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*See page 22*



ACS Local Section  
New York



ACS Local Section  
North Jersey

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Indicator**<http://www.theindicator.org/>

The monthly newsletter of the New York & North Jersey Local Sections of the American Chemical Society. Published jointly by the two sections and distributed to their 6,200 members.

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**EDITORIAL DEADLINES**

March 2024	February 16, 2024
April 2024	March 16, 2024
May 2024	April 16, 2024
June 2024	May 16, 2024

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## THIS MONTH IN CHEMICAL HISTORY

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

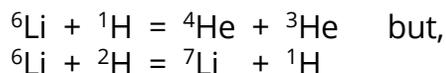
As I warned you last month, I intend to continue to “wallow in nostalgia” by looking back at the new chemistry of 90 years ago as reflected in the pages of The Chemical Society’s Annual report for 1934 (Volume XXXI) published in London in 1935.

I start with the section on radioactivity and sub-atomic phenomena.

A series of reports have appeared on the masses and abundance ratios of the isotopes of the elements as determined by mass-spectrum analysis. These are mostly by F. W. Aston, the pioneer of this method and originally one of J.J. Thomson’s students. However, the detection of tritium in ordinary hydrogen at an abundance of less than 1 in  $10^{-7}$  was by Lozier, Smith, and Bleakney. A new isotope of argon of mass 38 has been detected.

Separation methods for isotopes have been successful for some of the lighter elements. Hertz has obtained spectroscopically pure deuterium by the diffusion method, and has isolated nearly pure  $^{22}\text{Ne}$  by the same technique. Minute amounts of the isotopes of lithium and potassium have been prepared by a combination of electrical and magnetic fields applied to vaporized samples. These are echoes of work to come nearly a decade later in the work under the Manhattan Project to separate the fissile isotope of uranium for use in the atomic bomb.

Many investigators have been using a range of particles and radiation including gamma rays, alpha particles, neutrons, protons, and deuterons, to bombard nuclei. The results for lighter elements have been interpreted as a range of fission reactions the results of which may be isotope dependent, e.g.:



For heavy elements, the results are much harder to interpret. In studying the interactions of neutrons with uranium nuclei Fermi interpreted his results as pointing to the production of new super heavy elements with  $Z > 92$ . Reinterpretation by von Grosse and Agruss casts doubt upon this claim.

I now turn to biochemistry and the introductory preface to this section gives an excellent overview of the state of this area in 1934. There has been much interest in vitamins. It has been shown definitively by both chemical and nutritional studies that vitamin C is l-ascorbic acid. Crystallographic studies of different preparations of Vitamin B<sub>1</sub> by J. Bernal and Miss D. Crowfoot have shown them to be identical. The molecule probably contains a conjugated ring and a sulfur atom. Vitamin B<sub>2</sub> is a flavin, one of a number of yellow water-soluble compounds present in both vegetable and animal materials.

The chemical structures of the sex hormones have been the subject of many studies, and definitive structures are beginning to emerge for androsterone, oestrone, and luteosterone. Similarities among these structures and their close relationships to cholesterol strongly suggest that they all are produced by as-yet undiscovered pathways from cholesterol.

Watch for the next installment of this serial.

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## February Calendar

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**NEW YORK SECTION****Thursday, February 1, 2024**Long Island Subsection  
*See page 11***Monday, February 5, 2024**Nanotechnology Discussion Group  
*See page 19***Monday, February 12, 2024**Board of Directors Meeting  
*See page 10***Wednesday, February 23, 2024**ACS-LSAC DEIR African Heritage Summit  
*See page 10***SAVE THE DATES****Friday, April 12, 2024**[William H. Nichols Distinguished  
Symposium and Award Dinner](#)  
*See page 13***Sunday, April 14, 2024**Chemists Celebrate Earth Week  
*See page 17***NORTH JERSEY SECTION****Thursday, February 15, 2024**Mass Spectrometry Topical Group  
*See page 6***Wednesday, February 21, 2024**NJACS Executive Committee Meeting  
*See page 5***Thursday, February 22, 2024**NMR Topical Group  
*See page 7***SAVE THE DATE****Thursday, April 11, 2024**Drug Metabolism Topical Group  
*See page 5*


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## NORTH JERSEY SECTION MEETINGS

<https://www.njacs.org>

### 2024 NORTH JERSEY ACS EXECUTIVE COMMITTEE MEETINGS

2024 North Jersey ACS Chair Sandra Keyser and the Executive Council welcome you to our monthly NJACS meetings. The meetings are normally held on the second **Wednesday from 6:30 pm to 8:30 pm**. All members are welcome to attend and become more involved in section activities. The dates for 2024 are, as follows:

<b>Wednesday, February 21, 2024</b> (virtual)	<b>Wednesday, June 12, 2024</b> (hybrid)
<b>Wednesday, March 13, 2024</b> (virtual)	<b>Wednesday, September 11, 2024</b> (hybrid)
<b>Wednesday, April 10, 2024</b> (hybrid)	<b>Wednesday, October 9, 2024</b> (hybrid)
<b>Wednesday, May 15, 2024</b> (hybrid)	<b>Wednesday, November 13, 2024</b> (virtual)
	<b>2025 Planning Meeting in December, TDB</b>

[Click here](#) for links to the virtual meetings and RSVP for in-person attendance at hybrid meetings.



**November 18-20, 2024**  
**EASTERN ANALYTICAL SYMPOSIUM & EXPOSITION**  
**Partners in Problem Solving**  
 Crowne Plaza Princeton Conference Center, Plainsboro, NJ  
 TECHNICAL PROGRAM • EXPOSITION • CAREER DEVELOPMENT OPPORTUNITIES

The banner features a circular logo on the left with the letters 'EAS' and 'AS' intertwined, surrounded by the text 'EASTERN ANALYTICAL SYMPOSIUM & EXPOSITION'. On the right, there is a photograph of several scientists in white lab coats working in a laboratory setting. The background is a light blue with a molecular structure pattern.

### NORTH JERSEY ACS DRUG METABOLISM DISCUSSION GROUP



The North Jersey ACS' Drug Metabolism Discussion Group topical group will host a Spring symposium entitled:

*Supporting Novel Drug Discovery,  
Development, and Delivery*

on **Thursday, April 11<sup>th</sup>** from **8:30 AM to 4:00 PM**.

The list of speakers and agenda will be published in the March issue of The Indicator.

