

# PATRICK RAVINES

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## **EDUCATION**

Certificate in Library & Archives Conservation - May 1985, Columbia University, New York City, New York

Master of Library Science - May 1985, Columbia University, New York City, New York

Master of Science, Chemistry - Aug 1981, University of Wisconsin, Milwaukee, Wisconsin

Bachelor of Science, Chemistry - Aug 1978, University of Washington, Seattle, Washington

## **CONSERVATION/PRESERVATION EXPERIENCE**

### Associate Professor and Director

Art Conservation Department

Buffalo State – The State University of New York

Buffalo, New York 14222

Dates: July 2010 to present

### Senior Research Fellow & Project Conservator

George Eastman House International Museum of Photography & Film

Kay Whitmore Conservation Center

Rochester, New York 14607

Dates: September 2007 to June 2010

### Andrew W. Mellon Fellow

Advanced Residency Program in Photograph Conservation

George Eastman House International Museum of Photography & Film

Rochester, New York 14607

Dates: September 2005 to August 2007

### Chief of the Conservation Office

Baha'i World Centre, Haifa, Israel 31001

Dates: April 1993 to August 2005.

### Book and Paper Conservator

Conservation Office, Baha'i World Centre, Haifa, Israel.

Dates: October 1986 to April 1993

## **CHEMISTRY EXPERIENCE**

Research Specialist, Department of Chemistry, University of Wisconsin-Milwaukee. Designed and performed experiments to characterise molybdenum supported zeolites and their catalytic activity using EPR & FTIR. (10/81 - 4/82)

Graduate Research Assistant, Department of Chemistry, University of Wisconsin - Milwaukee. Physicochemical research on the behaviour of mixtures of 1:1 electrolyte solutions using the Cube-Root Field Dielectric Gradient model.

(1/79 - 8/81)

Teaching Assistant, Department of Chemistry, University of Wisconsin - Milwaukee. Taught introductory and first year chemistry courses. Co-ordinated discussion and laboratory sections.

(9/78 - 8/80)

## **PUBLICATIONS & PRESENTATIONS** (since 2005)

- "Multimodality Imaging of Daguerreotypes and Development of a Registration Program for Image Evaluation" with Karl G. Baum, Nicholas A. Cox, Shawn Welch, & María Helguera. *Journal of the American Institute for Conservation*, in press.
- "Surface characterization and monitoring of surface changes after conservation treatments of silver gelatin photographic papers using confocal microscopy," with Jiuan-jiuan Chen, Christian M. Wichern. *Scanning: the Journal of Scanning Microscopies*, 32/3, 122-133. DOI: 10.1002/sca.20186. Published Online: Jun 21 2010 8:29AM, <http://www3.interscience.wiley.com/journal/123541843/abstract> *Publication*
- "A registration open source program for images and photographs," with Maria Helguera and Karl Baum. Presentation at IP4AI4: The Third International Workshop on Image Processing for Art Investigation, 27 May 2010, Museum of Modern Art. *Presentation*
- "Analysis and Restoration of Daguerreotypes Using Cluster Computing," Technical Report 954, with Paul A. Ardis, Ross Messing, Xiaoqing Tang, Christopher M. Brown, Randal C. Nelson & Ralph Wiegandt. TR954, Computer Science Department, University of Rochester, January 2010. Universal URL: <http://hdl.handle.net/1802/9343> *Publication*
- "Digital analysis and restoration of daguerreotypes" with X. Tang, P. A. Ardis, R. Messing, C. M. Brown, R. C. Nelson and R. Wiegandt. In *Proceedings of the IS&T/SPIE Electronic Imaging Conference*, San Jose, California, January 2010. *Presentation and publication*
- "Applications of SIMS and FIB SIMS in conservation science." with McPhail, D., Chater, R., Yakolvlev, N., P. 2009. Presentation at SIMS XVII, Toronto, 14-18 September 2009. *Presentation*
- "The Daguerreotype under High Magnification: An Ultra-High Resolution SEM Study of a 19th Century Daguerreotype's Surface Nanostructure." with West, A., Minter, J., and Gutierrez, R. 2009. International Materials Research Congress, Cancun 2009, & 2nd Latin-American Symposium on Physical and Chemical Methods in Archaeology, Art and Cultural Heritage Conservation & Archaeological and Arts Issues in Materials Science, IMRC 2009. On CD.
- "Silver gelatin photographic paper surfaces: Topography changes after humidification & flattening conservation treatment regimens monitored with confocal topometry systems" with Christian M. Wichern and Jiuan-juan Chen, First International Conference on Surface Metrology, Worcester Polytechnic Institute, Worcester, Massachusetts, 26-28 October 2009. *Presentation & extended abstract in conference papers*
- "High resolution SEM, FIB-SEM & TEM daguerreotype research", Mellon workshop on daguerreotypes, held at the Weissman Preservation Center,

