a mail ballot to contact Ryan Wynfield, AIC Membership Coordinator, rwinfield@aic-faic.org.

—Howard Wellman, OSG Chair
wellmanconservation@comcast.net



PAINTINGS

Elections: As I have mentioned in several previous columns, this year we are switching to electronic elections. On March 15 you should receive an electronic ballot. Voting will be open for one month. Please complete your ballot and submit it by April 15. If you do not receive a ballot or if you do not have email access and would like a paper ballot, please contact the AIC office. I would like to thank the nominating committee for finding an excellent slate of candidates and I would like to thank the candidates for agreeing to run. Please vote!

2009 AIC Annual Meeting: This year’s annual meeting will be in Los Angeles from May 19–22. I hope to see many of you there. The advanced rate deadline is March 31, so hurry up and register!

The Painting Specialty Group sessions will take place on Thursday and Friday. The Thursday morning session will be held in conjunction with RATS. Our Program Chair, Sue Ann Chui, has put together a great program, including a special panel discussion about practical image processing, which will be held on Thursday evening. A full meeting brochure and registration materials can be found on the AIC website under “meetings.”

Of course we will once again be hosting our fabulous tips session lunch and we hope many of you can attend. Since the served, sit-down lunch worked so well last year, we decided to do that again this year. If you have a tip you would like to share, please contact Sue Ann Chui at schui@getty.edu. It does not take long to prepare a tip and your colleagues always appreciate them.

There is a small mistake in the Annual Meeting brochure regarding

the PSG tips luncheon and the PSG Business meeting. The brochure implies that the business meeting will take place during the tips luncheon. In fact, the business meeting will be held just before the tips luncheon, not in conjunction with it. *You do not need to pay the \$40 luncheon fee to attend the business meeting.*

PSG Business Meeting: As mentioned above, we will be holding the PSG business meeting just before the tips luncheon on Friday, May 22. In early May I will post the meeting agenda on the PSG listserv. If there are any concerns you would like to see addressed, please send me an email and I will add them to the agenda.

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



PHOTOGRAPHIC MATERIALS

PMG Winter Meeting: Thank you to all who attended the Tucson Winter Meeting and a special thanks to all of the presenters! The meeting was well attended and the talks were informative, ranging from face mounted photographs to the daguerreotype. Our appreciation goes out to Program Chair Lyzanne Gann and Local Arrangements Coordinator Laura Downey Staneff for their hard work in organizing the meeting.

PMG would also like to thank the Center for Creative Photography, Silverpoint Conservation, True Vue, The Chicago Albumen Works, and the Better Image for sponsoring the breaks at the meeting. Their contributions helped considerably to defray the cost of the meeting.

Angels Project: The PMG Angels Project took place at the Arizona Historical Society (AHS). Twenty-eight participants, many of them



students, volunteered their time to help in the re-housing of the AHS negative collections. The project was a huge success, significantly helping the AHS to place these fragile materials into appropriate housing allowing for them to be placed into frozen storage. Thank you to all who participated, including organizers Lyzanne Gann and Laura Downey Staneff, and the FAIC Angels Project Fund whose generous donation of \$1000 helped defray the cost of the project. This Angels Project was the most highly attended in AIC history, once again demonstrating that PMG is made up of an amazing group of people who believe in the power of volunteering their time! If you see one of these Angels Project attendees give them a big pat on the back: Jamie Allen, Caroline Barcella, Barbara Brown, Alice Carver-Kubik, Siobhan Creem, Laura Downey Staneff, Lisa Duncan, Patti Dunbaugh, Thomas Edmondson, Serra Erdem, Mirasol Estrada, Lyzanne Gann, Joanne Guillemette, Anna Jedrzejowski, Saori Kawasumi, Jenny Li, Connie McCabe, Alejandra Mendoza, Chail Norton, Brian Norton, Julianne Pascoe, Sandra Petrillo, Dee Psaila, Juli Sheptytsky-Zall, Sara Shpargel, Rebecca Streiman, Laura Wahl, Gawain Weaver.

In addition, PMG would like to thank Paul Messier Conservation, LLC for sponsoring the Angel's Project Dinner.

