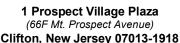


### Newsletter

Of the

### **New York Microscopical Society**



**GPS**: Latitude 40.8648N, Longitude 74.1540W



January 2018 Editor: (201) 791-9826 Volume 12 (32) Number 1

### Microscopy Fun at the American Museum of Natural History January 27, 2018, 1:00 pm – 3:30 pm Location: American Museum of Natural History

There has been serious fun with microscopy at the Museum over the past year!





AMNH Dept of Education staff, incl. our meeting leader NYMS Board of Managers member Jay Holmes, work with a wide variety of audiences, from City Librarians to secondary school science teachers, to family groups with young children. From a couple of students in a "Making" environment to 1200 people for a family event. These various programs involve a variety of microscopes, tools, and objects to observe.

Join Jay, his colleagues, their students, and NYMS members, at the Museum for a sampling of some of these activities. It's a great opportunity to think about opportunities for NYMS outreach and perhaps brainstorm some new ways to share our love of the smaller things in life with people of all ages.

The day will open with a short presentation, then move on to hands-on stations around:

students making microscopes from glass, brass, and wood
 1:00 PM Doors open

1:20 – 3:20 PM Presentation, hands-on activities, and Meet NYMS!

### Location:

American Museum of Natural History, Central Park West between 77th and 79th Sts., NYC Davis Classroom East, on Second floor

Enter free through the Main Security Entrance below the main entry's stairs on Central Park West–<u>MUST</u> mention "New York Microscopical Society / Education Department meeting in Davis Classroom East."

At other entries you will have to pay admission.

Floor maps for program locations in Supplement section: SEE nyms.org and SEE YOU THERE!!

### **New York Microscopical Society Board of Managers**

President and Secretary 2017-18, Brooke Kammrath, <u>bkammrath@newhaven.edu</u>; (203) 931-2989, Manager 2016-2019.

Vice President 2017-18, John Scott, <a href="mailto:nyconsnfdn@aol.com">nyconsnfdn@aol.com</a>; (646)339-6566, Curator, Archivist, Facilities Assistant, Past President, Manager 2015-2018.

Treasurer 2017-18, Mel Pollinger, pollingmel@optonline.net; (201)791-9826, Facilities, Editor, Librarian, Manager 2017-20.

Manager 2015-2018, Lou Sorkin entsult@aol.com, (914) 939-0917.

Manager 2015-2018, Guy deBaere guydbaere@aol.com; (347) 668-4798 Outreach Program Chair Manager 2016-2018, Jay Holmes jholmes@igc.org; (212) 769-5039, Outreach Program Assistant.

Manager 2016-2019, Peter Diaczuk <a href="mailto:pedicoplanb@gmail.com">pedicoplanb@gmail.com</a>; (917) 578-3049, Past President.

Manager 2016-2019, Seymour Perlowitz <a href="mailto:perlowitzs@hotmail.com">perlowitzs@hotmail.com</a>; (718) 338-6695

Manager 2016-2019, Roland Scal. <a href="mailto:recal@gcc.cuny.edu">recal@gcc.cuny.edu</a>; (718) 631-6071.

Manager 2017-2020, John A. Reffner <a href="mailto:jareffner@cs.com">jareffner@cs.com</a>; (203) 358-4539 Past President. Manager 2017-2020, John R. Reffner, Jr. <a href="mailto:jrr11p@gmail.com">jrr11p@gmail.com</a>; (215) 527-1882. Manager 2017-2020, Andrew J. Winter, <a href="mailto:jwinter112@gmail.com">jwinter112@gmail.com</a>; Education Chair.

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

### Awards Given by the New York <u>Microscopical Society</u> The New York

microscopical Society takes great pleasure in recognizing and rewarding individuals who have contributed to either the activities of the society or to furthering microscopy. These awards are described in our website and in a pdf file for our email newsletter recipients. All members are eligible to nominate individuals for these various awards, and are encouraged to do so. John A. Reffner, Awards Committee Chairperson

### Awards Committee Chair: John A.

Reffner Members

Jan Hinsch Peter Diaczuk John R. Reffner

### To Order Your NYMS Lapel Pins

Send a check in the amount of \$12.00 per pin to: New York Microscopical Society

c/o Mel Pollinger, 18-04 Hillery Street, Fair Lawn, NJ 07410. To avoid shipping & handling charges, pins may be purchased directly at any NYMS meeting for \$10.00.



