



Ping Furlan, Ph.D.
2024 New York ACS Chair
See page 4



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New York



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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 and distributed to their 6,200 members.

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EDITORIAL DEADLINES

February 2024	January 16, 2024
March 2024	February 16, 2024
April 2024	March 16, 2024
May 2024	April 16, 2024
June 2024	May 16, 2024

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

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

January Calendar

NEW YORK SECTION

Monday, January 15, 2024

Westchester Distinguished Scientist Award
Nomination Deadline
See page 9

Thursday, January 18, 2024

Picture a Scientist virtual screening
See page 9

Saturday, January 20, 2024

New York ACS Sectionwide Conference
See page 6

Thursday, February 1, 2024

Long Island Subsection
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NORTH JERSEY SECTION

Wednesday, January 10, 2024

North Jersey Executive Committee Meeting
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NEW YORK ACS CHAIR'S MESSAGE

Dear New York ACS Members,

It is truly an incredible honor to address you as your incoming Chair. The New York Local Section, one of the oldest and largest Sections of the ACS, stands as a testament to the dedication and hard work of our past Chairs, Boards of Directors, and members.

Our history is a vibrant tapestry woven with dedication, innovation, and a relentless pursuit of excellence. As we reflect on our journey, we celebrate the milestones that have shaped us into a community celebrated for its significant contributions to chemistry.

Heartfelt congratulations to Dr. Mary Virginia Orna, the 2023 chair, for steering us through an exceptional year. From honoring Dr. Marie Maynard Daly with a National Historic Chemical Landmark to in-person Nichols Medal Symposium, the 51st Middle Atlantic Regional Meeting, and the MEET Grant-supported Sterrett Environment Chemistry Symposium on the future of Electric Vehicles – these accomplishments reflect our commitment to the core values of the ACS, including diversity, equity, environment, and sustainability. Kudos to the dedicated members of the New York Section for winning two Chemluminary awards including Outstanding Section - Very Large Category, and Best New Public Relations Marketing Campaign, highlighting our commitments to excellence and innovation.

Looking forward, I am thrilled to share a glimpse of the exciting programs and key events that await us. Our calendar is brimming with opportunities to engage, learn, and contribute:

- January: The NYACS Sectionwide Conference featuring renowned science communicator Dr. Raychelle Burks, a.k.a. @DrRubidium
- April: The William H. Nichols Distinguished Symposium and Medal Award Dinner celebrating Dr. Emily Carter's quantum insights in sustainable catalysis
- April: Chemists Celebrate Earth Week on Batteries at the Jones Beach Energy & Nature Center
- October: National Chemistry Week Celebrating Photography and Imaging at the New York Hall of Science
- November: The Long Island Subsection's Francis S. Sterrett Environmental Symposium at Hofstra University
- Plus, engaging events including the Chemistry Olympiad, High School Student Award Dinner, the Westchester Chemical Society Distinguished Scientist Award Ceremony, Undergraduate Research Symposium, Eastern Analytical Symposium & Exposition, and riveting seminars sponsored by Subsections and Topical Groups.

I invite each of you to actively participate, lending your expertise, ideas, and enthusiasm. As a volunteer organization, our strength lies in the collective power of our members. Volunteering now is not merely an option; it is a call to action, and a cornerstone of our continued success. As we work to preserve our legacy, and venture into new frontiers of success and impact, we will also grow and forge stronger bonds together.

Let us be inspired by our history, driven by recent achievements, and fueled by the potential ahead. New York ACS is not just an organization; it is a thriving community of passionate individuals and leaders who shape the future of chemistry.

Thank you for your commitment and support. I look forward to the privilege of working alongside and serving you in the coming year.

Sincerely,
Ping Y. Furlan, Ph.D.
2024 Chair, New York American Chemical Society

NEW YORK SECTION MEETINGS

<http://www.newyorkacs.online>

2024 NEW YORK ACS BOARD MEETINGS

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

Saturday, January 20, 2024 (in person)

Sectionwide Conference

Monday, February 12, 2024 (virtual)

Monday, March 11, 2024 (hybrid)

Friday, April 12, 2024 (in person)

William H. Nichols Distinguished
Symposium and Medal Award Dinner
The Sonesta Hotel, White Plains, NY.

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](#).





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START 2024 WITH TWO STEM EVENTS

VIRTUAL FILM SCREENING AND PANEL DISCUSSION

As a prelude to the 2024 Sectionwide Conference, the New York ACS invites all members to join in a virtual screening of the film *Picture A Scientist* featuring Dr. Raychelle Burks. Following the screening there will be a virtual discussion of this important film.

Date: Thursday, January 18, 2024

Time: 7:00PM

Place: Online

[Register here for this FREE event](#)

The graphic is a vertical rectangular poster with a light green background. At the top left is the ACS Local Section New York logo. Below it is a movie poster for 'Picture A Scientist' showing a scientist in a lab. To the right of the movie poster, the text reads: 'Virtual Film Screening and Panel Discussion', 'Picture A Scientist', 'Thursday, 1/18/24', '7:00 PM (online only)', and 'View the 60 minute documentary live and enjoy a post-film discussion'. In the center, a dark brown banner says 'START 2024 WITH STEM!'. Below this is a portrait of Dr. Raychelle Burks, a woman with curly hair. To the left of her portrait, the text reads: 'Dr. Raychelle Burks', 'Featured Scientist in the Film', 'Keynote Speaker', 'Saturday, 1/20/24', '12:00 PM', and 'NYACS Sectionwide Conference St. John's University'. At the bottom left is a 'Register Now!' button and a QR code. At the bottom right is the Twitter handle '@DrRubidium'.

2024 NEW YORK ACS SECTIONWIDE CONFERENCE KEYNOTE ADDRESS

Dr. Marie Maynard Daly's life can inspire us to be better chemists and citizens.

Speaker: Dr. Raychelle Burks, American University

Biography: After working in a crime lab, Dr. Burks returned to academia, teaching, and forensic science research. Her research team is focused on the development of field portable colorimetric and luminescent sensor arrays for the detection of analytes of mainly forensic interest such as explosives, chemical weapons, controlled substances, and latent prints. She writes a science-meets-true crime column called "[Trace Analysis](#)" for *Chemistry World*. Beyond forensics, Dr. Burks collaborates with colleagues in a variety of fields on projects where low cost and reliable rapid screening methods are needed. An in-demand science communicator, Dr. Burks regularly appears on TV, in podcasts, at large genre cons such as DragonCon and GeekGirlCon, and other venues to converse on chemistry, forensic science, and STEM meets pop culture. She is the 2020 recipient of American Chemical Society's Grady-Stack Award for Interpreting Chemistry for the Public. She is a member of several local, national, and international committees, task forces, and projects focused on social justice and STEM. In 2021, Dr. Burks was listed as one of the "[6 women who are changing chemistry as we know it](#)" by BBC Science Focus Magazine.