Mellon Collaborative Workshop in Photograph Conservation:

Plans are underway for the final Mellon Collaborative Workshop in Photograph Conservation. The focus of this workshop will be the daguerreotype. It will be hosted by the Weissman Preservation Center at Harvard University in July 2009. Please keep an eye on the Conservation DistList for the precise dates, program details, and application deadline. Late in 2009 the Collaborative Workshops will be taken over by AIC, with input from a board composed of members from

the AIC Education Committee, the Photographic Materials Group, as well as Nora Kennedy and Debbie Hess Norris, and funded through a special grant from The Mellon Foundation.

New Officers: The new PMG officers were announced at the PMG Winter Meeting and are as follows: Barbara Brown, Chair; Monique Fischer, Program Chair; Rachel Wetzell, Secretary/Treasurer. They will officially take over at the AIC Meeting in May. Thank you to all of them for volunteering their time.

—Adrienne Lundgren,
PMG Chair, alun@loc.gov



RESEARCH AND TECHNICAL STUDIES

RATS did not submit a column for this issue.



TEXTILES

AIC Annual Meeting 2009: Patricia Ewer and I want to update you on the upcoming AIC annual conference in Los Angeles May 19-22. Please contact me with any items you want to include on the agenda for this year's business meeting.

We have a wonderful roster of speakers including colleagues from overseas that you will not want to miss. For a complete listing of lecture titles and topics, please see the AIC registration brochure. Also Patricia has a delicious dinner lined up for us at Da Pasquale.

The tips session includes presentations on cleaning, digitization and gel poultices by Deborah Lee Trupin, Dr. Shu Hwa Lin, and Maya Naunton.

Next are talks on assessment and examination, covering such topics as the use of digital images in condition assessment and microscopy imaging for documentation by H.R. Williams, J.M. Dulieu-Barton, A.R. Chambers, F. Lennard, D. Eastop, Elena Phipps, and Min Sun Hwang.

This will be followed by a section on issues in cleaning textiles with presentations by Mary W. Ballard, Catalina Hernandez, Susan Heald, Dr. Mohamed Marouf, and M. Saber.

Then, topics in new textile conservation laboratories and storage will be addressed by Patricia Ewer, Harold F. Mailand, Fenella G. France, Sarah Gates, Beth Szuhay, Meredith Montague, Florica Zaharia, Beth McLaughlin, Sara Reiter, and Linda Gottfried.

The session will close with a presentation on waterlogged textiles and a panel discussion of silks from Southeast Asia by Johanna Rivera, Paul Mardikian, Dr. Shu Hwa Lin, Dr. Abby Lillethun, and Dr. Margaret Ordoñez, Professor.

Special mention should also be made of a poster on vacuuming textiles, as presented by Elizabeth C. Shuster and Mary Ballard.

Mary Kaldany reports that the new AIC website is nearing completion which means work on the wiki page for catalogues can begin soon. By the time this comes out the vote on certification will have taken place. I hope that everyone voiced their opinion on this important step in the professional development of our field. And not to beat the drum too much but please consider sponsoring one of your fellow textile conservators for Professional Associate or Fellow of AIC status. We all benefit from fostering professional participation in our field.

—Anne Murray, TSG Chair
anne_murray@msn.com



WOODEN ARTIFACTS

WAG Elections On-line: All WAG officer positions are up for election this year: Chair, Secretary-Treasurer and Program Chair, and WAG will conduct our first on-line elections. The election period will begin on March 17, 2009 and close on April 17. The election will be administered by an independent contractor through the AIC office, and as always, your vote is anonymous.

Please consider your fellow WAG members or nominate yourself to serve as a WAG officer and send nominations to me at muldoonp@si.edu by Sunday, March 15. WAG officer nominations must include the position, candidate's name, and a one paragraph biography.

The WAG Chair and Secretary-Treasurer serve two year terms. The Secretary-Treasurer serves as a primary advisor to the Chair. This year WAG will hold a special election for the Secretary-Treasurer to serve a one-year term. This allows WAG to stagger these two year appointments so we can maintain a working level of institutional memory, and avoid a steeper learning curve for both.

The WAG Program Chair serves for one year and will design the WAG program for the 2010 AIC Annual Meeting. The Program Chair position is a fun and creative way to become involved in WAG. It provides opportunities to interact with many colleagues you might otherwise not get to know.

