

#### OCTOBER 2024 VOLUME 47 NO. 10

# **SILICON VALLEY CHEMIST**

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### Paving the Path Virtual Career Panel & Watch Parties

#### October 16, 2024 5-7PM

Calling all community college and transfer students interested in chemistry-related fields! Silicon Valley American Chemical Society (SVACS) invites you to interact with a career panel of 4 chemistry professionals, all of whom began their educational journeys at community colleges. They will highlight their unique professional journeys and tell us their stories of resilience and determination. This virtual career panel can be accessed by Zoom on your own or at an in-person watch party at:

- Cabrillo CollegeGavilan College
- DeAnza College
- Hartnell College
- Foothill College
- Mission College

San Jose State University
 The in-person watch parties will also include refreshments (read: pizza), networking, and ACS swag. *Register* by October 15 and indicate your watch party preference so we order enough food. All

#### Paving the Path, continued from front page

registrants will be contacted by email with the Zoom link and the location of the watch party on their choice of campus (if applicable). Can't make it to the watch party? *Register* & get the link to join us on your own by Zoom. Looking forward to an animated evening of inspirational stories and pizza-fueled conversation! *Download the flyer*.



### BECAUSE PEOPLE LIKE YOU CREATE GREAT CHEMISTRY

You Belong Here

### Join ACS Today and Save!

As part of an exciting membership drive, the American Chemical Society is offering a special discount for new and renewing members. Now is the perfect time to become a part of the world's largest chemical society, where you can access a wealth of resources, networking opportunities, and professional development tools. Whether you're a seasoned professional or just starting out, ACS has something to offer. Don't miss out on this limited-time offer (available until November 15, 2024) - join or renew your membership today and take advantage of the discounted rates!

To get a 30% discount, sign up or renew your ACS membership at *https://ow.ly/* BHOs50SI9Rq.

Don't forget to use the code LSGROW24 at checkout to apply for the discount. *Learn more about ACS Membership* | *Download 2024 Guide to ACS Membership* (PDF)

### 2024 Election of SVACS Officers, Councilors, Alternate Councilors for 2025

Voting Period: October 21 to November 14, 2024

### Silicon Valley ACS (SVACS) members will receive an email notification to cast their votes online.

To help you be more informed when you receive this notification, a sample ballot is shown below.

### Biographies and candidate statements will be posted by October 18th on the *SVACS website*.

#### How to petition to be on the ballot:

Prior to October 15, 2024 any member or affiliate of the Section may, in writing or from the floor at a meeting to conduct governance business, nominate additional candidates for office, provided that the candidates are members of the Section, and the nomination is seconded by another member or affiliate. Nominations shall be equally valid as those from the Nomination Committee. All candidates nominated shall have indicated willingness to serve if elected. Written petitions can be sent to the Chair of the Nominations Committee, *Todd Eberspacher*. You may also contact Todd with questions.

A petition must include the following: name of the proposed candidate, the proposed position, and the name and ACS membership numbers for both the candidate and the person who is seconding the nomination. All petitions must be submitted by October 14, 2024, to *Todd Eberspacher*.

ACS is your Society! Voting in an ACS Election is one of many ways to engage and stay connected.Ability to vote in ACS Elections is granted to all ACS regular members who are on standard or premium packages.Excluded from this are members with a basic package.

#### https://www.acs.org/membership.html

#### ----- Sample Ballot ------

Chair-Elect (3-year commitment, will be Chair-elect 2025, Chair in 2026, and Immediate Past Chair in 2027) VOTE for ONE (1)

- Natalie McClure
- Write-in \_

Secretary (2-year term, 2025-2026. Vote for ONE (1)

- Ijgisha Shah
- $\square$  Write-in  $\_$

Councilor (2 open positions for 3-year terms, 2025-2027. Vote for TWO (2)

