



# Newsletter

Of the

## New York Microscopical Society

1 Prospect Village Plaza  
(66F Mt. Prospect Avenue)  
Clifton, New Jersey 07013-1918  
GPS: Latitude 40.8648N, Longitude 74.1540W

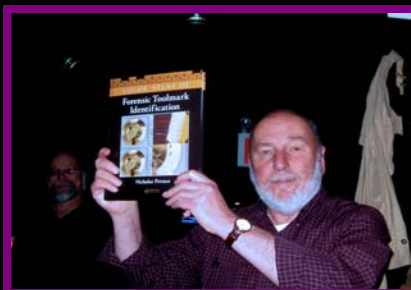


Nov-Dec2012

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

Volume 6 (26) Number 9

## NYMS December 9<sup>th</sup> 2012 Banquet at Landmark Tavern



Jan & Wiebke Hinsch with NYMS President, Peter Diaczuk  
(Our speakers)



## Board of Managers (updated)

<b>Diaczuk, Peter</b> , <a href="mailto:pedicopete@earthlink.net">pedicopete@earthlink.net</a> ; (212) 237-8896, ..... Expy June 2013, .....President
<b>Scott, John</b> , <a href="mailto:nyconsnfdn@aol.com">nyconsnfdn@aol.com</a> ; ..... Expy June 2015, .....Vice President, Program Chair, Archivist
<b>Pollinger, Mel</b> , <a href="mailto:pollingmel@optonline.net">pollingmel@optonline.net</a> ; (201) 791-9826, ... Expy June 2014, .....Treasurer, Editor, Librarian
<b>Klaus, Angela</b> , Ph.D., <a href="mailto:klausang@shu.edu">klausang@shu.edu</a> ; ..... Expy June 2015, .....Secretary, Education Chair
<b>O'Leary, Don</b> , <a href="mailto:dkoleary@verizon.net">dkoleary@verizon.net</a> ; (201) 368-8849, .....Expy June 2013, .....Curator, Facilities Manager
<b>Reffner, John A.</b> , Ph.D., <a href="mailto:jareffner@cs.com">jareffner@cs.com</a> ; (203) 348-8098, Expy June 2014,.....Awards Chair, Past President
<b>McCann, Mary</b> , <a href="mailto:mccanns@tiac.net">mccanns@tiac.net</a> ; (617) 484-7865, ..... Expy June 2015, .....Membership Chair
<b>Huemmer, Craig</b> , <a href="mailto:chuemmer@hotmail.com">chuemmer@hotmail.com</a> ; ..... Expy June 2015, .....Board member
<b>Mayer, Gary</b> , <a href="mailto:mayer@co.somerset.nj.us">mayer@co.somerset.nj.us</a> ; ..... Expy June 2014, .....Board member
<b>Perlowitz, Seymour</b> , <a href="mailto:perlowitzs@hotmail.com">perlowitzs@hotmail.com</a> ; ..... Expy June 2013, .....Board member
<b>Reffner, John Jr.</b> , <a href="mailto:jrr1lp@gmail.com">jrr1lp@gmail.com</a> ; (cell): (215) 527-1882, ..... Expy June 2014, .....Board member
<b>Scal, Roland</b> , Ph.D., <a href="mailto:rscal@qcc.cuny.edu">rscal@qcc.cuny.edu</a> ; (718) 631-6071, .....Expy June 2013, .....Webmaster

### Dues and Addresses

Please remember to mail in your Dues to:

Mary McCann,  
Membership Chair  
**McCann Imaging**  
161 Claflin Street  
Belmont, MA 02478

Junior (under age 18) \$10

Annually

Regular \$30

Student (age 18 or above) \$20

Annually

Supporting \$60 Annually

Corporate (includes one advertisement in NYMS News)

\$175 Annually

Life \$300 (payable within the year)

To avoid missing notices:

Notify Mary McCann and Mel Pollinger if you have changed your address, phone or email.

### Awards Given by the New York Microscopical Society

The New York microscopical Society takes great pleasure in recognizing and rewarding individuals who have contributed to either the activities of the society or to furthering microscopy.

