

SEPTEMBER 2024 VOLUME 47 NO. 9

# SILICON VALLEY CHEMIST

## SVACS Wins 2024 ChemLuminary Award for Outstanding Local Section Career Program



Sponsored by the ACS Committee on Economic and Professional Affairs, the Silicon Valley Local Section created a Career Panel and Networking event supporting community college and transfer students. The panel featured four scientists who started their higher education at community colleges, and was viewed on Zoom and at a watch party on the Hartnell College campus. The watch party model will be expanded to other community *continued on next page* 

	BAC	an ACS sponsored event					
P	BAY AREA CHEMISTRY SYMPOSIUM connecting industry + academía						
The 5th annual <b>Bay Area Chemistry Symposium</b> , an ACS sponsored symposium for Synthesis and Design in Medicinal & Process Chemistry							
	WHEN	Friday, October 25th, 2024					
WHERE Roberts		Robertson Auditorium, UCSF					
	SUBMIT	Abstracts for talks & posters today!					
This symposium, unique to the Bay Area, will provide an ideal forum for students, postdocs, and							

In symposium, unique to the Bay Area, will provide an ideal forum for students, postdocs, and industrial chemists to meet and exchange ideas covering themes in chemical biology, synthesis, and computational chemistry. The 2024 symposium will feature keynote seminars from leading local academics & industrial chemists, as well as short talks from students, postdocs, and industry researchers. A lively poster session promises a much-anticipated return to networking with local chemists through this opportunity to learn about cutting-edge chemistry across the Bay Area's outstanding institutions. Visit our website for more details: bayareachemistrysymposium.com

OUR 2024 KEYNOTE ACADEMIC SPEAKERS







Prof. Noah Burns Stanford Prof. Brian Shoichet UC San Francisco

Prof. Alanna Schepartz UC Berkeley

Last year's BACS was graciously sponsored by our

> INDUSTRY SPONSORS



## **TABLE OF CONTENTS**

Silicon Valley ACS Wins 2024 ChemLuminary Award for Outstanding Local Section Career			
Program	1-2		
Bay Area Chemistry Symposium 2024	1		
Diversity in Science: Bridging Communities Through the History of AIDS Research	2		
New ACS Volunteer and Youth Protection Policy	2		
Upcoming Events	3		
Stanford Chemistry Events	4		
National Chemistry Week 2024: Picture Perfect Chemistry	4		
Reactions Science Videos	5		
ACS Council Meeting Fall 2024: Selected Highlights	5		
Molecule of the Week Update for Vancomycin	6		
New Members	6		
Chemistry Quiz	6		
Chemistry of the Smell of the Sea Infographic	7		

ACS ChemLuminary Award Winner, continued from front page



The Lawrence Hall of Science, Berkeley DIVERSITY IN SCIENCE: BRIDGING COMMUNITIES THROUGH THE HISTORY OF AIDS RESEARCH

September 21st, 2024

Join us for this Cal ACS and AWIS East Bay joint event featuring the documentary Surviving Voices - Quilt Panel Makers, which tells the untold story of the AIDS Memorial Quilt. Dr. Christoph Carter, Senior Director of Clinical Development at Gilead Sciences, will speak on HIV treatment and prevention research advances. The event includes brief talks by National AIDS Memorial management and ACS California Board Members, followed by a networking session. Don't miss this opportunity to connect and reflect on the intersection of science and societal impact.

Register now <u>here</u> (\$20 General, FREE for students). All proceeds from this event will <u>go to the</u>

National AIDS Memorial. A limited number of travel assistance funds

A limited number of travel assistance funds are available for eligible students. Apply <u>here.</u>

Questions? Email taheri.atefeh@gmail.com

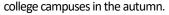




#### Agenda:

SCIENCE<sup>at</sup>Cal

- 12:30 1:00 PM: Registration and Welcome with Coffee/Tea
- 1:00 2:00 PM: Screening of Surviving Voices - Quilt Panel Makers
- 2:00 3:00 PM: Talk by Dr. Carter, Gilead Sciences
- 3:00 4:00 PM: Networking Session with Food and Refreshments



See our newsletter article in *The Silicon Valley Chemist, July 2024, pages 4-5 for details about this career panel and networking event* (PDF)

View all 2024 ChemLuminary Award Winners

# New ACS Volunteer and Youth Protection Policy

Beginning September 1, 2024, the ACS new Youth Protection Policy takes effect. Adult ACS volunteers who will be interacting with children under the age of 18 at ACS events will need to follow the ACS Volunteer and Participant Code of Conduct and the Youth Protection Policy, which includes background checks. Please see more details below.

