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AMERICAN CHEMICAL SOCIETY



CHEMEXPO



Celebrating National Chemistry Week 2024
See pages 7, 11 and 15



ACS Local Section
New York



ACS Local Section
North Jersey

OCTOBER 2024

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THIS MONTH IN CHEMICAL HISTORY

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

In my last column I gave a sketch of the career of Nevil Sidgwick, in preparation for a review of his two volume work "Chemical Elements and their Compounds" (Oxford University Press, 1950), a book that I regard as one of the great chemistry books of the 20th. Century. It is a massive tome: 2 volumes, each of over 850 pages. But what would you expect of a work that takes all the elements (well all that were known in the 1940s) as its subject matter.

I begin with an extended quotation from the preface that gives an insight into Sidgwick's view of the scope of this book:

"This book is an attempt to discuss in detail the properties of the elements and their compounds in the light of modern ideas of atomic and molecular structure. The development of these ideas in the last thirty years has made it possible to transform 'Inorganic' Chemistry from a mass of disconnected facts into an ordered system of relations. Inorganic textbooks are, however, usually so over-burdened with the details of mineralogy, metallurgy, technical chemistry, and analysis that hardly any space is left for the consideration of the theoretical relations; while the customary exclusion of all but the simplest carbon compounds deprives us of the help of the best-known and most important of the elements."

The work is arranged following the Periodic Table with Volume 1 covering an introduction; Group 0; Groups IA and IB following an old form of the Table; and so on up to Group V. Volume II covers the rest of the elements. This certainly seems ambitious; but remarkably it succeeds in giving an overall view of all 92 of the chemical elements and many of their compounds. The present review of Sidgwick's book must be highly selective. The following excerpts are simply illustrative of topics that have captured my interest. In the section on Group 0, the noble gases, I note the melting point of solid helium under various pressures from 1K at 25 atm. To 42K at 5450 atm. Sidgwick mentions "the obscure question of the formation of chemical compounds" of the heavier elements of Group 0. Various metals have been stated to form compounds with helium under the influence of electric sparks including mercury, tungsten, and platinum. None of these have been shown to be stoichiometric compounds. They may all be merely helium adsorbed on to a dispersed metal. In the solid state there are well defined hydrates of argon, krypton, and xenon.

Hydrogen, the first element of Group I, and its isotopes deuterium and tritium, have a remarkably rich chemistry that takes up nearly 50 pages. There is an extended discussion of the ortho and para forms of molecular H₂. Methods of production of hydrogen atoms at moderate temperatures are also reviewed in detail. The binary hydrides form 4 classes: salt-like e.g. CaH₂; volatile e.g. CH₄; metal-like e.g. non-stoichiometric Pd hydride; and spectroscopic hydrides seen only in discharges. There is an extensive section on the hydrogen bond – not surprising since Sidgwick was one of the earliest chemists to point out the existence and importance of this form of bonding.

In the section on deuterium I came across the following perceptive quotation from Rutherford in 1920, a full decade before the definitive evidence for the existence of this isotope was presented : It seems very likely that one electron can bind two hydrogen nuclei, and possibly also one hydrogen nucleus, In the one case this entails the possible existence of an atom of mass nearly two, carrying one charge, which is to be regarded as an isotope of hydrogen."

Sidgwick discusses the possibility of optical activity in a compound of general formula CabHD and concludes that any activity will be extremely small. "Failures to detect any resolution are numerous."

In this column I have only "scratched the surface" of this great book. More will be forthcoming.

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THE 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

November 2024	October 16, 2024
December 2024	November 16, 2024
January 2025	December 16, 2024
February 2025	January 16, 2025
March 2025	February 16, 2025

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All views expressed are those of the editor and contributors and do not necessarily represent the official position of the New York and North Jersey Local Sections of the American Chemical Society unless so stated.

October Calendar

NEW YORK SECTION

Thursday, October 10, 2024

Long Island Subsection

See page 9

Thursday, October 10, 2024

Westchester Chemical Society

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Sunday, October 13, 2024

National Chemistry Week at the New York Hall of Science

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Thursday, October 17, 2024

MetroWomen Chemists' Committee

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Thursday, October 24, 2024

Hudson-Bergen Subsection

See page 7

SAVE THE DATE

Saturday, November 9, 2024

Chemistry of $^{39}\text{Y}^{80}\text{O}^{31}\text{Ga}$

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Saturday, November 9, 2024

Frances S. Sterrett Environmental Symposium

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NORTH JERSEY SECTION

Wednesday, October 9, 2024

Executive Committee Meeting

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Friday, October 11, 2024

Chromatography Group

See page 14

Saturday, October 12, 2024

Brewing = Chemistry: The Science of Beer

See page 13

Saturday, October 19, 2024

ChemExpo

See page 15

SAVE THE DATE

Thursday, November 14, 2024

NMR Topical Group Annual Symposium

See page 14

Thursday, November 21, 2024

2024 Award for Creativity in Molecular Design and Synthesis & Award Ceremony

See page 17

NYSCC PRESENTS

Emerging Trends in
Oral Health & Beauty

TOPICS TO BE DISCUSSED:

- Oral microbiome
- Fermented biosurfactants
- Oral health vs. Systemic health
- Inflammation
- New product formats

OCT 15, 9 AM - 6 PM
at New Brunswick
Performing Arts Center

REGISTER NOW →

NEW ACS VOLUNTEER AND PARTICIPANT POLICIES

The American Chemical Society's mission and vision is to advance the broader chemistry enterprise and its practitioners for the benefit of Earth and all its people, as well as to improve all people's lives through the transforming power of chemistry. ACS is committed to providing a safe, inclusive, respectful, positive, and welcoming environment for all participants at every event, whether in person or online. The [Volunteer and Participant Code of Conduct Policy](#) and the [ACS Youth Protection Policy](#) have been developed to ensure a safe and enjoyable environment for all its individuals and its community.

