



New York ACS Officer Elections  
*See page 9*



**ACS** Local Section  
New York



**ACS** Local Section  
North Jersey

MAY 2024

Vol. 105 • No. 5

ISSN 0019-6924

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

**THE INDICATOR****Editor**

DR. BRIAN GIBNEY

[brg33@newyorkacs.org](mailto:brg33@newyorkacs.org)**Associate Editor**

DR. KATHLEEN GILBERT

[kgilbert@njacs.org](mailto:kgilbert@njacs.org)**Acting Advertising Manager**

DR. NEIL JESPERSEN

Phone 516-883-7864 • Cell: 347-658-9898

[jespersn@stjohns.edu](mailto:jespersn@stjohns.edu)**INDICATOR COMMITTEE****Chair**

DR. BRIAN GIBNEY

[brg33@newyorkacs.org](mailto:brg33@newyorkacs.org)**New York Section Representative**

DR. NEIL JESPERSEN

[jespersn@stjohns.edu](mailto:jespersn@stjohns.edu)**North Jersey Section Representative**

DR. JUSTYNA SIKORSKA

[justyna.sikorska@merck.com](mailto:justyna.sikorska@merck.com)**SECTION WEB MASTERS****NY Section** – DR. BRIAN R. GIBNEY[postmaster@newyorkacs.org](mailto:postmaster@newyorkacs.org)**NoJ Section** – [website@njacs.org](http://www.njacs.org)**NORTH JERSEY SECTION** <https://www.njacs.org>**Chair**, DR. SANDRA KEYSER

Senior Safety Specialist, Merck

Rahway, NJ 07065

732-939-6412 • [skeyser@njacs.org](mailto:skeyser@njacs.org)**Chair-Elect** DR. ROBERT MENGER

Associate Scientific Director,

Bristol Myers Squibb,

556 Morris Avenue, Summit, NJ 07901

908-934-4384 • [robert.menger@bms.com](mailto:robert.menger@bms.com)**Secretary**, BETTYANN HOWSON

49 Pippins Way, Morris Township, NJ 07960

973-822-2575 • [chemphun@gmail.com](mailto:chemphun@gmail.com)**Section Office**

49 Pippins Way, Morris Township, NJ 07960

973-822-2575 • [chemphun@gmail.com](mailto:chemphun@gmail.com)**NEW YORK SECTION** <http://newyorkacs.online/>**Chair**, DR. PING Y. FURLAN

US Merchant Marine Academy

300 Steamboat Road, Kings Point, NY 11024

516-726-5783 • [furlanp@usmma.edu](mailto:furlanp@usmma.edu)**Chair-Elect**, DR. ERIC CHANG

Pace University

Department of Chemistry and Physical Sciences

One Pace Plaza, New York, NY 10038

(212) 346-1425 • [echang@pace.edu](mailto:echang@pace.edu)**Secretary**, DR. DANIEL AMARANTE

Mercy College

School of Health and Natural Sciences

555 Broadway, Dobbs Ferry, NY 10522

[damarante@mercy.edu](mailto:damarante@mercy.edu)**Section Office**, BERNADETTE TAYLOR

Office Administrator

St. John's University, Dept. of Chemistry,

8000 Utopia Parkway, Queens, NY 11439

732-770-7324 • [btaylor@NewYorkACS.org](mailto:btaylor@NewYorkACS.org)**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.

**CONTENTS**

This Month in Chemical History	3
May Calendar	4
North Jersey ACS Section Meetings	5
NJACS Mass Spectrometry	
Discussion Group	5
NJACS Womens Chemists Committee	6
NJACS NMR Spectroscopy	
Discussion Group	7
New York ACS Section Officer Elections	9
NYACS Long Island High School Awards	10
NYACS Undergraduate Research	
Symposium	11
Meeting Reports	12
Leo H. Baekeland Award Symposium	12
NJACS US National Chemistry Olympiad	14
NYACS 2024 Nichols Medal Symposium	15
NYACS Chemists Celebrate Earth Week	19
News from Our Partners	21
Call for Nominations	22
Using ChatGPT in Your Job Search	24
Opportunities	25
Job Board	26

**EDITORIAL DEADLINES**

June 2024	May 16, 2024
September 2024	August 16, 2024
October 2024	September 16, 2024
November 2024	October 16, 2024
December 2024	November 16, 2024

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

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.

## THIS MONTH IN CHEMICAL HISTORY

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

Back to serious chemical history. I hope that my foray into imaginative science last month didn't disconcert my readers. I now take a final look back at the new organic chemistry of 90 years ago as reflected in the pages of The Chemical Society's Annual report for 1934 (Volume XXXI) published in London in 1935.

The organic chemistry review is divided (like Gaul!) into 3 parts: aliphatic, homocyclic, and heterocyclic. Following are some highlights from each section. By the way the last paragraph of my April column about isomer numbers was taken verbatim from the actual Review and is quite correct.

Structural studies by X-ray diffraction are confirming long-held beliefs about details of organic structures. The structures of several alkene derivatives including cis and trans  $C_2H_2Br_2$  (the introduction of "heavy" bromine atoms helps in the analysis of the diffraction patterns) are all planar with a CC distance of around 1.3 Å as compared with 1.55 Å in  $Me_3CBr$ . Naphthalene consists of two regular plane hexagons with CC distances of 1.41 Å. There are three forms of cis-cinnamic acid with m.p.s of 42°, 58°, and 68° respectively. They have now been shown to be identical in kinetics of solution reactions and are therefore polymorphs. Ruzicka and his colleagues have continued work on synthesizing large ring polymethylene ketones and hydrocarbons as large as  $C_{34}$ . Linstead and his co-workers have determined the structures of phthalocyanines; they consist of a 16-membered ring of 8 carbon atoms and 8 nitrogen atoms arranged alternately. It appears that this large ring is planar. It forms a stable copper derivative.