In December 2023, the ACS Board of Directors approved the *Volunteer and Participant Code of Conduct Policy*, effective May 1, 2024. In the policy, item 10 states that a background check may be required for some events.

Starting on September 1, 2024, the *Youth Protection Policy* will take effect, and it details the expectations for volunteers at ACS Youth Events. ACS has partnered with Sterling Volunteers to conduct all background checks. This policy applies to all adults volunteering at ACS Youth Events in the U.S.

With National Chemistry Week approaching, please share the *ACS Background Check link* with your volunteers as soon as possible. Events scheduled before the end of September have a grace period and are exempt from the new policy. However, it is imperative for volunteers to familiarize themselves with the process and request a background check soon. All volunteers for ACS Youth Events after October 1 must comply with the Youth Protection Policy—no exceptions. For more information:

- Please visit the Youth Protection Policy webpage for the tutorial video, procedural details, and FAQs.
- For questions about the background check process, contact Sterling Volunteers at *info@ sterlingvolunteers.com*.
- For policy-related inquiries, email VolunteerPolicy@acs.org.
   Sincerely,

#### Marsh OlDei

Mark O'Brien

Senior Portfolio Manager, Component Services American Chemical Society

## CALENDAR OF EVENTS https://www.siliconvalleyacs.org/events/

	- September 2024 -	Sep 25	Innovation, Technology, and AI: Revolutionizing Peer Review & Publishing
Sep 9-11	Polymeric Foams and Latticed Architectures Enabling Dematerialization with Performance: A 2.5-day Virtual Short Course		Sponsored by ACS Webinars and ACS Publications 8:00 am – 9:15 am, Online, Free, <i>Registration required</i>
	<ul> <li>Prof. Tim Long, Arizona State University; Prof. Bob Moore, Virginia Tech; Prof. Joe DeSimone, Stanford; Prof. Rayne Zhang, UC Berkeley</li> <li>Sponsored by the Golden Gate Polymer Forum</li> <li>Sept. 9-10, 8AM-5PM, Sept. 11, 8AM-1PM. Online, \$450 until 8/26; \$550 until 9/6 if space is still available. <i>Learn more and register</i></li> </ul>	Sep 25	<ul> <li>"ChemHIST Talks" Two Talks from the ACS 2024 Fall Meeting</li> <li>(1) Art and inspiration: Edouard Benedictus and the invention of laminated safety glass. Prof. Seth C. Rasmussen, North Dakota State University</li> <li>(2) Drug analysis in the early years of the Pure Food and Drug Act of 1906. Prof. Alice Haddy, University of North Carolina at</li> </ul>
Sep 11	What's New in CAS SciFinder Sponsored by CAS 2:00-3:00 pm, Online, Free, <i>Registration required</i>		Greensboro. Sponsored by the ACS History of Chemistry Division Noon-1pm, Online, Free, <i>Registration required</i>
Sep 11	Growing Chemical Businesses: Strategies for IP Protection Sponsored by ACS Webinars and ACS Chemistry and the Law Division 11:00 am-12:15 pm, Online, Free, <i>Registration required</i>	Sep 26	Who Will Win the #ChemNobel? Predicting the 2024 Nobel Laureate(s) in Chemistry Sponsored by ACS Webinars and Chemical & Engineering News 11:00 am-Noon, Online, Free, <i>Registration required</i>
Sep 12	ACS Virtual Office Hours: Academia vs. Industry Sponsored by ACS Careers 9:00-10:30 am, Online, Free, <i>Registration required</i>	Sep 28	Lunch, Bocce, and Electrochemical Systems for Large-Scale Energy Storage Nicholas Cross, Postdoctoral Researcher, Lawrence Livermore
