

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



September 2018

Editor: (201) 791-9826

Volume 12 (32) Number 6

<u>New! Student Travel Awards for EAS, see</u> <u>Supplement Section</u>

NYMS Meetings Schedule Sep. to Dec. 2018

September 30 Sunday, John Scott as NYMS Curator and Archivist, speaking on Philip O Gravelle (1877-1955), NYMS member and international photomacrography pioneer, and introducing our very own Gravelle Archives. Including a cameo presentation by the charming Bernice Keebler (her health permitting), whose father F Gordon Foster was NYMS President (dates to be researched), a friend of Gravelle's, and executor of Gravelle's estate. Mrs Keebler inherited and donated to NYMS the bronze medal Gravelle received with the London Microphotographic Society's 1923-4 award of merit.



October 14th, Sunday, with Jay Holmes et al at AMNH:

- 1:00-4:00 NYMS welcome to attend Urban Advantage's 'A Family Science Day,' including NYMS volunteers helping to set up and guide a microscopy fun area, and

- 4:00-5:30 especially but of course not exclusively for NYMS, extension of microscopy fun in the Rose Center Classroom on the 2nd floor.

November During Nov 11-14 EAS: Our Abbe Session honoring Dr Peter De Forest. Also microanalysis in some of the Cultural Heritage talks, and in other EAS sessions and short courses.

December 9, Sunday, Our Holiday Dinner at the Landmark Tavern, Manhattan.

Featured speaker: Eugenia Bone, author of 'Microbia: A Journey into the Unseen World Around You,' (2018), and of 'Mycophilia: Revelations from the Weird World of Mushrooms,' (2013). Something mycrobial / mycological. Bone describes herself as a writer-reporter, not a microscopist, yet is a past President of the New York Mycological Society. She was quite upbeat about presenting. We'll work out topical etc details via email ASAP.

January 20 or 27, Sunday, medical photographer Howard Radzyner on luminary social, art and science photographer Roman Vishniac, probably at Clifton.

February 17 Sunday (weather date 24th) Microscopist Dr Renate Reimschussell of FDA, at Clifton:

'How a fish pathologist and her microscope helped FDA identify why dogs and cats were dying during the 2007 pet food recall'

The Pet Food Recall of 2007 was the largest recall the Center of Veterinary Medicine (CVM) had ever investigated. FDA's scientists, industry and academia all worked together to determine the contaminants and the mechanism of toxicity. Dr. Reimschuessel was at the heart of critical investigations that helped clarify how a relatively nontoxic chemical, melamine, could be responsible for the renal failure in so many pets. Learn how the head of Aquaculture Research at CVM used techniques routinely used in fish diagnostics and microscopy to rapidly find answers that routine pathologic methods would miss.

All for NYMS and NYMS for all! ~John 646 339 6566 m, John Scott, nyconsnfdn@aol.com

New York Microscopical Society Board of Managers

President and Secretary, 2018-2019, Brooke Kammrath, <u>bkammrath@newhaven.edu</u>: (203) 931-2989; Manager 2016-2019, Membership Chair

Vice President, 2018-2019, John Scott, <u>nyconsnfdn@aol.com</u>; (646)339-6566; Manager 2016-19, Program Chair, Curator, archivist, facilities assistant

Treasurer, 2018-2019 Mel Pollinger, <u>pollingmel@optonline.net;</u> (201)791-9826; Manager 2017-2020, Newsletter Editor, Librarian, Facilities, Membership

Manager, 2017-2020 Lou Sorkin entsult@aol.com; (914)939-0917, Webmaster Pro tem
Manager, 2017-2020 John A. Reffner jareffner@cs.com; (203)358-4539 Past President
Manager, 2016-2019 Roland Scal rscal@qcc.cuny.edu; (718)631-6071
Manager, 2017-2020 Andrew J. Winter andrew.winter@co.middlesex.nj.us; (732)816-3793, Education Chair
Manager, 2016-2019 Seymour Perlowitz perlowitzs@hotmail.com; (718)338-6695
Manager, 2016-2019 Peter Diaczuk pedicoplanb@gmail.com; (212)237-8896, Past President
Manager, 2016-2019 Jay Holmes, jholmes@igc.org; (212)769-5039, Outreach program assistant
Manager, 2018-2021 Julie Cohen, julcoh3@gmail.com; (516) 608-1875
Manager, 2018-2021 Sally Warring, sallywarring@gmail.com; (917) 755-4110

Dues and Addresses Please remember to mail in your Dues to: Mel Pollinger Treasurer, NYMS 18-04 Hillery St. Fair Lawn, NJ 07410-5207

Junior (under age 18) \$10 Annually <u>Regular</u> \$30 <u>Student (</u>age 18 or above) \$20 Annually <u>Supporting</u> \$60 Annually <u>Corporate</u> (includes one advertisement in NYMS News) \$175 Annually <u>Life</u> \$500 (payable within the year) To avoid missing notices: Notify Mel Pollinger if you have changed your address, phone or email.

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 emailing: pollingmel@optonline.net

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

<u>Awards</u> Committee

Chair: John A. Reffner

Members

To Order Your

Send a check in the

pin to:

Society

\$10.00.

amount of \$12.00 per

New York Microscopical

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

NYMS Lapel Pins

Jan Hinsch Peter Diaczuk John R. Reffner



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



Please remember to pay your dues

Buy and Read a Good Book on Microscopy.

----- Original Message -----From: <u>Ave AVERILL</u> To: <u>Mel Pollinger</u> Sent: Monday, August 27, 2018 5:16 PM Subject: Re: NYMS Picnic 2018

Hello Mel: Yes, it was nice to meet you and your fellow members/guests yesterday. Quite an interesting group of folks with great enthusiasm for this optical gizmo we call the microscope! Thanks for the confirmation regarding our picnic tab. Jan was a great friend and associate for about 15 years of my life when he was working for Leitz prior to taking over the MicroLab in Rockleigh. We figure it has been 26 years since I saw him last...until yesterday! The NYMS brought us back together again after such a long spell.

I met Bill Newberg about four years ago and I have been working with him the past year to organize his many microscopes and accessories so that they make sense for his work both at his home lab and his office R & D/QC lab at Shamrock in Newark. We are presently bringing him into the digital world with the purchase of his first DSLR Canon camera....he just got an adapter ring to use all of his great Leica R-camera lenses on the Canon. We also have adapters now for his two Leitz Orthoplan microscopes to use the Canon DSLR (20MP) for his photomicroscopy tasks.

Good friend and real gentleman. Bill and I will plan to come to one of the Clifton meetings in the coming months ...me as a visitor and possible future member...if you will have a member accepted who lives below the Mason-Dixon.

We are doing a lot now with image stitching and stacking. We also have now launched our own 3Dprinted microscope stage and focus drive that is actually affordable for the hobbyist who wants to automate these digital imaging methods. An interesting site is in Germany: www.microvisioneer.com I like the software www.zerenesystems.com for zstacking. Also, the iPhone adapter for microscopes from www.arcturuslabs.com

Our mission these days is to modernize older optical microscopes and save them from the surplus rooms and landfills of America. Old lighting is easily updated now with LED ...see www.nightsea.com and www.retrodiode.com Proper cleaning and things like focus mechanism overhaul is best done by the experts. Many "microscope service techs" are just able to do external spit-n-polish work. The real experts are those who are experienced with the mechanics and optical alignments needed to keep any microscope functional. I spend a lot of time sourcing old Leitz microscope parts to complete Leitz scopes from the era 1960 to 2000. It is amazing what you can find on ebay if you know what your are looking for!! Visit my YouTube channel noted below.

We will talk again I am sure. I look forward to our next communication and possible visit to Clifton.

Jim Averill Bunton Instrument Co., Inc. 301-831-3434 YouTube Channel: TheMICROBG www.buntgrp.com 12610 Jesse Smith Road Mount Airy, MD 21771 301-865-5567 (Home)

Visitors Always Welcome to NYMS

Although most of our lecture meetings, workshops and classes are held in the NYMS Clifton facility on the last Sunday in the months of Jan., Feb., Mar., May, Sep. & Oct. The building may be opened for special purposes at other times, by appointment only. For such an appointment, please contact Mel Pollinger by phone at (201) 791-9826, M-F noon to 9:30pm, or by email at pollingmel@optonline.net.

From The Editor ...

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

Need to use a Microscope or Book?

The various microscopes and library are presently for use on the main floor of the New York Microscopical Society building in Clifton, N.J. To arrange for a visit, please contact John Scott, or Mel Pollinger (see pg 2 for details)

NYMS microscope slide collections are available for study at meetings and by appointment.

Additional Historical NYMS Supplements

Email Newsletter recipients can also receive copies of NYMS Newsletter pdf back-Issues from 2007. Copies of older newsletters will be included in the supplement section as I convert them.

Upcoming NYMS events are noted on the NYMS website and in the NYMS Newsletters both printed and email versions.

Career Development Opportunities at EASWORKSHOPS Monday, November 12, 2018, 1:00 PM to 3:00 PM

Title: Effective Communication Skills for

Professionals in Chemistry Presenter: Donald Learn This Valuable Truss, Executive Recruiter Perspective of The Interview Decision Making ProcessCome and learn the secrets to making the interviewer comfortable and capable of understanding you. Learn how the proper use of patience and timing will increase the probability of receiving an offer of employment. During this interactive session, we will discuss how to understand what the interviewer is feeling during the interview, and how you can guide his or her feelings in a way that improves communication. Don't miss this opportunity to get an insiders view of the effective processes involved between interviewer and interviewee. Come with an open mind and be prepared to be surprised! Don't miss this event where you can expand your network, make new friends, share knowledge with your peers, and hear highly relevant and beneficial insights and perspectives from an expert in the employment marketplace.

Tuesday, November 13, 2018, 1:00 PM to 3:00 PM Title: The Importance of an Impressive Social Profile, Whether You are Looking for Your Next Career Move or

Not. Presenter: Suzanne M. Stingo, SMS Social Media Strategies Whether you are looking for your next career move or looking to connect with more business counterparts, LinkedIn is where your profile needs to shine! This workshop will help you get your profile be the BEST version of YOU it can be! Be an "All Star" on LinkedIn and learn how to use the platform in all stages of your career!

Eastern Analytical Symposium & Exposition | 732-449-2280. Our workshops include topics to help develop your professional skills, as well as to hone other skills critical for career success. These workshops are open to all registered attendees; advanced registration is requested.





