

## SEPTEMBER 2020 VOLUME 43 NO. 9

# **SILICON VALLEY CHEMIST**

## TABLE OF CONTENTS

Council Report	1
Chair's Message	1
Upcoming Events	1
Chemistry Quiz	2
Elections for 2021 SVACS Leadership	3
New Members	3
National Chemistry Week 2020	4
Teacher-Scholar Award nominations	4
Worth Knowing About	4
Green Chem. Conf. Videos On-Demand	4
Enhancing Online Lab Experiences	5
Future of the Chemistry Lab Course	5
Teaching Remotely: Lessons Learned	5
Making Your Article Discoverable	5

## **SVACS** Councilor's Report on the ACS Fall 2020 Virtual National Council Meeting **Natalie McClure**

As a requirement in today's changing world, ACS just completed its first virtual National ACS meeting August 16-20, 2020. The virtual meeting included scientific talks, poster discussions and the governance business that is typically conducted at a National meeting. Zoom was extensively used for presentations. Some presentations were prerecorded and played back with live Q&A sessions. For the governance meeting, two platforms were used: Zoom was used for presentations and discussions and Lumi was used for voting and assurance of eligibility of the participants. Lumi is a platform that has been used for years to support annual business meetings, shareholder meetings, and similar meetings where presentations and voting need to occur in a controlled and certifiable setting. This was a little complicated to sign into, but in fact seemed to work very well. The planned presentations occurred without any glitches.

It was also possible to request time to ask questions or make comments and that also occurred in an orderly fashion. Unfortunately, the ability to chat among ourselves, to see the presenters and our fellow councilors, and to get a sense of the overall feelings could not occur in this virtual setting. All things considered, this was a pretty successful meeting. This meeting was supposed to occur in San Francisco, so in honor of this, the meeting was mostly conducted on Pacific time.

The National Council business consisted of selecting members for ACS council committees, responding to a petition for a new international section in Israel, voting on the closure of the Committee on Chemistry Abstracts Service (CCAS), and reviewing ACS governance business. A summary of each of these points is provided below.

continuned on next page

## **Chair's Message** Matt Greaney



I hope this message finds you well. We had another layer of chaos added to the fold this past month with several hundred wildfires starting from what can only be described as one of the most peculiar weather patterns we've seen in the Bay. Over 11,000 lightning strikes led to hundreds of wildfires, many of which quickly spiraled out of control and forced the evacuation of tens of thousands of residents.

Even if you were not directly affected by being forced to flee your home or by sheltering an evacuated friend or loved one, we are all affected by some of the worst Bay Area air quality I've ever seen. Couple this with the ongoing COVID-19 pandemic, and it's tough to figure out what we can actually do with our free time in a safe and responsible manner. I was recently made aware of a crowd-sourced Air Quality Index (AQI) monitoring system that is updated every 10 minutes. To figure out when the air is safe to go for a walk or a run or where to go for some reprieve from the smoke, I'd recommend checking out the Purple Air AQI tracking system.

While wildfires rage and pandemics persist, some business continues to go on. The first ever completely virtual ACS National Meeting was held from continuned on page 3

## UPCOMING EVENTS

Sep 3	Pioneers in the Oil Field: Establishing LGBTQ Inclusion at Chevron in the 90's				
	Co-sponsored by ACS California Section and East Bay Association of Women in Science				
	6:00-7:00pm, online via Zoom; Free, <i>Registration required</i>				
Sep 12	ACS Virtual Career Day – Industry				
	8:00am-11:00am; Free, <i>Registration required</i>				
Sep 17	Joint Virtual Happy Hour & Movie Discussion: "RADIOACTIVE"				
	Co-sponsored by ACS California Section and East Bay Association of Women in Science				
	6:00-7:00pm, online via Zoom; Free, Registration required				
Sep 30	Webinar: Polymers in 5G Mobile Phones				
	Dr. Jeff Gotro, Innocentrix				
	Sponsored by the Golden Gate Polymer Forum (GGPF)				
	6:30-9:00pm, online via Zoom; Free, <i>Registration required</i>				
Oct 1	Becoming Conscious of Unconscious Bias: Contemplative practice to deepen respect & inclusion				
	Sponsored by Contemplation by Design. Stanford Prevention				
	Research Center, Stanford School of Medicine.				
	12:00pm-1:15pm, online via Zoom; Free, <i>Registration required</i>				

