

## North Jersey and New York Sections Mourn the Passing of Our Friend and Colleague, **William “Bill” Suits**



*(Photo courtesy of Tom Krone)*

***See write-ups on pages 5-7.***

## THIS MONTH IN CHEMICAL HISTORY

Harold Goldwhite, California State University, Los Angeles • [hgoldwh@calstatela.edu](mailto:hgoldwh@calstatela.edu)

I recently bought an elegantly illustrated new book by Brian Clegg entitled “Scientifica Historica”. (With a title like that I couldn’t resist). The subtitle gives it away: “How the world’s great science books chart the history of knowledge”. Since imitation is the sincerest form of flattery I intend to devote a number of columns to the world’s great chemistry books. (Clegg’s work, covering all the sciences and mathematics, is a bit thin on chemistry). I don’t have the luxury of abundant illustrations in my all text format, but perhaps I can work a few in if my editor allows. The period I plan to cover, at least initially, is from antiquity through the 19th Century. The title will be taken seriously; only books will be included. There are papers and pamphlets that I may mention in passing, but books are the theme. Of course my choices are idiosyncratic and you may vigorously disagree – or maybe you just won’t care. I’ll try to cover two titles per column, or I’d be at this for years. And perhaps, when I’m done, I’ll assemble the columns with illustrations and see if I can find a publisher.

I start with Plato because his dialog “The Timaios” was the only Platonic book, in dialog form, known for centuries in early and medieval Europe. The science historian J.R. Partington, calls this dialog “perhaps the first extant treatise on chemistry”. While Plato credits earlier philosophers with various element theories it is in Timaios that he firmly asserts the existence of four elements: earth, air, fire, and water. It is “out of four things of this kind [that] the body of the universe was created”. I place such emphasis on the four element theory because, with relatively minor variations, it held sway over the minds and works of alchemists and chemists for some 2000 years. Indeed, in another book I will get to much later in this series, in the late 17th Century, Robert Boyle decided it was worth his effort to attack the four element theory in his book “The Skeptical Chymist”.

Plato was apparently not an experimental scientist. He mistrusted, like many later philosophers (Descartes comes to mind), knowledge gained solely from observation and experiment. Knowledge had to fit into a philosophical overarching scheme. Plato devised such a scheme in which 5 “Platonic” solids, the faces of which were regular geometric figures like equilateral triangles or squares, represented the four elements, and the foundation of the universe. An illustration: the tetrahedron, with its four triangular faces and sharp points, represents the penetrating element fire. The triangles or squares that are the basis of an element can unravel and form into another shape. Consequently the transmutation of one kind of matter into another is quite possible As Partington says “alchemy in germ goes back to Plato”.

Perhaps my choice of Plato as the author of my first great book of chemistry was not a surprise. But my second choice may be. It is a narrative book-length Latin poem written by Titus Lucretius Carus, hereafter abbreviated to Lucretius (ca. 100 BCE to 55 BCE) who wrote “De Rerum Natura” in about 57 BCE. In this work Lucretius incorporates many ideas that come from the Greek philosopher Epicouros (Epicurus in Latin) who lived about 340 BCE to 270 BCE and who himself drew from the ideas of Demokritos (Democritus) who, alas, did not leave us a book. And neither did Epikouros. So at third hand, via Lucretius, we get our understanding of the atomic theories of these early Greek philosophers. (It is worth noting that Aristotle criticized at length and dismissed the atomic theory of Demokritos on grounds that it included a void – a concept firmly rejected by Aristotle).

So to Lucretius and his mentors. “Nothing is ever begotten out of nothing by divine power” and the workings of the world take place without intervention by the gods. This is a radical idea, foreshadowed by some of the earliest Greek philosophers, and quite opposite to conventional thinking of the period. “Nothing is ever annihilated, but all, things on their dissolution go back into [the elements]. Void exists! The elements are made of “atoms” that are in ceaseless motion. (Lucretius did not use Demokritous’ term; he speaks of seeds and first beginnings). Matter and space are infinite. Atoms differ in size, shape, and weight. There is a limit on the number of their shapes. Sense impressions like color, taste, smell etc. are not properties of atoms but are the effects of numbers of atoms on the perceptive. Atoms may collide and become attached and thus, by accretion, things are created. Lucretius’ poem explains at length how many natural phenomena can be explained on the basis of this atomic theory. Because of the widespread acceptance of Aristotle’s ideas on pretty much everything from ethics to logic; from politics to poetry; from physics to biology, and because even his views on the creation of the universe were, in some sense, compatible with Christian doctrine, Aristotle became the major figure in philosophy in the early and medieval Christian church. Hence his views on the void, the constitution of matter, and his rejection of atomism became the orthodox doctrine in Europe until the 17th Century. (See Robert Boyle mentioned above).

Plato and Lucretius – Greek and Roman – two pillars of the ancient European world. Their speculations laid the basis of both theoretical and experimental alchemy and chemistry for millenia. These are truly great books of the precursors to chemistry.

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The monthly newsletter of the New York & North Jersey Sections of the American Chemical Society. Published jointly by the two sections.

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*The Indicator* (ISSN0019-6924) is published on-line monthly except July and August by the New York and North Jersey Sections of the American Chemical Society, Office of Publication, 38 Main Street, Apt. 8, Butler, NJ 07405.

All views expressed are those of the editor and contributors and do not necessarily represent the official position of the New York and North Jersey Sections of the American Chemical Society unless so stated. Distributed electronically to members through the website <https://www.TheIndicator.org>. Non-members are invited to read it online. Members should register their email addresses at

<https://www.acs.org/editmyprofile>.

Address advertising correspondence to Advertising Manager. Other correspondence to the Editor.

# June Calendar

## NEW YORK SECTION

**Thursday-Friday, June 4-5, 2020**

Biochemical Topical Group  
See pages 16-17.

**Friday, June 5, 2020**

New York Section Board Meeting  
See page 8.

*also*

**September 11, November 13, 2020**

New York Section Board Meetings  
See page 8.

**Wednesday, October 7, 2020**

Westchester Science Cafe  
See page 9.

**Friday, October 23, 2020**

Nichols Symposium  
See pages 16-17.

**Rescheduled Dates to be determined**

Westchester Distinguished Scientist Award  
See page 9.

New York Metro Women Chemists  
See page 9.

Hudson-Bergen Chemical Society  
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New York Nanoscience Discussion Group  
See page 10.

MARM

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## NORTH JERSEY SECTION

*Rescheduled dates*

**Thursday, September 10, 2020**

North Jersey Drug Metabolism Discussion Group  
See pages 24-25.

**Monday, September 21, 2020**

North Jersey Executive Meeting  
See page 23.

**June Meeting, rescheduled date to be determined**


North Jersey Mass Spectrometry Discussion Group  
See page 23.

**Tuesdays, September 15, 2020**

**(Symposium/Vendor Show),**

**October 13, December 8, 2020**

North Jersey Mass Spectrometry Discussion Group  
See page 23.



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## Obituary

### WILLIAM “BILL” SUITS



**Donna and Bill Suits at a recent Awards Dinner.**

*(Photo courtesy of Tom Krone)* Rose Bowl giving Bill memories to last a lifetime.

Bill graduated from University of Wisconsin in 1963 with a degree in chemistry and remained on campus, managing the medical science lab from 1962-1963 and the bio-physics lab from 1963-1965. These positions helped fuel his lifelong passion for chemistry. After Bill left the lab, he moved to Chicago and became a product specialist for Packard Instrument Company. He married Geraldine (Jerry) Sloan in 1969 and they had two children, Tim Suits and Joanna (Suits) Hubenthal. The family moved to Pittsburgh, PA in 1974 where Bill began his sales career with Varian Medical Systems. In 1976, Bill was promoted to a Chromatography Specialist and the family moved to Short Hills, New Jersey. Bill and Jerry divorced in 1982. Bill married Donna Suits in July 1985 and began their marriage living in the Knollcrest community in Bedminster, NJ. Subsequently Bill held professional positions at Varian Analytical Instruments as a Senior Salesman from 1973-89, Manager at Dionex Corp. from 1989-91, sales representative at Bodman Industries from 1992-93, Sr. Tech. Sales Representative at Beckman Inst. from 1994-97 and was President of Chromatography Connections from 1997 to present.