- Linda Brunauer
- Jane Frommer
- □ Write-in

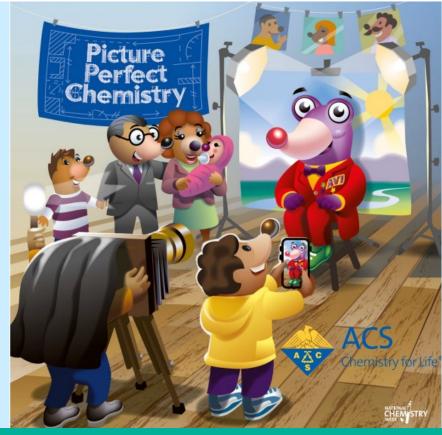
Alternate Councilor (2 open positions for 3-year terms, 2025-2027. Vote for TWO (2)

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- Jose Ramirez
- Eefei Chen
- Write-in

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

Oct 9	-October 2024 - Versatile and Sustainable Adhesives Derived from α-Lipoic Acid	Oct 23	Program-in-a-Box : Picture Perfect Chemistry: Laboratory Imaging & Photography
	Prof. Phillip B. Messersmith, UC-Berkeley & Lawrence Berkeley National Lab		Sponsored by ACS 4pm Pacific Time (pre-show starts at 3:45pm), Online, Free <i>Registration required and learn more</i>
	Sponsored by the Golden Gate Polymer Forum (GGPF)	0-+ 25	
	6:00-7:00 pm, Online, Free/\$5 Donation, <i>Registration required by</i> October 8 at 1:00 pm to receive Zoom link.	Oct 25	Bay Area Chemistry Symposium Sponsored by Silicon Valley ACS, California ACS, EWOC (Empowering
Oct 10	Catalyze the Vote! Meet the 2025 ACS President-Elect Candidates		Women in Organic Chemistry) NorCAL Chapter, plus many corporate sponsors
	Rigoberto Hernandez, Laura Sremaniak, & Mukund Chorghade		UCSF Mission Bay, Robertson Auditorium   <i>Learn more and register</i>
	Sponsored by ACS Webinars, ACS Younger Chemists Committee,		
	& ACS Nominations & Elections Committee 11:00 am-Noon, Online, Free, <i>Registration required</i>	Oct 28	Drug Discovery: How We Got Here & Where We Might Be Going Dr. Derek Lowe, Novartis
Oct 10	Primordial Pathway: A Legacy of Ancient Life on Earth		Sponsored by Stanford Chemistry Department
	Macon Abernathy		3:00-4:00 pm, In person at Stanford Center for Teaching & Learning, Sapp Center Auditorium 111, Free, <i>Learn more</i>
	Sponsored by SLAC National Accelerator Laboratory		Sapp Center Additionant 111, Free, Learn more
	7:00-8:00 pm, Online & in person, Free, <i>Learn more &amp; register to</i> watch in person	Oct 30	Science for All: The Power of Impactful STEM Communication & Journalistic Writing
Oct 12	Kid Makers: Pop Up Chemistry		Sponsored by ACS Webinars & ACS Public Relations & Communications
000 12	Sponsored by Silicon Valley ACS & Redwood City Public Library (RCPL)		Committee
	2:00-3:00 pm, In person for ages 9-12, RCPL Downtown Location,		11:00 am-12:15 pm, Online, Free, <i>Registration required</i>
	1044 Middlefield Road, Redwood City, Free, Learn more	Oct 30	See What's New in CAS SciFinder
Oct 14	Chemistry in Art, Art in Chemistry, and the Spiritual Ground		Sponsored by CAS