These are mandatory policies and all ACS members participating in New York or North Jersey ACS events must comply. All events involving children (under the age of 18) must include the Code of Conduct Policy link in event registration forms, emails to participants, or event check-in sheets, ensuring all registrants review and agree to it. (Download the QR code below). For events involving youth, the Youth Protection Policy and Background Check links need to be included in emails, and registration forms. (Download the QR code below). The required background check by Sterling Volunteers will take a few hours to complete. Adult volunteers must show their Sterling badge at the event, which is displayed on their Sterling Volunteers profile. **Event organizers are responsible for distributing this policy to ensure compliance.**

VOLUNTEER AND PARTICIPANT CODE OF CONDUCT POLICY

Effective May 1, 2024, the [Volunteer and Participant Code of Conduct Policy](#) outlines ACS' expectations for all ACS members and participants at in-person and virtual events and activities, including but not limited to seminars, symposia, trainings and courses, mixers, meetings, programs, and gatherings that are organized, hosted, planned, or managed in whole or in part by ACS or its units. Participants, including, but not limited to, those engaging with ACS as members, officers, affiliates, associates, volunteers, attendees, exhibitors, partners, speakers, and service providers are expected to communicate and abide by this policy at all times.



[Download QR code for flyers](#)

ACS YOUTH PROTECTION POLICY

Effective September 1, 2024, the [ACS Youth Protection Policy](#) reflects its values and expectations of ethical behavior and protects the safety of youth. All adult volunteers at ACS hosted events, programs, and activities whether held in person and online must comply with the Youth Protection Policy if any participant or attendee is under the age of 18. Compliance is required for all events after October 1, 2024.

To comply, all adult volunteers must complete a background check. ACS will cover the cost.

[Request a background check here](#)



[Download QR code for flyers](#)

NEW YORK SECTION MEETINGS

NOVEMBER BOARD MEETING DATE

The final meeting of the New York ACS Board of Directors for 2024 will be held on Monday, **November 25, 2024**. This hybrid meeting 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, i.e. the Wednesday before the Monday 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.

The Board Meeting dates for 2025 will be published in the December issue of The Indicator.

WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AWARD 2025 – CALL FOR NOMINATIONS

The Westchester Chemical Society is now accepting nominations for the "Westchester Chemical Society Distinguished Scientist Award 2025". Scientists who live or work in Westchester County or the Bronx qualify. Self-nominations are acceptable. Nominees can be from private companies or educational institutions or government. The awardee is expected to attend the Awards Dinner (April/May time-frame) and to present aspects of their work. Nominations are not carried over from previous years. New and possibly updated nominations should be submitted. Please send a cover letter stating why your nominee should receive the award along with the nominee's resume by January 15, 2025 to Dr. Peter Corfield.



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HUDSON-BERGEN CHEMICAL SOCIETY

In celebration of National Chemistry Week 2024

Activation and Incorporation of Rare Sugars into Bacterial Surfaces

Speaker: Dr. Tania Lupoli, Assistant Professor
Chemistry Department
New York University

Date: Thursday, October 24, 2024

Place: Dickinson Hall, Room 4468
Fairleigh Dickinson University
Teaneck, NJ 07666

Time: 5:00 PM Pizza and Refreshments
5:30 PM Lecture

RSVP Reservations required by October 19, 2024,
email [Dr. Mihaela Leonida](#), or [Dr. Ish Kumar](#)



[Download flyer here](#)

Abstract: Our planet is inhabited by trillions of bacteria that live inside and outside of humans. The “skin”, or surface, of bacteria is called the cell envelope, which mediates infection of the host and protects bacteria from host immune defense tactics. While Gram-negative bacteria contain a protective outer membrane layer absent in most Gram-positives, almost all bacteria contain polymers composed of unique monosaccharides that extend from the cell surface. Gram-negative bacteria typically contain lipopolysaccharide (LPS) in the outer leaflet of the outer membrane with attached polysaccharides called O-antigens that help mediate interactions with the environment. O-antigens are composed of repeating oligosaccharides that define particular bacterial serotypes, which distinguishes bacterial strains within a single species. Foundational chemical biology work has contributed to our understanding of eukaryotic cell surface composition. However, we still lack a clear understanding of assembly of bacterial surface glycan polymers that contain prokaryote-specific or “rare” sugars. Here, we describe synthetic and chemoenzymatic methods to construct rare nucleotide sugars to study substrate recognition by bacterial glycosyltransferases that build O-antigens. We identify key regions in sugar substrates that are required for substrate binding and activity, and we use this knowledge to design chemical probes that will be used for the construction of synthetic O-antigens and small molecule inhibitors that will stall O-antigen synthesis. This work will expand our understanding of cellular mechanisms underlying bacterial polysaccharide synthesis, and will teach us about the roles that rare sugars play in bacterial cellular interactions.