Boys has developed a method for calculating the value of the optical rotatory power of simple aliphatic compounds. It gives values in reasonable agreement with experimental data. Asymmetric derivatives of arsenic and phosphorus have been prepared. Carothers and his collaborators (the team that later synthesized nylon) have prepared polyesters of molar masses ranging from 2800 to 25,000. Only those with molar masses greater than 9,400 form strong fibers.

Keto-enol tautomerism has been studied in detail in a number of triketones of the type  $ArCOCOCH_2COAr$ . The pure keto-forms are only observed when Ar is a bulky group like mesityl. The enols are usually more stable and the more stable trans forms of the enols are yellow. The mechanism of the Claisen reaction has been clarified by applying the electronic interpretation of Lapworth, Robinson, and Ingold – three of the great pioneers of the application of electronic interpretations to mechanisms of organic reactions. Work on hormones has proceeded to the stage of the isolation of minute quantities of androsterone, the male sexual hormone. Its formula has been determined as  $C_{19}H_{30}O_2$  and it is a hydroxy ketone. It is suggested that it is of the steroid type. The corpus luteum hormone of the female ovary has been obtained pure and crystalline. Luteosterone,  $C_{20}H_{30}O_2$ , is an unsaturated diketone and its uv spectrum indicates that its double bond is conjugated to the keto group. The hormone has now been synthesized from a related sterol. The poisons found in certain toads are chemically closely related to the compounds affecting the human heart in digitalis plants (belladonna).

As usual the area of alkaloid structure has been active. Yohimbine by degradation has given several compounds of determined structures. The evidence thus obtained indicates that yohimbine may be pentacyclic containing, in addition to three six-membered carbocyclic rings, a pyrrole ring and a piperidine ring. The evidence is still very far from determining yohimbine's structure. The recent work on strychnine is in a similarly early stage. Biological considerations strongly suggest a similarity between tryptophan and bufotenine, a toad poison mentioned earlier. The poison probably contains the indole skeleton with an attached hydroxyl group; and a dimethylamino group not attached to the indole. Work, as always, is untrammled and proceeds. And so we say farewell to 1934. My next column will return to the topic of great chemistry books of the 20<sup>th</sup>. Century.

A personal note. Courses on the history of science and the history of chemistry, that I was tentatively scheduled to teach in Spring semester 2024 and Fall semester 2024, have been cancelled because of expected low student enrollments in both terms. A sad commentary on the state of science education in Southern California.

---

## May Calendar

---

**NEW YORK SECTION****Saturday, May 4, 2024**

Undergraduate Research Symposium

**See page 11****Thursday, May 9, 2024**

Long Island Subsection

**See page 10****Friday, May 31, 2024**

New York ACS Elections

**See page 9****NORTH JERSEY SECTION****Wednesday, May 2, 2024**

North Jersey Mass Spectrometry Discussion Group

**See page 5****Wednesday, May 15, 2024**

North Jersey Executive Committee Meeting

**See page 5****Thursday, May 23, 2024**

North Jersey NMR Spectroscopy Discussion Group

**See page 7****Friday, May 24, 2024**

North Jersey Women Chemists Committee

**See page 6****MARM 2024***Celebrating Discovery***Dates and Location:**

June 05 - June 08

The Pennsylvania State University

University Park, PA 16802

---

### Ad Index

---

Robertson - Microlit.....	6
Micron.....	7

**Stay in the know.**

The Indicator is distributed electronically to members via email and their websites. Non-members are invited to read it online. ACS Members should register their email addresses at

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

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

---

## 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. All members are welcome to attend and become more involved in section activities. The dates for 2024 are, as follows:

**Wednesday, May 15, 2024** (hybrid)

**Wednesday, June 12, 2024** (hybrid)

**Wednesday, September 11, 2024** (hybrid)

**Wednesday, October 9, 2024** (hybrid)

**Wednesday, November 13, 2024** (virtual)

**2025 Planning Meeting in December, TBD**

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

**Deadline for submitting articles and advertisements for the June 2024 issue is *May 16, 2024***

### NORTH JERSEY ACS MASS SPECTROMETRY DISCUSSION GROUP

The [North Jersey ACS' Mass Spectrometry Discussion Group](#) is proud to announce its May in person meeting featuring a social hour, complimentary dinner, and two talks. Attendance is free, but please register. Special thanks to the ASMS for partial sponsorship of this event.

**Date:** **May 2, 2024**

**Time:** 5:30 PM to 9:00 PM

**Location:** Somerville Elks Lodge  
375 Union Avenue  
Bridgewater, NJ 08807

Registration: [Click here to register](#)



***A nanoscale spatially resolved mass spectrometry-based platform for macromolecular cartography of the cellular membrane***

Kallol Gupta, PhD  
Yale University

***New approaches for top-down and native top-down protein characterization***

Jared B. Shaw, Ph.D.  
University of Nebraska

***NORTH JERSEY ACS WOMENS CHEMISTS COMMITTEE***

The [North Jersey ACS' Women Chemists Committee](#) is proud to present Juliet (Chin) Hart, CEO and Founder of Hart & Chin, speaking on ***Being a Leader in the Sciences***. Using a virtual meeting platform, Google Meet, this professional development event will address the following questions:

What does it mean to be a leader in the sciences?  
Why would I or anyone want to be an influential leader?  
What are the challenges & benefits?  
How do I become a leader or a strong leader?