Supporting Member

SUPPLEMENT BCALLON

September 2018

ection n T

018 Conic at the Hinsches, 018 Gardens & Microscopes by JayHolmes / Chiniac Cover w Abstract News pg1,3,6, 2018 My Presents Three Special Lectures ♦ NY ◊ NYN ◊ Rom EAS Spe

♦ NY nd Application - NEW NS Sudent Travel Award Application - NEW NS Student Travel Award Evaluation - NEW South Travel Award Judges - NEW South Green Solutions South Solutions South Courses Analytical Solutions Scareer Development S Short courses 2018 S Short courses 1018 S Short courses 1018 S Short courses 1018 ♦ NYI ♦ EAS

♦ EA

◊ 201 ♦ EA

 $\diamond E$

Spectroscopy Course rone InterMicro Call For Papers 2019 ♦ Mc

McGrone Interviers Call For Pape
 Historical NYMS Bulletins for sale

NYMS Sales Items
 Membership Application
 Gallery page(s)

Cerumin & Durene, Mixed melt 50x, (P1042831)av4x6x200: Preparation and Polarized-light photomicrograph by Mel Pollinger Prepara

New York Microscopical Society's Summer Picnic, 26-Aug-2018 at the Home and Gardens of Jan & Wiebke Hinsch

What a wonderful way to celebrate NYMS & Summer. Beautiful skies, excellent luncheon, happy guests, lots of nature to explore; flowers, shrubs, trees, birds, etc., and interesting folks to meet.





Photos by Mel Pollinger, Page 1 of 7

Scope belongs to Jay Holmes. It was made by Robert Bancks in 1810 roughly). It is a "Botanical Microscope" design. Three lenses, stage forceps.











Photos by Mel Pollinger , Page 3 0f 7



Photos by Mel Pollinger, Page 4 0f 7









NYMS Picnic continued photos by Jan & Wiebke Hinsch Page 7 of 7

A little Microscopic Journey into Wiebke and Jan's Garden

Photos and text by Jay Holmes

At the lush garden of Wiebke and Jan Hinsch, the New York Microscopical Society once again gathered at the end of summer to celebrate and share, chat and catch up amongst the buzz and flutter of activity at the flowers and the tables.

To explore our shared interest in the tiny details of the natural world I brought along a couple tiny microscopes designed for the outdoor setting; a Robert Bancks 1810 botanical microscope and a Nikon Model H Field Microscope from the late 1960s-early 1970s.

The Bancks Botanical Microscope is a wonderful piece of portable technology, very close in size to a current day cellphone, easily slips into the pocket to take anywhere, and especially into the garden! It is a "simple" or as I like to call them, "single lens" microscope. "Simple" always seems to imply some lower design, but the image is clear and sharp, the machining and wood work clean, rack and pinion smooth, a wonderful tool for taking a closer look in the garden. The three lenses can be used singly or in combination to provide a variety of lower magnifications. Just right for insects, flowers, leaves and such. On the wonderfully colorful table cloth we set up a little sharing space, and collected a few items to explore. Here a flower from the self seeding wood sorrel in the flower beds.



The Robert Bancks 1810 Botanical Microscope looking mod on the colorful table cloth.



Wood sorrel through the Bancks Botanical Microscope with a hand held iPhone 6

Robert Bancks made a variety of forms of microscopes, this one rather small, and signed "Math' Inst' Make^r to the Prince of Wales" a larger design was used by several scientist like Robert Brown, discoverer of the cell nucleus One Bancks went beyond the backyard, on one of the great voyages, that of the HMS Beagle, with Charles Darwin. Used to view plankton, insects, crustaceans as well as botanical specimens. Another design that journeyed, this one far above the Earth on Skylab in more recent decades was the Nikon Model H Field Microscope, it is equally at home in the garden as in space.

The Nikon Model H has a bit of a different magnification range, from 40x up to 1000x. We used the lower end of that spectrum, 40x and 100x to have a little look at a leaf peel, to observe epidermal. I was experimenting with an aluminum well slide that I had made the night before. The Model H is an inverted microscope, objectives looking up from below the slide. It's focus does better with the cover slip towards the objective, facing down, so I machined a hole through a piece of 1/8 inch think aluminum, then a thin rim into which a circular coverslip sets into. I ran some clear nail polish around the rim to seal the coverslip. This was flipped



Nikon Model H Field Microscope



Leaf peel showing epidermal cells and stomata, hand held phone photograph.

to provide a little 1/8 inch deep well with a nice flat, thin bottom and a watertight seal. My intent for this slide was more for viewing live plankton, but I placed the peel down in there with a little water and it worked nicely. The peel tended to float a little, and was not completely flat, so the focus was not super even, but it was fun to explore. The chloroplasts in the stomata were clear and sharp and the convoluted puzzle piece shapes of the epidermal cells were mimicked by the floral pattern of the table cloth.



It was a wonderful gather of colorful plants, insects and people. Great to see everyone and get ready for the Fall when monthly gatherings will start again and we will continue to share our interests in the smaller things in life, from art, science and technology.

Underside of the machined aluminum well slide.



MicroNews

San Francisco Microscopical Society

Volume 13, #2 May 2018

PATHOGENIC PLANKTON: COLLECTION AND IDENTIFICATION

GENERAL MEMBERSHIP MEETING Wednesday May 9, Randall Museum, SF, 2nd Floor

Dr. Nader Shatara will discuss the *Monitering* and Identification of Harmful Planktonic Organisms including collection and preparation for microscopic identification of pathogenic plankton from ocean and bay waters where shellfish may be contaminated. He will discuss the significance of this information as well as ways of working with the California Department of Public Health to report findings.

Dr. Shatara is a Registered Environmental Health Specialist that has been working in various fields of environmental health for almost 30 years.



INSIDE

Society Elects A New Board	2
How Bug Day Turned Out	2
Spirogyra Conjugation Cancer Immunotherapy	3 3
BOOKS: River of Con- sciousness; Whitewash; Seeds of Life Board Meeting Notes4/21	4 4 4
Membership Meeting on March 21 at Randall Mus. McCrone Atlas; Carrizo Plain; NY Micro. Society	5 5 5
Lake Merritt BioBlitz	6
An Appreciation: Peter Werner's Presidency.	7
2018 JOIN SFMS	8

The programs in which he has worked include food protection, vector control, and the inspection of wells, pools and recreational waters. Door open at 7 pm and presentation will start at 7:30.

Come, bring friends, enjoy a look at the refurbished Randall Museum and share in the tasty refreshments. HS

Improving Visualization of

Unstained, Transparent Specimens

By Cody Prebys-Williams, President, SFMS

At the last SFMS General Meeting, Peter Werner demonstrated that it is possible to make homemade Rheinberg and other microscope filters from supplies readily available at most hardware and craft stores. With a little creativity and knowhow, these filters can be integrated into nearly any compound microscope. After receiving feedback from one of the participants who expressed excitement about microscopy but was concerned about having less technical knowledge, I wanted to follow-up with additional background information.

Rheinberg Illumination is considered a form of darkfield microscopy. Most forms of light microscopy collect both the diffracted rays and non-diffracted rays. In other words, you will see light passing through to the objective that is both "unaffected" and "affected" by the specimen. As a consequence, unstained and transparent specimens that are low in contrast are hard to see. Darkfield is a technique that aims to collect only the light affected by the specimen (i.e. scattered or diffracted), thus improving the contrast and visual prominence of the specimen compared to the background. This technique is recommended for diatoms, bacteria, microtubules, ciliates, flagellates, animal cells and tissues.

At the fundamental level, Rheinberg Illumination simply utilizes transparent films of various colors that are cut and inserted into the light path. Rheinberg filters are generally placed just below the condenser, where most microscopes have a dedicated condenser filter holder that can be used for ease of filter sizing and placement. To be able to properly size your homemade filters, you will also need to know how to adjust the microscope condenser for Köhler illumination. Rheinberg filters can be seen as two combined filters. See the figures below showing the "center stop" inner circle and the "annulus" outer ring adjacent to the colored light path diagram. This form of "optical staining" avoids having to use chemical dyes or stains that may negatively impact living specimen.



Spirogyra conjugation, scalariform, prepared slide, 100x, a6x4x100 Photomicrograph by Mel Pollinger, NY Microscopical Society, 2018.

SCIENCE, sciencemag.org 23 March 2018, pp 1366 SPECIAL SECTION: CANCER IMMUNOTHERAPY

During my lifetime I have subscribed on and off to Science, the premier weekly science magazine. It comes too often to be easily digested and it contains reports that are difficult to understand if you are not a specialist in that field. The editors recognize these limiting factors and therefore also include articles that give an overview of a trending science subject and frequently offer special sections that cover topics such as Cancer Immunotherapy in greater detail through several articles. One of these articles in this issue deals with the microbiome and the immune response to cancer. Our small newsletter does not attempt to do much more than draw your attention to the topic and to comment on what is the central theme of one article, the microbiome of the gut.

Ask beginning biology student to differentiate between the inside and the outside of the body and the answer might be something like this: "The outside is in contact with your clothing and everything else is the inside". After students learn of epithelial tissue the answer becomes more sophisticated. One way to quickly visualize the digestive system is to picture a donut that has been stretched so that the donut hole becomes a tube forming a mouth at one end and an anus at the other, much like an earthworm's digestive system. The gut now is an extension of the exterior covered with a layer of epithelium continuous from lips to the skin of the perineum which also is epithelium. In the mammalian body each section of the gut creates a special microenvironment with its microbiome. This population of organisms, most of whom are commensals, form a diverse and complex ecosystem that is found residing at all portals of entry on all epithelial barriers. We can classify the mammalian host-associated microorganisms as follows: 1) bacterial microbiome, 2) archaeal microbiome, 3) the virome (bacteriophages and eukaryotic viruses), 4) the mycobiome or fungi, 5) the meiofauna (unicellular protozoa and the helminthic worms). I have been told that if only the helminthic population remained visible to an observer, and remained in place and the species were recognizable, the observer would be able to identify dogs and cats, trees and lawns, houses and humans, soil and even many insects.