00114	They Share		11:00 am-Noon, Online, Free, Registration required
	Prof. Roald Hoffmann, Cornell University		- November 2024 -
	Sponsored by Stanford Chemistry Department		
	3:00-4:00 pm, Online & in person, Stanford Center for Teaching &	Nov 2	Reducing Risk & Uncertainty Associated with Nuclear Waste
	Learning, Sapp Center Auditorium 111, Free, Learn more		Processing & Disposal: A Hanford Tank Waste Case Study Carolyn Pearce, PhD, Pacific Northwest National Laboratory
Oct 16	Finding Your Market, Defining Your Business		Sponsored by ACS California Section, Women Chemists Committee
	Sponsored by ACS Careers Pathway Virtual Workshop		10:30-Noon, Online, Free, <i>Registration required</i>   <i>Download Flyer</i>
	9:00-10:30 am, Online, Free, Registration required	No. 7	
Oct 16	Paving the Path Initiative for Community College Students:	Nov 7	ACS Virtual Office Hours: Finding and Securing an Internship Sponsored by ACS Careers Office
00110	Virtual Career Panel & Watch Parties		9:00-10:30 am, Online, Free, <i>Registration required</i>
	Sponsored by Silicon Valley ACS		
	5:00-7:00 pm, Online & In person at Cabrillo College, DeAnza College,	Nov 9	Kid Makers: Pop Up Chemistry
	Foothill College, Gavilan College, Hartnell College, Mission College,		Sponsored by Silicon Valley ACS & Redwood City Public Library (RCPL)
	& San Jose State University, Free, <i>Registration required</i>		2:00-3:00 pm, In person for ages 9-12, RCPL Downtown Location, 1044 Middlefield Road, Redwood City, Free, <i>Learn more</i>
Oct 17	Sustainable Manufacturing: Green Chemistry Breakthroughs in	Nov 15	Celebration of Life: Professor John I. Brauman
	Pharma	107 15	Sponsored by Stanford Chemistry Department
	Sponsored by ACS Webinars & the ACS Green Chemistry Institute 11:00 am-12:30 pm, Online, Free, <i>Registration required</i>		5:00-6:30 pm, Online & in person at Sapp Center for Teaching and
			Learning, Sapp Auditorium (STLC 111), 376 Lomita Drive, Stanford.
Oct 19	National Chemistry Week Celebration 2024		Learn more and RSVP
	Sponsored by Silicon Valley ACS and San Jose Public Library	Nov 16-17	Stanford Splash - Fall 2024
	11:00 am-2:00 pm for kids ages 5-12. In person at the Martin Luther	100 10 17	Sponsored by Stanford University
	King Library, 150 E San Fernando St, San Jose, CA 95112, Free,		For students in grades 8-12. In person at Main Quad, Stanford
	No registration required, <i>Learn more</i>		University. Cost \$50 but free for students where this imposes a financial burden. <i>Learn more</i>