Harvard University Libraries, Cambridge, 19-23 October 2009. *Presentation on 21 October 2009*

- "Surface metrology applied to daguerreotypes", Mellon workshop on daguerreotypes, held at the Weissman Preservation Center, Harvard University Libraries, Cambridge, 19-23 October 2009. *Presentation on 20 October 2009*
- "Hands-On Workshop on Accurate Elemental Non-destructive XRF", invited speaker with Dr. Bruce Kaiser held at the Edificio Carolino, Benemerita Universidad Autonoma de Puebla, Puebla, Mexico, 26 – 28 August 2009. [www.ifuap.buap.mx/Workshop-XRF/home.html](http://www.ifuap.buap.mx/Workshop-XRF/home.html) *Presentation*
- "The Daguerreotype Under High Magnification: A UHR SEM Study of the Nanostructure of the First Image" with Anne West, Rob Gutierrez, John Minter, Steve Stoker & Ralph Wiegandt. XVIII International Materials Research Congress: Symposium 3 - LASMAC 2009, 2do Simposium Latinoamericano sobre Métodos Físicos y Químicos en Arqueología, Arte y Conservación del Patrimonio Cultural, and Archaeological & Art Issues In Materials Science, Cancun, Quintana Roo, Mexico, 16 – 21 August 2009. [www.mrs-mexico.org.mx/webimrc09/inicio.htm](http://www.mrs-mexico.org.mx/webimrc09/inicio.htm) *Presentation*
- "The Preservation of the Baha'i Sacred Writings", *Baha'i Studies Review* 15, 2009, pp. 133-148, doi:10.1368/bsr.15.133/7.
- "The Art and Science of the Daguerreotype: Harnessing the Photon the Old Fashioned Way", invited presentation with Ralph Wiegandt, New York State Section, American Physical Society Meeting, 17 – 18 April 2009, University of Rochester. <http://nyssaps.org/program.htm> *Presentation*
- "Recent Research on Daguerreotypes at George Eastman House" with Ralph Wiegandt. Topics in Preservation Science lecture series, Library of Congress, Washington, D.C. October 23, 2008, 2:00 - 3:30 p.m. West Dining Room, 6th floor, James Madison Building. [www.loc.gov/preserv/tops/weigandt\\_ravines.html](http://www.loc.gov/preserv/tops/weigandt_ravines.html) *Presentation*
- "Confocal White Light Microscopy Applied to the Study of Photographic Surfaces" Inter/Micro 2008– McCrone Research Institute annual international conferences on microscopy, Millennium Knickerbocker Hotel, Chicago, 7-11 July 2008. [www.mcri.org/home/section/101-102-362/inter-micro-2008-conference-schedule](http://www.mcri.org/home/section/101-102-362/inter-micro-2008-conference-schedule) *Presentation*
- "Optical and Surface Metrology Applied to the Study of Photographic Surfaces" OCT4ART - Optical Coherence Tomography for Examination of Art, International conference and workshop held at Nicolaus Copernicus University, Torun, Poland, 3-5 July. [www.fizyka.umk.pl/~oct4art/](http://www.fizyka.umk.pl/~oct4art/) *Presentation*
- "Optical and Surface Metrology to Study Cultural Heritage: Confocal Topometry Applied to the Surface Study of Photographic Images" with Christian M. Wichern and Jiuan-jiuan Chen. *In Art 2008 9th International Conference on Non-destructive Investigations and Microanalysis for the Diagnostic and Conservation of Cultural and Environmental Heritage*. Jerusalem, Israel: ISAS International Seminars, 2008. CD-ROM. [www.isas.co.il/art2008/](http://www.isas.co.il/art2008/) Also published in e-Journal & Database of Non Destructive Testing, Document ID: 6086, [www.ndt.net/search/docs.php3?MainSource=-1&id=6086](http://www.ndt.net/search/docs.php3?MainSource=-1&id=6086) *Presentation and publication*
- "Advancements in Daguerreotype Research using Confocal & Electron Microscopy," Photographic Materials Group (PMG), AIC Denver, April 2008. *Presentation*
- "Optical Metrology & Conservation: Confocal Microscopy Applied to the Surface Study of Photographic Images," Research and Technical Studies (RATS), AIC Denver, April 2008. *Presentation*
- "Surface characterisation of daguerreotypes with the optical metrological

