

# THE Indicator

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NATIONAL  
CHEMISTRY  
WEEK 



ACS  
Chemistry for Life®

AMERICAN CHEMICAL SOCIETY

# FABULOUS FiFIBERS

THE CHEMISTRY OF FABRICS

**2022 • #NCW**  
OCTOBER 16-22



NATIONAL CHEMISTRY WEEK 2022

*See pages 5 & 12*



ACS Local Section  
New York



ACS Local Section  
North Jersey

OCTOBER 2022

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

## ***THIS MONTH IN CHEMICAL HISTORY***

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

In a recent column I warned you about a possible succession of physical organic chemistry texts that I plan to include in the “Great Books in Chemistry: 20<sup>th</sup>. century” series. Here we go with another celebrated volume: “Structure and Mechanism in Organic Chemistry” by C.K. Ingold, Professor of Chemistry, University College, University of London, published in 1953. This is another of the seminal chemistry texts based on the remarkable series of Baker Lectures presented at Cornell University. Ingold visited Cornell in Fall Semester of the 1950 – 51 academic year to present this lecture series. The final product was this 800- page tome covering, as I shall detail, most aspects of the chemistry of organic molecules undergoing homogeneous molecular reactions in their normal states.

(A personal note: I was a post-doctoral associate at Cornell from 1956 – 1958. In Spring 1957 the lecturer was Saul Winstein but no book was forthcoming, perhaps because of his early death. In Spring 1958 the lecturer was R.P. Bell on “The Proton in Chemistry” – also the title of the book based on his lectures. The Baker lectures were very well attended. The labs essentially shut down for the one or two hours a week of the presentations.)

When I was in undergraduate organic chemistry classes in the early 1950s we heard very little about physical organic chemistry. However the names of Hughes and Ingold did come up in the context of nucleophilic aliphatic substitution, along with the S<sub>N</sub>1 and S<sub>N</sub>2 symbolism. The two collaborators had been working on the mechanisms of these classes of reactions since the 1930s and had developed the S<sub>N</sub> taxonomy and a rationalization of mechanisms of these classes of reaction.

In Ingold’s list of acknowledgments in the book’s Preface there is a litany of mid-20<sup>th</sup>. century contributors to physical organic chemistry. In addition to Hughes there are J. F. Bunnett (Reed College); J. W. Baker (Leeds); J.D. Roberts (then at M.I.T.); and F. H. Westheimer (then at Chicago).

The first two Chapters of Ingold’s book give the background of valency and molecular structure; and interactions (forces) between and within molecules. This second Chapter presents an in-depth examination of the relative strengths of the forces detailed, a subject that Ingold had previously reviewed in detail in the early 1930s.

Physical properties at that early date were mostly based on macroscopic determinations of such parameters as electric dipole moments; heats of formation and reaction; electrical polarizability; and bond force constants from spectroscopy. An exploration of aromatic character moves from theory to physical properties with a detailed exploration of diamagnetic polarizability in unsaturated molecules; conjugated unsaturates; and aromatics. It is impressive to realize how far chemists of nearly a century ago could go in understanding molecular properties based on a handful of bulk-matter properties.

Two Chapters of about 100 pages each present what I characterize as the heart of the matter. The first on electrophilic aromatic substitution draws together masterfully the experimental evidence on this subject looking at electronic effects on the ratio of ortho- to para-substitution, and at steric effects in both the reagents and the substrates. Nitration serves as a model for this class of reaction, shedding light on halogenation, acylation, sulfonation, mercuration, hydrogen exchange (drawing on isotopic labelling experiments carried out in the early 1930s !), and diazo-coupling.

Nucleophilic substitution at saturated carbon atoms had been a long-term study of the Ingold and Hughes group, and its treatment in this text is complete and comprehensive. Polar effects, solvent effects, salt effects, and catalysis are all scrutinized and interpreted. The Walden inversion gets its due. And the effects of steric hindrance on both kinetics and thermodynamics of nucleophilic substitution are explored.

We are still less than half-way through this comprehensive volume and remaining topics include eliminations; rearrangements; additions to olefins; acids and bases; carboxyl reactions; and nucleophilic aromatic substitution. A ten-page index pays tribute to the thoroughness with which Christopher Ingold prepared the book. Almost every page is footnoted to the original sources.

Ingold (1893 – 1970) received many honors. Fellow of the Royal Society in 1926, he was knighted in 1958 for services to British scientific education.

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

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**EDITORIAL DEADLINES**

November 2022	October 16, 2022
December 2022	November 16, 2022
January 2023	December 16, 2022
February 2023	January 16, 2023
March 2023	February 16, 2023

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Address advertising correspondence to [Advertising Manager](#). Other correspondence to the [Editor](#).

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## October Calendar

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### NEW YORK SECTION

#### Friday, October 6, 2022

Younger Chemists Committee  
See page 4

#### Tuesday, October 6, 2022

Long Island Subsection  
See page 8

#### Sunday, October 16, 2022

National Chemistry Week Celebration  
See page 5

#### Thursday, October 20, 2022

Hudson-Bergen Subsection  
See page 6

#### Saturday, October 22, 2022

National Chemistry Week Celebration  
See page 5

#### Tuesday, October 25, 2022

Westchester Chemical Society  
See page 7

*also*

**Wednesday, November 9, 2022** Finance  
Committee Meeting

#### Saturday, November 19, 2022

Frances Sterret Environmental Symposium

#### Monday, November 21, 2022

Board of Directors Meeting

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### NORTH JERSEY SECTION

#### Wednesday, October 5, 2022

NJACS Chromatography Topical Group  
See page 10

#### Saturday, October 15, 2022

ChemExpo! at Liberty Science Center  
See page 5

#### Monday, October 17, 2022

North Jersey Executive Committee Meeting  
See page 9

#### Monday, October 24, 2022

NJACS NMR Topical Group  
See page 11


*also*

#### November 15, 2022

2022 Award for Creativity in Molecular Design &  
Synthesis  
See page 13

#### November 14 and December 12, 2022

North Jersey Executive Committee Meeting  
See page 9




YOUNGER CHEMISTS COMMITTEE  
(YCC) PRESENTS

## "HOPPY" HOUR NETWORKING EVENT

at Ebbs Brewing  
Includes Brewery Tour, Beer Tasting and  
Snacks

**DATE/TIME:  
THURSDAY, OCTOBER 6, 2022  
@ 6PM**

Location: Ebbs Brewery Co, Citi Field Taproom  
Cost: \$10 for age 21+ when you sign up by  
October 5rd  
(\$25 after October 3rd)  
Event is free for those under 21; non-alcoholic  
drinks/cocktails available  
\*Free event parking at Citi Field Lot C\*