Attendance is FREE and open to all

**Date:** **May 24, 2024**  
**Time:** 12:00 PM to 1:00 PM EST  
**Location:** via Google Meet  
[Click here to join](#)



[Download flyer](#)

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



Elemental CHN, S, X analysis

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

FTIR, UV/VIS spectroscopy, Optical Rotation

GC-MS/FID, Residual Solvents, Headspace

Ion Chromatography

KF Aquametry, Titrimetry

DSC, TGA, melting point

HPLC

1705 US Highway 46 • Suite 1D • Ledgewood, NJ 07852 • 973.966.6668 • F 973.966.0136

[www.robertson-microlit.com](http://www.robertson-microlit.com)

[results@robertson-microlit.com](mailto:results@robertson-microlit.com)

***Rapid Results • Quality • Accuracy • Competitive Pricing***

**NORTH JERSEY ACS NMR SPECTROSCOPY DISCUSSION GROUP****Probing Molecular Packing of Lipid Nanoparticles from  $^{31}\text{P}$  Solution and Solid-State NMR**

**Speaker:** Ryan Schroder  
Senior Scientist  
Bristol Myers Squibb

**Date:** **Thursday, May 23, 2024**


**Time:** 12:00 PM ET via Microsoft Teams

[Download flyer](#)



**Abstract:** Lipid nanoparticles (LNPs) are intricate multicomponent systems widely recognized for their efficient delivery of oligonucleotide cargo to host cells. Gaining insights into the molecular properties of LNPs is crucial for their effective design and characterization. However, analysis of their internal structure at the molecular level presents a significant challenge. This study introduces  $^{31}\text{P}$  nuclear magnetic resonance (NMR) methods to acquire structural and dynamic information about the phospholipid envelope of LNPs. Specifically, we demonstrate that the  $^{31}\text{P}$  chemical shift anisotropy (CSA) parameters serve as a sensitive indicator of the molecular assembly of distearoylphosphatidylcholine (DSPC) lipids within the particles. An analytical protocol for measuring  $^{31}\text{P}$  CSA is developed, which can be implemented using either solution NMR or solid-state NMR, offering wide accessibility and adaptability. The capability of this method is demonstrated using both model DSPC liposomes and real-world pharmaceutical LNP formulations. Furthermore, our method can be employed to investigate the impact of formulation processes and composition on the assembly of specifically LNP particles or, more generally, phospholipid-based delivery systems. This makes it an indispensable tool for evaluating critical pharmaceutical properties such as structural homogeneity, batch-to-batch reproducibility, and the stability of the particles.

**Connection Information:** This will be a virtual meeting hosted via Microsoft Teams. A direct link to the meeting is located [HERE](#). Further information can be found on the [NMR Topical Group website](#). Please reach out to Christine Jorge ([christine.jorge@bms.com](mailto:christine.jorge@bms.com)) or Rongfeng Zheng ([rongfeng.zheng@bms.com](mailto:rongfeng.zheng@bms.com)) with any questions.




*Solving material problems with evolving solutions since 1966*

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

Come visit Us at <https://micronanalytical.com>

302-998-1184    Wilmington DE

[micronanalytical@compuserve.com](mailto:micronanalytical@compuserve.com)

## ADVERTISE IN THE INDICATOR

Do you need to reach over 6,000 chemists in the tri-state area to inform them of your products/services to grow your business?

Whether your target audience is scientists working in industry, academia or government, The Indicator offers an affordable option for your marketing campaign. As shown at left, a ¼ page full-color advertisement costs only \$200 / month (\$1500/yr). The deadline for an ad placement is the 16<sup>th</sup> of the month prior to publication, so your ad can be published within two-weeks of receipt. Your advertisement will be seen on the first of the month by each member of the New York and North Jersey ACS. Semimonthly emails to these memberships will also include your advertisement ensuring full coverage of your potential clients.

[Contact our Ad Sales Manager for more details](#)

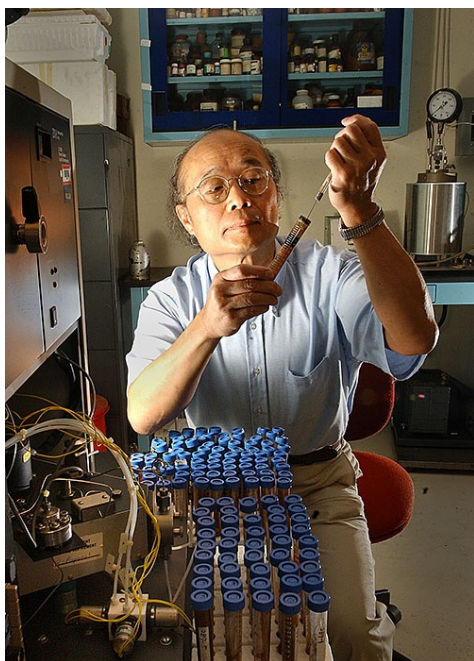


**Your  
Ad  
Here**

**\$200/month**

**\$1500/year**

[Click here to learn more](#)



## DR. MOW SHIAH LIN SCHOLARSHIP

Brookhaven National Laboratory's Asian Pacific American Association has established the Dr. Mow Shiah Lin Scholarship for doctoral students of Asian heritage (including F-1 visa holders) on Long Island studying environmental & energy technology, biology, or chemistry.