**BACK BY POPULAR DEMAND:  
NORTH JERSEY ACS MASS SPECTROMETRY DISCUSSION GROUP**

**Celebrating Some of the Rich History and  
Community in Mass Spectrometry**

**Speaker:** Dr. P. Jane Gale  
Archivist/Historian  
American Society for Mass Spectrometry

**Date:** **Thursday, February 15, 2024**

**Place:** Webinar ([click here for details](#))

**Time:** 7:00 PM



In November of 2022, the NJMSDG celebrated our first post-covid in-person meeting by hosting Dr. P. Jane Gale, the current ASMS Archivist/Historian, who presented **'Decade by Decade: An Historical Review of Mass Spectrometry and ASMS in the Second Half of the 20<sup>th</sup> Century'**. We had an amazing turn-out and yet, many who missed and even those who attended have asked for a 'repeat-performance'. Dr. Gale has kindly agreed to again present her talk as a webinar, which is now scheduled for Thursday, February 15<sup>th</sup> at 7PM. Dr. Gale's talk celebrates some of the major events in the history of mass spectrometry. She also highlights ASMS's history and growth over the decades. As Dr. Gale has often observed, "Community has been such an important part of our profession," and her presentation expertly reviews some of the researchers, instrumentation developments, and the scientific communities that have worked to provide such a powerful analytical tool for our complex applications and most difficult research problems. Those who join the upcoming webinar will learn how ASMS captures and preserves 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 that explores the evolution of the science and the Society over the last 70 years. Dr. Gale will also provide an overview of 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.

[Click here for Webinar information.](#)

## ***NORTH JERSEY ACS NMR SPECTROSCOPY TOPICAL GROUP***

### **Structural Determination of Neurodegenerative Disease-Associated Proteins Inside Cells**

**Speaker:** Kendra Frederick, Ph.D.  
Assistant Professor  
Department of Biophysics  
University of Texas Southwestern

**Date:** **Thursday, February 22, 2024**  
**Place:** via MS Teams ([click here to join](#))  
**Time:** 12:00 PM



**Abstract:** The misfolded proteins associated with neurodegenerative disease can adopt a variety of different conformations, some of which are toxic. Because these proteins have identical amino acid sequences, the cellular environment clearly influences the final state, yet most structural studies do not include the cellular context and, perhaps because we are not studying the correct conformation, not a single therapeutic strategy for these diseases addresses the underlying protein misfolding pathology. Using new sensitivity-enhancement technology for solid state NMR spectroscopy, Dynamic Nuclear Polarization, we study protein structure in native environments -inside living cells -to reveal how both healthy and disease-relevant cellular environments influence protein structure. Because NMR reports quantitatively, with atomic level precision, on all sampled conformation, it can not only report on structural polymorphs but also provide experimental restraints on regions of intrinsic disorder, complementing insights from cryo-electron microscopy and tomography. Using this approach, we recently demonstrated that an amyloid fibril with a solved cryo-EM structure was polymorphic and found that when those fibrils were used to seed amyloid propagation in mammalian cells, the minority polymorph in the purified setting became the majority polymorph inside cells. With this approach we can understand the mechanism of protein-based inheritance of amyloid aggregates and correlate phenotype with conformational ensembles.

[Download Flyer here](#)



William 'Bill' Suits

## ***MARM 2024 / BILL SUITS AWARD NOMINATIONS***

The [2024 Middle Atlantic Regional Meeting of the ACS](#) is being held June 5-8 in Happy Valley, PA. The theme of this year's MARM is "Celebrating Discovery" and honors the discovery of oxygen in 1774 by Joseph Priestley. [Abstract submission is OPEN](#). [Award nominations are being accepted](#) – this year inaugurates the [Bill Suits Award for Undergraduate Volunteer Service](#).



**CALL FOR NOMINATIONS: NORTH JERSEY ACS'  
AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS**



THE ACS NORTH JERSEY SECTION SEEKS  
NOMINATIONS FOR THE 2024  
AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS

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The ACS North Jersey Section is soliciting nominations for the 2024 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 29** to Professor Joseph Badillo: [joseph.badillo@shu.edu](mailto:joseph.badillo@shu.edu). The prize consists of a crystal plaque and a \$5,000 honorarium.

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**Deadline for submitting articles and advertisements for the March 2024 issue is February 16, 2024**

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## NEW YORK SECTION MEETINGS

<http://www.newyorkacs.online>

### 2024 NEW YORK ACS BOARD MEETINGS

The New York ACS Board of Directors meetings dates for 2024, are, as follows:

**Monday, February 12, 2024** (virtual)

**Monday, March 11, 2024** (hybrid)

**Friday, April 12, 2024** (in person)

William H. Nichols Distinguished  
Symposium and Medal Award Dinner  
The Sonesta Hotel, White Plains, NY.

**Monday, June 10, 2024** (hybrid)

**Monday, September 16, 2024** (hybrid)

**Monday, November 25, 2024** (hybrid)

These meetings will be held on the campus of the United States Merchant Marine Academy in Kings Point, NY ([directions](#)) in the Library's Crabtree Conference Room. These meetings are open to all members, however, an RSVP for in-person attendance is required 5 days before the meeting. All members who would like to attend any of the meetings should inform the New York Section office by emailing [Ms. Bernadette Taylor](#). Prof. Ping Furlan will Chair all meetings. The meetings will start at precisely 6:30 PM.

#MONTHLY SEMINAR SERIES  
**PANEL TALK:  
DIVERSITY IS IN OUR ROOTS**

**CHIAMAOKA OKWU**  
QC Associate Scientist,  
Microbiology CAR-T  
Bristol Myers Squibb

**DAWN SANDIFORD**  
Director, Global  
Program Leader  
Janssen  
Johnson & Johnson

**JAEL GALLIMORE**  
Associate Scientist,  
Molecular Testing  
Pfizer

**WEDNESDAY,  
FEBRUARY 14TH**  
MPR A&B 2-4 PM  
Food will be served!

Sign Up

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## LONG ISLAND SUBSECTION

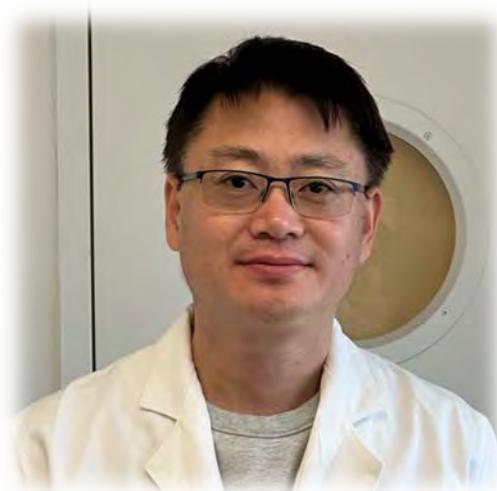
### Isoxazoles as Versatile Synthons & Iodine-mediated Reactions

**Speaker:** Dr. Yu Chen  
Associate Professor  
Queens College – CUNY

**Date:** **Thursday, February 1, 2024**

**Place:** via Zoom ([register here](#))

**Time:** 6:45 PM



**Abstract:** The seminar presentation consists of two parts. The first part will discuss the synthetic applications of various transition metal-catalyzed cascade ring-opening and rearrangement reactions of isoxazole derivatives, including palladium-mediated tandem catalysis and iron-mediated reductive ring-opening and cascade reactions. A brief introduction of the research background will be covered, including late transition metal-catalyzed cascade reactions and transfer hydrogenation reactions. The application of the in-house aged *N*-methyl-2-pyrrolidone as an economic and efficient hydrogen donor will be highlighted in the first part.

