

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



ACS Local Section
New York



ACS Local Section
North Jersey

THIS MONTH IN CHEMICAL HISTORY

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

Continuing my very personal and idiosyncratic review of the Great Books in Chemistry of the 20th. century I come to yet another physical organic chemistry text. Perhaps this would be a good time to reiterate my call to my readers; if you have any favorites for this list please send your recommendations to me. They will be given serious consideration provided that I can get hold of a copy. My choice for this month is "Rates and Equilibria of Organic Reactions" by John. E. Leffler of Florida State University, and Ernest Grunwald of Bell Telephone Laboratories Inc. This book was published by Wiley in 1963. It seems that the first seven decades of the 20th. century was something of a golden age for physical organic chemistry.

The subtitle of the work indicates that the treatment will be by statistical, thermodynamic, and extrathermodynamic methods and it begins with a remarkable Apologia quoted from the philosopher Bertrand Russell: "Unless we can know something without knowing everything, it is obvious that we can never know something." Clearly Leffler and Grunwald believe we can know something. In their preface they outline their approach to the subject and I quote: " Organic reactions usually involve complex molecules reacting in the liquid phase. The theoretical analysis of their rates and equilibria is necessarily less exact than that of small molecules reacting in the gas phase...the starting point is a macroscopic or thermodynamic analysis to which is added just enough microscopic detail to allow explicitly for structural and medium effects." And the text delivers on this promise in 450 pages.

After a 6-page glossary of symbols (!) the opening chapter dives right into equilibrium from a statistical point of view, that is equilibrium as an exercise in probability. Naturally, this includes applying Boltzmann distributions to chemical systems starting with a consideration of the configurations of 1,2-dichloroethane. This leads to a discussion of partition functions for various systems. It is clear right from the start that Leffler and Grunwald take the physical aspects of physical organic chemistry much more in depth than either Hammett or Ingold do in previous texts I have discussed in this series.

In addition to expected chapter headings including "Equilibrium and the Gibbs Free Energy", "Free Energy, Enthalpy, and Entropy", "Concerning Rates of Reaction", and "Rates of Interconversion of Subspecies", all treated in physical terms and occupying the first third of the book, the authors then embark on extrathermodynamic relationships. Chapter 6 is a theoretical introduction to this concept. Not the least of the pleasures in reading this book are the epigraphs that adorn each chapter. That for Chapter 6 is by Havelock Ellis and begins: "For even the most sober scientific investigations in science (sic), the most thoroughgoing positivist cannot dispense with fiction..."

The authors then go on to examine the fictions, or simplifying models, that are essential in trying to explain trends in reactivity in organic reactions. An example is trying to separate substituent effects and medium (solvent) effects. They consider such reactions as rearrangements of aminotriazoles, hydrolyses of esters catalyzed by imidazoles, and epoxidation of stilbenes. Another aspect of this modeling process is the existence of simple additivity rules in explaining properties of molecules containing several substituents.

The extrathermodynamic interpretations go on to examine, in two chapters, free-energy relationships, considering first substituent effects and then medium effects. A concluding chapter on extrathermodynamic effects analyses enthalpy and entropy changes.

The last chapter in this stimulating book is unusual in discussing mechanochemical effects, a subject that is currently receiving much attention. The authors review reports of these effects in liquid phase reactions including effects of viscosity changes in mechanical polymer degradation. An example of a reaction in a crystalline matrix is the transformation of phenolphthalein from colorless to red upon the application of either pressure or shearing forces. They also discuss thermodynamics and reactions of fibrous polymers.

I do not know (perhaps you do) of a text that explores in a more rigorous way the physical aspects of physical organic chemistry, and that is why Leffler and Grunwald belongs in the canon of Great Books in Chemistry of the 20th century.

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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

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

The Indicator (ISSN 0019-6924) is published on-line monthly except July and August by the New York and North Jersey Local Sections of the American Chemical Society, Office of Publication.

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<https://www.acs.org/editmyprofile>.