Bill was a very active member of the American Chemical Society (ACS) and the chemical profession until his death. He started his work locally with the ACS as Secretary of the North Jersey Section's Chromatography group in 1983 and the next year as chair of that group. Since that time, he dedicated his activities to helping others as a career consultant and he was the founder of the NJACS "Careers in Transition Program" that met several times a month to give guidance and direction to those seeking jobs in the chemical industry. Bill also worked at the national level on career consulting as well and he served as a national ACS Career Consultant. He worked tirelessly at Regional and National ACS meetings and also visited many colleges and universities to present career workshops and give advice and encouragement to the students. He was especially supportive of young people, not only working on their resumes and interviewing skills, but also in encouraging them to network through groups like the Young Chemists Committee (YCC) and other public outreach opportunities. He served as a mentor to our local YCC. In addition, he was the Director of the ChemPharma Networking Group that administers a website where over 60 executive jobs a month are posted. In 2001, recognizing his leadership abilities, he was asked to run for Chair of the North Jersey Section, the largest section in the country at that time, and won the election for chair and counselor. Since then he led the section's finances by chairing the finance committee and continued to mentor the local YCC group.

Bill's dedication at the local section level was matched and surpassed by his dedication at the regional level as co-chair of the very successful Middle Atlantic Regional Meeting (MARM) 2005. Bill was the person who had the contacts to build up a MARM 05 committee with over 150 dedicated volunteers. It was often said that Bill was a "walking rolodex of contacts". He then continued as Chair of the MARM Board of Directors and was successful incorporating MARM during that time. He continued as mentor to successive MARMs and mentored the

*(continued on page 6)*



## **WILLIAM “BILL” SUITS**

*(continued from page 5)*

'06 and '07 leadership teams.

Bill was also very active at the ACS national level where he participated through various roles. He has been either councilor or alternate councilor for the North Jersey Section over the years and regularly attended national council meetings. He was an associate on the Committee on Economic and Professional Affairs (CEPA), member of the Division of Professional Relations (PROF) and was on the PROF nominating committee. He was appointed to the local section activities committee (LSAC) where he served as member and on the LSAC Local Section Assistance and Development subcommittee. He was also an associate on the Committee on Meetings and Expositions (M&E). Finally, he was member of the Committee on Public Relations and Communications (CPRC).

Bill was proud to be a chemist, and his enthusiasm was obvious to anyone he met. Bill's roles and contributions have been rightly recognized with the 2012 Ann Nalley Regional Award (MARM) for Volunteer Service, the Burton C Beldon Distinguished Service Award of the North Jersey Section and the Harvey R Russell Award from the NJACS Teacher Affiliates for Outstanding Support of Chemistry Education. Nationally the ACS Division on Professional Relations (PROF) recognized him with their Henry Hill Award in 2010. In 2012 Bill was honored with the distinguished recognition as an ACS fellow.

Bill's volunteer efforts do not end with the ACS. He was director of “AIDSfreeAfrica” that is a group providing drugs and diagnostics to people living in Cameroon, Africa. He recruited a Nigerian CEO Chemical Engineer with drug packaging experience to aid in these efforts. Bill was also a supporter and recruiter for “Students2Science”, a private nonprofit organization that mentors middle school and high school students with hands on chemistry experiments.

Finally, Bill Suits exemplified volunteerism and excellence in the chemistry profession. He was not only concerned about others in the chemical profession but also in the world. His infectious enthusiasm and dedication to the chemistry profession will be sorely missed by all he came in contact with.



*(All NoJ photos courtesy of Tom Krone)*



(Photo courtesy of Tom Krone)

## BILL SUITS REMEMBERED

### From the New York Section

We are heartbroken to announce the passing of William (Bill) Howard Suits and his wife, Donna Jean Gould Suits.

Bill was an experienced chemist with a lifelong service to the American Chemical Society on a national and local level. I met him at a regional ACS meeting in Vermont and asked him to join the board of directors of AIDSfreeAFRICA. He became a dedicated advisor and his contributions helped our organization to grow and thrive. We are grateful to him for connecting us with Students 2 Science, a non-profit which donated \$250 million dollars worth of drug production equipment for use in Cameroon. Gladly following his advice, we added promoting access to medications to our organization's mission to empower Cameroonians to manufacture drugs. Additionally, he assisted us in establishing a revolving drug funds to aid small hospitals in Cameroon to purchase drugs in bulk.

Bill passed away 6 days before his wife Donna. She worked as a realtor and introduced many people to their new homes. She also enjoyed traveling and hosting family gatherings. She was a dedicated matriarch to the Suits' large family, and kept lifelong friendships with former classmates. She shared a passion for music along with Bill as both attended concerts and performed in their church's choir.

In appreciation of the compassionate care they received, their family has requested donations be made to Meadow Lakes, the nursing facility where they last lived and were treated in the end for COVID-19. <https://springpointsl.org/foundation/heroes/>

Having served as an advisor to many students, it is fitting that a scholarship is being created in Bill's honor through the National and North Jersey American Chemical Societies. <https://www.njacs.org/>

We send our love to their family, friends, and colleagues.

<https://tomlinsonfh.com/book-of-memories/4183478/Suits-William/index.php>

<https://tomlinsonfh.com/book-of-memories/4186902/Suits%20-Donna/index.php>



238th ACS National Meeting, Washington DC. (Left to right) William (Bill) Suits, Dr. Julie Colis, Dr. Rolande Hodel and Dr. Jose Zambrana.

(Photo courtesy of Rolande Hodel)

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## New York Meetings

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<https://www.newyorkacs.org>

### ACS, NEW YORK SECTION BOARD OF DIRECTORS

#### MEETING DATES FOR 2020

The dates for the Board of Directors Meetings of the ACS New York Section for 2020 were selected and approved. The meetings are open to all – everybody is welcome. All non-board members who would like to attend any of the meetings should inform the New York Section office by emailing Bernadette Taylor at [btaylor@NewYorkACS.org](mailto:btaylor@NewYorkACS.org) or by calling the Section office at (732) 770-7324.

Dates of the meetings for 2020 are posted on the New York Section website at <https://www.newyorkacs.org> below, and monthly in *The Indicator*. Dr. Ruben Savizky will chair all meetings. Refreshments will be available starting at 6:00 PM and the board meetings will start at exactly 6:30 PM.

The Board Meeting dates for 2020 are:

#### Friday, June 5

Friday, September 11

Friday, October 23 (Nichols Symposium)

Friday, November 13

All meetings will take place at Cooper Union, 41 Cooper Square, New York NY 10003. The Nichols Symposium will be held at the Crowne Plaza Hotel, White Plains, NY.