[Read more here](#)



---

## NEW YORK SECTION MEETINGS

---

<http://www.newyorkacs.online>

### 2024 NEW YORK ACS BOARD MEETINGS **NEW YORK ACS 2024 ELECTIONS**

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

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

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

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

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

More information will be posted in future monthly issues of **The Indicator** and on the New York ACS [website](#).



### VOTE NOW

Electronic ballots will be sent via email using Survey Monkey on May 1, 2024 to the membership of the New York ACS. Please make sure to Opt-In to receive Survey Monkey emails if you have opted-out in the past. If you do not receive the ballot, please contact the Section Office via email. Please vote

The Board of Directors thanks the following candidates for accepting the nominations, and for their willingness to support the New York ACS and chemistry through donating their time, efforts, and sharing their expertise.

#### **Chair-Elect for 2025**

Mr. Joseph Ulichny (Columbia University)

Mr. Joseph Wiener (PepsiCo)

#### **Secretary for 2025 – 2026**

Dr. Naphthali O'Connor (Lehman College)

#### **Director-at-Large for 2025**

Dr. Daniel Amarante (Mercy University)

Dr. Yosra Badiei (St. Peter's University)

Dr. Jaclyn Catalano (Montclair State University)

Dr. Ron D'Amelia (Hofstra University)

Dr. Qi Wang (Nassau Community College)

Dr. Justyna Widera-Kalinowska  
(Adelphi University)

#### **Councilors for 2025 – 2027**

Dr. Brian Gibney (Brooklyn College)

Dr. Barbara Hillery (SUNY – Old Westbury)

Dr. Pamela Kerrigan (University of Mount Saint Vincent)

Dr. Patricia Redden (St. Peter's University)

Dr. Ruben Savizky (The Cooper Union)

Dr. Rita Upmacis (Pace University)

#### **Alternate Councilor**

##### **-to fill vacancy for 2025**

Dr. Kathleen E. Kristian (Iona University)

[Download the candidate bios here](#)

## LONG ISLAND SUBSECTION HIGH SCHOOL AWARDS DINNER

### *How Color Changed the World*

**Speaker:** Dr. Mary Virginia Orna  
ChemSource, Inc.  
**Date:** **Thursday, May 9, 2024**  
**Place:** Adelphi University  
Ruth S. Harley University Center  
**Time:** 6:45 PM



For the 35th consecutive year, the American Chemical Society will be recognizing outstanding high school chemistry students from high schools in Nassau, Suffolk, and Queens. Teachers are invited to nominate their

student(s) who have demonstrated a strong interest and who have excelled in the field of chemistry. Teachers from each school should consult science teacher colleagues and come to a consensus for selecting student(s), then complete the nomination form below by **Friday, May 3, 2024** (nomination deadline).

These students will be feted at a dinner in their honor on **May 9, 2024** with a keynote presentation by Dr. Mary Virginia Orna entitled **How Color Changed the World**. This is a ticketed event, please see the flyer for more details.

[Download flyer here](#)

## 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.

## UNDERGRADUATE RESEARCH SYMPOSIUM



The Student Activities Committee of the New York ACS invites all undergraduates to present their research at the 71<sup>st</sup> Annual [Undergraduate Research Symposium](#). This year's URS will be held at Medgar Evers College – CUNY on May 4, 2024 from 8:00AM – 2:00PM and will feature a keynote address by Prof. Marvin Parasram of New York University. Registration is FREE.

### *Anaerobic Heteroatom Transfer Reactions Promoted by Photoexcited 1,3-Dipoles*

**Speaker:** Marvin Parasram, Ph.D.  
Assistant Professor  
Department of Chemistry  
New York University

**Date:** **Friday, May 4, 2024**

**Place:** Medgar Evers College  
– City University of New York

**Time:** 8:00 AM – 2:00 PM

**Registration:** [Student Presenters](#)  
[Faculty Mentors](#)  
[Exhibitors](#)  
[Guests](#)



**Abstract:** Heteroatom units, such as carbonyls, C(sp<sup>3</sup>)-OH and C(sp<sup>3</sup>)-NH<sub>2</sub> bonds, are prevalent motifs in many medicinally important compounds. Methods to incorporate these important functional groups at the expense of hydrocarbons rely on the use of non-commercial heteroatom transfer agents, precious transition metals, and/or costly engineered enzymes. Also, these methods often require exogenous oxidants to promote the C-heteroatom bonding event, which greatly limits substrate scope. Our laboratory focuses on the employment of economical 1,3-dipoles as versatile reagents that can serve as the hydrocarbon activator and the heteroatom atom source for the heteroatom incorporation of aliphatic systems under benign visible-light irradiation. Our contributions involve the cleavage of alkenes leading to valuable carbonyl derivatives and the direct C-H oxidation of hydrocarbons via anaerobic oxygen-atom transfer from photoexcited nitroarenes. Using photoexcited azoxys, an anaerobic nitrogen atom transfer event can occur leading to the aziridination of alkenes. Mechanistic studies reveal that the 1,3-dipoles are the sole photo-absorbing species, which leads to the formation of diradical intermediates that are responsible for heteroatom transfer events.

[Download flyer here](#)

---

## MEETING REPORTS

---

### ***2023 LEO HENDRIK BAEKELAND AWARD PRESENTED TO PROF. KEARY ENGLE***

On Friday, April 12<sup>th</sup>, the North Jersey ACS hosted the Leo Hendrik Baekeland Award Symposium to celebrate Professor Keary M. Engle from the Scripps Research Institute at Fairleigh Dickinson University's Lenfell Hall. Dr. Engle was the 2023 Baekeland Award Winner, due to his general and versatile synthetic strategies for the programmed functionalization of olefins and the development of widely used nickel and palladium catalysts.