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

November Calendar

NEW YORK SECTION

Thursday, November 3, 2022

Long Island Subsection
See page 7

Wednesday, November 9, 2022

Finance Committee Meeting
See page 9

Saturday, November 19, 2022

Frances S. Sterrett Environmental Symposium
See page 10

Monday, November 21, 2022

Board of Directors Meeting
See page 7

SAVE THE DATE

Friday, December 9, 2022

Nadrian C. Seeman Memorial Symposium
See page 11

NORTH JERSEY SECTION

Tuesday, November 1, 2022

NJ Mass Spectrometry Discussion Group Meeting
See page 5

Monday, November 14, 2022

North Jersey Executive Committee Meeting
See page 5

Tuesday, November 15, 2022

2022 Award for Creativity in Molecular Design & Synthesis Symposium
See page 6

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NORTH JERSEY SECTION MEETINGS

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](#).

November 14

December 12

2023 NORTH JERSEY OFFICER ELECTION RESULTS

The North Jersey Section is pleased to announce the 2023 election results.

2023 Chair-Elect:

Sandra Keyser

2023-2025 Councilors:

Bettyann Howson, Mohammad Elshaer, & Michael Peddicord

2023-2025 Alternate Councilor:

Kathleen Gilbert

Congratulations to our newly elected leaders for 2023! Interested in 2024 leadership positions in the North Jersey section?

Attend the Executive Board meetings each month they're open to all Section members!

- Contact our [Communications Chair](#) for details!
- Read [The Indicator](#) and check out [our website](#) to stay current with our events
- Volunteer for events and activities by contacting an Executive Board member or filling out this [interest form](#)

NORTH JERSEY MASS SPECTROMETRY DISCUSSION GROUP

Decade by Decade: An Historical Review of Mass Spectrometry and ASMS in the Second Half of the 20th Century

Speaker: P. Jane Gale, Ph.D.
ASMS Archivist / Historian

Date: **Tuesday, November 1, 2022**

Place: Somerville Elks Lodge 1068
375 Union Avenue
Bridgewater, NJ 08807

Program: 4:30 PM Social Time (cash bar)
6:00 PM Complimentary Dinner
7:00 PM Invited Speaker

[Registration is free](#)



NORTH JERSEY ORGANIC TOPICAL GROUP

The North Jersey Section ACS' Organic Topical Group presents

Prof. Carolyn Bertozzi-
Stanford University
 with the
2022 Award for Creativity
in Molecular Design

on **Tuesday, November 15, 2022**. A full-day symposium in her honor include talks by luminaries including Prof. Christina Woo (Harvard), Prof. Ellen Sletten (UCLA), Prof. Mohammad Sayedsayamdost (Princeton), Dr. Lisa Marcaurelle (GSK) and Dr. Wu Yang (BMS). This full-day symposium also features a poster session and the Award Address by Prof. Bertozzi.

Date: **Tuesday, November 15, 2022**

Time: 9:00AM – 5:00PM

Place: The Palace at Somerset Park
 333 Davidson Ave.
 Somerset, NJ 08873

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

SCAN 

 PROF. CHRISTINA WOO Harvard <i>"Chemical biology studies of the thalidomide binding domain of cereblon"</i>	 PROF. CAROLYN R. BERTOZZI Stanford <i>"New therapeutic modalities from bioorthogonal chemistry"</i>	 DR. LISA MARCAURELLE GSK <i>"DNA-Encoded Libraries as a Powerful Tool in Drug Discovery"</i>
 PROF. ELLEN SLETTEN UCLA <i>"Exploring fluoro: fluorine and fluorescence in chemical biology"</i>	 PROF. MOHAMMAD SAYEDSAYAMDOST Princeton <i>"Cryptic Natural Products as a New Source of Pharmaceutical Leads"</i>	 DR. WU YANG BMS <i>"The Discovery of Milvexian (BMS-986177)/NJ-70033093: An Inhibitor of Factor XIa with Phase 2 Results for Antithrombotic Therapy"</i>

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

Did you know ?

Smaller colleges in New Jersey and New York are eligible for the Spectroscopy Society of Pittsburgh's College Equipment Grants Program



+



Click here to apply by December 10 for up to \$5000

NEW YORK SECTION MEETINGS

BOARD MEETING DATES FOR 2022

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.