- technique of confocal microscopy” with Ralph Wiegandt and Christian M. Wichern. *Surface Engineering*, 2008, **24** (2) 138-146. *Publication*
- “Surface analysis of daguerreotypes with the optical metrological technique of confocal microscopy” with Christian Wichern and Ralph Wiegandt. In *21<sup>st</sup> International Conference on Surface Modification Technologies, Arts and Surfaces Symposium (SMT XXI)*, Paris, 24 – 25 September 2007. *Presentation and publication*
  - “Optical and surface metrology applied to daguerreotypes” with Ralph Wiegandt, Richard Hailstone and Grant Romer. In *Conservation Science 2007: Papers from the Conference held in Milan, Italy 24–26 May 2007*. London: Archetype Publications, 131-139. *Presentation and publication*
  - “A Reversible Mounting Technique for the Display of Oversized Contemporary Photographs”, with Jiuan-jiuan Chen (GEH), Ralph Wiegandt (GEH), Rosina Herrera (GEH), Sylvie Pénichon (Amon Carter Museum), and Marsha Sirven (Atelier de restauration et de conservation des photographies, Paris). Joint meeting of AIC Photographic Materials Group (PMG) & ICOM-CC Working Group on Photographic Documents, 22–24 February 2007, George Eastman House International Museum of Photography and Film, Rochester, New York.  
<http://aic.stanford.edu/sg/pmg/meeting07.html> *Presentation*
  - “The Analysis of Acacia Gums using Electrophoresis” with Safa Motlagh, K.A. Karamallah and Qifeng Ma. *Food Hydrocolloids*, Vol 20, no 6, 848-854, 2006. *Publication*
  - “The Conservation and Restoration of a 19<sup>th</sup> Century Calligraphy of a Baha’i Text in Arabic” with Shingo Ishikawa. *Restaurator* 26:203-215, 2005. *Publication*
  - “3D Imaging: A tool for all aspects of Visual Documentation in Conservation,” ICOM-CC 14th Triennial Meeting ‘Our Cultural Past – Your Future!’ Working Group on Documentation, The Hague, Netherlands 12 – 16 September 2005. *Poster*

### **MISCELLANEOUS ACTIVITIES**

- Co-chair for the first International Conference on Surface Metrology, Worcester Polytechnic Institute, Worcester, Massachusetts, 26-28 October 2009.

### **PROFESSIONAL ASSOCIATIONS**

The American Institute for Conservation (AIC)

The International Institute for Conservation (IIC)

The International Council of Museums (ICOM), Conservation Committee, Graphic Documents and Photographic Documents Working Groups

The American Chemical Society (ACS)

### **PERSONAL**

Languages (other than English)

- Spanish (Peruvian) - fluency in speaking, reading and writing
- Hebrew – medium fluency in speaking, basic reading and writing skills
- German - basic speaking, reading and writing skills