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



# 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

Please remember to pay your dues

\*\*\*\*\*\*\*\*\*\*\*

Buy and Read a Good Book on Microscopy.

### Special guest at the 2017 NYMS Banquet:

Annemarie Reimschussel, Joined NYMS in1965, became a Life Member, a Member of the NYMS Board of Managers and, subsequently, elected NYMS President in1973. Past President Reimschussel joined the other guests at the NYMS Annual Banquet on December 10th, 2017 and even brought her microscope.





Photo of
Hoarfrost taken
by
Jeff Glover
See
Supplement
Gallary page
for larger
image

### Mystery photo for January, 2018



Answer on page 4

### NYMS Life Member Kenneth Davol Langley Dies

Kenneth Davol Langley, 75, of Tiverton, Rhode Island and Mason Township, Maine, passed away on Saturday, October 14, 2017 at Saint Annes Hospital He was the husband of forty-five years to Maryann (Slavin) Langley. Kenneth was born in Fall River the son of the late Henry Davol and Ruth (Lightbown) Langley. He was a graduate of BMC Durfee High School class of 1960. Ken received his B.S degree in Textile Technology in 1964 from what is now UMASS Dartmouth, and his M.S. from the Institute of Textile Technology in Charlottesville, Virginia in 1968. Before returning to UMD to teach, he was employed by DuPont in Waynesboro, Virginia in Lycra Spandex quality control. Ken was formerly the chair and Chancellor Professor of the Department of Materials and Textiles in the College of Engineering at UMD, and is a Fellow of the Textile Institute. He has taught courses in Textile Fibers, Textile Manufacturing, Statistical Quality Control and Design and Analysis of Experiments. He has forty-five publications which peer reviewed journals and proceedings, conference papers and manuscript revi- ews, including a number on fiber identification.

### See suppleIment section for full obituary



Having joined New York
Microscopical Society in
1979,
Ken Langley
subsequently became a
Life Member

### **Reprint of November 2017, President's Message** Hello NYMS Members.

The New York Microscopical Society is looking to expand our membership, and we are asking for your help. Do you have a colleague, student, or friend who works with and/or has an interest in microscopy? Then introduce them to NYMS! The Board of Managers has even created an incentive for you: Any member who refers three (3) new members will have their membership dues waived for the year! Or, if you are a life member, you can get a free NYMS microscope cover!

Help us to promote the techniques and applications of microscopy and microanalysis!
Kind Regards,

Brooke Kammrath, Ph.D., D-ABC

### **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 extended pdf version 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.

Fountain spray rainbow at local pond.

ANSWER TO Mystery Photo page 3:

### NEW YORK MICROSCOPICAL SOCIETY BULLETINS

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. NYMS bulletins, Journals, Yearbooks and other out-of-archive publications may be viewed at the NYMS Library 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

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. NYMS bulletins, Journals, Yearbooks and other out-of-archive publications may be viewed at the NYMS

Library 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





# N.Y.M.S. SUPPLEMENT SECTION January 2018 In This Section: **AMNH** meeting Maps ♦ Forged Antique Slides (reprint) ♦ NYMS Journal Apr 1891 ♦ Kenneth Davol Langley Obit ♦ Historical NYMS Bulletins **♦ Directions to NYMS ♦ NYMS Sales Items** Membership Application ♦ Gallery page(s) L-Serine crystallization, Rheinberg Illumination & Polarized-light, 100x (P1450901) vb4x6x100: Photomicrograph by Mel Pollinger