NEW YORK ACS OFFICER ELECTIONS

The continuing success of the New York Section's programs relies on the exemplary service of a cadre of dedicated volunteers as well as by collegial leadership. The NYACS sees nominations for its 2023 Officers to lead the Section in fulfilling its mission.

Candidates for following elected offices, with terms beginning on January 1, 2024, are being sought:

- Chair-Elect
- Treasurer
- Councilor
- Alternate Councilor
- Director at Large

The duties and responsibilities of each position are detailed in the New York ACS [Job Manual](#). Please send nominations to Chair-Elect [Mary Virginia Orna](#).

LONG ISLAND SUBSECTION

Understanding the function and failure of batteries through operando X-ray diffraction



Speaker: Dr. Hao Liu
Department of Chemistry
Binghamton University

Date: Thursday, November 3, 2022

Place: Via [Zoom](#)

Time: 6:30 PM

[Registration is free](#)

Abstract: Rechargeable batteries are electrochemical cells that store energy for a wide variety of applications, including portable electronics, electric vehicles, and renewable power sources. Major advances in battery technology in the past three decades owe to the commercialization and development of Li-ion batteries, which offer superior energy and power density to conventional batteries. To make batteries that last longer, charge faster, and cost less, it is important to understand how they work and why they fail. As a non-invasive structural probe, operando X-ray diffraction allows for the interrogation of reactions inside a working battery. In this talk, I will present applications and recent developments of operando X-ray diffraction in the study of Li-ion batteries. Examples of fast charging, capacity degradation, and reaction heterogeneity will be discussed.



DR. MARIE MAYNARD DALY TO BE HONORED WITH A NATIONAL HISTORIC CHEMICAL LANDMARK

SAVE THE DATE

The [New York Section of the American Chemical Society](#) (NYACS) proudly announces that Dr. Marie Maynard Daly, the first African American woman to earn a Ph.D. in chemistry, is being honored with an [ACS National Historic Chemical Landmark](#) at her alma mater, Columbia University.

A landmark ceremony is planned for Friday, May 19, 2023, at Columbia University, and the NYACS invites you to attend in honor of Dr. Daly's singularly significant achievement. This landmark celebrates [Diversity, Equity, Inclusion and Respect](#), a core value of the ACS. Details for registration will be forthcoming.

The NYACS is currently accepting tax-deductible donations to support this event ([click here](#)).

COMMITTEE ON THE HISTORY OF THE NEW YORK LOCAL SECTION

Over the past twenty-five years the New York Section has participated in the designation of seven, soon to be eight, 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.

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FINANCE COMMITTEE MEETING

Subsection, Topical Group and Committee Chairs – Don't forget to submit your budget requests for 2023 by the **November 1st** deadline. These requests will be discussed by the New York ACS Finance Committee at their meeting on **November 9, 2022** at 6:00 PM. The budget proposal for 2023 will then be sent to the Board of Directors for approval.



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LONG ISLAND SUBSECTION

The Long Island Subsection (LIACS) proudly presents the 2022 Frances S. Sterrett Environmental Chemistry Symposium which is dedicated to presenting the public with up-to-date, factual scientific information on environmental topics. This year's virtual event features a total of five speakers that have been selected to discuss a plethora of topics including wastewater resource recovery, water purification, decarbonization, and the state of environmental science education at the undergraduate level from local colleges and universities.

Date: **Saturday, November 19, 2022**

Time: 10:00AM – 12:00PM

Place: Virtual via Zoom

[Register here](#)

