



# Newsletter

Of the

## New York Microscopical Society

1 Prospect Village Plaza  
(66F Mt. Prospect Avenue)  
Clifton, New Jersey 07013-1918



April 2009

N.Y.M.S. (973) 470-8733

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### 7<sup>th</sup> Annual Microscope Day at John Jay

Thursday, April 23rd, 2009  
BMW Building, 555 W. 57<sup>th</sup> St., New York, NY  
Room 616B

Presented by New York Microscopical Society and John Jay College

Please join us for this event, which begins at 11 AM and concludes at 5 PM. It is an informal event where speakers will give presentations with ample time in-between to interact with other attendees and speakers.

This year's speakers and their presentation titles (exact order of speakers is subject to change):

11:00 AM Opening Remarks: Peter Diaczuk, President, New York Microscopical Society  
11:15 Gerard Petillo – *The White Light Interferometer-will it help firearm/tool mark examiners meet Daubert criteria?*  
12:00 Martin Eber – *Whole Slide Imaging*  
12:45 Lunch  
1:45 Jack Hietpas – *Determination of the Woods used in Gun Stocks*  
2:30 Nicholas Petraco – *World Trade Center Dust*  
3:15 Dr John A. Reffner - *What can we learn using polarized light for spectroscopy?*  
4:00 Peter Tytell - *The Polar Bears Secret*  
4:45 Closing remarks: Peter Diaczuk

Poster presentation by Vanessa Martinez - *Discrimination of Glass Samples by Infrared Microprobe Analysis with Diamond Attenuated Total Reflection*

Dave Zweig of Zarbeco will have a table displaying and demonstrating his newest digital microscopes (the MiScope) and attachments.

Bob Luce will have a table displaying and demonstrating the latest Leica microscopes.

Marty Eber will have literature describing the latest instruments and microscopes from Olympus.

Refreshments to be served.

This event is free and open to all those interested in microscopy. Photo ID necessary for entry into building.

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## **N.Y.M.S. BOARD OF MANAGERS**

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### **Archivist & Associate Curator**

John Scott

**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).

Junior (less than 18 years old) \$10  
Annual \$30 (students  $\geq 18$  years old \$20)  
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.***

**Antique Microscope (NYMS collection) shown  
in the upper right corner of page one:**

**R. & J. Beck, Binocular Brass Microscope, 1865 or  
later.**



R. & J. Beck are the nephews of J.J. Lister who showed the way to achromatic correction of microscope objectives. This microscope in the NYMS collection owes its distinctive appearance to the design of the base. Instead of an inclination joint the stand is connected to the base by a triangular hinge, which permits the tube to be locked in one of four positions:

vertical, inclined (2 positions) or horizontal. It has all of the important features of a state of the art microscope of the period, such as rack and pinion drive for coarse and a micrometer spindle for fine focus.

The NYMS instrument is fitted with a binocular tube of Wenham design. A prism splits the objective pupil into two halves and directs one to the left eye and the other to the right. With this arrangement stereoscopic vision is possible with moderate power objectives.

In his book of 1865 "The Achromatic Microscope" Richard Beck devotes 15 pages to this instrument, which he calls the "Popular Microscope". If we accept 1832 as the earliest date of the achromatic microscope objectives then 33 years separate our instrument from that historic date. During this brief period the development of the compound microscope advanced further than in its entire previous history. The objective aperture increased 5-fold; adjustable correction for cover glass thickness variations is introduced. So are condensers for bright and dark field illumination.

Richard Beck's book is a fascinating inventory of the technology of the microscope and micro technique in 1865. With his microscope next to the text this scholarly account becomes an adventure.

Article by Jan Hinsch, photo by Mel Pollinger

**Meeting of 29-March-2009**



A view back in time through the NYMS Culpeper microscope.

**2009 Nikon Small World**

The deadline for entering the 2009 Nikon Small World competition is approaching. Entries for the contest can be uploaded through a web browser directly to the MicroscopyU servers at the following URL:  
<http://www.microscopyu.com/smallworld/registration/entrypage1.aspx>

The deadline is Friday, May 1st, 2009.