Quick Updates: Last year WAG initiated an AIC subscription with the Foundation Center, a sophisticated resource for identifying potential sponsors for special project and scholarships. Although there is consensus that the Foundation

Center provides a valuable resource, I received important feedback from our membership about the learning curve involved and support for the idea that AIC hire a professional development officer. I do not think it is widely realized that AIC has a terrific development officer. Our Executive Director, Eryl Wentworth is extraordinarily helpful and supportive of our creative ideas, and an enormous pleasure to work with.

Occasionally I hear reluctance to rely on the "front office" although reluctance conflicts with the idea of hiring an AIC development officer. An important area of concern is whether the AIC office will add a layer of complication, slowing projects, and involving approvals that imply losing a measure of control. These concerns may reflect previous experiences, but the AIC office is currently more cooperative and efficient than it has ever been. Eryl is very responsive and an eager advocate for Specialty Group initiatives.

The only concern Eryl has ever expressed is that AIC be the contact for potential sponsors rather than Specialty Group representatives or individuals. This concern is both practical and legal. It allows AIC to avoid conflicts with our sponsors being contacted by AIC members unknowingly competing with each other, while diminishing AIC credibility and influence among sponsors.

And it resolves the legal issue of signing contracts, since Specialty Groups lack the corporate legal status to sign contracts on behalf of AIC initiatives, because AIC is our non-profit corporation.

Furniture in Italy: After unforeseen and unavoidable delays, the WAG Furniture in Italy initiative is regaining momentum and moving forward.

—Peter Muldoon, WAG Chair
muldoonp@si.edu

Specialty Group Events at the Annual Meeting

Tuesday, May 19

8:00 a.m. - 12:00 p.m.:

CIPP 2.0 Workshop

6:30 - 8:30 p.m.:

CIPP Business Meeting

Wednesday, May 20

7:30 - 8:30 a.m.:

Specialty Group Officer Breakfast

12:00 - 2:00 p.m.:

Objects Luncheon

2:00 - 5:30 p.m.:

Specialty Group Afternoon Sessions:

Book and Paper

Objects

Thursday, May 21

Specialty Group Morning Sessions

Times vary

Book and Paper

Paintings

Research and Technical Studies

Textiles

Wooden Artifacts

6:00 p.m.:

Objects Business Meeting

Specialty Group Dinners & Receptions:

Times vary

Book and Paper

Objects

Textiles

Wooden Artifacts

Friday, May 22

Specialty Group Morning Sessions

Times vary

Architecture

Book and Paper

Electronic Media

Paintings

Research and Technical Studies

Textiles

12:00 - 2:00 p.m.:

Specialty Group Luncheons:

Architecture

Paintings Business Meeting and Tips

Session

Research and Technical Studies

Specialty Group Afternoon Sessions

Times vary

Architecture

Electronic

Paintings

Textiles

Wooden Artifacts

COURSES, CONFERENCES, AND SEMINARS

CALL FOR PAPERS

August 2-7, 2009. Chemistry Solutions, 42nd IUPAC Congress. Glasgow, UK—Contact: www.iupac2009.org.

Oral abstract submissions accepted until January 16, 2009; poster abstract submissions accepted until June 5, 2009.

September 24-25, 2009. Symposium on Principles of Conservation. Royal Academy of Arts, London—Contact: Alison Richmond, a.richmond@vam.ac.uk. Abstracts accepted until March 31, 2009.

September 21-25, 2009. 8th International Conference on Lasers in the Conservation of Artworks (LACONA 8). Sibiu, Romania—Contact: lacona8@inoe.inoe.ro or Andrea Bernath, andrea.bern@muzeulastra.ro

October 11-15, 2009. Interim Conference Metal 2010. Charleston, SC—Contact: ICOMCC.Metal2010@gmail.com, www.icom-cc.org/54/document/call-for-papers-historic-metals-conservation/?id=485. Abstracts accepted until June 1, 2009.

October 3-6, 2010. ICOM-CC WG Glass & Ceramics Interim Meeting at the Corning Museum of Glass. Corning, NY—Contact: hannelore.roemich@nyu.edu until September 15, 2009.

