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Professor Jin-Quan Yu
2024 Creativity in Molecular Design and Synthesis Awardee
See pages 5 & 11



ACS Local Section
New York



ACS Local Section
North Jersey

NOVEMBER 2024

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THIS MONTH IN CHEMICAL HISTORY

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

Here is one more column about Nevil Sidgwick's 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. The following are some random jottings of items that caught my eye as I was browsing.

How many oxides of carbon exist (at the time of publication, 1950)? Apart from the obvious carbon monoxide and carbon dioxide there is carbon suboxide, O:C:C:C:O, C₃O₂, obtained by heating malonic acid with phosphorus pentoxide in vacuo. It is described as an evil-smelling gas boiling at -7°C that combines readily with water to regenerate malonic acid. There is also claimed the compound pentacarbon dioxide, C₅O₂ formed in very low yield when carbon suboxide is pyrolyzed at 200°C. It is fairly stable and has an extrapolated boiling point of 105°C. There is some doubt about this claim.

An extended discussion of aqueous ammonia concludes that in a 0.10M solution 46.2% of the solute is present as NH₃; 1.4% as NH₄⁺; and 52.4% as NH₄OH, this latter being presumably a relatively strongly hydrogen-bonded molecular complex of ammonia and water molecules.

The effect of traces of water on the volatilization of ammonium chloride is controversial. The chemist "intensive drying" Baker claims that perfectly dry ammonia does not react with dry hydrogen chloride; and dry ammonium chloride volatilizes as intact molecules and does not dissociate. However the conventional view, which now (1950) prevails is that the solid is the salt NH₄⁺Cl⁻ that breaks down in the gas phase completely to hydrogen chloride plus ammonia.

Hydrogen cyanide, despite its toxicity, has been the subject of many investigations. It melts at -13.4°C and boils at 25.6°C. It has a very high dielectric constant and is a good solvent for salts. The pure compound is probably completely in the HCN form, but the presence of traces of the HNC isomer cannot be completely ruled out. Large numbers of complex metal cyanides exist; the most remarkable are the octacyanides of molybdenum in the three oxidation states 3,4, and 5; and of tungsten in oxidation states 4 and 5. The cyanide is probably bonded through carbon to the metal in these complexes.

Among the oxides of nitrogen the least familiar is probably NO₃. This was made by the action of ozone on nitrogen pentoxide. It is very unstable but its solution in water is more stable. It is a strong oxidizer and its aqueous solution slowly decomposes to molecular oxygen and nitric acid. Its probable structure is ONO₂.

Ozone, O₃, is paramagnetic and on being cooled forms a dark blue liquid and solid. Below -158°C liquid oxygen and liquid ozone are partially immiscible and form two layers, one of which contains 30% of liquid oxygen. The ultraviolet absorption of ozone is as great as that of metal of similar density, so that the absorption of ultraviolet by the ozone in the upper atmosphere is equivalent to that of 3 sheets of gold leaf, each of thickness 1/10,000 mm.

Elemental sulfur vaporizes first as S₈ molecules. Above 800°C these decompose to S₂ possibly with S₆ as an intermediate. At 2000°C some single sulfur atoms are formed. Plastic sulfur formed by pouring molten sulfur into water is amorphous. By stretching it, like rubber, becomes crystalline. Presumably the tangled chains of sulfur atoms separate by being pulled.

I could go on and on – but enough is enough. I hope this sampling of a small fraction of the range of these volumes can convince you to go to the library and take a dip into the pages of this great chemistry book of the twentieth century.

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THE Indicator

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

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EDITORIAL DEADLINES

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| December 2024 | November 16, 2024 |
| January 2025 | December 16, 2024 |
| February 2025 | January 16, 2025 |
| March 2025 | February 16, 2025 |
| April 2025 | March 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.