WESTCHESTER CHEMICAL SOCIETY***Our Chemical Heritage: Its Impact on Our Daily Lives***

Speaker: Mary Virginia Orna, Ph.D.
Professor of Chemistry, Emerita
College of New Rochelle

Date: Thursday, October 10, 2024
Place: Westchester Community College
Gateway Center, Room 110

75 Grasslands Road
Valhalla, NY 10595

and via Zoom

Time: 5:30 PM Coffee Hour
6:00 PM Speaker

RSVP to pcorfield@Fordham.edu for in person or Zoom link



[Download flyer here](#)

Few of us take the time to look into the past to see how our lives have been impacted by decisions and policies made long ago or even very recently. In the case of our chemical heritage, often the decision to pursue a particular line of research can have tremendous consequences on the quality of our lives. Some examples from our recent past include the pathways to cancer chemotherapy, research into the chemical origins and cure of prostate disease and the scourge of river blindness. This talk will document these advances in chemical research that have had a profound impact on our search for a rational, healthy future, which is the great gift of modern scientific research.

***NEXT MONTH
SAVE THE DATE******The Bio-Chemistry of Love***

Speaker: Professor Eric Chang
Professor of Chemistry
Pace University

Date: Thursday, November 14, 2024

Place: via Zoom

Time: 7:30 PM

RSVP to pcorfield@Fordham.edu for the Zoom link

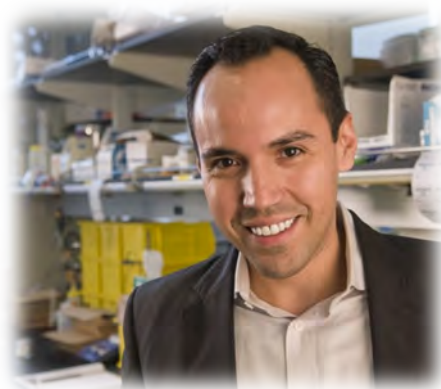


**Deadline for submitting articles and advertisements
for the November 2024 issue is **October 16, 2024****

LONG ISLAND SUBSECTION

Molecules and Macromolecules that Harness and Amplify Light Energy

Speaker: Dr. Luis M. Campos
Columbia University
Date: Thursday, October 10, 2024
Place: via [Zoom](#) ([Registration is required](#))
Time: 6:45 PM



[Download flyer here](#)

Abstract: Macromolecular engineering of chromophores capable of harnessing and amplifying the energy of light offers numerous advantages for the development of next-generation optoelectronic materials for device applications and photochemistry. Polymers offer a versatile platform for incorporating functional units to tailor properties, but this introduces challenges as architecture can significantly impact both mesoscale and bulk behavior. Our group is interested in understanding the link between building blocks and macromolecules that can be used to exploit organic materials in multiple applications. This talk will provide an overview on the strategies that our team employs in order to investigate structure-property relationships of multiexciton systems.

NEXT MONTH SAVE THE DATE

Synthetic Studies on Several Heterocycles - NMR Spectroscopic Studies of a Few Potentially Isolable Atropisomeric Benzazepines

Speaker: Dr. Sasan Karimi
Professor of Chemistry
Queensborough Community College – CUNY
Date: Thursday, November 7, 2024
Place: Queensborough Community College
Science Building, Room 112 and
via [Zoom](#)
Time: 6:45PM



[Download flyer here](#)

The Indicator is posted to the web 1ST of the month (September – June) at

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

1st ANNUAL CHEMISTRY OF $^{39}\text{Y}^{80}\text{O}^{31}\text{Ga}$ EVENT

Date: Saturday, November 9, 2024
Place: Pace University
 Gymnasium and Bianco Room
 1 Pace Plaza
 New York City
Time: 10:00AM – 2:00PM
RSVP: [Register here for FREE](#)
 All attendees must register, including children
N.B.: Bring your own yoga mat or blanket



[Download flyer here](#)

Join us in this fun, healthy, and educational event, where we come together and celebrate our life energy! Yoga is more than twisting and turning – it is the awareness of the breath, concentration, meditation, a look within. The chemistry of $^{39}\text{Y}^{80}\text{O}^{31}\text{Ga}$ techniques to be discussed include: asana (postures), pranayama (breathing), and meditation (dhyana). Presentations will discuss the production of gamma-aminobutyric acid (GABA), dopamine, oxytocin, serotonin, and endorphins. The day's bliss will begin with a beginner asana practice, pranayama, and sound healing by certified yoga instructors. Following the practice and talks, there will be lunch, snacks, and a healthy smoothie bar. Come breathe, flow, and smile with us 😊 The event is free and open to all, but everyone must register (including children). For more information contact: Prof. JaimeLee Lolani Rizzo, jrizzo@pace.edu



METROWOMEN CHEMISTS' COMMITTEE SEMINAR



Preserving Photographs at the Metropolitan Museum of Art: Scientific Approaches to Practical Problems

Speaker: Katherine Sanderson
 Department of Photographic Conservation
 Metropolitan Museum of Art
Date: Thursday, October 17, 2024
Place: Pace University
 1 Pace Plaza
 New York City
Time: 3:25 PM

[Download flyer here](#)

**NEW YORK ACS NATIONAL CHEMISTRY WEEK 2024
CALL FOR VOLUNTEERS / SPONSORS**



Join the New York Local Section of the American Chemical Society, New York Hall of Science, and PepsiCo for our annual National Chemistry Week Celebration to celebrate the importance of chemistry in everyday life! Learn about this year's theme, Picture Perfect Chemistry, with many exciting hands-on activities put together through collaboration of Academic Institutions, Student Volunteers, Industry Professionals, and NySci.