GENERAL

March 5-6, 2009. In and Out Air Strategies: Library, Archives and Museum Preservation Issues: From Climate Change to Microclimate. Bibliotheque nationale de France—Contact: flore.izart@bnf.fr, http://www.ifla.org/VI/4/conf/preservation-four-elements-1_2009-march.htm

April 1-3, 2009. DigCCurr 2009: Digital Curation Practice, Promise and Prospects, Chapel Hill, North

Carolina—Contact: Rachael Clemens, rclemens@unc.edu or www.ils.unc.edu/digccurr2009/

April 5-10, 2009. 12th International Seminar Forum, UNESCO University and Heritage. Hanoi, Republic of Vietnam—Contact: <http://universityandheritage.net>, 2009seminar@fuuh.upv.es

April 6, 2009. “Fire! Recent Trends in Suppression and Mitigation,” presented by the Northeast Ohio Alliance for Response, Akron, OH—Contact: Intermuseum Conservation Association, (216) 658-8700

April 24, 2009. Going Green: Towards Sustainability in Conservation. The British Museum, London, UK—Contact: goinggreen@britishmuseum.org, +44 (0)20 7323 8678

April 30–May 4, 2009. 2009 AAM Annual Meeting, The American Association of Museums, Philadelphia, PA—Contact: aam-us.org

May 29-31, 2009. The Canadian Association for Conservation of Cultural Property, 35th Annual Conference. Vancouver, British Columbia—Contact: Heidi Swierenga, Program Chair, (604) 822-2981, heidiswi@interchange.ubc.ca

June 1-3, 2009. Forum for the Conservation and Restoration of Stained-Glass Windows. New York, NY—Contact: www.forum2009ny.org

ARCHITECTURE

May 18-19, 2009. Workshop: Injection Grouts for the Conservation of Architectural Surfaces. The Getty Center, Los Angeles, California—Leslie Rainer, lrainer@getty.edu, or www.getty.edu/conservation/field_projects/grouts/grouts_component4.html

Please note, individual course listings are now listed once a year in print, but the complete list will be available on the AIC website. Throughout the year, only new courses will be listed, space-permitting.

OBJECTS

March 26, 2009. U.S. National Archives and Records Administration (NARA). 2009 Preservation Conference: Digitizing for Preservation and Access: Past is Prologue—Contact: Richard Schneider, Conference Coordinator, (301) 837-3617, richard.schneider@nara.gov, <http://www.archives.gov/preservation/conferences/2009/>

OBJECTS

April 22, 2009. Gilding and Decorative Surfaces Group Conference: Picturing the Frame: Attitudes, Context and Treatment, from Conception to Consolidation. Royal Institute of British Architects (RIBA), London—Contact: www.icon.org.uk/

PAINTINGS

May 14-15 2009. EU-ARTECH Symposium on Vincent van Gogh and Contemporaries. Amsterdam—Contact: <http://www.icn.nl/nl/actueel/agenda/eu-artech-14-15-mei-2009>.

May 17-18, 2009. Facing the Challenges of Panel Paintings Conservation: Trends, Treatments and Training. The Getty Center, Los Angeles, California—Contact: Sue Ann Chui, schui@getty.edu

COURSES, CONFERENCES, AND SEMINARS



2009 PROFESSIONAL DEVELOPMENT WORKSHOPS

The following courses are presented with funds from the FAIC Endowment for Professional Development, which is supported by The Andrew W. Mellon Foundation and by contributions from members and friends of AIC. Full descriptions and registration forms are available on the AIC website (www.aic-faic.org) or from the AIC Office: (202) 452-9545, ext. 8.

