

Jeannette E. Brown To Receive the ACS Henry Hill Award



See article on page 5.

THIS MONTH IN CHEMICAL HISTORY

Harold Goldwhite, California State University, Los Angeles • hgoldwh@calstatela.edu

For my final look back at the science of a century ago through the pages of The Chemical Society Annual Reports for 1920 I go to the section on radioactivity reported by F. Soddy, a collaborator of Rutherford, deviser of the term isotope, and Nobel Laureate in chemistry for 1921. A section on the nuclear constitution of atoms recapitulates the historic demonstration of the nuclear theory of Rutherford and associates and suggests that because the mass of an electric charge is proportional to the square of the charge and inversely proportional to its diameter, "the diameter of the uranium atom would be ... 1/50th of the diameter of a single negative electron, if [the nucleus] consisted of pure positive electricity. That the nucleus is not a pure positive charge, but contains negative electrons ... is shown by the emission of beta-rays from the radio-elements and by the mode of formation of isotopes in radioactive changes. Hence the view is not free from inconsistencies."

A section on isotopes reports the mass spectrometric work of Aston, initially a student of J. J. Thomson. Aston and Thomson observed isotopes of neon as early as 1913. By 1920 Aston had examined nineteen elements and ten, including H, He, C, N, O, F, P, S, As and I were found to be homogeneous. (Later investigations using more sensitive detection methods have shown the presence of isotopes for several of these elements). Isotopes were confirmed, and their masses measured, for B, Ne, Si, Cl, A, Br, Kr, Xe, and Hg. "In every case, except hydrogen, the atomic mass of each homogeneous component proves to be an exact integer, in terms of that of oxygen as 16, within the error of measurement... For hydrogen, however, the chemical value, 1.008, is exactly confirmed and its homogeneity proved."

The precise work of T. W. Richards (the first U.S. Nobel laureate in chemistry) and others on the atomic weight of lead from various sources is analyzed. From Norwegian thorite the value is 207.9, the highest yet found. Ceylonese thorianites gave values as low as 206.8. "Common" lead has an atomic weight of 207.1. These results show that there are different radioactive decay series that give rise to different mixtures of lead isotopes.

Although many attempts have been made it is doubtful whether any separation of a mixture of isotopes has yet been successful. Neon has been fractionated [by adsorption?] on cold charcoal to no effect. Similarly for fractional diffusion through porous pipe clay. Theoretical separation methods include centrifugal separation and thermal diffusion, both of which depend on differences of molecular mass. (These and related methods are, of course, central to the modern nuclear industries.)

There are reports on pioneering experiments on the use of isotopes as tracers in chemical operations. "When active lead nitrate and inactive lead chloride are dissolved in boiling pyridine, the lead in the lead chloride crystallizing out is half as active as the lead in the original lead nitrate, but when an active lead salt is so mixed with an organic compound of lead, such as lead tetraphenyl or diphenyl [lead] nitrate no interchange of lead occurs." Lead isotopes have also been used to measure the velocity of diffusion of lead atoms in molten lead.

Soddy reviews in detail the "fixed electron" model of atomic structure that is attributed to G. N. Lewis. He concludes that in contrast to the Bohr theory the Lewis model possesses a number of advantages particularly in accounting for the Periodic Law, ionized versus un-ionized compounds, and the arrangement of atoms in crystals as determined by X-ray methods. We are fortunate in 2020, in having the luxury of choosing our atomic models – Lewis or electron orbitals – depending on the problem at hand.

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February 2021	December 28, 2020
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<https://www.acs.org/editmyprofile>.

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

March Calendar

NEW YORK SECTION

Thursdays, March 5, 2020

Long Island Chemical Society March Seminar
See page 10.

Friday, March 6, 2020

NYACS Chemagination Competition
See page 11.

Wednesday, March 18, 2020

Westchester Chemical Society
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Wednesday, March 18, 2020

Organic Topical Group
See page 13.

Thursday, March 19, 2020

Biochemical Topical Group
See page 14.

Friday, March 20, 2020

Computers in Chemistry Topical Group
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Tuesday, March 24, 2020

Biochemical Topical Group
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Friday, March 27, 2020

Nichols Symposium
See pages 10-11.

also

Thursday, April 2, 2020

Long Island Chemical April Spring Seminar
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Saturday, April 4, 2020

CCEW Illustrated Poetry Contest Deadline
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Fridays, April 17, June 5, September 11, November 13, 2020

New York Section Board Meetings
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Saturday, April 25, 2020

CCEW Walk the Brooklyn Bridge Event
See pages 17.

Tuesday, June 2, 2020

New York Nanoscience Discussion Group
See page 17.

Friday, June 12, 2020

MARM
See pages 20-22.



NORTH JERSEY SECTION

Tuesday, March 10, 2020

North Jersey Mass Spectrometry Discussion Group
See page 6.

Sunday-Thursday, March 22-26, 2020

ACS National Meeting in Philadelphia - Jeannette Brown receives Henry Hill Award
See page 5.

Monday, March 23, 2020

North Jersey Executive Meeting
See page 6.

also

Tuesdays, April 14, May 12 (Dr. P. Jane Gale Event), June 9, September 15 (Symposium/Vendor Show), October 13, December 8, 2020

North Jersey Mass Spectrometry Discussion Group
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North Jersey Drug Metabolism Discussion Group
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**Deadline for items to be included in the
April 2020 issue of *The Indicator* is**

February 28, 2020

North Jersey's Jeannette Brown, Henry Hill Awardee

(Reprinted with permission from the Department of Chemistry, University of Minnesota.)