When: October 13, 2024 (11:00 – 4:00 pm)

Where: New York Hall of Science, Queens, Ny

Questions about the event, please contact Joseph Wiener at Joseph.Wiener@PepsiCo.com.

If you would like to volunteer, host a demo/activity, or sponsor this event, please reach out as well via email or [click here](#).

We hope to see you there!



2024 FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM**2024 Frances S. Sterrett Environmental Chemistry Symposium*****Micro-Plastics: Macro-Problem?*****Saturday, November 9, 2024; 9:00 am – 1:45 pm****Berliner Hall Room 117, Hofstra University; Hempstead, NY 11549-1000**

The Frances S. Sterrett Environmental Chemistry Symposium is dedicated to presenting the public with up-to-date, factual scientific information on environmental topics. The symposium is organized by members of the Long Island Subsection of the American Chemical Society (LIACS) and cosponsored by the New York Section of the American Chemical Society (NYACS); this event is made possible with support from ACS LS-Sustainability Programming Grant, and Hofstra University's Chemistry Department. We invite you to join us and gain invaluable insights from field experts as they illuminate the pervasive issue of microplastics; and explore the latest advancements in detection methods and mitigation strategies to address this pressing environmental challenge.

Dr. J. Evan Ward

Professor and Head
Department of Marine Sciences
University of Connecticut

*Interactions Between Plastic Particles and Aquatic Suspension-Feeding Invertebrates: Searching for a Bioindicator of Microplastics in the Environment **

Dr. Luis Medina Faull

Lecturer and IDEA Fellow
School of Marine and Atmospheric Sciences
Stony Brook University

From the Arctic to the Antarctic, Microplastics are Pervasive in the Ocean

Ms. Huiping Deng

PhD Student
Lamont Doherty Earth Observatory
Columbia Climate School
Columbia University

Microplastic and Nanoplastic Exposure Through Tap Water

Dr. Cody Garrison

Assistant Professor
Department of Biology
SUNY Old Westbury

The Microplastic Problem Through a Microbial Lens

Dr. Matthew J. Campen

Distinguished Professor
College of Pharmacy
University of New Mexico

*Silent Invasion: The Remarkable Presence of Nanoplastics in the Human Body **

Dr. Huiyuan Guo

Assistant Professor
Department of Chemistry
Binghamton University

*Tracking the Biological Barrier-Crossing Behavior of Nanoplastics **

Dr. Ashok Deshpande

Research Chemist
Northeast Fisheries Science Center
Sandy Hook Laboratory
National Oceanic Atmospheric Administration
Characterization of Microplastics by Using a Novel Method of Pyrolysis GC-MS

Note: this symposium combines both in-person and virtual experiences. While the majority of talks will be held in person, those marked with "*" will be conducted via Zoom.



ACS Local Section
New York
Long Island Subsection

Registration (free): using the link [2024 LIACS-ECY](#)
Contact: [Dr. Paris Svoronos](#) – Symposium Chairperson

NORTH JERSEY SECTION MEETINGS

2024 NORTH JERSEY ACS EXECUTIVE COMMITTEE MEETINGS

2024 North Jersey ACS Chair Sandra Keyser and the Executive Committee welcome you to our monthly NJACS meetings. Each meeting is held **Wednesday night 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:

Wednesday, October 9, 2024 (hybrid) **Wednesday, November 13, 2024** (virtual)
2025 Planning Meeting in December, TDB

For links to the virtual meetings and RSVP for in-person attendance at hybrid meetings, please [check out the calendar on our website](#).

BREWING = CHEMISTRY: THE SCIENCE OF BEER

The North Jersey Section, the Trenton Section, and the Division of Organic Chemistry will be hosting a free Local Section Member Engagement and Enhancement event at The College of New Jersey on **October 12th at 2 PM** in the Education Building Room 115.

Join Jeanne Berk of Cedar Crest College and the Lehigh Valley Local Section as we learn about some of the chemistry involved in brewing beer. Discover how four simple ingredients, barley, water, hops, and yeast come together through fermentation and other chemical reactions to make such a wide variety of beers. The steps involved in the production of beer will be covered as well as how the flavor and type of beer depends on the temperature, timing, and amount of each ingredient. The first 25 attendees will receive an ACS Beaker coffee mug. Additionally, the organizers will host a raffle for ACS membership funding, a 64 oz ACS Growler, and a Professor Molarity doll. We hope to see you there!

**BREWING=CHEMISTRY:
THE SCIENCE OF BEER**

October 12, 2024 2:00 PM

The College of New Jersey - Education Building Room 115

Join Jeanne Berk of Cedar Crest College, Lehigh Valley ACS, as we learn about the chemistry of brewing beer.

NETWORKING SESSION AT BLUEBERRY KITCHEN AND TAP

REGISTER HERE: FREE ATTENDANCE

RAFFLES FOR GROWLER AND PROF MOLARITY

FREE ACS BEAKER MUG TO FIRST 25 ATTENDEES

ACS MEMBERSHIP RAFFLE

[Link to Education Building](#) [Link to Blueberry Kitchen And Tap](#)

North Jersey Section American Chemical Society American Chemical Society Division of Organic Chemistry

TRENTON CHEMISTRY MUGS THE WAREHOUSE

[Download flyer here](#)

NORTH JERSEY CHROMATOGRAPHY GROUP ANNUAL SYMPOSIUM: BIOPHARMACEUTICAL ANALYSIS

NJCG is hosting its annual symposium on **Friday, October 11st, 2024**, focused on "**Biopharmaceutical Analysis**" at **DoubleTree by Hilton, Mirabelle Room, 200 Atrium Dr, Somerset, NJ 08873**. Please find the attached flyer for more information.