LONG ISLAND SUBSECTION

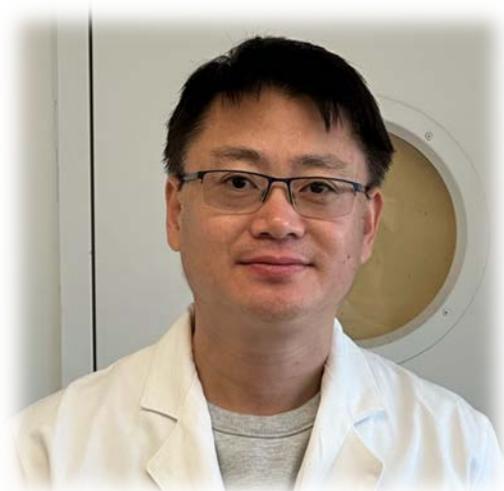
Isoxazoles as Versatile Synthons & Iodine-mediated Reactions

Speaker: Dr. Yu Chen
Associate Professor
Queens College – CUNY

Date: **Thursday, February 1, 2024**

Place: via Zoom ([register here](#))

Time: 6:45 PM



Abstract: The seminar presentation consists of two parts. The first part will discuss the synthetic applications of various transition metal-catalyzed cascade ring-opening and rearrangement reactions of isoxazole derivatives, including palladium-mediated tandem catalysis and iron-mediated reductive ring-opening and cascade reactions. A brief introduction of the research background will be covered, including late transition metal-catalyzed cascade reactions and transfer hydrogenation reactions. The application of the in-house aged *N*-methyl-2-pyrrolidone as an economic and efficient hydrogen donor will be highlighted in the first part.

In the second part, iodine-mediated interconversion of methyl homopropargyl ethers to α -iodo- γ -chloroketones as well as the carbon-nitrogen cross-coupling reaction between aldehydes and amides will be discussed. Background introduction to the synthesis of halogenated ketones as well as imide bonds will be discussed. An interesting electrotonic effect observed in the iodine-catalyzed carbon-nitrogen cross-coupling reaction will be covered. Specific attention will be paid to the intriguing C-C bond cleavage and formyl transfer reaction between electron-rich aromatic aldehydes and amides, which will highlight the second topic. Mechanistic studies on both the iodine-mediated functional group interconversion and the single electron transfer C-N cross coupling reaction will be discussed as well.

[Download flyer here](#)

A Day in the Life of a
GRADUATE STUDENT
with Erin Joy Araneta



Monday, January 22nd, 2024
6:00 – 7:00 PM EST
3:00 – 4:00 PM PST

Erin Joy Araneta is a graduate student in environmental chemistry at the University of Southern California and the creative mind behind “The Adventures of Chemist Clara” book series. She is passionately committed to leaving a positive mark on the world, and is a member of the ACS YCC.



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paper or poster to the ACS Spring
2024 meeting

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**Deadline for submitting articles and advertisements for the
February 2024 issue is **January 16, 2024**
[Click here to submit](#)**

LAST CALL FOR NOMINATIONS WESTCHESTER CHEMICAL SOCIETY DISTINGUISHED SCIENTIST AWARD DEADLINE IS JANUARY 15, 2024

The Westchester Chemical Society is now accepting nominations for the “WCS Distinguished Scientist Award 2024”. 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, 2024 to Dr. Peter Corfield at pcorfield@fordham.edu.

2024 WILLIAM H. NICHOLS DISTINGUISHED SYMPOSIUM & AWARD BANQUET**PHYSICAL CHEMISTRY AND SUSTAINABILITY**

A distinguished symposium honoring

Professor Emily A. Carter

Princeton University

*for groundbreaking quantum insights
in sustainable catalysis*

Date: Friday, April 12, 2024

Sonesta Hotel, White Plains, NY

[Hotel website](#)

Time: 1:30 PM – 9:00 PM

[Register here](#)

Symposium Program

- 1:30 PM** **Welcome**
Professor Ping Furlan, 2024 New York ACS Chair, US Merchant Marine Academy
- 1:35 PM** **Opening of the Distinguished Symposium**
Professor Eric Chang, 2024 New York ACS Chair-Elect, Pace University
- 1:45 PM** **Computational Discovery of Metal-Organic Frameworks for a Changing World**
Professor Laura Gagliardi, University of Chicago
- 2:30 PM** **Designing Metal-Oxide-Based thermochemical Redox Materials and Processes:
Solar Fuels and Energy Storage**
Professor Ellen Stechel, Arizona State University
- 3:15 PM* *Coffee Break*
- 3:45 PM** **Observing Molecular Transport through Living-Cell Membranes – Pushing the
Boundary of Physical Chemistry toward Biology**
Professor Hai-Lung Dai, Temple University
- 2:30 PM** **A Physical Chemist's Journey to Combat Climate Change**
Professor Emily A. Carter, 2024 Nichols Medalist, Princeton University
- 5:45 PM* *Social Hour*
- 6:45 PM** **Medal Award Dinner**

Supported in part by the William H. Nichols Fund For Chemistry at the Boston Foundation

**CALL FOR NOMINATIONS: NORTH JERSEY ACS'
AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS**



THE ACS NORTH JERSEY SECTION SEEKS
NOMINATIONS FOR THE 2024
AWARD FOR CREATIVITY IN MOLECULAR DESIGN & SYNTHESIS

The ACS North Jersey Section is soliciting nominations for the 2024 Award for Creativity in Molecular Design & Synthesis. The award recognizes initiative, creativity, leadership, and perseverance in pure and/or applied chemistry. Nominees must have had broad impact in the areas of chemical synthesis, method development, bioorganic/medicinal chemistry, pharmaceutical sciences, and/or molecular recognition.

Nominations should include a letter describing the nominee's achievements, a brief biography and curriculum vitae, and a list of the nominee's important published works. Supporting letters are strongly encouraged.

Please submit materials by **February 29** to Professor Joseph Badillo: joseph.badillo@shu.edu. The prize consists of a crystal plaque and a \$5,000 honorarium.