The epithelium of the human gut is particularly important in separating us from all the above mentioned organisms while at the same time admitting to the bloodstream a wide array of molecules produced by the digestive process. Disruption of the gut microbiome has been connected with a variety of inflammatory disorders, some of which may lead to cancer. It is understood that the abnormal cellular growth of cancerous tissue often results in the production of proteins that the immune system identifies as non-self and therefore attempts to attack by secreting anti-inflammatory cytokine/chemokines, metabolites, antimicrobial and neuropeptides. To the degree that the immune system is successful in clearing the aberrant cells from the body we are able to resist the development of cancerous tumors.

Laurence Zitvogel et.al. explore the fine line between health and disease driven by the interplay between the host and microbial factors in: *The Microbiome in Cancer Immunotherapy: Diagnostic tools and therapeutic strategies.*

Of interest is the recognition that the use of antibiotics in treatment reduced the abundance of bacterial in patients that do not respond to regular cancer treatment. Inflammation can induce carcinogenesis. Damage to the digestive mucosa results in an inflammatory response usually successfully controlled by the immune system. HS

It is striking to realize as authors describe their data how often it is based on work done with microscopes and yet the instrumentation is seldom mentioned or described in any detail. It is taken for granted that other scientists will recognize that the observations would have been made with what is a standard laboratory instrument. Photomicrographs are presented without mentioning if they are the result of light or electron microscopy. The reader must be aware that research today requires a broad spectrum of instrumentation. The Editor (Contimued from page 1)



RHEINBEG FILTER Note the peripheral colored annulus and the center opaque stop.

After performing a quick survey of the Internet, it was clear that there is a wide range of pre-

fabricated microscope filters available for purchase, ranging from under five dollars to thousands of dollars for proprietary name brand filter cubes. However, putting in the effort to create your own Rheinberg filters can provide an almost infinite combination of color for few cents per unit.

I encourage everyone to experiment and feed their curiosity. Last month SFMS opened an Instagram account under the name: *sfmicroscopicalsociety*. Searching through all the microscopy images has really been a delight and new source of daily inspiration and motivation. Please let us know if you're out there on Instagram too, so we can follow you! CPW

Lake Merritt BioBlitz

Since there is a good chance that you will not see this issue of Micro News in time, remember that it was sent out by eMail to all who are on the SFMS list. We record it here to remind you that SFMS is active and widely involved in scientific and public events.

A **BioBlitz** is an event in which teams of volunteers work together to find and identify as many species as possible.

Lake Merritt in the heart of Oakland is the jewel of the city and teeming with life, (*some of it microscopic*). During this event come learn about the thousands of organisms that call this place home and help document them as part of the <u>City Nature Challenge</u>. Local naturalists will be on hand to help you find and identify organisms. Bring your smart phone pre-loaded with the <u>iNaturalist</u> app, food for lunch, and any tools that you think will help you find organisms. There will be stations around the lake focusing on different habitats and some short 1 hour guided walks.

You can drop in at any point of the BioBlitz and find a <u>marked area leader</u> to learn from. Please RSVP even if you will be dropping in for just a little bit of the Bioblitz. To participate use this SCHEDULE: 10:00 - 10:30 am - Opening Session - basics of iNaturalist and Bioblitzs @ Oakland Museum of California: (No time span) The Mud Station @ near the boat house at the south end of Lake Merritt: 11:00 - 12:00 pm - Birding @ Rotary Nature Center, 11:00 - 12 pm - Insect walk @ Lake Merritt Gardens: 12:30 - 1:30 pm - Plant walk @ Lake Merrit Gardens: 2:00 - 3:30 pm - Identification Party @ Oakland Museum of California.

A BIT OF HISTORY "The i<u>Naturalist</u> platform was used as the recording tool for the 2014, 2015, and 2016 Centennial Bioblitzes in this series. The National Park Service and National Geographic hosted the first ever <u>nationwide</u> National Parks BioBlitz with scientists, park managers, and the public serving as citizen scientists making more than 60,000 observations on the mobile app iNaturalist. This endeavor has currently documented nearly 7,000 species, including species that are new to parks' species lists, and engaged an estimated 80,000 public participants. Check out the <u>iNaturalist results</u>. (Wikipedia).

The <u>iNaturalist</u> web site is an excellent place to find out about organisms that you may have difficulty identifying.





The *Journal of Biocommunication* is the professional academic journal of the Association of Medical Illustrators and the BioCommunications Association

ILLUMINATING ROMAN VISHNIAC: A CAREER IN BIOLOGICAL PHOTOGRAPHY AND CINEMATOGRAPHY

HOWARD J. RADZYNER & NORMAN J. BARKER

Abstract

Despite the fame of Roman Vishniac's photography of Jewish communities in pre-Holocaust Europe; what is relatively unknown today to the photography or science communities — despite the recognition it received at the time of its creation — is that Vishniac's major efforts in photography were neither documentary nor artistic. Rather, the vast majority of his lifetime of photographic work focused on the biological world. Reviewed here is the phenomenal scope and quantity of biological photography and cinematography produced by Roman Vishniac over a five-decade period. From zoo animals to the tiniest of microorganisms, from time-lapse studies of vascular physiology to widely distributed biology classroom films, from spreads in LIFE magazine to advertisements for an insect sting analgesic; Vishniac's ability to capture and create images — almost exclusively of living subjects — was sought after by scientific researchers, popular magazines, movie producers, news organizations and commercial entities. Vishniac's body of scientific photography, both still and ciné, often produced by him from initial concept through writing and shooting — in an age before the technological advances in imaging that we all now enjoy — and despite its later eclipse by his own earlier images, was regarded as the finest and most imaginative of its time.

JOURNAL OF BIOCOMMUNICATION

JBC Vol. 42. No. 1. 2018

For full access to all embedded video clips and to live resource links: <u>http://journals.uic.edu/ojs/index.php/jbc/article/view/9201/7497</u> From: "Eastern Analytical Symposium & Exposition" <newsletter@eas.org>

Sent: Friday, July 27, 2018 3:01 PM

Subject: EAS Proudly Presents Three Special Lectures That You Won't Want to Miss

Registration Opens August 1st



Upcoming Special Lectures

The theme for EAS 2018 is *Analytical Solutions to the World's Problems* with a focus on *Going Green*. Our 2018 technical program has been strengthened by including these three special lectures. We invite all registered attendees to join us to hear these experts:

KEYNOTE SPEAKER

On Nov. 12, at 4:15pm, **Dr. John Warner**, founder of the Warner Babcock Institute for Green Chemistry, will speak on: *Green Chemistry: The Missing Elements*. A complimentary reception will be held immediately following the lecture.

Click here for John Warner's bio

See bio pages following



PLENARY LECTURE

On Nov. 14 at 11:45am, our plenary lecture will be delivered by this year's winner of the EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry, **Prof. Linda P. McGown**, Rensselaer Polytechnic Institute. Prof. McGown presentation is on "Aptamers: A Case Study in Chemical vs. Biological Evolution." Light refreshments will be served.

Click here-for-Linda McGown's-bio

See bio pages following



BREAKFAST LECTURE

Dr. Mark Schure, Theoretical Separation Science Laboratory, will give a breakfast lecture on "*Making the Case for Multidimensional Liquid Chromatography in the Search for Biomarkers,*" on Nov. 13 at 7:30am. Light breakfast will be provided.

Please note Symposium & Exposition Conferee or Full-Time Student Conferee registration required to attend the Breakfast Lecture

Click here for Mark Schure's bio

See bio pages following



Page 2 of 2

Eastern Analytical Symposium & Exposition | 732-449-2280 | askeas@eas.org | EAS.org

STAY	CONNI	ECTED
×	×	×

PO Box 185, Spring Lake, NJ 07762

Unsubscribe pollingmel@optonline.net

Update Profile | About our service provider

Sent by newsletter@eas.org in collaboration with



Try it free today

Upcoming Special Lectures

The theme for EAS 2018 is Analytical Solutions to the World's Problems with a focus

on Going Green. Our 2018 technical program has been strengthened by including these

three special lectures. We invite all registered attendees to join us to hear these experts:

KEYNOTE SPEAKER John Warner is the recipient of the 2014 Perkin Medal, widely acknowledged as the highest honor in American Industrial Chemistry, and was named a 2016 AAAS - Lemelson Invention Ambassador. He received his BS in Chemistry from University of Massachusetts - Boston, and his Ph.D. in Chemistry from Princeton University. After working at the Polaroid Corporation for nearly a decade, he then served as tenured full professor at UMASS Boston and Lowell (Chemistry and Plastics Engineering). In 2007 he founded the Warner Babcock Institute for Green Chemistry, LLC (A research organization developing green chemistry technologies) where he serves as President and Chief Technology Officer, and Beyond Benign (a non - profit dedicated to sustainability and green chemistry education). He is one of the founders of the field of Green Chemistry, co - authoring the defining text Green Chemistry: Theory and Practice with Paul Anastas. He has published nearly 300 patents, papers and books. His recent work in the fields of pharmaceuticals, personal care products, solar energy and construction and paying materials are examples of how green chemistry principles can be immediately incorporated into commercially relevant applications. Warner received The 2004 Presidential Award for Excellence in Science Mentoring (considered one of the highest awards for US science education), the American Institute of Chemistry's Northeast Division's Distinguished Chemist of the Year for 2002 and the Council of Science Society President's 2008 Leadership award. Warner was named by ICIS as one of the most influential people impacting the global chemical industries. In 2011 he was elected a Fellow of the American Chemical Society and named one of "25 Visionaries Changing the World" by Utne Reader. In 2017 the German Ministry of Economics and The Technical University of Berlin announced the naming of "The John Warner Center for Green Chemistry Star - Ups" in his honor.

Title and Abstract:

Green Chemistry: The Missing Elements

Imagine a world where all segments of society demanded environmentally benign products! Imagine if all consumers, all retailers and all manufacturers insisted on buying and selling only non-toxic materials! The unfortunate reality is that, even if this situation were to occur, our knowledge of materials science and chemistry would allow us to provide only a small fraction of the products and materials that our economy is based upon. The way we learn and teach chemistry and materials science is for the most part void of any information regarding mechanisms of toxicity and environmental harm. Green Chemistry is a philosophy that seeks to reduce or eliminate the use of hazardous materials at the design stage of a materials process. It has been demonstrated that materials and products CAN be designed with negligible impact on human health and the environment while still being economically competitive and successful in the marketplace. This presentation will describe the history and background of Green Chemistry and discuss the opportunities for the next generation of materials designers to create a safer and more sustainable future.