Sep 12	<ul> <li>Drug Quality and Regulations 101: An Overview of the Pharma Industry, Drug Development, and QC Processes</li> <li>Sponsored by ACS Webinars and ACS Office of Careers and Professional Education</li> <li>11:00 am-12:15 pm, Online Free, <i>Registration required</i></li> </ul>		National Laboratory Sponsored by California ACS 11:30 am-2:00 pm, The Clubhouse at the Mission Peak Sportplex, 4020 Technology Place, Fremont, California 94538, Cost \$25/person (\$12.50/person for students and unemployed members), <i>Registration required</i> by September 14, <i>Download flyer</i> (PDF)
Sep 12	The 34th First Annual Ig Nobel Prize Ceremony Sponsored by Improbable Research Webcast 3:00-4:30 pm Pacific Time, <i>Learn more</i>		- October 2024 -
Sep 14	Designing Tomorrow Prof. Julie Beth Zimmerman Sponsored by California Section ACS, Women Chemists Committee 10:30 am-Noon, Online, Free, <i>Registration required</i> by Sept. 12th at Noon, <i>Download flyer</i> (PDF)	Oct 3 Oct 9	<ul> <li>Catalyze the Vote! Meet the 2025 ACS President-Elect Candidates</li> <li>Sponsored by ACS Webinars, ACS Younger Chemists Committee, and ACS Committee on Nominations and Elections</li> <li>11:00 am-Noon, Online, Free, <i>Registration required</i></li> <li>Versatile and Sustainable Adhesives Derived from α-Lipoic Acid</li> <li>Comment Hubble California Catalyse Service</li> </ul>
Sep 14	<ul> <li>Kid Makers: Pop Up Chemistry</li> <li>Sponsored by Silicon Valley ACS and Redwood City Public Library (RCPL)</li> <li>2:00-3:00 pm, In person for ages 9-12, RCPL Downtown Location, 1044 Middlefield Road, Redwood City, Free, <i>Learn more</i></li> </ul>		<ul> <li>Sponsored by the Golden Gate Polymer Forum</li> <li>Prof. Phillip B. Messersmith, University of California-Berkeley &amp; Lawrence Berkeley National Lab</li> <li>6:00-7:00 pm, Online, Free/\$5 Donation, <i>Registration required</i> by October 8 at 1:00 pm</li> </ul>
Sep 18	How to Find and Apply for a Chemistry Position in the Federal Government Sponsored by ACS Career Pathways Virtual Workshop 9:00-10:30 am, Online, Free, <i>Registration required</i>	Oct 12	<ul> <li>Kid Makers: Pop Up Chemistry</li> <li>Sponsored by Silicon Valley ACS and Redwood City Public Library (RCPL)</li> <li>2:00-3:00 pm, In person for ages 9-12, RCPL Downtown Location,</li> <li>1044 Middlefield Road, Redwood City, Free, Learn more</li> </ul>
Sep 21	<ul> <li>Diversity in Science: Bridging Communities through the History of AIDS Research</li> <li>Dr. Christoph Carter, Gilead Sciences and Quilt Panel Makers</li> <li>Sponsored by California ACS and AWIS (Association for Women in Science)-East Bay</li> <li>12:30-4:00 pm, Lawrence Hall of Science, Room 150, 1 Centennial Dr., Berkeley CA 94720, Cost \$20, Students Free, <i>Registration required</i>, <i>Download flyer</i> (PDF), Student Travel Grant funds available: <i>Application form</i></li> </ul>	Oct 25	<ul> <li>Bay Area Chemistry Symposium</li> <li>Sponsored by Silicon Valley ACS, California ACS, EWOC (Empowering Women in Organic Chemistry) NorCAL Chapter, plus many corporate sponsors</li> <li>UCSF Mission Bay, Robertson Auditorium</li> <li>Submit abstracts by the end of September   Learn more</li> </ul>

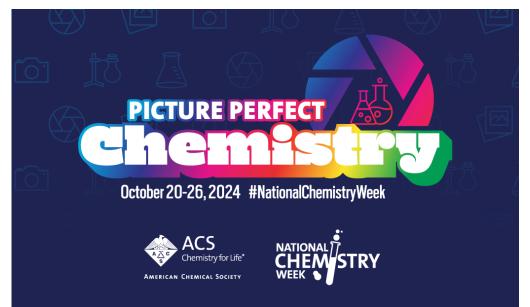
## STANFORD CHEMISTRY DEPARTMENT UPCOMING EVENTS

Subscribe to *This Week in Chemistry* to attend Stanford Chemistry events held in the *Sapp Center* that are also available via Zoom. TWIC is published on Fridays.