#### Directions

<http://cooper.edu/admissions/visit/location-and-directions>



### BIOCHEMICAL TOPICAL GROUP – JOINT MEETING WITH THE NYAS BIOCHEMICAL PHARMACOLOGY DISCUSSION GROUP

#### Phenotypic Drug Discovery: Leveraging Computational Tools

*Organizers:* Kira A. Armacost, PhD  
Merck

Timothy J. Cardozo, MD, PhD  
New York University

Ye Che, PhD  
Pfizer

Paul A Clemons, PhD  
Broad Institute of MIT and  
Harvard

Guanglei Cui, PhD  
GlaxoSmithKline

Olivier Elemento, PhD  
Weill Cornell Medical College

Adam Gilbert, PhD  
Pfizer

Susan Pieniazek, PhD  
Bristol Myers Squibb

Marie-Claire Peakman, PhD  
Pfizer

Marco Prunotto, PhD  
Roche

Alison Carley, PhD  
The New York Academy of  
Sciences

Sonya Dougal, PhD  
The New York Academy of  
Sciences

*Keynote:* Michael A White, PhD  
Pfizer

Olga Troyanskaya, PhD  
Princeton University

*Speakers:* Andrea Califano, PhD  
Columbia University

Yolanda Chong, PhD  
Recursion Pharmaceuticals

Paul A Clemons, PhD  
Broad Institute of MIT and  
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Olivier Elemento, PhD  
Weill Cornell Medical College

Johannes M. Freudenberg, PhD  
GlaxoSmithKline

Jennifer Fuller  
GeneCentrix Inc

Rajarshi Guha, PhD  
Vertex Pharmaceuticals

Traver Hart, PhD, MD  
Anderson Cancer Center

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Massachusetts Institute of  
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Michael Keiser, PhD  
University of California,  
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Elizabeth McMillan, PhD  
Pfizer



Nicholas Tatonetti, PhD  
Columbia University

Bridget Wagner, PhD  
Broad Institute of MIT and  
Harvard

Anne Mai Wassermann, PhD  
Bayer

Explore the current state of computational methods used in phenotypic screening and novel in-silico approaches, and including discussions of deep learning, AI, functional genomics, chemical screening, systems biology, target deconvolution, biomarkers, and toxicity.

**Date:** Thursday-Friday, June 4-5, 2020

**Time:** June 4, 11 AM – 4:45 PM (ET),  
June 5, 11 AM – 4:15 PM (ET)

**Place:** Webinar

**Cost:** ACS and Academy members save \$30 or more on this event. Please select the appropriate non-member Registration Category and use the Priority Code “ACS”.

For more information and to register for the event, go to:

[www.nyas.org/Phenotypic2020](http://www.nyas.org/Phenotypic2020)

To become a Member of the Academy, visit [nyas.org/become-a-member/](http://nyas.org/become-a-member/)



## EMPLOYMENT AND PROFESSIONAL RELATIONS COMMITTEE OF THE NEW YORK SECTION

To Human Resources Departments in Industry and Academia

The Employment and Professional Relations Committee maintains a roster of candidates who are ACS members seeking a position in the New York metropolitan area. If you have job openings and would like qualified candidates to contact you, please send a brief job description and educational/experience background required to [hessytaft@hotmail.com](mailto:hessytaft@hotmail.com).

Candidates from our roster who meet the requirements you describe will be asked to contact you.

**IN COMPLIANCE WITH  
COVID-19 GUIDELINES,  
ALL OF THE FOLLOWING  
MEETINGS HAVE HAD TO BE  
RESCHEDULED. WHERE  
POSSIBLE, A DATE IS LISTED,  
OTHERWISE, THE DATE IS YET  
TO BE DETERMINED.**



## WESTCHESTER CHEMICAL SOCIETY

### Distinguished Scientist Award

With regrets, the Westchester Chemical Society has cancelled the Distinguished Scientist Awards Dinner and Meeting, scheduled for April 23, 2020. The Westchester Chemical Society Board of Directors has designated Mr. George Policello, who had been chosen as our Distinguished Scientist 2020, as our Distinguished Scientist 2021. **The details of the 2021 meeting have yet to be determined.** To the extent that faculty in local colleges and high schools are able to name Student Awardees, those students are being sent certificates. For the students, see page 21.



## WESTCHESTER CHEMICAL SOCIETY

With regrets, the Westchester Chemical Society has cancelled and postponed its **Science Café** that had been scheduled for March 18, 2020 at the Stone Manor Restaurant in Hawthorne, NY. The discussion leader was to have been Monona Rossol and the topic was “Safety, Fire, and Chemical Hazards in Special Effects”. **Rescheduled date is October 7, at a location to be determined.**



## NY ACS METRO WOMEN CHEMISTS' COMMITTEE

**Opening Up the Envelope: Reading Out Mysterious Membrane Machinery in the Human Pathogen *Mycobacterium Tuberculosis***

The April 29, 2020 meeting has been postponed **until a future date is determined.**

(continued on page 10)

## THE HUDSON-BERGEN CHEMICAL SOCIETY AND THE SCHOOL OF NATURAL SCIENCES OF FAIRLEIGH DICKINSON UNIVERSITY

### The 22nd Annual Student Research Symposium

The Hudson-Bergen Chemical Society and the School of Natural Sciences of Fairleigh Dickinson University announce that The 22nd Annual Student Research Symposium scheduled for April 24, 2020 was postponed to the fall of 2020 (date to be announced).



## NEW YORK NANOSCIENCE DISCUSSION GROUP

### Hosted by the New York University Department of Chemistry

The NYNDG is an ACS Topical Group that meets in the New York University Department of Chemistry. Sessions feature three 30-minute presentations on nanoscience, one each with strong orientation in biology, chemistry, and physics/applied mathematics.

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Presentations will be focused on discussion of recent work, although speakers will place the work in a context understandable to a broad audience.

**The June 2 session has been postponed until a date to be determined.**

### Topical Group Page

[https://www.newyorkacs.org/grp\\_nano-tech.php](https://www.newyorkacs.org/grp_nano-tech.php)



## NICHOLS SYMPOSIUM RESCHEDULED

Dear NY ACS Section Member:

We are sorry to inform you that due to the outbreak of the Coronavirus in the New York area, the Executive Committee of the ACS New York Section feels it is in everyone's best interest to postpone the Nichols Symposium and Dinner on March 27 until **Friday, October 23**. Right now this date works with the hotel, the speakers and Dr. Matyjaszewski. If for some reason we need to change this date again, another announcement with those details will be sent.

We apologize for any inconvenience this may cause you. We hope you find that the new date works with your schedule. If you have already registered for this event and cannot attend, you will receive a full refund. We appreciate your patience as we work through this. (*See program on pages 16-17*)

Wishing you best of health.

Dr. Ruben Savizky, 2020 Chair ACS-NY



## CANDIDATES FOR THE NY SECTION 2020 ELECTIONS —BALLOTS DUE MAY 31

At the January 2020 Section-wide Conference, the Nominating Committee presented the candidates for office for the 2020 elections. The biographies of the candidates are posted in the May issue of *The Indicator* and on the New York Section website at [https://www.newyorkacs.org/2020\\_Candidates.pdf](https://www.newyorkacs.org/2020_Candidates.pdf)

The Board of Directors extends a sincere thank you to the candidates for accepting the nomination to run for office, and encourages ACS New York Section members to vote for these worthy candidates.

**VOTE BY MAY 31**

## THANKS TO MARM2020 EXHIBITORS

Dear MARM 2020 Exhibitors:

It is with deep regret that we inform you the Executive Committee of the 48th Middle Atlantic Regional Meeting (MARM 2020) has reached a decision of terminating its June conference, planned to be held on June 12, 2020, at the Graduate Center of City University of New York. The decision has been made in the interest of the health and safety of all MARM 2020 participants including its presenters, exhibitors, and attendees.

At the present time, the refunds of our MARM 2020 Exhibitors are being processed.

Although MARM 2020 is canceled, your organization's logos, as MARM 2020 Exhibitors, will remain on the conference website at <https://www.marm2020.org>, and along with your Program information, will be published in *The Indicator*, the New York and North Jersey (ACS) Newsletter at <https://theindicator.org/index.html>.

Once again, we would like to express our greatest gratitude to your organizations for your past and continued support of ACS MARM conferences, especially through the exhibition. We wish you, your family members and colleagues a safe and healthy status during this difficult time.

We look forward to future opportunities to work with you, your colleagues, and your organizations.