2018 EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry

February 11, 2018 askeas Awards, EAS Awards Prof. Linda McGown

Linda Baine McGown is the William Weightman Walker Professor of the Department of Chemistry and Chemical Biology at Rensselaer Polytechnic Institute. Dr. McGown received her B.S. in chemistry from the State University of New York at Buffalo in 1975 and her Ph.D. in chemistry from the University of Washington in 1979. She was a faculty member at California State University (1979-1982), Oklahoma State University (1982-1987, tenured in 1985) and Duke University (1987-2004) before joining RPI in 2004. She has been a Fellow of the American Association for the Advancement of Science since 2001 and received the New York Section of the Society for Applied Spectroscopy Gold Medal Award in 1994. She was included in the 2016 Power List: the Top 50 Most Influential Women in the Analytical Sciences, and in The Future of Women in Chemistry and Science in honor of UNESCO declaring 2011 the International Year of Chemistry as one of "60 exemplary thinkers each speaking for 60 seconds about how to expand women's leadership in the sciences, across all disciplines and sectors". She has served on numerous editorial boards including Chemical and Engineering Analytical Chemistry, Applied Spectroscopy, Analytica News, Chimica Acta and Life.

The common thread through Dr. McGown's research is the recognition of the analytical potential of new discoveries and emerging technologies. In her early career, she exploited the unique capabilities of frequency-domain fluorescence lifetime spectroscopy to create information-rich, multidimensional data formats to characterize and classify complex samples such as human serum, humic substances and petrolatums. She then integrated fluorescence lifetime detection into separation techniques, including HPLC and CE, in order to obtain complete fluorescence lifetime profiles of each peak on-the-fly. One important product of this research is a four-decay approach to DNA sequencing that provides unprecedented resolution of overlapping DNA strands without any assumptions about the number or nature of the components contributing to the signal at each point in the capillary electropherogram.

In the mid-1990s, Dr. McGown became acquainted with aptamers, which were under investigation primarily as novel pharmaceuticals. She and co-authors wrote an Apage report to *Analytical Chemistry* citing the potential advantages of aptamers (aka "nucleic acid ligands") over other affinity reagents, most notably antibodies, for chemical analysis. Aptamers are now considered to be a mainstream alternative to antibodies for targets ranging from small m molecules to large proteins and even whole cells. In her own research, Dr. McGown introduced aptameric stationary phases in capillary electrochromatography for chiral and chemical separations, and an affinity MALDI mass spectrometry platform for rapid screening of affinity protein capture directly at aptamermodified MALDI probe surfaces. She is currently focusing on genomeinspired approaches to aptamer discovery to complement combinatorial methods, in order to explore a naturally evolved sequence space often underrepresented in combinatoriallibraries. Other current research interests include reversible biogels formed through selfassembly of guanosine compounds into hydrogen-bonded tetrads, separation of DNA by sequence, and prebiotic chemistry on early Earth.

Dr. McGown owes the success of her research program to the many talented graduate and undergraduate students and postdoctoral scholars who have participated in her group. She owes her professional longevity to support and encouragement from extraordinary friends and mentors, and most importantly, her family.

Post navigation

Previous Post:2018 EAS Award for Outstanding Achievements in Mass Spectrometry

Mark Schure has worked in separation science for over 35 years in industry and academics. Over a 28 year period he has worked for Digital Equipment Corporation, the Rohm and Haas Company and The Dow Chemical Company. Dr. Schure has been an Adjunct Professor in the Department of Chemical and Biomolecular Engineering at the University of Delaware for over 20 years. He has published over 110 papers, has 4 patents and recently edited the book "Multidimensional Liquid Chromatography."

His scientific interests include the fundamental separation science of complex molecules, polymers and colloids, colloid chemistry and materials science and all aspects of solving large-scale chemical and physical problems with computers. His contributions to separation science include detailed theory, simulations and experimental investigations in the areas of 2D chromatography, chromatographic stationary phase calculations and mechanism, capillary electrophoresis, electrochromatography and field-flow fractionation.

He has received many awards including the Arthur Doolittle award from the American Chemical Society, the Northeastern University Distinguished Alumni Lecture award, the Douglas Leng

award from The Dow Chemical Company, the Eastern Analytical Symposium Award for Outstanding Achievements in Separation Science, the L. S. Palmer award from the Minnesota Chromatography Forum and in 2015 he received the Stephen Dal Nogare award and the Uwe D. Neue award.

TitleandAbstractfor2018Presentation:Making the Case for Multidimensional Liquid Chromatography in the Search for Biomarkers, MarkR. Schure, Theoretical Separation Science Laboratory, Kroungold Analytical, Inc., Blue Bell, PA19422

Determining the presence and concentration of specific molecules as indicators of health and specific diseases has revolutionized medicine. Although many definitions of the term "biomarker" exist (1), the general idea is that some material or compound is present in a body fluid that reveals the presence of disease. Finding "smoking gun" biomarkers, those which signal an impending disease state, may be problematic in that some of these may be present at low concentrations that reside within the noise threshold of a detector. It is this theme that draws us to ask the question, "How many biomarkers may be present below the limit of detection and buried in the noise?" Some of these issues have been raised by Enke and Nagels (2) in their analysis of levels of natural substances. I will extend this discussion with recent work from my laboratory and my many collaborators.

Although this is a simple question, chromatography has a well-known problem: even with long columns and slow velocity, the component saturation is so high in a body fluid that even with high resolution mass spectrometry, large amplitude signals swamp out neighboring low-level signals causing loss of potential biomarker detection. How bad is the loss? This will be shown by generating chromatograms with statistical distributions of peak heights and retention times.

One potential aid to this is the use of two-dimensional liquid chromatography to reduce the saturation of components coming into the detector. In so many different ways, slowing down the chromatography allows one to get more effective information per unit time. In this presentation, which relies heavily on modeling, the pathways to component density reduction is explored and practical estimates reveal the difficulty of finding low-level biomarkers.

 K. Strimbu, J. A. Tavel, What are Biomarkers? Curr. Opin. HIV AIDS 2010 5(6) 463-466.
 C, G. Enke, L. J. Nagels Undetected Components in Natural Mixtures: How Many? What Concentrations? Do They Account for Chemical Noise? What Is Needed to Detect Them? Anal. Chem. 2011, 83, 2539-2546.



New York Microscopical Society One Prospect Village Plaza (66 Mount Prospect Avenue) Clifton, NJ 07013

NYMS Student Travel Award Application

NYMS is pleased to offer three (3) \$250 Student Travel Awards to assist with expenses (travel, lodgings, registration fees, etc...) in attending the 2018 Eastern Analytical Symposium (EAS) in Princeton, NJ (November 12-14, 2018). Awardees will also receive a NYMS student membership for one year.

Eligibility requirements for the NYMS Student Travel Award:

- Full or part-time undergraduate student in their junior or senior year
- Full or part-time graduate students (Masters or Doctoral)
- The student must be in good-standing and demonstrate excellence in his/her academic program.

Application requirements:

- Candidate application and short essay (maximum of 500 words) from the student describing his/her career aspirations, achievements and reasons for award consideration. This should highlight the student's education, experiences and ambitions involving microscopy, and what he/she hopes to achieve from attending EAS.
- Most current academic transcripts (unofficial).
- One letter of recommendation from a Professor, Lecturer, or Laboratory Instructor who is involved in the student's major curriculum.

Awardees must register for and attend EAS, specifically attending the NYMS Abbe Award Session, where they will formally receive their award. It is encouraged for them to attend other microscopy sessions.

Application requirements must be emailed to both the awards chairperson (John A. Reffner, jareffner@cs.com) & the NYMS president (Brooke W. Kammrath, <u>bkammrath@newhaven.edu</u>) by <u>October 1st, 2018</u>. Out of fairness to all potential candidates, no exceptions will be made. The winner will be notified no later than November 1st, 2018.

This is a wonderful opportunity, and members are encouraged to promote it.



New York Microscopical Society One Prospect Village Plaza (66 Mount Prospect Avenue) Clifton, NJ 07013

NYMS Student Travel Award Application Form

	Undergraduate 🗆	Graduate 🗆	Ph.D. (1 st 2 years) (select one)
Name			Email	
College/Institutio	on			Current Year
School Residence	chool Residence			
School Phone Nu	School Phone Number			
lome Address				
Home Phone Nur	nber			-

Application essay for award consideration – Maximum of 500 words

(Please use the space below and/or attach additional sheets, if necessary)

All applicants must submit the following materials electronically in one pdf file to both the awards chairperson (John A. Reffner, jareffner@cs.com) & the NYMS president (Brooke W. Kammrath, <u>bkammrath@newhaven.edu</u>):

1) Candidate application; 2) Most current academic transcripts (unofficial); 3) One recommendation letter.

All materials must be submitted and received no later than October 1st, 2018. The winner will be notified no later than November 1st. 2018. NYMS does not discriminate against any applicant because of race, color, religion, sex, sexual orientation, national origin, or physical handicap.

OFFICIAL USE ONLY: Reference#

Date	Received	
Date	Received	

Initials____

NYMS Student Travel Award Application Evaluation

Thank you for being a judge for the 1st NYMS Student Travel Awards.

There are three components of a complete application. These include:

- 1. Student Essay (max 500 words) 60%
- 2. Recommendation Letter 30%
- 3. Transcript (unofficial) 10%

Any incomplete applications will not be considered for this award.

A spreadsheet with each of the names of the students you will be evaluating will be provided for you (along with their applications). After you have read an application, please input your scores for each category into this spreadsheet. These scores will then be weighted based on the above criteria to provide a final score.

Each application will be evaluated by 3 judges. The scores of the 3 judges will then be averaged to make a final score for each applicant. The 3 students with the highest average scores will receive the NYMS Student Travel Awards.

Each of the following will be evaluated on a scale of 1-10, with a score of 1 indicating that the information for that category is unsatisfactory, 5 being average, and 10 being exceptional. Additional guidelines are provided under each category

- 1. Student Essay: 60%
 - a. This should include a discussion of career aspirations, achievements, and reason for award. To consider when
 - i. Is this student planning a career that involves microscopy?
 - ii. Does this student describe any meaningful experiences with microscopy, in classes, research or otherwise?
 - iii. Did the student address all prompting questions (career aspirations, achievements, and reason for award)?
 - iv. Has this student made any significant achievements during their educational careers?
 - v. Has the student made a compelling reason for receiving this award?
 - vi. Will attending EAS help this student in achieve their future goals/be beneficial?
 - vii. Is the essay well-written (i.e. mechanics and grammar)?
 - viii. Is the essay thoughtfully written?
 - ix. Is this student presenting at EAS?
 - x. Do you think this student should be given this award?
 - b. To generate a score, give 1 point for a YES answer to any of the above questions.