Registration Fee is \$25, Lunch and Refreshment will be provided. There will be raffles at the end.

Please feel free to register using the link below and pass along the information to your colleagues who might also be interested.

Place: DoubleTree by Hilton
Mirabelle Room
200 Atrium Drive
Somerset, NJ 08873

Date: **Friday, October 11, 2024**


Time: **10:00AM – 4:00PM**

Registration \$25 ([registration website](#))

[Download flyer here](#)


North Jersey Chromatography Group
Annual Symposium

Biopharmaceutical Analysis




October 11, 2024, 10am - 4pm
Double Tree by Hilton, 200 Atrium Dr, Somerset, NJ, 08873


Guest Speakers




JAMES GRINIAS
PROFESSOR OF
CHEM&BIOCHEM,
ROWAN UNIVERSITY



STEPHAN KOZA
CONSULTING
SCIENTIST,
WATERS
CORPORATION



JAMES GRECO
REGIONAL ACCOUNT
MANAGER,
WYATT
TECHNOLOGY




ARMEN BECK
POSTDOCTORAL
FELLOW
MERCK

Speaker	Topic	Schedule
James Grinias	Analysis of Pharmaceutical and Biopharmaceutical Compounds with Compact Capillary LC	11:15-11:45 AM
Stephan Koza	Advances in SEC for Biotherapeutics	1:00-1:30 PM
James Greco	What can MALS add to my biological analysis needs?	1:30-2:00 PM
Armen Beck	Data Efficient Chromatography Retention Time Predictions of Biopharmaceuticals Using Graph Networks	3:15-3:45 PM

<https://www.njcg.org/register-for-symposium-here.html>

REGISTER NOW!

Registration Fee: \$25
Lunch and Refreshment Included



MORE INFORMATION →

NJCG1234@GMAIL.COM

NORTH JERSEY ACS NMR TOPICAL GROUP



The North Jersey ACS NMR Topical Group will hold its annual NMR Symposium on November 14, 2024. This year's speakers include John M. Frank (Syracuse University), Daron Freedberg (FDA), Flemming Hansen (University College London) with the keynote lecture presented by Prof. Robert Guy Griffin (MIT, shown at left).

Place: Crowne Plaza
2055 Lincoln Hwy
Edison, NJ 08817

Date: **Thursday, November 14,**

Time: **2024 1:00PM – 5:00PM**

Registration \$0 – \$10 ([registration website](#))

CHEMEXPO 2024

CHEMEXPO 2024



October 19, 2024 | 12 pm – 4 pm

Liberty Science Center

Join North Jersey ACS for free hands-on demos and activities, centered on the theme of photography and imaging.

Contact skeyser@njacs.org if you have questions about the event or if you'd like to volunteer!

We hope to see you there!



NORTH JERSEY ACS TO HOST MARM 2025

MARM 2025

May 28-31, 2025

Seton Hall University, New Jersey

ANNOUNCING KEYNOTE SPEAKERS



MORTEN MELDAL

2022 Nobel Laureate
University of Copenhagen



PHAEDRIA ST. HILAIRE

DEI Consultant, Angel Investor
and ProWOC co-founder



REBECCA RUCK

Associate Vice President Process
Research & Development
Merck & Co.

Symposia abstracts now being accepted! Find details for submission and more conference updates at MARM2025.com



NJACS Celebrating

100

Years of Chemistry



2024 AWARD FOR CREATIVITY IN MOLECULAR DESIGN AND SYNTHESIS SYMPOSIUM & AWARD CEREMONY



ACS NORTH JERSEY ORGANIC TOPICAL GROUP PRESENTS

2024 AWARD FOR CREATIVITY IN MOLECULAR DESIGN AND SYNTHESIS SYMPOSIUM & AWARD CEREMONY



PROF. KEARY ENGLE
Scripps Research
“Metal–Olefin Bonding and Reactivity: C–H Activation, Nucleometalation, and Beyond”



PROF. JIN-QUAN YU
Scripps Research
2024 Award Recipient
“Wakening Pd(OAc)₂ for C–H Activation through Bifunctional Ligands: From Curiosity to Industrialization”



DR. DIPKA KALYANI
Merck
“Catalyzing Molecular Invention Leveraging Industry-Academic Collaborations”



DR. JEREMY RICHTER
BMS
“Discovery of a ROMKi Clinical Candidate for the Treatment of Heart Failure”



PROF. RAMESH GIRI
Pennsylvania State University
“Catalytic Transition Metal and Photoredox Catalysis for Difunctionalization of Alkenes”



DR. DAVID WEINSTEIN
Vividion
“Covalent First: A Chemoproteomic-Enabled Paradigm for Drugging Challenging Targets”

REGISTRATION

(includes symposium and lunch)

GENERAL: \$150

STUDENT: \$15

<https://www.njacs.org/event/2024-njacs-otg-award-for-creativity-in-molecular-design-synthesis/>

Questions? joseph.badillo@shu.edu

THE PALACE AT SOMERSET PARK

333 DAVIDSON AVE, SOMERSET, NJ 08873

November 21st, 2024 | 9:00am -5:00pm

Undergraduate and Graduate

Poster Session Presented During Breaks

Participating Institutions Include

NYU, Princeton, Columbia, Temple, Cornell, Rutgers, and Scripps.