2022 FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM

Agenda

- 10:00 AM **Welcoming Remarks**
Dr. Paris Svoronos, Symposium Chair
Dr. Kathleen Kristian, 2022 ACS New York Section Chair
Dr. Qi Wang, 2022 ACS Long Island Subsection Chair
- 10:05 AM **Wastewater Resource Recovery in the Circular Economy**
Dr. Dimitrios Katehis, Executive Director of Operations,
Bureau of Wastewater Treatment,
NYC Department of Environmental Protection
- 10:30 AM **Magnetically Recoverable and Reusable Nanocomposites
for Water Treatments**
Dr. Ping Y. Furlan, Professor, United States Merchant Marine Academy
- 10:55 AM **Chemistry of Decarbonizing Combustion and Propulsion Systems**
Dr. Charles E. Taylor, Retired, National Energy Technology Laboratory
- 11:20 AM **Moving an Introductory Environmental Chemistry Course Online
Using the American Chemical Society's "Chemistry in Context"**
Dr. Kevin Kolack, Lecturer, CUNY Queensborough Community College
- 11:35 AM **Current Trends in Environmental Chemistry Education
at an Urban Comprehensive Private University**
Dr. Laura Schramm, Director of Environmental Studies
St. John's University
- 11:55 AM **Closing Remarks**
Dr. Mary Virginia Orna, 2023 ACS New York Section Chair-Elect
Dr. Terrence Black, 2023 ACS Long Island Subsection Chair-Elect

NEW YORK ACS NANOSCIENCE DISCUSSION GROUP


NADRIAN C. SEEMAN MEMORIAL SYMPOSIUM

Rosenthal Pavilion, NYU Kimmel Center
December 9, 2022 | 9:00 AM– 5:00 PM

Event	Time	Name
Welcome & Coffee	9:00 AM	
Introduction	9:20 AM	Andy Hamilton <i>New York University</i>
Session Chair 1		Jim Canary <i>New York University</i>
Speaker 1	9:30 AM	Paul Chaikin <i>New York University</i>
Speaker 2	10:00 AM	Greg Petsko <i>Harvard Medical School</i>
Speaker 3	10:30 AM	Hao Yan <i>Arizona State University</i>
Coffee Break	11:00 AM	
Session Chair 2		Simon Vecchioni <i>New York University</i>
Speaker 4	11:30 AM	Lulu Qian <i>California Institute of Technology</i>
Speaker 5	12:00 PM	Tim Liedl <i>University of Munich</i>
Lunch	12:30 PM	

Event	Time	Name
Session Chair 3		Yoel P. Ohayon <i>New York University</i>
Speaker 6	2:00 PM	Hanadi Sleiman <i>McGill University</i>
Speaker 7	2:30 PM	William Shih <i>Harvard Medical School</i>
Speaker 8	3:00 PM	Chengde Mao <i>Purdue University</i>
Coffee break	3:30PM	
Session Chair 4		Phil Lukeman <i>St. John's University</i>
Speaker 9	4:00 PM	Ruojie Sha <i>New York University</i>
Speaker 10	4:15 PM	Risheng Wang <i>Missouri University</i>
Speaker 11	4:30 PM	Xing Wang <i>UIUC</i>
Speaker 12	4:45 PM	Bryan Wei <i>Tsinghua University</i>
Closing	5:00 PM	Bobby Arora <i>New York University</i>
Reception/ Open Mic	5:15 PM – 7:00 PM	

Sponsors: ISNSCE, NYU President's Office, NYU Dean for Science, NYU Department of Chemistry, New York Nanoscience Discussion Group, ACS New York Section

MEETING REPORTS

NJACS HOSTS SUCCESSFUL CHEMEXPO IN CELEBRATION OF NATIONAL CHEMISTRY WEEK

Contributed by Sandra Keyser

In partnership with Liberty Science Center, North Jersey ACS hosted the 28th annual ChemExpo on October 15, 2022 in celebration of National Chemistry Week. Over 1500 visitors to the Liberty Science Center in Jersey City, NJ had the opportunity to engage in demonstrations related to the theme of “Fabulous Fibers: The Chemistry of Fabrics” with over 60 volunteers.



Caldwell College student Adam discusses the effects of pH on the handkerchiefs dyes as child sprays the acidic solution



Children race each other as they transfer water using different fabrics with Drew University students

College students from New Jersey City University (NJCU), Essex County College, New Jersey Institute of Technology, Drew University, Seton Hall University and Caldwell College (shown above) as well as high school students from J.P. Stevens High School and Princeton International School of Mathematics and Sciences (PRISMS) brought engaging activities to the visitors of Liberty Science Center.