These awards are described in our website and in a pdf file for our email newsletter recipients. All members are eligible to nominate individuals for these various awards, and are encouraged to do so.

John A. Reffner, Awards Committee Chairperson

### Awards Committee

Chair: John A.  
Reffner

### Members

Jan Hinsch  
Don O'Leary  
Mel Pollinger



Mel Pollinger, Editor  
18-04 Hillery St.  
Fair Lawn, NJ 07410-5207

### To Order Your NYMS Lapel Pins

Send a check in the amount of \$12.00 per pin to:  
New York Microscopical Society  
c/o Mel Pollinger, 18-04 Hillery Street, Fair Lawn, NJ 07410. To avoid shipping & handling charges, pins may be purchased directly at any NYMS meeting for \$10.00.



### 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.

### 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, or emailing: [pollingmel@optonline.net](mailto:pollingmel@optonline.net)

\*\*\*\*\*

**Dues for 2013 are due!**

*Buy and Read a Good Book on Microscopy.*

Most Recent Donations to the NYMS Library

From Mr. Ralph Remmer: NYMS has recently received, via Nikon Instruments, Inc., a donation of old microscopy-related books, catalogs and manuscripts from the library of Mr. Ralph Remmer of Huntington, NY. Mr. Remmer had worked for American Optical Company and Nikon Instruments, Inc.  
The material was donated by his wife, Barbara.

From Len Tilstra: Len has recently donated some microscopy-related books from his personal library. Len is a long-time Life-member of NYMS.

From Nicholas Petraco: An autographed copy of his latest book; "Color Atlas Of Forensic Toolmark Identification."

From Michael W. Davidson (National High Magnetic Field Laboratory): An autographed copy of his latest book; "Fundamentals of Light Microscopy and Electronic Imaging."

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**NYMS Banquet 2012 Speakers**

**Jan & Wiebke Hinsch: The Garden under the Microscope**

Jan and Wiebke Hinsch look at their garden from different perspectives. Wiebke is a master gardener and her garden reflects her love for flowers, gestaltung and environmental responsibility. She taught Jan to look at the garden as an endless source of miraculous things with which to feed his microscope.

This talk therefore was a synthesis of Jan's and Wiebke's passions.

**The presentation was breathtaking and received with great enthusiasm.**

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**NYMS President Peter Diaczuk presents Abbe Award to Skip Palenik at Eas 2012.**

**THE 2013 NORTH JERSEY GEM & MINERAL SHOW  
SPONSORED BY THE NORTH JERSEY MINERALOGICAL SOCIETY**

**SAT. & SUN. MARCH 9 & 10, 2013, 10am to 5pm  
at THE POPE JOHN II CENTER, 775 VALLEY ROAD  
CLIFTON, NJ, (just off Rt. 3 & 46)**

- FREE PARKING**
- FREE MINERAL SPECIMEN FOR KIDS**
- REFRESHMENTS SOLD AT THE CLUB TABLE**
- DOOR PRIZES THROUGHOUT THE DAY AND A GRAND PRIZE DRAWING ON SUNDAY AT THE CLOSE OF THE SHOW.**

**ADMISSION:**  
**ADULTS - \$5**  
**SENIORS - \$4**  
**UNDER 18 - \$3**  
**KIDS UNDER 12 AND ALL SCOUTS IN UNIFORM FREE!**

**SHOW CONTACT:**  
**Show Chairman for 2013 - Jeff Wilson**  
**All inquiries via email: buckwood4@yahoo.com**

**Got News?**

**Send it to The Editor. If you have images and/or article related to microscopy, or a letter to the editor, please send it to me. It could be an interesting book, mystery photo, website or anything else you believe may be of interest to your fellow NYMS members, don't be shy, send it to the Editor.**

**For article contributions and/or responses to the Editor, please email Mel Pollinger:**

**[pollingmel@optonline.net](mailto:pollingmel@optonline.net)**

### NYMS Welcomes Visitors

Although most NYMS events and meetings are held in Clifton, New Jersey on Sundays, the building may be opened for visitors at other times providing an appointment is made with Don O'Leary or Mel Pollinger at least two days prior to the desired appointment time. NYMS Headquarters at Clifton, NJ will be open by appointment only to members from 8:00pm to 10:00 pm most Tuesday evenings.