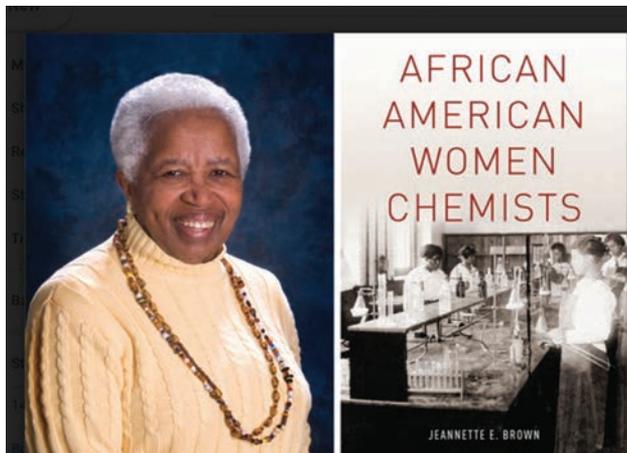
Alumna Jeannette E. Brown has received the Henry Hill Award from the American Chemical Society (ACS) Division of Professional Relations. She was recognized for distinguished service to professionalism. She will receive the award at the spring ACS National Meeting in Philadelphia, March 22-26, 2020.

This award honors the legacy of Henry Aaron Hill who became the American Chemical Society's first African American president in 1977. He is highly regarded for establishing standards for employer-employee relationships in the chemical profession.

Brown, herself, is a pioneer as a chemist, historian, advocate, and author. She was the first African American to receive a degree from the Department of Chemistry's graduate program, earning her master's degree in 1958. She received her bachelor's degree in chemistry from Hunter College. She is a former faculty associate in the department of Pre-College Programs at the New Jersey Institute of Technology. For 25 years, she worked as a research chemist at Merck. She started her industrial career as a junior chemist at CIBA Pharmaceutical, working there for 11 years. She is the 2004 Société de Chimie Industrielle (American Section) Fellow of the Chemical Heritage Foundation, and is a member of the first class of American Chemical Society Fellows (2009).

Brown is the author of two books. Her first book, *African American Women Chemists*, features outstanding chemists from the earliest pioneers to the late 1960s—a time when an explosion of career opportunities opened up to African Americans due to the passage of the Civil Rights Acts. Each mini-biography was a thorough account of the chemist's passion for the field, what inspired her, and what she accomplished in her career. Brown rounded out this study with a narrative of her own life story and achievements, and a look at what's in store for the future of African American women chemists. Her second book, *African American Women Chemists in the Modern Era*, focused on contemporary women who have benefited from the Civil Rights Act and are working as chemists or chemical engineers. This book tells the stories, taken by oral history, of 18 women who are leaders in their fields and how they succeeded.

Brown is an advocate for science education, and is passionate about serving as a mentor to and role model for underrepresented students. She has participated in countless scientific outreach programs and career days for students at all educational levels—elementary through college. For her work as a mentor to minority students and science education advocacy, she was elected to the Hunter College Hall of Fame in 1991; was honored by the University of Minnesota with an Outstanding Achievement Award in 2005; and received the American Chemical Society national award for Encouraging Disadvantaged Students into Careers in



the Chemical Sciences in 2005. She was featured in the College of Science & Engineering's spring 2017 edition of *Inventing Tomorrow*, an edition focused on women scientists including alumnae like Brown who have inspired future generations of women in science, technology, engineering, and math.

(Photos courtesy of Department of Chemistry, University of Minnesota.)

North Jersey Meetings

<http://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, March 23, 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@shu.edu for information.



NORTH JERSEY MASS SPECTROMETRY DISCUSSION GROUP

Welcome 2020



Happy NJMSDG New Year. We are excited to be kicking off another year with many events on the schedule. This year we have a full listing of five scheduled evening meetings on the **second Tuesdays**: March 10, April 14, June 9, October 13 and December 8, 2020. We will again meet at the Somerville Elks lodge, at 375 Union Ave. in Bridgewater, NJ. This is our 3rd year at this venue, and we have been pleased to work with the Elks as they are a non-profit organization, and proceeds for events such as ours support several great charities.

As well, we have a couple special events. We will host our Annual Symposium/Vendor

Show Tuesday, September 15, so please mark the calendar as this gathering is always a top notch in presentations and networking.

There is also one very special addition to our 2020 meeting roster, an evening meeting that will celebrate the "history of mass spectrometry". The NJMSDG steering committee is delighted to welcome ASMS's Archivist/Historian, **P. Jane Gale, PhD** to present "Decade by Decade: An Historical Review of Mass Spectrometry and ASMS in the Second Half of the 20th Century." More details will be forthcoming, but



we anticipate a full house with attendees from both industry and academia. One last little sneak-peek: be on the look-out for contest details regarding the 'oldest working mass spectrometer'! Submission of pictures and provenances will be required, but again, note that the operative word is 'working'. This fun and interactive event is booked for Tuesday, May 12.

Kathleen Anderson
NJMSDG Director of Communications

Dates: Tuesday, March 10, 2020
Tuesday, April 14, 2020
Tuesday, May 12, 2020
Dr. P. Jane Gale Event
Tuesday, June 9, 2020
Tuesday, September 15, 2020
(Symposium/Vendor Show)
Tuesday, October 13, 2020
Tuesday, December 8, 2020
(second Tuesday each month)

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

Place: Somerville Elks Lodge
375 Union Avenue
Bridgewater NJ.



NORTH JERSEY DRUG METABOLISM DISCUSSION GROUP

Spring Symposium: "Novel Drug Delivery Approaches"

Date: Thursday, April 30, 2020

Times: 8:00 AM – 4:00 PM

Place: The Palace at Somerset Park

(For full details, see the April Indicator.)

NORTH JERSEY NMR TOPICAL GROUP

The NMR Topical Group held its kick-off seminar of 2020 at Princeton University. Dr. Bradley Falk, a research investigator at Bristol-Myers Squibb and 2020 co-chair of the NMR topical group presented his work on the development of a ¹H solution NMR platform for characterization, screening, and development of therapeutic proteins and peptides. He first demonstrated how 1D PROFILE offers a means to assess differences in proteins for a batch to batch comparability. Further on, he described how to use DOSY methods to define a Diffusion Profile and define protein behavior as a distribution of sizes and association states to capture complexities such as self-interactions or aggregation. Lastly, Bradley showed how coupling information from DOSY and ¹H R2 measurements can further refine the understanding of behavior by profiling motions as well as interactions. He highlighted how the combination of these three methods provides an NMR Toolbox that can be used to rapidly characterize behavior, aid in formulation screening and address the developability of biologics under relevant formulation conditions.

The seminar was preceded by an optional dinner which offered ample networking opportunities.