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 Council welcome you to our monthly NJACS meetings. The meetings are normally held on the second **Wednesday from 7 pm to 9 pm**. All members are welcome to attend and become more involved in section activities. The dates for 2024 are, as follows:

Wednesday, January 10, 2024 (virtual)	Wednesday, June 12, 2024 (hybrid)
Wednesday, February 21, 2024 (virtual)	Wednesday, September 11, 2024 (hybrid)
Wednesday, March 13, 2024 (virtual)	Wednesday, October 9, 2024 (hybrid)
Wednesday, April 10, 2024 (hybrid)	Wednesday, November 13, 2024 (virtual)
Wednesday, May 15, 2024 (hybrid)	2025 Planning Meeting in December, TBD

For links to the virtual meetings and RSVP for in-person attendance at hybrid meetings, please [click here to email our Communications Chair](#).



2023 FINANCES & 2024 BUDGET & 2023 ANNUAL REPORT, OH MY!

A reminder for Topical Group and Committee Chairs and Treasurers: you should have received an email in mid-December about:

- Tracking your group's finances for 2023
- Requesting your 2024 budget

With the new year approaching, it's also a good time to remind key Topical Group, Committee, and Event players that the 2023 Annual Report will be due in February 2024. Start gathering your information on successes, collaborations, shout-outs, and photos **photos PHOTOS** from your 2023 events! The deadline approaches rapidly and with many people using January to regroup from 2023 and set plans for 2024 in motion, we don't want to be knocking on your (virtual or real!) door the last minute to send information to National!

Thank you kindly for all you do – remember, we are a Local Section of National ACS, and a non-profit too! We have to make sure we check all financial and other reporting requirements to allow us to continue the great work of the North Jersey Local Section of the American Chemical Society!

MEETING REPORTS

FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM



Symposium Organizers with Speakers. Left to right: Dr. Ronald P. D'Amelia (NYACS Director-at-Large), Dr. Kenneth Takeuchi, Dr. Esther Takeuchi, Dr. Paris Svoronos, Dr. Ping Furlan (NYACS Chair-Elect), Dr. Amy Marschilok, and Dr. William Nirode.

On November 18, Hofstra University's Berliner Hall 117 hosted the 2023 Frances S. Sterrett Environmental Chemistry Symposium—a dive into the future of electric vehicles. The day-long event featured ten distinguished speakers delivering nine insightful talks, mixing in-person and virtual presentations.

In-person speakers included Dr. Steve Greenbaum (Hunter College-CUNY), Dr. Brian Gibney (Brooklyn College-CUNY), Drs. Esther Takeuchi, Kenneth Takeuchi and Amy Marschilok (all from Stony Brook University), and Dr. Muhammad Momimur Rahman (Brookhaven National Lab). Adding a virtual dimension to the Symposium were Dr. Hao Liu (Binghamton University), Dr. Linda Gaines (Argonne National Laboratory), and a joint presentation by Dr. Priyanka Bhattacharya and Dr. Kevin Wujcik from Blue Current.

Speakers were acknowledged with ACS-Long Island Subsection plaques, recognizing their invaluable contributions. Dr. Charles Riordan, Hofstra University's Provost and Vice President of Academic Affairs, set the tone with inspiring introductory remarks. Dr. William Nirode, Chair of the Chemistry Department, and Dr. Paris Svoronos, the Symposium Committee Chair, added their insights.



Dr. Paris Svoronos inaugurates the 2023 Frances S. Sterrett Environmental Chemistry Symposium on November 18, 2023 at Hofstra University.

FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM (continued)

Dr. Charles Riordan, Hofstra University's Provost and Vice President of Academic Affairs, extends a warm welcome to attendees at the 2023 Frances S. Sterrett Environmental Chemistry Symposium. A chemist himself, he expressed appreciation for hosting this event, fostering discussions on current issues related to environment, equity, and sustainability, at Hofstra University, where Dr. Sterrett served as a full-time faculty member.

Practical logistics were handled smoothly, with breakfast and lunch provided by Hofstra's Food Services, supported by the NYACS-Long Island Subsection and an ACS Local Section MEET Grant.

The Symposium, attended by 56 participants and well evaluated by survey responders, made a lasting impact, contributing to environmental consciousness, equity, and sustainability while fostering understanding and collaboration in the electric vehicle landscape. The Symposium Committee express gratitude to all participants and look forward to their continued engagement in next year's Symposium.

Special thanks to the following Symposium Committee members: Dr. Paris Svoronos (Chair), Dr. Mary Virginia Orna, Dr. Ping Furlan, Dr. William Nirode, Dr. Ronald P. D'Amelia, Dr. Kevin Bisceglia, Dr. Brian Gibney, Dr. Terrence Black, Dr. Qi Wang, Dr. Sujun Wei, Dr. Frank Romano, Dr. Neil Jespersen, Professor Marlon Moreno, Dr. Paul Sideris and Mr. Rocco Di Stefano for their pivotal roles in making this success possible. The Symposium garnered high praise from its participants.



Dr. Steve Greenbaum, CUNY Distinguished Professor of Physics at Hunter College, showcased breakthrough with cellulose nanofibers and Li_3YCl_6 , advancing all-solid-state-batteries.



Dr. William Nirode (left), Chair of the Chemistry Department at Hofstra University, presents a plaque to Dr. Muhammad Mominur Rahman, Chemistry Research Associate at Brookhaven National Laboratory. Dr. Rahman presented his work on lithium-metal battery challenges, focusing on electrolyte additives and solvent development.

FRANCES S. STERRETT ENVIRONMENTAL CHEMISTRY SYMPOSIUM (continued)

Dr. Esther Takeuchi, SUNY Distinguished Professor at Stony Brook University explores the effects of fast charging on EV batteries, addressing degradation modes and essential mitigation strategies for prolonging battery life.



Dr. Amy Marschilock, Energy Storage/System Division Manager at Brookhaven National Laboratory, highlights the significance of low-cost, abundant materials and the role of 2D materials in enhancing battery stability.



Dr. Kenneth Takeuchi, Distinguished Teaching Professor at Stony Brook University, envisions lighter, smaller, and more energy-efficient electric vehicle batteries through innovative material concepts.