In the second part, iodine-mediated interconversion of methyl homopropargyl ethers to  $\alpha$ -iodo- $\gamma$ -chloroketones as well as the carbon-nitrogen cross-coupling reaction between aldehydes and amides will be discussed. Background introduction to the synthesis of halogenated ketones as well as imide bonds will be discussed. An interesting electrotonic effect observed in the iodine-catalyzed carbon-nitrogen cross-coupling reaction will be covered. Specific attention will be paid to the intriguing C-C bond cleavage and formyl transfer reaction between electron-rich aromatic aldehydes and amides, which will highlight the second topic. Mechanistic studies on both the iodine-mediated functional group interconversion and the single electron transfer C-N cross coupling reaction will be discussed as well.

[Download flyer here](#)



## LONG ISLAND SUBSECTION

### Optimizing the Metabolic Stability of Phosphodiesterase 5 Inhibitors

**Speaker:** Dr. Jole Fiorito  
Assistant Professor  
Department of Biological and Chemical Sciences  
New York Institute of Technology

**Date:** **Thursday, March 7, 2024**

**Place:** via Zoom ([register here](#))

**Time:** 6:45 PM



**Abstract:** Phosphodiesterase 5 (PDE5) is a cyclic guanosine monophosphate-degrading enzyme involved in numerous biological pathways. Inhibitors of PDE5 are important therapeutics for the treatment of neurodegenerative diseases, including Alzheimer's disease (AD). We previously reported the first generation of quinoline-based PDE5 inhibitors for the treatment of AD. However, the short *in vitro* microsomal stability rendered them unsuitable drug candidates. Here we report a series of new quinoline-based PDE5 inhibitors. Among them, compound **4b**, 8-cyclopropyl-3-(hydroxymethyl)-4-(((6-methoxypyridin-3-yl)methyl)amino)quinoline-6- carbonitrile, shows a PDE5 IC<sub>50</sub> of 20 nM and improved *in vitro* microsomal stability ( $t_{1/2} = 44.6$  min) as well as excellent efficacy in restoring long-term potentiation, a type of synaptic plasticity to underlie memory formation, in electrophysiology experiments with a mouse model of AD. These results provide an insight into the development of a new class of PDE5 inhibitors for the treatment of AD.

**Biography:** Dr. Jole Fiorito earned a Master of Science in Pharmaceutical Chemistry and her Ph.D. in Pharmaceutical Sciences from the University of Catania, Italy. Following graduate school, she became a post-doctoral researcher at Columbia University in the TAUB Institute for Research on Alzheimer's Disease and the Aging Brain (Dr. Arancio Lab) and the Organic Chemistry Collaborative Center (Dr. Landry Lab). While at Columbia, she developed novel compounds that inhibit phosphodiesterase 5 (PDE5) enzymes and increase the phosphorylation of the transcriptional factor CREB through the nitric oxide signaling pathway, which is found to be impaired in Alzheimer's disease. These technologies are patent pending and have already generated interest from the pharmaceutical industry. Currently, Dr. Fiorito's research interests are in developing multi-target small molecules against both HAT and PDE5 enzymes that are involved in several multifactorial diseases such as Alzheimer's disease and cancer. Dr. Fiorito has received an NIH Research Enhancement Award (R15) to conduct this research. She hopes her research will lead to novel disease-modifying therapeutics that can address unmet clinical needs.

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**2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD BANQUET****PHYSICAL CHEMISTRY AND SUSTAINABILITY**

A distinguished symposium honoring

**Professor Emily A. Carter**  
Princeton University

*for groundbreaking quantum insights  
in sustainable catalysis*

**Date: Friday, April 12, 2024**  
Sonesta Hotel, White Plains, NY  
[Hotel website](#)

**Time: 1:30 PM – 9:00 PM**  
[Download Brochure here](#)  
[Register here](#)

**Symposium Program**

- 1:30 PM**      **Welcome**  
*Professor Ping Furlan, 2024 New York ACS Chair, US Merchant Marine Academy*
- 1:35 PM**      **Opening of the Distinguished Symposium**  
*Professor Eric Chang, 2024 New York ACS Chair-Elect, Pace University*
- 1:45 PM**      **Computational Discovery of Metal-Organic Frameworks for a Changing World**  
*Professor Laura Gagliardi, University of Chicago*

Addressing the energy challenges that we face globally requires the coordinated efforts of scientists, engineers, and policy makers. Chemistry has the potential to drive quantum leaps in technology. With theory, computation, and machine intelligence we can accelerate the search for solutions to water scarcity, decarbonization, and clean energy. Metal-organic frameworks (MOFs) are versatile platforms for various applications including catalysis for complex reactions and water harvesting. I will first present our ongoing efforts to understand and design the water-filling mechanism for water-harvesting MOFs.<sup>[1]</sup> I will then describe our combined computational and data-driven study of MOF-supported catalysts. Utilization of machine learning algorithms in conjunction with experimental data can not only predict superior catalytic materials, but also under which experimental conditions they are most optimal.<sup>[2]</sup>

- 2:30 PM**      **Designing Metal-Oxide-Based thermochemical Redox Materials and Processes: Solar Fuels and Energy Storage**  
*Professor Ellen Stechel, Arizona State University*

In this talk, we unveil cutting-edge developments in metal oxide-based thermochemical redox materials and processes<sup>[1]</sup>, applicable to solar fuels and energy storage. We start by exploring how the high-temperature endothermic reduction of redox-active metal oxides, capable of releasing oxygen gas under achievable

*Supported in part by the William H. Nichols Fund For Chemistry at the Boston Foundation*

## **2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD BANQUET** *(continued)*

**2:30 PM**      **Designing Metal-Oxide-Based thermochemical Redox Materials and Processes: Solar Fuels and Energy Storage (continued)**  
*Professor Ellen Stechel, Arizona State University*

operating conditions, effectively converts thermal energy into stored chemical energy. A subsequent re-oxidation step then either recovers this energy as heat or drives further chemical reactions. The ability to indefinitely repeat these two steps opens the door to sustainable energy cycles. Here we will focus on two interrelated processes: reversible re-oxidation with oxygen and bond-breaking re-oxidation with CO<sub>2</sub> and/or water. This presentation will also highlight the groundbreaking design of a novel perovskite metal oxide material, Ca<sub>2/3</sub>Ce<sub>1/3</sub>Ti<sub>1/3</sub>Mn<sub>2/3</sub>O<sub>3</sub> (CCTM2112), specifically engineered for enhanced thermochemical hydrogen production. This material, predicted solely from theoretical considerations and validated experimentally, showcases a unique cation redox chemistry. Utilizing quantum-based modeling [2], we reveal how the deliberate manipulation of cation composition on both A and B sub-lattices leads to a material with optimal oxygen vacancy formation energies and superior redox dynamics to facilitate splitting of water and carbon dioxide. This presentation will delve into the intricacies of CCTM2112's thermodynamics, demonstrating its potential. Our findings not only introduce a high-performing material but also open new avenues in the design of redox-active materials through a deep understanding of their electronic characteristics.

