



Newsletter

Of the

New York Microscopical Society

1 Prospect Village Plaza
(Formerly 64-66F Mt. Prospect Avenue)
Clifton, New Jersey 07013-1918



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Meeting Announcement For New Location

New York Microscopical Society 2008 Fall Lecture Series

“About Microscopes and Diatoms”

**Jan Hinsch, Formerly Head of Microscopy
Lab at Leica**

Sunday September 28th, 2008, 2:00 pm
New York Microscopical Society, in **Clifton,
New Jersey**

Diatoms fascinate microscopists. Almost everyone is attracted to the formal beauty of these microstructures. Moreover, to the person with an interest in the physics and the resolution limits of the microscope the silica shells of diatoms with their repetitive, ordered fine structure are suitable objects for various kinds of enlightening diffraction experiments. This talk reviews Abbe's theory of image formation and uses diatoms to demonstrate the practical decisions the microscopist has to make to balance resolution and contrast.

Progress in microscope optics and illumination methods, such as DIC, often has been demonstrated first on diatoms. I like to reference some of these techniques in my talk with emphasis on Reflection Interference Contrast (RIC).

To the diatomist this is a relatively new technique that, under favorable circumstances, enhances contrast and thereby permits to achieve resolution close to the theoretical limits imposed by the lens aperture and the wavelength of light. RIC images are also more representative of the surface of diatoms than are transmitted light images and in this respect resemble SEM micrographs.

The availability of interesting software, much of it in the public domain, is a major reason why I replaced my trusted 35mm camera with a digital model. Between Photoshop Elements, ImageJ and CombineZ I can do just about anything of interest to me, a retired hobby microscopist, and I would like to include a few examples of these possibilities as well.

**NYMS Members and their guests
are welcome to join us at our **new headquarters** for a
tour and refreshments before, and following, the
lecture.**



Permanent Headquarters of the New York Microscopical Society- 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).

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.

NYMS Field Trip To Mohonk Mountain House (see images on page 4)

Mohonk Mountain House, near New Paltz, NY, was the site of the June 18, 2008, NYMS Field Trip, during which we ran a one-hour Water Bear Hunt open to anyone visiting that historic inn. Our group consisted of: Debra, Leonard & Spencer Hargiss, Jay Holmes, Dr. William "Randy" Miller (NYMS' tardigrade consultant), Don O'Leary, Jean Portell, and Mark Wellendorf (Dr. Miller's student). Before the workshop, which was held in a large parlor room, we were treated to a delicious lunch. During the Water Bear Hunt, Randy and Mark inspected bits of lichen and moss that they had collected outside and quickly found tardigrades. Don projected an image of a lively one on Mohonk's huge screen, by attaching video equipment to NYMS' trinocular Olympus microscope. Mohonk's staff and guests (mostly parents with children) were very impressed! Randy offered to identify these tardigrades when he returned to Baker University, Kansas, and send a report to the Daniel Smiley Research Center of the Mohonk Preserve.

Although this NYMS field trip was a far drive, and preparations for the workshop (toting many 'scopes, etc.) were arduous, once we got there and set up we had a great time. Our hosts declared that the NYMS Water Bear Hunt, which was a featured event of Mohonk's 2008 Summer Nature Week, was a success. Since then, our contacts at the Mohonk Mountain House and the (separately run) Daniel Smiley Research Center have urged NYMS to stay in touch. We will!

Jean D. Portell



The Moving Company (not shown in picture are Jan & Wiebke Hinsch)

Editorial Comment

Since our last days at the AMNH and prior, NYMS has always been at the mercy of the landlord, perhaps not obviously at first, but eventually, and with each new address, came the eventual dreaded notice; "we need your space for my Uncle Willie's string collection, you have one month." After the AMNH, we held fast at our

new digs in West Paterson, New Jersey, for awhile. We were just feeling at home when the innuendo storm hit and once again we were told to leave. We finally found what appeared, until recently, to really be our home, Evergreens. The deceased original owner, Charles Schultz, was actually a past president of NYMS; finally! The dream ended when the familiar rumblings began and we knew this had to be the last time we rent. Thanks to a bequest by the late Barry Nathanson, past President, on we now had the cash to buy our own home. We did!

We invite you to join us, at 2:00 PM on Sunday the 28th of September-2008 at the permanent headquarters of the New York Microscopical Society. Refreshments will be served. Please feel free to stand up and shout "Huzzah, huzzah!" Note: Handicap accessible.

Mel Pollinger

Traveling to NYMS

NYMS is easily accessible by car and train. The building is located on Mt. Prospect Avenue between Colfax and Van Houten Avenues. Route 46 and the Garden State Parkway are the best main routes. Call or email Don O'Leary or Mel Pollinger for additional information (see page 2).

2008 Olympus BioScapes Digital Imaging Competition

I would like to invite you to submit several of your images and/or digital video clips to the 2008 Olympus BioScapes Digital Imaging Competition, which will honor extraordinary microscope images of life science subjects. Up to five images or videos can be entered via Internet:

http://www.olympusbioscapes.com/registration/enter_pg1.aspx

The deadline for new entries is September 30, 2008. A note about the contest: First prize will be Olympus microscope or Camera equipment valued at \$5,000. Nine additional winners will also receive valuable prizes from Olympus. Each person entering can submit up to five movies, images, or image sequences. It is not necessary for people entering the competition to be users of Olympus equipment. Winners will be notified in late October, and publicly announced in December, 2008.

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Some Images From The Mohonk Trip



Answer to Summer 2008 Mystery photo



Angela Klaus wrote: "My guess for the mystery photo is the inside base of a female flower, or male/female flower with the stamens removed." Angela is correct.



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

***Historical Volume Numbers for NYMS'**
Newsletters will be continued as of this issue.

Got something you want to sell, trade or publish in the Newsletter?
 Write, call or send an email message to:
 201-791-9826 or pollingmel@verizon.net
 or
 Mel Pollinger, Editor
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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.