An advertisement for the ACS Bridge Fellow program. The background is purple with white and yellow text. The ACS logo and 'Chemistry for Life' tagline are at the top left. The main text reads 'Envision a brighter future! BECOME AN ACS BRIDGE FELLOW'. Below this, it says 'Diversifying the graduate student population in the chemical sciences.' and 'Learn more and apply at ACS.org/BridgeProgram'. On the right side, there is a photograph of a young Black woman with curly hair, wearing a striped shirt, with her hands clasped in a thoughtful pose.

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CHEMISTS CELEBRATE EARTH WEEK ILLUSTRATED POEM CONTEST

**2024 CCEW Illustrated Poem Contest
Get A Charge Out of Chemistry**

The New York City Local Section of the American Chemical Society (ACS) is hosting an illustrated poem contest for students in Kindergarten through 12th grade. Entries must be sponsored by a local school or community group for verification purposes.

Contest Deadline: Friday, April 5, 2024 at 11:59 PM Eastern

Local Prizes: 1st Prize in each category receives a \$20 gift certificate

Winners of the New York City Local Section's Illustrated Poem Contest will advance to the ACS National Illustrated Poem Contest for a chance to be featured on the ACS website and to win prizes!

Local Contact: Elmer E. Mojica, Department of Chemistry and Physical Sciences, Pace University, One Place Plaza, New York, NY 10038 (Phone: 2123461344; Email: emojica@pace.edu)

Write and illustrate a poem using the CCEW theme, "Get A Charge Out of Chemistry." Your poem must be **no more** than 40 words and in the following styles to be considered:

HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE

Possible topics related to the CCEW 2024 theme include:

Batteries Natural Gas Biofuels Gasoline Renewable Energy

Entries will be judged based upon:

Artistic Merit - use of color, quality of drawing, design & layout
Poem Message - fun, motivational, inspiring about yearly theme
Originality Creativity - unique, clever and/or creative design
Neatness - free of spelling and grammatical errors

Contest rules:

- All poems must be no more than 40 words, and in one of the following styles to be considered: Haiku, Limerick, Ode, ABC poem, Free verse, End rhyme, and Blank verse.
- Entries are judged based upon relevance to and incorporation of the yearly theme (Get A Charge Our of Chemistry), word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.
- All entries must be original works without aid from others. Physical drawings may be scanned or captured via camera and submitted to the online form. Illustrations may be created using crayons, watercolors, other types of paint, colored pencils, or markers.
- The illustration may also be electronically created by using a digital painting and drawing app on a computer, tablet, or mobile device. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- The text of the poem should be easy to read and may be typed before the hand-drawn or digital illustration is added, or the poem may be written on lined paper, which is cut out and pasted onto the unlined paper with the illustration.
- No clipart or unoriginal images can be used.
- Only one entry per student will be accepted.
- Students must be sponsored by a school or another sponsoring group (e.g. Homeschool Association, Boys and Girls Club, Scout Troop, 4-H, etc.).
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners' names, likenesses, and entries for editorial, advertising, and publicity purposes.

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**2024 L'ORÉAL
FOR WOMEN IN
SCIENCE
FELLOWSHIP**

DEADLINE TO APPLY : FEBRUARY 16, 2024 AT 5 PM ET

<https://lorealfwis.aaas.org/>



2023 For Women in Science Fellows

NEW YORK ACS PARTNERS WITH NEW YORK HALL OF SCIENCE AND PEPSICO FOR ANOTHER SUCCESSFUL NATIONAL CHEMISTRY WEEK CELEBRATION

– Contributed by Dr. Ping Furlan



On Sunday, October 15, 2023, the New York Section of the American Chemical Society (NYACS) celebrated the 17th consecutive National Chemistry Week (NCW) at the New York Hall of Science (NYSCI) in Queens. This marked a significant return to in-person festivities after facing challenges from the pandemic and hurricane damages since 2020. This year's celebration was made possible through a successful partnership between the NYACS, PepsiCo, and NYSCI.

Approximately 200 volunteers from diverse backgrounds, representing colleges, high schools, nonprofit organizations, chemical companies, and business centers, put on a spectacular chemical hands-on demo that illustrated “The Healing Power of Chemistry”. Volunteers, traveling from all directions in the early morning, showcased their commitment to the cause. The day's program featured 32 activity tables hosting nearly 30 theme-related, safe and fun experiments. The interactive displays engaged 1,000 Hall visitors, with a particular focus on students in grades K-12.



NEW YORK ACS PARTNERS WITH NEW YORK HALL OF SCIENCE AND PEPSICO FOR ANOTHER SUCCESSFUL NATIONAL CHEMISTRY WEEK CELEBRATION (continued)

A large, eye-catching, and inviting NCW banner adorned the exterior of the NYSCI, creating a visually appealing welcome for attendees. Inside, a well-organized welcome table provided program brochures, chemistry demo passport cards, and guidance to the various activity sites.

The event officially commenced at 10 am with welcome remarks from Mr. Joseph Wiener and Dr. Ping Furlan, the NYACS NCW Committee Chairs. They expressed gratitude to the volunteers for their energy, passion for chemistry and commitment to volunteering, and thank them for demonstrating, with their well-designed experiments, that chemistry, at its core, has the power to heal, inspire, and change the world. Notable figures, including Dr. Mary Virginia Orna (NYACS Chair), Ms. Kiryn Hoffman (NYSCI's Chief Advancement Officer), and Mr. Rene Lammers (PepsiCo Chief Science Officer), reiterated the shared mission of promoting STEM learning and inclusion.



Throughout the day, NYACS volunteers, including college and high students, professors, high school teachers, and chemists, hosted their tables inside the Viscusi Gallery. They delivered captivating demos, hands-on activities, and engaging conversations, drawing inquisitive youngsters eager to learn from and interact with their inspiring “role-models”. Theme-related activities ranged from Blood Buffer Magic, Polymer Wonders in Wound Care, Mirror Molecules at Pharmacy, UV Defense Sunscreen and Beads, Invisible Ink in Medicine, From Diagnostic to Bookmarks, Endo-Thermic Alka Seltzer, Power of Minerals in Rocks for Plants, Healing Power of Illuminating Rocks, Earth’s Magnetic Field, Making Sparkling Water with Flavors, Iron for Health, Making Milk of Magnesia, PeaH Indicator with Butterfly Pea Flower, Radiation Rescue, Wheat Germ, Better Bandages, Elephant Toothpaste, Cabbage pH Indicator, Hot and Cold Packs, Antibacterials and antibiotics, Extracting DNA from Strawberries.