*3:15 PM*      *Coffee Break*

**3:45 PM**      **Observing Molecular Transport through Living-Cell Membranes - Pushing the Boundary of Physical Chemistry toward Biology**  
*Professor Hai-Lung Dai, Temple University*

Why should we store food in refrigerator to avoid bacteria contamination? But why refrigeration cannot keep the food fresh for a long period of time? How do bacteria develop antibiotic resistance? How are vesicles used for delivering mRNA vaccines into human body? All these questions can find answers from understanding molecular transport through cell membranes. Nonlinear light scattering in the form of Second Harmonic Generation, due to its symmetry properties, has been proven effective for observing molecular adsorption and transport at the surfaces of colloidal objects, including living biological cells. This method affords membrane specificity, real time resolution, and the ability to image single cells in examining molecule-membrane interactions. This talk will lay out the basic physical principles of the newly developed Second Harmonic Light Scattering (SHLS) method and illustrate how SHLS can be applied to examine molecular adsorption and transport at cell membranes. In addition to answering the questions above, this method has been used to determine the fundamental mechanism of the century-old Gram stain for classifying bacteria, understand effects of molecular structure and membrane structure in influencing molecular transport through cell membranes, and characterize membrane phase transition and membrane asymmetry.

## 2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD BANQUET (continued)

**4:30 PM**      **A Physical Chemist's Journey to Combat Climate Change**  
*Professor Emily A. Carter, 2024 Nichols Medalist, Princeton University*

When I first became fully cognizant of what fossil fuel burning was doing to our planet, I vowed to use my expertise full-time to transition the world to sustainable energy. But now it is terribly clear that to preserve the planet for future generations, this action – far from complete - is not nearly enough. We must stop emitting carbon into the atmosphere from all sectors, aiming not just for net-zero but net-negative emissions. More than 15 years ago, I pivoted my quantum simulation research to design materials for clean electricity (solar cells, fusion, fuel cells). More recently, we design catalysts for renewable fuels and chemicals production, via electro-/solar-thermo-chemical water splitting and photo/electro/solar-thermo-chemical carbon dioxide reduction. However, recycling CO<sub>2</sub> is not enough; we must develop sustainable processes to convert and store CO<sub>2</sub> in useful, durable products. I will describe our quantum embedding simulation methods that accurately simulate sustainable production of fuels and chemicals catalytically using electricity and/or light, and introduce its use for studying processes related to direct ocean capture of CO<sub>2</sub> to form minerals, a strategy for getting to negative emissions.

*5:45 PM*      *Social Hour*

**6:45 PM**      **Medal Award Dinner**

<b>Presiding:</b>	<b>Dr. Ping Furlan</b> 2024 Chair, ACS New York Section
<b>ACS Greetings:</b>	<b>To be announced</b>
<b>Introductory Address:</b>	<b>Dr. Michael Berman</b> Air Force Office of Research
<b>Medal Presentation:</b>	<b>Dr. Ping Furlan</b>
<b>Acceptance Address:</b>	<b>Dr. Emily A. Carter</b> Nichols Medalist

### THE WILLIAM H. NICHOLS MEDAL AWARD

Dr. William H. Nichols established this annual award, the first of its kind, in 1902 to honor a chemical scientist for original research. Since its inception, the New York ACS has administered the award. It has been perpetuated through the generosity of Dr. Nichols, his family, and the Nichols Foundation, Inc. The award ceremony has evolved into a Distinguished Symposium and a Medal Award Banquet during which scientists can interact with their colleagues and with chemistry students. The Nichols Medal has been presented to 21 Nobel Laureates, and 23 National Medal of Science recipients.

[Read more here](#)

## 2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD BANQUET (continued)

### BANQUET RESERVATIONS DEADLINE – APRIL 1, 2024

Symposium only:	\$80 Non-ACS Member \$55 for ACS Member \$30 Student, unemployed, retired \$0 50+ year ACS member
Banquet only:	\$210 Non-ACS Member \$180 for ACS Member
Symposium & Banquet:	\$235 Non-ACS Member \$205 for ACS Member
Table of 8 or more for symposium/banquet	\$205 per person (non-ACS Members)

RESERVE BY MAIL USING THIS [ORDER FORM](#) MAILED WITH AN ENCLOSED CHECK (payable to ACS, New York Section, Inc.) To:

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### BANQUET RESERVATIONS DEADLINE – APRIL 1, 2024



**11<sup>th</sup> ANNUAL CHEMISTS CELEBRATE EARTH WEEK EVENT**

**Where:** [Jones Beach Energy & Nature Center](#)  
150 Bay Parkway  
Wantagh, NY

**Date:** **Sunday, April 14, 2024**  
[Register here for FREE](#)  
Please register by April 3, 2024

**Time:** 11:00 – 3:00 PM

GET A  
**CHARGE**  
OUT OF CHEMISTRY



April 21-27, 2024 | #CCEW



Join us at New York's famous Jones Beach as we celebrate Earth Week at the newly renovated [Energy and Nature Center!](#)

The day's event includes an introduction of Jones Beach by the Education Team, a tour of the Nature Center, a self-guided hike through the beach and preserve area, as well as snacks, lunch, and cool earth day gifts!

Space is limited and everyone must register (including children). Once registration has reached capacity it will be closed. There is a parking fee to enter Jones Beach.

*Hope to "sea" you there!*

[Click here to register.](#) Registration is FREE

For more information contact:

Prof. JaimeLee Rizzo  
CCEW Coordinator  
[jrizzo@pace.edu](mailto:jrizzo@pace.edu)



## CHEMISTS CELEBRATE EARTH WEEK ILLUSTRATED POEM CONTEST



### 2024 CCEW Illustrated Poem Contest Get A Charge Out of Chemistry

The New York City Local Section of the American Chemical Society (ACS) is hosting an illustrated poem contest for students in Kindergarten through 12th grade. Entries must be sponsored by a local school or community group for verification purposes.

**Contest Deadline:** Friday, April 5, 2024 at 11:59 PM Eastern

**Local Prizes:** 1<sup>st</sup> 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!

**Local 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](mailto:emojica@pace.edu))

Write and illustrate a poem using the CCEW theme, "Get A Charge Out of 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 the CCEW 2024 theme include:**

Batteries

Natural Gas

Biofuels

Gasoline

Renewable Energy

**Entries will be judged based upon:**

Artistic Merit - use of color, quality of drawing, design & layout  
Poem Message - fun, motivational, inspiring about yearly theme  
Originality Creativity - unique, clever and/or creative design  
Neatness - free of spelling and grammatical errors



**Contest rules:**

- All poems must be no more than 40 words, and in one of the following styles to be considered: Haiku, Limerick, Ode, ABC poem, Free verse, End rhyme, and Blank verse.
- Entries are judged based upon relevance to and incorporation of the yearly theme (Get A Charge Our of Chemistry), word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.
- All entries must be original works without aid from others. Physical drawings may be scanned or captured via camera and submitted to the online form. 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. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- 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.
- Only one entry per student will be accepted.
- Students must be sponsored by a school or another sponsoring group (e.g. Homeschool Association, Boys and Girls Club, Scout Troop, 4-H, etc.).
- 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.