On Friday, April 12<sup>th</sup>, the North Jersey ACS hosted the Leo Hendrik Baekeland Award Symposium to celebrate Professor Keary M. Engle from the Scripps Research Institute at Fairleigh Dickinson University's

Lenfell Hall. The capacity crowd heard shown below Dr. Engle, 2023 Baekeland Award Winner, present his general and versatile synthetic strategies for the programmed functionalization of olefins and the development of widely used nickel and palladium catalysts. As shown above, NJACS Chair Sandra Keyser presented Dr. Engle with the 2023 Baekeland Award.



## 2023 LEO HENDRIK BAEKELAND AWARD PRESENTED TO PROF. KEARY ENGLE (continued)



The symposium was opened by Dr. Sandra Keyser, Chair of the NJACS and Baekeland Symposium Chair, and Dr. Dorothy Phillips, ACS 2024 President-Elect. Dr. Steve Wisniewski (BMS), Dr. Tianning Diao (NYU), Dr. Peng Liu (Pitt), and Dr. Scott Miller (Yale) provided stimulating presentations on a range of topics in catalytic organic reactions. Ms. Bonnie Lawlor, District III Director, gave congratulatory remarks to the awardee. The Baekeland Medal was presented to Dr. Keary Engle by Dr. Sandra Keyser. Dr. Engle's keynote address entitled, "Metal-olefin interactions and the catalytic chemistry they inspire," was well-received. Attendees included faculty and students from Caldwell College, Drew University, Fairleigh Dickinson University, William Paterson, Seton Hall University, and New York University and employees from BMS and Merck..

The Baekeland Symposium was organizing committee included Alan Cooper, Mohammed Elshaer, Miriam Gulotta, Bettyann Howson, Diane Krone, Cecilia Marzabadi, Amanda Mann, Joseph Badillo, Mary Okorie, and Sandra Keyser.

The symposium was followed by a private dinner at Rod's Steakhouse in Morristown, NJ.



## US NATIONAL CHEMISTRY OLYMPIAD 2024 (USNCO)

During the month of March 419 high school chemistry students sat for the USNCO local section exam. Those students achieving a qualifying score of 43 or higher were invited to participate in the second round of testing, the national exam. North Jersey is allowed to invite 14 students to the national exam. The students represent 10 different high schools. The national exam has 3 parts and all three parts will be given on Sunday, April 21, 2024. Caldwell University under the sponsorship of Dr. Xiaolei Gao will host the national exam. Students invited to participate are:

North Jersey ACS (303) National Olympiad Participants		
First Name	Last Name	High School
Arjun	Sharma	Montgomery
Lawrence	Ma	Ridge
Benjamin	Lin	West Windsor Plainsboro-N
Jai	Dave	West Windsor Plainsboro-N
Kaden	Luo	Ridge
Martin	Zhang	Edison Academy Magnet
Henry	Bilton	Highland Park
Vinav	Shah	Pingry
Brooks	Wang	Chatham
Ishan	Mungikar	Montgomery
Jaden	Glogg	Morris Hills
Kyle	Srivatsa	Bergen County Academies
Daniel	Mun	Bergen County Technical
Kai	Kim	Bergen County Academies



## 2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD DINNER

Professor Emily A. Carter of Princeton University was presented with the William H. Nichols Medal Award on April 12, 2024 following a distinguished symposium in her honor. Dr. Carter earned the Nichols gold Medal for her “groundbreaking quantum insights in sustainable catalysis.” As illustrated in the panoramic photo below, over one hundred fifty chemists and guests attended the day’s events. Dr. Eric Chang, Chair-Elect of the New York Section for 2024, superbly organized and conducted the symposium while New York ACS Chair Dr. Ping Furlan emceed the evening’s award banquet festivities.



**2024 William H. Nichols Distinguished Symposium Speakers and Attendees.**

The William H. Nichols Distinguished Symposium, that preceded the award ceremony, was titled “Physical Chemistry and Sustainability.” The attendees enjoyed amazingly entertaining talks by the following internationally known speakers:

- Prof. Laura Gagliardi
- Prof. Ellen Stechel
- Prof. Hai-Lung Dai

The symposium was capped off with Prof. Emily A. Carter’s 2024 Nichols Medalist Address entitled:

### ***A Physical Chemist’s Journey to Combat Climate Change***



**2024 William H. Nichols Medal Award Address by Prof. Emily A. Carter (Princeton University)**

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

At the Nichols Award dinner, New York ACS Chair Dr. Ping Furlan (pictured at right, on the right) welcomed the guests, introduced the dignitaries seated on the dais. ACS President Mary Carrol (pictured at right on the left, below at right) and ACS CEO Albert Horvath, offer greetings and congratulations from the American Chemical Society. Dr. Michael Berman (pictured below at left), Air Force Office of Scientific Research, introduced his long-time colleague Prof. Emily A. Carter (pictured below in center) to the audience of 150 attendees. Dr. Ping Furlan then presented Prof. Emily A. Carter with the engraved William H. Nichols gold medal, a bronze replica and an honorarium.

The New York ACS wishes to thank Pace University, New York University, the Cooper Union, and Barnard College for buying tables at the award dinner for their students.



