



Newsletter

Of the

New York Microscopical Society

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



January 2008

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Meeting Announcement

New York Microscopical Society, 2008 Spring Lecture Series

"Imaging biological nano-motors"

**Dr. Hernando Sosa, Associate Professor,
Department of Physiology and Biophysics,
Albert Einstein College of Medicine**

Wednesday, January 23rd, 2008, 7:30 pm
American Museum of Natural History, People
Center, New York, NY

**This will be a joint meeting with the New York
Society of Experimental Microscopists (NYSEM).**

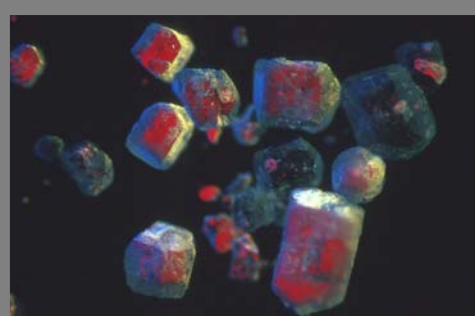
Dr. Sosa's lab focuses on elucidating the structural basis of the mechanism of action of molecular motors. There are three superfamilies of molecular motors that produce linear forces and movement along cytoskeletal tracks, the myosins, the kinesins and the

dyneins. These motors use the energy of ATP hydrolysis to move along cytoskeletal filaments. Myosins move along actin filaments while kinesin and dyneins move along microtubules. Dr. Sosa's talk will focus on the use of cryo-electron microscopy and other methods to elucidate molecular motor structures.

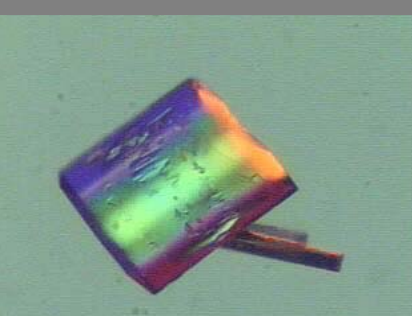
NYMS Members and their guests are welcome to join the speaker for dinner (\$25.00 all inclusive) at 5:45 pm at Calle Ocho (<http://www.calleochonyc.com/>), 446 Columbus Ave., NYC. Please reserve your place(s) with Angela Klaus by noon Jan 23rd. Angela can be contacted by email (avklaus2@yahoo.com) or by phone (201-988-6251).

Glucose

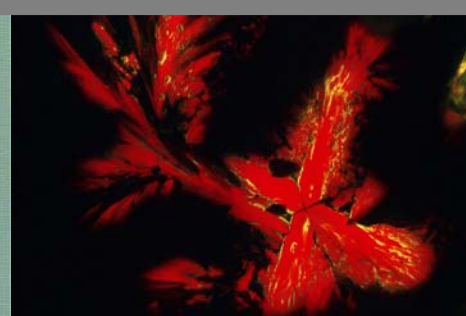
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The Mission of the New York Microscopical Society is the promotion of theoretical and applied microscopy and the promotion of education and interest in all phases of microscopy.

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 ≥ 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.

President's Message Jan 2008

This has been a good year for microscopy. 2007 had many events (some annual and some special) for those interested in microscopy and for those who use microscopy daily. To note a few:

Microscope Day at John Jay, McCrone Research Institute's **Inter/Micro**, the FBI's **Trace Evidence Symposium**, an **Advanced PLM Workshop** at NEAFS, and the **Forensic Microscopy and Industrial Microscopy Sessions** at EAS.

We can only hope for another packed schedule in 2008. To keep members abreast of all microscopy-related events, we encourage you to contact us so we can disseminate information in a timely manner.

I would like to thank all of the NYMS Board of Managers for their assistance and service to the Society, and I would like to especially thank the following officers, without whose untiring help and dedication the Society would not function. They have been especially helpful to me in my role as the President.

Angela Klaus, Vice President and Program Chair. Angela has coordinated and arranged all of the speakers for the monthly meeting events, and she hasn't even resorted to making herself the guest speaker (as I did when I was the program chair).

Donald O'Leary, Curator and Education Chair. He has scheduled the NYMS courses and has continued to organize the microscope collection. Thanks, Don, for allowing me to sit in on another fall "Basics of Microscopy" course. I always enjoy it and the food is great, too.

Mel Pollinger, Treasurer, Librarian and Newsletter Editor. Mel has maintained the books to the penny and puts up with me submitting paperwork after the deadlines. He has also resurrected the Newsletter (and again, deals with my last-minute submissions, such as this one). I applaud Mel's patience in.