Chair Justyna Sikorska introducing speaker Bradley Falk

(Photo courtesy of Luciano Mueller)



Snapshot of Bradley's presentation

(Photo courtesy of Luciano Mueller)



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**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, March 27, 2020
Place: Crowne Plaza Hotel, White Plains, NY

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

Online registration using PAYPAL for payment is available at www.newyorkacs.org/meetings/Nichols/2020Nichols.php

Or use the Tear Off reservation form at this line

BANQUET RESERVATIONS DEADLINE – MARCH 15, 2020

MAIL RESERVATIONS TO:

ACS, New York Section Office
St. John's University, Department of Chemistry
8000 Utopia Parkway
Queens, NY 11439

More Information:

<https://www.NewYorkACS.org>

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E-mail: btaylor@NewYorkACS.org

		Number	Total
Symposium only:	\$70 (\$50 for ACS Members)	_____	\$ _____
Student, unemployed	\$30	_____	\$ _____
50 year ACS member	\$0	_____	\$ _____
Banquet only:	\$150 (\$130 for ACS Members)	_____	\$ _____
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for symposium/banquet	\$150 per person (non-ACS Members)	_____	\$ _____

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 _____

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New York Meetings

<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 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, April 17

Friday, June 5

Friday, September 11

Friday, November 13

All meetings will take place at Cooper Union, 41 Cooper Square, New York NY 10003.

Directions

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



LONG ISLAND ACS 2020 SPRING SEMINAR PROGRAM

March Seminar

“Synthesis and Characterization of M(CO)(CN) and M(RS₂)_x Complexes to Mimic Hydrogenase”

Speaker: Dr. Daniel Amarante
Department of Chemistry
Stony Brook University

Abstract: Currently, the energy infrastructure is dominated by fossil fuel production and combustion. This is causing massive emissions of greenhouse gases which are harming the planet. Hydrogen is often suggested

as alternative fuel, sometimes called the “fuel of the future”. This statement has been mentioned for at least a generation, usually with greater seriousness during high petroleum prices. The technology to utilize hydrogen as fuel is highly advanced, however it is the scaling up that remains an issue. Hydrogen fuel cells have been designed and used, but because of the high cost and limited availability of platinum group metals used in these cells, this technology has not become widespread to the retail market. Scientists have turned to biological systems that utilized hydrogen in order to develop new catalysts that do not require platinum group metals. In nature, hydrogen is consumed/produced with certain efficiency by hydrogenase enzymes. These enzymes are characterized as metalloenzymes which contain iron and/or nickel core. The discovery of [Fe(CN)_x(CO)_y] units in hydrogenase enzymes has prompted the study of iron–cyanide–carbonyl compounds. Recently, compounds of the general structure [Fe^{II/III}(CN)₄L₂]^{2-/-1-}, where L = DMSO, CO, pyridine, were synthesized for the first time. This prompted studies of related compounds of the congener elements of iron, specifically using ruthenium and osmium. These studies have produced the first compounds of ruthenium with the general structure, [Ru^{II}(CN)₄L₂]²⁻ where L = CO and pyridine. Iron carbonyl complexes with the H₂PS₂ ligand have been previously used to mimic the iron centers in hydrogenase enzymes. To expand on these studies, ruthenium was used to replace iron in the general structure [M^{II}CO]₅(PS₂). Various compounds were also synthesized using Li₂NS₂ in place of Li₂PS₂.

Date: Thursday, March 5, 2020

Time: Refreshments start at 5:30 PM

Seminar 6:00 PM to 8:00 PM

Dinner follows Seminar at a nearby restaurant

Cost: \$25 per person

Place: Science Building, S-112

Queensborough Community

College

222-05 56th Avenue

Queens, NY 11364

Directions:

<http://www.qcc.cuny.edu/about/getting-here.html>

2020 NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY CHEMAGINATION COMPETITION

Date: Friday, March 6, 2020

Times: 10:00 AM to 2:00 PM

Place: St. John's University, Queens, NY

https://www.newyorkacs.org/graf/logo_chemagination.jpg

Chemagination is a creative innovation and writing contest for high school science students conducted by the American Chemical Society (ACS) and written with the National Science Education Standards in mind.

It will consist of a poster session and judging, followed by a presentation for the students and the award ceremony.

For this event, high school students are asked to imagine that they are living 25 years in the future and have been invited to write an article for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. Students are also asked to design the magazine cover. The subject of the article is:

"Describe a recent breakthrough or innovation in chemistry (and/or its applications) that has improved the quality of people's lives today."

The article must be written to fit in one of four categories: Alternative Energy, Environment, Medicine/Health or New Materials.

First place category winners from Local ACS Sections' Chemagination contests will be eligible to participate in the regional Chemagination contest at the 2020 Middle Atlantic Regional Meeting held at St. John's University on Saturday June 13, 2020.

Refer to the 2020 Chemagination Contest Description & Rules for more details. For examples of questions that might be asked by judges during the competition click Sample Questions.

Important Information:

DEADLINE for submission of the 'Intent to Participate Form' is **February 7, 2020**.

DEADLINE for submission of the 'Article Submission Form' along with the article and cover page is **February 21, 2020**

DEADLINE for a \$80.00 Submission Fee for each project entry is **February 21, 2020**. Please make the check to **NYACS**.

The New York section contest will be held on **Friday, March 6, 2020** at St. Johns University, Room 416 ABC in the D'Angelo Center, Queens, NY.