**ACS President Mary Carrol and New York ACS Chair Ping Furlan**



**Dr. Michael Berman, Prof. Emily A. Carter, and ACS President Mary Carrol**



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



***Pace University attendees.***



***Attendees from the Hudson-Bergen Subsection.***



***Brooklyn College attendees.***



***Lehman College attendees with the 2024 Medalist.***

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



*Attendees from Cooper Union.*

### The Chemical Biology Discussion Group End-of-Year Symposium: Deconvoluting Protein Networks

June 6, 2024

Weill Cornell Medicine  
Uris Auditorium and Griffis Faculty Club  
New York, NY  
or join virtually

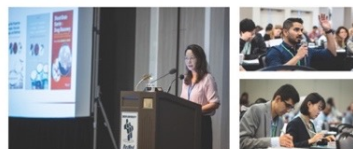
[Register](#)

### Drew University's 37th Annual ResMed: Residential School on Medicinal Chemistry and Biology in Drug Discovery

June 10-14, 2024

Hanover Marriott, Whippany, NJ

ResMed is a week-long graduate level course organized to provide an accelerated program for medicinal chemists, biologists and other industrial and academic scientists who wish to broaden their knowledge of drug discovery and development. The School's aim is to concentrate on the fundamentals that are useful in drug discovery spanning initial target validation through development.



#### TOPICS INCLUDE

- Principles of Med Chem
- Drug-like Properties
- Hit-to-Lead in Drug Discovery
- Lead Optimization
- Cheminformatics
- Molecular Modeling & Structure-Based Drug Design
- Kinases
- Drug Metabolism
- Designing Around Problematic Functionalities
- Bioisosteres
- Covalent Inhibitors
- Pharmacokinetics & Protein Binding
- Enzymology, Receptors & Ion Channels
- Proximity-induced Drug Design
- Proteolysis-targeting Chimeras
- Phenotypic Screening
- Protein-protein interactions
- Antibody-drug Conjugates
- Preclinical Toxicology
- In Silico Tools
- Impact of AI
- Case Study Presentations

REGISTER NOW! In-person and virtual options available



[WWW.DREW.EDU/RESMED](http://WWW.DREW.EDU/RESMED)



[RESMED@DREW.EDU](mailto:RESMED@DREW.EDU)



973.408.4861

**DREW**  
UNIVERSITY

Drew University  
36 Madison Ave  
Hall of Sciences 319  
Madison, NJ 07940



**NEW YORK ACS' CHEMISTS CELEBRATE EARTH WEEK 2024**

On a sunny and brisk Sunday, April 14, 2024 the New York ACS celebrated its 11<sup>th</sup> Annual Chemists Celebrate Earth Day (CCEW) at the New York's famous Jones Beach! The 2024 CCEW theme was "Batteries: Get a Charge Out of Chemistry". The day's festivities started with a breakfast with a "Blender Bar" which served freshly prepared fruit and vegetable smoothies for all and time for participants to mingle. The program then started with a welcome by the CCEW Coordinator, Dr. JaimeLee Iolani Rizzo, greetings by the NY ACS Chair, Dr. Ping Furlan, a keynote address by Pace University physicist, Dr. Erik Lascaris entitled, "An Introduction to Batteries," a presentation by the ACS Student Chapter of Pace entitled, "Batteries and Renewable Energy," and a presentation by Pace University's Tribeta (Biology Honor Society) entitled, "Nature's Capacitors". There were a number of lively and interesting discussions at the end of each presentation relating to renewable energy. Following the talks everyone gathered in front of the Energy and Nature Center for a group photo. Some participants then hiked to the beach and took in the sunshine, others walked the boardwalk, while some explored the Energy and Nature museum. Earth day enthusiasts returned



**NEW YORK ACS' CHEMISTS CELEBRATE EARTH WEEK 2024**

lunch at the Nature Center and for battery-themed hands-on demonstrations by the United States Merchant Marine Academy. All participants received Earth Day gift bags that included personalized caps with the logo of 3 Li 26 Fe (lithium and iron to spell LIFE), BPA-free water bottle, bubbles, lifesaver candies, and other goodies. The day's festivities concluded with desserts, which included a beach-themed cake decorated with the 3 Li 26 Fe logo and the words CCEW 2024, Hawaiian kona coffee, and a fun raffle!

Participants from the following schools and institutions included: Adhesiology Inc., Agilent Technologies, Always-at-Aum Yoga School, Baruch College, Blue Lotus Yoga and Wellness, Entech, Chem Source Inc., City University of NY, CUNY, Glen Cove Senior Center, Greenwich Hospital, Micato Safari, Northwell Medical, NYC Environmental Protection, NYPD, PACE University – NYC, PACE University – PLV, Queens College, Queensborough Community College, Psychology Private Practice, Republic Airport, Rye High School Chem Club, The Summit School, Touro College, U.S. Army Corp. of Engineers, Wagging Tails of Westchester, West Hollow Middle School, Yale University.

All-in-all an educational and relaxing time was had by all with beautiful views and smells of the ocean with feet in the soft sand! Some stretched out on the beach and took in the warm and beautiful rays of the sun, while others collected pretty shells at the seashore.