Thanks to the members for your continued support of the Society.
Best wishes for the New Year

Peter Diaczuk



Imaging Glucose (page one) d-Glucose

d-Glucose is also known as Dextrose, Corn Sugar, Grape Sugar. It is soluble in hot ethanol and in water. An aqueous solution of d-glucose exhibits dextro (right) optical rotation.

The three images shown on page one were produced as follows:

1. Crystals directly from package imaged by darkfield Rheinberg illumination. 40x
2. Single crystal was mounted in immersion oil and imaged by Rheinberg illumination. Originally imaged at 100x, but reduced in size to fit frame.
3. Recrystallized from water, imaged at 200x, darkfield Rheinberg illumination.

By Mel Pollinger

From The 1968 NYMS Annual Report

April 15, 1966

THE LIBRARY OF NYMS

SIDNEY BRAGINSKY

Mr. Braginsky is Librarian of the NYMS, and is employed at the American Optical Company. He said that the library had its beginning about ninety years ago, when the Society was founded, and that it included books for beginners, amateurs, and serious microscopists. He mentioned that the last acquisitions to the library of any appreciable number of new books took place about 1939, and mentioned briefly the work of Messrs. Banner, Boone and Lawrence in connection with the rare book section of the library. Discussed also were some of the series of volumes containing the *Transactions* of the Royal Microscopical Society. The speaker indicated there were some serious gaps in this series which have not been filled.

The speaker mentioned that a committee made up of himself, Miss Doris Fay, Dr. Oscar Richards, and Mr. Mortimer Abramowitz had been appointed to go over the library, and said the decision of the Library Committee was that the most effective type of library for the Society would deal only with reference books on microscopy, and that books relating to allied sciences would be removed from the shelves.

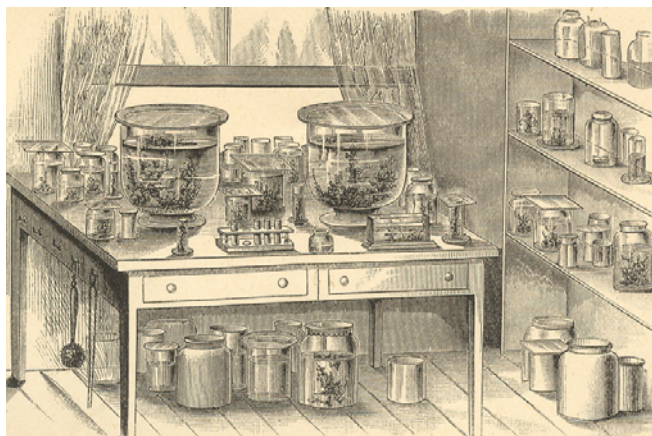
It was announced that a list of books subject to removal from the library will be presented, with prices of such books, to the Board of Managers for review. The intent is to present the list to the members of the Society. Library of Congress classification in the opinion of the Committee is not necessary for the Society Library, but Library of Congress classification numbers presently on books will not be removed. The Committee decided that the card catalogue will be by subject and author.

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NYMS Present Library

Mel Pollinger

Consisting of over 3500 books and thousands of magazines and other publications, the NYMS library is a trip into the past, present and future of microscopy. While going through the process of cataloging the library on a database, I frequently view some of the contents of the older books. Many contain images that are hand-drawn and highly detailed. Not all of these are of subjects seen through the microscope, but all are related to some part of microscopical science. The following is a scan of a frontpiece of a book from the 1800s:



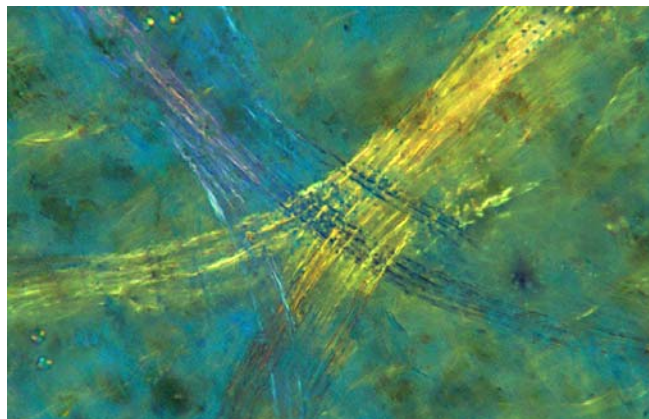
Microscopist's worktable

Answer to Nov-Dec 2007 Mystery photo



This one was too easy - More correct guesses than room on this page. Microscope stage, condenser lens and objective.

January 2008 Mystery Photo



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

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
NYMS Newsletter
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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.

Please make sure you have paid your dues or this could be your last newsletter.