Those members wishing to visit must call Don O'Leary or Mel Pollinger to confirm. Don's cell-phone number is (201) 519-2176 or email: [dkoleary@verizon.net](mailto:dkoleary@verizon.net). Mel's Home phone number is (201) 791-9826 or email: [pollingmel@optonline.net](mailto:pollingmel@optonline.net)

### ***From The Editor... if you have email:***

Getting the newsletter by email means you receive an extended pdf version that cannot be sent by "snail mail." Even if you continue your USPS delivery of the newsletter, NYMS needs your email address for reporting priority events and special news. Being able to contact you by email means better communication between us■ Mel

**Dues for 2013 are due!**

### Need to use a Microscope?

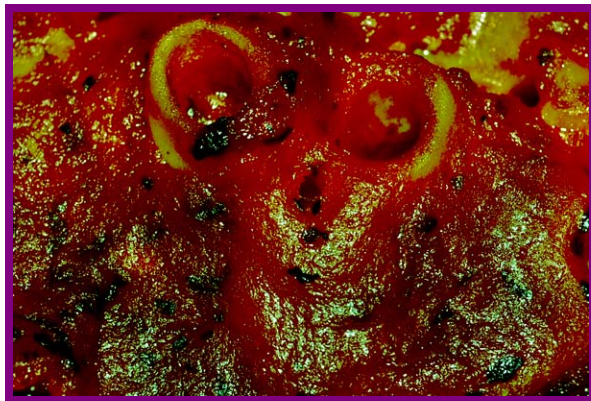
The various microscopes that are presently set up on the main floor of the New York Microscopical Society building in Clifton, N.J. are there for the use of its members.

### Microscope Cleaning Kit

A complete set of tools and accessories to keep your microscope in optimum operating condition. The kit is put together by our Curator/Educational Chairman and available directly from NYMS for only \$35.00 plus shipping & handling, or may be purchased at a meeting. Call or email Mel Pollinger or Don O'Leary for details (see page two for contact numbers).

**Also: Slide boxes** 100 capacity, used: \$5.00 while they last

### Answer to Mystery Photo for October 2012



Ziti, just out of the oven. Closest was pizza - send in by Hal Sherman.

\*\*\*\*\*

### Mystery Photo for Nov-Dec 2012



Want to take a guess? Send it to me by email or call me: [pollingmel@optonline.net](mailto:pollingmel@optonline.net), (201) 791-9826

\*\*\*\*\*

Additional Historical NYMS Supplements  
Email Newsletter recipients will also be getting copies of NYMS Newsletter pdf back-Issues from 2007. Copies of older newsletters will be sent as I convert them.

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@optonline.net](mailto:pollingmel@optonline.net) (images ok)

or

Mel Pollinger, Editor  
NYMS Newsletter  
18-04 Hillery Street  
Fair Lawn, NJ 07410



Supporting Member

# **NYMS Newsletter Extended**

## **Section, Nov-Dec 2012**

### **Directions to NYMS Headquarters**

One Prospect Village Plaza  
(66F Mount Prospect Avenue)  
Clifton, NJ 07013

**GPS: Intersection of Colfax & Mt. Prospect:**

**Latitude 40.8656 N, Longitude 74.1531W,**

**GPS: Our building: Latitude 40.8648 N,**

**Longitude 74.1540 W**

**From George Washington Bridge:**

Take Interstate Route 80 west to Exit 57A, Route 19 South. Take Route 19 to Broad Street and continue two lights to Van Houten Avenue. Turn Left. Go to second light, Mount Prospect Avenue and turn left. Building 66F is on the left side , one and a half blocks from Van Houton.

**From Lincoln Tunnel:**

Follow exit road to NJ route three west. Continue to Bloomfield Avenue exit. Turn right to Circle and go three quarters to Allwood Road West. Mount Prospect Avenue is a few blocks on the right (a small street) Turn right and go to first light (Van Houton) continue. Building 66F is on the left side , one and a half blocks from Van Houton.