REGIONAL WORKSHOPS

- The Use of Bleaching Treatments in Paper Conservation*, San Francisco, CA, May 11-15
 - Workshops, AIC Annual Meeting, Los Angeles, CA, May 19
 - CIPP 2.0 Workshop; Conservation of Magnetic and Optical Media; Eddy Current Metal Testing for Conservation; Integrated Pest Management for Collections; Networking 101; New Noninvasive Portable Instrument: XRD/XRF; Respirator Fit Testing; Saving Energy in HVAC and Lighting Systems for Conservation Environments; Senior Officials All Hazards Preparedness
 - Plastics and Rubber*, Omaha, NE, June 8-12
 - Paper and Water*, Austin, TX, July 28-31
 - Paper and Water*, Buffalo, NY, August 4-7
 - Reading the Paper: The Identification of Paper, Williamstown, MA, October 1-2
 - Adhesives for Conservation*, Shepherdstown, WV, October 5-9
 - Removal of Pressure-Sensitive Tapes and Tape Stains, Morrow, GA, October 26-30
- *Event is funded in part by a grant from the National Endowment for the Humanities. Special scholarship funds available for U.S. residents. FAIC scholarship application deadlines are May 1 and September 15

CO-SPONSORED WORKSHOPS

- Modular Cleaning System, NYU, March 17-20
- Microscopy for Art Conservators, NYU, June 1-5
- College of Microscopy, IL, 5 courses
- Campbell Center, IL, 6 courses

See the AIC website for complete course listings and FAIC co-sponsored courses.

FAIC ONLINE COURSES

- Professional Responsibility in Conservation, April 16-May 13
- Mitigating Risk: Contracts and Insurance for Conservation, May 28-June 24
- Records and Information Management for Conservation, June 25-July 22
- Establishing a Conservation Practice, July 30-August 26
- Laboratory Safety for Conservation, September 10-October 7
- Marketing for Conservation, October 22-November 18

NEW COURSE OFFERINGS

College of Microscopy
Scanning Electron Microscopy (March 16-20), Infrared Microscopy (March 24-26), Transmission Electron Microscopy (March 24-26), Hair Comparisons and Identification (April 20-24), Fiber Identification (April 27-May 1), Spot Testing for Materials Characterization (May 5-8), Polarized Light Microscopy (May 4-8), Laboratory Safety (June

5), Introduction to the Microscopical Identification of Conservation Materials (June 8-12). Note: FAIC scholarships available for select courses through AIC; call Lois Gelwicks, Registrar, at (630) 887-7100 for information. Westmont, IL—Contact: (630) 887-7100; courses@collegeofmicroscopy.com; www.collegeofmicroscopy.com

The Conservation Center Institute of Fine Arts, NYU
The Modular Cleaning Program: A

Systematic Approach to Cleaning Artworks (March 17-20, 2009); Microscopy for the Conservator of Art and Artifacts: McCrone Research Institute Certified Course for Conservators and Art History Professionals (June 1-5, 2009). Note: these workshops are made possible by support from the Foundation of the American Institute for Conservation of Historic & Artistic Works (FAIC). New York, NY—Contact: Anuja Butala at (212) 992-5888 or anuja.butala@nyu.edu

POSITIONS, INTERNSHIPS, AND FELLOWSHIPS

THE CLEVELAND MUSEUM OF ART

Assistant/Associate Objects Conservator (Temporary)

This full-time temporary position is available immediately and will conclude upon the completion of a major reinstallation project; approximately 2012. Under supervision of the Objects Conservator, this position will work closely with various departments and staff members to examine, document, and treat the Museum's vast and diverse object-based collections as well as aid in the reinstallation of works of art as the museum begins to reopen.

The candidate must have a Bachelor's degree and completed graduate-level of study in Conservation, or equivalent education and training, with at least two years of work experience.

Salary will commensurate with experience.

For Consideration: Send resumes or other relevant credentials to:

E-Mail: resume@clevelandart.org
Human Resources
The Cleveland Museum of Art
11150 East Boulevard
Cleveland, OH 44106-1797
No Phone Calls Please

EOE/M/F/D/V

LOS ANGELES COUNTY MUSEUM OF ART

Andrew W. Mellon Postdoctoral Fellowship in Conservation Science

Salary will commensurate with experience.

The Conservation Center of the Los Angeles County Museum of Art is offering a three-year postdoctoral fellowship for a scientist interested in contributing to the field of art conservation. This position reports to the Senior Conservation Scientist and works collaboratively with all conservation staff and curatorial departments.