Sep 24	<ul> <li>Steering spin–valley polarizations through phonons and photons</li> <li>Prof. Roel Tempelaar, Northwestern University</li> <li>3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114</li> <li>Learn more</li> </ul>	Oct 2	New Strategies for Stereoselective Radical Biocatalysis Prof. Yang Yang, UC Santa Barbara 3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114 <i>Learn more</i>
Sep 25	and Research Prof. Grace Stokes, Santa Clara University; Prof. Gilles Muller, San Jose State University; and Prof. Resa Kelly, San Jose State University		Student Hosted Colloquium Kickoff Professor Matt Kanan, Stanford University 3:00-4:00pm, Stanford University, Sapp Center Auditorium 111 Learn more
Sep 26	<ul> <li>3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114 Learn more</li> <li>Copper-protein interactions in degenerative diseases: From the brain to the lens</li> <li>Prof. Liliana Quintanar Vera, Cinvestav</li> <li>3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114 Learn more</li> </ul>	Oct 14	Chemistry in art, art in Chemistry, and the spiritual ground they share Professor Roald Hoffman, Cornell University 3:00-4:00pm, Stanford University, Sapp Center Auditorium 111 <i>Learn more</i>
		Oct 15	Exploring and Manipulating Materials with Ultrafast Linear and Nonlinear Scattering and Spectroscopy Techniques Prof. Michael Zürch, University of California, Berkeley
Sep 27	NOBCChE Chemistry Seminar Prof. Will Tarpeh, Stanford University 3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114 Learn more		3:00-4:00pm, Stanford University, Sapp Center Lecture Hall 114 Learn more

## **National Chemistry Week 2024**

"National Chemistry Week (#ACS\_NCW) is celebrated this year during the week of October 20-26, with the theme "Picture Perfect Chemistry." Chemistry plays a crucial role in how photographs and images are created. The chemistry of photography is based on photosensitivity and reactions with light. The chemical processes that create a traditional photograph start inside the camera with the absorption of photons. However, photochemistry alone is not able to



produce an image. Development is continued through chemical reactions. The structures of the chemicals involved are extremely important to the reactions that take place.

Today, modern technology called imaging uses things like sound waves, many types of light, and even streams of electrons to make images we can't see with our eyes alone. These tools assist with making the images we use for medicine, space exploration, research, and other areas. Similarly, through medical imaging, we can see inside the human body. Medical X-rays, CT scans, and MRIs allow doctors to look inside our bodies in ways never possible before. These techniques help researchers understand diseases and improve patient care.

On Earth and in space, observatories use different types of imaging. These inventions help us see deeply into the universe and better understand it.

*Explore the resources on our pages* to learn more about chemistry's contribution to photography and imaging, as we strengthen local communities and celebrate this year's National Chemistry Week together."

# **Reactions Science** Videos

How a retracted paper affected the course of Alzheimer's research



#### Watch Video on YouTube **Read Associated Article**

"In June 2024, a landmark Alzheimer's research paper was retracted due to fraud allegations. Did we waste billions of dollars and thousands of hours of scientists' time? Maybe not. There are now two potentially helpful drugs on the market targeting the subject of the paper: amyloid beta. This video breaks down the amyloid-beta hypothesis, the fraud itself and where we go from here."

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#### Don't drink raw milk. But what about raw milk cheese?



### Watch Video on YouTube **Read Associated Article**

"A lot of people on the internet have been telling our host Alex to drink raw milk. This is a bad idea — a particularly bad one actually. So, she wanted to make a video about why it's such a bad idea to consume raw milk, then she realized she's been eating raw milk without even knowing it via cheese. That's when things got complicated."

# **ACS National Council Meeting** Fall 2024, Denver Colorado **Selected Talking Points**

The ACS National Council Meeting was held at the ACS 2024 Fall Meeting on August 21, 2024 in Denver.