**From North:**

Take Garden state Parkway South to Route 46 Clifton Exit. On 46 Make second exit to Van Houton Ave. Continue to third light Mount Prospect Avenue and turn left. Building 66F is on the left side , one and a half blocks from Van Houton.

**From Route 46 coming from west:**

Take Broad Street Exit in Clifton and follow Directions above from GW Bridge.

**From route 46 coming from East:** Take Paulson Avenue Exit in Clifton and follow to Second light, Clifton Ave turn right. Go to next light, Colfax, turn left, go three blocks and turn right on Mount Prospect Ave.. Building 66F is half block on right.

**Public transportation from NY:**

Take NJ Transit train from Penn Station to Secaucus Transfer Station. Change trains to Bergen Line to Clifton (call NJ Transit for schedules). From Clifton Station cross under tracks to first street and go left one block to Mount Prospect Street, turn right and Building 66F is one half block on Right.

**If you plan to come by bus or train, please copy the links below into your browser:**

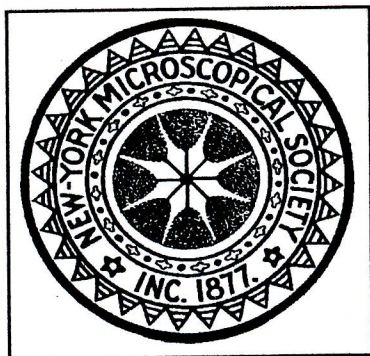
[http://www.njtransit.com/sf/sf\\_servlet.srv?hdnPageAction=TripPlannerItineraryTo](http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=TripPlannerItineraryTo)

[http://www.njtransit.com/sf/sf\\_servlet.srv?hdnPageAction=BusSchedulesP2PTo](http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=BusSchedulesP2PTo)

[http://www.njtransit.com/sf/sf\\_servlet.srv?hdnPageAction=TrainTo](http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=TrainTo)

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- NYMS Banquet 2012 Images
- NYMS Booth at EAS
- NYMS Abbe Award Presentation Images
- Petraco Book Review
- Davidson Book Review
- NYMS Items for Sale
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## New York Microscopical Society

Return to: **Mary McCann**  
**161 Claflin Street**  
**Belmont, MA 02478**

Please Print

*I hereby apply for membership in the New York Microscopical Society.*

Name: (Dr., Ms., Mr.) ..... Nickname .....  
Home Address .....

Phone ..... Fax ..... E-Mail .....  
Work: Company ..... Address .....

Phone ..... Fax ..... E-Mail .....  
Would you prefer to receive NYMS mail at home ☐ At work ☐ By e-mail (best way) ☐  
Principal work or interest in Microscopy .....

On what topic are you available as a speaker? .....

Would you like information about NYMS committees? Yes ☐ No ☐ Awards ☐ Membership ☐  
Education ☐ Library ☐ Finance ☐ Curator ☐ Housing ☐ Program ☐ Publications ☐ History ☐  
Who referred you to NYMS? .....

### Academic and Honorary Degrees:

Degree ..... Conferring Institution ..... Date .....

Scientific Publications .....

Membership in Scientific Societies .....

Date of birth (optional if over 18) .....

**I have enclosed a check for \$..... to cover my application fees for membership {Annual \$30, Supporting \$60, Life \$300 (payable within the year), Corporate \$175 (includes one advertisement in NYMS News), Junior \$5 (under 18 years old)}. Student (over 18) \$20**

**I understand portions of the above information may be used in NYMS publications.**

**I would prefer my home ☐ work ☐ address/ phone included in the NYMS Directory.**

Signature ..... Date .....

NYMS Headquarters: One Prospect Village Plaza, Clifton, NJ 07013 Telephone (973) 470-8733



# CEDAR CREST COLLEGE

DEPARTMENT OF CHEMICAL AND PHYSICAL SCIENCES • 100 COLLEGE DRIVE, ALLENTOWN, PA 18104-6196  
OFFICE: 610-606-4611 • FAX: 610-606-4616

Mr. Mel Pollinger, FNYMS  
Treasurer,  
New York Microscopical Society  
One Prospect Village Plaza  
(66 Mount Prospect Avenue)  
Clifton, NJ 07013

December 14, 2012

*Mel*  
Dear Mr. Pollinger,

I want to thank you for the support of the New York Microscopical Society for five (5) of my students from Cedar Crest College to attend EAS. The NYMS has been very supportive of our students in the past and we really appreciate your assistance for our students.