Seton Hall students are eager to discuss natural dyes with the Liberty Science Center visitors



Children paint with natural dyes with NJIT

Children used natural dyes to color yarn for their own bracelets with Seton Hall, changed the color of dyes using acids and bases with Caldwell College, raced against each other using fabrics of different absorbency to transfer water with Drew, observed how dyes absorb and spread on fabric using alcohols, painted with natural dyes with NJIT, and examined different fibers under microscopes with J.P. Stevens and PRISMS. NJCU provided a variety of experiments, showing differences between natural and synthetic fibers under a microscope, processing and recycling plastic materials into fibers, and testing hydrophobic fabrics with water. The Younger Chemists Committee also returned this year to provide support, greeting Liberty Science Center visitors with stickers and tattoos and providing assessments of the various groups as judges.

Judges Kathleen Gilbert, Debra Hazard-Sweet, Bettyann Howson, Tiffany Olivera, and Mary Okorie evaluated the demonstrations and selected the winners for the college competition with Miriam Gulotta as the judging coordinator. Both J.P. Stevens and PRISMS were provided a \$50 award. For the *Sister Marian José Smith Undergraduate Public Outreach Award*, the second place monetary award of \$175 was given to NJIT and first place of \$250 went to NJCU for the second year in a row!



Child examines Nylon under a microscope with PRISMS



Child adds alcohol to diffuse the fabric dyes with Essex County College students

Financial support from the NJACS made the event possible. The event was also successful due to the support of the volunteers, NJACS members, chemistry teachers at the participating school, leadership at Liberty Science Center, and the ChemExpo 2022 Steering Committee: Marilyn (Bobbi) Gorman, Miriam Gulotta, Kathleen Gilbert and Sandra Keyser.

CALL FOR NOMINATIONS

ACS Fellows

The [American Chemical Society Fellows Program](#) recognizes ACS members for outstanding achievements in and contributions to science, the profession, and the Society. Both the North Jersey ACS and the New York ACS are seeking candidates to nominate for ACS Fellow honors. Please email the respective Section representative for more info.



[North Jersey ACS](#)
[New York ACS](#)

DUE January 1, 2023

WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AWARD

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.

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DUE NOVEMBER 12, 2022

[Learn more](#)

NEW YORK ACS SEEKS SEMINAR SPEAKERS

The New York Section wants to add to add you 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!

OPPORTUNITIES

For High School Teachers

ChemClub Community Activity Grant

[Due November 1](#)

James Bryant Conant Award in High School Chemistry

[Due November 1](#)

For Undergraduates

ACS International Research Experience for Students (IRES) Program

[Due December 15](#)

I.M. Kolthoff Enrichment Awards for Undergraduates

[Due January 9, 2023](#)

ACS Scholars Program

[Due March 1, 2023](#)

For Graduate Students / Postdocs

SMART Scholarship-for-Service

[Due December 1](#)

Merck Research Award

[Due December 15](#)

Heh-Won Chang, PhD Fellowship in Green Chemistry

[Due December 31](#)

Nina McClelland Memorial Award

[Due December 31](#)

For Professionals

ACS Division of Analytical Chemistry Younger Chemists Conference Travel Grants

[Due November 1](#)

The Dreyfus Prize in the Chemical Sciences

[Due December 1](#)

The ACS offers FREE career counseling via [virtual office hours](#) (12 to 1 pm every Thursday) in which you can engage in mock interviews, have your resume reviewed, learn how to improve your LinkedIn profile, and speak with a Career Consultant for general counseling.

This week's topic: **Securing an Internship**

Date: **Thursday, November 3, 2022**

Time: Noon ET

[Register here](#)

Next Month: Careers in Academia

ANNOUNCING THE NINA McCLELLAND MEMORIAL AWARD

Win \$2,000 and present your postdoctoral research at the 27th Annual Green Chemistry & Engineering Conference.

Apply by December 31, 2022.



WORKFORCE OR GRAD SCHOOL?

[Professional development and career planning](#) can never be started too early. If you are an undergraduate STEM major, at some point you will have to answer the question 'Do I want to join the workforce or enroll in graduate school to continue your studies?'. The ACS offers a variety of resources to help inform your decision.

One of the first steps you should take is to complete a [ChemIDP](#), an Individual Development Plan designed specifically for chemists. As you work through your ChemIDP, you will explore potential careers, find out the skills you have and those you need to develop further, and develop a plan to achieve your professional goals.