Sincerely,  
Ping Furlan  
Yosra Badiei  
MARM 2020 Exhibition  
ACS New York Section

## A LETTER TO THE MARM COMMUNITY

Dear members of the MARM community,

The organizing committee of the 2020 Middle Atlantic Regional Meeting, that was to be held June 12-13, 2020 at the CUNY Graduate Center and St. John's University, has been monitoring the coronavirus (COVID-19) outbreak. Unfortunately, the decision has been made to terminate MARM 2020 in the interest of the health and safety for all of our invited speakers, poster presenters, exhibitors, and attendees. While it is unfortunate that we can't present MARM 2020, our hearts go out to the real people impacted by COVID-19.

We wish to thank all of our session organizers for their hard work in building an exciting and dynamic program for MARM 2020 and the American Chemical Society staff, Shantesse Dortch and Kim Savage, for their expert guidance in organizing a regional meeting. We also sincerely appreciate the support of the New York Section of the ACS, our fellow scientific society collaborator [Society of Cosmetic Chemists], our industrial exhibitors [Advion, Dotmatics, Chem101, TA Instruments, Heidolph Instruments, and Vernier], our academic exhibitors [Columbia University Chemical Engineering MS program, CUNY PhD Programs in Chemistry and Biochemistry, University of Delaware Department of Chemistry and Biochemistry, University of Pennsylvania Master of Chemical Science, Stony Brook University, and York College - CUNY], and our program sponsors [ACS Division of Organic Chemistry, ACS Womens Chemists Committee, and Firmenich] for their generous support.

Sincerely,  
Alison Hyslop, General Co-Chair  
Joseph Serafin, General Co-Chair  
Brian R. Gibney, Program Chair

## Our Heartfelt Thanks to MARM 2020 Exhibitors

Cancelled

48<sup>th</sup> Middle Atlantic Regional Meeting (<https://www.marm2020.org/>)

Sponsored by the New York Local Section of the American Chemical Society

The Graduate Center of the City University of New York | June 12, 2020

MARM 20/20



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# MARM2020 EXPO

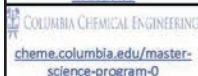
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The Graduate Center of the City University of New York | June 12, 2020 - CANCELLED



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Chem101's active learning platform enables instructors to engage their students in the classroom with interactive problems, assign homework, and provide on-the-go practice activities. The platform's intuitive technology allows instructors to go beyond generic questions with chemistry-specific answer modules that make learning and teaching fun, effective, and exciting.



Our Scientist to Engineer (S2E) Program is an intensive, accelerated program designed especially for new M.S. students without a B.S. in Chemical Engineering. This program covers the essentials of the entire undergraduate curriculum, followed by a standard M.S. program. Typically, this can all be accomplished in three semesters.



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Nanalysis develops and manufactures affordable, accessible, and automatable NMR spectrometers. Our spectrometers are aimed at expanding the use of multinuclear NMR spectroscopy into qualitative and quantitative chemical applications where NMR has not historically been used. In 2019, Nanalysis introduced the 100 MHz product, the highest field available for benchtop NMR spectrometers.



TA Instruments provides innovative material characterization instruments that are widely used for research, analysis, and quality control in the evaluation of physical properties. We are the world's leading supplier of thermal analysis, rheology, and micro-calorimetry instruments.



The University of Delaware is situated less than an hour from Philadelphia, PA, and is within easy driving distance of New York City and Washington, D.C. Our graduate program in Chemistry and Biochemistry combines a rich historic legacy with a strong commitment to education and innovation. Students at UD benefit from a highly supportive and collaborative environment that supports a wide array of cutting-edge Core Facilities, and dynamic initiatives focused on driving advancements across all areas of chemistry, biochemistry and related fields.



The University of Pennsylvania's Master of Chemical Sciences prepares you for diverse career and academic possibilities in the chemistry fields. We feature PhD-level courses, individualized advising, six chemistry concentrations, and Ivy League facilities and resources. Complete your research with local and national industry partners or at Penn's stellar facilities.



**Our mission: To advance cosmetic science**  
The Society strives to increase and disseminate scientific information through meetings and publications. By promoting research in cosmetic science and industry, and by setting high ethical, professional and education standards, we improve the qualifications and caliber of cosmetic scientists.



St. John's University welcomes students to learn more about how to apply for our Masters in Science (M.S.) program in chemistry and discuss how our program can help the student meet their career goals.



Stony Brook Chemistry has a long history of conducting research and teaching at the interface of chemistry with fields such as biology, medicine, and materials science. This tradition was established by Nobel Laureate Paul Lauterbur, who made his pioneering discoveries in Magnetic Resonance Imaging at Stony Brook. As part of our diverse community, you will benefit from the wide range of opportunities found at a large research university while enjoying the personalized attention and sense of community that exists within our Department.



For 39 years, Vernier Software & Technology has been the leader in scientific data-collection technology. Education worldwide use Vernier Sensors, instrumentation, including a benchtop gas chromatograph and spectrophotometers, software, and experiments to teach and engage students in chemistry investigation.

## **USMMA PARTNERS WITH NYACS TO CONTRIBUTE TO BAKER STEM FAMILY NIGHT**

On Wednesday, January 22, 2020, for the sixth consecutive year, the United States Merchant Marine Academy (USMMA) once again partnered with the American Chemical Society New York Section (NYACS) and brought safe, colorful, and action-containing activities to the Great Neck E. M. Baker Elementary School's Annual STEM Family Night for the students and their families to try ([https://www.newyorkacs.org/Lets\\_Do\\_Chemistry.php](https://www.newyorkacs.org/Lets_Do_Chemistry.php)). Thirty Academy volunteers had a great evening and enjoyed their participation in and contribution to the event: nineteen midshipmen representing the Science & Innovation Club (led by M/N Dave Ingels-Thompson, M/N Mark Hayton, and M/N Alex Biscardi), five midshipmen the Acta Non-Verba Club, and six faculty members the Departments of Math & Science and Marine Engineering.

As in the past, the USMMA stations were very busy during the entire evening, continuously flooded with the excited youngsters and delighted parents who were obviously enjoying their interactions with the USMMA presenters and having a blast with science! Through the following themes: Water, water everywhere, Nanomaterials, and Green Energy/Energy Storage, more than 400 local youths and their parents had an opportunity to experience the following experiments: chemistry is colorful (LDC), nature of dye (LDC), super absorbent polymer, fortune-telling fish, total ion/conductivity, which reaction is faster, magic sand, smart metals, sun-block, liquid crystals periodic table, light-emitting diodes, radiometer, solar energy, copper solar cell, molecules in motion (LDC), chemistry makes scents (LDC), and building a battery (LDC). These activities were incorporated to educate the students about the importance of taking care of our environments via using sciences and developing green energy and functional materials. (LDC = Let's Do Chemistry Kit activity).

We would like to thank the USMMA volunteers who took time from their extremely busy schedules to help promote STEM professions in the community and be excellent role models for our future leaders, scientists, and engineers. Huge thanks also go to the USMMA administration and the campus community whose strong support enabled the Program to be carried out smoothly. Additionally, we would like to express our heartfelt thanks to Ms. Aileen Sullivan, the Baker School administration, science teachers, and parent group for inviting and working with us - we are very proud to be part of this terrific program every year ever since its inception six years ago -with the blessing of our Superintendent, Admiral Jack Buono, even during the government shutdown last year, we did not miss it. The Let's Do Chemistry (LDC) Kits were developed and provided by National Informal STEM Education Network (NISE Net) through the National Science Foundation (NSF) funds under grant number DRL 1612482. We thank them for their generous support.

The Program was very well evaluated by all who were involved. Sample feedback is listed below:

### ***From Baker School:***

"We are impressed with the knowledge of your students, and their kind and gentle way of sharing that knowledge and excitement for STEM. It's difficult to express how grateful I am to all of you for giving up your time and sharing your talents with our students and their parents. Your students are wonderful role models to our children, and your faculty are consistently a wonderful and engaging presence!"

"Thank you all SO much for coming to Baker's STEM night! Your experiments are a highlight for our students and families, and we truly appreciate all of the time and hard work you put into helping this evening be such a tremendous success! Great Neck is fortunate to have the Academy be such an amazing resource, and we appreciate the relationship we have built with you. I understand that for both students and faculty, an evening like this is a big commitment and I want to thank you again for all of your hard work."