The following graduate students attended EAS on Tuesday, November 13, 2012 thanks to the support of the NYMS:

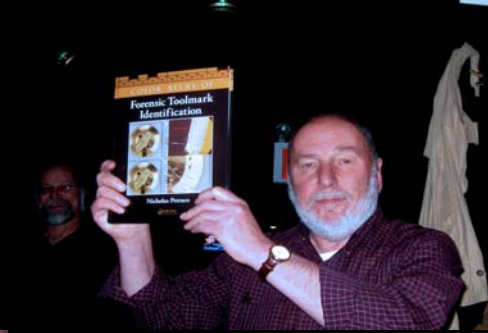
Karen Lau  
James Anasti  
Cassandra Agozzino  
Colleen Spease  
Kayla Sween

Thank you very much.

Sincerely,

Thomas A. Brettell, Ph.D., D-ABC  
Associate Professor of Chemistry

# NYMS 2012 Banquet



# NYMS booth 715 at EAS 2012



# NYMS presents its Abbe Award to Skip Palenik at EAS 2012



Book review by Peter Diaczuk

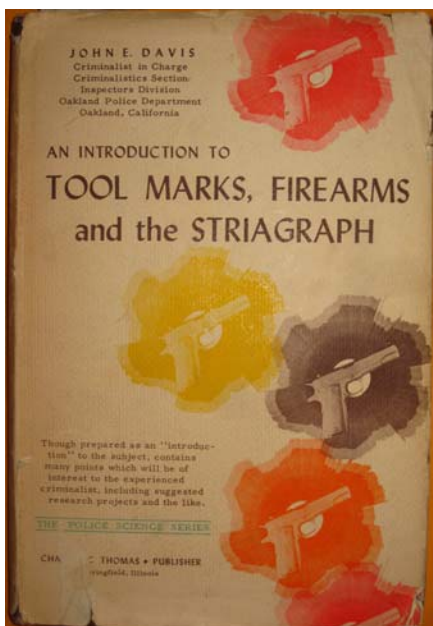
***Color Atlas of Forensic Toolmark Identification***

by Nicholas Petraco, 2011, CRC Press, ISBN 978-1-4200-4392-1

I first saw a pre-production copy of this book at the CRC table at last year's American Academy of Forensic Sciences meeting in Seattle. CRC was accepting orders at that time and I was pleased when the first copies rolled off the presses a few months later.

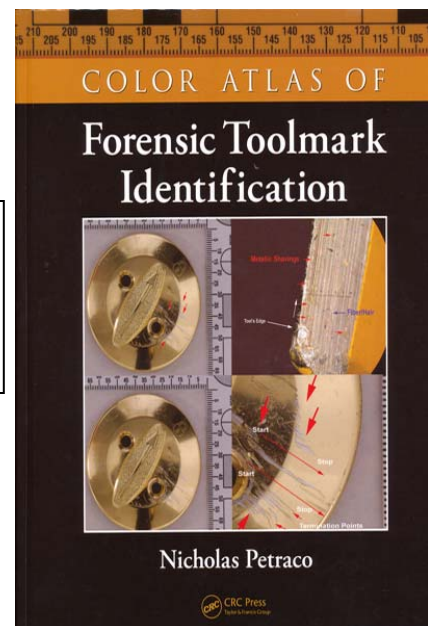
A modern comprehensive text on toolmarks is now available. Not since the pivotal work of Davis over 50 years ago has a thorough treatment of toolmarks been performed (John E. Davis, *An Introduction to Toolmarks, Firearms and the Striagraph*, 1958). This is a stand-alone book, as it includes chapters on microscopes and microscopy, principles of optics, a primer on tools themselves, how these tools interact with common surfaces encountered at crime scenes (leaving microscopic striations or impressions), how to make exemplar marks from suspect tools for comparison to unknown marks, the statistical foundation for making conclusions about comparisons, and case examples from the author's vast experience as a Criminalist / Detective with the NYPD, where the above topics coalesced into a complete package.