#### Councilor's Report, continuned from front page

#### Committee membership:

- Elizabeth M. Howson, Zaida C. Morales-Martinez, Margaret J. Schooler, and Jeanette M. Van Emon were elected for three-year terms (2021-2023), and Mark D. Frishberg for a one-year term (2021) on the Council Policy Committee (CPC).
- Martha G. Hollomon, Diane Krone, Sarah M. Mullins, Andrea B. Twiss-Brooks, and Javier Vela were elected for three-year terms (2021-2023) on the Committee on Committees (ConC).
- Jetty L. Duffy-Matzner, Kevin J. Edgar, Neil D. Jespersen, Julianne M. D. Smist, and Linette M. Watkins were elected for three-year terms (2021-2023) on the Committee on Nominations and Elections (N&E).

#### Petitions:

On the recommendation of the *Committee* on *International Activities*, and with the concurrence of the Council Policy Committee, Council approved the creation of an ACS International Chemical Sciences Chapter in Israel, contingent on approval by the Board of Directors.

On the recommendation of the *Committee* on *Committees*, and with the concurrence of the *Council Policy Committee*, Council approved the Petition to Clarify Amendments to the Standing Rules.

On the recommendation of the Committee on Committees, and with the concurrence of the Council Policy Committee, Council disbanded the Joint Board-Council Committee on Chemical Abstracts Service, contingent on approval by the Board of Directors. This was the point that generated the most discussion. CAS reports directly to the Board of Directors and was being monitored by the Governing Board for Publishing and the Council Committee on CAS (CCAS). The CCAS is a committee made up of ACS members and has been under review for the past 12 years. The CCAS was charged to:

- develop an informed, constructive, and supportive relationship with the SOCIETY body established by the Board of Directors to manage and conduct the affairs of Chemical Abstracts Service, including reporting of each group's activities to the other
- serve as a channel for information flow between the Governing Board for Publishing, ACS members, and individual Chemical Abstracts Service users to help assure that each party's needs and support are researched, recognized, and appreciated
- encourage and consider suggestions from the membership concerning CAS and send or provide these suggestions to the Governing Board for Publishing and the ACS's Board of Directors

- respond to requests by the Governing Board for Publishing that will assist in furthering the Chemical Abstracts Service mission; and,
- inform the Council and the Board of Directors of the Committee's activities.

What has become very clear is that *CAS* is a business arm of ACS. It is governed by *Governing Board of Publishing*, which includes 8 ACS members in its membership, and which reports directly to the *ACS Board of Directors*. The support and involvement of CCAS is no longer needed. After discussion, the Council voted to accept the recommendation by the *Committee on Committees* (ConC) and disbanded the CCAS. The volunteers who have served on CCAS were thanked for their service and will be offered positions on other ACS committees where they can make a bigger impact.

#### Nominations and Elections (N&E)

Ballots for the 2020 fall national election will be distributed starting on September 28 with a voting deadline four weeks later on October 23, 2020. ACS members eligible to vote and with an email address on file will receive an electronic ballot with the option to request a paper ballot. Those members with no email address on file will be sent a paper ballot with the option to vote electronically. The ACS election vendor, Survey & Ballot Systems, will send three email reminders during the voting period to those who have not voted as of the reminder dates. *N&E* encouraged all ACS members to vote for President-Elect. Election information may be viewed at *acs.org/elections*.

#### **Budget and Finance**

The Society's 2020 financial performance through July 31, 2020 yielded a Net from Operations of \$55.7 million, or \$25 million greater than the same period in 2019. Total revenues are \$354 million, 5% ahead of last year, and total expenses are \$298 million, or 3 percent below last year. Unrestricted Net Assets increased to \$466 million.

The most direct revenue impact to the Society related to the COVID pandemic has been to meeting-related revenues with the termination of the in-person Spring 2020 National Meeting and termination of the in-person Green Chemistry Conference. Significant effort has been devoted to expense management. The Society expects to meet its budgeted net contribution of \$41.3M.

#### Core Value of Diversity, Inclusion and Respect

The Board held a strategic discussion on ways to turn the ACS' Core Value of Diversity, Inclusion, and Respect, one of the most important strategic issues facing the Society today, into a prioritized action plan for the coming years. The development of such a plan would be undertaken in collaboration with the Advisory Board on Diversity, Inclusion and Respect and would promote the coordination of committee activities so as to emphasize the urgency of "moving the needle" both within ACS and in the broader chemistry enterprise.