### ***From USMMA Midshipmen:***

"The Event has opened my eyes to a community of learning. To see the regular faculty involvement is truly inspiring. Often times, it is very easy to get swept away in the everyday routine at Kings Point and to forget about previous hobbies or interests. Tutoring Baker Elementary School students during STEM Night allowed me to spread that educational enthusiasm and science joy to the surrounding community which I really enjoyed!"

*(continued on page 14)*



## USMMA PARTNERS WITH NYACS TO CONTRIBUTE TO BAKER STEM FAMILY NIGHT

(continued from page 13)

"It was truly gratifying to see a young child's eyes light up as he watched in amazement when small rubber toys grew so big in a jar as air molecules were removed from the jar! (I was pretty amazed too!)"

"I enjoyed showing how chemistry is used to clean spilled oil and help protect marine environment! I learned many new things myself and am grateful being a part of this fantastic outreach program!"

"Many children found our experiment so amazing and it truly warmed up my heart seeing the children look at us in awe when we put the water in their hand and the Sodium Polyacrylate began to expand."

"I learned about the real world applications of chemistry, and I liked teaching and working with children. I remember when I was a kid and went to science fairs and learned from older students. It felt good to give back."

"We learned how to entice the kids to come to our booth. Surprisingly, elementary school kids were more interested in the experiment when you say 'Look! Color changing beads!' than 'Hey, kids! Wanna learn about sunscreen?' Overall, the whole event was a crash course in cross-generational communication. ... Maybe one day these kids will be chemistry majors or awkward engineering students doing Kings Point scholar projects... all in all, even if they don't become science geeks, I hope I helped give them a fun night and a reminder to always put on sunscreen."

### HEROES IN THE LAB

Very often on TV we hear people on the front lines of health care, doctors, nurses, aides being described as heroes. Also, first responders, EMTs, police, firemen, transit workers, grocery and pharmacy workers. All are well described as heroic. However, only once have I heard the scientists, engineers, lab techs who work in clinical laboratories, or industry R&D laboratories, doing or developing and improving diagnostic tests and/or therapeutics described as heroes. Despite advances in automation, you can't perform lab experiments from a laptop in the safety of your home. Most often, this work requires working with at least potentially infectious samples.

I admit that I have not done a scientific survey or even a statistically designed sampling of TV coverage; just serendipity. I also may be prej-

udiced from having worked in Clinical Diagnostics R&D, for Siemens-Healthineers (and predecessors: Siemens Diagnostics, Bayer Diagnostics, Technicon Instruments) for 35 years (now retired) and, so, have many friends who work in labs. Although not usually described as heroic, they deserve to be so-called.

P.S. In fairness I must add this note. The above was written and submitted to *The Indicator* yesterday. The other night in the "Cover The World Together At Home Concert" broadcast on ABC, there were four to five instances recognizing lab researchers.

Paul W. Dillon, Ph.D.  
Co-Chair and Program-Director  
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[PaulWDillon2@hotmail.com](mailto:PaulWDillon2@hotmail.com)  
[http://www.newyorkacs.org/sub\\_west.php](http://www.newyorkacs.org/sub_west.php)



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**2020 STEM Family Night at Great Neck Baker School**  
**Educating the Next Generation of the Leaders about the Importance of**  
**Taking Care of Our Environments via Greener STEM Efforts**  
**U.S. Merchant Marine Academy, New York ACS, January 22, 2020**  
(photo courtesy of Dr. Ping Furlan, Dr. Mike Melcer, and Captain Tony Nigro)



**Deadline for submitting Articles**  
**for the SEPTEMBER *Indicator* is**  
**JULY 28, 2020**



**AMERICAN CHEMICAL SOCIETY'S NEW YORK SECTION, INC.  
WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM**

**“NANOSTRUCTURED POLYMERS BY MOLECULAR  
ENGINEERING USING ATRP ”**

**HONORING: PROFESSOR KRZYSZTOF MATYJASZEWSKI**

**Date: Friday, October 23, 2020**  
Place: Crowne Plaza Hotel, White Plains, NY

**Date changed due to COVID-19 Virus.  
See details on page 10.**

**PROGRAM**

- 1:00 PM Welcome Professor Ruben M. Savitzky  
2020 Chair, ACS New York Section, The Cooper Union
- 1:05 PM Opening of the Distinguished Symposium Professor Rita K. Upmacis  
2020 Chair-elect, ACS New York Section, Pace University
- 1:15 PM Polymer-Enhanced Biology Professor Alan J. Russell  
Department of Chemical Engineering, Carnegie Mellon University

The growth of polymers from the surface of proteins has opened the door to tuning and supplementing protein function by rational design. Protein-polymer conjugates are synthesized from pure starting materials and the struggle to separate conjugates from polymer, native protein, and from isomers has vexed scientists for decades. We have discovered that covalent polymer attachment has a transformational effect on protein solubility in salt solutions. Charged polymers increase conjugate solubility in ammonium sulfate and completely prevent precipitation even at 100% saturation. This transformational impact on protein solubility can be used to simply purify mixtures of conjugates and native proteins into single species. Increasing protein solubility in salt solutions through polymer conjugation could lead to many new applications of protein-polymer conjugates.

- 2:00 p.m. Responsive Materials from Dynamic Bonds Professor Brent S. Sumerlin  
Department of Chemistry, University of Florida

By relying on a variety of reversible covalent reactions that lead to readily cleaved bonds, we have prepared materials that combine the physical integrity of covalent materials and the structural dynamics of supramolecular complexes. Enaminone, boronic esters, boronate esters, and Diels-Alder linkages have all been employed to prepare these responsive and dynamic materials, with particular attention having been dedicated to the preparation of hydrogels, elastomers, and nanoparticles. We seek to exploit the reversible nature of these bonds to prepare responsive and self-healing materials.

- 2:45 PM Dancing in the Dark with CHIPs: Polymers for Next Generation Photonics and Imaging Professor Jeffrey Pyun,  
Department of Chemistry and Biochemistry,  
University of Arizona

The ability to manipulate light with materials is critical for a wide range of optical applications for devices, imaging and sensing applications. We will discuss our recent efforts to make new functional polymers and materials that are designed to transmit, reflect, rotate or guide light across a wide optical spectrum to enable creation of new imaging and sensing platforms. We will discuss how these systems will improve human-machine interfaces and next generation sensors for transportation.

- 3:30 PM Coffee Break

- 4:00 PM Polymers, Cells and Spores: Macromolecular Engineering of Living Thin Films Professor David A. Tirrell,  
Department of Chemistry, California Institute of Technology

This lecture will describe our ongoing effort to engineer the physical and biological properties of thin bacterial films by display of adhesive proteins on the cell surface, by release of matrix proteins into the extracellular space, and by the inclusion of stable bacterial spores. Studies of film fabrication, cell viability, film growth, film structure, indentation behavior, and regeneration following injury will be discussed.

- 4:45 PM Macromolecular Engineering by Taming Free Radicals using Atom Transfer Radical Polymerization Professor Krzysztof Matyjaszewski, Nichols Medalist,  
Center for Macromolecular Engineering  
Carnegie Mellon University

Macromolecular Engineering (ME) is a process comprising rational design of (co)polymers with specific architecture and functionality, followed by precise and efficient polymer synthesis and processing in order to prepare advanced materials with target properties. We employed radical polymerization for ME due to its tolerance to many functionalities although radicals are difficult to be controlled, since they have very short life times (<1 s) and are involved in side reactions. Taming free radicals was accomplished via dynamic equilibria between minute amounts of radicals and large pool of dormant species using copper-based ATRP (atom transfer radical polymerization) catalytic systems. By applying new initiating/catalytic systems, Cu level in ATRP was reduced to a few ppm and ME provided polymers with precisely controlled molecular weights, low dispersities, designed shape, composition and functionality as well as block, graft, star, hyperbranched, gradient and periodic copolymers, molecular brushes and organic-inorganic hybrid materials and bioconjugates. These polymers can be used as components of various advanced materials such as health and beauty products, biomedical and electronic materials, coatings, surfactants, lubricants, additives, sealants as well as nanostructured multifunctional hybrid materials for application related to environment, energy and catalysis.