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## NEW YORK SECTION MEETINGS

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<http://www.newyorkacs.online>

### NATIONAL CHEMISTRY WEEK 2022

#### *Back In Person for 2022*

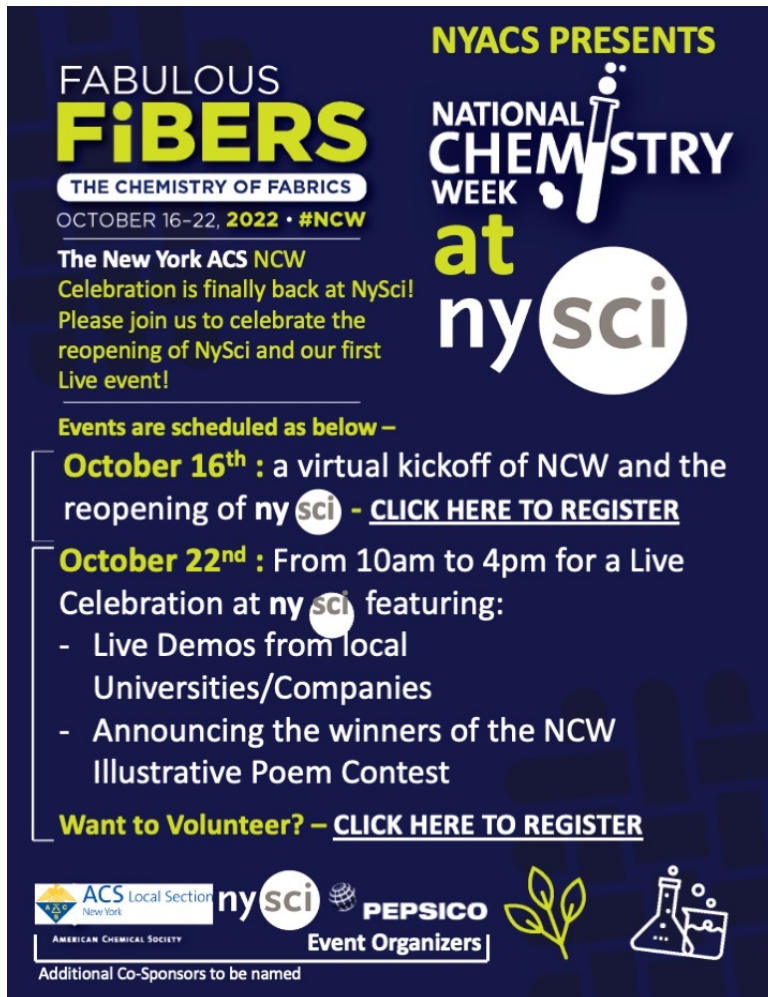
The New York ACS will celebrate National Chemistry Week in person this year. Three events are planned to highlight the theme of 'Fabulous Fibers: The Chemistry of Fabrics'.

First off, the New York ACS will have a virtual kickoff of National Chemistry Week at the reopening of the [New York Hall of Science \(NYSCI\)](#) on **October 16, 2022**. Register [here](#) for this free virtual event.

Second, the volunteers from local colleges, universities and companies will present live in-person chemical demonstrations at NYSCI on **October 22, 2022** from 10AM – 4PM.

Third, the NY ACS is also hosting an **illustrated poem contest** for K-12 students. Students are invited to write and illustrate a poem using this year's NCW theme, "Fabulous Fibers!" The local winner(s) will be forwarded to the national competition for a chance to be featured on the ACS website and to win prizes. Download the [entry form](#) and [email](#) your submission by **October 21, 2022**.

Lastly, you can download and share the magazine Celebrating Chemistry (at right in [English](#) and [Spanish](#)) which contains NCW 2022 themed articles, games and activities.



**NYACS PRESENTS**  
**FABULOUS FIBERS**  
 THE CHEMISTRY OF FABRICS  
 OCTOBER 16-22, 2022 • #NCW

**The New York ACS NCW Celebration is finally back at NySci! Please join us to celebrate the reopening of NySci and our first Live event!**

**Events are scheduled as below –**

**October 16<sup>th</sup>** : a virtual kickoff of NCW and the reopening of **ny sci** - [CLICK HERE TO REGISTER](#)

**October 22<sup>nd</sup>** : From 10am to 4pm for a Live Celebration at **ny sci** featuring:

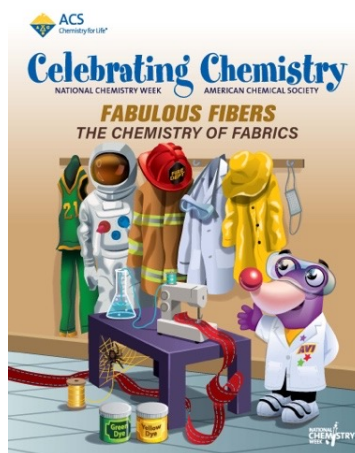
- Live Demos from local Universities/Companies
- Announcing the winners of the NCW Illustrative Poem Contest

**Want to Volunteer? – [CLICK HERE TO REGISTER](#)**

ACS Local Section New York | **ny sci** | PEPSICO  
 AMERICAN CHEMICAL SOCIETY | Event Organizers