[The Graduate School Reality Check](#) is also useful as you consider advanced study. It provides insightful articles about how to lay the groundwork for graduate study, how to assemble your most competitive application and what to expect as a graduate student. It also reinforces the need for self-reflection embedded in the ChemIDP to ensure that graduate school is right for you.

Since the PhD is a research degree, having some experience as an undergraduate researcher is desirable. You may work with faculty at your college/university, and you can also explore other areas of research at another institution. These might be industrial internships, [like the one advertised at right](#), or academic summer undergraduate research programs ([NSF REU](#), [NIH SURF](#), [NIST SURF](#) which will be detailed in future issues of The Indicator). There are many opportunities that allow you to explore your interests, expand your skillset, and inform your career plans.

If you are interested in industrial internships, please see page 19 of this issue for a free webinar on '[Securing an Internship](#)'.



PHARMACEUTICAL COMPANIES OF *Johnson & Johnson*

Global Summer Internship Program

Gain exposure to drug discovery and development in the pharmaceutical industry with a 12-week paid internship during the summer with Janssen Oncology Research & Development.

When: Mid May - Mid August (*start dates are flexible*)
Where: Choice of Virtual, Hybrid, or On-Site
Locations: Raritan/Somerville, NJ; Springhouse, PA

Program Consists of:

- 10-week "Bench to Beside" Lecture Series
- Challenging and Engaging Projects in Clinical, Discovery, Translational Research, Pharmacovigilance, and other functional areas
- Networking Opportunities
- Team Building
- One-on-One Mentorship 
- Supplied Laptop
- Housing Stipend Available (based on eligibility) 

Qualifications:

- Undergraduate college students with completion of a minimum of four semesters
- Currently enrolled in a biology, chemistry, pre-med, nursing program, biochemistry, genetics, immunology, or similar fields
- Graduate students must be pursuing a master's, PharmD or PhD degree
- Must have a minimum cumulative GPA of 3.0
- Good verbal and written communication skills
- Good presentation skills; leading presentations to peers, project teams and senior leadership teams
- Working knowledge and or experience using key Microsoft suite of business tools including but not limited to Outlook, Excel, PowerPoint, Word, Teams, Slack, SharePoint, OneNote, etc.

Internship Program Co-Leads Contact Information:



Eunice Artis

 LinkedIn



Nikki DeAngelis

 LinkedIn

Email Address: oncologyinternshipprogram@its.jnj.com

Learn more about J&J internships here: <https://www.careers.jnj.com/internship>

NEWS FROM OUR PARTNERS**EASTERN ANALYTICAL SYMPOSIUM – SPECIAL LECTURES****KEYNOTE LECTURE***Making Progress with Social Justice and Sensing*

Dr. Rachel Burks, American University

Monday, November 14, 4:15 PM**BREAKFAST LECTURE***The Dark Side of Science: Misconduct in Research*

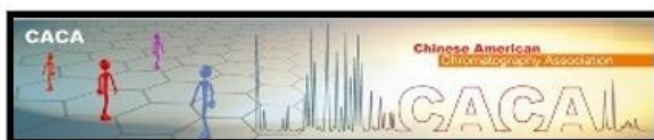
Dr. Elisabeth Bik, Habers Bik LLC

Tuesday, November 15, 8:00 AM**PLENARY LECTURE***Engineering Phage to Grow and Assemble Materials for Energy, the Environment and Medicine*

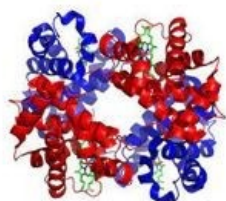
Professor Angela Belcher, Massachusetts Institute of Technology

Wednesday, November 16, 11:45AM[Full program](#)**JOINT CHROMATOGRAPHY FORUM OF DELAWARE VALLEY & NORTH JERSEY CHROMATOGRAPHY GROUP EVENT AT EASTERN ANALYTICAL SYMPOSIUM**

Please join the [North Jersey Chromatography Group](#) as they and the [Chromatography Forum of Delaware Valley](#) sponsor a FREE dinner and presentation on “[Capillary Electrophoresis with Integrated Enzyme Analyses](#)” by [Lisa Holland of West Virginia University](#) on **Monday November 14th** at 6:30PM the [2022 Eastern Analytical Symposium](#) held at the [Crowne Plaza in Plainsboro](#). Fees for attending the 2022 EAS are provided [here](#), with discounted rates for students.