AMERICAN CHEMICAL SOCIETY'S NEW YORK SECTION, INC. CHEMAGINATION AND OLYMPIAD PROGRAMS

2020 CHEMAGINATION CONTEST

- High School science essay and poster contest, details at: www.newyorkacs.org/meetings/chemagination/chemagination.php
- INTENT TO PARTICIPATE FORM IS DUE FEBRUARY 7
- Article Submission form along with the article and a cover page is due FEBRUARY 21
- The contest will be held on MARCH 6, 2020 at St. John's University, Queens, NY.
- A \$80 submission fee is required for each project entry - check payable to ACS New York Section, due by FEBRUARY 21, 2020

2020 CHEMISTRY OLYMPIAD

- The local portion of the 2020 International Chemistry Olympiad will be held on March 7 and 8, 2020 at locations throughout the greater metropolitan area.
- THE REGISTRATION DEADLINE IS FEBRUARY 14
- Details and registration materials can be found at the web site of the New York Section of the American Chemical Society at: www.newyorkacs.org/meetings/Olympiad/Olympiad.php

Contact Sally Mitchell with any questions: sbmitchell2@gmail.com

WESTCHESTER CHEMICAL SOCIETY

Science Café – “Safety, Fire, and Chemical Hazards in Special Effects”

Science Cafés are designed for informed interaction with members of the public on scientific matters of current concern in society. The essence of a Science Café is informality, with groups seated around tables, with food and drink to encourage conversation.

Speaker and Discussion Leader: Monona Rossol, M.S., M.F.A. Industrial Hygienist
 President: Arts, Crafts & Theater Safety, Inc.
 Theater Safety, Inc.
 New York, NY



Biography

Monona Rossol is a chemist, artist, and industrial hygienist. She was born into a theatrical family and worked as a professional entertainer from age 3 to 17. She enrolled in the University of Wisconsin–Madison where she earned a B.S. in Chemistry with a minor in Math (1959), an M.S. majoring in Ceramics and Sculpture (1962), and an M.F.A. with majors in Ceramics and Glassblowing and a minor in Music (1964). Monona was in Harvey Littleton's first college-level glassblowing courses. Her ceramics, sculpture and blown glass were exhibited in over 40 group shows and four solo shows. Her many awards include a purchase prize in the 23rd Ceramic National Competition of the Everson Museum of Art.

While at school she worked as a research chemist, taught art and chemistry classes, performed with University music and theater groups, toured with summer stock, and began working as a free lance art conservation consultant/restorer working primarily with furniture, ceramics, and enamels. She also noticed the vast difference in the safety cultures in the science, art and theater departments. She presented several graduate seminars on art safety to a very unreceptive art student body which sparked a life-long interest in the subject.

She moved to New York City in 1969 and began working in the area of art safety despite a thundering lack of demand for these services. Her major income was from teaching art and performing in musical and straight acting roles in Off and Off Off Broadway theaters and cabarets. Her work was eventually recognized and she became a full member of the American Industrial Hygiene Association in 1984.

Today, this work is in demand. Monona is a building regulatory and ventilation system planning consultant and has worked on over 80 new and renovation building projects. She consults, trains, and lectures regularly on the hazards of theater and art hazards including those of conservation work and museum/laboratory disaster planning. She has been a member of the American Institute for Conservation since 1981 and was made a life-time Honorary Member in 2002.

Monona is President/founder of Arts, Crafts & Theater Safety (ACTS), a nonprofit dedicated to providing health and safety services to the arts. She also is the Safety Officer for Local USA829 of the International Alliance of Theatrical Stage Employees (IATSE) and for the New York Production Locals (representing all unions on film locations). Her jobs have taken her to all but two states in the US, Canada, Australia, England, Mexico, Portugal, the Netherlands, and the United Arab Emirates. She has written nine books, one of which won a 1996 Choice Outstanding Academic Book Award from the Association of College and Research Libraries. Her latest book: *Pick Your Poison: How Our Mad Dash to a Chemical Utopia has made Lab Rats of Us All* (Wiley & Sons) 2011. She will teach a 40 hour Art/theater Safety Course at UMass-Amherst, August 24-28, 2020.

Talk Summary

People in theater, film and television work with chemicals every day. As a child, Monona worked in variety entertainment (Vaudeville), and saw chemicals used in magic acts that caused things to flash into flame, disappear, or change color. Today she deals with chemicals ranging from those used to paint faces (makeup) or to paint scenery to explosive chemicals used to blow

up cars in movies. The program will start with a short video showing how pyrotechnic chemicals are used to simulate bullets hitting walls or people and then she'll discuss a host of other chemical safety issues in the entertainment industry

Date: Wednesday, March 18, 2020

Time: 5:15 PM Social and Snacks, (Cold drinks and a variety of snacks freely available, as well as a cash bar.)

5:30 PM - Lecture and Discussion

7:00 PM - Option to Order Dinner

Place: Stone Manor Restaurant,
101 Saw Mill River Road (Rte .9A)
Hawthorne, NY 10532
Tel: 914-703-4112

Cost: \$3.00 Students, \$5.00 All Others

For further information: contact Peter Corfield, pcorfield@fordham.edu
Phone: 914-762-4468; Text: 914-980-9128 or 914-218-7607.

Please RSVP by text or email to Peter Corfield if you expect to come, to help us plan. But if you do not RSVP, you can still drop by!

Please note that photos may be taken at the meeting and may be submitted for publication in the NY/North Jersey newsletter, *The Indicator*. If you do not want a photo of yourself submitted, let us know at the meeting.



ORGANIC TOPICAL GROUP – JOINT MEETING WITH THE NEW YORK ACADEMY OF SCIENCES CHEMICAL BIOLOGY DISCUSSION GROUP

Natural Products: From Discovery to Therapeutic Applications

Organizers: Derek Tan, PhD
Memorial Sloan Kettering
Cancer Center
Mo Seyedsamdst, PhD
Princeton University
Justin Cisar, PhD
Janssen Research &
Development
Sara Donnelly, PhD
The New York Academy of
Sciences

Sonya Dougal, PhD
The New York Academy of
Sciences

Keynote: Jon Clardy, PhD
Harvard Medical School

Speakers: Emily Balksus, PhD
Harvard University
Rebecca Butcher, PhD
University of Florida
Bo Li, PhD
University of North Carolina,
Chapel Hill

Elizabeth Sattely, PhD
Stanford University

Dan Nomura, PhD
University of California,
Berkeley

Peter Senter, PhD
Seattle Genetics

Steven D. Townsend, PhD
Vanderbilt University

This one-day symposium will discuss the latest research in natural products with a focus on their discovery, mechanisms of action and therapeutic applications across a wide range of disease indications.