Additional Co-Sponsors to be named

### Download Celebrating Chemistry ([English](#) / [Spanish](#))



## HUDSON-BERGEN CHEMICAL SOCIETY

### In celebration of National Chemistry Week

#### A Green Chemistry Approach to the Development of Novel Antibacterial Agents



**Speakers:** Dr. Margaret E. Kerr (above)  
Dr. Maura C. Pavao  
Worcester State University

**Date:** Thursday, October 20, 2022

**Place:** Via [Zoom](#) from Fairleigh Dickinson University

**Time:** 5:30 PM

**RSVP by October 13, 2022**

to [Dr. Mihaela Leonida](#)  
or [Mr. Thomas Drwiega](#)

**Abstract:** The present talk introduces the synthesis of antibacterial and antifungal complexes accomplished using a green method. Microwave synthesis is considered to be an effective and environmentally friendly system, particularly with the synthesis of imines. These can be synthesized either using water as a solvent or in a “solvent-free” environment. Imines and Zn(II) coordinated imines have been synthesized, creating a library of complexes to study. These complexes have been evaluated against various bacteria to determine their antibacterial activity using minimum inhibitory concentration (MIC) analysis. Bacteria tested include *Staphylococcus aureus*, *Streptococcus pyogenes*, *Klebsiella pneumoniae* and *Escherichia coli*.

**Bios:** Margaret E. Kerr, Professor of Chemistry, received her B.S. degree in Chemistry from the University of Maine and her Ph.D. from Wesleyan University in Middletown, CT (USA) in Inorganic Chemistry. She did post-doctoral research at the University of Florida and was offered a position as a Senior Staff Scientist at Fina Oil and Chemical in Houston, TX. She worked for two years developing metallocene catalysts for polypropylene synthesis before taking a position as a faculty member at Worcester State University in Worcester, MA. She is currently a Professor and Department Chair with a focus on research in green chemistry. She was awarded a Fulbright Senior Scholar Grant in 2007 to go to Thailand to promote green chemistry curriculum development at Chulalongkorn University in Bangkok. She has received the George Alden Excellence in Teaching Award and the Deans’ Lecture Award at Worcester State University.



Maura C. Pavao, Professor of Biology, received her B.S. degree in Biotechnology from Worcester Polytechnic Institute and her Ph.D. from Rutgers-The State University of New Jersey-New Brunswick in Microbiology and Molecular Genetics. She is a scientist with over ten years experience, teaching Microbiology, Fermentation Technology, and Process Development related courses. Interests include microbiome studies using chemostat systems and large-scale cultivation of plant and animal cells to produce recombinant proteins.

**WESTCHESTER CHEMICAL SOCIETY****SPECIAL HYBRID SEMINAR*****Ancient Pigments Gone Modern:  
Selected Stories of Pigment Evolution*****Speaker:** Mary Virginia Orna, Ph.D.**Date:** **Tuesday, October 25, 2022****Place:** Westchester Community College  
Gateway Center, Room 110  
75 Grasslands Road  
Valhalla, NY 10595  
or online via [Zoom](#)**Time:** 5:30 PM – Coffee Hour  
6:00 PM – Speaker

**Abstract:** Naturally occurring and synthetic ancient pigments have a history of use spanning thousands of years. Curiously, some of their newly discovered properties make them excellent candidates as semiconductors, anti-counterfeiting agents, and so much more. This talk will review their ancient roots in art and modern emergence as 21<sup>st</sup> century workhorses. You can never judge a pigment by its color alone.

**Bio:** Mary Virginia Orna is Professor of Chemistry, Emerita, The College of New Rochelle. She received her B.S. in chemistry from Chestnut Hill College and Ph.D. degrees from Fordham University in analytical chemistry. She has lectured and published widely in the area of color chemistry and archaeological chemistry. She has presented plenary lectures and named lectureships on at least a dozen different occasions and has been a long-time speaker on the roster of the American Chemical Society. She has been the recipient of numerous awarded including the ACS Pimentel Award and the CASE New York State Professor of the Year Award. She has authored numerous peer-reviewed articles, book chapters and encyclopedia articles, and has authored or edited 21 books. Her latest book, *March of the Pigments* (Royal Society of Chemistry) was released this past May 2022. She is presently Chair-Elect of the New York Section.

**WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AWARD  
CALL FOR NOMINATIONS**

The Westchester Chemical Society is now accepting nominations for the “[WCS Distinguished Scientist Award 2023](#)”. Scientists who live or work in Westchester or the Bronx qualify. The awardee is expected to attend the Awards Dinner (April/May time-frame) and to present aspects of his or her work. Self-nominations are acceptable. 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, 2023 to Dr. Peter Corfield at [pwrc@earthlink.net](mailto:pwrc@earthlink.net).

## LONG ISLAND SUBSECTION

### *Synthesis and Gelation Properties of Ammonium Carboxylate Salts of Stearic Acid, 12-Hydroxystearic Acid, and their Thiol- and Disulfide-Containing Derivatives*

**Speaker:** Danielle Beaupre  
Georgetown University

**Date:** **Thursday, October 6, 2022**

**Place:** Via [Zoom](#)

**Time:** 6:00 PM



**Abstract:** Molecules containing thiol and disulfide groups are ubiquitous in nature. They contribute to key biological functions, such as signaling cellular redox processes and regulating protein folding processes and conformations. More recently, synthetic thiol- and disulfide-containing materials have been used in a variety of other applications, such as to deliver anti-cancer drugs and as self-healing materials. The prevalence of these systems in nature, and their more recent adaptation to materials science derives from the relative ease of inter-conversion between the thiol (RSH) and disulfide (RSSR) forms. This talk will focus on the synthesis and gelation ability of thiol- and disulfide-containing low molecular weight organic gelators derived from 12-hydroxystearic acid (12-HSA), which is a well-known low molecular weight gelator. Low concentrations of gelator molecules in solution can self-assemble to form materials, which rheologically behave like solids. It remains difficult to predict which molecules are excellent gelators, and which solvents they will be able to gelate. Various intermolecular forces drive the self-assembly of gelator molecules within a liquid. Additional in-depth studies of the structure-property relationships that influence gelation are needed to facilitate prediction of which gelator molecules can gelate which solvents at which concentrations, temperature ranges, etc. The syntheses and properties of aggregates of a structurally related set of gelators--ammonium carboxylate salts of 12-HSA and of stearic acid (SA), and the thiol- and disulfide-containing derivatives of 12-HSA (12-TSA and 12-DSA)—will be the focus of this talk.