The Conservation Center's research laboratory enjoys a reputation for excellence in both service and research and has a long tradition of providing training opportunities for young conservators

and scientists interested in the care and preservation of paintings, works of art on paper, textiles, and three-dimensional objects. The fellow will be expected to participate in the daily activities of the laboratory including the technical examination of works of art using modern analytical equipment in the Center's Research Laboratory (FTIR, XRD, XRF, UV-VIS, PLM, MFT and TL) while engaging in at least one significant research project on the conservation of modern materials in museum collections. This project will seek to elucidate the mechanism of decay of specific modern materials in the museum's collections while offering potential preservation strategies. All research will be carried out collaboratively with LACMA conservators and scientists and may include scientists from outside LACMA. Publication in the professional literature and participation in symposia, seminars and other professional meetings will be strongly encouraged.

Eligibility: Candidates must have a PhD in one of the physical sciences. A strong background in materials science or polymer science is desirable. The degree must have been obtained within the last five years. Previous experience in a museum environment is not required, but a strong interest in the visual arts is important. Excellent written and verbal skills as well as an interest in collaborative and multi-disciplinary research are essential.

Terms: The postdoctoral fellowship will be three years beginning Spring/Summer, 2009 and ending in 2012. Fellows will be provided an annual stipend including benefits starting at \$56,240 with an annual cost of living increase. Fellows will also be provided a travel allowance and program funds for the purchase of equipment and supplies.

Application Procedure: Interested candidates must submit the following materials:

- A curriculum vitae including biographical information and list of publications
- A cover letter containing a short statement of the candidate's interest and intent in applying for the fellowship
- Three letters of recommendation

Application Deadline: Completed applications must be received no later than February 1, 2009. Applications should be mailed to: Adam Kaplan, Human Resources, Los Angeles County Museum of Art, 5905 Wilshire Boulevard, Los Angeles CA 90036. CC: Mark Gilberg, Director, Conservation Center, Los Angeles County Museum of Art, 5905 Wilshire Boulevard, Los Angeles CA 90036.

Questions may be addressed to: Dr. Frank Preusser, Senior Conservation Scientist, Conservation Center, Los Angeles County Museum of Art, 5905 Wilshire Boulevard; Los Angeles, California 90036; 323 857-6269; fpreusser@lacma.org.

Directory Corrections

The telephone numbers for **Mary W. Ballard**, **Rose-Marie Ballard**, and **Rachel Wetzel** were listed incorrectly in the 2009 Directory. The correct numbers follow:

Ballard, Mary W.
(301) 238-1210

Ballard, Rose-Marie
(207) 563-2925

Rachel Wetzel
(215) 545-0613

Johanna Rivera Diaz's address was listed incompletely. Her complete address is:

Johanna Rivera Diaz
Warren Lasch Conservation Center
School of Materials Science and Engineering
Clemson University
1250 Supply Street, Bldg 255
North Charleston, SC 29405

Pamela Hatchfield's address was listed incompletely. Her complete address is:

Pamela Hatchfield
Robert P. and Carol T. Henderson Head of Objects Conservation
Museum of Fine Arts Boston
465 Huntington Avenue
Boston, MA 02115
(617) 369-3467

The email address for **Marjorie Jonas** was listed incorrectly. Her correct email address is: marjoriej@nyc.rr.com

We extend sincerest apologies to Mary, Rose-Marie, Rachel, Johanna, Pamela, and Marjorie.



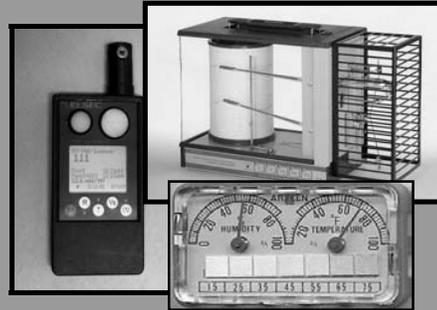
315 East 89th Street
New York, NY 10128

(212) 722-6300 tel
(212) 427-6726 fax

information@apsnyc.com
consulting@apsnyc.com

Environmental Monitoring Equipment

- Arten Thermohygrometer
- Isuzu Hygrothermograph
- Psychrometer
- Elsec UV Monitor
- Visible Light Meter



Microclimate Preservation Systems

- RHAPID Pak, Pre-conditioned Silica Gel
- Scavenger Pollution Control Sheet

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