**NANOTECHNOLOGY DISCUSSION GROUP**

NEW YORK NANOSCIENCE  
DISCUSSION GROUP  
**Monday, February 5, 2024**  
Waverly 500  
Refreshments: 5:00 p.m.  
Science: 5:30 – 7:00 p.m.

New York University  
Department of Chemistry  
Silver Center  
32 Waverly Place  
New York, NY 10003  
Phone: 212-998-8400

**RISING STAR SESSION****Simon Vecchioni**

New York University

Research Scientist, Department of Chemistry (Seeman, Sha & Canary Associate)

*Metal-Mediated Molecular Electronics in DNA Nanosystems*

**Magdalini Panagiotakopoulos**

Memorial Sloan Kettering Cancer Center

Research Associate, Cancer Nanomedicine Laboratory (Heller Group)

*Nanodelivery Targets in Cancer Therapy*

**Edwin Pratt**

Memorial Sloan Kettering Cancer Center

Research Fellow (Lewis Lab)

*Multiplexed PET Imaging of Cancer Resistance*

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 be expected to place the work in a context understandable to a broad audience.



NEW YORK UNIVERSITY

Department of Chemistry

## ACS-LSAC DEIR AFRICAN HERITAGE SUMMIT

The New York ACS is partnering with the Southern California ACS, the ACS Nigeria Chapter and the Ilorin Student Chapter of the ACS to present the ACS-LSAC DEIR African Heritage Summit on Friday, February 23, 2024 from 9:00AM – Noon (ET).

[Download flyer here](#)

[Register here](#)

ACS Chapter Nigeria

AMERICAN CHEMICAL SOCIETY(ACS)  
UNIVERSITY OF ILORIN STUDENT CHAPTER  
AND ACS NIGERIA CHAPTER

Invite all to

# ACS-LSAC DEIR AFRICAN HERITAGE SUMMIT

A Collaborative Grant with New York Section, Southern California Section, and Nigeria International Chapter

TITLE / THEME :

## *African Ancestry:*

Our Diversity, Adversity, Royalty and Inclusivity in  
Global Community Advancement Activities:

- Africa's Gift: Unwrapping Africa's Overlooked Scientific and Medical Innovations
- Royalty in Diversity of the Black Race: A Panacea for Global Cataclysm
- Understanding the African Ancestry and it's Relevance to the Global Community in the 21st Century
- Legacy of the first African-American Woman with a Ph.D. Degree in Chemistry
- Cultural Dancers Show

**Speakers:** Expert speakers sharing their extensive experience and knowledge.

University of Ilorin Main Auditorium Basement  
Participation Mode: Physical Participation and Hybrid

23rd  
Feb., 2024

3:00 pm – 6:00 pm  
West Central Africa Time/Nigeria Time

9:00 am – 12:00 noon  
US Eastern Standard Time

6:00 am – 9:00 am  
US Pacific Standard Time

[Register Now](#)

**PROF. JOSHUA A. OBALEYE**  
Chair, ACS Nigeria & ACS University of Ilorin Chapter Student Advisor  
Email. jobaleye@yahoo.com

## MEETING REPORTS

## NEW YORK ACS SECTIONWIDE CONFERENCE

Each year the New York Section organizes its Sectionwide Conference for all members to meet their colleagues and welcome new members. This year the Sectionwide Conference was held at St. John's University on January 20<sup>th</sup>. The day began with committee work and the planning of the NYACS events for 2024. Organized by New York ACS Chair Ping Furlan, Ph.D. (pictured at right), the agenda featured award presentations for volunteerism, excellence in the teaching of chemistry, and the announcement of the candidates for New York ACS elected office for 2025. The day concluded with a convivial luncheon at a local restaurant.



Ping Furlan, Ph.D.  
2024 New York ACS Chair

**Marie Maynard Daly, Ph.D.**  
First African American Woman to Earn a Ph.D. in Chemistry

*National Historic Chemical Landmark*  
at Columbia University



A STUDY OF THE PRODUCTS FORMED BY THE ACTION OF PANCREATIC AMYLASE ON CORN STARCH

by MARIE MAYNARD DALY  
Columbia University  
Ph.D. Thesis (1947)



Scan here for a video about Dr. Daly

**Analysis of Purines:Pyrimidines in DNA**

Dr. Daly developed methods for the quantitative hydrolysis of DNA and separation of the resulting nucleobases. She showed the 1:1 ratios of Adenine:Thymine and Guanine:Cytosine in DNA and demonstrated these ratios existed across biology. This helped dispel the long-standing tetranucleotide hypothesis and helped lead to the elucidation of DNA's structure.

**The Ribosome is the Site of Protein Synthesis**

Dr. Daly demonstrated that the ribosome was a well-defined RNA-protein complex. She also showed that the ribosome was the site of protein synthesis in the cell.

**Linked Cholesterol & Aging to Heart Disease**

Dr. Daly's work on arterial cholesterol showed the link between cholesterol and cardiovascular disease. Her work established that dietary cholesterol was not a major factor in heart disease. She also showed the relationship between aging and heart disease.

*Through countless hours spent in laboratories, where sometimes I would watch as a child, conducting meticulous experiments and scrutinizing data, Dr. Daly demonstrated that introversion, womanhood, and Black excellence are not mutually exclusive.*  
- Carly Rae Reid, granddaughter

**Illuminated the Challenges of Being a Minority Woman in Science**

Dr. Daly was invited to participate in a conference aimed at understanding the unique challenges by minority women in science. This led to the trailblazing report entitled: The Double Bind: The Price of Being a Minority Woman in Science.

**Improved Diversity in Medical & Biological Research**



Mary Virginia Orna, Ph.D.  
2023 New York ACS Chair

Dr. Mary Virginia Orna (at left) was honored for her excellent leadership as Chair of the New York Section for 2023. She was presented with the coveted Past-Chair Pin and a plaque commemorating her service. 2023 will go down as a singularly significant year in the history of the New York Section because of its over-arching focus on Dr. Marie Maynard Daly's life and legacy led by Dr. Orna. Many of the year's events included Dr. Daly – beginning with keynote lectures about Dr. Daly at the 2023 Sectionwide Conference, followed by the William H. Nichols Symposium and Award Dinner, the dedication of the National Historic Chemical Landmark honoring Dr. Daly as the first African American woman to earn a Ph.D. in Chemistry, the Middle Atlantic Regional Meeting 2023, National Chemistry Week and the Eastern Analytical Symposium – to name a few.