November Calendar

NEW YORK SECTION

Thursday, November 7, 2024

Long Island Subsection

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Saturday, November 9, 2024

Frances S. Sterrett Environmental Symposium

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Saturday, November 9, 2024

1st Annual Chemistry of ³⁹Y⁸O³¹Ga Event

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Thursday, November 14, 2024

Westchester Chemical Society

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Board of Directors Meeting

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Long Island Subsection

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NORTH JERSEY SECTION

Wednesday, November 13, 2024

Executive Committee Meeting

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Thursday, November 14, 2024

NMR Topical Group Annual Symposium

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Thursday, November 21, 2024

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

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ADVERTISE IN THE INDICATOR

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DR. JIN-QUAN YU SELECTED AS THE 2024 AWARDEE FOR CREATIVITY IN MOLECULAR DESIGN AND SYNTHESIS

The Organic Topical Group of the New Jersey Local Section of the American Chemical Society proudly announces Professor Jin-Quan Yu has been selected as the 2024 Awardee for Creativity in Molecular Design and Synthesis. Professor Yu, the Bristol Myers Squibb Endowed Chair in Chemistry and the Frank and Bertha Hupp Professor of Chemistry at Scripps Research Institute is being honored for his *groundbreaking work in C-H bond activation*. Professor Yu's lab has made several significant advances in the efficiency, specificity, and practicality of palladium-catalyzed C-H functionalization. His laboratory has published over 300 peer-reviewed articles on a variety of C-H activation methods including a [seminal study](#) in 2023 showing that hydrogen bond acceptor ligands allowed arylation of C(sp³)-H alcohols. The symposium in his honor is described on page 11 of this issue.



NORTH JERSEY ACS TO HOST MARM 2025

A colorful promotional graphic for the NJACS 100th anniversary. The background is blue and filled with various chemical symbols, structures, and laboratory equipment like flasks and test tubes. The text "NJACS Celebrating" is written in a yellow, cursive font. Below it, the number "100" is displayed in large, black, outlined digits. Underneath "100", the words "Years of Chemistry" are written in a yellow, cursive font. At the bottom, the text "MARM 2025" is in large, bold, black letters, followed by "MAY 28-31, 2025" and "SETON HALL UNIVERSITY" in smaller black letters. The address "400 S ORANGE AVE, SOUTH ORANGE, NJ 07079" is at the very bottom in black text.

CHEMICAL & ENGINEERING NEWS INTERVIEW WITH NJACS' 2024 VOLUNTEER OF THE YEAR MARY C. OKORIE!

Check out the [Chemical and Engineering News interview](#) with one of our section's favorite volunteers and Younger Chemists Committee Co-Chair, Mary C. Okorie! Mary talks about YCC and other ways she has contributed to the section. Here is a photo of Mary (at left) and some of our other great volunteers, along with the chemists of tomorrow!



STAY CONNECTED WITH US!

-  <https://www.njacs.org/communities/>
-  njacs.youngerchemistscommittee@gmail.com
-  @njacsycc
-  @njacsycc
-  NJACS YCC Public Group Page

Serving the needs of early career chemists!



NJACS YCC SOCIAL MEDIA LINKS

Would you like to know more about [North Jersey ACS's Younger Chemists Committee](#)? Check out [this flyer](#) and the following social media links:

Email
njacs.youngerchemistscommittee@gmail.com

X (formerly twitter)
<https://x.com/njacsycc>

Facebook
[Younger Chemists Committee – NJACS](#)

Instagram
<https://www.instagram.com/njacsycc/>

MARIA ZEITLIN SELECTED AS THE NICHOLS FOUNDATION CHEMISTRY TEACHER AWARDEE FOR 2024

The New York ACS is proud to honor Maria Zeitlin of Smithtown High School East as the [2024 Nichols Foundation Chemistry Teacher Awardee](#). Inspired by a love of chemistry and research, Maria Zeitlin began her career as an analytical chemist with the Pall Corporation in the Pallscope Lab which provided fluid analysis for mobile military equipment such as aircraft carriers. A decision to leave the workforce to raise a family led to a different path. She later returned to her alma mater at Stony Brook University to earn a MAT in science education, and was hired as a high school chemistry teacher in the Smithtown Central School District. Having taught Regents Chemistry, Syracuse University Project Advance Chemistry, and now AP Chemistry, the commonality is an environment of mutual respect, safety, and individual responsibility as the foundation within the base of the structure of learning. Ms. Zeitlin is also the originator and coordinator of the THINK Discovery Science