# NATIONAL CHEMISTRY WEEK CELEBRATION 2024

A FREE, interactive experience for kids of all ages and their families featuring:

- Hands-on chemistry activities for kids, about the chemistry of photography!
- Free copy of "Celebrating Chemistry" the ACS publication for kids.
- · PRIZES for every child who participates!
- Free! No registration required.

**SATURDAY**, **OCTOBER 19, 2024** Time 11 a.m.—2 p.m.

Dr. Martin Luther King, Jr. Library, Children's Room 150 E. San Fernando San José, CA 95112 (408) 808-2183

To request an accommodation under the Americans with Disabilities Act (ADA) for library events, please call 408-808-2355 or email Accessibility@sjlibrary.org at least one week prior to the event.









#### 2024 NCW Illustrated Poem Contest Picture Perfect Chemistry

The Silicon Valley Local Section of the American Chemical Society (ACS) is sponsoring an illustrated poem contest for students in kindergarten through 12th grade.

#### Contest Deadline: October 25, 2024

Prizes: Win an Amazon gift card

#### Contact: Jigisha Shah (jigishapshah85@gmail.com)

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

Write and illustrate a poem using the NCW theme, "**Picture Perfect Chemistry.**" Your poem must be <u>**no more**</u> 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 theme include:

- Chemical reaction
- Molecules
- FilmFilters

- Transparent
- Lens
- UltrasoundColloid
  - 1
- Imaging Pixel

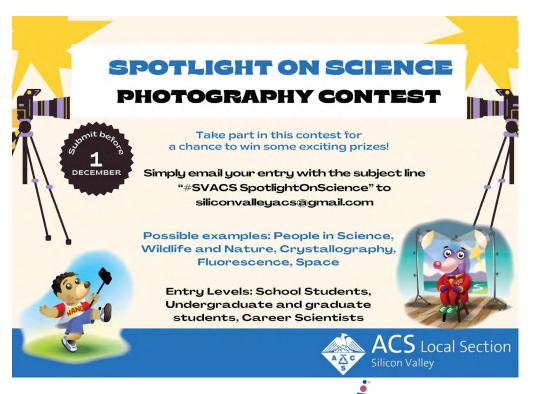
#### Entries will be judged based upon:

- Artistic Merit use of color, quality of drawing, design, and 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 NCW theme, 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. Poems may be submitted by hand on an unlined sheet of paper not larger than 11" by 14" or scanned and sent via email. 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.
- 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; all entries must include an entry form. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- Acceptance of prizes constitutes consent to use winners' first name, and entry for editorial, advertising, and publicity purposes.
- Do not place participant names on the front of your poem







#### Who can enter?

The photography contest is open to individuals of any age in any part of California.

#### Your photograph should focus on Science

Taking a camera and shooting a picture is an easy deal. What about going further? What about using photos to discover science?

Scientific phenomena are all around us. Silicon Valley ACS aims to give you an opportunity to freeze them for eternity!

#### Must be original, unpublished work

Entries must be composed of original, authentic, unpublished material and must be the sole property of the entrant, not previously submitted to any other contest. Published material includes that which has been posted online. This includes, but is not limited to, Facebook, or any other social network website where photos have been posted and shared.

In adherence to our commitment to promoting originality and creativity, the Spotlight on Science photography contest strictly prohibits the use of Artificial intelligence (AI) resources for photo manipulation or enhancement to ensure that each submission reflects the genuine skill and creativity of the photographer.

While the copyright for the photograph is retained by the entrant, entering the contest automatically provides Silicon Valley ACS the right to display the photo online and/or in any public or private settings without restriction.

#### What do I need to submit?

The photography contest is limited to one submission per entrant. A valid submission will contain the following information:

- 1. A completed Microsoft Form *found here*
- 2. One photograph illustrating your choice of "Science in the Spotlight."

#### When is the deadline?

All eligible submissions must be received electronically by **8 p.m. PST, Sunday, 1 December 2024**. Your photo submission is considered incomplete until we receive all of these items.

If you have any problems submitting your entry, please e-mail the Silicon Valley ACS staff at SiliconValleyACS@gmail.com with the subject line "#SVACS SpotlightOnScience".

### Stanford Splash Fall 2024 will be November 16 and 17!



Stanford Splash Education for students. By students.

Splash is a program that brings students in grades 8-12 from everywhere to Stanford's campus for a two-day learning extravaganza. Our goal is to create unique and fun learning experiences for students in the greater Bay Area, especially students from underrepresented and disadvantaged backgrounds. Splash also provides valuable teaching and outreach opportunities for Stanford affiliates.

Date: November 16 and 17, 2024

Location: Main Quad, Stanford University [*directions*]

**Cost:** \$50, but free for students where this imposes a financial burden (see our *fee waiver*). Lunch, snacks, and water are provided.

Interested in teaching? Click on the "Teachers" tab on the *Splash homepage* for more information! Teachers must be Stanford affiliates (students, faculty, or postdocs) and LiveScanned under California law.

**For students**: If you are interested in registering as a student, please check out the student tab for more information.

Any questions? Please email us!

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Want updates? Make an account and follow us on Instagram!