77th Street

79th

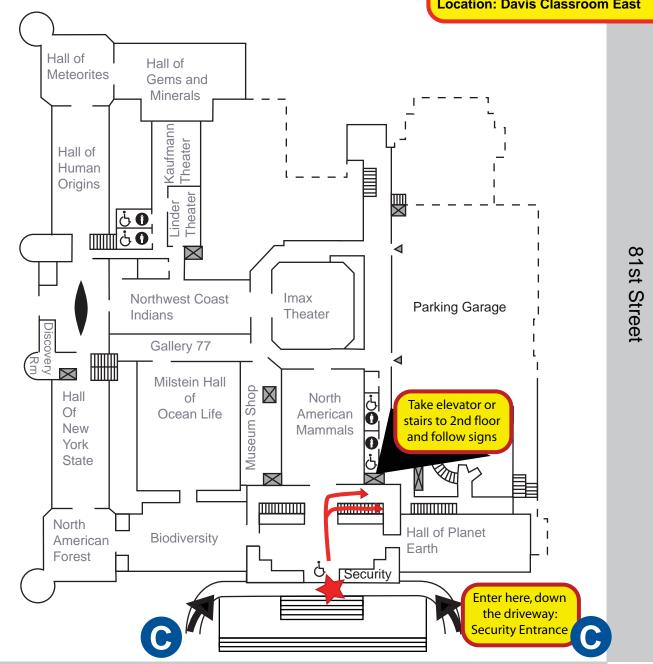
Columbus Ave

American Museum of Natural History

First Floor

**Meeting Details:** 

Date: Saturday, January 27, 2018 Location: Davis Classroom East



Central Park West

Enter the Museum through the

Security Entrance located beneath the main stairs on Central Park West between 77th and 81st Streets.

Take the elevator or the stairs to the second floor and follow the signs.

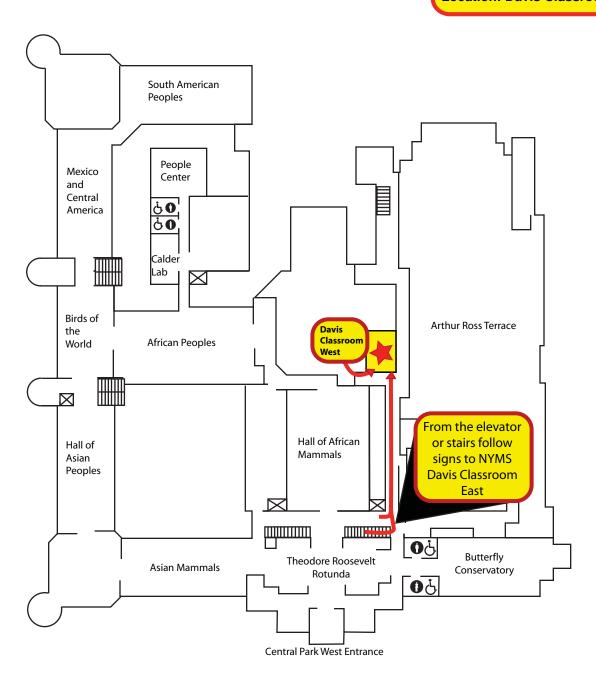


### American Museum of Natural History

Second Floor

### **Meeting Details:**

Date: Saturday, January 27, 2018 Location: Davis Classroom East



### Forged "Antique" Microscope Slides - A Lesson for Collectors

Brian Stevenson, Kentucky, USA

Writing in 1857, Edmund Dixon declared "the preparer's art is no mere mechanical routine. He must have science to know what is worth preserving, taste to arrange it gracefully and accurately, and skill so to embalm his object as to retain its beauty for future admirers. He must have an artistic eye, a fine touch, an extensive knowledge of Nature's minutiae, and a hand practised in the manipulation of his business. Hence, it is no day-dream to predict, that, before long, collections of microscopic objects will publicly enter the lists with other articles of virtú. Choice specimens of invisibilities will rise to high fancy prices - especially after their preparers are dead. As we treasure cabinet-pictures by Teniers or the Breughels, so shall we set an exalted value on charming bits of still-life from the studios of Amadio or Stevens, on insect-portraits by Topping, on botanical groups by Bourgogne the Elder, and on other works by anonymous artists, whose names, though not their productions, still remain unknown to fame. We shall have connoisseurs, fanciers, and collectors of microscopic objects, with all the peculiarities of the genus. Indeed, I might say we have them already in the adolescent stage of their growth. But, one of these days, as my readers who live long enough will see, beautiful preparations by first-rate hands will pass through the same course of destiny as illuminated missals, majolica earthenware, Benvenuto Cellini carvings, and the like".

Dixon's words have definitely come true. Individual slides sometimes sell for many thousands of dollars. As with other collectible forms of art, it is not surprising that our hobby has attracted forgers.