Research Program at Smithtown High School East where she has mentored 4 Science Talent Search Finalists, 23 Science Talent Search Scholars (Semi-Finalists), 12 International Science & Engineering Fair Finalists, 3 National Genes in Space Finalists, along with many more regional and state science fair winners. A special passion of hers is scientific writing and her students excel in essay contests with a multitude of 1st place winners at the national level. Always looking for ways to use creativity in her curriculum, she also utilizes unique competitions such as the BioenergizeMe Infographic Challenge (1st Place) and the ACS Illustrated Poem Contest (2nd Place). The thread that connects all of her endeavors is a tremendous passion for science and an innate, genuine curiosity of the world around her. Recently trained for beamline science at Brookhaven National Lab, Ms. Zeitlin's students will now be able to use the power of the NSLS II for microplastic investigations. She also is the adviser of the ACS Chem Club, THINK Discovery Club, and the National Honor Society.



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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 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, November 13, 2024 (virtual)

2025 Planning Meeting, December 7, 2024

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



NORTH JERSEY ACS ELECTION RESULTS

The North Jersey ACS congratulates is newly elected 2025 officers. The Executive Committee extends a most sincere thank you to all the candidates and expresses its appreciation for their time and efforts on our behalf. The officers elected, and their terms of service are given below:

Chair-Elect for 2025 Mohammed R. Elshaer

Treasurer for 2025-2027 Amanda Peterson Mann

Councilors
for 2025-2027 Diane Krone
 Rob Menger
 Justyna Sikorska

Alternate Councilors
for 2025-2027 Lynda Box
 Cecilia Marzabadi
 Monica Sekharan



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NORTH JERSEY ACS NMR TOPICAL GROUP**The North Jersey ACS NMR Topical Group**

presents its

Annual NMR Symposium**November 14th, 2024****Crowne Plaza, Edison, NJ 08817**More information available on our website: <https://www.njacs.org/topical-group/nmr-spectroscopy/>The Symposium is FREE of charge to all attendees

Dinner: \$10 employed • \$5 student/unemployed/retired • Free for Speaker/Sponsor

All registered dinner attendees are automatically entered in our raffle to win gift cards up to \$50!!

Afternoon Sessions (1:00 – 5:00 pm EDT)**Thomas Theis**
NC State University**John M Franck**
Syracuse University**Flemming Hansen**
University College London**Darón Freedberg**
FDA**Happy Hour & Evening Keynote session (5:00– 7:15 pm EDT)****Robert Guy Griffin**
*MIT***Dinner (7:15-8:30 pm EDT)**

NORTH JERSEY ACS NMR TOPICAL GROUP (continued)**Program****Session 1 - (1:00 – 3:30 PM ET)**

1:00 – 1:05: Christine Jorge, 2024 Chair NJACS NMR Topical Group

Opening Remarks

1:05 - 1:50: Thomas Theis, NC State University

Hyperpolarization Chemistry and Spin Physics for Precision Measurement and Molecular Imaging

1:50 - 2:40: Flemming Hansen, University College London

Transforming and Analysing Complex NMR Spectra with Deep Neural Networks

Coffee Break (2:40 – 3:20 PM ET)**Session 2 – (3:20 – 5:00 PM ET)**

3:20 – 4:10: John M Franck, Syracuse University

Magnetic Resonance Techniques Illuminate Interfacial Water and its Role in Macromolecular and Nanoscale Chemistry