**Bio:** Danielle Beaupre is currently a chemistry Ph.D. candidate at Georgetown University in Washington, D.C. Danielle earned an associate degree in liberal arts at Manchester Community College in Manchester, CT. Thereafter, she majored in chemistry at the University of Connecticut, in Storrs, CT, where she earned her bachelor's degree (B.S.) in 2016. Danielle joined the lab of Prof. Richard G. Weiss at Georgetown University in 2016. Danielle's thesis research is focused on small molecules and polymers that contain thiol and disulfide groups, and she has recently authored a review on thiolated polymers and their applications.

## FINAL 2022 BOARD MEETING DATE

The date for the remaining 2022 Board Meeting of the ACS New York Section is **Monday, November 21, 2022** (hybrid) at Iona College ([directions](#)). The meetings are open to all members, but please RSVP to [Ms. Bernadette Taylor](#) by Wednesday, November 16, 2022 if you plan to attend. The meeting will start at exactly 6:30 PM.



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## NORTH JERSEY SECTION MEETINGS

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<https://www.njacs.org/>

### 2022 NORTH JERSEY EXECUTIVE COMMITTEE MEETINGS

2022 North Jersey ACS Chair Qi Gao and the Executive Council welcome you to our monthly NJACS meetings. All meetings will be held virtually until further notice. The meetings are normally held on **Mondays from 7 pm to 9 pm once per month**. All members are welcome to attend and become more involved in section activities.

The format for each meeting will be announced in preceding month's issue of The Indicator. For any additional information including a link to virtual meetings and RSVP deadline for in-person meetings, please [click here to email our Communications Chair](#).

October 17      November 14      December 12

### NORTH JERSEY SECTION CHAIR-ELECT & COUNCILOR ELECTIONS – VOTE NOW

It's time for you to decide which way our Section is going! The Executive Council has several open positions for dedicated volunteers to work to make our Section better in 2023! You can vote by email or by phone using the info on your ballot. Biographies of the candidates are available on the voting website.

The North Jersey Section ACS 2023 election will take place until **October 28, 2022**. Ballots were sent out by email from ACS-NJ Elections via [Vote-Now.com](#). *Please check your Spam folder if you cannot find your ballot.*

All current North Jersey ACS members should have received ballots on September 22nd. As a reminder, here is our candidate slate for the 2023 offices of Chair-elect as well as the multiple Councilor/Alternate Councilor positions available.

Chair-elect:

Lynda Box  
Sandra Keyser

Councilor/Alternate Councilor:

Mohammed Elshaer  
Elizabeth (Bettyann) Howson  
Michael Peddicord  
Kathleen Gilbert

### ACS ELECTIONS – VOTING CLOSES ON OCTOBER 21, 2022



While you are voting on the North Jersey ACS leadership, don't forget to vote in the ACS leadership election. You should have received an email from ACS Election Coordinator [noreply@directvote.net](mailto:noreply@directvote.net) on or about September 26<sup>th</sup>. Check your email and vote today.

**NORTH JERSEY CHROMATOGRAPHY GROUP'S ANNUAL VIRTUAL SYMPOSIUM*****The Role of Chromatography – Biologics Characterization******Featuring Keynote Address***

The Role of Chromatography in Protein  
Biopharmaceutical Analysis  
*Dr. Koen Sandra*  
*Research Institute of Chromatography*  
*Ghent University*

***Symposium Speakers***

Enabling online determination of the size-dependent RNA Encapsulation of  
lipid nanoparticle-based RNA formulations  
*Dr. Xiujuan Jia, Merck*

*Two-Dimensional Liquid Chromatography (2D-LC) for the Characterization of  
Biotherapeutics: Case Studies*  
*Dr. Zhi Chen, Bristol-Meyers Squibb*

*Automated Multicolumn screening combined with Fraction Collection for Native  
Protein-Based Separation and Analysis of Biopharmaceuticals*  
*Dr. Rodell Barrientos, Merck*

*Recent Advancement in Peptide Multi Attribute Method: Improvement on  
Chromatographic Performance for CQA Peptides*  
*Dr. Ying Qing Yu, Waters*

**Date:** **Wednesday, October 5, 2022**

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

**Time:** 1:00 PM – 4:30 PM

The North Jersey Chromatography Group is holding their Annual Virtual Symposium on October 5<sup>th</sup> from 1 pm to 4:30 pm featuring Dr. Koen Sandra of RIC and Ghent University presenting on The Role of Chromatography in Protein Biopharmaceutical Analysis and other invited talks by pharmaceutical and analytical experts. The symposium is free and we have planned a raffle with gifts as well! Please [visit the NJCG website](#) for more information and [click here to register!](#)





## The North Jersey ACS NMR Topical Group

*presents its*

# Annual NMR Symposium

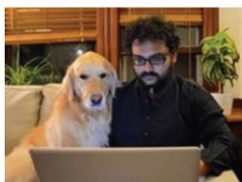
**October 24<sup>th</sup>, 2022**

**Frick Chemistry Building, Princeton University, Princeton, NJ 08544**

More information available on our website: <http://www.njacs.org/nmr-spectroscopy-topical-group>

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### *Afternoon Session (1:00 – 5:15 pm EDT)*