MEETING REPORTS

THE PHILADELPHIA ACS LOCAL SECTION'S 125th ANNIVERSARY CELEBRATION



Left to right: Mary Virginia Orna, NYACS Immediate Past-Chair, with Deborah Cook and Anne DeMasi, co-organizers of the event. Photo credit: Joel Perlish Photography, Havertown, PA

On September 4, 2024, the Philadelphia ACS Local Section hosted a gala reception and banquet at the Weitzman National Museum of American Jewish History in the Historic District of Philadelphia to celebrate the 125th anniversary of its founding. Over 120 members and invited guests of the Section attended the event which was highlighted by a lecture by a distinguished former member, Joseph De Simone, of Stanford University. Founded in 1899 by 83 chemists, the Section is one of the oldest local sections and one of the largest in the ACS. Its members come from not only Philadelphia but also from the surrounding counties in both Pennsylvania and New Jersey. NYACS Immediate Past-Chair attended the event to represent the Section.



Some hi-jinks at one of the tables. First row, left to right: David Katz, James Burke the Elder (former ACS Board Chair), James Burke the Younger; Back Row: Mary Virginia Orna, Anne DeMasi, Sharon Haynie, Melissa Cichowicz, David Cichowicz, Alan Warren. Photo credit: Joel Perlish Photography, Havertown, PA.

2024 NEW YORK ACS OUTSTANDING TEACHING IN CHEMISTRY AWARDS CALL FOR NOMINATIONS

The New York ACS is seeking nominations for its Outstanding Teaching in Chemistry Awards. There are five award categories designed to honor excellence in chemistry teaching at the college level. New this year, are the awards for Adjunct or Part-time faculty and for full time lecturers and instructional chemistry faculty. Links to the nomination forms for each of the five awards are, below:

[Adjunct or Part-time Faculty \(new for 2024\)](#)

[Full Time Lecturers and Instructional Chemistry Faculty \(new for 2024\)](#)

[Two-Year College Chemistry Faculty](#)

[Four-Year Undergraduate College / University Chemistry Faculty](#)

[Four-Year University with Graduate School Chemistry Faculty](#)

Nominations are due November 15, 2024. Candidates need not be members of the American Chemical Society. Prior nominations remain active for three years and updating is encouraged. Awardees will be recognized with a major award plaque at the Sectionwide Conference in January 2025.

FOR STUDENT MEMBER CHAPTERS



Compete, Grow, Win!

Boost your ACS membership. Receive a cash reward.

1ST PLACE

\$2,000

2ND PLACE

\$1,500

3RD PLACE

\$1,000



ACS President Mary Carroll is sponsoring the [#CompeteGrowWin](#) challenge to increase the number of ACS student members and chapters worldwide. How many new ACS student members will you add to your student chapter by November 15? The chapter to gain the highest percentage of new ACS student members will win:

\$2,000

\$1,500

\$1,000

Student Chapters (U.S.-based) & International Student Chapters will each be competing for their own set of prizes

CONSIDERING GRADUATE SCHOOL?

STEP 1: GRADUATE SCHOOL REALITY CHECK

Thinking about applying to graduate school, but unsure of how it fits into your career plans, what the application process entails, and what to expect? The ACS offers a great resource, [Graduate School Reality Check](#), to use while you consider your options along with the ACS' [ChemIDP](#), an online planning tool. In addition, the Graduate Center of the City University of New York has two programs to help you in applying to graduate school.

STEP 2: APPLICATION BOOTCAMP

Want to learn how to assemble your most competitive application to graduate school? The CUNY Graduate Center is offering a FREE virtual Application Bootcamp on **Thursday, November 7, 2024 from 4:30 – 6:30 PM**. The information provided is applicable to any chemistry/biochemistry graduate school application.

[Register here](#)



Application Boot Camp

FOR THE PH.D. PROGRAMS IN THE NATURAL SCIENCES

**Thursday, November 7, 2024
4:30 PM - 6:30 PM**

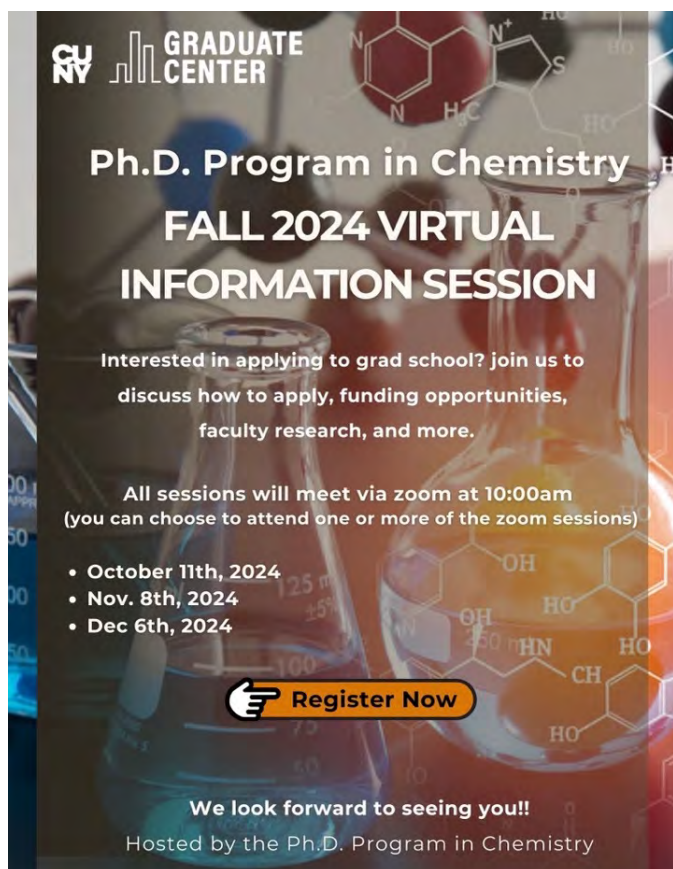
This event will be held virtually via Zoom