**BioBus**

Our speaker on May 24 will be Dr. Benjamin Dubin-Thaler, a new member of NYMS. He is a cell biologist



who divides his energies between doing research with colleagues and driving the BioBus, a lab-on-wheels, to public schools in order to provide

students with extra science classes. Ben, shown in photo with Wanda, relies on volunteers like Wanda, shown in one, to help teach aboard the BioBus. The BioBus is a 'green' lab, outfitted with solar panels, a windmill, and donated pre-used microscopes. It will park near Grand Central Station and be on view to the public on Friday & Saturday, April 24 & 25. ([www.biobus.org](http://www.biobus.org))

**Article&Photo by Jean D. Portell**

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## Email for the Newsletter

For those members having access to email, it is a distinct advantage to receive your newsletters electronically. For one

### Email Notices

We need your active email address if you wish advance notification of special NYMS events.

thing, email newsletters allow those members to receive additional material that cannot be sent by a standard newsletter paper mailing. NYMS has many old issues of newsletters, technical papers, images, etc. that are presently being scanned and available by email along with the newsletter. To try and send these extras by paper mail would be a financial and production disaster. If you receive email, electronic copies are definitely to your advantage. It is easy to convert from paper to email; just write to me at [pollingmel@verizon.net](mailto:pollingmel@verizon.net) and I will do the rest. You'll be glad you did.

Mel Pollinger

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## Answer to March 2009 Mystery Photo



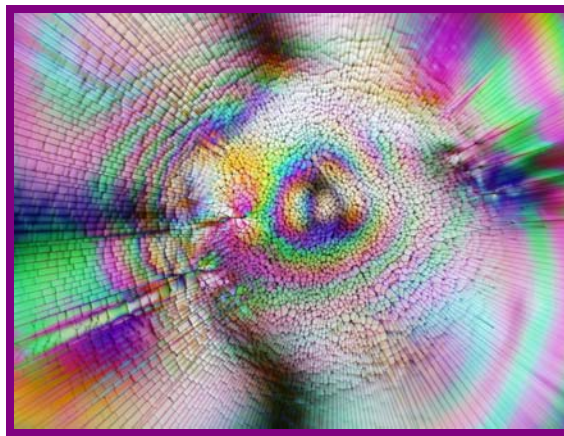
Complex crystal of the mineral calcite. Did you guess correctly?

### Errata:

The March answer, as supplied by the photographer, to the February 2009 mystery photo was reported to me by Wiebke Hinsch to be in error. Wiebke identifies the leaf to be that of Sweet Gum or Sassafras.

## Donation

A special thanks to Fred Smokay for his donation of his NYMS Newsletter collection for our back-issue archives. Fred's collection goes back to December 1975



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

## Lapel Pins Are Here



The Society's long awaited lapel pins will be available to members in about two weeks. The pins are \$10ea plus \$2.00 S&H if mailed. The pin is 22mm in diameter, antique bronze over brass with a deep blue enamel inlay.

### Send checks to:

New York Microscopical Society  
c/o Mel Pollinger  
18-04 Hillery Street  
Fair Lawn, NJ 07410

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**Need a Microscope or part?**  
**Visit NYMS' Surplus Department when you visit NYMS at our new home in Clifton, New Jersey.**

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**Bernard Friedman Memorial Workshop**  
**Polarized Light Microscopy**  
**May 2, 9, 16 & 23, 2009**

Got something you want to sell, trade or publish in the Newsletter and/or on the website? Write, call or send an email message to: 201-791-9826 or [pollingmel@verizon.net](mailto:pollingmel@verizon.net) (images accepted)

or

Mel Pollinger, Editor  
NYMS Newsletter  
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Regarding how you can receive future newsletters, you may choose one of the following methods:

1. Regular mail, folding may damage images: Do nothing.
2. Email with undamaged full color images, pdf file: Needs your active email address.