Date: Wednesday, March 18, 2020

Time: 8:30 AM – 4:20 PM
(reception to follow)

Place: The New York Academy of
Sciences
7 World Trade Center
250 Greenwich Street – 40th Floor
New York, NY 10007

Cost: ACS and NYAS members save \$50 or more on this event. Please select the appropriate non-member Registration Category and use the Priority Code “ACS”. **The Early Bird Discounted Registration deadline is February 7, 2020.**

For more information and to register for the event, go to www.nyas.org/NaturalProducts2020

To become a Member of the Academy, visit www.nyas.org/benefits

**Deadline for items to be included
in the APRIL 2020 issue of
The Indicator is
FEBRUARY 28, 2020**

BIOCHEMICAL TOPICAL GROUP – JOINT MEETING WITH THE NYAS BIOCHEMICAL PHARMA- COLOGY DISCUSSION GROUP

Branched Chain Amino Acids and Human Disease

Organizers: Zoltan Arany, MD, PhD,
University of Pennsylvania

Michelle Clasquin, PhD
Pfizer

Kevin Filipowski, PhD
Pfizer

Rachel Roth Flach, PhD
Pfizer

Claire Steppan, PhD
Pfizer

Yibin Wang, PhD
University of California
Los Angeles

Sonya Dougal, PhD
New York Academy of
Sciences

Kari Fischer, PhD
New York Academy of
Sciences

Keynote: Susan Hutson, PhD
Virginia Tech

Speakers: Tracy Anthony, PhD
Rutgers University
Zoltan Arany, MD, PhD
University of Pennsylvania

David Chuang, PhD,
UT Southwestern

Christian Metallo, PhD
University of California
San Francisco

Christopher Newgard, PhD
Duke University

Rachel Roth Flach, PhD
Pfizer

Rong Tian, MD, PhD
University of Washington

Yibin Wang, PhD
University of California
Los Angeles

Altered branched chain amino acid (BCAA) metabolism is implicated in multiple diseases including diabetes/metabolic syndrome, heart failure, and cancer. This symposium

will review the landscape of what is known about BCAA metabolism in various systems, discuss knowledge gaps, and identify potential therapeutic nodes of intervention to ameliorate human diseases.

Date: Thursday, March 19, 2020

Time: 8:30 AM – 6:00 PM
(Reception to follow)

Place: The New York Academy of
Sciences
7 World Trade Center
250 Greenwich Street – 40th Floor
New York, NY 10007

Cost: ACS and Academy members save \$50 or more on this event. Please select the appropriate non-member Registration Category and use the Priority Code “ACS”.

**Poster Abstract Deadline: Monday,
January 13, 2020**

**Early Bird Discounted Registration
Deadline: Thursday, February 6, 2020**

For more information and to register for the event, go to: www.nyas.org/BCAA2020

To become a Member of the Academy, visit nyas.org/become-a-member/



NYACS COMPUTERS IN CHEMISTRY TOPICAL GROUP

Organizers: These organizers have committed to collaborate for the next four years 2019-2023.

Yolanda Small (York College CUNY)
ysmall@york.cuny.edu

Imran Khan (Build Well Labs)
buildwelllabs@gmail.com

Marta Kowalczyk (LaGuardia CC, CUNY)
mkowalczyk@lagcc.cuny.edu

Yufeng Wei (New Jersey City Univ.)
ywei@njcu.edu

To contact all co-chairs:
ny.acs.comp.chemistry@gmail.com

Mission/Focus:

Our goal is to expose undergraduate students to the interdisciplinary nature of computers in the chemical sciences. We will create annual themes and accomplish our goal in three ways: (1) by hosting workshops which demonstrate the applicability of computing in real-world chemical research, (2) by

hosting seminars which invite faculty to present their research topic to students, and (3) connecting students to the broader NYC community of scientists who utilize computing in their work.

Upcoming Activities/Agenda: Python Workshop

Date: Friday, March 20, 2020

Times: 9:00 AM - 4:00 PM

Place: York College CUNY (Room 3G09)

Python's readability makes it a great first programming language, it allows one to think like a programmer without the confusing syntax requirements of more sophisticated programming languages. Python is powerful and is used by companies like Google, Dropbox, Spotify, and Netflix, to name a few. For scientists, it is especially useful. Data scientists use python to create machine learning algorithms, perform data mining, build data models, create web services and classify data sets. It is a popular programming language but it is not currently a standard component of the natural science degree outline. As such, this workshop fills a critical niche in preparing chemical scientists for modern careers.

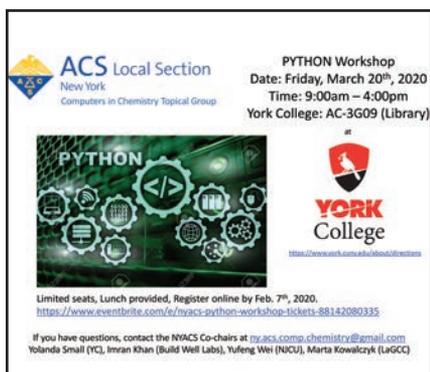
Register Online by February 7, 2020:

<https://www.eventbrite.com/e/nyacs-python-workshop-tickets-88142080335>

For Questions: contact the NYACS

Co-chairs at

ny.acs.comp.chemistry@gmail.com



ACS Local Section
New York
Computers in Chemistry Topical Group

PYTHON Workshop
Date: Friday, March 20th, 2020
Time: 9:00am – 4:00pm
York College: AC-3G09 (Library)

PYTHON

YORK College
<http://www.york.cuny.edu/about/direction>

Limited seats, Lunch provided, Register online by Feb. 7th, 2020.
<https://www.eventbrite.com/e/nyacs-python-workshop-tickets-88142080335>

If you have questions, contact the NYACS Co-chairs at ny.acs.comp.chemistry@gmail.com
Yolanda Small (TC), Imran Khan (Build Well Labs), Yufeng Wei (NOCU), Marta Kowalczyk (LaGCC)