Department directors from the doctoral programs in **Biochemistry, Biology, Chemistry,** and **Physics** will discuss:

- Application Procedure
- Program Curriculum
- Degree Requirements

REGISTER HERE

Send Questions to: admissions@gc.cuny.edu



Ph.D. Program in Chemistry

FALL 2024 VIRTUAL INFORMATION SESSION

Interested in applying to grad school? Join us to discuss how to apply, funding opportunities, faculty research, and more.

All sessions will meet via zoom at 10:00am (you can choose to attend one or more of the zoom sessions)

- October 11th, 2024
- Nov. 8th, 2024
- Dec 6th, 2024

Register Now

We look forward to seeing you!!

Hosted by the Ph.D. Program in Chemistry

STEP 3: VIRTUAL INFORMATION SESSION

Having decided to go to graduate school, and having assembled your most competitive application, now you need to do your research into the type of research you will perform for your PhD. The Ph.D. Program in Chemistry at the CUNY Graduate Center offers virtual information sessions throughout the fall where you can join the zoom session to learn about faculty research, how students are funded, and ask questions to the program leadership. These virtual Information Sessions are being held on the following **Fridays at 10:00AM** :

October 11
November 8
December 6

[Register here](#)

CALL FOR NOMINATIONS



DREYFUS PRIZE IN THE CHEMICAL SCIENCES: ELECTROCHEMICAL PROCESSES

The Camille & Henry Dreyfus Foundation is seeking nominations focused on electrochemical processes for its 2025 Dreyfus Prize in the Chemical Sciences. Awarded to an individual the award recognizes exceptional and original research that has led to major advances in the field.

[Due December 5](#)





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evolving solutions since 1966*

Thermal		Defects
Polymers		Castings
Chemicals		Corrosion
Metal Phases		Quality Check
Contaminations		Product Failure
SEM - EDS		DSC - TGA
AUGER		ESCA
FTIR		XRD

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THE INDICATOR NEEDS YOUR INPUT TO SERVE YOU BETTER

The Indicator has seen major changes over the past several years that were designed to improve its service to the membership of the New York and North Jersey ACS sections. The aesthetics and style of the publication have been updated, the time-to-publication has been reduced, the advertising costs reduced, job posting added, the issues were made into searchable PDF files with active links, the issues are now actively delivered to the membership, posted on social media, and downloadable on the web, and the issue is distilled into emails sent to the members as well. Most recently, the website theindicator.org has been updated to highlight our advertisers and provide an online calendar for the two sections. We will be sending out a survey to get feedback on these changes during the fall. Please take a few minutes to fill it out when it arrives.

In addition, we are interested in adding new features to the publication and website. Your input would be appreciated. Please let us know which type of features you would like to see in future issues and whether you might be willing to assist in gathering or writing such material. Please click these links to email the [Editor](#) or [Associate Editor](#) with your ideas.

OPPORTUNITIES

For High School Students & Teachers

Society for Science – STEM Research Grant
[Due November 1](#)

ChemClub Community Activities Grant
[Due November 1](#)

James Bryant Conant Award in High School Chemistry
[Due November 1](#)

For Undergraduates

Joseph Breen Memorial Fellowship
[Due November 1](#)

DoD Science, Mathematics, and Research for Transformation (SMART) Scholarship
[Due December 6](#)

For Graduate Students / Postdocs

Younger Chemists Leadership Institute Award
[Due October 15](#)

NRC Research Associateship Program
[Due November 1](#)

Joseph Breen Memorial Fellowship
[Due November 1](#)

For Professionals

Macromolecular Rapid Communications
 Junior Researcher Award
[Due October 15](#)

Younger Chemists Leadership Institute Award
[Due October 15](#)

ACS Division of Analytical Chemistry Younger Chemists Conference Travel Grants
[Due November 1](#)

ACS National Awards
[Due November 1](#)

Young Industrial Polymer Scientists Award
[Due October 31](#)

Herman F. Mark Polymer Award
[Due November 1](#)

The Dreyfus Prize in the Chemical Sciences
[Due December 5](#)

Produced by ACS Webinars

FREE LIVE WEBINAR

CATALYZE THE VOTE

Thursday, October 3, 2024 | 2pm - 3pm ET

Meet the 2025 ACS President-Elect Candidates Co-produced with the ACS Younger Chemists Committee and the Committee on Nominations and Elections

YOUNGER CHEMIST LEADERSHIP INSTITUTE AWARD

Eligibility:

- Aged under 40
- Current grad student, post-doc, or within 7 years of start of career
- Current ACS member
- Have not received this award before.

International applicants encouraged to apply.