4:10 – 5:00: Darón Freedberg, FDA

Advancing glycan characterization in solution by NMR spectroscopy

Happy Hour! (5:00 – 6:00 PM ET)**Evening Keynote Presentation – (6:00 – 7:15 ET)**

Keynote Session 5:50 - 7:10: Robert Griffin, Massachusetts Institute of Technology

Atomic Resolution Structures of Amyloid Fibrils

Magic Angle Spinning (MAS), Dynamics Nuclear Polarization (DNP), Diamond Rotors, ¹H Detected ¹⁷O NMR

7:10 – 7:15: Rongfeng Zheng, 2025 Chair NJACS NMR Topical Group

Closing Remarks

Buffet Dinner & Raffle/Social (7:15 - 8:30 PM ET)

Register on the website here: <https://www.njacs.org/event/annual-nmr-symposium/>

We acknowledge the generous support of our sponsors:



Suraj Manrao Science Fund
Luciano Müller



NORTH JERSEY ACS ORGANIC TOPICAL GROUP



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.



NORTH JERSEY ACS ORGANIC TOPICAL GROUP (continued)**2024 NJACS OTG Award for Creativity in Molecular Design & Synthesis Symposium Schedule:**

| | |
|---------------|--|
| 9:00–9:15 | Prof. Joseph Badillo (Seton Hall University) <i>Welcoming remarks</i> |
| 9:15–10:00 | Dr. Jeremy Richter (Bristol Myers Squibb): <i>Discovery of a ROMKi Clinical Candidate for the Treatment of Heart Failure</i> Introduced by Dr. Vladislav Lisnyak (Bristol Myers Squibb) |
| 10:00–10:45 | Prof. Ramesh Giri (Pennsylvania State University): <i>Catalytic Transition Metal and Photoredox Catalysis for Difunctionalization of Alkenes</i> Introduced by Prof. Magnus Bebbington (Montclair State University) |
| 10:45–11:30 | Coffee break & student poster session |
| 11:30 – 12:15 | Dr. Dipa Kalyani (Merck): <i>Catalyzing Molecular Invention Leveraging Industry-Academic Collaborations</i> Introduced by Nadya Ackermanian (Montclair State University) |
| 12:15–1:30 | Lunch break |
| 1:30–2:15 | Dr. David Weinstein (Vividion): <i>Covalent First: A Chemoproteomic-Enabled Paradigm for Drugging Challenging Targets</i> Introduced by Joshua Korn-Heilner (Seton Hall University) |
| 2:15–3:00 | Prof. Keary Engle (Scripps Research): <i>Metal–Olefin Bonding and Reactivity: C–H Activation, Nucleometalation, and Beyond</i> Introduced by Dr. John Gurak (Bristol Myers Squibb) |
| 3:00–3:45 | Coffee break & student poster session |
| 3:45–3:55 | Prof. Joseph Badillo (Seton Hall University) <i>Presentation of the Award for Creativity in Molecular Design & Synthesis to Prof. Jin-Quan Yu</i> |
| 3:55–4:55 | Prof. Jin-Quan Yu (Scripps Research): <i>Wakening Pd(OAc)₂ for C–H Activation through Bifunctional Ligands: From Curiosity to Industrialization</i> |
| 4:55–5:00 | Prof. Joseph Badillo (Seton Hall University) <i>Concluding remarks</i> |

The Indicator is posted to the web 1ST of the month (September – June) at
<http://www.theindicator.org/>

NEW YORK SECTION MEETINGS

FINAL BOARD MEETING OF 2024

The final board meeting of 2024 will be held on **Monday, November 25, 2024** (hybrid). This meeting is open to all, but an RSVP for in-person attendance is required 5 days before the meeting.

All members who would like to attend should inform the New York Section office by emailing [Ms. Bernadette Taylor](#). Ping Furlan, Ph.D. will Chair the meeting starting at exactly 6:30 PM.