The book is packed with color photos and photomicrographs (over 300!), making it well worth its cost. The combination of easily read text with many figures and photos for reference make this book a valuable resource for microscopists, criminalists, and firearm / toolmark examiners. Additionally, with toolmark comparisons being criticized recently, especially from non-scientists with little or no knowledge or expertise in either microscopy or tools, this book becomes an even greater resource when responding to these critics.



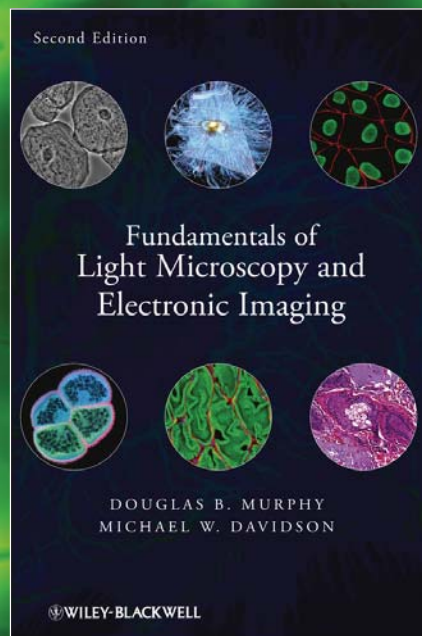
<<<<<Then

Now>>>>>



**Nicholas Petraco is a Fellow of the New York Microscopical Society**

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at Wiley-Blackwell  
Booth #1306!



Meet Author  
**Michael  
Davidson!**  
Visit Wiley-Blackwell  
Booth #1306  
Sunday, Dec. 16  
2:00 - 3:30pm

# Fundamentals of Light Microscopy and Electronic Imaging 2nd Edition

**Douglas B. Murphy, Michael W. Davidson**

ISBN: 978-0-471-69214-0 | Hardcover | 552 pages | October 2012

*Fundamentals of Light Microscopy and Electronic Imaging, 2nd Edition* provides a coherent introduction to the principles and applications of the integrated electron microscope system. It is divided into three sections covering optical principles in diffraction and image formation, basic modes of light microscopy, and components of modern electronic imaging systems and image processing operations. Each chapter introduces relevant theory, followed by descriptions of instrument alignment and image interpretation.

Contents Include:

- New chapters on live cell imaging, measurement of protein dynamics, deconvolution microscopy, and interference microscopy
- Expanded and updated discussions of multi-spectral imaging, intensified digital cameras, signal colocalization, and uses of objective lenses
- Guidance in the selection of microscopes and electronic cameras, as well as appropriate optical systems and fluorescent tags
- Full-color illustrations
- End-of-chapter problem sets with answers
- A glossary of terms, lists of materials, and procedures for specimen preparation

Learn more at

[www.wiley.com/go/lightmicroscopy2e](http://www.wiley.com/go/lightmicroscopy2e)

# WILEY

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- Chapter 1: Fundamentals of Light Microscopy
- Chapter 2: Light and Color
- Chapter 3: Illuminators, Filters, and the Isolation of Specific Wavelengths
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- Chapter 6: Diffraction and Spatial Resolution
- Chapter 7: Phase Contrast Microscopy and Darkfield Microscopy
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- Chapter 10: Differential Interference Contrast (DIC) Microscopy and Modulation Contrast Microscopy
- Chapter 11: Fluorescence Microscopy
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- Chapter 14: Two-Photon Excitation Fluorescence Microscopy
- Chapter 15: Superresolution Imaging
- Chapter 16: Imaging Living Cells With The Microscope
- Chapter 17: Fundamentals of Digital Imaging
- Chapter 18: Digital Imaging Processing