The highlights below are excerpts taken from the Councilor Talking Points document. For more complete reporting, see Councilor Talking Points: Fall 2024 (PDF), and Council Agenda, Fall - August 21, 2024 (PDF).

• The ACS Fall 2024 National Meeting was held from August 18 – 22, 2024 in Denver, Colorado.

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 National meeting attendance: As of August 22, there were 11,569 registrations:10,245 inperson and 1,324 online.

#### **Council Actions**

- Approved revised Academic Professional Guidelines to reflect shared responsibility and accountability with the academic institution, faculty, and other mentors in creating a safe environment, and the Chemical Professional's Code of Conduct.
- Approved a petition for Global Representation on Council.

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- Approved the creation of the following International Chemical Sciences Chapters, subject to the concurrence of the ACS Board of Directors: Bangladesh, East and Northeast India, and West India.
- Approved a name change for the Committee on Technician Affairs (CTA) to the ACS Committee on Chemical Technical Professionals (CTP).
- The Committee on Younger Chemists (YCC), in celebration of their 50th anniversary, encourages early career chemists to join ACS. Through September, new members can join ACS for a 50% discount off their first year of annual dues by using discount code YCC24 when joining online.

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#### **Board of Directors Actions**

- Voted to approve that the Arthur C. Cope Fund utilization be revised to include a twoyear postdoctoral fellowship program to be awarded to Ph.D. candidates or postdoctoral researchers within their first two years of pursuing postdoctoral research in organic chemistry, providing support up to \$85,000 per year for two years, beginning in 2025.
- Voted to approve the use of \$10,000 from the 2024 Presidential budget to support the ACS Student Chapter Membership Campaign.
- Voted to approve the DEIR statement as modified during the meeting.
- Voted to approve the ACS nominee for the 2025 Perkin Medal.

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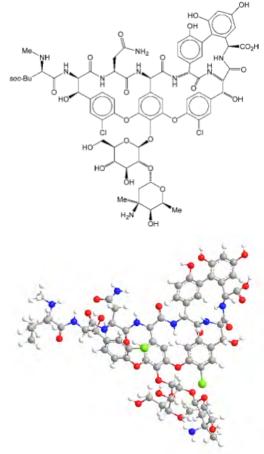
- Voted to approve the appointment of an Editor-in-Chief of Organic Process Research & Development, and reappointment of several ACS journal editors.
- Voted to approve the advance member registration fee for 2025 spring and fall meetings: \$549 for in-person and \$249 for virtual. •••

#### Reports

- ACS CEO, Albert Horvath, and his staff, reported on the evolution of membership engagement, planning for the 150th anniversary of ACS, the ACS Brand, financials, organizational objectives, and other ACS activities.
- ACS General Counsel, Tokë Vandervoort, provided an update on the Youth Protection Policy and Volunteer Background Check process. The communications will roll out to the ACS member community beginning on August 26, 2024. See the separate article on page 2 in this September 2024 SVACS newsletter.

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# Molecule of the Week Update for Vancomycin



"Vancomycin<sup>1</sup> was the Molecule of the Week for *September 05, 2016*. It is an amphoteric glycopeptide antibiotic originally isolated from the soil bacterium *Amycolatopsis orientalis* in 1955. Vancomycin is mostly used to treat serious Gram-positive bacterial infections that do not respond to other antibiotics.

In August 2024, Lynette Cegelski, Paul A. Wender, and co-workers at Stanford University reported that enhanced versions of vancomycin are broad-spectrum antibiotics *effective against several otherwise resistant Grampositive and Gram-negative pathogens*. The authors prepared conjugates of vancomycin with biguanide<sup>2</sup>, a small molecule with amine and imine functionalities. The successfully treated pathogens included vancomycinresistant Enterococcus species, mycobacteria, and all of the pathogens in the virulent *ESKAPE* class."

\*

<sup>1</sup> CAS Reg. No. 1404-90-6. <sup>2</sup> CAS Reg. No. 56-03-1.

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Each month, our Silicon Valley local ACS section receives a spreadsheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members - students. As a welcoming gesture, the SVACS Executive Committee offers new members free attendance at a catered SVACS event. Come join us at our in-person gatherings! To register as our guest for a catered event, *contact us* directly to receive complimentary admission for you and a friend. This month's picnic is one such opportunity to meet us. See page 1 for details.