**Hari Arthanari**  
*Dana-Farber*

**Kevin Gardner**  
*CUNY - ASRC*



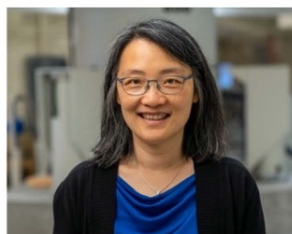
**Tatyana Polenova**  
*U. Delaware*

**Frank Delaglio**  
*NIST*



**Lauren Marbella**  
*Columbia U.*

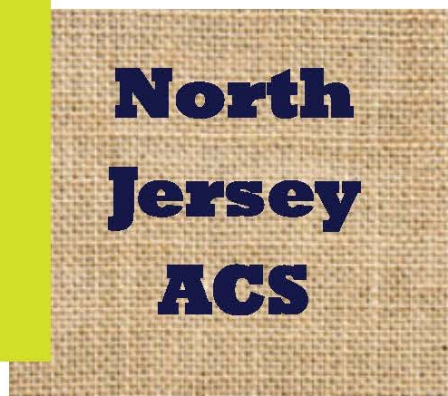
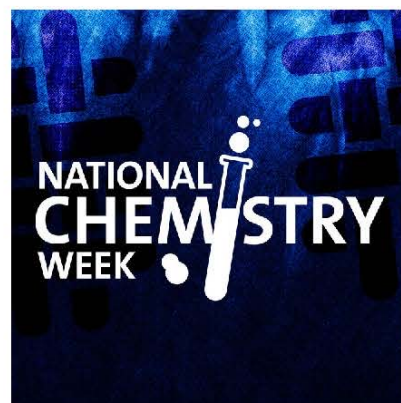
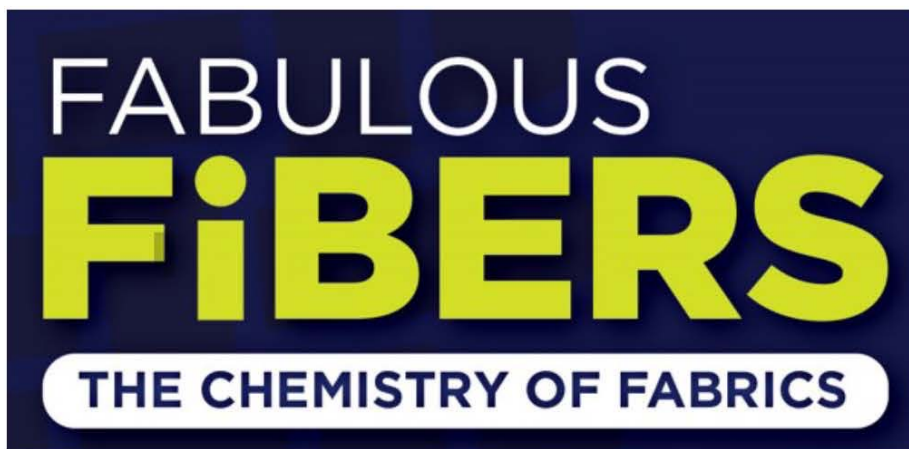
### *Evening Keynote session (5:30– 6:45 pm EDT)*



**Mei Hong**  
*MIT*

*Dinner (7:00 – 8:30 pm), Frick Chemistry Atrium*

\*\*\*\*\*



**What: Hands-on activities for children, ages 5 and up**

**When: 10/15/22, 12-4**

**Where: Liberty Science Center**

Learn about the chemistry of fabrics!

**How much:  
Free with LSC  
admission**



**NORTH JERSEY YOUNGER CHEMISTS COMMITTEE**ACS  
Chemistry for Life®**Follow us**

The NJACS Younger Chemists Committee welcomes everyone to the new Fall semester! If you are a younger chemist (under 35 years old), enjoy networking, early-career resources, and volunteering opportunities, please reach out to find out how to get involved! The committee is looking to coordinate a co-hosted meeting with the WCC for a Seminar and Networking event later this semester. We are also volunteering as a group for the Liberty Science Center for the Annual ChemExpo this month (see flyer on Page 12). Our committee meeting will be meeting virtually later this month to discuss any updates and plans for this academic year; if interested, please contact us via [email](#) for the meeting link!

**NORTH JERSEY AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS**

**ACS NORTH JERSEY SECTION**  
AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS  
NOVEMBER 15, 2022 | 9:00 AM - 5:00 PM EST

**SCAN**



**ME**



**PROF. CHRISTINA WOO**

Harvard  
"Chemical biology studies of the thalidomide binding domain of cereblon"



**PROF. CAROLYN R. BERTOZZI**

Stanford  
"New therapeutic modalities from bioorthogonal chemistry"



**DR. LISA MARCAURELLE**

GSK  
"DNA-Encoded Libraries as a Powerful Tool in Drug Discovery"



**PROF. ELLEN SLETTEN**

UCLA  
"Exploring fluoro: fluorine and fluorescence in chemical biology"



**PROF. MOHAMMAD SAYEDSAYAMDOST**

Princeton  
"Cryptic Natural Products as a New Source of Pharmaceutical Leads"



**DR. WU YANG**

BMS  
"The Discovery of Milvexian (BMS-986177/3NJ-70033093): An Inhibitor of Factor XIa with Phase 2 Results for Antithrombotic Therapy"

**THE PALACE AT SOMERSET PARK**  
333 DAVIDSON AVE, SOMERSET, NJ 08873  
**QUESTIONS?**  
yalanxing218@gmail.com

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## MEETING REPORTS

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### *Minority Affairs Committee Reaches Out to NYC School for Career Day*



The NY ACS presented the video (click thumbnail above to view on YouTube) for Career Day to 8<sup>th</sup> and 10<sup>th</sup> Grade Students at the Institute for Collaborative Education NYICE (a public middle/high school open to all students in NYC) on May 26, 2022. The video, an original idea from the Minority Affairs Committee of the NY Section, was conceived to encourage middle and high school students from diverse backgrounds to consider chemistry-focused careers. The video was directed, filmed, and edited by Sally Lomidze and Michael Zhonga (recent TV, Radio, and Emerging Media graduates from Brooklyn College – CUNY). The video was produced by Dr. Maria Contel (Professor of Chemistry, Brooklyn College CUNY and chair of the Minority Affairs Committee). The casting includes chemists from diverse backgrounds and working in government, industry, and academia: Dr. Jasmine Hatcher-Lamarre (Assistant Scientist, Brookhaven National Laboratory) Dr. Keyla Lazardi (Scientific Chief Officer, Revlon) and Dirk Trauner (Professor of Chemistry at New York University).