- 2. Recommendation Letter : 30%
 - a. A letter of recommendation Is difficult to evaluate. Things to consider are how well the faculty member knows the applicant and their opinion of the student's intelligence, work ethic, and capabilities. After reading the letter, assignment of a score can be based on the following scale:
 - i. Exceptional = 10 pts
 - ii. Above Average/Great = 8 pts
 - iii. Average/Good = 6 pts
 - iv. Below Average/Poor = 4 pts
 - v. Unsatisfactory = 2 pts
- 3. Transcript (unofficial): 10%

Consider the rigor of the student's coursework when making this determination, but a possible grading scale could be: (please round)

GPA: 4.0 = 10 pts GPA: 3.5 = 8 pts GPA: 3.0 = 6 pts GPA: 2.5 = 4 pts GPA: 2.0 = 2 pts GPA: below 2.0 = 0 pts

Any questions should be directed to Brooke W. Kammrath at <u>bkammrath@newhaven.edu</u>.

Main Identity

From: "Eastern Analytical Symposium & Exposition" <newsletter@eas.org>

To: <pollingmel@optonline.net>

Sent:

Wednesday, August 22, 2018 9:44 AM

Subject: Get Greener at the 2018 EAS Expo



HOW GREEN ARE YOU? FOCUS ON GREEN SOLUTIONS TO YOUR ANALYTICAL PROBLEMS AT 2018 EAS EXPO

November 12-14, 2018 Crowne Plaza Princeton - Conference Center, Plainsboro, NJ

Top Reasons to Attend the EAS Exposition

- Discover practical, green and sustainable solutions to your analytical problems.
- Visit more than <u>90 Exhibitors</u> in a convenient, uncluttered format
- Participate in the Technology Tour (view participating vendors listed below) while seeing the latest in analytical instrumentation, services, and supplies.
- View instrument demos in dedicated vendor hospitality suites (<u>click here for</u> <u>information on Special Exhibitor Events</u>)
- Network with your colleagues and vendors at the complimentary Exposition Mixer on November 13 from 4:00 to 5:30 pm
- Attend the <u>Keynote lecture</u>: Dr. John Warner, Warner Babcock Institute for Green Chemistry, will present: Green Chemistry: The Missing Elements
- <u>Register</u> in advance or on-site. Your registration is valid for all three days.
- Exposition hours are November 12 and 14 from 9 am to 4 pm and November 13 from 9 am to 5:30 pm

Register

EXHIBITOR SPACE AVAILABILITY

It's not too late - a few tabletop displays are still available! Contact Sheree Gold, Exposition Director, at <u>easinfo@aol.com</u> for details.

TECHNOLOGY TOUR

If you visit 10 of the participating companies and get your Passport marked, you are eligible to redeem it for your choice of a special gift at the EAS Souvenir Booth. If you visit all 20 of the participating companies, in addition to the special gift, you will be eligible to enter a daily drawing to win an **Amazon gift card**.

This year's Technology Tour is sponsored by the following exhibitors:

Activated Research AMETEK Arizona Instrument Omicron Scientific Princeton Instruments Cayman Chemical Company DWK Life Sciences GERSTEL Gibraltar Laboratories Malvern Panalytical Metrohm USA Mettler Toledo Millipore Sigma Restek Sciex Shimadzu Scientific Instruments TA Instruments Thermo Fisher Scientific USP Viavi Solutions VUV Analytics

EMPLOYMENT BUREAU

An Employment Bureau is located on the 3rd Floor of the Crowne Plaza Conference Center, easily accessible to employers and employees. You must be a registered attendee to use the Employment Bureau. Click here for more details

Eastern Analytical Symposium & Exposition | askeas@eas.org | www.eas.org

See what's happening on our social sites:



PO Box 185, Spring Lake, NJ 07762

Unsubscribe pollingmel@optonline.net

<u>Update Profile</u> | <u>About our service provider</u> Sent by newsletter@eas.org in collaboration with

×	Trusted Email from Constant Contact - Try it FREE today.

Try it free today

From: "Eastern Analytical Symposium" <newsletter@eas.org>

To: <pollingmel@optonline.net> Monday, August 13, 2018 2:54 PM

Sent: Subject: EAS Short Course Schedule - Register by Oct. 15 for Discounted Rates



EAS SHORT COURSES - Are A Great Training Opportunity!

Knowledge is the key to success in the laboratory enterprise, and the slate of EAS short courses provides real-world, tangible knowledge on a variety of topics. The instructors are experts in their specialties, and they communicate the important, and sometimes esoteric, nature of techniques and problems encountered in everyday laboratory work. You are sure to find topics that will provide essential knowledge and enhance your career in analysis.

Register to guarantee your spot in a one- or two-day course. Register by October 15 to receive discounted rates.

Click on the course title below to link to course descriptions and instructor bios or download the full schedule

Two-Day Short Courses

Code	~ Two-Day Courses ~ Sun., Nov. 11 - Mon., Nov. 12 8:30am - 5:00pm	Instructor(s)
E18-01	Practical Gas Chromatography	Eugene Barry, University of Mass-Lowell Thomas Brettell, Cedar Crest College
E18-02	LC/MS: Theory, Instruments, and Applications	Guodong Chen, Bristol-Myers Squibb Ragu Ramanathan, Pfizer
E18-03	Chemometrics Without Equations Part 1 & 2 (combined course)	Donald Dahlberg, Lebanon Valley College Barry Wise, Eigenvector Research
E18-06	Modern HPLC/UHPLC for Practicing Scientists 1 & 2: Fundamentals, Best Practices and Applications	Michael Dong, MWD Consulting

Code	~ Two-Day Courses ~ Mon., Nov. 12 - Tues., Nov. 13 8:30am - 5:00pm	Instructor(s)
E18-19	LC-MS Method Development for Small	Perry Wang, LC-MS Technical Expert
	Molecule Pharmaceuticals	

Code	~ Two-Day Courses ~ Tues., Nov. 13 - Wed., Nov. 14 8:30am - 5:00pm	Instructor(s)
E18-23	Troubleshooting Chromatographic Systems	Merlin Bicking, ACCTA, Inc. Douglas Raynie, South Dakota State University
E18-24	How to Develop Validated HPLC Methods: Rational Design with Practical Statistics and Troubleshooting	Brian Bidlingmeyer, Analytical Acumen LLC Stanley Deming, Statistical Designs
E18-25	Quality by Design: A New Paradigm for the Analytical Laboratory: Part 1 & 2	Zenaida Otera Gephardt, Rowan University

One-Day Short Courses

Code	~ One-Day Courses ~ Sunday, November 11 8:30am - 5:00pm	Instructor(s)
E18-04	Introduction to Chemometrics Without Equations	Donald Dahlberg, Lebanon Valley College Barry Wise, Eigenvector Research
E18-07	Modern HPLC/UHPLC for Practicing Scientists <u>1: Fundamentals and Pharmaceutical</u>	Michael Dong, MWD Consulting

	Applications	
E18-09	Introduction to Vibrational Spectroscopy for Real Time Analysis	John Wasylyk, Bristol-Myers Squibb Peter Larkin, Solvay Cytec Group
E18-10	Interpretation of Mass Spectra with Practical Solutions to Problems	Mike Lee, Milestone Development
E18-11	Lifecycle Approach to Analytical Methods:Â Incorporating Quality by Design Concepts into Method Development, Validation, Verification and Transfer	Gregory Martin, Complectors Consulting
E18-12	Process Analytical Technology: Out of the Lab & Into the Line	James Rydzak, Specere Consulting
E18-13	Develop Robust HPLC Methods for Pharmaceutical Analyses	Jinjian Zheng, Merck & Co.
E18-14	Getting the most from GC and GC/MS	Gregory Slack, PharmAssist Nicholas Snow, Seton Hall University
E18-15	Intact and Top-Down Protein Characterization and Quantitation by Mass Spectrometry: Approaches for Pharmaceutical Drug Discovery, Development, and Bioanalysis	John Kellie, GlaxoSmithKline Wenying Jian, Janssen
E18-16	Physical Characterization and Methods of Analysis of Pharmaceutical Solids: Essential Knowledge	Stephen Byrn, Purdue University Sean Chen, Antares Pharma
E18-17	Optimizing HPLC Separations with Knowledge of Analyte Size, Column Pore Size, and Phase Chemistry	Richard Henry, Consultant
E18-18	Taking Advantage of the Power of Excel	Scot Abbott, Phoenix First Response

Code	~ One-Day Courses ~ Monday, November 12 8:30am - 5:00pm	Instructor(s)
E18-05	Intermediate Chemometrics Without Equations	Donald Dahlberg, Lebanon Valley College Barry Wise, Eigenvector Research
E18-08	Modern HPLC/UHPLC for Practicing Scientists 2: UHPLC, Method Development, HPLC Operation, Troubleshooting and Biopharmaceutical Applications	Michael Dong, MWD Consulting
E18-20	Analytical Sampling and Sample Preparation	Douglas Raynie, South Dakota State University
E18-21	Evaluation of Trace/Ultratrace Impurities in Pharmaceuticals	Satinder Ahuja, Ahuja Consulting
E18-22	Introduction to GPC/SEC for Polymer Analysis	Yejia Li, Ashland Zheng Li, Ashland

Code	~ One-Day Courses ~ Tuesday, November 13 8:30am - 5:00pm	Instructor(s)
E18-26	Quality-by-Design: A New Paradigm for the Analytical Laboratory Part 1: QbD Fundamentals for Analytical Chemists	Zenaida Otera Gephardt, Rowan University
E18-28	Supercritical Fluid Chromatography: A Powerful and Greener Tool for Analytical and Preparative Separations	Yingru Zhang, Bristol-Myers Squibb Michael Hicks, Merck & Co.
E18-29	Modern Portable Analytical Spectroscopy	Richard Crocombe, Crocombe Spectroscopic Consulting Pauline Leary, Smiths Detection
E18-30	Stability Studies: The Tools, Methods and Predictions During Each Stage of Pharmaceutical Development	Kenneth Waterman, Freethink Technology Peter Bonk, Reaction Analytics
E18-31	Setting Data Quality Objectives and Determining, Reporting, and Interpreting Data Quality Indicators to Meet Scholarly Publication Requirements	Ephraim Govere, Penn State University

Code	~ One-Day Courses ~ Wednesday, November 14 8:30am - 5:00pm	Instructor(s)
E18-27	Quality by Design: A New Paradigm for the Analytical Laboratory Part 2: Design of Experiments for Analytical Chemists	Zenaida Otera Gephardt, Rowan University
E18-32	Keeping Your Analytical Procedures in Compliance with the FDA: Validation,	Kim Huynh-Ba, Pharmalytik

I.