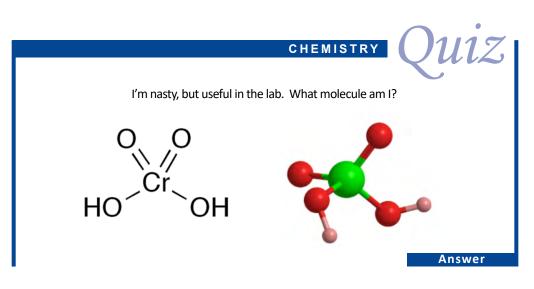
We hope you will also join us for an outreach event, like judging a science fair, proctoring the high school Chemistry Olympiad or participating in a National Chemistry Week hands-on experiment event. The local section is a volunteer organization. Attend an event, volunteer to help, and get to know your local fellow chemists.

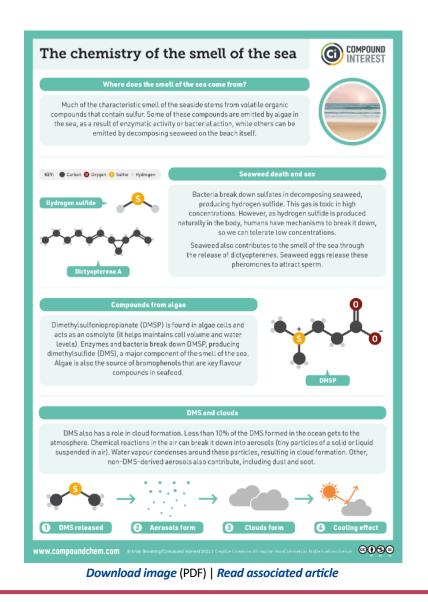
Ivonne Jasmine Aguirre Saad Albawardi Kayla Patricia Barker Hannah Bartels Andres Zamudio Bucio Xinpei Cai Stephanie Margot Cervantes-Azpilcueta **Rachel Anne Christian** Yaneli Cordova Morales Lakshay Dheer Sam Fleischman **Emely Elizabeth Flores** Sandra Yvonne Garibay Sanchez Eva Lizbeth Gonzalez Samantha Gonzalez-Leon Sai Gourisankar

#### **New SVACS Members**

Arely Martin Guijarro Gabino Guzman Diego Guzman-Bermudez Pauline Haghnazari Juan Sebastian Hernandez Cifuentes Henry Nguyen Huynh Mariam Khvichia Noe Lona Lizbeth Dayanara Lozano-Ruiz Juan Diego Madrigal Jacob Angel Mejia Bryanna Mendenhall Azucena Mendez-Gomez Jannet Anne Noriega Joaquin Perez Edwin Perez Pulido Alex S. Powers

Kimberly Nicole Ramirez Jonathan Resendiz-Saavedra Anne S. Robinson Nathan Alexander Rosales Luisana Salinas Jeriel San Antonio Sevilla Jie Shi Yujia Sun Reika Tei Andrea Gabriela Tinajero Ana Victoria Trujillo Lorena Lizeth Vargas Mo Wu Fan Yang Liwei Zheng





## Silicon Valley ACS Executive Committee

2023 Section Officers	Chair Chair-Elect Past-Chair Secretary	2024 2024 2024 2023-2024	Todd Eberspacher Amanda Nelson Natalie McClure vacant
	Treasurer	2024-2025	Ihab Darwish
Councilors	2023-2025	Linda Brunauer Ihab Darwish Grace Baysinger	2022-2024Jane Frommer2023-2025Madalyn Radlauer2024-2026Natalie McClure
Alternate Councilors	2023-2025	Megan Brophy Kristin Schmidt Karan Dikshit	2022-2024 Anais Nguyen 2023-2025 Laura Yeager 2024-2026 Howard Peters
Newsletter	Editor	Grace Baysinger	Assoc. Editor Jane Frommer



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**Communities | Green Chemistry** Local Sections | Science Outreach **Students and Educators** ACS Institute | Center for Lab Safety **Diversity, Equity, Inclusion & Respect** Volunteer | Donate

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