### MEDAL AWARD BANQUET

5:45 PM Social Hour

6:45 PM Medal Award Dinner

Presiding:

Dr. Ruben M. Savitzky  
2020 Chair, ACS New York Section, The Cooper Union

ACS Greetings:

Dr. Katherine L. Lee  
District 1 Director, American Chemical Society

Introductory Address:

Dr. David A. Tirrell  
California Institute of Technology

Presentation of the Medal:

Dr. Ruben M. Savitzky

Acceptance Address:

Dr. Krzysztof Matyjaszewski  
Nichols Medalist

**For More Information: Please visit the New York Section website at [www.NewYorkACS.org](http://www.NewYorkACS.org)**

**Online registration using PAYPAL for payment is available at [www.newyorkacs.org/meetings/Nichols/2020Nichols.php](http://www.newyorkacs.org/meetings/Nichols/2020Nichols.php)**

Or use the Tear Off reservation form at this line

**BANQUET RESERVATIONS DEADLINE – OCTOBER 5, 2020**

**MAIL RESERVATIONS TO:**

**ACS, New York Section Office**  
**Attn: Bernadette Taylor**  
**1313 3rd Ave., #2 South**  
**Spring Lake, NJ 07762**

**More Information:**

<https://www.NewYorkACS.org>

**Phone: 732-770-7324**

**E-mail: [btaylor@NewYorkACS.org](mailto:btaylor@NewYorkACS.org)**

|                                 |   | Number | Total    |
|---------------------------------|---|--------|----------|
| <b>Symposium only:</b>          | <b>\$70 (\$50 for ACS Members)</b>        | _____  | \$ _____ |
| <b>Student, unemployed</b>      | <b>\$30</b>                               | _____  | \$ _____ |
| <b>50 year ACS member</b>       | <b>\$0</b>                                | _____  | \$ _____ |
| <b>Banquet only:</b>            | <b>\$150 (\$130 for ACS Members)</b>      | _____  | \$ _____ |
| <b>Symposium &amp; Banquet:</b> | <b>\$170 (\$140 for ACS Members)</b>      | _____  | \$ _____ |
| <b>Table of 8 or more</b>       |   |        |          |
| <b>for symposium/banquet</b>    | <b>\$150 per person (non-ACS Members)</b> | _____  | \$ _____ |

Reserve our table in the name of: \_\_\_\_\_

Enclosed is my check, payable to: **ACS, NEW YORK SECTION, Inc. in the amount of** \$ \_\_\_\_\_

**If reservations are for more than one person, please attach a list of the guests' names, and dinner selections where needed.**

**DINNER CHOICES:** Chicken \_\_\_\_\_ Prime Rib \_\_\_\_\_ Salmon \_\_\_\_\_

**Tickets will be mailed to the person designated below**

**NAME** \_\_\_\_\_ **PHONE** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_ **E-MAIL** \_\_\_\_\_

**CITY, STATE, ZIP** \_\_\_\_\_



## EVERYTHING OLD IS NEW AGAIN!

At last night's meeting of the NYACS BoD, it was noted that *The indicator* may be short of content because so many events have been cancelled. I have written a short "mini-essay" (page 14) intended to honor those who work in the lab.

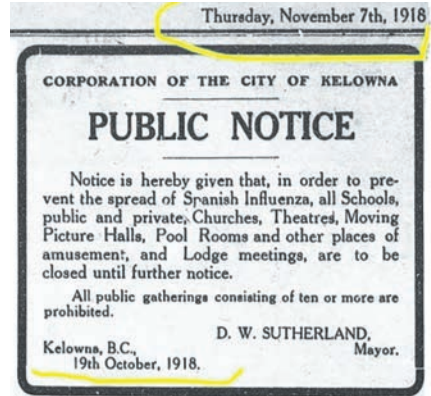
Finally, a friend sent an e-mail with some par-



ticularly timely pictures, an interesting poem and a public notice. The Nostradamus thing is cute at best ... (and I wonder did he even talk about "the world economy" in 1561.

Some of this (particularly the poem) may be worthy of consideration. However, I have no idea of the provenances of these materials, nor of copyright status.

Paul Dillon



History repeats itself. Came across this poem written in 1869, reprinted during 1919 Pandemic.

### This is Timeless....

And people stayed at home  
 And read books  
 And listened  
 And they rested  
 And did exercises  
 And made art and played  
 And learned new ways of being  
 And stopped and listened  
 More deeply  
 Someone meditated, someone prayed  
 Someone met their shadow  
 And people began to think differently  
 And people healed.  
 And in the absence of people who  
 Lived in ignorant ways  
 Dangerous, meaningless and heartless,  
 The earth also began to heal  
 And when the danger ended and  
 People found themselves  
 They grieved for the dead  
 And made new choices  
 And dreamed of new visions  
 And created new ways of living  
 And completely healed the earth  
 Just as they were healed.







Nostradamus wrote in the year 1551 this! There will be a twin year (2020) from which will arise a queen (corona) who will come from the east (China) and who will spread a plague (virus). In the darkness of night, on a country with 7 hills (Italy) and will transform the twilight of men into dust (death), to destroy and ruin the world. It will be the end of the world economy as you know it.



(continued on page 20)

**EVERYTHING OLD IS NEW AGAIN!**

(continued from page 19)



Deadline for items to be included in the  
SEPTEMBER 2020 issue of *The Indicator* is

**JULY 28, 2020**

## WESTCHESTER CHEMICAL SOCIETY

### Student Achievement Awards

As noted on page 9, some faculty were able to nominate achievement awardees at local colleges and high schools. Although they were not given a formal presentation, each was sent a certificate of award. These awardees were:

| School                 | Awardee            | Faculty                              |
|------------------------|--------------------|--------------------------------------|
| Fordham University     | Eliot Kazarov      | Jon Friedrich                        |
| Manhattanville College | Craig Cropsey, Jr. | Darlene Gandolfi                     |
| Briarcliff High School | Emma Smoler        | Robert Saar                          |
| Ossining High School   | Nicole Camilliere  | Valerie Holmes and Angelo Piccirillo |
| Rye High School        | Kathryn Stevens    | Jaime Zung                           |
| The Horace Mann School | Malhaar Agrawal    | Megan Reesbeck                       |
| The Horace Mann School | Danielle Paulson   | Megan Reesbeck                       |

No photos were available for Eliot Kazarov, Malhaar Agrawal or Danielle Paulson.



**Craig Cropsey, Jr.**  
Mnhattanville College



**Emma Smoler**  
Briarcliff High School



**Nicole Camilliere**  
Ossining High School



**Kathryn Stevens**  
Rye High School





# Thriving in the New Normal!

Job search and LinkedIn Networking during COVID-19

Webinar for the ACS North Jersey Section Powered by the ACS  
Philadelphia Section  
Thursday, May 21, 2020  
6:30 p.m. EDT - 8:30 p.m. EDT

Featuring:

Master Career Strategist Coach, Ron Nash,  
Founder of Get Hired Now! Programs

**6:30 p.m. – 7:00 p.m. EDT:**

Happy Half Hour (BYOB) and presentation by special guest, Trent Gordon

**7:00 p.m. – 8:00 p.m. PDT:**

Master Career Strategist Coach Ron Nash  
Thrive in a New Normal! JobSearch & LinkedIn Networking during COVID-19

**8:00 p.m. -- 8:30 p.m. PDT**

Q&A session moderated by Joe Martino, ACS Philadelphia Section Chair.