	Documentation, and Investigation	
E18-33	HPLC and UPLC Troubleshooting	Imad Haidar Ahmad, Merck & Co.
E18-34	Practical NMR Spectroscopy	Damodaran Achary, University of Pittsburgh
E18-35	How Liquid Chromatography Works: Separation Principles Explained in Chromatograms	Martin Gilars, Waters Corp
E18-36	Analytical Instrument Qualification from a Chemical Metrology Perspective	Jerry Messman, Stranaska Scientific

Visit our website for more details on these Short Courses

Registration is now OPEN! Click here to register online or by mail

STAY CONNECTED



Eastern Analytical Symposium, PO Box 185, Spring Lake, NJ 07762

<u>SafeUnsubscribe™ pollingmel@optonline.net</u> <u>Forward this email</u> | <u>Update Profile</u> | <u>About our service provider</u> Sent by <u>newsletter@eas.org</u> in collaboration with



Try it free today

From:"Eastern Analytical Symposium & Exposition" <newsletter@eas.org>To:<pollingmel@optonline.net>Sent:Friday, August 24, 2018 10:32 AMSubject:Hot NEW Pharmaceutical Development Short Courses at EAS



PHARMA at EAS Check out these **NEW** courses being offered November 11-14 in Plainsboro, NJ!

NEW Short Courses focusing on Pharmaceuticals

Intact and Top-Down Protein Characterization and Quantitation by Mass Spectrometry: Approaches for Pharmaceutical Drug Discovery, Development, and Bioanalysis Sunday, November 11, 8:30am - 5:00pm *Instructors: John Kellie, GlaxoSmithKline and Wenying Jian, Janssen R&D*

Intact and top-down protein analysis by mass spectrometry (MS) is poised to play an increasing role in pharmaceutical industry in the areas of drug discovery (proteomics, target characterization), development & manufacturing (antibody characterization, quality attributes, mass analysis), and preclinical / clinical study support (biomarkers & biotherapeutic monitoring for in-life studies). This course will provide a background in sample processing, analysis by MS, and data interpretation and analysis for the many applications of intact protein MS in pharmaceutical industry. Click here for more details <u>Click here for more details</u>

Process Analytical Technology: Out of the lab and into the Line

Sunday, November 11, 8:30am-5:00pm Instructor: *James Rydzak, Specere Consulting*

Process analytical technology (PAT) is a tool for product development, scale up and manufacturing o any chemical product. In this course, you will learn about the benefits of in-process monitoring, how to justify and plan the analysis implementation. Different process analytical tools will be discussed how to implement them and how to choose between them for your application. How to use PAT to save time and money, improve your green scores in development and manufacturing becomproficient at PAT will be discussed. Various applications, from various industries will be used to explain concepts and provide examples of implementation. *Click here for more details*

Physical Characterization and Methods of Analysis of Pharmaceutical Solids: Essential Knowledge

Sunday, November 11, 8:30am-5:30pm Instructors: *Stephen R. Byrn, Purdue University & Xiaoming (Sean) Chen, Antares Pharma*

Physical characterization and methods of analysis of pharmaceutical solids are essential for drug research and development. Solid characteristics such as polymorphism, formation of hydrate and solvate, and crystallinity have profound impact on the quality attributes of drug substances and drug products such as solubility, dissolution, bioavailability, processability, and stability. Characterization o those solid state properties is critical for selection and manufacture of desirable solid forms fo development. This short course presents some essential knowledge for pharmaceutical solids. It also introduces methods of analysis of the solid state such as X-Ray powder diffraction, differentia scanning calorimetry, thermogravimetric analysis, microscopy, infrared spectroscopy, Ramai spectroscopy, and solid state NMR. Applications of those techniques in the final form selection of drug substances and mixture analysis of drug products are discussed. <u>*Click here for more details*</u>

Stability Studies: The Tools, Methods and Predictions During Each Stage of Pharmaceutical Development

Tuesday, November 13, 8:30am-5:30pm Instructors: *Kenneth C. Waterman, FreeThink Technologies & Peter Bonk, Reaction Analytics*

First, we will look at the nature of stability measurements and the meaning of shelf-life. We will emphasize the needs at each stage of pharmaceutical development. Accelerated models used to accurately predict stability appropriate for various storage conditions will be discussed, along with how to calculate error bars when using these types of predictions. The discussions will include in-use stability and justification for acceptability after shipping excursions. <u>*Click here for more details.*</u>

We will also offer these popular <u>Pharmaceutical</u> short courses: click on course title for more details

- <u>Keeping Your Analytical Procedures in Compliance with the FDA:</u> <u>Validation, Documentation, and Investigation</u> (Nov. 14)
- Lifecycle Approach to Analytical Methods: Incorporating QbD Concepts into Method Development, Validation, Verification (Nov. 11)
- Evaluation of Trace/Ultratrace Impurities in Pharmaceuticals (11/12)
- Analytical Sampling and Sample Preparation (11/12)
- LC/MS Method Development for Small Molecule Pharmaceuticals (Nov. 12-13)



Click here for our full line up of two- and one-day courses. All Short Course take place at the Crowne Plaza Princeton-Conference Center in Plainsboro, NJ. You must register as a Symposium & Exposition Conferee or Full-Time Student Conferee in order to take a short course. Register before Oct. 15 for discounted pricing.

Technical Program

Hear the latest pharmaceutical topics at

these oral sessions

- Stability Indicating Method Development and Forced Degradation Experimental Approaches (11/12 AM)
- The Role of Chirality in the Pharmaceutical Industry (11/12 PM)
- Impact of New Regulatory Expectations to Drug Development in Pharmaceutical Industry (11/12 PM)
- Analytical Solutions to Challenges in Impurity Testing (11/13 AM)
- PAT: Having Eyes in the Process (11/13 ÅM)
- Enabling Real Time Release Testing with PAT (11/13 PM)
- Pharmaceutical Drug Product Quality (11/13 PM)
- Challenges in Pharmaceutical Analysis: Formulations and Method Transfer (11/14 AM)
- Ensuring Quality of Pharmaceutical Products (11/14 PM)
- Proteomics and Protein Bioanalysis (11/14 PM)

Visit our website for complete list of our <u>short courses</u> and <u>technical program</u> and all the other exciting happenings at EAS! <u>www.EAS.org</u>

It's not too late to submit a poster! Poster abstracts are being accepted until **September 1st**; go to www.eas.org/asubmit for more details and to submit your work.

- From: "Eastern Analytical Symposium & Exposition" <newsletter@eas.org>
- To: <pollingmel@optonline.net>
- Sent: Tuesday, September 11, 2018 10:15 AM

Subject: Career Development Workshops & Employment Bureau to Help Advance Your Career

Submit Job Posting & Resumes in Advance



Career Development Opportunities at EAS

WORKSHOPS

Our workshops include topics to help develop your professional skills, as well as to hone other skills critical for career success. These workshops are open to all registered attendees; advanced registration is request.

Monday, November 12, 2018, 1:00 PM to 3:00 PM

Title: Effective Communication Skills for Professionals in Chemistry Presenter: Donald Truss, Executive Recruiter

Learn This Valuable Perspective of The Interview Decision Making Process

Come and learn the secrets to making the interviewer comfortable and capable of understanding you. Learn how the proper use of patience and timing will increase the probability of receiving an offer of employment. During this interactive session, we will discuss how to understand what the interviewer is feeling during the interview, and how you can guide his or her feelings in a way that improves communication. Don't miss this opportunity to get an insiders view of the effective processes involved between interviewer and interviewee. Come with an open mind and be prepared to be surprised! Don't miss this event where you can expand your network, make new friends, share knowledge with your peers, and hear highly relevant and beneficial insights and perspectives from an expert in the employment marketplace.

Tuesday, November 13, 2018, 1:00 PM to 3:00 PM

Title: The Importance of an Impressive Social Profile, Whether You are Looking for Your Next Career Move or Not

Presenter: Suzanne M. Stingo, SMS Social Media Strategies

Whether you are looking for your next career move or looking to connect with more business counter-parts, LinkedIn is where your profile needs to shine! This workshop will help you get your profile be the BEST version of YOU it can be! Be an "All Star" on LinkedIn and learn how to use the platform in all stages of your career!

Click here to register

EMPLOYMENT BUREAU

An Employment Bureau is available to provide ample opportunity for employees to meet prospective employers. We are now accepting job postings - email pdf to **job_postings@eas.org**.

The Employment Bureau will operate Monday - Wednesday and is included with your EAS registration. Job postings are continually updated during EAS and applicants are encouraged to visit the Job Posting bulletin boards on a regular basis.

Job Seekers: All resumes must be submitted in a SEARCHABLE PDF file format. This is to make it easier and faster for employers to find prospective applicants. Resumes can be emailed to candidate_cvs@eas.org any time <u>after</u> you have registered for the conference.

Job Postings: Employers will be given access to EAS's secure portal to search and review resumes online.

<u>Click here</u> to for more details and how to submit your job posting in advance. If you are unemployed, contact the Executive Secretary at askeas@eas.org

Register here

Eastern Analytical Symposium & Exposition | 732-449-2280 | askeas@eas.org | www.eas.org



PO Box 185, Spring Lake, NJ 07762

Unsubscribe pollingmel@optonline.net

Update Profile | About our service provider

Sent by newsletter@eas.org in collaboration with



Try it free today

From: "Eastern Analytical Symposium & Exposition" <newsletter@eas.org>

To: <pollingmel@optonline.net>

Sent: Thursday, August 09, 2018 1:49 PM

Subject: NEW Chromatography Short Courses at EAS!