*Wow! What an amazing opportunity for our students to be exposed to careers in science. The speakers were kind and thoughtful and provided great insight to the students. Particularly on how to get experience and internships in science not just in college but as soon as this summer and through high school.*

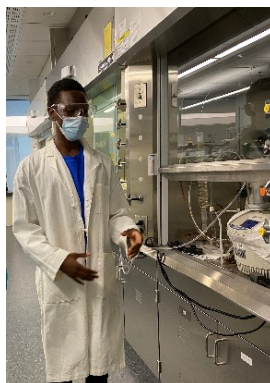
*- Daniel Zucker (NYICE Science Professor)*

The presentation of the video was followed by a conversation on chemistry careers between students and all the members of the ACS NY Local Section Minority Affairs Committee (Dr. Daniel Amarante, Associate Professor of Practice at Stony Brook University, Dr. Maria Contel, Dr. Naphtali O'Connor Professor of Chemistry at Lehman College, CUNY, and Ruben Savizky, Associate Dean of Academic Affairs and Professor of Chemistry at Copper Union) as well as Dr. Brian Gibney (Professor, Brooklyn College CUNY and ACS NY Local Section Diversity, Equity, Inclusion and Respect grantee). The conversations were facilitated by NYICE science professors Daniel Zucker and Daniel Clarke. The ACS NY Local section will be distributing the link to the video to all middle, and high schools in NYC in the Fall of 2023.

## North Jersey Project SEED in-person research resumes after two summers of virtual camp



Joy Okaro & Alexander Luna  
Kean University



David Onyegbule  
Rutgers-Newark



Dayannara Vilcarino  
Seton Hall University

SIXTEEN students from nine different high schools, sponsored by the North Jersey Section, ACS, were part of the Project SEED in-person research this summer. Students were engaged at Kean University, Seton Hall University, Stevens Institute of Technology, Columbia Medical Center, and three campuses of Rutgers University: Newark (SAS), New Brunswick (SEBS), and Piscataway (Busch). The event culminated with a Poster Symposium hosted at Seton Hall University on September 10, 2022.



### 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](mailto:bernadette.taylor@nysection.org) 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](http://www.nysection.org). 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](mailto:neil.jespersen@nysection.org), Chair, Committee on the History of the NY Section.



## Nanoscience Approaches to Cancer

October 7, 2022  
 9:15AM – 2:00PM via Zoom  
[Click here to Register](#)

<p><b>Rational Design of Nanocarriers for Cancer Immunotherapy</b>  <a href="#">Song Li, MD, Ph.D.</a>                  University of Pittsburgh</p>	<p><b>TBA</b>  <a href="#">Warren Chan, Ph.D.</a>                  University of Toronto</p>
<p><b>When Nanoscience throws surprising insights into cancer biology</b>  <a href="#">Shiladitya Sengupta, M.Sc., Ph.D.</a>                  Harvard Medical School</p>	<p><b>Improve Clinical Success of Anticancer NanoMedicine by Correcting Flawed Design</b>  <a href="#">Duxin, Sun, Ph.D.</a>                  University of Michigan</p>
<p><b>Using an Omics Approach to Accelerate Drug Delivery</b>  <a href="#">Natalie Boehnke, Ph.D.</a>                  University of Minnesota</p>	<p><b>A Hybrid Imaging Technique to Visualize Breast Cancer Intratumor Heterogeneity</b>  <a href="#">Carolina Salvador Morales, Ph.D.</a>                  National Cancer Institute</p>
<p><b>Silver-chalcogenide nanoparticles as multi-modal theranostic agents for breast cancer</b>  <a href="#">David Cormode, D.Phil.</a>                  The University of Pennsylvania</p>	

### FREE VIRTUAL SYMPOSIUM

The [Brooklyn College Cancer Center](#) and the CUNY [Advanced Science Research Center](#) are excited to offer a FREE symposium entitled “Nanoscience Approaches to Cancer”. Experts in government and academic institutions will present their most recent advances in using nanoscience to battle cancer in all its forms. The topics range from the diagnosis, to the imaging and the treatment of cancer.

**Date: OCTOBER 7, 2022**  
 Time: 9:15AM – 2:00PM via Zoom

[Download flyer](#)  
[Register here](#)

## ABSTRACT SUBMISSION DEADLINE OCTOBER 17, 2022



The ACS National Spring Meeting will take place **March 26-30, 2023**, in **Indianapolis, IN**. The meeting will be hybrid (in-person and virtual). Make sure to submit your Abstract in time.

[Abstract submission deadline is October 17, 2022](#)



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## Call for Nominations

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### **OUTSTANDING COLLEGE CHEMISTRY TEACHING AWARDS**

The New York Section is seeking nominations for the following three Outstanding College Teaching Awards awards whose purpose is to recognize, encourage and stimulate high-quality teaching and research:


[Outstanding Two-Year College Chemistry Teaching Award](#)

[Outstanding Four-Year Undergraduate College and University Chemistry Faculty Teaching Award](#)

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

**Nominations are due October 15, 2022.**

Candidates need not be members of the ACS. Awardees will be recognized with a major award plaque at the Sectionwide Conference in January 2022. Unsuccessful nominations remain active for three years and updating is encouraged. For more information about the award along with a list of former award recipients, please visit the [website](#).




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## Grant Opportunities

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### **ACS PETROLEUM RESEARCH FUND**

Proposals for fundamental research in the petroleum field will be accepted starting on September 19, 2022.

**DUE OCTOBER 14, 2022**

[Learn more](#)

### **SCIENCE CAFÉ MINIGRANTS**

\$500 to facilitate discussions of current topics between scientists and non-scientists in a relaxed, open venue.

**DUE OCTOBER 15, 2022**

[Learn more](#)

### **GLOBAL INNOVATION IMPERATIVES GRANT**

Up to \$20,000 for multi-day forum/conference that contributes to the resolution of global sustainability issues.

**DUE NOVEMBER 1, 2022**

[Learn more](#)

### **LOCAL SECTION DIVERSITY, EQUITY, INCUSION AND RESPECT (DEIR) GRANT**

Up to \$3,000 to foster inclusiveness and participation within local sections, and to support interactions with other local sections, divisions, committees and other professional associations or community groups.