#### Fall 2020 Virtual Meeting Attendance

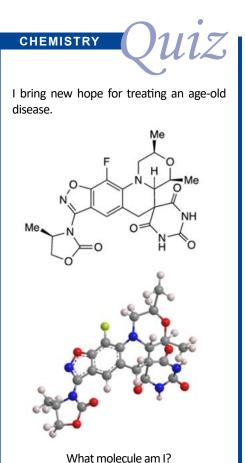
The theme of the 260th ACS National Meeting was "Moving Chemistry from Bench to Market." As of August 19, 2020, registration for the Meeting, broken down by Category was:

Member 3,494 Student Member 1,638 Unemployed Member 25 Non-Member 945 Student Non-Member 375 Total 6.477

#### Virtual Presentation Uploads

All Inclusive (SciMtgs) 1,735 Virtual Platform Only 1,655 Temporary Access Option 640 Presentation Uploads 4,067

Lastly, the *ChemLuminary Awards* presentation was postponed. The good news is that there will be a Zoom session set up in the coming months to celebrate Local Sections' efforts over the past year. Silicon Valley section has self-nominated for several ChemLuminary awards. I hope you will be able to attend this session.



Answer

#### Chair's Message, continuned from front page

August 17-20. Most of us appreciate the privilege of attending these meetings in person to listen to cutting edge science and reconnect with friends and colleagues, but there were several benefits that accompanied the virtual format. For example, most technical presentations were made available in an on-demand format, meaning one did not have to rush from room to room or even worse, from hotel to hotel, to be able to take in closely scheduled presentations. To that same point, I often find myself in the predicament where there are two presentations I'd like to attend, but they are scheduled at the same time. Solution: on-demand technical talks! Another pleasant aspect of the virtual format was the virtual ACS National Council meeting, which was held on Wednesday, August 19. ACS governance must continue to function, and this Council meeting was functional and covered all aspects typically addressed during the in-person Council meetings. I am not proposing we eliminate the in-person National meetings that we've come to know and love, but I sincerely hope that we hang onto many of the adaptations we've made during the pandemic when we finally return to a more normal semblance of everyday life. Including a virtual component/option to future ACS meetings would enable greater participation from attendees and sponsors, especially when so many are unable to participate because of economic reasons related to travel and lodging. Please feel free to share your own opinions on this

matter with me and others on the Silicon Valley ACS Executive Committee.

Since we were unable to hold the Annual SVACS Awards Picnic this year, we are designating the October 13, 2020 (7-8:30pm) ExComm meeting as the official annual meeting to conduct SVACS business. Mandated by the Section's bylaws, the annual meeting to conduct SVACS business is intended to serve as a forum for all SVACS members to participate and raise any topics they believe should be addressed by the Section. Typically, the SVACS July Picnic also serves as an awards BBQ and as the "annual meeting" specified in the bylaws. While all ExComm meetings are open to the public, we are specifically designating the October ExComm meeting as the bylaw-mandated, Section-wide 2020 annual meeting. Members interested in participating should contact myself or the SVACS Secretary, Laura Yeager, for Zoom login credentials.

As a friendly reminder, you should be receiving a notice about SVACS elections soon. We sincerely hope (and request) you take advantage of the opportunity to cast your vote for your local section representation. Stay well.

> Matt Greaney 2020 SVACS Chair 2020-2022 SVACS Councilor ACS Committee on Economic and Professional Affairs member

## A message from the Nominations Committee **Elections for 2021 Silicon Valley ACS Leadership**

This fall you have the opportunity to elect members of our section to the 2021 Silicon Valley ACS Executive Committee, the leadership group of our local ACS section. The official online ballot will be sent out this month (September) by email to all eligible section members, accompanied by biographies and statements from each candidate.

We have six open positions on this year's ballot: Chair-Elect, Secretary, Councilor (2), and Alternate Councilor (2). Descriptions of these positions are available after the directory on this page of our website

On behalf of the current Silicon Valley Section Executive Committee, the Nominations Committee is pleased to present the following group of candidates. We hope to get strong voter turnout. Feel free to reach out to any of the Executive Committee members if you have questions about the election process - our contact information is always located at the end of each monthly newsletter.

#### Our slate of candidates

Chair-Elect (the first year in a sequence of Chairelect/Chair/Immediate-Past-Chair for a total of 3 vears)

Stephanie Benight

- Secretary (2-year position)
- Prasad Raut

Councilor (2 open positions; the two candidates with the most votes will fill 3-year positions. Vote for two.)