## Zoom Registration Information

Register in advance for this meeting, seats are limited:

[https://zoom.us/meeting/register/vplqf-iprDkuNV98L56d3Qi\\_hl7l0qqLjg](https://zoom.us/meeting/register/vplqf-iprDkuNV98L56d3Qi_hl7l0qqLjg)

After registering, you will receive a confirmation email containing information about joining the meeting.

## North Jersey Meetings

<https://www.njacs.org>

### NORTH JERSEY EXECUTIVE COMMITTEE MEETING

Section officers, councilors, committee chairs, topical group chairs, and section event organizers meet regularly at the Executive Committee Meeting to discuss topics of importance to running the section and representing the membership.

All ACS members are welcome to attend this meeting and to become more involved in section activities.

**Date:** Monday, September 21, 2020

**Time:** 6:30 - 8:30 PM

**Place:** Seton Hall University  
Jubilee Hall, Room 132  
400 South Orange Avenue  
South Orange, NJ 07079

To connect to the meeting remotely, please contact Cecilia Marzabadi at [cecilia.marzabadi@gmail.com](mailto:cecilia.marzabadi@gmail.com) for information.



### NoJ MASS SPECTROMETRY DISCUSSION GROUP

**Special Event Meeting: "Celebrating Some of the Rich History and Community in Mass Spectrometry"**

The NJMSDG is very pleased and excited this year to host a Special Event Meeting that highlights, as well as celebrates, some of the major events in the history of mass spectrometry. The event title will likely be shortened to simply 'History Night' as we welcome Dr. P. Jane Gale, the current ASMS Archivist/Historian, who will present 'Decade by Decade: An Historical Review of Mass Spectrometry and ASMS in the Second Half of the 20th Century'. As Dr. Gale has often observed, "Community has been such an important part of our profession," and our community is excited to have her return to NJ to share how ASMS is preserving and presenting the researchers, the instrumentation developments, and the scientific communities that have provided such a powerful analytical tool for our complex applications and most difficult research problems. We look forward to learning how ASMS captures

and presents this rich story as Dr. Gale describes four broad topics covered by the ASMS history poster collection: 1) the History of ASMS, 2) Member Interactions and Giants in Mass Spectrometry, 3) the History of the Science of Mass Spectrometry and 4) the History of Commercialization and explores the evolution of the science and the Society over the last 70 years through a more in-depth look at the ASMS Anniversary posters.

As a little taste of our very own history, it should be noted that Dr. Gale was a member of NJMSDG during the time she lived in New Jersey. When she, joined in 1980, 40-50 attendees gathered each month at one of several locations, ranging in New Jersey geography from Princeton to Florham Park. With fellow NJMSDG member Dave Kemp, Dr. Gale co-chaired the group from 1981-1984 after the two tied in the election for the discussion group's next leader.

Dr. Gale spent her career working in the field of mass spectrometry, first at RCA Laboratories in the Materials Characterization group and later at Bristol-Myers Squibb, where she oversaw the development of quantitative bioanalytical assays to support clinical trials. She subsequently served as chief operating officer at Virgin Instruments (now Simultof) and later as Director of Educational Services at Waters Corporation.

At our upcoming meeting, as we enjoy a time of fellowship and looking back over the historical development of mass spectrometers, we will also announce the winner of our contest for the submission of the 'oldest working mass spectrometer'. Pictures and provenances can be sent to [ghall@chem.rutgers.edu](mailto:ghall@chem.rutgers.edu) up to one (1) day before the meeting.

Kathleen Anderson  
NJMSDG Director of Communications

**Date:** Rescheduled date tbd

**Times:** Social and dinner - 5:30-7:00 PM  
Presentations start - 7:00 PM

**Place:** Somerville Elks Lodge  
375 Union Avenue  
Bridgewater NJ.

**Future Dates:**

**Tuesdays, September 15, 2020  
(Symposium/Vendor Show),  
October 13, December 8, 2020**

Times and Place: As above.



## NoJ DRUG METABOLISM DISCUSSION GROUP

### 2020 Spring Symposium and Vendor Exhibition

Sponsored by the North Jersey ACS Drug Metabolism Discussion Group

#### “Novel Drug Delivery Approaches”

##### Program

|          |  |   |
|----------|--|---|
| 8:00 AM  | Registration / Continental Breakfast / Vendor Exhibit  |   |
| 9:00 AM  | Introductory Remarks   | Imad Hanna, Chair, NJ DMDG  |
| 9:15 AM  | SiRNA delivery of GalNac-conjugated molecules  | Diane Ramsden<br>Principal Scientist,<br>Anlylam, Cambridge, MA   |
| 10:00 AM | Pro-drug strategies for targeted delivery of therapeutics  | John Isbel, PhD<br>Director, Drug Metabolism and Disposition<br>The Novartis Genomic Institute, San Diego, CA   |
| 10:45 AM | Vendor Exhibit & Coffee Break  |   |
| 11:15 AM | Stem cell-directed targeted enzyme/prodrug therapy of cancer   | Arash Hatefi, Associate Professor,<br>Department of Pharmaceutics,<br>Rutgers, The State University of New Jersey   |
| 12:00PM  | Lunch & Vendor Exhibit   |   |
| 1:15 PM  | Nano particle drug conjugates for efficient delivery to biological targets   | Liang Zhao, PhD<br>Department of Microbiology and<br>Immunology, Albert Novartis Institutes<br>for BioMedical Research, Cambridge, MA   |
| 2:00 PM  | Pharmacokinetic modeling of CNS disposition of 5-HT3 receptor antagonist with quantitative assessment of the role of P-glycoprotein efflux | Manting Chiang, PhD<br>Graduate Student,<br>Pharmaceutical Sciences, Rutgers,<br>The State University of New Jersey.<br>Current affiliation: Clinical Pharmacology &<br>Pharmacometrics, Bristol Meyers Squibb, Princeton, NJ |
| 2:45 PM  | Vendor Exhibit & Coffee Break  |   |
| 3:00 PM  | Biopharmaceutical characteristics and drug delivery strategies for peptides/ASOs/targeted protein degraders                                | John Morrison, PhD<br>Pharmaceutical Candidate<br>Optimization, Bristol Meyers Squibb,<br>Princeton, NJ   |
| 3:45 PM  | Program closure  |   |

#### Date: Thursday, September 10, 2020

Times: 8:00 AM - 4:00 PM

Place: The Palace at Somerset Park  
333 Davidson Avenue  
Somerset, NJ • Phone: 732-302-9922

#### Registration:

Pre-registration fee is \$125 (pre-register by September 23, 2020).

Registration fee at the door is \$150 (Checks only)

Registration fee for students and postdocs is \$10 and \$50 for faculty

Registration is free for unemployed

- Please plan to pre-register as a group, as coordinated by a member of the NJACS DMDG steering committee from your organization (see list).
- If you have no DMDG member at your company, please contact Imad Hanna ([imad.hanna@novartis.com](mailto:imad.hanna@novartis.com)) for registration.
- Payments by personal or company checks. Sorry, credit cards are not accepted.

- Checks should be made payable to: NJ Drug Metabolism Discussion Group.
- Please also visit our website: <http://www.njacs.org/topical-groups/drug-metabolism>

#### Exhibitors:

- Please contact Naiyu Zheng ([naiyu.zheng@bms.com](mailto:naiyu.zheng@bms.com)) for information concerning exhibits

#### Directions to the Palace at Somerset Park

333 Davidson Avenue, Somerset, NJ  
Phone: 732-302-9922

#### From the New Jersey Turnpike:

Exit 10 to Interstate 287 North. Follow 10 miles to Exit 10 (527 New Brunswick-South Bound Brook). Easton Ave towards South Bound Brook to first light, make left (Davidson Ave.)

#### From New York City:

Lincoln Tunnel to N.J. Turnpike South. Follow N.J. Turnpike directions mentioned above.