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

Novel Approaches in Pulmonary Fibrosis: Beyond the Fibroblast

Organizers: Anthony V. Azzara, PhD
Bristol-Myers Squibb

Erica Herzog, MD, PhD
Yale University

Julia Kaufman, PhD
Boehringer Ingelheim

Chris Kitson, PhD
Bristol-Myers Squibb

Scott Macdonnell, PhD
Regeneron

Glenda Trujillo, PhD
Bristol-Myers Squibb

Sara Donnelly, PhD
The New York Academy of Sciences

Keynote: Oliver Eickelberg, MD
University of Colorado
Anschutz Medical Campus

Speakers: Megan Ballinger, PhD
The Ohio State University

Stijn De Langhe, PhD
University of Alabama
at Birmingham

Wonder Puryear Drake, MD
Vanderbilt University

Anjelica Gonzalez, PhD
Yale University

Louise Hecker, PhD
University of Arizona

Boris Hinz, PhD
University of Toronto

James Kirkland, MD, PhD
Mayo Clinic

Ana Mora, MD
University of Pittsburgh

Idiopathic pulmonary fibrosis (IPF) is a chronic, progressive lung disease that remains poorly treated. This symposium will discuss the importance of cellular senescence and immune signaling in IPF as well as the roles of endothelial cells and alveolar epithelial cells, which are emerging as key drivers of disease.

(continued on page 16)

BIOCHEMICAL TOPICAL GROUP

(continued from page 15)

- Date:** Tuesday, March 24, 2020
Time: 8:30 AM – 4:50 PM
 (reception to follow)
Place: The New York Academy of Sciences
 7 World Trade Center
 250 Greenwich Street – 40th Floor
 New York, NY 10007
Cost: ACS and Academy members save \$50 or more on this event. Please select the appropriate non-member Registration Category and use the Priority Code “ACS”. Early Bird Discounted Registration Deadline: **Tuesday, February 11, 2020**

For more information and to register for the event, go to: www.nyas.org/LungFibrosis

To become a Member of the Academy, visit www.nyas.org/become-a-member/



NICHOLS SYMPOSIUM

Date: Friday, March 27, 2020

(See Program on pages 10-11)

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THE GRADUATE CENTER
CITY UNIVERSITY OF NEW YORK

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.

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



LONG ISLAND ACS 2020 SPRING SEMINAR PROGRAM

April Seminar

“Design and Total Synthesis of Self-healing Cyanine Fluorophores”

Speaker: Dr. Zhou Zhou
 Assistant Professor
 Queensborough Community College

Abstract: Small organic fluorophores are powerful research tools in biological imaging that have enabled unprecedented insights into mechanisms of bio-functions. Fluorescence applications as Single-molecule fluorescence resonance energy transfer (smFRET) requires high photo-stability and brightness of fluorophores. A series of cyanine dye molecules have been synthesized with significantly enhanced brightness, lifespan and water solubility by covalently attaching triplet state quenchers (TSQ) to the fluorophores along with other structural modifications. The advanced physical properties of these new fluorophores have already led to several previously impossible research projects, and shed light on both cellular and molecular processes masked by ensemble averaging in bulk investigations.

Date: Thursday, April 2, 2020
Time: Refreshments start at 5:30 PM
 Seminar 6:00 PM to 8:00 PM
 Dinner follows Seminar at a nearby restaurant
Cost: \$25 per person

Place: Science Building, S-112
Queensborough Community
College
222-05 56th Avenue
Queens, NY 11364

Directions:

<http://www.qcc.cuny.edu/about/getting-here.html>



**COME AND JOIN US CELEBRATE
EARTH WEEK WITH OUR 9th
ANNUAL "WALK THE
BROOKLYN BRIDGE"
EVENT**



This year's Chemists Celebrate Earth Week's theme is: **"Protecting Our Planet Through Chemistry"**



Speaker: Dr. Monica Palta
Director of Environmental
Science Undergraduate
Program
Pace University

Our festivities will begin at 11:00 AM with check in and a healthy light breakfast including a "blender bar" followed by a keynote address delivered by Dr. Monica Palta. We will then head out for our annual parade over the beautiful Brooklyn Bridge and then return to Pace for lunch, dessert/coffee/tea, and some fun games and a raffle!

The event is free and open to all, but EVERYONE must register **by April 17**. Past the registration deadline there will be a \$15 onsite fee at the event (cash only). To register:

<http://www.newyorkacs.org/meetings/EarthDay/CCED.php>

Contact: Prof. JaimeLee Rizzo, CCED
Coordinator jrizzo@pace.edu

Date: Saturday, April 25, 2020

Time: 11:00 AM – 4:00 PM

Place: Pace University, Bianco Room

Cost: Free and open to the public, but everyone must register by April 17 or pay a \$15 (cash only) onsite fee.

**NEW YORK NANOSCIENCE
DISCUSSION GROUP**

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

Speakers to be announced.

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

Date: Next meeting: June 2, 2020

Times: Refreshments at 7:00 PM

Science at 7:30 PM

Place: NYU Silver Center
Room 1003 (10th floor)
31 Washington Place
New York, NY

Topical Group Page

https://www.newyorkacs.org/grp_nano-tech.php







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Chemicals	Corrosion
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Chemists Celebrate Earth Week (CCEW) 2020

“Protecting Our Planet Through Chemistry”

Illustrated Poem Contest

The New York City Local Section of the American Chemical Society (ACS) is sponsoring an illustrated poem contest for students in Kindergarten through 12th grade.

Contest Deadline: Saturday, April 4, 2020

Prizes: 1st Prize in each category receives a \$20 gift certificate

Winners of the New York City Local Section’s Illustrated Poem Contest will advance to the ACS National Illustrated Poem Contest for a chance to be featured on the ACS website and to win prizes!

Contact: Elmer E. Mojica, Department of Chemistry and Physical Sciences, Pace University, One Place Plaza, New York, NY 10038 (Phone: 2123461344; Email: emojica@pace.edu)

Write and illustrate a poem using the CCEW theme, “**Protecting Our Planet Through Chemistry**” Your poem must be **no more** than 40 words and in the following styles to be considered:

HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE

Possible topics related to chemistry include:

Sustainability, recycling, conservation

Entries will be judged based upon:

Relevance to and incorporation of the CCEW theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity and overall presentation



Contest Rules:

- All entries must be original works without aid from others.
- Poems may be submitted by hand on an unlined sheet of paper not larger than 11" x 14" or scanned and sent via email.
- Illustrations may be created using crayons, watercolors, other types of paint, colored pencils, or markers. The illustration may also be electronically created by using a digital painting and drawing app on a computer, tablet or mobile device. The text of the poem should be easy to read and may be typed before the hand-drawn or digital illustration is added or the poem may be written on lined paper, which is cut out and pasted onto the unlined paper with the illustration. No clipart or unoriginal images can be used.
- There will be 4 categories: Grades K-2, Grades 3-5, Grades 6-8 and Grades 9-12.
- Only one entry per student will be accepted. All entries must include an entry form. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners' names, likenesses, and entries for editorial, advertising, and publicity purposes.