Grant for younger chemists to fund all expenses related to attending Leadership Institute

Awardees will:

- Acquire leadership skills
- Learn about ACS Governance
- Network with current ACS leaders

APPLICATIONS ACCEPTED: Deadline October 15th
 Award Information & Application Link at:
<https://bit.ly/YCCLDI>

AMERICAN CHEMICAL SOCIETY - YOUNGER CHEMISTS COMMITTEE

C&EN'S GRAD STUDENT SURVIVAL GUIDE

SIGN UP NOW >>>

FROM OUR PARTNERS

SOUTHERN CALIFORNIA SECTION

The SCALACS is proud to present a virtual symposium celebrating National Hispanic Heritage Month on **Thursday, October 3rd from 5:00 – 7:00 PM ET**. Prof. Benjamin Garcia (Washington University School of Medicine) and Dr. Socrates Munoz (Kansas State University) will present their work on Quantitative Mass Spectrometry for Understanding Epigenetic Mechanisms, and Acyloxyphosphonium Ions as Versatile Building Blocks in Organic Synthesis, respectively.

[Register here](#)

Celebrating Hispanic Heritage Month: The Southern California Section of the American Chemical Society (SCALACS) showcases seminars by two distinguished scientists as role models for our next generation (funded by the LSAC-DEIR grant).

NATIONAL HISPANIC HERITAGE MONTH VIRTUAL SYMPOSIUM

THURSDAY, OCTOBER 3 • 2 - 4 PM



ACYLOXYPHOSPHONIUM IONS AS VERSATILE BUILDING BLOCKS IN ORGANIC SYNTHESIS
Presented by:
Dr. Socrates Munoz, Kansas State University
Time:
2:00 - 3:00 PM

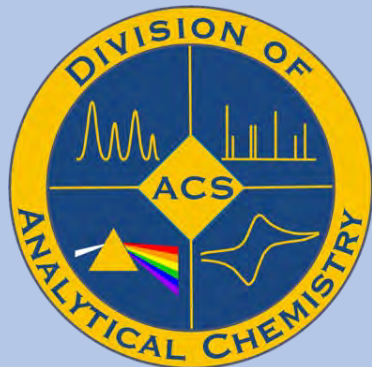


QUANTITATIVE MASS SPECTROMETRY FOR UNDERSTANDING EPIGENETIC MECHANISMS
Presented by:
Professor Benjamin A. Garcia, PhD, FRSC,
Washington University School of Medicine
Time: 3:00 - 4:00 PM

RSVP: scalacs.org

ACS Local Section
Southern California

DIVISION OF ANALYTICAL CHEMISTRY



The [Analytical Division](#) organizes programs for the spring and fall ACS Meetings, [Pittcon](#), the [SciX conference](#) and the [Eastern Analytical Symposium](#) (EAS). In addition, the Chromatography and Separation Chemistry subdivision addresses the issues of interest to its members. The division has a wide range of outreach programs including student travel grants and regional meeting support. Its award program includes undergraduate, graduate and professional awards. We welcome new members. Please join and/or volunteer to help with one or more activities.

THE CHEMISTS' CLUB

[The Chemists' Club](#) is excited to present the Fourth Annual Bonding Conference on **Wednesday, October 22nd from 6:00 – 11:00 PM** at the Liederkrantz of the City of New York! [The Bonding Conference](#), BondCon, includes networking, a DEI panel focused on LGBTQ+ in the chemical industry, and a reverse job fair where students present personal posters. Professionals please [register here](#); Students please [register here](#) (a poster presentation is required).

The Chemists' Club

The Fourth Annual

BONDING CONFERENCE

2024

A unique reverse job fair for students and professionals to engage in panel discussions and extensive networking

TOPIC
DIVERSITY, EQUITY AND INCLUSION IN THE CHEMICAL INDUSTRY

PANELISTS
Scott France, Merck
Jane Barry-Moran, Out Leadership
Cory Valente, Dow Chemical

MODERATOR

BONDCON.NYC
6:00 PM - 11:00PM
Tuesday, October 22, 2024
Liederkrantz of the City of New York
6 E 87th St, New York, NY 10128

Student Registration & Poster Submission
Professionals Registration

JOB BOARD

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

Tenure Track Assistant Professor of Chemistry – St. Joseph’s University

[Apply here](#)

Tenure Track Assistant Professor, Physical Chemistry – Adelphi University

[Apply here](#)

Two Tenure Track Faculty Positions in Chemical Engineering Department of Chemical and Biomolecular Engineering – New York University Tandon School of Engineering

Dean for the Sciences, CUNY Graduate Center

[Apply here](#)

Professor of Chemistry – Universite de Sherbrook

[Apply here](#)

Tenure Track Assistant Professor of Biochemistry – Lehigh University

[Apply here](#)

Assistant or Associate Professor in Computational Chemistry – Hofstra University

[Apply here](#)

[Apply here](#)

Assistant or Associate Professor of Organic Chemistry – Hofstra University

[Apply here](#)

Product Development Chemist I – Benjamin Moore

[Apply here](#)

Chromatography Scientist – Nouryon

[Apply here](#)

Senior Researcher – Nouryon

[Apply here](#)

Senior Manager, Quality Control – Regeneron

[Apply here](#)

Scientist II, Analytical R&D – Contract Pharmacal Corp

[Apply here](#)

Senior Chemist – Olaplex

[Apply here](#)



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Careers in Industry

Thurs., Oct. 3 • 12 pm ET