#### From Route 287:

If traveling **north**:

Exit 10 (527 New Brunswick-South Bound Brook).

Follow sign towards Bound Brook, to light make left (Davidson Ave.)

If traveling **south**:

Exit 10 (527 New Brunswick). Left on Easton Ave., to light, make left (Davidson Ave).

## Obituary

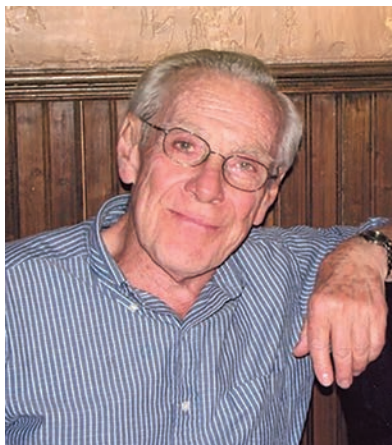
### HERMAN BURWASSER

Herman Burwasser 92, of Renaissance, Manchester died Saturday, May 2, at Alcoeur Gardens, Toms River. He had recently celebrated 70-years as a member of the American Chemical Society, and had served many years as Ad Manager for *The Indicator*,

Herman was born in the Bronx, the son of Russian immigrants, but always considered Toms River to be his hometown. He graduated from Toms River High School in 1945, and immediately enlisted in the Navy. At the end of the war, he returned to the family farm, but he took advantage of the G.I. Bill and entered Rutgers University, and subsequently, went on to earn his doctorate in chemistry from New York University. After a short stint doing research at Princeton University, Herman joined the aerospace industry, where he was a part of the team that saw the birth of the American manned space program. He was, in the truest sense, a rocket scientist. He spent the last part of his career in chemical research and development in the photography industry, for many years at GAF Corporation, working in both upstate New

York and Wayne, New Jersey. Herman was an avid golfer, a lover of fine food and wine and classical music.

He is survived by his loving wife of 65 years, Lillian, three sons; Robert of NYC, Peter of Philadelphia, PA, and Daniel, also of NYC, and five grandchildren; Alex, Lee, Amanda, Rachel and Ian. Please consider making a memorial donation in Herman's name to Fisher Center for Alzheimer's Research Foundation, [www.alzinfo.org](http://www.alzinfo.org)



## Call for Applications

### FREDDIE AND ADA BROWN AWARD

This Award recognizes and encourages high achieving middle- and high-school students, of African American and Native American heritage, to further develop their academic skills, with views on careers in the chemical sciences.

#### Award Amounts

Middle School \$100.00 Check and \$50.00 gift certificate : High School \$200.00 Check and \$100.00 gift certificate.

#### Who is Eligible

Middle School students enrolled in a science class : High School students who have completed a chemistry course

#### Grades

Middle School B Average or better in Science, B Average overall : High School B Average in Chemistry, B Average overall

#### Letter of Recommendation

Math or Science/Chemistry Teachers or Guidance Counselor

#### Statement

Middle School "Why I Like Science" : High School "Why I Like Chemistry"

#### Selection Criteria

Applicants must be African American (Black) or Native American (including Pacific Islander) or of mixed race.

#### Transcript

Official transcript required.

#### Financial Need

Not Required.

Applications available on the web: [www.njacs.org/freddieadabrown](http://www.njacs.org/freddieadabrown) or from your school guidance office.

#### Return Application To

Freddie and Ada Brown Award, NJACS Section Office, 49 Pippens Way, Morristown, NJ 07960

#### Due Date

Completed Applications must be postmarked no later than **March 31 Annually**

Questions: Contact Jeannette Brown [Jebrown@infionline.net](mailto:Jebrown@infionline.net) or (908) 239-1515

## Call for Volunteers

### OPPORTUNITY FOR ACS MEMBERS TO AID STUDENTS 2 SCIENCE IN A HYBRID VIRTUAL LAB PROGRAM

Can you spare a few hours of your time? Do you like working with students and would you like the opportunity to share your science knowledge in a classroom? Students 2Science (S2S) is seeking volunteers to support its V-Lab program. S2S has a series of elementary, middle, and high school experiments that run in various schools across New Jersey. Members are especially needed to mentor students in participating schools to help with experiments. It's great fun, a wonderful way to give back, and only requires

1-2 hours of your time. Experiments include CO<sub>2</sub> to the Rescue, Curious Crystals, Mystery of M&Ms, Thermochemistry: *Exothermic and Endothermic Chemical Reactions*, and *Glow it Up: The Chemistry of Luminol*. All are age-appropriate and volunteers are provided with instructions on how to support in the classroom prior to your scheduled volunteer day.

For more information, contact Cyndi Roberston, Director of Corporate Relations, at (973) 947-4880 ext. 516 or visit the website to register for the upcoming school year: <https://www.students2science.org>.



### SEMINAR SPEAKERS WANTED

The New York Section of the ACS is in search of speakers that we can add to our Speakers Bureau database of interested local area speakers who are available for Section-wide seminars and symposia. If you have an area of research or interest that would provide an interesting talk appropriate for our Section members, and would like to be included in our Speakers Bureau, please contact the New York Section Office at (516) 883-7510 or send an email to Bernadette Taylor [btaylor@NewYorkACS.org](mailto:btaylor@NewYorkACS.org) with the following information that will be posted on the Section's website: your name, affiliation, a title, and 5-6 words briefly summarizing your area of specialty. We look forward to hearing from you about topics that you wish to share with our other members!

## Call for Nominations

### COMMITTEE ON THE HISTORY OF THE NEW YORK SECTION

Over the past twenty-three years the New York Section has participated in the designation of seven National Historic Chemical Landmarks and four New York Section Historic Chemical Landmarks. A brief description of these National and local section landmarks may be found on the NY Section Home Page at <https://www.newyorkacs.org> under the Committee on the History of the NY Section. These landmark programs recognize achievements in the chemical sciences and related areas, in order to enhance public appreciation

for the contributions of the chemical sciences to modern life.

Please consider making a nomination for an historic chemical landmark. The Committee on the History of the NY Section will consider all nominations. In addition to a particular achievement, an historic library, building or association may be worthy of this distinction.

Please send your nomination, with supporting documentation, to the Chair of the Committee, Dr. Neil Jespersen, at [jespersn@stjohns.edu](mailto:jespersn@stjohns.edu).

Please reach out to your members to consider sending recommendations for this award. All nominations must be submitted by the Division or Committee, after approval from the respective Chair.



The New York Section is accepting nominations for the William H. Nichols Medal Award for the year 2021. This distinguished award, established in 1902 by Dr. William H. Nichols, for the purpose of encouraging original research in chemistry, is the first award authorized by the American Chemical Society. It is presented annually in recognition of an outstanding contribution in the field of chemistry, and consists of a gold medal, a bronze replica and a cash award. The medals are presented at the William H. Nichols Meeting that consists of a Distinguished Symposium related to the medalist's field of expertise and a Medal Award dinner.

Investigators who have published a significant and original contribution in any field of chemistry during the five calendar years preceding the presentation meeting are eligible for consideration by the Nichols Medal Jury. Each nomination requires a completed Nomination Form, biographical and professional data, and seconding letters. Since the nomination procedure will now utilize the New York Section website, please access the forms and instructions here: <https://www.newyorkacs.org/meetings/Nominations/Nichols.php>

**Nominations must be received by May 31, 2020.**

The Nichols Medal Award Jury will meet in June 2020 to select the Nichols Medalist for 2021. Nominations remain active for a period of five years and additions may be made during that time. After five years, a new nomination is required. The list of previous Nichols Medal recipients can be found on our website: <https://www.newyorkacs.org/nicholsmedalists.html>

Questions regarding the nomination procedure should be directed to Bernadette Taylor, New York Section Office via Email: [btaylor@newyorkacs.org](mailto:btaylor@newyorkacs.org)

Access the forms and instructions at:  
<https://www.newyorkacs.org/meetings/Nominations/Nichols.php>