CHROMATOGRAPHY at EAS

Check out these New Short Courses

New Chromatography Short Courses

<u>Supercritical Fluid Chromatography (SFC): A Powerful and Greener Tool for Analytical</u> <u>and Preparative Separations</u>

Tuesday, November 13, 8:30am - 5:00pm *Instructors:* Yingru Zhang, Bristol-Myers Squibb and Michael Hicks, Merck & Co.

This one-day course provides an introduction to SFC fundamentals and method development with practical instructions on implementing SFC as an everyday separation technique to complement other chromatography. First, we cover practical knowledge necessary to develop successful SFC methods taking participants step by step through the instrument setup and configurations, column and mobile phase selections and SFC conditions for both chiral and achiral applications. Second, we will guide the participants through physical properties and chromatography attributes to understand the power of SFC. Finally, we cover the intrinsic advantages of modern SFC technology and its expansion and strategies for more experienced liquid chromatographers to develop a broader spectrum of SFC applications. *Click here for more details*

Introduction to GPC/SEC for Polymer Analysis

Monday, November 12, 8:30am - 5:00pm Instructors: Yejia Li, Asland, and Zheng Li, Asland

This one-day course presents the fundamentals of gel permeation chromatography/size exclusion chromatography (GPC/SEC) with an emphasis on practical applications for polymer analysis. Topics to be covered include the theory, instrumentation and applications of SEC/GPC with key concepts of polymers. Applications of SEC/GPC will be presented with examples from industry and academy. Advanced technique with light scattering and rheometer will be used to solve complex issues. Other practical issues and trouble-shooting for GPC/SEC analysis will be discussed as well. <u>Click here for more details</u>

<u>How Liquid Chromatography Works: Separation Principles Explained in</u> Chromatograms

Wednesday, November 14, 8:30am - 5:00pm Instructor: Martin Gilar, Waters Corp.

The course attendees will learn about principles of chromatographic modes such as reversed-phase, hydrophilic interaction, ion-exchange and size exclusion chromatography. Special emphasis will be given to reversed phase mode. MS Excel will be employed to illustrate retention and dispersion processes on columns. Excel generated chromatograms will be utilized to explain the principles of band broadening on column and due to extra-column effects. Couse attendees will be able to use the spreadsheets, vary separation parameters and instantly observe the effects in chromatograms. Basic pitfalls of method development and method transfer will be covered. <u>*Click here for more details*</u>

Returning Popular Chromatography Courses:

- Getting the most from GC and GC/MS (11/11)
- Practical Gas Chromatography (11/11-11/12)
- Troubleshooting Chromatographic Systems (11/13-11/14)

- *LC/MS: Theory, Instruments, and Applications* (11/11-11/12)
- LC/MS Method Development for Small Molecule Pharmaceuticals (11/12-11/13)
 - Register Now

All Short Course take place at the Crowne Plaza Princeton Conference Center. You must register as a "Symposium & Exposition Conferee" or a "Full-Time Student Conferee" in order to take a short course.

Technical Program

Hear the latest chromatography topics at

these oral sessions:

- EAS Award for Outstanding Achievements in Separation Sciences, Honoring Christopher Pohl, Thermo Fisher Scientific (11/12 AM)
- The Current and Future Role of HILIC in the Separation World (11/13 PM)
- Modern Applications of Supercritical Fluid Chromatography (11/14 AM)
- Recent Advances and Applications of Multidimensional Chromatography (11/13 AM)
- New Developments in GC Analysis Capabilities (11/13 AM)
- Modern Advances in Gas Chromatography (11/13 PM)

Visit our website for a complete list of our <u>short courses</u> and <u>technical</u> <u>program</u> and all the other exciting happenings at EAS!

www.EAS.org

EAS, PO Box 185, Spring Lake, NJ 07762

SafeUnsubscribe[™] pollingmel@optonline.net

<u>Forward this email</u> | <u>Update Profile</u> | <u>About our service provider</u> Sent by <u>newsletter@eas.org</u> in collaboration with

×	Cons	stant	Conta	act	

Try it free today

1

From: "Eastern Analytical Symposium & Exposition" <newsletter@eas.org>

To: <pollingmel@optonline.net>

Sent: Thursday, September 06, 2018 3:47 PM

Subject: Outstanding HPLC/UHPLC Courses - Separates EAS from the Rest of the Pack!



HPLC/UHPLC at EAS Check out what's happening this November 11-14 in Plainsboro, NJ!

HPLC/UHPLC Short Courses

Develop Robust HPLC Methods for Pharmaceutical Analyses

Sunday, Nov. 11; 8:30am - 5:00pm Instructor: Jinjian Zheng, Merck & Co.

In this one-day short course, we will discuss a systematic approach to develop robust HPLC methods for pharmaceutical analyses. Many challenging real life examples will be analyzed to understand what it takes to develop a robust HPLC method for various applications including assay/CU/dissolution, impurity profiling/stability indicating, mutagenic impurities etc. The application of software modeling tools in each stage of the method development will be discussed. In addition, we will discuss the approaches to minimize method uncertainties and reduce errors in quantitative analysis based on measurement system analysis principles. *Click here for more details*

Optimizing HPLC Separations with Knowledge of Analyte Size, Column Pore Size, and Phase Chemistry

Sunday, Nov. 11; 8:30am - 5:00pm Instructor: Richard Henry, Consultant

Small-pore HPLC columns (about 100Å average pore diameter) may not be suitable for optimum separation when sample components exceed about 500-1,000 MW. Ideally, columns should have diameters large enough to allow rapid diffusion of target analytes throughout the particle internal pore volume. This practical short course will describe: 1) why having adequate pore diameter is critical to good HPLC column performance in any phase retention mode (RP, HILIC, etc.), and 2) how to detect pore exclusion for larger components and select the pore diameter that maximizes phase interaction and rapid mass transfer for all sample components. *Click here for more details*

Modern HPLC/UHPLC for Practicing Scientists 1 and 2: Fundamentals, Best Practices and Applications

Sunday, Nov. 11 and/or Monday, Nov. 12; 8:30am - 5:00pm Instructor: Michael W. Dong, MWD Consulting

This intermediate 2-day workshop will provide the analytical scientist with a clearer understanding and a solid working knowledge of the concepts, instrumentation, columns, pharmaceutical applications and practices (method development, HPLC operation and troubleshooting) of modern HPLC and UHPLC (ultra-high-pressure liquid chromatography). The focus is on its practice in pharmaceutical analysis of small molecule drug substances and drug products. This workshop is divides into two 1-day sessions which allows attendees to register separately if desired. The first day is fundamentals and small molecule drug applications. The second day is UHPLC, method development, troubleshooting and other applications including characterization/QC of recombinant biologics. <u>Click here for more details</u>

How to Develop Validated HPLC Methods: Rational Design with Practical Statistics and Troubleshooting

Tuesday, Nov. 13 and Wednesday, Nov. 14; 8:30am - 5:00pm Instructors: Stanley Deming, Statistical Designs and Brian Bidlingmeyer, Analytical Acumen

This two-day course offers practical training for the practicing scientist. Follow a step-by-step approach to develop validated HPLC methods. Learn a systematic approach to methods development that provides sustainable validation by using statistics and statistical process control tools. With emphasis on practicality, the course proposes a straightforward, iterative process to integrate the method development and validation activities. How to carry out routine maintenance to prevent loss of validation, and set diagnostics to recognize behavior that requires troubleshooting will be discussed. Consult with instructors who have years of experience in industry and academe. Leave with a strategy for developing your own validated methods. *Click here for more details*

HPLC and UPLC Troubleshooting

Wednesday, Nov. 14; 8:30am - 5:00pm Instructor: Imad Haidar Ahmad, Merck & Co.

This course teaches the basics of HPLC troubleshooting by reviewing the most common problems encountered in HPLC analysis. The course is divided into five sections: artifact peaks, retention time variability, peak broadening, baseline noise, and peak area variability. A set of clues are provided for each section to help diagnosing, confirm, and solving of the chromatographic problem. List of recommendations/best approaches are given at the end of each section. Over 60 study cases from literature are presented and discussed in this course in an interactive way. The attendees will be involved in solving most of the riddles by pondering upon the root cause and the solution of the presented problems. At the end of the course, a poster summarizing all the problems presented in this course along with clues, solutions, and examples from the literature will be provided.

<u>Click here for more details</u>

Register Now

All Short Course take place at the Crowne Plaza Princeton Conference Center in Plainsboro, NJ. You must register as a "Symposium & Exposition Conferee" or a Full-Time Student

Conferee" in order to take a short course. Register before Oct. 15th for discounted pricing.

Visit our website for a complete list of our <u>Short Courses</u> and <u>Technical</u> <u>Program</u> and all the other exciting happenings at EAS!

www.EAS.org

EAS, PO Box 185, Spring Lake, NJ 07762

SafeUnsubscribe[™] pollingmel@optonline.net

Forward this email | Update Profile | About our service provider

Sent by newsletter@eas.org in collaboration with

1

From:"Eastern Analytical Symposium & Exposition" <newsletter@eas.org>To:<pollingmel@optonline.net>Sent:Friday, August 31, 2018 9:48 AMSubject:Spectroscopy Courses at EAS are Electromagnetic!



SPECTROSCOPY at EAS Outstanding Courses & Presentations being offered November 11-14 in Plainsboro, NJ!