***JOSEPH SERAFIN PRESENTED WITH THE NYACS OUTSTANDING SERVICE AWARD***

Dr. Joseph Serafin, Professor and Chair of the St. John's University Department of Chemistry, was awarded the Outstanding Service Award by the New York ACS at their Sectionwide Conference on January 20, 2024. A long-time volunteer in the New York Section, Dr. Serafin started as a leader of the Undergraduate Research Symposium and now leads our efforts to recruit and retain members as Chair of the Membership Affairs Committee. He has previously served as elected Chair, Secretary and Alternate Councilor for the NYACS and is currently a Councilor. A General Co-Chair of MARM 2023, Dr. Serafin worked tirelessly to bring the undergraduate student programming to life with the Graduate / Medical School Panels, the Graduate School Fair, the Employment Panel and the resume review workshop. For these reasons, and many more, the New York ACS celebrates Prof. Serafin.



*Prof. Joseph Serafin  
Outstanding Service Awardee*



The Educational Activities Committee planning their 2024 events.



The Program Review Committee discussing the health of the Section.

## HONORING CHEMISTRY TEACHING EXCELLENCE

The New York Section is proud to honor Xue Qing Liang, M.A., of the New Utrecht High School in Brooklyn, NY, with the 2023 [Nichols Foundation High School Teacher Award](#).

With eight years of teaching experience, she brings a wealth of knowledge to her students. She incorporates demonstrations, hands-on activities, and online simulations to spark interest in chemistry. She is also a passionate supporter of STEM students and actively involves them in TERRA STEM Fair, Engineering for Tomorrow labs, and the US National Chemistry Olympiad. Outside the classroom, Xue Qing continues to grow as an educator through involvement with ACS Chem Clubs, Math for America, and science fairs.

Ms. Liang earned her B.S. in chemistry from The College of Staten Island – CUNY, and her M.A. in Adolescent Chinese from Hunter College – CUNY. With eight years of teaching experience, she brings a wealth of knowledge to her students.



2023 Nichols Foundation  
High School Teacher Awardee  
Xue Qing Liang

*"Teaching and learning go hand-in-hand. Therefore, I continue to learn and teach as a chemistry teacher."* – Xue Qing Liang

*The New York ACS acknowledges financial support of the Nichols Foundation High School Teacher award program by the William H. Nichols Fund for Chemistry at the Boston Foundation*



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Metals by ICP-OES, ICP-MS, USP <233>

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## **OUTSTANDING COLLEGE TEACHING AWARDS**

The New York Section is proud to honor the 2023 College Teaching Awardees for their dedication to training the next generation of STEM professionals. These awards were established to reward the highly effective teaching and inspirational leadership by chemistry faculty within the New York ACS. There are three categories based on the faculty member's institutional type. Calls for Nominations will be announced at the New York Section [webpage](#) for the 2024 awards.

### **Outstanding Two-Year College Chemistry Teaching Award**

**Dr. Sharon Lall-Ramnarine, Queensborough Community College – CUNY**



*Sharon Lall-Ramnarine, Ph.D. with her students.*

Dr. Sharon Lall-Ramnarine (third from right in the photograph) is a tenured full Professor at Queensborough Community College –The City University of New York (CUNY) where she has taught for two decades. A native of Guyana, she earned her B.S. in Chemistry from the University of Guyana, which she followed with a masters in chemistry at Queens College – CUNY, and her doctorate in chemistry at The CUNY Graduate Center. She is committed to undergraduate research and professional development – several of her current mentees are in the photo with her. She has guided 37 of her students on to successful careers in STEM with a particular focus on women and students from underrepresented groups in science. Her tireless efforts have secured 64 individual paid summer internships for 35 students over the past 19 years at Brookhaven National Laboratory which have resulted in numerous publications and awards.

**OUTSTANDING COLLEGE TEACHING AWARDS (continued)****Outstanding Four-Year Undergraduate College Chemistry Teaching Award****Dr. Rita Upmacis, Pace University**

Rita Upmacis, Ph.D.

Dr. Rita Upmacis (pictured at right) is an Associate Professor of Chemistry at Pace University and Fellow of the Royal Society of Chemistry. Dr. Upmacis earned her BSc and Ph.D. degrees from the University of Nottingham, United Kingdom, the latter with Sir Martyn Poliakoff before postdoctoral studies at The California Institute of Technology with Prof. Harry Gray. She worked at Rohm and Hass, and at Weill Cornell Medical College before joining Pace University in 2010. She teaches General Chemistry, Advanced Inorganic Chemistry, and Green Chemistry, while her research explores reactive oxygen & nitrogen species, anti-parasitic drugs, and innovative educational practices in chemistry. She also organizes lectures for Pace students via the MetroWomens Chemist Committee of the New York ACS.

**Outstanding Four-Year Graduate College Chemistry Teaching Award****Dr. Guillermo Gerona-Navarro, Brooklyn College – The City University of New York (CUNY)**

Dr. Gerona-Navarro (pictured at right with NYACS Chair Ping Furlan) joined Brooklyn College and the CUNY Graduate Center as an Assistant Professor in September 2013. His educational training includes a bachelor's degree in chemistry from Havana University, a Ph.D. in Organic and Medicinal Chemistry from Complutense University of Madrid, and postdoctoral training at Weill Cornell Medical College of Cornell University and Mount Sinai School of Medicine. He has used his research in 'stapled' peptides to train 30 undergraduates, graduate students and post-doctoral fellows. He has had a major impact on the teaching of organic chemistry at Brooklyn College due to his development of a course that bridges between General Chemistry II and Organic Chemistry I.

Guillermo Gerona-Navarro, Ph.D.  
(at right)

## PICTURE A SCIENTIST FILM SCREENING AND PANEL DISCUSSION

On January 18, the New York ACS along with its Inorganic and Organometallic Chemistry Topical Group and the Metrowomen Chemists Committee sponsored a screening of the 2020 documentary film *Picture A Scientist*. The international audience of 29 participated in a post-screening panel discussion of gender equity and sexual harassment in science.

Pictured below are participants: (top row, L-R) Joshua Obaleye (ACS Nigeria Chapter), Alison Hyslop (St. John's University), Mary Virginia Orna (New York ACS), (middle row, L-R) Maria Contel (Brooklyn College), Kathleen Kristian (Iona University), Krishna Kallury (Southern California ACS), (bottom row, L-R) Anna Vázquez (St. John's University) and Despina Strong (Committee on Women Chemists).



## FROM OUR PARTNERS

### SOUTHERN CALIFORNIA ACS

All are invited to a seminar entitled:

Twists in the Tale: 2D Superlattices for Electrochemistry and Magnetism presented by Prof. Daniel Kwabena Bediako of the University of California – Berkeley on February 22, 2024. The talk will explore the impact of moiré superlattices on electrochemical kinetics and how to control magnetic exchange in transition metal materials.

**Date:** February 22, 2024

**Time:** 2:00 PM (PT)  
5:00 PM (ET)

[RSVP here](#)

**ACS Local Section**  
Southern California

In conjunction with the Black History Month Celebration, SCALACS invites you to a free Virtual Seminar

**TWISTS IN THE TALE: 2D SUPERLATTICES FOR ELECTROCHEMISTRY AND MAGNETISM**

**FEBRUARY 22, 2024** **2:00 PM PACIFIC TIME**

presented by

**PROF. DANIEL KWABENA BEDIAKO**  
Assistant Professor of Chemistry,  
University of California, Berkeley, CA

**RSVP: [www.scalacs.org](http://www.scalacs.org)**

This seminar will describe how azimuthal misalignment of atomically thin layers produces moiré superlattices that manifest a strong twist angle dependence of heterogeneous electrochemical kinetics in the case of twisted bilayer and twisted trilayer graphene electrodes with the greatest enhancement observed near the 'magic angles.'