CHINESE AMERICAN CHROMATOGRAPHY ASSOCIATION

**High-Resolution Accurate Mass (HRAM) Mass Spectrometry:
A Vital Tool for the Development of Modern and Future Medicines**



**CACA Webinar
Laurence M. Brill,
BioAgilytix**



**Nov 9, 2022, Wed, 12:00 PM ET
Nov 10, 2020, Thur., 0 am, Beijing Time**

Dr. Laurence M. Brill, Director,
Large Molecule LCMS, BioAgilytix

PUGET SOUND LOCAL SECTION

The Puget Sound Section is celebrating the 95th Anniversary of the ACS Women Chemists Committee with a talk by the recipient of the 2022 ACS Francis P. Garvan-John M. Olin Medal, and University of Washington Professor, Dr. Anne McCoy. Dr. McCoy was recognized for her distinguished service to chemistry by women chemists



W DEPARTMENT OF CHEMISTRY
UNIVERSITY of WASHINGTON



Speaker: Dr. Anne McCoy
Department of Chemistry
University of Washington

Date: **Thursday, November 29, 2022**
Place: Via [Zoom](#)
Time: 7:00 PM (ET)



Contact Despina Strong: strongdespina@gmail.com

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



Société de Chimie Industrielle

Founded 1918

Megatrends, Innovation, and Sustainability in the Personal Care Industry

Featuring Marcelo Lu (BASF), Joe Lupia (Elementis Global) & Peter Tsois (The Estée Lauder Companies)

Wednesday, November 16, 2022

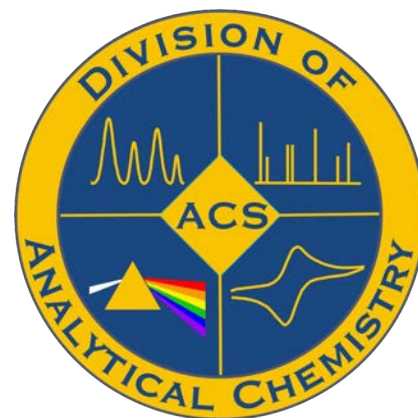
11:30AM - 2:00 PM EDT

The Yale Club

50 Vanderbilt Ave

[Register here](#)

The [Analytical Division](#) is the third largest division of the American Chemical Society. It organizes programming at the spring and fall ACS meetings, [Pittcon](#), the [SciX conference](#) and the [Eastern Analytical Symposium](#) (EAS). The ANYL Division website provides a variety of information and member services, including the [Analytical Sciences Digital Library](#). 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. This member oriented and directed group works for you! We welcome new members. Please join and/or volunteer to help on one or more activities.



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 for inclusion.

High School Substitute Teacher – The Dalton School

[Apply here](#)

Assistant Professor, Biochemistry, Bioanalytical, Biophysics – Brooklyn College

[Apply here](#)

Assistant Professor in Chemistry, Inorganic/Physical – Manhattan College

[Apply here](#)

Assistant Professor, Biochemistry (broadly defined) – Fordham University

[Apply here](#)

Assistant Professor in Organic Chemistry – New Jersey Institute of Technology

[Apply here](#)

Assistant Professor, Environmental Analytical Chemistry – Lehman College

[Apply here](#)

Patent Agent – Chemistry – Foley Hoag

[Apply here](#)

Research Scientist, Biochemistry – Chemeleon

[Apply here](#)

Senior Scientist – Momentive

[Apply here](#)

Senior Scientist, SAS Physical Chemistry - Estée Lauder Companies

[Apply here](#)

Analytical Chemistry, Senior Analytical Chemist - Exemplify BioPharma

[Apply here](#)

Senior Scientist, Fabric Care Technical Development - Firmenich

[Apply here](#)

Director, instrument Development – Gemological Institute of America

[Apply here](#)

Senior Scientist – Merck & Co., Inc.

[Apply here](#)