ACS, NEW YORK SECTION'S 2020 SECTIONWIDE CONFERENCE CUNY – CUNY GRADUATE CENTER, NEW YORK, NY

The New York Section's Annual Sectionwide Conference was held on January 18th at CUNY's Graduate Center in Manhattan, NY. The conference was an excellent opportunity to meet with colleagues and ACS friends after another successful year. Members enjoyed a welcome breakfast at the start. The conference also included award presentations, an outstanding keynote address, introductions of the 2020 election candidates, planning sessions for the Section's 2020 activities and a luncheon at a nearby restaurant. Prof. Ruben Savizky, New York Section Chair for 2020, welcomed everyone and acknowledged the outstanding service of the Section's volunteers during 2019.

At the award ceremony, Prof. Justyna Widera-Kalinowska received via Skype the ACS past chair pin and an engraved ACS plaque for her excellent and dedicated service as Chair of



Dr Ruben Saizky presents the 2019 Outstanding Service Award to Dr. Brian Gibney.

Photo courtesy of Dr. Brian Gibney)

the New York Section in 2019. The 2019 Outstanding Service Award was awarded to Prof. Brian Gibney for his extraordinary service and dedication to the Section. Brian is currently a councilor and webmaster for the New York chapter, and has also served on the Long Range Planning Committee as well as an alternate delegate to the Eastern Analytical Symposium.

The Section presented the Nichols Foundation High School Chemistry Teacher Award for 2019 to Mr. Paul Orbe of Academy for Enrichment and Advancement, Union City High School, for his highly effective teaching and inspirational leadership to students.

A number of Salute to Excellence Awards were given for top-notch volunteerism over the past years: Ping Furlan, U.S. Merchant Marine Academy, in appreciation for extraordinary service and dedication to the Section including a giant 3-D Periodic Table as part of National Chemistry Week and the International Year of the Periodic Table; Mr. Joseph Wiener, PepsiCo, in appreciation for his extraordinary service and dedication to the Section including a

giant 3-D Periodic Table as part of National Chemistry Week and the International Year of the Periodic Table; and Justyna Widera-Kalinowska, Adelphia University, in appreciation for her extraordinary service and dedication to the Section including MARM, URS and the Long Island Subsection.

Three new teaching awards were presented as follows: Outstanding Four-Year University with Graduate School Chemistry Faculty Teaching Award to Dr. Brian R. Gibney, CUNY-Brooklyn College & Graduate Center; Outstanding Four-Year Undergraduate College and University Chemistry Faculty Teaching Award to Dr. Jaimelee I. Rizzo, Pace University; and Outstanding Two-Year College Chemistry Teaching Award to Dr. Paris Svoronos, CUNY Queensborough Community College. Congratulations to all the awardees.

Following the award ceremony, Prof. Rita Upmacis, 2019 New York Section Chair-elect, presented the names of the candidates for the upcoming 2020 elections and introduced the candidates who were present.

Dr. Mary Virginia Orna, Professor of Chemistry, Emerita, The College of New Rochelle, gave a presentation on "The Lost Elements: The Periodic Table's Shadow Side." She has written a book by the same name and signed copies were raffled off after the presentation. The audience seemed to thoroughly enjoy her informative and eye-opening presentation; there was plenty of discussion afterwards.

The annual planning session for the subsections, topical groups, and committees of the New York Section was held during the last hour of the conference, to discuss goals and activities for 2020. After the meeting, guests enjoyed lunch together at Brendan's restaurant.

Call for Papers

MIDDLE ATLANTIC REGIONAL MEETING

The call for papers for the 2020 Middle Atlantic Regional Meeting has been issued. The meeting will take place on Friday, June 12, 2020 at The Graduate Center of the City University of New York, in New York City kitty-corner from the iconic Empire State Building.

Details, including names and contact information for program and session chairs, can be found on the meeting website at www.marm2020.org. The final program summary will be published in C&EN in the Spring; the online program will be available on May 25, 2020.

The symposium will highlight technical advances in chemistry that focus on improving people's lives. In addition to technical sym-

posia and poster sessions, the symposium will feature a plenary lecture, a 50-, 60-, 70-year member luncheon, an industrial exhibition, graduate school recruitment, and an awards dinner. The regional Chemagination competition and high school teacher programming will be held the following day at St. John's University, New York.

The symposium sessions include "Flavor and Fragrance Chemistry"; "Cosmetic Chemistry"; "Environmental Chemistry"; "Forensic Chemistry"; "The Chemistry of Life Sciences"; and "Materials Chemistry"; as well as poster sessions. The symposium will also feature three-minute long data-blitz talks selected from the submitted poster abstracts.

ACS's Meeting Abstracts Programming System (MAPS) opens on January 27, 2020 for abstracts. Please visit either the symposium website or MAPS at maps.acs.org, to submit an abstract. Abstracts are due March 9, 2020.

MARM 20/20

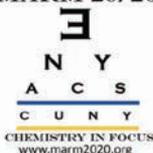
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CHEMISTRY IN FOCUS

MARM 20/20

ACS Local Section
New York

August 1, 2019

Dear Potential MARM 2020 Exhibitors:

The New York Section of the American Chemical Society (NYACS) is hosting the 48th Middle Atlantic Regional Meeting (MARM 2020) on **Friday, June 12, 2020**. It will be held at **The Graduate Center of the City University of New York**, located in the center of Manhattan at 365 5th Avenue, across from the Empire State Building, and two blocks east of Penn Station.