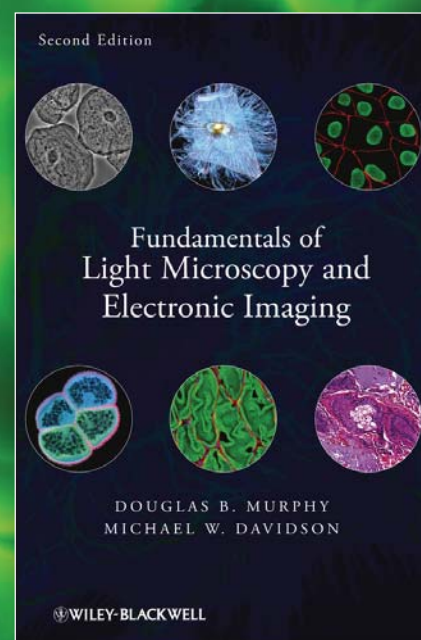
## Reviews from the First Edition:

"...will greatly advance your knowledge of practical light imaging techniques. . . ."  
—*IEEE Electrical Insulation Magazine*, July/August 2007

"This book will provide individuals without background knowledge in optical physics, electronics, or image processing with many of the basic facts they need to know to understand both the power and the limitations of their images."  
—J. Richard McIntosh, Cell Biology Education

"Douglas Murphy's book, *Fundamentals of Light Microscopy and Electronic Imaging*, is a welcome tool to introduce students in the biological sciences to the fundamentals of modern light microscopy and its augmentation by electronic imaging methods"...Each section has illustrative exercises and/or demonstrations, making this book readily adaptable to course work."  
—Gordon W. Ellis, University of Pennsylvania

"Given the remarkable resurgence of interest in biological microscopy during the past few years and the genuine need for a text in this field, Murphy's book will be warmly welcomed by all cell biologists who use microscopes in their research."  
—Joseph G. Gall, American Cancer Society  
Professor of Developmental Genetics, Carnegie Institution



# WILEY

# New York Microscopical Society Items For Sale

## N.Y.M.S. Microscope Covers

Item #	Size	Member Price	List Price
MT-003	Small Microscope or Stereo	\$18.00	\$20.00
MT-004	Lab Microscope or Large Stereo	\$23.00	\$25.00
MT-005	Large Lab Scope	\$28.00	\$30.00
MT-009	Large Lab Scope with Camera	\$31.00	\$33.00
MT-010	Universal Scope with Camera	\$36.00	\$40.00
MT-012	X-large Scope	\$45.00	\$50.00

## N.Y.M.S. Microscopes (see next page for images)

185	Monocular Dissecting Microscope	\$85.00	\$99.00
131	H.S. Student Microscope	\$190.00	\$245.00
131-FLU	H.S. Student Microscope (Fluorescent)	\$200.00	\$255.00
125-LED	H.S. Student Microscope (LED)	\$240.00	\$309.00

## Other Items

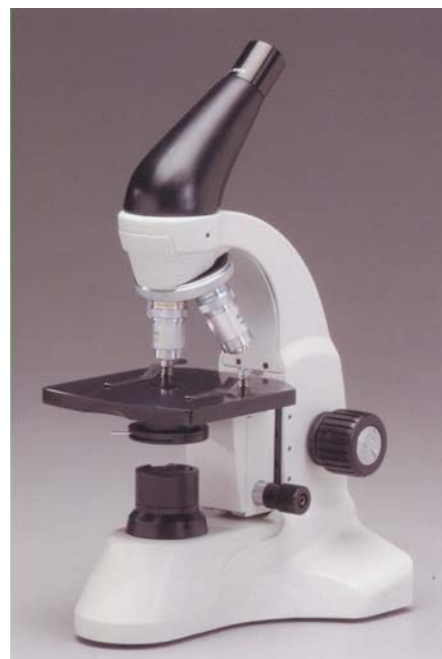
NYMS Glossary of Microscopical Terms	\$20.00
NYMS Patch	\$5.00
Microscope Cleaning Kit	\$35.00
NYMS Lapel Pin	\$10.00



Model 131: Tungsten  
Model 131-FLU: Fluorescent



Model 185: 20x



Model 125-LED Cordless



Eastern Pennsylvanian Spider (JG055Sep2009) by Jeff Glover



Euglenoid (P8180718) by Mel Pollinger