Grace Baysinger Natalie McClure Alternate Councilor (2 open positions; the two candidates with the most votes will fill 3-year positions. Vote for two.)

Howard Peters

Dipti Shingnapurkar

All candidates must be members of the

Silicon Valley ACS local section and must be willing to serve. According to ACS bylaws, affiliate members may not participate in the election. Student members may vote and sign petitions, but they may not run for office.

#### The Nominations Committee

Madalyn Radlauer (co-chair), Todd Eberspacher (co-chair), Howard Peters, Kathy Armstrong and Paul Karol

## Welcome to the Silicon Valley Section of ACS

Each month, the 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. To welcome you to the section and get to know you, the Executive Committee offers new members a free dinner! To encourage you to attend a monthly section seminar meeting, we would like you to be our guest. When you register, make certain to mention that you are a new member and you and a friend will be our guests. The seminar meetings are held at a number of local venues. If you are unable to attend in the evening, perhaps you would join us for an outreach event, like judging a science fair, proctoring the Chemistry Olympiad or participating in a National Chemistry Week event in October. Then, there is our annual beer & wine tasting and awards picnic in July. The local section is a volunteer organization. Please attend an event, volunteer to help and get to know your local fellow chemists. Welcome!

- Green Ahn Nick Brockman Shan Chung Melissa Churley Jasmine Corbin Dr. Ilona Lynn Davies Youssef Elkady

## **NEW ACS MEMBERS**

Andrea Faulkner Leslie Hamachi Anna Kogler Jason Nicholson Valerie Niemann Dr. Yuan Ping James Raiford

Joanna Shea Dr. Devleena Shivakumar Judy Shon Shumei Wang Qi Zhang Elana Zizmor



## **National Chemistry Week 2020**

Band-Aids, Post-Its, Superglue, oh my!!! Celebrate National Chemistry Week (NCW) this October 18-24, with the theme "Sticking with Chemistry." Due to COVID-19, the celebration has gone fully digital with instructions for planning virtual events and an updated suite of educational resources.

Learn how to plan *Virtual Demo Events* and *Digital Illustrated Poem Contests* for K-12 audiences, and Virtual Teach-Ins for higher education and adult audiences. Amplify the campaign on social media using the hashtags #NCW, #StickyChemistry, and #Chemistry. Help show collective action by adding your virtual events to Facebook and submitting your photos, videos, and screenshots to the *NCW 2020 Photo Album*.

If you don't have time to plan events, you can still *Spread the Word* via social media, share digital *Educational Resources* with teachers and parents in need, and share our new *General Interest Resources* with friends in your circles or adults in your community.

Visit the NCW website at *www.acs.org/ncw* for more information.

About National Chemistry Week (NCW): NCW is a public awareness campaign that promotes the value of chemistry in everyday life. ACS members and chemistry enthusiasts celebrate NCW by coordinating events and communicating the importance of chemistry.

## **Call for Nominations at our Community Colleges**

You probably know a community college science educator whose work is deserving of recognition. Celebrate them by submitting a nomination for this Silicon Valley ACS Award.

The *Teacher-Scholar Award* is given to a community college science faculty member who has made an outstanding contribution to their chemistry students and communities.

This award is the first of its kind and was established in 2008 by our Silicon Valley ACS Local Section in recognition of the important role that community colleges play in science education. Over half of STEM graduates from UCs and CSUs started at a California community college!

The recipient of the Teacher-Scholar Award is recognized in a public ceremony and receives an ACS plaque and two \$500 checks - one for the awardee and one for the awardee's science department.

Eligibility criteria: Any faculty member from the 13 community colleges in the Silicon Valley ACS Local Section's territory of San Mateo, Santa Clara, Santa Cruz, San Benito and Monterey Counties. ACS membership is not a prerequisite.

#### Selection criteria

Nominees must exemplify two or more of the following:

- Excellent teaching in lab and classroom
- Extensive mentoring and encouragement of students toward academic success
- Collaborations with local high schools or fouryear colleges and universities, leading to more student transfers and matriculation
- · Supervision of undergraduate research
- Published articles and books related to chemistry education
- Participation in projects promoting innovative teaching methods and undergraduate research
- Development and dissemination of teaching innovations
- Exceptional contributions to the operation of the college's chemistry department
- Public outreach

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- Contributions to the local community, for example through the K-12 system or local agencies
- Substantial service to the American Chemical Society and its affiliated groups

Nominating is easy! Please contact Kathleen Armstrong at *armstrongkathy@fhda.edu* to receive a nomination form.