Popular Spectroscopy Short Courses

Introduction to Vibrational Spectroscopy for Real Time Analysis

Sunday, November 11, 8:30am - 5:00pm Instructors: John Wasylyk, Bristol-Myers Squibb & Peter Larkin, Solvay Cytec Group

Classic vibrational spectroscopy techniques include near-infrared (NIR) absorption, infrared (IR), and Raman spectroscopies. These vibrational spectroscopies provide important real time analytical (RTA) techniques to the scientist because of their molecular specificity, sampling flexibility and available analysis methodologies. The popularity of these techniques for RTA continues to increase due to steady improvements in technologies and heightened regulatory expectations surrounding RTA based control strategies. In this course we will provide an overview of all three techniques, review basic spectroscopy principles, review the advantages and disadvantages of each technique, summarize the group frequency concept, provide a comparison of the spectra-structure correlations of NIR, IR and Raman spectroscopies and briefly summarize key chemometric concepts for model development. RTA examples will be presented which highlight the strengths and limitations of all three techniques and summarize the critical attributes needed for successful applications of RTA. *Click here for more details*

Modern Portable Analytical Spectroscopy

Tuesday, November 13, 8:30am-5:00pm Instructors: *Richard Crocombe, Crocombe Spectroscopic Consulting & Pauline Leary, Smiths Detection*

Portable spectrometers are used for many purposes, including quality control and process analyses in industrial environments, and for scene-assessment in law enforcement, emergency response and military applications. Hardware and software innovations make it possible to manufacture small, light, easy-to-use systems that perform well, and are ruggedized to meet the needs of the field user. This hands-on course will cover the capabilities of modern portable spectrometers covering elemental spectroscopy (x-ray fluorescence and laser induced breakdown spectroscopy), molecular/optical (infrared and Raman), and mass spec/molecular (ion mobility and gas chromatography-mass spectroscopy). Advantages, limitations and applications of each method will be detailed. Attendees will be exposed to sampling and use of these systems during the hands-on exercises. *Click here for more details*

Practical NMR Spectroscopy

Wednesday, November 14, 8:30am-5:30pm Instructor: *Damodaran Achary, University of Pittsburgh*

In this course, you will learn the fundamentals of NMR spectroscopy that will help you better understand commonly used and advanced 1D and 2D NMR experiments, both in routine analytical work and in scientific research. Emphasis will be given on practical aspects of NMR spectroscopy. You will also learn the tips and tricks to obtain the best out of your spectrometer. Overall, this course will prepare you to engage the NMR spectrometer and run experiments with confidence. *Click here for more details*

Register Now 0 Π

Click here for our full line up of two- and one-day courses. All Short Course take place at the Crowne Plaza Princeton-Conference Center in Plainsboro, NJ.

You must register as a Symposium & Exposition Conferee or Full-Time Student Conferee in order to take a short course.

Register before Oct. 15 for discounted pricing.

Technical Program

Hear the latest & greatest Spectroscopy

topics at these oral sessions

- EAS Award for Outstanding Achievements in Vibrational Spectroscopy, Honoring Stephen Cramer, University of California-Davis (11/12 AM)
 - Analytical Techniques for Elemental Analysis of Solids (11/12 AM)
 - 60th Anniversary of SAS: Advancing Spectroscopy from Foundation to Future (11/12 PM)
 - New York/New Jersey Section of the Society for Applied Spectroscopy Gold Medal Award,

Honoring Igor Lednev, University of Albany (11/13 AM)

- Better Raman Spectroscopy through Chemometrics (11/13 AM)
- Spectroscopy Hits the Clinic (11/13 PM)
- Nano IR Development (11/13 AM)

• EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry,

Honoring Linda McGown, Rensselaer Polytechnic Institute (11/14 AM)

- Raman Material Identification (11/14 AM)
- Advances in Spectroscopy for Food Safety and Quality (11/14 AM)
- Analytical Chemistry On the Go: Mobile Measurements (11/14 AM)
- Enhancement Strategies in Raman & Infrared Spectroscopy (11/14 PM

Visit our website for complete list of our <u>short courses</u> and <u>technical program</u> and all the other exciting happenings at EAS! <u>www.EAS.org</u>

It's not too late to submit a poster! Poster abstracts are being accepted until **September 1st**; go to www.eas.org/asubmit for more details and to submit your work.

EAS, PO Box 185, Spring Lake, NJ 07762

SafeUnsubscribe[™] pollingmel@optonline.net

Forward this email | Update Profile | About our service provider

Sent by newsletter@eas.org in collaboration with

1



Try it free today

NEW YORK MICROSCOPICAL SOCIETY BULLETINS

The following original-print bulletins can be purchased by NYMS members. The bulletins are limited in number and can be purchased, while they last, at \$2.00 each, 8 copies for \$10 plus \$2.00 S&H. Also, in limited supply are original-print NYMS journals, while they last at \$5.00 each. The journals date back to 1896. The bulletins, Journals and other out-of-archive publications may be viewed at the NYMS Library in our building in Clifton, New Jersey. If interested in owning a part of NYMS history, please contact Mel Pollinger by email pollingmel@optonline.net or by daytime phone at (201) 791-9826

Vol. 1 New York, N. Y., January, 1937 No.3 COLLECTING RECENT DIATOMS By JOSEPH F. BURKE Vol. 1 New York, N. Y., February, 1937 No. -4 PREPARING RECENT DIATOMS By JOSEPH F. BURKE Vol. 1 New York, N. Y., November, 1937 No.5 MOUNTING RECENT DIATOMS By JOSEPH F. BURKE Vol. 3 New York, N. Y. June, 1951 No: 1 PREP ARA TION OF METAL FOR MICROSCOPICAL EXAMINATION by F. Gordon Foster Fellow, New York Microscopical Society Vol. 1 New York, N. Y., December, 1936 No.2 MAKING A ROCK SECTION By GEORGE E. ASHBY Vol. 1 New York, N. Y., February, 1936 No.1 THE MYCETOZOA By ROBERT HAGELSTEIN Vol. 2 New York, N. Y., April, 1944 No.1 THE HISTORY OF THE MICROSCOPE **By ROBERT HAGELSTEIN** Vol. 1 New York, N. Y., January, 1940 No.6 MOUNTING INSECTS BY THE PRESSURE METHOD, By Roy M. ALLEN From:"McCrone Research Institute" <intermicro@mcri.org>To:<pollingmel@optonline.net>Sent:Thursday, August 23, 2018 4:02 PMSubject:Call for Papers - Inter/Micro 2019





McCrone Research Institute

A Not-for-Profit Corporation 2820 South Michigan Avenue, Chicago, IL 60616-3230 Phone: 312-842-7100 Fax: 312-842-1078

Copyright \odot 2018 McCrone Research Institute, Inc. All rights reserved.

McCrone Research Institute, Inc., 2820 S. Michigan Avenue, Chicago, IL 60616

SafeUnsubscribe[™] pollingmel@optonline.net

Forward this e-mail | Update Profile | About our service provider Sent by <u>intermicro@mcri.orq</u> in collaboration with



Try it free today

1



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 Houten.

From Route 46 coming from west:

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

<u>From route 46 coming from East:</u> 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=BusSchedulesP2PTo http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=TrainTo



Please Print

New York Microscopical Society

Please send with payment directly to: New York Microscopical Society c/o Mel Pollinger, Treasurer 18-04 Hillery Street Fair Lawn, NJ 07410-5207

I hereby apply for membership in the New York Microscopical Society

Name: (Dr., Ms., Mr., Mrs.) Home Address:			Nickname:	
Phone: (home or mobile)	Fax:	Email:		
Work Information: Company Name		Work Address:		
Work Phone:	Email:			
Would you prefer to receive NYMS r Principal work or interest in microso	nail at home? at copy :	work? by	email (<i>best wa</i>	y)?
Would you like information about N	NYMS committees?	Yes No	Awards	Membership
Education Library Finance	Curator Housing	Program	Publications	History
Academic and Honorary Degrees:				
Degree	Conferring Institutio	n	Date	
Scientific Publications				
Membership in Scientific Societies				
Date of birth (optional if over 18)				
I have enclosed a check for \$ {Annual \$30, Supporting \$60 advertisement in NYMS New I understand portions of the above i	to cover my app , Life \$500 (payable w s), Junior \$5 (under 18 nformation may be us	lication fees for rithin the year), 8 years old), Stu sed in NYMS pul	membership. Corporate \$17 dent (over 18) olications.	5 (includes one \$20.}
I would prefer my home work	address/phone inc	cluded in the NY	MS Directory	
Signature	Date			

NYMS Headquarters: One Prospect Village Plaza (66 Mount Prospect Avenue), Clifton, NJ 07013

New York Microscopical Society Items For Sale

29-Feb-2016

N.Y.M.S. Microscope Covers

ltem #	Size	Member Price	List Price
MT-003	Small Microscope or Stereo, 15"W x 17"H	\$18.00	\$20.00
MT-004	Lab Microscope or Large Stereo, 20"W x 18"H	\$23.00	\$25.00
MT-005	Large Lab Scope, 22"W x 21"H	\$28.00	\$30.00
MT-009	Large Lab Scope with Camera, 9"W x 19"Deep x 23"H	\$31.00	\$33.00
MT-010	Universal Scope with Camera, 11"W x 25"Deep x 23"H	\$36.00	\$40.00
MT-012	X-large Scope	\$45.00	\$50.00
	N.Y.M.S. Microscopes (see below for im	ages)	

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	\$30.00	\$35.00
	NYMS Patch	\$5.00	\$7.00
	Microscope Cleaning Kit*	\$40.00	\$45.00
	NYMS Lapel Pin	\$10.00	\$15.00



NYMS Engraved Pen



Model 131: Tungsten Model 131-FLU: Fluorescent





\$10.00

\$40.00

\$7.00

\$20.00

Model 125-LED Cordless

Model 185: 20x

NYMS Gallery; Sep2018 Pg. 1



Image No.190, Phloroglucin, re-crystallized from a melt between a slide and a cover glass; 6x4x200 low- magnification Polarized-light Photomicrograph by Jan Hinsch



Image No. 240, microtome thin cross-section of an injection molded plastic machine part; 6x4x200Low-magnification Polarized-light photomicrograph by Jan Hinsch

NYMS Gallery; Sep 2018 Pg. 2



Waterfalls Shapes, High-Speed Photo. 0180304(DSC8180b6x4x200): Photo by Mel Pollinger



Waterfalls Shapes, High-Speed Photo, 0180304(DSC8182b6x4x200): Photo by Mel Pollinger

NYMS Gallery; Sep 2018 Pg. 3



Bibenzyl, 50x (P1061212)a6x4x200: Preparation & Photomicrograph by Mel Pollinger



Bibenzyl, 50x (P1061213)a6x4x200: Preparation & Photomicrograph by Mel Pollinger

NYMS Gallery; Sep 2018 Pg. 4



Reflected light differential interference contrast. An effective, qualitative demonstration of the presence of the trigon, the higher order colors on the left are indicative of a steep slope: Photomicrogtraph by Jan Hinsch



Reflected light interferometry, no polarized light involved. The colors are due to height differences of the surface structure, here tiny trigons on a raw diamond: Photomicrogtraph by Jan Hinsch