FINANCE COMMITTEE MEETING

The Finance Committee will meet on **Wednesday, November 20, 2024 at 6:45PM** (via Zoom) to deliberate over the 2025 budget. All subsections, topical groups, and committees of the New York ACS should remit their 2025 budget requests to the New York Section office by email to [Ms. Bernadette Taylor](#) by November 11, 2024.

WESTCHESTER CHEMICAL SOCIETY

The Biochemistry of Love



Speaker: **Eric Chang, Ph.D.**
Associate Professor,
Chemistry and Physical Sciences
Dyson College of Arts
and Sciences
Pace University
New York, NY

Date: **Thursday, November 14, 2024**
Place: via [Zoom](#)
Time: **7:30 PM**

[Download flyer here](#)

Abstract: What is love? Is it a feeling, a physiological response, or a series of chemical reactions? The answer is complex and still being debated by society and the scientific community, and we want you to contribute to the conversation! Join Dr. Eric P. Chang at Pace University to discuss the Biological and Chemical aspects of love through a mix of lecture and audience participation

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

DISTINGUISHED SYMPOSIUM HONORING DR. BENJAMIN F. CRAVATT AS THE 2025 WILLIAM H. NICHOLS MEDALIST

Professor Benjamin F. Cravatt, the Norton B. Gilula Chair of Chemical Biology in the Department of Chemistry at The Scripps Research Institute, will be fêted on **April 11, 2025** as the William H. Nichols Medalist for 2025. The Distinguished Symposium in his honor, entitled:

Advancing biology through innovations in chemistry

will feature lectures by:

Stavroula Hatzios, Yale University
 Tom Muir, Princeton University
 Damian Young, Baylor College of Medicine
 and
 Benjamin Cravatt, The Scripps Research Institute

Full details will be featured in an upcoming editions of [The Indicator](#) and on the [New York ACS website](#).



The William H. Nichols Award is generously supported by The Boston Foundation via the William H. Nichols Fund for Chemistry

LONG ISLAND SUBSECTION

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](#)

Abstract: This talk will focus on some of the chemistry of pyrroles, benzazepines, and quinolines. Pyrroles have been synthesized from azido dienes, but the corresponding reactions of structurally similar nitrodienes had not been investigated until it became the focus of our study. Using this approach, we were able to synthesize several biologically active pyrroles. We have also reported a synthesis of 2-aryl-3H-1-benzazepines, in one step from 2-haloanilines and acetophenone derivatives. The impetus for that study was the possibility of new and efficient preparations of biologically active 1-benzazepines. To achieve this, we tried to functionalize the C-3 position with NBS. Instead of the expected bromobenzazepine, the reaction underwent a ring-contraction to produce quinoline. NMR experiments at room temperature show that the 3H-benzazepines undergo fast conformational exchange on the NMR time scale unless there is an alkyl substituent at C5. We have synthesized a few benzazepine derivatives that have slowed down the rate of interconversion of conformational enantiomers to allow possible separation and characterization of atropisomers.

NEXT MONTH: 2024 HOLIDAY DINNER AND SEMINAR

Meteorites on the Ice: The Antarctic Search for Meteorites (ANSMET) 2023-2024 Field Season

Speaker: Dr. Jon M. Friedrich
Professor of Chemistry
Department of Chemistry and Biochemistry
Fordham University

Date: Thursday, December 5, 2024

Place: Nassua Community College
CCB Building, Room 252
via [Zoom](#)

Time: 6:00PM dinner followed by seminar



[Download flyer here](#)

LONG ISLAND SUBSECTION

2024 Frances S. Sterrett Environmental Chemistry Symposium

Saturday, November 9, 2024
9:00 AM – 1:45 PM

Berliner Hall Room 117
Hofstra University
Hempstead, N.Y. 11549-1000



Micro-Plastics: Macro-Problem?
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Find Information: <http://newyorkacs.online/sterrett/>

