



# Newsletter

Of the

## New York Microscopical Society



30 North Mountain Avenue, Montclair, New Jersey 07042-1841

September 2007

N.Y.M.S. (973) 744-0043

Volume 1 Number 7

## Meeting Announcement

### New York Microscopical Society, 2007 Fall Lecture Series

#### The Preparation of Petrographic Thin Sections for Microscopic Study Or How to See Through a Rock

**Joe Orosz, Consulting Engineer; NYMS Board Member; and Curator of Mineral Science at the Franklin Mineral Museum**

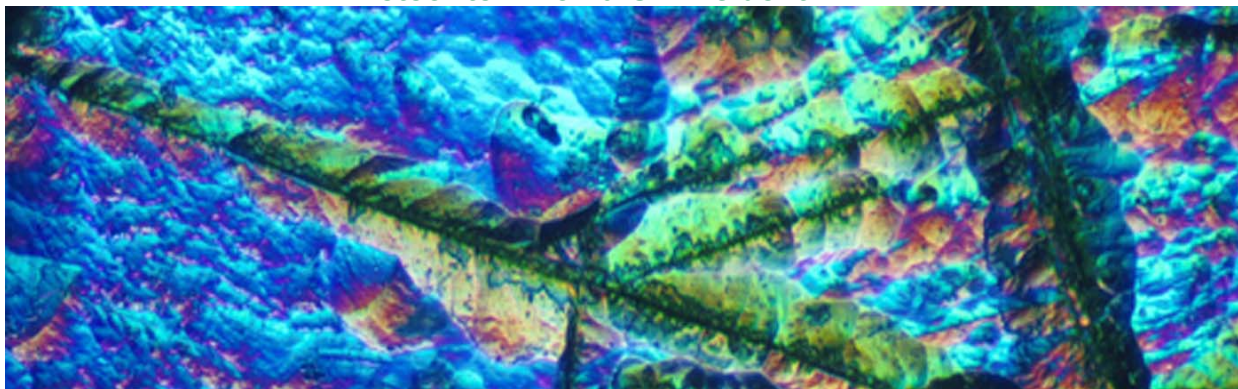
**Thursday, September 20<sup>th</sup>, 2007, 7:30 pm  
American Museum of Natural History, People Center,  
New York, NY**

The first implementation of thin sections for the microscopic study of rocks is credited to H. C. Sorby circa 1857. Many of our early NYMS members made thin sections both professionally and for their own pleasure. Petrographic thin sections are used to help identify both rock types and constituent mineral species as well as display their textural relationships. The methodology for thin section preparation has remained essentially the same for 150 years; however, the

technology has changed dramatically. Diamond impregnated saw blades have replaced abrasive slurry-coated wires and wheels. Slides illustrating current methods for thin section preparation will be presented. Thin sections of rocks from the Franklin, New Jersey area, studied under the Polarized Light Microscope (PLM) will be shown and discussed. Thin section studies using a Scanning Electron Microscope (SEM) equipped for Energy Dispersive Spectroscopy (EDS) are useful when ultimate specie identification requires quantitative elemental analysis. A thin section SEM/EDS case study will be presented.

**NYMS Members and their guests are welcome to join the speaker for dinner (\$25.00 all inclusive) at 5:45 p.m. at Calle Ocho (<http://www.calleochonyc.com/>), 446 Columbus Ave, between 81<sup>st</sup> and 82<sup>nd</sup> streets. Please reserve your place(s) with Angela Klaus by noon on Sept. 19<sup>th</sup>. Angela can be contacted by email ([avklaus2@yahoo.com](mailto:avklaus2@yahoo.com)) or by phone (201-988-6251).**

**Meteorite – Nomarski Incident D.I.C.**



***A Final Farewell to Two Friends of Microscopy..., see page 3***

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**The Mission of the New York Microscopical Society** is the promotion of theoretical and applied microscopy and the promotion of education and interest in all phases of microscopy.

### **Dues and Addresses**

Please remember to mail in your  
**Dues to Mary McCann, Membership  
Chair** (see this page for address).

**Annual \$30**  
**Supporting \$60**  
**Life \$300 (payable within the year)**  
**Corporate \$175 (includes one  
advertisement in NYMS News)**

**To avoid missing notices:**  
**Notify Mary if you have changed your  
address, phone or email.**

### **Alternate Meeting Notifications**

Please note that due to time constraints in publishing, some meeting notices may be available by calling Mel Pollinger at 201-791-9826, or by visiting the NYMS website.

**Buy and Read a Good Book on Microscopy.**

## ***A Final Farewell to Two Friends of Microscopy...***

### **Beatrice Cowan**

Beatrice Cowan passed away during the week of August 18, 2007 in Memphis, TN after failing health and a series of strokes. Beatrice was a long-time NYMS member and past secretary of NY Photographic Historical Society (later, American Photographic Historical Society). Her late husband was a past president of NYMS, and their son, Dr. George Cowan was also a member of NYMS. A memorial service for friends in the NYC area is being planned for October.