Figure 1A illustrates two "antique" microscope slides I purchased several months ago. They were listed on eBay along with a half dozen other slides. My impression prior to the sale was that these were an interesting Edmund Wheeler slide of ancient mummy cloth, and a rather unique Wheeler preparation that used generic, off-the-shelf wrapping papers. Upon receipt of the slides, however, comparisons with legitimate Wheeler preparations (Figure 1B) revealed substantial differences (Figure 2).

**Figure 1. (A)** Two fraudulent "antique" microscope slides. One used an Edmund Wheeler (EW) cover paper. **(B)** Six legitimate slides made by Edmund Wheeler. The first two and last two used machine-printed specimen labels. The middle two slides have specimen labels handwritten by Edmund Wheeler.



**Figure 2.** Details of forged and legitimate Wheeler microscope slides, and computer-generated printing using Edwardian Script ITC font.

Several differences are apparent when comparing the fraudulent and legitimate Wheeler slides:

The font used on the forged slides is modern, known as "Edwardian Script ITC". It is available on many computer programs, including Microsoft Word and Photoshop. Try it. Although superficially similar to Wheeler's handwritten and printed labels, there are obvious differences.

The edges of the specimen labels on the forged slides are uneven, and were evidently cut by hand with scissors. Wheeler's labels were punched out with a die, and are perfectly even.

The papering on the forged slides is very sloppy. Compare the uneven overlaps of the yellow papers on the forged slides with the professional-quality, mitered edges of Wheeler's work.

One of the problems with collecting antique microscope slides is that almost all purchases are through the internet, generally eBay. We have to rely upon what is shown in photographs, and on the reputation of sellers. The seller from whom I purchased the forgeries is quite reputable, however. Many of us have bought genuine antiques from that person. I have to assume the seller did not realize what was being sold. So, *caveat emptor*. We buyers must recognize that forged microscope slides are being made and passed off as legitimate, and look more than twice at the pictures before bidding.

Comments to the author will be welcomed.

This and other information on antique microscopy can also be read at <a href="http://microscopist.net">http://microscopist.net</a>

(Reprinted from Micscape, courtesy of Brian Stevenson)

### JOURNAL

OF THE

# New-York Microscopical Society.

EDITED BY

REV. J. L. ZABRISKIE,

WAVERLEY AVE., FLATBUSH, L. I., N. Y.

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## Hew York: PUBLISHED FOR THE SOCIETY, QUARTERLY.

PRESS OF STETTINER, LAMBERT & CO., 22, 24 & 26 READE STREET.

[Entered at the Post-Office at New York as second-class matter.]

If I seem to have reduced the new matter in Mr. Smith's observations to a minimum, I should not do justice to my sense of the real value of his work unless I add that enough remains to make it, in my judgment, a very important and interesting step in the investigation of diatom-structure. It is also full of promise that still further results may be attained by pursuing the investigation on the same line. I am confident, therefore, that the Society will join with me in expressing a sincere sense of obligation to him for communicating the results of his observations, and especially for the valuable aid in understanding them which is given by his beautiful series of lantern slides and prints.

#### THE WORK OF THE MICROSCOPE.

ANNUAL ADDRESS OF THE PRESIDENT, P. H. DUDLEY, C E. (Read January 16th, 1891.)

At no period in the history of the microscope have the results of its researches received as much attention as at the present time. The importance of the investigations in recent years, by its means, of many of the causes affecting the health and comfort of mankind, is just being recognized by the efficacy of the remedies which have been suggested from a knowledge of the causes. The indications of a new remedy are daily flashed from continent to continent by that unseen agency, electricity, its messages multiplied by the press in all languages and distributed through the land by steam's swiftest trains. These three great inventions of communication and diffusion of knowledge of to-day have carried the tidings to the peoples of all nations, and there is a common interest and thought upon the subject. History does not record a grander spectacle than that of the entire civilized world, brought into sympathy and interest by the investigations of the microscope, in search of relief for thousands of its sufferers from some of the occult conditions incident to life.

Animal or plant life, either of the highest or lowest orders, is surrounded by conditions, some favorable to growth, others unfavorable; and whether an animal or plant will survive or perish, aside from the inherent vitality, depends upon the preponderance of the favorable or the unfavorable conditions of environment.