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### Silicon Valley ACS Harry and Carol Mosher Award Call for Nominations

#### Award recipients selected on the following criteria:

- Recognition of outstanding work in chemistry
- Advancing chemistry as a profession
- Recognized service to ACS

Submit nomination dossier to Natalie McClure *nmcclure@drugregulatoryaffairs.com* by December 1, 2024

#### Nomination dossier to consist of:

- 2 letters of recommendation
  - nominee CV

### For more details: https://www.siliconvalleyacs.org/awards-funding/mosher/

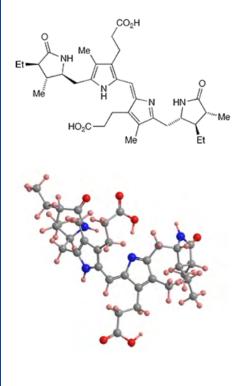
#### **Recent recipients:**

- Bruce and Cynthia Maryanoff, 2023
- Richard Zare, 2022
- Resa M Kelly, 2021
- P. Andrew Evans, 2020
- Chad Mirkin, 2019
- Gary Molander, 2018
- Nicola Pohl, 2017
- John Warner, 2016
- Attila Pavlath, 2015
- Scott Denmark, 2014

#### CHEMISTRY



I produce a color that you're all too familiar with. What molecule am I?





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.

Ignacio Bettinelli Kevin Cheung Ella Chu Arshia Desarkar Louis Diment Michele Fromel Hajime Fujita Xinxin Gao

#### **New SVACS Members**

Tanvi Gujarati Tarini S. Hardikar Aiying Hunag Minh Hoang Huynh Zhiqiao (Kate) Jiang Meara Kauffman Elizabeth Kelley Andrew Latham Jessica Luu Haiyan Mao Lorelay Mendoza Jaron Mercer Margit Moreland Yanwu Shao Rahul Vaidya Heng Zhang

Answer

### In Memoriam: John Brauman (1937-2024)



John Brauman served as Chair and Alternate Councilor for the ACS Santa Clara Valley Section (former name for the ACS Silicon Valley Section).

"Stanford chemist John Brauman, the J.G. Jackson and C.J. Wood Professor of Chemistry, has passed. During his 55-year career at Stanford, he served as a mentor to many and held several key positions, including Department Chair, Associate Dean for Natural Sciences, and Associate Dean of Research.

John Brauman's research on chemical structure and reactivity changed the way people thought about chemistry, clarifying how solvents affect chemical stability and reactivity. John was a skilled and motivating teacher and mentor who had a profound impact on the lives and careers of generations of graduate students and chemists.

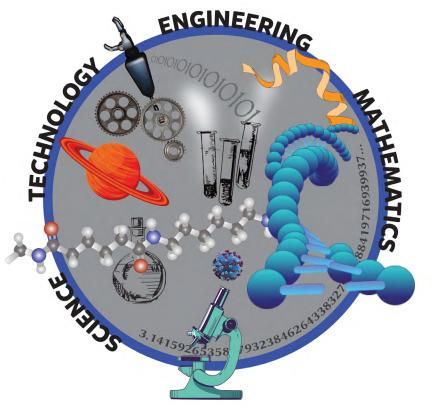
Among the many honors that he received over his lifetime was the National Medal of Science in 2002, membership in the National Academy of Sciences in 1976, the National Academy of Sciences Award in Chemical Science, and many awards from the American Chemical Society including the Linus Pauling Medal, Willard Gibbs Award, Harrison Howe Award, James Flack Norris Award in Physical Organic Chemistry, and the Award in Pure Chemistry."

#### PROFESSOR JOHN BRAUMAN CELEBRATION OF LIFE FRIDAY, NOVEMBER 15, 2024 | 5:00-6:30PM SAPP AUDITORIUM

A celebration of his life and scientific contributions is being held online and in person at Stanford on November 15, from 5:00-6:30 pm. *Learn more and RSVP*. | *John Brauman Obituary, SF Chronicle* 



K-12 Science Educators - get a BUBBLE Grant for your classroom. The SVACS BUBBLE Grant supports K-12 teachers with funds to facilitate teaching science.