Registration (free): using the link [2024 LIACS-ECY](#)

Contact: [Dr. Paris Svoronos](#) – Symposium Chair



AMERICAN CHEMICAL SOCIETY ELECTION RESULTS


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International District Director
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 Institute of Chemistry
 Academia Sinica, Taiwan

Natalie A. LaFranzo
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 Vice President of Strategy
 LINUS Group

**Congrats to ACS's newly elected
 2025 officers and directors!**

December issue submission deadline is November 16th

SEMINAR SPEAKERS WANTED

The New York Section wants to add to our Speakers Bureau database of local speakers who are available for Section-wide seminars and symposia. If you have an area of research or interest that would provide an interesting talk appropriate for our Section members, and would like to be included in our Speakers Bureau, please send an email to [Ms. Bernadette Taylor](#) with the following information that will be posted on the Section's website: your name, affiliation, a seminar title, and 5-6 words briefly summarizing your area of specialty. We look forward to hearing from you about topics that you wish to share with your fellow members!

COMMITTEE ON THE HISTORY OF THE NEW YORK LOCAL SECTION

The New York Section has participated in the designation of seven National Historic Chemical Landmarks and four New York Section Historic Chemical Landmarks, as detailed on its [website](#). These landmark programs recognize achievements in the chemical sciences and related areas, in order to enhance public appreciation for the contributions of the chemical sciences to modern life.

Please consider making a nomination for a historic chemical landmark - be it an achievement, a building or association. Send your nomination, with supporting documentation, to [Dr. Neil Jespersen](#), Chair, Committee on the History of the NY Section.

FROM OUR PARTNERS

CHICAGO SECTION



The Chicago ACS Section welcomes participation at a virtual one-hour program scheduled for **Thursday, November 21, 2024 at 12 Noon CST / 1:00 PM EST**. Adam Sussman will give a presentation and answer questions on “Career Opportunities for Young Chemists in Intellectual Property”. Register [here](#) to receive the Zoom link. Adam is a Chicago Section member and Counsel at Crowell & Moring LLP.

SOUTHERN CALIFORNIA SECTION

The Southern California Section of the ACS is proud to host a virtual Research Symposium for High School Students, made possible by an ACS LSAC-Innovative Project Grant. This event offers a glimpse of what STEM research is about to students aspiring to become leaders in future innovations. Award winners at the 2024 ISEF will join local students in describing how their research projects were planned, and executed in the lab, how their collected data were analyzed, and how resulting conclusions supplement current know-how in solving real-world problems. Students are invited to choose any STEM-related topic and deliver a 15-minute presentation via Zoom.

[More info here](#)

CHROMATOGRAPHY FORUM OF DELAWARE VALLEY

NOVEMBER 18, 2024

The Chromatography Forum of Delaware Valley Events Series
Co-Sponsored by North Jersey Chromatography Group

DEVELOPMENT OF ADVANCED HYPHENATED SYSTEMS FOR ANALYTICAL MEASUREMENTS

Kevin Schug
Professor and the Shimadzu Distinguished Professor of Analytical Chemistry
Department of Chemistry and Biochemistry at The University of Texas at Arlington



Abstract

Complex samples present myriad challenges in terms of removal and characterization of impurities, the presence of multiple target analytes of interest, and the potential for matrix effects. Modern analytical instrumentation has become more modular in nature, which allows for the creation of on-line and custom systems that can be used to increase efficiency, recovery, throughput, and analyte coverage for complex mixture analysis. Two examples of advanced hyphenated systems will be presented. The first will be a multi-modal liquid chromatography system designed for characterization of polymeric drug delivery modalities. In one injection, both polymer degradants and other small molecule components can be monitored. Restricted access media is used to segregate different components on-line prior to independently operated size exclusion and reversed phase separation channels. The second is a commercial on-line supercritical fluid extraction – supercritical fluid chromatography instrument. This instrument has a broad application base, but because the on-line hyphenation includes loading of the extract plug directly on the analytical column, optimization of extraction and separation conditions to achieve efficient analyte determination is challenging. Multivariate and advanced surrogate optimization procedures are being explored to create more effective means for method development. This work explores the interface between advanced data science procedures and analytical system optimization to better capitalize on the broad application base offered by supercritical fluid technologies. Both instrumental arrangements involve the use of mass spectrometric detection.