[April,

This law is coeval with the existence of life. To ascertain and understand the conditions favorable to the human race has and will always occupy the attention of a large portion of the more intelligent of mankind.

Some of the conditions are at once apparent; others, equally important, are unseen, obscure, and only discovered by tracing back from the effect to the cause. We experience effects and not causes, and to analyze the former, assigning each to its proper cause, is by no means an easy matter. The first step is to observe the facts, study their relations, and trace the laws controlling them. It is only in this way that any progress has been made, and then oftentimes the real nature of the cause remains undiscovered.

Jenner's important discovery of vaccination for small-pox, a century since, was not the result of accident, as often stated, but close observation of a series of facts and studying their relations. That small-pox was due to a germ in the system, invisible to the keenest vision, is of recent demonstration by the microscope.

How early minute forms of life were suspected of causing bodily ailments or decomposition in fluids is uncertain. The Egyptians, 3,500 years since, knew how to practically prevent decomposition in bodies and wooden utensils, so that they have been preserved to the present time. More recently Robert Boyle, 200 years ago, expressed the opinion that ferments had something to do with fevers. Leuwenhoek, 1632 to 1723, made small lenses, and described the ferment of yeast as ovoid or spherical bodies, and discovered bacteria in the mouth and in fluids undergoing decomposition. The powers and use of the early simple microscopes were too limited to definitely establish the functions of the minute forms or their relations to the higher orders The belief, however, was becoming more and more general that the minute forms had something to do with bodily ailments and fermentations, but without microscopical aid it could not be clearly demonstrated. As must be expected, some extravagant views were adopted, while others were close approximations to the truth. Boerhaave, in 1693, distinguished three kinds of fermentations, viz, alcoholic, acetous, and putrefactive. Linnæus stated that a certain number of diseases resulted from animated invisible particles dispersed through the air. Spallanzani, in 1769, started his series of experiments upon spontaneous generation and sterilization, resulting in the present method of preserving foods. Opinions were very conflicting, and the truth, which may now be expressed by a line, required years of labor to ascertain, and really follows the improvement in the microscope. In 1837 Cagniard-Latour described yeast as a collection of globules which multiplied by budding. In 1838 Turpin described the yeast plant in beer, and named it Torula cerevisiae. Many chemists were unwilling to admit the important part played by yeast in fermentations, and ascribed it to "catalysis," or action by presence. In 1843 the celebrated French chemist Dumas, from microscopical and chemical examinations, clearly explained the physiological function of the living ferment, yeast. The truth was now proven, but it made little progress until Louis Pasteur, some ten years later, took up the work of studying under the microscope the ferments of yeast, vinegar, and wine, demonstrating conclusively that a germ must be present to start fermentation or decomposition in fluids, that the definite knowledge he learned of the functions of the minute forms of life attracted attention.

Pasteur, by his systematic work with his microscope, tracing the life history of many ferments from the spore, ascertained the laws of growth, so he could induce fermentation or check it as desired. The ability to keep liquids for years when freed from germs, which under ordinary circumstances would ferment or decompose in a few hours, enabled Pasteur to confirm and clearly set forth the general principles of the germ theory of minute forms of life, in place of the theory of spontaneous generation. The theory so completed, revolutionizing current ideas, met with vigorous opposition, but the microscopical demonstration was so complete it has proven invulnerable, and upon it has been formed the important branch of science, bacteriology. We are too near to estimate the value of the demonstration. It will require time to show its full value, for its application is but really commenced.

Pasteur's work has been pre-eminently practical, and the results of his investigations at once applied to the French industries, in which interests they were undertaken. He saved the French silk industry from threatened destruction by investigating the parasitic diseases of the silkworm, and suggested a remedy. His investigations led to the antiseptic treatment in surgical operations which is now considered indispensable. His extensive

experiments to obtain vaccines, or attenuated virus for protective inoculations, have been very successful, especially when the difficulties of producing an attenuated virus are considered.

The process for obtaining the protective virus for rabies may be mentioned. He inoculates a morsel of the brain of a mad dog into the brain of a rabbit, which attenuates the virus sufficiently to act as a protective inoculation for dogs, or men bitten by dogs, suffering from rabies. At first the attenuated virus from the rabbit was also passed through the organism of the monkey before using. This feature has been discontinued. This was the first successful step towards checking rabies. Pasteur has a large institute in Paris for the treatment of rabies, and there is now in this city a branch institute under the charge of Dr. Paul Gibier, where about 160 persons have been successfully treated the past year.