We invite your organization to take advantage of the benefits of MARM 2020 as an Exhibitor. This is the opportunity to connect with chemists, biochemists and science educators in the Middle Atlantic Region of the ACS, from Washington, DC, to New York, NY. The MARM 2020 theme is "Chemistry in Focus". The meeting will highlight the areas of flavor and fragrance, cosmetic, forensic, life science, materials science, and environmental chemistry. We anticipate 250 attendees from academia, government, industry, and K-12 education. Your presence will maximize your visibility with attendees including decision makers and prospective workforce employees.

Included in your sponsorship are:

- Exhibit areas located in a high traffic area to ensure a steady stream of attendees to frequent your display. The exhibit hall will be immediately adjacent to the registration area, poster session, lunch area, refreshment area, and technical session.
- A 5-ft rectangular table and two chairs.
- Exhibit spaces available with standard (110 V, 15 A) power, if needed.
- Wireless internet access is available throughout The Graduate Center.
- Two complimentary meeting registrations, that includes technical symposia and boxed-lunches.
- Meeting attendees' contact information.
- Logo with a 50 word-description of your organization along with a link to your company website on the MARM 2020 website at www.marm2020.org.

Register before March 1, 2020 to receive the Early Bird Discount Rate, and register by April 15, 2020 to ensure full benefits. Returning MARM exhibitors receive additional 15% discount if they register before March 1, 2020. **Exhibit space and power are limited**, and spaces will be reserved on a first come-first serve basis. Please see the attached exhibitor application form.

For application form and additional information, please see MARM2020.org. Please feel free to contact us if you have any questions. We look forward to your sponsorship and seeing you at MARM 2020.

Sincerely,

Dr. Ping Furlan
Professor of Chemistry
U. S. Merchant Marine Academy
Kings Point, NY 11024
516 726-5783
fulanp@usmma.edu

Dr. Yosra Badiei
Assistant Professor of Chemistry
Saint Peter's University
Jersey City, NJ 07306
201 761-6442
ybadiei@saintpeters.edu

Exhibits/Sponsorship Chairs

Ping Furlan
(516) 726 - 5783
fulanp@usmma.edu

Yosra Badiei
(201) 761 - 6442
ybadiei@saintpeters.edu

General Chairs

Alison Hyslop
(718) 990 - 5218
hyslopa@stjohns.edu

Joseph Serafin
(718) 990 - 6297
serafinj@stjohns.edu

Brian Gibney
(917) 399 - 0607
BGibney@brooklyn.cuny.edu

Treasurer

Jill Rehmann
jrehmann@sjcnv.edu

MARM Executive

Board Contact
Martha Hollomon
MarthaHollomon@comcast.net

ACS Meeting

Planning Partner
Kimberly Savage
K.Savage@acs.org

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

February 28, 2020

MARM 20/20

48TH MIDDLE ATLANTIC REGIONAL MEETING

CHEMISTRY IN FOCUS

EXHIBITION OPPORTUNITIES

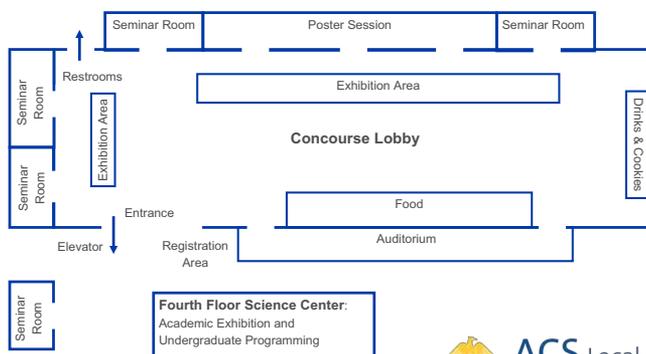
THE GRADUATE CENTER OF THE CITY UNIVERSITY OF NEW YORK | JUNE 12, 2020

Exhibitor Categories and Fees*

	MARM Returning Exhibitor	Early	Regular	Included
Commercial	\$270	\$320	\$375	Power: first come-first serve basis. Five foot rectangular table, two chairs, two meeting registrations, access to the meeting attendee contact information, corporate logo displayed on website and in program.
Academic **	\$210	\$235	\$275	Five foot rectangular table, two chairs, two meeting registrations, access to the meeting attendee contact information, institute logo displayed on website and in program.

*MARM Returning Exhibitor & Early Bird rates by *March 1, 2020*; full payment by *April 15, 2020* to ensure full benefits.
 **Academic Exhibition will be held near the undergraduate programming, Fourth Floor Science Center.

Exhibition Hours: 11:30 a.m.—1:00 p.m. (Lunch); 4:00–p.m.—5:00 p.m. (Poster Session)
Exhibit Set-up begins at 9:30 a.m. and **Exhibit Removal** by 6:00 p.m.



Contact Information:
 expo@marm2020.org



ACS Local Section
 New York

American Chemical Society's New York Section, Inc. | <http://newyorkacs.org>

MARM 20/20



Join Us at MARM2020 Exhibition

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



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 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 or (908) 239-1515

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.

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.

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The Indicator is posted to the web around the 15th of the previous month at

www.TheIndicator.org

CALL FOR NOMINATIONS

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2020 AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS

The ACS North Jersey Section is soliciting nominations for the 2020 Award for Creativity in Molecular Design & Synthesis. The award recognizes initiative, creativity, leadership, and perseverance in pure and/or applied chemistry. Nominees must have had broad impact in the areas of chemical synthesis, method development, bioorganic/medicinal chemistry, pharmaceutical sciences, and/or molecular recognition.

Nominations should include a letter describing the nominee's achievements, a brief biography and curriculum vitae, and a list of the nominee's important published works. Supporting letters are strongly encouraged.

Please submit materials by **February 28** to Susan_Zultanski@merck.com. The award is presented by the section every two years, and the prize consists of a crystal plaque and a \$5,000 honorarium.

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

THE INDICATOR-MARCH 2020 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 CO₂ 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 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!

**The Indicator is
posted to the web
around the 15th of the
previous month at
www.TheIndicator.org**

**Deadline for items to
be included in the
April 2020 issue of
The Indicator is
February 28, 2020**