In honor of Dr. Marie M. Daly and the 2023 National Historic Chemical Landmark designation, NYACS featured dedicated demo tables with a lively photo booth. Attendees enjoyed playful photo ops with lab coats, goggles, and molecular models against the backdrop of Dr. Daly's, NCW, and NYACS banners. Additionally, a station highlighted the journey from hospital laundry to a fun slime activity, adding a unique and educational touch to the celebration.

NEW YORK ACS PARTNERS WITH NEW YORK HALL OF SCIENCE AND PEPSICO FOR ANOTHER SUCCESSFUL NATIONAL CHEMISTRY WEEK CELEBRATION (continued)

A secondary welcome table near the Viscusi Gallery ensured youngsters received safety glasses upon entry and NCW gifts upon proudly presenting their stamped passport cards at departure. As volunteers concluded the program at 4 pm, a sense of satisfaction and gratitude permeated the participants. Many enthusiastically committed to returning for National Chemistry Week 2024, making it a resounding success and a memorable day for all involved!

A heartfelt thanks you to the 2023 NCW sponsors and participants including Adelphi University, Archer Daniels Midland, Bronx Community College, College of Mount Saint Vincent, Columbia University, York College-CUNY, Hofstra University, Jersey City Public Schools, Iona University, Lehman College, New York ACS, New York Hall of Science, New York University, Pace University, PepsiCo, Queensborough Community College, Riverdale Scientific, Ryde High Chem Club, Skidmore College, Sonatrach, St. John's University (pictured below at right), United States Merchant Marine Academy, and Wild Flavors. Your support, dedication, creativity, and diligence played a pivotal role in the success of our return to NYSCI, making this chemistry outreach event a spectacular success once again.



Additionally, the New York ACS sponsored an illustrated poem contest with nearly 100 middle and high school students participating. We are thrilled to congratulate ***Jolene Cao and her teacher Ms. Maria Zeitline of Smithtown East High School, for securing the National 2nd place in the 9-12 grade category!*** ([View all winners here](#)). Our heartfelt gratitude goes to the participating schools and science teachers, including General Douglas MacArthur High School, Smithtown East High School, Monsignor Scanlan High School, Hastings High School, and St. Luk School, for their exceptional dedication in nurturing a passion for chemistry and fostering students' scientific creativity. Their support significantly contributed to the success of the 2023 National Chemistry Week Illustrated Poem Contest. We look forward to collaborating with you once more as we celebrate "Picture Perfect Chemistry!" during the 2024 National Chemistry Week Illustrated Poem Contest.

NORTH JERSEY ACS YOUNGER CHEMISTS

On November 28, 2023, the North Jersey ACS Younger Chemists Committee held their Fall 2023 Seminar Series featuring Dr. Jackson Hall an Associate Principal Scientist in the Small Molecule Analytical Research & Development Department at Merck & Co. Rahway, NJ. Dr. Hall was able to share his journey through science to a successful career at Merck! Approximately 13 YCC members consisting of both undergraduate and graduate students attended the seminar. Be on the lookout for more events they have planned and follow their social media pages!

Social Media Handles

Website: <http://www.njacs.org/ycc>

Email: njacs.youngerchemistscommittee@gmail.com

Facebook: [NJACS YCC Public Group](#)

Twitter: NJACSYCC

Instagram: @njacsycc

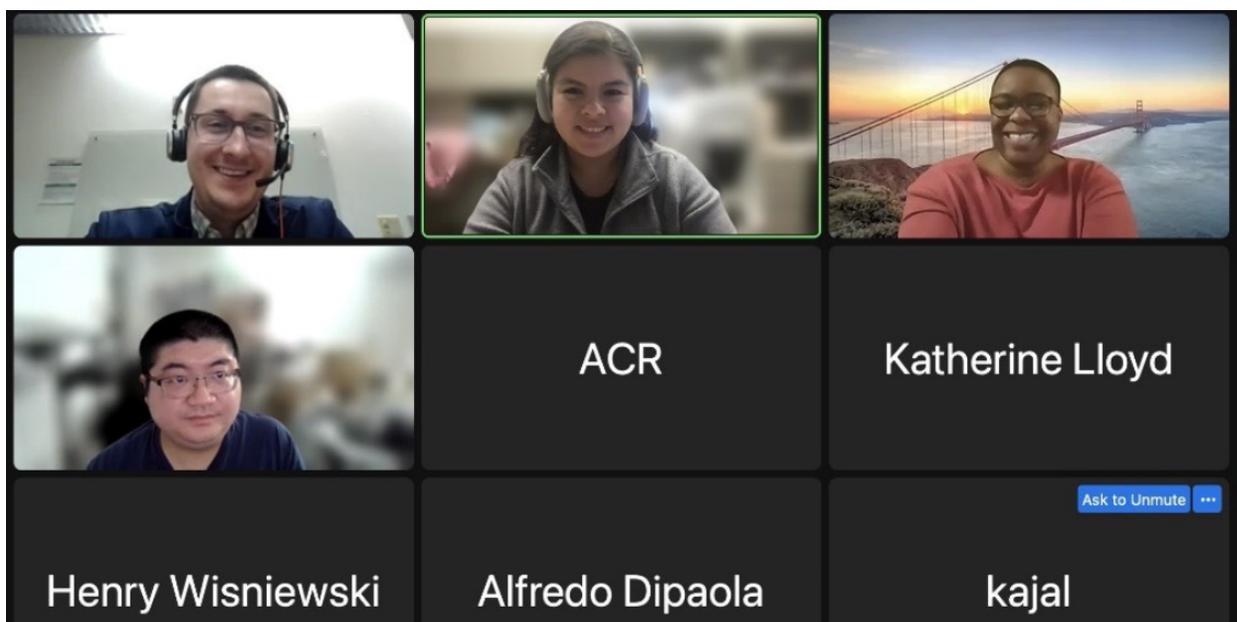
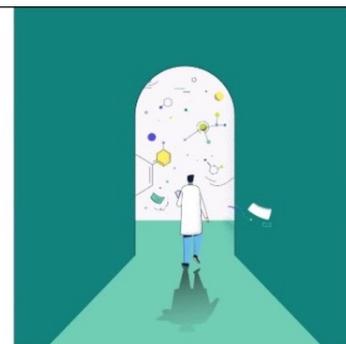


Analytical Chemistry in the Pharmaceutical Industry

My Journey through Science to a Career at Merck

Jackson Hall
Associate Principal Scientist
Small Molecule Analytical Research and Development