Considering for a moment the higher orders of plant life, the microscope has shown conclusively that the functions of the fungi which we see upon them is to undo the structure which has been built up by the higher plants, returning the elements composing them to the air and soil. This is of itself a work of great economic value, and must be more generally understood to save our building timber and forests from the natural process of decay.

The rapid advancement of bacteriology in the last decade is largely due to the arduous labors of Koch, who, by extensive microscopical investigations, discovered the specific bacillus of several diseases, particularly of Asiatic cholera and tuberculosis. He originated a method of staining a specific bacillus so as to differentiate it from all others in enclosed tissue or other media, and found them when others not using as skilful methods failed. He originated a system of solid nutritive media for cultivating and isolating a specific bacillus, producing pure cultures. This has proven of the greatest value, for much has been learned as to the manner of growth and products secreted of each bacillus studied. With the pure cultures he carried out extensive inoculations on animals, and carefully noted the effects. The latter have been analyzed, resulting in his extensive experiments with his so-called lymph to check the bacillus of tuberculosis in the human system. It is this feature of Koch's great work which has made his name a household word to-day in all civilized countries.

Yesterday he gave to the world the formula for his great discovery, which, briefly stated, is a glycerin extract of a certain dilution from the ptomaines or the products of the bacillus itself.

The consensus of opinion from the tests is that it is a remedy of great value. Besides its direct benefits the indirect ones will be even greater, for the publicity given by the press to this and kindred discoveries is rapidly educating the people to the important rôle played by microbes in contagious diseases, and the necessity of efficient sanitary measures for our cities as a preventive. Check the causes instead of dealing with the dangerous effects, and have clean streets, wholesome water, and efficient Any one or all of these, when not in proper condition, are efficient media for the growth of microbes detrimental to health, particularly in cities of warm climates. But few of our cities in warm climates have as wholesome water as is needed for domestic purposes, being so filled with germs as to be unsafe for many persons to drink without sterilization. The indifference of the people to these important matters is largely due to the fact that their nature and bearing are not understood. The reasons why the streets should be clean, the water wholesome, and that there should be efficient sewerage in our cities, are evident to health boards, but it needs enlightened public opinion to more thoroughly carry out the demonstrations of the microscope.

### PROCEEDINGS.

MEETING OF DECEMBER 5TH, 1890.

In the absence of the President and Vice-President, Mr. William Wales was elected chairman.

Twelve persons present.

The Corresponding Secretary exhibited the first and second numbers of the new publication, Le Diatomiste, edited by M. J. Tempère, Paris, and gave notice of the character of the publication.

#### OBJECTS EXHIBITED.

I. Longitudinal and transverse sections of an Actinia, Metridium marginatum Milne-Edwards, showing tentacles, mouth, œsophageal tube, and mesenteric folds: by L. RIEDERER.

### NYMS Life Member Kenneth Davol Langley Dies

Obituary:

Kenneth Davol Langley, 75, of Tiverton, Rhode Island and Mason Township, Maine, passed away on Saturday, October 14, 2017 at Saint Annes Hospital in Fall River. He was the husband of forty-five years to Maryann (Slavin) Langley. Kenneth was born in Fall River the son of the late Henry Davol and Ruth (Lightbown) Langley. He was a graduate of BMC Durfee High School class of 1960. Ken received his B.S degree in Textile Technology in 1964 from what is now UMASS Dartmouth, and his M.S. from the Institute of Textile Technology in Charlottesville, Virginia in 1968. Before returning to UMD to teach, he was employed by DuPont in Waynesboro, Virginia in Lycra Spandex quality control. Ken was formerly the chair and Chancellor Professor of the Department of Materials and Textiles in the College of Engineering at UMD, and is a Fellow of the Textile Institute. He has taught courses in Textile Fibers, Textile Manufacturing, Statistical Quality Control and Design and Analysis of Experiments. He has forty-five publications which peer reviewed journals and proceedings, conference papers and manuscript revi- ews, including a number on of fiber identification. Ken was also he president of KDLangley Fiber Services. At one time, he was one of the top two testers for fiber analysis of Cashmere and specialty fibers in the US. He was internationally known for his expertise. Mr. Langley was a member of ASTM International, Institute of Textile Technology, AFT Union of Professionals, MASS Retirees, New York Microscopic Society, the Textile Institute of England, Herreshoff Marine Museum in Bristol, Cashmere Camel Hair Manufacturing Institute CCMI in Boston, Providence Athenaeum, and the Tiverton Yacht Club. He appeared in court as an expert witness many times regarding fiber analysis. He enjoyed sailing aboard his boat the lona, hiking, and photography. Survivors besides his wife are a son: Philip D. Langley of Tiverton; a sister Louise Keane and her husband Thomas of Fall River; two nephews: Matthew Keane of Somerset and Michael Keane of Fall River. His Funeral Service will be held on Thursday, October 19, 2017 at 11:45am from the Hathaway Home for Funerals, 1813 Robeson Street, Fall River, followed by Mass with Requiem Eucharist at 1pm in Holy Trinity Church, 1956 Main Road Tiverton. Relatives and friends are invited to attend, burial to follow in Hillside Cemetery Tiverton. To light a memorial candle, sign guest book, facility or church directions go towww.hathawayfunerals.com or call 508 673-0781. Memorial donations in his memory can be made to the Holy Trinity Episcopal Church Capital Improvement Fund, 1956 Main Rid, Tiverton, RI 02878. Calling Hours will be held on Wednesday, October 18, 2017 from 4-7pm in the funeral home. Ken spent most of his life giving to and helping others, never expecting anything in return. In his memory please consider an act of kindness toward someone. Published in The Herald News on Oct. 17, 2017.

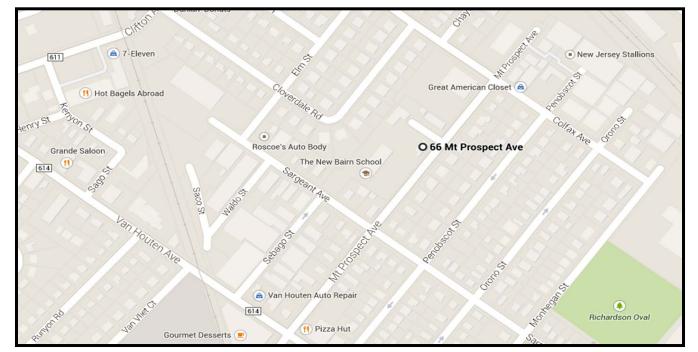


Having joined New York Microscopical Society in 1979, Ken Langley became a Life Member

### 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



### <u>Directions to NYMS Headquarters</u>

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

### New York Microscopical Society Items For Sale

29-Feb-2016

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

Item #	Size	Member Price	List Price		
MT-003	Small Microscope or Stereo, 15"W x 17"H	\$18.00	\$20.00		
MT-004	•		\$25.00		
MT-005			\$30.00		
MT-009	MT-009 Large Lab Scope with Camera, 9"W x 19"Deep x 23"H		\$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	\$7.00	\$10.00		
	Rotifer Book by Howard Taylor *When available	\$20.00	\$40.00		



Model 131: Tungsten

Model 131-FLU: Fluorescent



Model 185: 20x



Model 125-LED Cordless



### 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

### **Please Print**

### I hereby apply for membership in the New York Microscopical Society

Home Address:		Nickname:			
Phone: (home or mobile)					
Work Information: Company Na					
Work Phone:					
Would you prefer to receive NYI Principal work or interest in mid	MS mail at home? at work	k? by email ( <i>best wa</i>	y)? 		
Would you like information abo			Membership		
Education Library Financ	<u> </u>	Program Publications	History		
<b>Academic and Honorary Degree</b> Degree	Conferring Institution	Date			
Scientific Publications					
Membership in Scientific Societ	ties				
Date of birth (optional if over 18					
	\$60, Life \$500 (payable within News), Junior \$5 (under 18 yea	the year), Corporate \$17 ers old), Student (over 18)	•		
I would prefer my home wo	ork address/phone include	ed in the NYMS Directory			
Signature	Date				

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



Hoarfrost P1020077av4x5x100: Photo by Jeff Glover



Barbituric acid, Polarized-light, 25x (P760909)v4x6x200 Photomicrograph by Mel Pollinger