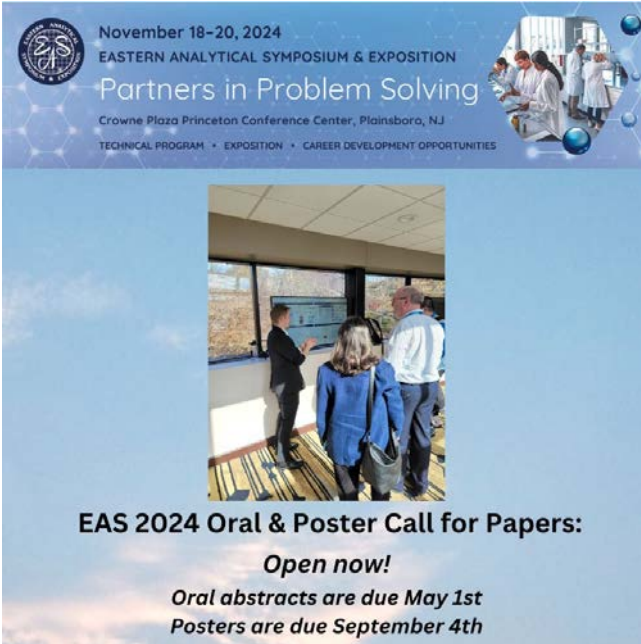
**NEWS FROM OUR PARTNERS****EASTERN ANALYTICAL SYMPOSIUM**

The **FREE** Eastern Analytical Symposium Virtual Student Symposium (VSS) will be held **May 20, 2024** from **10:00AM – 3:00PM (EDT)**. Undergraduate students and graduate students are invited to submit an abstract and present your work at this virtual event. Posters and slides, accompanied by oral presentations, are accepted. Abstracts are due May 10.


[Register here](#)  
[Submit your abstract here](#)

Abstracts for oral presentations at the Eastern Analytical Symposium are due May 1<sup>st</sup>. The EAS will be held on **November 18-20, 2024** at the Crowne Plaza Princeton Conference Center.

[Read more here](#)



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



**EAS 2024 Oral & Poster Call for Papers:**  
**Open now!**  
Oral abstracts are due May 1st  
Posters are due September 4th

**EWOC****Empowering Women in Organic Chemistry**

June 20-21, 2024 at Merck in Rahway, NJ

**MEMORIAL DAY****HONORING ALL WHO SERVED**

## YOUNGER CHEMISTS COMMITTEE

The ACS National Committee on Younger Chemists is excited to announce the first 2024 Local Section Leadership Series event. On Thursday, May 9, at 6 pm ET/3 pm PT, we welcome Professor Jennifer Heemstra to speak to her experiences with social media and provide some tips and tricks on how to grow your online reach within your community. Join us on Zoom for this virtual event (invite will be distributed the day before the event)! We look forward to connecting with you!

Speaker: Prof. Jennifer Heemstra  
**Date:** **Thursday, May 9, 2024**  
**Place:** Online via Zoom  
**Time:** 6:00 PM

[Register here](#)



## Applications are now being accepted for the 2024 Ignition Grant Program!

Proposals can be on any new green chemistry or green engineering research direction of relevance to the pharmaceutical industry. Grants provide \$40,000 for a 6-month research commitment.

Proposals are due May 17, 2024.

For more information and to apply, visit: [acsgcipr.org/grants](https://acsgcipr.org/grants)

## ACS GREEN CHEMISTRY INSTITUTE PHARMACEUTICAL RESEARCH GRANTS

The ACS Green Chemistry Institute is currently accepting proposals for the 2024 Pharmaceutical Research Grants for the following topics: Alternatives to Halogenated Solvents, AI and Machine Learning Reaction Optimization, Solid Phase Peptide Synthesis, and Oligonucleotides Process Development. If you are doing research in any of these key research areas, consider submitting a proposal to receive funding to help you complete that research.

[Due May 17](#)

## US EPA ANNOUNCES SUSTAINABLE CHEMISTRY GRANTS

The US Environmental Protection Agency has issued a request for applications to its Science to Achieve Results (STAR) Program on Advancing Sustainable Chemistry. Four awards of up to \$1.5M will be awarded. Applications due May 29, 2024.

[Due May 29](#)



## CALL FOR NOMINATIONS

### 2025 WILLIAM H. NICHOLS MEDAL – CALL FOR NOMINATIONS

The New York ACS seeks nominations for the 2025 Nichols Medal Award that was established in 1902 by Dr. William H. Nichols to honor a chemical scientist for outstanding original research. Dr. Nichols, an incorporator of the American Chemical Society and its president in 1918 and 1919, maintained a deep commitment to research and development and to the importance of supporting science education and students of chemistry. Since its inception, the New York Section administers the award. It has been perpetuated by the generosity of Dr. Nichols, his family, the Nichols Foundation, Inc. and the William H. Nichols Fund for Chemistry at the Boston Foundation. The William H. Nichols Medal is the first award in chemistry of the American Chemical Society.



[Nominations due May 31, 2024](#)

### FACULTY – HONOR YOUR STUDENTS & POSTDOCS



Division of Organic Chemistry  
Undergraduate Award

[Due June 18](#)

Graduate Student and Postdoctoral  
Scholars Recognition Program

[Nominate by June 30](#)

Division of Physical Chemistry  
Undergraduate Award

[Due June 15](#)

Division of Analytical Chemistry  
Undergraduate Award

[Nominate by July 1](#)

ACS Division of Inorganic Chemistry  
Undergraduate Award in Inorganic  
Chemistry

[Nominations due June 30](#)

Division of Analytical Chemistry  
Undergraduate Award

[Nominate by July 1](#)

Pfizer Emergent Leader Award

[Apply by July 15](#)

## **USING ChatGPT IN YOUR JOB SEARCH**

Copy these ChatGPT prompts to land your dream job in 2024: Nabeeha Atique

### *Company Research*

"I have an interview with [company] for the position of [job position]. Please summarize the company's mission, core products or services, and recent news or achievements by analyzing their website [website link] and any recent press releases."

### *Resume Optimization*

"Review my current resume attached and suggest improvements tailored for applying to a [job position] at [company]. Highlight any gaps in my experience and recommend ways to address these through online courses or projects."

### *Cover Letter Writing*

"Based on the job description for [job position] at [company], generate a cover letter that highlights my relevant experience, skills, and why I am passionate about working for [company]."