EVENT TIMES
06:30 PM Social Hour
06:30 PM Dinner
07:00 PM Presentation

Location
Crowne Plaza Princeton
900 Scudders Mill Rd,
Plainsboro Township, NJ
08536

Free Registration and Refreshments will be provided.

REGISTER NOW! <https://cfdv.org/events/registration/130>




Presenting

HIGH SCHOOL STUDENTS RESEARCH SYMPOSIUM

November 2nd, 2024 • 9 am - 4:00 pm PT

OPPORTUNITIES

For High School Students & Teachers

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

For Undergraduates

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

For Graduate Students / Postdocs

ACS Polymer Division Henkel Award for Outstanding Graduate Research in Polymer Science & Engineering
[Due January 25, 2025](#)

For Professionals

The Dreyfus Prize in the Chemical Sciences
[Due December 5](#)
 Camille Dreyfus Teacher-Scholar Award
[Due January 30, 2025](#)
 ACS Polymer Division Distinguished Service Award
[Due January 31, 2025](#)

**The Indicator is posted
to the web 1ST of the
month at**

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



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



tiny url: <https://tinyurl.com/yz699ttf>
 Send Questions to: admissions@gc.cuny.edu



FOR FUTURE GRADUATE STUDENTS

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](#)

CALL FOR NOMINATIONS

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 at pcorfield@fordham.edu.

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](#)



OUTSTANDING COLLEGE CHEMISTRY TEACHING AWARDS – CALL FOR NOMINATIONS

The New York ACS proudly honors the dedication of college faculty in training the next generation of chemistry professionals with their Outstanding Chemistry Faculty Teaching Awards. These awards are presented annually to recognize highly effective teaching and inspirational leadership by chemistry faculty within the New York Section. There are five awards to be presented at the NYACS Sectionwide Conference on January 25, 2025. Each is presented based on the faculty member's employment status and institutional affiliation type. Click on these links to access the nomination packet. **Nominations are due November 15, 2024.**

- ❖ [Adjunct or Part-Time Chemistry Faculty \(new for 2024\)](#)
- ❖ [Full-time Lecturers and Instructional Faculty \(new for 2024\)](#)
- ❖ [Two-Year College Faculty](#)
- ❖ [Four-Year Undergraduate College / University Faculty](#)
- ❖ [Four-Year University with a Graduate School Faculty](#)

[Check out the New York ACS website for more details](#)

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.

Postdoctoral Position in Electrocatalysis – The City College of New York

[Apply here](#)

High School Science Teacher – Math, Engineering, and Science Academy

[Apply here](#)

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

[Apply here](#)

Chemistry Teacher (half-time) – Saint Ann's School

[Apply here](#)

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

[Apply here](#)

Assistant Professor – Physical Chemistry, Tenure-Track – Adelphi University

[Apply here](#)

Leadership Development Program for Graduating PhD Students – BASF

[Apply here](#)

Chemist, Analytical Characterization & Texture Science

[Apply here](#)

Senior Scientist, Purification – Merck

[Apply here](#)

Director, Small Molecule Analytical R&D GxP Strategic Lead – Merck

[Apply here](#)

Senior Chemist – The Assurance Group

[Apply here](#)

Senior Process Chemist – Exemplify Biopharma, Inc., a Symeres Company

[Apply here](#)

Scientist II-1, Fragrances – IFF

[Apply here](#)

Chromatography Scientist – Nouryon

[Apply here](#)