NJ ACS YCC
November 28, 2023



Elemental CHN, S, X analysis
Metals by ICP-OES, ICP-MS, USP <233>
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GC-MS/FID, Residual Solvents, Headspace

Ion Chromatography
KF Aquametry, Titrimetry
DSC, TGA, melting point
HPLC

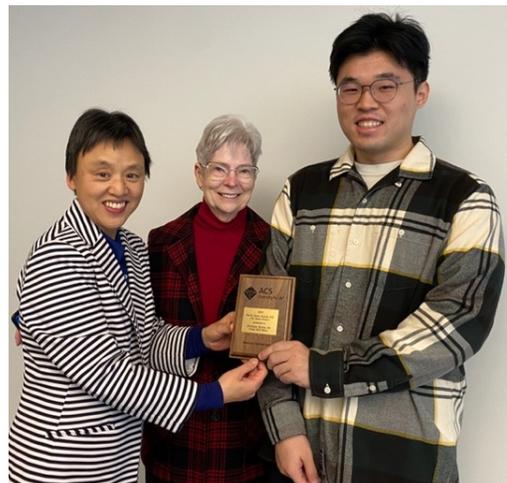
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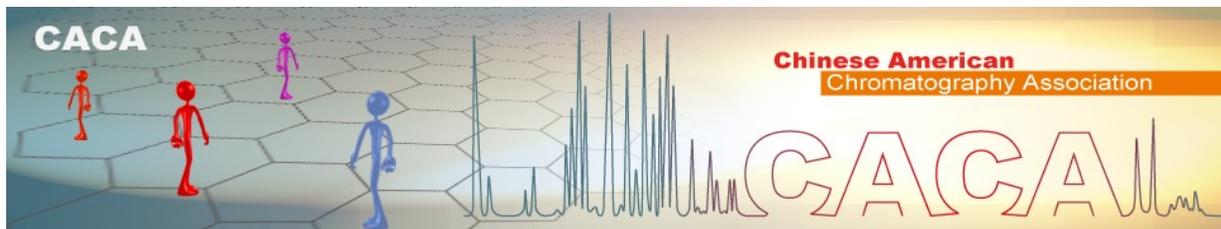
NORTH JERSEY ACS PRO BONO AWARD FOR PROJECT SEED WORK

Dr. Huixin He who was to receive a Pro Bono Award at our May Awards Dinner was unable to attend the ceremony. Dr. He won the NJACS Pro Bono Award for her continued mentorship with Project SEED students as shown in the picture at left.

Marilyn “Bobbi” Gorman retrieved her plaque that didn't get sent and then visited her on November 27th at Rutgers Newark. We are pleased that one of her student researchers was able to take photos to share with her department and to share with our section.



Here are some of the pictures taken by Ouyang Junjie, Beside Bobbi and Dr. He, pictured is Zhiyuan Zhang, the graduate student who supervised 2 Project SEED students during the summer of 2023.



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!

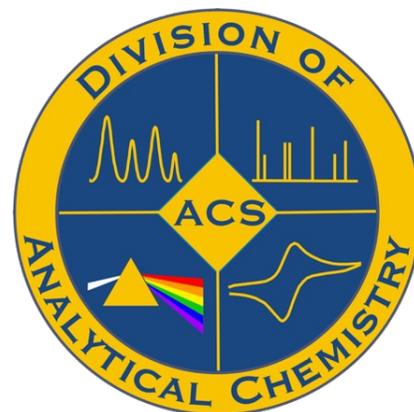
COMMITTEE ON THE HISTORY OF THE NEW YORK LOCAL SECTION

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.

NEWS FROM OUR PARTNERS**ANALYTICAL DIVISION**

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.

**SYNTHESIS ON SCALE SYMPOSIUM**

The [Princeton ACS](#) and [Rutgers University](#) invite you to attend the [Synthesis on Scale: Process Chemistry in the Pharmaceutical Industry](#) symposium on January 12, 2024.

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

**PROGRAM – SYNTHESIS ON SCALE – JANUARY 12, 2024**

- 9:30 – 10:00 AM **Registration – CCB Foyer**
- 10:00 – 10:10 AM **Welcome – Prof. Jean Baum, Rutgers University, Vice Provost for Life Science**
Opening Remarks – Prof. Lawrence Williams, Chair, Rutgers CCB
- 10:10 – 11:10 AM **Harshkumar Patel, Bristol-Myers Squibb**
Development of a Sustainable Synthetic Route to BMS-986278
- 11:10 – 12:10 PM **Kevin Campos, Merck**
Innovations in Synthetic Chemistry at Merck: Striving for the Ideal Commercial Manufacturing Process
- 12:10 – 1:10 PM **Lunch Buffet – CCB Foyer**
- 1:10 – 2:10 PM **Chris Senanayake, TCG GreenChem**
Novel Synthetic Approaches toward Complex API Assembly
- 2:10 – 3:10 PM **Prof. Ken Houk, UCLA**
Pericyclic Reactions in Synthesis and Biosynthesis: Computational Elucidation
- 2:40 – 2:45 PM **Closing remarks – Prof. Spencer Knapp, Rutgers CCB, PACS, Symposium Organizer**
- 2:45 – 3:45 PM **Reception – CCB Foyer**



NEWS FROM OUR PARTNERS (continued)**MARM 2024**

The Central Pennsylvania Section of the ACS is proud to present the 2024 Middle Atlantic Regional Meeting of the ACS on June 5-8 in Happy Valley, home of the Penn State Nittany Lions. The theme of this year's MARM is "Celebrating Discovery" and honors the discovery of oxygen in 1774 by Joseph Priestley.

[Website](#)
[Sponsor MARM](#)
[Join the Expo](#)

**ACS NATIONAL MEETING & EXPOSITION**

Access cutting-edge research while sharing your work and fine New Orleans cuisine with colleagues from across the globe at the ACS Spring 2024 National Meeting & Exposition being held **March 17-21, 2024**.

[Meeting registration](#)
[Hotel reservation](#)

A promotional graphic for ACS Spring 2024. The background is a light blue grid. On the left, the text "ACS SPRING 2024" is written in large, bold, blue letters. To the right, there is a mass spectrum plot with peaks labeled at 55, 69, 81, 94, 109, 122, and 152. Below the plot, the text "K5857 22% *2109.N* MW:305/305.42 C18H27N1O3 CAPSAICIN" is visible. A pink sticky note with the ACS logo and "Chemistry for Life" is placed over the spectrum. Below the spectrum, a yellow sticky note reads "Many Flavors of Chemistry". At the bottom, a wooden cutting board holds several bowls of food: strawberries, blueberries, white rice, and bread cubes. Chemical structures are overlaid on the food items. A blue banner at the bottom left contains the text "MARCH 17-21 | NEW ORLEANS, LA". A yellow banner at the bottom center contains the text "Registration Open!".