How transition metal dichalcogenides intercalated with open-shell transition metals represent a family of materials allowing fine control over the chemical and electronic structure of a magnetic material to tailor the interplay between magnetic exchange, and magnetocrystalline anisotropy to bring about exotic magnetic orders in two-dimensional materials or bulk crystals will also be elaborated. (Visit [scalacs.org](http://scalacs.org) for a detailed abstract, references and bio.)

Professor Bediako's research considers charge transport and interfacial charge transfer in two-dimensional materials and heterostructures. He is also a member of the Editorial Advisory Board of the *Journal of the American Chemical Society* (JACS).

This is a Southern California Section of the American Chemical Society (SCALACS) event presented under the Diversity, Equity, Inclusion, and Respect (DEIR) grant from the American Chemical Society (ACS) in collaboration with New York ACS Local Section and Nigerian Affiliate International ACS Section.

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## CALL FOR NOMINATIONS

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### ***2024 MIDDLE ATLANTIC REGIONAL MEETING (MARM 2024) AWARDS***

**Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences** recognizes individuals and/or institutions who have advanced diversity in the chemical sciences and significantly stimulated or fostered activities that promote inclusiveness within the region. This award is sponsored by the [ACS Committee on Minority Affairs](#). Nominations are submitted via the [link](#) on the [award website](#).

**Deadline: March 1, 2024**

**E. Emmet Reid Award in Chemistry Teaching at Small Colleges** celebrates outstanding achievements in teaching chemical sciences at small colleges within the Middle Atlantic Region. Information on this award and nomination procedures are in this [document](#). Nominations are submitted by a [Google Form](#).

**Deadline: April 1, 2024**

**E. Ann Nalley Middle Atlantic Regional Award for Volunteer Service to the ACS** recognizes the volunteer efforts of individuals who have served the American Chemical Society, contributing significantly to the goals and objectives of the Society through their regional activities. Please use this nomination [form](#). Nominations are submitted by a [Google Form](#).

**Deadline: April 1, 2024**

**ACS Division of Chemical Education Middle Atlantic Region Award for Excellence in High School Teaching** recognizes, encourages, and stimulates outstanding high school chemistry teacher in the Middle Atlantic Region. Please use this nomination [form](#). Nominations are submitted by a [Google Form](#).

**Deadline: April 1, 2024**



**The William "Bill" Suits Undergraduate Award for Outstanding Service to the American Chemical Society**. The Bill Suits award recognizes an outstanding undergraduate student who has provided exemplary volunteer service in the Mid-Atlantic Region of the ACS. Academic records, volunteer service in the region, and a student's application statement will be considered. Please submit the completed nomination [form](#) via [Google Forms](#).

**Deadline: April 1, 2024**

## OPPORTUNITIES

### For High School Students & Teachers

ACS Project SEED

[Applications open in February](#)

ACS Scholars

[Due March 1](#)

ChemClub Student Scholarship

[Due March 31](#)

### For Undergraduates

AWIS Dr. Vicki L. Schechtman Scholarship for first-generation college students

[Due February 29](#)

ACS Scholars Program

[Due March 1](#)

ACS Bridge Program

[Due March 15](#)

Priscilla Carney Jones Scholarship

[Due May 1](#)

### For Graduate Students / Postdocs

ACS Green Chemistry & Engineering Conference

[Abstract Deadline February 12](#)

L'Oreal for Women in Science Fellowship

[Due February 16](#)

### For Professionals

Helen M. Free Award for Public Outreach

[Due February 15](#)

ACS Petroleum Research Fund Grants

[Due March 8](#)

### Free Resources for Green & Sustainable Chemistry Education

The ACS Green Chemistry Institute has partnered with chemistry instructors from over 45 institutions to develop sustainable chemistry education resources for undergraduate students.

Each Module Contains:

- Presentations
- Printable Activities for students
- Instructor Materials
- Links to supplementary materials



Learn More at  
[acs.org/greenmodules](https://acs.org/greenmodules)

ACS Campaign for a  
Sustainable Future



### ACS PRF Grants Support Fundamental Research.

[www.acsprf.org](http://www.acsprf.org)

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- Inorganic Chemistry
- Materials Science
- Physical Organic Chemistry
- Polymer Science
- Surface Science
- Synthetic Organic Chemistry



### For Graduate Students / Postdocs

ACS Green Chemistry & Engineering Conference

[Abstract Deadline February 12](#)

L'Oreal for Women in Science Fellowship

[Due February 16](#)

### For Professionals

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[Due February 15](#)

ACS Petroleum Research Fund Grants

[Due March 8](#)

### 28<sup>th</sup> Annual GREEN CHEMISTRY & ENGINEERING CONFERENCE

June 3-5, 2024 // Atlanta, GA & Hybrid

« AI-Enabled Green Chemistry »

#### Call for Abstracts

Submit your abstract by Feb. 12, 2024!



[Abstracts Due April 1](#)



## APPLY NOW FOR THE ACS SCHOLARS PROGRAM



The ACS Scholars Program awards renewable scholarships to **undergraduate students from historically underrepresented groups** in the chemical sciences, majoring in chemistry-related disciplines, and intending to pursue chemistry-related careers. Selected recipients are awarded up to \$5,000 per academic year. To date, over 3,500 students have received funding from the ACS Scholars Program.

[Apply by March 1, 2024](#)

## CONSIDERING GRADUATE SCHOOL?

The ACS Bridge Program offers a 1 to 2 year Bridge Experience to help you make your application to graduate school more competitive. You gain research experience, take advanced courses, and are mentored in the application process. Applications due **March 15, 2024**.

[Apply here](#)



**San Jose State University**  
San Jose, CA

**Brookhaven National Laboratory**  
Long Island, NY

### EARN CASH & COLLEGE CREDIT

The US Department of Energy (DOE) and Division of Nuclear Chemistry & Technology of the American Chemical Society (ACS) are sponsoring two six-week Summer Schools in Nuclear & Radiochemistry for undergraduates. Funding is provided by the US Department of Energy.

Candidates should be undergraduates with an interest in nuclear science who are presently in their sophomore or junior year of study at a US college or university. They should have completed at least two years of chemistry, one year of physics, and one year of calculus. Applicants must be US citizens.

### DOE & ACS Nuclear & Radiochemistry Undergraduate Summer Schools

**Fellowships include a \$4000 stipend,** all tuition and fees, transportation to and from the Summer School location, housing, books, and laboratory supplies. Transferable college credit will be awarded through the ACS accredited chemistry programs at San Jose State University (7 units) or Stony Brook University (6 units).