**DUE NOVEMBER 12, 2022**

[Learn more](#)

**The Indicator is posted  
to the web 1<sup>ST</sup> of the  
month at**

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

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## OPPORTUNITIES

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### ***For High School Students & Teachers***

Ciba Travel Award in Green Chemistry

[Due October 9](#)

ChemClub Community Activity Grant

[Due November 1](#)

James Bryant Conant Award in High School Chemistry

[Due November 1](#)

### ***For Undergraduates***

Joseph Breen Memorial Fellowship

[Due October 9](#)

Ciba Travel Award in Green Chemistry

[Due October 9](#)

SMART Scholarship-for-Service Program

[Due December 1](#)

### ***For Graduate Students / Postdocs***

Joseph Breen Memorial Fellowship

[Due October 9](#)

Ciba Travel Award in Green Chemistry

[Due October 9](#)

National Research Council Research Associateship Program

[Due November 1](#)

Truman Fellowship - Sandia National Laboratory

[Due November 1](#)

SMART Scholarship-for-Service Program

[Due December 1](#)

### ***For Professionals***

Joseph Breen Memorial Fellowship

[Due October 9](#)

Young Industrial Polymer Scientist Award

[Due October 21](#)

ACS Division of Analytical Chemistry Younger Chemists Conference Travel Grants

[Due November 1](#)

The Dreyfus Prize in the Chemical Sciences

[Due December 1](#)

**THE PAEMST  
2022-2023  
APPLICATION CYCLE  
HAS LAUNCHED!**

Nominate a 7-12th grade STEM teacher today!

[WWW.PAEMST.ORG](http://WWW.PAEMST.ORG)

**Awardees receive:**  
a certificate signed by the President;  
a \$10,000 award from NSF;  
a trip to D.C.; and  
join a national cohort of more than 5,200 teachers.

**SMART**  
Scholarship-for-Service  
Program

Apply Aug 1 – Dec 1

STEM students can earn full tuition and a rewarding career with the Department of Defense.

[smartscholarship.org](http://smartscholarship.org)

[Learn More](#)

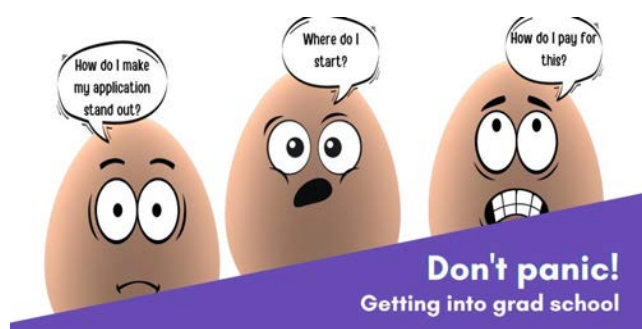
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## Councilor's Caucus

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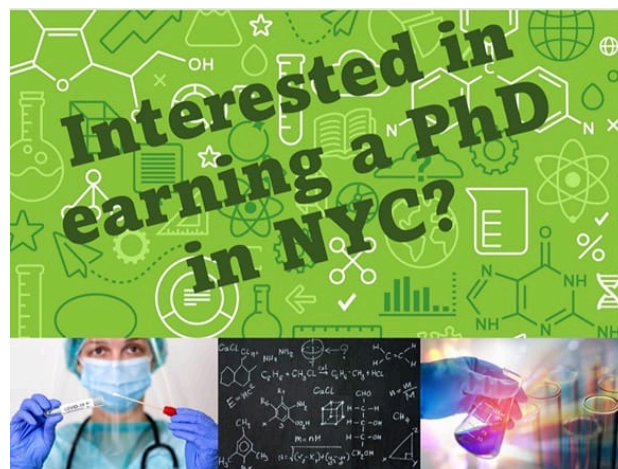
The Council of the American Chemical Society met virtually on August 24, 2022 to conduct the business of the Society. The North Jersey and New York Councilors discussed and voted on a variety of issues and resolutions. The Councilor Talking Points can be downloaded [here](#).

**Deadline for submitting articles for the  
November issue is October 16, 2022**

**THINKING ABOUT GRADUATE SCHOOL? THINGS TO KNOW**

The ACS is offering a free [webinar](#), Don't Panic: Getting into grad school, on **October 9, 2022** at **2:00 PM**. Join Profs. Sam Pazicni and Michelle Boucher to learn the ins-and-outs of getting into graduate school. You will learn:

1. There are [an array of diverse opportunities](#) for graduate studies in chemistry, biochemistry, materials science and engineering that are tailored to your interests and career objectives. These include the [professional science master's](#), the master's degree, and the doctoral degree.
2. Self-assessment is critical. The [ChemIDP](#) to a valuable self-assessment tool to evaluate your skills, skill needs, and motivation for graduate study.
3. Undergraduate research and/or industrial experience are not required for admission to graduate school, but can strengthen your application.
4. [The ACS Bridge Program](#), part of the national [Inclusive Graduate Education Network](#) project, offers students from underrepresented groups an alternative method to apply to post-baccalaureate training and graduate school.



## 4 Fridays Zoom Chats with the Chemistry PhD Program

Sept 9, Sept 30, Oct 28 and Dec 16  
11:00am – 12:00pm

### Agenda

- What makes a good graduate School application?
- Is this a good time to start graduate school?
- How do you get funding for a PhD?
- What kinds of jobs do CUNY graduates get?

Register in advance for this meeting:

<https://us02web.zoom.us/join/register/tZlpc--orDIpH9z0SVEw2IM9WGuU2Ohjvw-h>

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Inclusive Graduate Education Network

## DIVERSITY, EQUITY, INCLUSION & RESPECT

### WOMEN CHEMIST COMMITTEE 95<sup>th</sup> ANNIVERSARY CELEBRATION

Please join the ACS Women Chemists Committee for the webinar: “Women Chemists of Color National Chemistry Week Networking Event” on Friday, **October 21, 2022** from 3:00-4:00 p.m. ET. A special panel of renown women chemists who will lead discussions on exploring and implementing self-care strategies as women of color in chemistry; being your authentic self in your professional life; and building your army for the battle between cultural expectations and career advancement. Come connect with your peers in the chemical enterprise, hear inspiring stories, and exchange information. [Click here to register](#) via Zoom.