For submission guidelines and project description go to http://www.siliconvalleyacs.org/awards-funding/bubble-grant

Bubble Grant application deadline - November 1, 2024

### Reactions: Chemistry Science Videos Uncover the Chemistry in Everyday Life



#### Watch Video on YouTube | View Sources

"How do you turn nuclear waste into a \$30,000-per-gram commodity? Tritium, once discarded as a by-product of Canadian nuclear reactors, is now one of the most expensive materials on Earth. This rare isotope of hydrogen powers glow-in-the-dark keychains, exit signs that can stay bright for two decades without power and cutting-edge fusion energy research.

Join our host, George, as he explores how tritium is produced and used, and why its use as a fusion fuel is completely different from its use in exit signs. As demand for clean, limitless power grows, companies are racing to secure their piece of the tritium pie, making this once-discarded nuclear waste a hot commodity."

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### David Parker Award for Excellence Recipients Celebrated at the Santa Clara Fire Department

In November 2020 the San Jose Mercury News published the obituary of David (Dave) Parker, a Ph.D. chemist and HAZMAT fire officer for the *City of Santa Clara Fire Department*. Dave had long been active in public outreach for science and chemistry. The obituary included a request to donate to the *ACS Silicon Valley Local Section (SVACS)* to support the chemistry education of middle school students. Dave had been a longtime active member of the SVACS Executive Committee.

Within a short time, donations were received to create the Dr. David Parker Fund to support 6-8th grade students presenting at the local *Synopsys Championship Science Fair* every March in San Jose. Donations are still being received to support student interest in science. The SVACS *David Parker Award for Excellence* recognizes 6-8th grade chemistry science fair presenters as David Parker Awardees. SVACS members Howard Peters and Mike Lepisto are the judges. Since the award was initiated in 2021 during the COVID epidemic, the earliest science projects were judged remotely.

On August 19, 2024, the City of Santa Clara Fire Department held a special event to honor the David Parker Awardees for years 2021-2024. These students and their families learned about the relationship between chemistry and fire science - both in starting a fire and how to extinguish one. They toured a fire truck containing tools and resources for firefighters responding to emergencies; were oriented to the role of the fire department in assuring public safety, as well as to station operations by fire department staff; and learned how the fire department responds to hazardous materials emergencies in the community. They performed hands-on testing with analytical equipment to identify potentially high-risk chemicals, as well as seeing demonstrations of hardware and software used to protect personnel. A special thanks to SCFD Firefighters Fred Chun and Jenn Panko for creating an amazing, informative learning session for these students and their parents. Fred and Jenn were integral in making this a memorable event.

Dave's wife, Carol Ann Parker, was in attendance and brought Dave's fire helmet (CHEMIST is printed across the front) and his gold badge to the event. The awardees had the opportunity to be photographed wearing the helmet, and a beautiful cake was served by fire department personnel in the awardees' honor.

SVACS members Susan Hines and Phil Hines attended the event as well. Susan has organized the SVACS Award teams at the Santa Clara County annual Synopsys Science Fair for many years. David Parker Awardees at the Santa Clara Fire Department Event

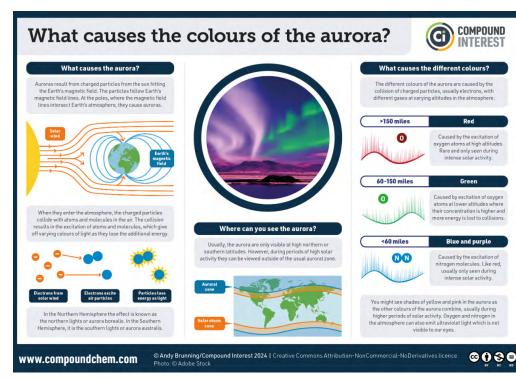


From left to right: Aanya Kandala (awardee), Carol Ann Parker (spouse), Susan Hines (SVACS), Phil Hines (SVACS), Mridula Rajagopalan (awardee), Viraj Pandey (awardee).









Download this image (PDF) Read associated article Sun Emits X9.0 Flare on 10/3/2024 (NASA)

### Silicon Valley ACS Executive Committee

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



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Website: https://www.siliconvalleyacs.org/

Sign up: Newsletter





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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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