**Completed applications must be received no later than February 15, 2024.** Each Summer School is limited to 12 students. Announcement of awards will be made in March 2024.

**June 17, 2024 through July 27, 2024**

For more information, contact:  
**Prof. Lynn C. Francesconi, Director**  
Nuclear & Radiochemistry, Summer Schools  
Department of Chemistry  
Hunter College of the City University of New York  
New York, NY 10065  
nccs.acs.doe@gmail.com • lfrances@hunter.cuny.edu

**Online application forms are available**  
[https://www.nucl-acs.org/?page\\_id=15](https://www.nucl-acs.org/?page_id=15)

## BROOKHAVEN NATIONAL LABORATORY

The **Nuclear Chemistry Summer Schools (NCSS) Program** is a longstanding Department of Energy (DOE) and American Chemical Society (ACS) collaboration designed to tap into the national need for training undergraduate students to assume leadership roles in the varied fields associated with Nuclear Chemistry and Radiochemistry. Together with expert scientists from United States National Laboratories and Universities, it offers a unique summer experience where students receive a comprehensive introduction to the fundamentals and many applications of nuclear chemistry and radiochemistry. Currently stipends are \$4,000 for this 6-week summer school, and students can also earn college credits. The dates for 2024 are June 17 – July 27. The deadline for completed applications is February 15th, 2024.

**Dates:** June 17 – July 27, 2024

[Applications due February 15](#)

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## GRANTS & AWARDS

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### **CHEMLUMINARY AWARDS**

ACS ChemLuminary Awards honor the best examples of programming, outreach, and operations from ACS local sections, technical divisions, regional meetings, and international chemical sciences chapters.

**DUE FEBRUARY 15, 2024**

[View the ChemLuminary Award Descriptions](#)

### **LOCAL SECTION PUBLIC RELATIONS AWARD**

To recognize outstanding efforts by ACS local sections to promote chemistry to the public or to local section members.

**DUE FEBRUARY 15, 2024**

[Learn more](#)

### **HELEN M. FREE AWARD FOR PUBLIC OUTREACH**

An award of \$1000 that recognizes outstanding volunteer achievements in the field of public outreach by a member of the ACS who improves public recognition and appreciation for the contributions of chemistry.

**DUE FEBRUARY 15, 2024**

[Learn more](#)

### **CORPORATION ASSOCIATES LOCAL SECTION & INTERNATIONAL CHAPTER GRANT**

Up to \$1000 for for ACS local sections and international chapters to promote industry-focused events.

**DUE FEBRUARY 1, 2024**

[Learn more](#)

### **LOCAL SECTION SUSTAINABILITY GRANT**

Up to \$500 for the promotion of opportunities that enhance the chemical community's awareness of and the essential role of chemistry in responding to sustainability challenges.

**DUE FEBRUARY 1, 2024**

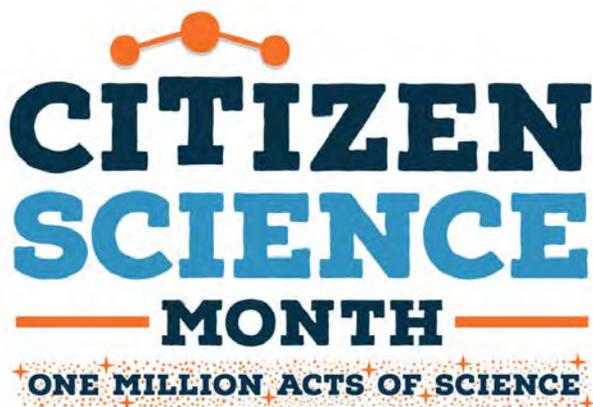
[Learn more](#)

### **ACS PRF RESEARCH GRANTS**

The ACS PRF supports fundamental research in the petroleum field and the development of the next generation of scientists and engineers through advanced scientific education. Membership in the ACS is not a factor in awarding ACS PRF grants.

**DUE MARCH 8, 2024**

[Learn more](#)



Coming in April - [Click to Learn more](#)



***JOB BOARD***

Starting your career or looking for the next challenge? Review postings at the New York ACS [Job Board](#). Email your job postings to [Jobs@NewYorkACS.org](mailto:Jobs@NewYorkACS.org) for inclusion.

***Academic Positions***

**Assistant Professor, Biochemistry – Iona University**

[Apply here](#)

**Assistant or Associate Professor of Organic Chemistry – Hofstra University**

[Apply here](#)

**Three-year Visiting Assistant Professor – Union College**

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**Associate/Assistant Professor of Chemistry and Physics – Lander College**

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**Assistant Professor, Pharmaceutical Sciences – University of Maryland**

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***Industrial Positions***

**Director of Operations and Deputy Executive Director (Administrative Officer) – CUNY Advanced Science Research Center**

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**Cosmetic Formulation Chemist – IFF– Lucas Meyer Cosmetics**

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**Principal Scientist, Small Molecule Analytical Research & Development, Merck**

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**Protein Manager, Analytical Characterization & Texture Science, Ingredion Inc.**

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**Senior Research Scientist, Protein Sciences – Nexomic Biosciences**

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**Chemist, ANI Pharmaceuticals**

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**Chemist, Analytical chemistry, Raw Materials – L’Oreal Research & Innovation**

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**Senior Chemist – Kinetic Brands**

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**Senior Scientist/Principal Scientist – NMR Spectroscopy – Bristol Myers Squibb**

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**Director of Purification Drug Substance Manufacturing - Beigene**

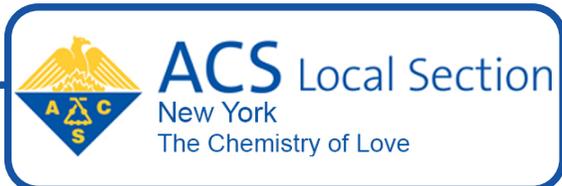
[Apply here](#)

**QC Scientist II – American Regent, Inc.**

[Apply here](#)

**Quality Control Chemist – Vantage Specialty Chemicals**

[Apply here](#)



## 3rd Annual "Chemistry of Love" event

**Where:** Pace University  
Entrance of 1 Pace Plaza  
(1<sup>st</sup> floor)  
Student Center East  
1 Pace Plaza,  
New York City, NY  
[www.pace.edu](http://www.pace.edu)



**Date:** Sunday, March 3, 2024  
[Register here for FREE](#)  
Register by February 25, 2024



**Time:** 11-3 PM

Join us at Pace University as we celebrate our 3rd Annual "Chemistry of Love" event!

The day's event includes a number of presentations discussing "love" hormones and brain chemistry, a healthy Blender Bar, lunch, fun gifts, a photobooth, and a raffle!

The event is family-friendly and fun for kids (and adults) of all ages - all are welcome!

Space is limited and everyone must register (*including children*).  
***Once registration has reached capacity it will be closed.***

[Click here to register](#). Registration is FREE

For more information contact: Prof. JaimeLee Rizzo  
COL Coordinator  
[jrizzo@pace.edu](mailto:jrizzo@pace.edu)