### Networking Event: Women Chemists of Color Celebrating National Chemistry Week



#### Breakout Room Topics:

1. Exploring and implementing self-care strategies as a woman of color in chemistry
2. Being your authentic self in your professional life
3. Building your army for the battle between cultural expectations and career advancement

**REGISTER HERE:** <https://american-chemical-society.zoom.com/meeting/register/tZcud-CprT0iE9RcAAfA7WVIF176M0GiBu3Y>

## PROMOTING EQUITY AND DIVERSITY IN CHEMISTRY 2022

Join the Indiana Local Section Committee of Minority Affairs, the ACS Committee on Chemists With Disabilities, and the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers for their virtual Promoting Equity and Diversity in ChemisTry (PREDICT) symposium to celebrate and amplify minority voices in STEM!

This virtual event will feature professionals in industry and academia, student talks as well as a panel discussion with members of the Chemists with Disabilities Committee.

**Date:** Thursday, October 14, 2022  
**Place:** Via [Zoom \(register here\)](#)  
**Time:** 8:00 AM – 12:30 PM



The ACS IN Local Section Committee of Minority Affairs Presents:



Promoting Equity and Diversity In ChemisTry

### PREDICT SYMPOSIUM 2022

Oct 14<sup>th</sup>, 2022 | 8:00 am -12:30 pm  
Virtual

Join us for a virtual symposium to celebrate and amplify minority voices in STEM!  
Featuring professionals in industry and academia, student talks and a panel with the Chemists with Disabilities Committee.

#### Registration is open!

<https://forms.gle/tXNTRTGdRGsbyhd98>

Check us on social media



For more information



<https://sites.google.com/view/acs-predict/>

Questions? Contact Carolina Vega (cguimara@iu.edu)

**NEWS FROM OUR PARTNERS****REGISTER NOW FOR THE  
EASTERN ANALYTICAL SYMPOSIUM**

Registration for the Eastern Analytical Symposium is open and the 2022 Preliminary Program is available. Check out the technical sessions, short courses, special lectures, workshops, student seminars and the in-person exposition. Register by **October 15, 2022** for discounted rates.

[Register here](#)

**SUSTAINABILITY: GREEN CHEMISTRY, UPCYCLING, BIODIVERSITY,  
SOCIAL PROGRESS, CIRCULARITY**

Join the New York Society of Cosmetic Chemists on **October 12, 2022** for a symposium on sustainability in the cosmetics industry. This in-person event is starts at 10:30 AM and ends with a happy hour at 6:30 PM at the picturesque Lake Room of the Central Park Boathouse.

[More info online](#)

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

***The Hudson Valley Science Café*****The Science of Magic**

**Speaker:** Dr. Willie K. Yee, Life Member, Society of American Magicians, Solar System Ambassador

**Place:** [Temple Hill Tavern & Catering](#)

**Time:** 6:00 Dinner / Drinks  
7:30 Speaker

**Cost:** \$3.00 plus food/beverage (reservations required)

RSVP to [Toby Rossman](#) by October 24, 2022

***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.

**QC Chemist – Evergreen Theragnostics**

[Apply here](#)

**Principal Scientist, Chemistry – Merck**

[Apply here](#)

**Lead Formulations Chemist – Enecon**

[Apply here](#)

**Synthetic Chemist, Tire and Rubber Silanes, Momentive**

[Apply here](#)

**Product Development Synthetic Chemist, Momentive**

[Apply here](#)

**Biocatalysis Chemist – International Flavors & Fragrances**

[Apply here](#)

**Tenure-track Assistant Professor of Chemistry – Stony Brook University**

[Apply Here](#)

**Tenure-track Assistant Professor of Chemistry (Organic & Physical) at Iona College**

[More info](#)

**Assistant Professor of Chemistry (Biochemistry)– New York University**

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## American Chemical Society – New York Section, Long Island Subsection 2022 Frances S. Sterrett Environmental Chemistry Symposium

Saturday, November 19, 2022; 10:00 AM – 12:00 PM; on Zoom

<http://newyorkacs.online/sterrett/>

*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).*

### Agenda

- 10:00 **Welcome Remarks**  
Dr. Paris Svoronos, *Symposium Chairperson*  
Dr. Kathleen Kristian, *2022 ACS-NY Chairperson*  
Dr. Qi Wang, *2022 ACS-LI Chairperson*
- 10:05 **Dr. Dimitrios Katehis**  
Wastewater Resource Recovery in the Circular Economy
- 10:30 **Dr. Ping Y. Furlan**  
Magnetically Recoverable and Reusable Nanocomposites for Water Treatments
- 10:55 **Dr. Charles E. Taylor**  
Chemistry of Decarbonizing Combustion and Propulsion Systems
- 11:20 **Dr. Kevin Kolack**  
Moving an Introductory Environmental Chemistry Course Online Using the American Chemical Society's "Chemistry in Context"
- 11:35 **Dr. Laura Schramm**  
Current Trends in Environmental Chemistry Education at an Urban Comprehensive Private University
- 11:50 **Closing Remarks**  
Dr. Mary Virginia Orna, *2023 ACS-NY Chair-Elect*  
Dr. Terrence Black, *2023 ACS-LI Chair-Elect*

### Speakers



#### Dr. Dimitrios Katehis

Executive Director of Operations  
Bureau of Wastewater Treatment, NYC  
Department of Environmental Protection



#### Dr. Ping Y. Furlan

Professor  
United States Merchant Marine Academy



#### Dr. Charles E. Taylor

Retired Supervisory Scientist  
National Energy Technology Laboratory



#### Dr. Kevin Kolack

Lecturer  
CUNY  
Queensborough Community College



#### Dr. Laura Schramm

Director of Environmental Studies  
St. John's University



**ACS** Local Section  
New York  
Long Island Subsection

**Registration** (free): using the link [2022 LIACS-ECY](#)  
**Contact:** [Dr. Paris Svoronos](#) – Symposium Chairperson