OPPORTUNITIES

For High School Students & Teachers

Presidential Awards for Excellence in
Mathematics and Science Teaching
[Nominations due January 9](#)

ACS-Hach Professional Development Grant
[Due January 21](#)

ACS Project SEED
[Applications open in February](#)

For Undergraduates

I.M. Kolthoff Enrichment Award
[Due January 9](#)

ACS Scholars Program
[Due March 1](#)

ACS Bridge Program
[Due March 15](#)

For Graduate Students / Postdocs

ACS Public Policy Fellowships
[Due January 8](#)

Henkel Award for Outstanding Graduate
Research in Polymer Science and Engineering
[Due January 25](#)

CAS Future Leaders
[Due January 28](#)

L'Oreal for Women in Science Fellowship
[Due February 16](#)

For Professionals

ACS Public Policy Fellowships
[Due January 8](#)

Camille Dreyfus Teacher-Scholar Awards
[Due February 1](#)

ACS Heroes of Chemistry Awards
[Due February 1](#)



Sound off on PhD life
Join a Slack community for grad students

Funding support provided by the
GENENTECH FOUNDATION

An advertisement for ACS Public Policy Fellowships. It features a yellow and blue background with an illustration of three people at a podium. Text includes: 'American Chemical Society Public Policy Fellowships', 'Do you have an interest in science policy?', 'ACS offers: > 1-2 year fellowship in ACS' Washington, DC HQ > 1 year fellowship on Capitol Hill', '✓ PhD or equivalent experience', '✓ Competitive salary', '✓ Relocation expenses & health coverage', '✓ Application deadline: January 15 for fellowships beginning the following September'. At the bottom, it says 'Find out more and apply! acs.org/policyfellow' and the ACS logo 'ACS Chemistry for Life'.

An advertisement for the Camille Dreyfus Teacher-Scholar Awards Program. It has a brown background with a network diagram on the right. Text includes: 'THE CAMILLE & HENRY DREYFUS FOUNDATION', '2023', 'Camille Dreyfus Teacher-Scholar Awards Program', and 'awards deadline announcement' at the bottom.

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

GRANTS & AWARDS

CHEMLUMINARY AWARDS

ACS ChemLuminary Awards honor the best examples of programming, outreach, and operations from ACS local sections, technical divisions, regional meetings, and international chemical sciences chapters.

DUE FEBRUARY 15, 2024

[View the ChemLuminary Award Descriptions](#)

LOCAL SECTION PUBLIC RELATIONS AWARD

To recognize outstanding efforts by ACS local sections to promote chemistry to the public or to local section members.

DUE FEBRUARY 15, 2024

[Learn more](#)

HELEN M. FREE AWARD FOR PUBLIC OUTREACH

An award of \$1000 that recognizes outstanding volunteer achievements in the field of public outreach by a member of the ACS who improves public recognition and appreciation for the contributions of chemistry.

DUE FEBRUARY 15, 2024

[Learn more](#)

CORPORATION ASSOCIATES LOCAL SECTION & INTERNATIONAL CHAPTER GRANT

Up to \$1000 for for ACS local sections and international chapters to promote industry-focused events.

DUE FEBRUARY 15, 2024

[Learn more](#)

LOCAL SECTION SUSTAINABILITY GRANT

Up to \$500 for the promotion of opportunities that enhance the chemical community's awareness of and the essential role of chemistry in responding to sustainability challenges.

DUE FEBRUARY 18, 2024

[Learn more](#)

STANLEY C. ISRAEL REGIONAL AWARD FOR ADVANCING DIVERSITY IN THE CHEMICAL SCIENCES

Recognizes individuals and/or institutions who have advanced diversity in the chemical sciences and significantly stimulated or fostered activities that promote inclusiveness within the region. This award is sponsored by the ACS Committee on Minority Affairs.

DUE MARCH 1, 2024

[Learn more](#)



UPCOMING POLY AWARDS

Call for Nominations



POLY is currently accepting award applications for the following awards:

ACS Macro Letters/
Biomacromolecules/Macromolecules Young
Investigator Award

Purpose: honor the contributions of two individuals, early in their careers, who have made a major impact in the field of polymer science.

Deadline: January 22, 2023

Henkel Award of Outstanding Graduate Research in
Polymer Science and Engineering

Purpose: Recognize a graduate student or recent graduate who has completed an outstanding Ph.D. thesis in research accepted by a U.S. or Canadian university.

Deadline: January 25, 2023

For complete information visit the POLY Awards Webpage listed below

Award Information: <https://polyacs.org/awards/>

***THE NEW YORK ACS MOURNS THE LOSS OF JOAN A. LAREDO-LIDDELL
(July 12, 1936-December 5, 2023)***

Joan Laredo-Liddell passed away on December 5, 2023. Joan was a well-known figure on the science scene not only in the New York American Chemical Society Section (NYACS) but also through her activities with STANYS (Science Teachers Association of New York State), which she also served as President in 1990. She was also very active in the Westchester Chemical Society and co-chaired the NYACS High School Teachers Topical Group for many years.

Joan received her Advanced Certificate in Educational Supervision and Administration, an M.A. and B.A. from CUNY-Hunter College. She was the recipient of many National Science Foundation (NSF) Grants for work at Sarah Lawrence College, the Stevens Institute of Technology and the Boyce Thompson Institute for Plant Research. She served in many educational positions including as Adjunct Physics Instructor, Concordia College, Bronxville, NY, Adjunct Chemistry Instructor, Fordham University, Bronx, NY, Adjunct Professor, Chemistry Department, Fordham University – Marymount College Campus, Tarrytown,

NY, Adjunct Assistant Professor in Chemistry, Elizabeth Seton College/Iona College, Yonkers, NY, and Assistant Principal, Science Chairperson, Chemistry/Physics Teacher, St. Barnabas High School, Bronx, NY. In these positions, she was always a staunch advocate for students in STEM fields. When few women were entering those fields, she stood out as a mentor to young women studying physics, chemistry, geology, ecology, math and earth science.