### *Interview Preparation*

"For the position of [job position] at [company], what are some industry-specific challenges or trends I should be aware of? How can I demonstrate my understanding or propose potential solutions during the interview?"

### *Common Interview Questions*

"Generate a list of common interview questions for a [job position] role within the [industry] industry."

### *Behavioral Interview Questions*

"Create a set of behavioral interview questions relevant to the [job position] role at [company]. Include a brief guide on how to structure responses using the STAR (Situation, Task, Action, Result) method, tailored to my experiences."

### *Follow-Up After Interview*

"Draft a follow-up email template for after an interview for the [job position] role at [company]. The email should express gratitude, reiterate interest in the position, and include a statement on how I can add value to the team, reflecting specifics from our discussion."

### *Technical Skills Assessment*

"I need to demonstrate my proficiency in [specific skill or software] for a [job position] role at [company]. Can you generate a practice test or challenges that reflect the level of understanding required?"

### *Salary Negotiation Strategies*

"Based on the role of [job position] in [location or industry], what is the competitive salary range? Provide strategies and key phrases for negotiating a higher salary or better benefits, considering my experience level and industry standards."

### *Networking and Referrals*

"Provide tips on how to use LinkedIn for networking with employees currently working at [company]. Include a template message for reaching out to potential contacts for insights about the [job position] and company culture."



---

## OPPORTUNITIES

---

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

ACS Hach Second Career Teacher Scholars

[Due May 1](#)

ACS-Hach Post-Baccalaureate Teacher Scholarship

[Due May 1](#)

Student Chapter Awards

[Due May 31](#)

ACS Hach High School Chemistry Classroom Grant

[Due June 1](#)

### **For Undergraduates**

NYSCC Roumelia Alina Inclusion & Diversity Scholarship

[Due May 15](#)

ACS Division of Physical Chemistry Undergraduate Award in Physical Chemistry

[Nomination by June 15](#)

ACS Division of Inorganic Chemistry

Undergraduate Award in Inorganic Chemistry

[Nomination by June 30](#)

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

ACS Division of Biological Chemistry Travel Award

[Due May 15](#)

NYSCC Future of Sustainability Scholarship

[Due May 15](#)

Ciba/YCC Travel Award

[Due May 15](#)

Division of Inorganic Chemistry Travel Award

[Due June 1](#)

Women Chemists Committee/Eli Lilly Travel Award

[Due June 1](#)

ACS Bridge Travel & Professional Development Award

[Due June 14](#)

### **For Professionals**

Local Section Member Engagement and Enhancement (LS-MEET) Grant

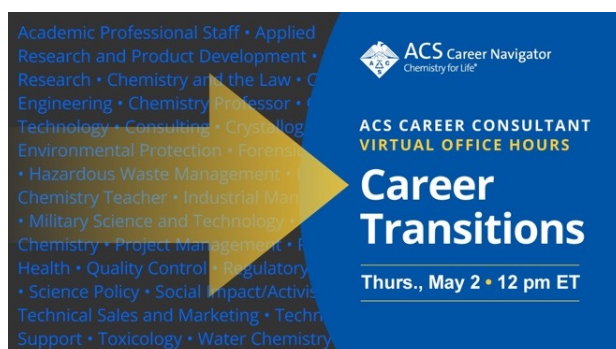
[Due May 31](#)

William H. Nichols Medal

[Due May 31](#)

Trust in Science and Scientists Grant

[Due June 1](#)



### **For Senior Chemists**

#### **SENIOR CHEMISTS COMMITTEE DIVERSITY, EQUITY, INCLUSION AND RESPECT (DEIR) GRANT**

Grants of \$500 are available for projects that advanced ACS's core values of diversity, equity, inclusions and respect which are led by senior chemists.

**DUE MAY 31, 2024**

[Learn more](#)

#### **SENIOR CHEMISTS MINI-GRANT**

Local Sections may request \$500 to support an event or activity to increase the engagement of senior members.

**DUE MAY 31, 2024**

[Learn more](#)

## **JOB BOARD**

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

### **Academic Positions**

**High School Chemistry Teacher – Regis High School**

[Apply here](#)

**Assistant Teaching Professor – Adelphi University**

[Apply here](#)

**Visiting Assistant Professor of Chemistry – Haverford College**

[Apply here](#)

**Full-time Faculty, Chemistry – Bard High School Early College Newark**

[Apply here](#)

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

[Apply here](#)

**Assistant Professor, Biochemistry – Iona University**

[Apply here](#)

**Part-time Laboratory Technician, Science and Math – Fashion Institute of Technology**

[Apply here](#)

**Program Officer – ACS-PRF**

[Apply here](#)

**Special Agent, STEM Background – Federal Bureau of Investigation**

[Apply here](#)

### **Industrial Positions**

**Analytical Scientist – Ashland Specialty Ingredients G.P.**

[Apply here](#)

**Specialist, Environmental, Health, and Safety (EHS)**

[Apply here](#)

**Technology Specialist, Sustainable Fuels – Air Company**

[Apply here](#)

**Chemist (BS/MS) – THG Labs Bentley**

[Apply here](#)

**Director, Chemistry – Regeneron**

[Apply here](#)

**Director, Chemistry – NJ Bio, Inc.**

[Apply here](#)

**Senior Principal Scientist – Bristol Myers Squibb**

[Apply here](#)

**Senior Scientist – OSMO**

[Apply here](#)

**Senior Analytical Scientist – EPM Scientific**

[Apply here](#)

**Associate Scientist – Regeneron**

[Apply here](#)