Reported to NYMS by David Sterner

### **Leonard Lessin, FBPA, FNYMS**

Len (Leonard) Lessin died peacefully at his home on Wednesday, August 22, 2007. He was 78. He had been treated for non-Hodgkin's lymphoma since 1999, and in March this year he was diagnosed also with pancreatic cancer. Throughout his illness he was under the care of an oncologist and recently also the hospice program associated with Continuum Care. In addition to his wife, Len leaves behind their son, Daniel and his wife of 37 years, Donna and a four-year-old granddaughter. Len was put to rest in Chicago, his home town.

Len was a longtime Fellow of both the NYMS and the BioCommunications Association (BCA), was associated for many years with Peter Arnold, Inc. Len co-authored a children's science book, "What Do You See and How Do You See It?", for which he provided the illustrations. He shared his expertise generously with NYMS with great dedication and good humor while undergoing diagnostic medical tests, then chemotherapy. Len contributed, to a NYMS Newsletter, a scholarly article on the history of microphotographs. We, who knew Len Lessin, will miss him. He was a gentleman and an optimist and a professional photomicroscopist. His zest for life was enormous.

Reported to NYMS by Jean Portell

### **Digital Imaging with the Microscope Thursday evenings at Montclair**

Many people with an interest in photography have made the switch from film to digital image sensors. In scientific photography the reasons for doing so are even more compelling than they are in general photography.

Indeed, whenever there is shoptalk about microscopy the topic tends to include digital imaging.

We like to test the waters if there is a need and interest for a micrographics group within NYMS. We have the necessary microscopes, cameras, computers and are eager to put them to use for the benefit of NYMS members.

On the evening of October 18, 25 and Nov. 1<sup>st</sup>, we will offer a series of informal workshops at Evergreens in Montclair, NJ. An agenda will be available by email. If you wish to attend, give us a call ahead of time. We can accommodate up to six participants. If you cannot come, we still like to hear from you if you think this is a good idea and you have any suggestions for the future.

Jan Hinsch, [cjhinsch@optonline.net](mailto:cjhinsch@optonline.net) 201.573.9851

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### **2007 McCrone Microscopy Meeting**

Article by Pete Diaczuk

This year the annual microscopy meeting sponsored by McCrone Research Institute ([www.McRI.org](http://www.McRI.org)) took place at the Knickerbocker Hotel in Chicago. NYMS member Jan Hinsch performed double duty between minding the Leica table and giving presentations during the scientific session. Several people from John Jay College contributed with presentations as well.

Presentations by:

Jason Beckert: "What's Your Handle? A Brief Look at the Wood Used in Common Hand Tool Handles" (MicroTrace, LLC)

Kelly Brinsko: "Identification of Synthetic Fibers by Eutectic Melting Point with p-Nitrophenol" (McRI)

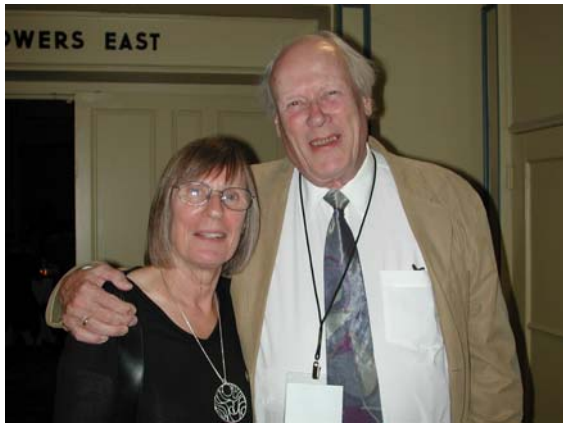
Jack Hietpas: "Utilizing Detrital Heavy Minerals for Geochronology and Source Rock Prediction"

Peter Diaczuk: "Evaluation of Kevlar Fibers as a Bullet Recovery Medium"

Jan Hinsch: "New Directions in the Design of Polarized Light Microscopes" (Leica Microsystems)

and "Oblique Illumination: A Forgotten Technique?"





Weibke and Jan Hinsch at the 2007 McCrone Microscopy Meeting



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Summer 2007 Mystery photo



Catadioptric telescope, view from the front  
Winner is Weibke Hinsch

The catadioptric telescopes (Schmidt-Cassegrain and Maksutov-Cassegrain) are "folded-optic" versions of the simple Newtonian reflecting telescopes which use a single parabolic mirror to capture starlight and reflect it to an image-forming eyepiece via a front surface mirror. In the catadioptric folded optic system, two parabolic mirrors are used to re-reflect or fold the light, thereby increasing the effective focal length of the system before the light is reflected to the image forming eyepiece. **The Vickers-A.E.L. microscope objective is also a catadioptric system (two parabolic mirrors), although it is constructed to illuminate a subject with transmitted and incident light from a single transmitted light source.**



Mystery Photo – Do you think you know what it is? Email or phone me your answer. > Mel

Got something you want published in the Newsletter?

- Technical article
- Images
- For sale
- Wanted to buy
- Any microscopy-related item

Write, call or send an email message to:  
201-791-9826 or  
pollingmel@verizon.net  
or  
Mel Pollinger  
18-04 Hillery Street  
Fair Lawn, NJ 07410

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**Regarding how you can receive future newsletters, you may choose one of the following methods:**

1. Regular mail, gray scale images: Do nothing. Color may continue.
2. Email with full color images, pdf file: Needs your active email address.