Joan was also very active in the NYACS serving as Section Chair in 2007, as Councilor from 2006 to 2015, Director-at-Large in 1999 to 2005, and on the Board of Directors from 1990 on. She served on many other NYACS committees including membership, safety, chemical education, nominating and long-range planning. She also served as Director, Secretary and Chair of the Westchester Chemical Society. Her activities on the national ACS scene were also numerous: she was a member of the (national) Society Committee on Chemical Education (SOCED) from 2004 to 2017 as well as the SOCED High School Programming Task Force and the Pre-College Teacher Workshop Coordinator. She was also a frequent presenter at ACS National Meetings.

Recognition for her many activities came through the 1996 Chemistry Teachers Club of New York Oscar Riker Foster Award, the 1998 ACS Middle Atlantic Regional Award in High School Chemistry Teaching and the 2011 ACS E. Ann Nalley Regional Award for Volunteer Service. In addition, in 1988 she was named a STANYS Fellow and in 2011 a Fellow of the American Chemical Society.



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.

Academic Positions

Assistant Professor, Biochemistry – Iona University

[Apply here](#)

Lecturer, Chemistry – Barnard College

[Apply here](#)

Program Manager, Awards – New York Academy of Science

[Apply here](#)

Industrial Positions

Analytical Research Scientist (Spectroscopy) – SABIC

[Apply here](#)

Quality Control Chemist – Vantage Speciality Chemicals

[Apply here](#)

Contract Analytical Research and Development Chemist – Lupin Pharmaceuticals

[Apply here](#)

QC Chemist II – Amneal Pharmaceuticals

[Apply here](#)

Director, Regeneron Genetic Medicines – Regeneron

[Apply here](#)

PET Radiochemist – PharmaLogic

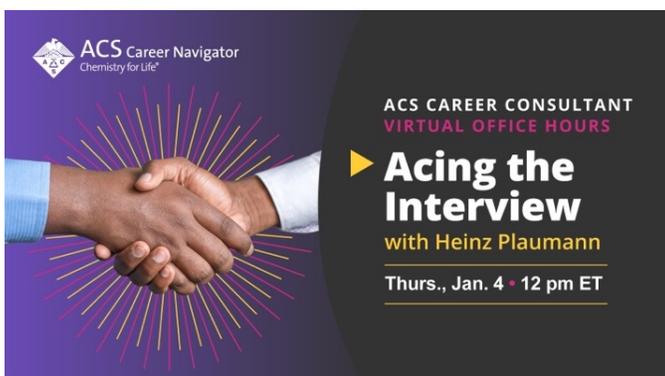
[Apply here](#)

Synthetic Chemist, Director – Osmo

[Apply here](#)

Senior Scientist, Chemistry – Merck

[Apply here](#)



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THIS MONTH IN CHEMICAL HISTORY

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

For my next few columns I plan to revert to my custom at the beginning of a new year and look back at the new 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. Glancing at this volume I was struck by the advertisements that preceded the actual contents. Old advertisements have a strangely nostalgic impact, I find. Lang of London offers All-British high-speed mixers and emulsifiers and high-speed centrifuges. Their offices and works are located, as a mini-map indicates, at the junction of Euston Road and Hampstead Road in N.W.1. B.Black and Son offer mercury in glass thermometers that are British made throughout and can come with National Physical Laboratory certificates of precision. The Derbyshire Silica Firebrick Company offers highest grade refractories and insulating bricks.

Bookshops and publishers are also included. H.K.Lewis offers English and Foreign scientific books and - a novelty - a scientific lending library. Heinemann has just published A.J.Mee's "Physical Chemistry" and O.Hassel's "Crystal Chemistry". The former cost 15 shillings or about \$4.00; the latter 6 shillings or about \$1.50. W.R.Chambers has published Part III of Perkin and Kipping's "Organic Chemistry" containing recent advances in the subject. This is really nostalgic; seventeen years later F. Barry Kipping, one of the authors, was my lab instructor in organic chemistry. Finally, Kennicott Co. specializes in water purification for all purposes - a bold claim.

And now for 1934's chemistry. The relatively recent discovery of deuterium (this is now the accepted name for the hydrogen isotope) has led to a surge in new findings. Heavy water either as pure D₂O or in various mixtures with H₂O is now available commercially in both America and Europe. The electrolytic method is used exclusively to prepare it. The ratio D:H in many samples has been determined, e.g. in benzene, kerosene, and honey, to an accuracy claimed as 2 ppm. Generally, the ratio is slightly higher than in normal tap water and this is attributed to slightly different evaporation rates. The vibration-rotation spectra of HD and D₂ have been observed and agree completely with theoretical predictions - the assumption being that the potential energy curve is essentially the same as for H₂. The nuclear spin of the deuteron is 1, twice that of the proton. The ionic product of D₂O is about 3 x 10⁻¹⁵ at 298K, that is about one-third of the value for H₂O.

The kinetics of a few reactions involving deuterium have been determined and compared with those of compounds containing normal hydrogen. D₂ reacts with chlorine at about one third of the rate of H₂ in the photochemical reaction to produce DCl or HCl. This is attributed to the rate of the initial step in which chlorine atoms extract D(H) from D₂(H₂). Reaction of D₂ with oxygen, catalyzed by palladium, is 1.6 times slower than the comparable reaction of H₂.

Reaction rates of several reactions in H₂O and D₂O have been compared. The acid catalyzed mutarotation of glucose is 1.3 times as fast in the former solvent. E_a differs by 1.25 kcal. In the absence of added acid the rate in H₂O is 3.8 times that in D₂O. Surprisingly the rate of acid catalyzed inversion of sucrose is nearly twice as great in D₂O as in H₂O. However, the rate of enzymatic inversion is slightly slower in the deuterated solvent.

Let's change the topic to the relatively recent discovery of the Raman effect. In 1934 the technical challenges were substantial, but there were still around 1000 articles to review since the initial papers in 1929. Despite the faint appearance of Raman scattered lines on photographic plates the effect has been used quantitatively with fair accuracy in a number of cases. Benzene-toluene mixtures have been analyzed with an accuracy of about 5%. As little as 0.4% of styrene can be detected in ethylbenzene. In a mixture of xylenes, the meta isomer can be detected down to 1%.

This is just the opening salvo in a barrage of fascinating information about the advances in chemistry 90 years ago. I promise you more in succeeding columns. In the meantime, here's wishing you a happy and prosperous 2024.