Deadline for nominations is **September 25**, 2020

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## Worth Knowing About Steve Boyer

The National Library of Medicine *announced* last month a significant addition of over 50 billion scientific entities to their collection of publicly available data:

"Google Patents organizes the world's inventions to make them universally accessible and useful. As part of this goal, Google has machine-annotated the worldwide patent corpus for scientific content and released the annotations publicly. The dataset includes billions of mentions of chemical compounds, diseases, proteins, genes, anatomy, etc. extracted from the full text, images, PDFs and translations of over 130 million patents."

## Pub Chem

The donated data – over 4TB – is being processed by the NLM/NIH (National Library of Medicine/National Institutes of Health) and will be made searchable and downloadable in *PubChem*. The curation process uses NIH-developed technology for image processing of chemical structures (*OSRA, Optical Structure Recognition Application*) together with software developed by collaborator *OntoChem*.

Google is also making all of the data available as a publicly accessible database table in the cloud database *Google BigQuery* where the scientific content of patents can be cross-queried with other scientific and business-related content such as *ChEMBL, PubChem,* and *Clinical Trials*. Annotated data from patents and non-patent literature can be searched by structure and substructure in *Google Patents,* as reported in *June's Worth Knowing About column*.

## On-Demand Green Chemistry & Engineering Videos from the Virtual Conference

The Virtual 24th Annual Green Chemistry & Engineering Conference may be over, but you can still watch on-demand videos from

the conference for free until September 25. Registration is required to view the videos, and also gives you access to the complete conference schedule, recorded poster presentations, exhibitor



and sponsor pages, and attendee networking features. You can download an overview of the schedule here, and email any other questions to *gceconferences@acs.org*.

## Enhancing Online Laboratory Experiences: Insights from Organic, Inorganic, and Physical Chemistry Courses

Archived ACS Webinar, July 22, 2020 (access limited to ACS Members)

Panel:

Maria Gallardo-Williams, North Carolina State University

Kyle Grice, DePaul University Michael Seery, University of Edinburgh Stacey Lowery Bretz, Miami University

"As the undergraduate chemistry community prepares for the fall and beyond, we have opportunities to better utilize online laboratory experiences. This involves considering learning goals and outcomes for our courses and programs, our students, and our institutions, as well as advances in technology and educational research.

Join a panel of chemistry faculty during this free interactive broadcast for insights from organic, inorganic, and physical chemistry courses that you can translate into your courses and institutional contexts. Learning goals and outcomes, pedagogical approaches, technology platforms, and assessments will be among the aspects discussed."

What You Will Learn:

- Various goals and outcomes for online undergraduate laboratory experiences
- Examples of how laboratory goals and outcomes are being fulfilled
- Approaches for planning and assessing online laboratory experiences

## The Future of the Chemistry Laboratory Course

Archived ACS Webinar, July 15, 2020 (access limited to ACS Members)

Chemistry lab courses require significant investments and resources. As a consequence, some students, instructors and administrators question the labs' value, particularly for students not majoring in chemistry. Join speakers Marcy Towns of Purdue University, Justin Carmel of Florida International University, and Edgar Arriaga of the University of Minnesota as they discuss advances in educational research, insights from the recent pivot to remote learning amid the COVID-19 pandemic, and the future of chemistry lab courses."

What You Will Learn

 Essential skills and knowledge that students develop in (and only in) laboratory courses



## SEO for Chemists: How to Make Your Chemistry Research Paper Discoverable

#### Jesse Stanchak

"Search engine optimization (SEO) is essential for chemists looking to gain citations and awards for their research. Before a paper can receive the recognition it deserves, the community must read it. Scientists of the past could achieve this just by publishing in a high-impact journal. But the way the chemistry community digests research has changed. With the emergence of specialized search engines (such as PubMed, Google Scholar, Web of Science) and the increasing number of journals, chemists must also consider the basics of search engine optimization if they're going to make their research paper discoverable. Optimizing your research for search takes a little bit of work, but it doesn't have to be scary if you break it down into its base components." *Read full article in ACS Axial* 



## ACS Webinars: "Teaching Remotely Together: Lessons Learned"

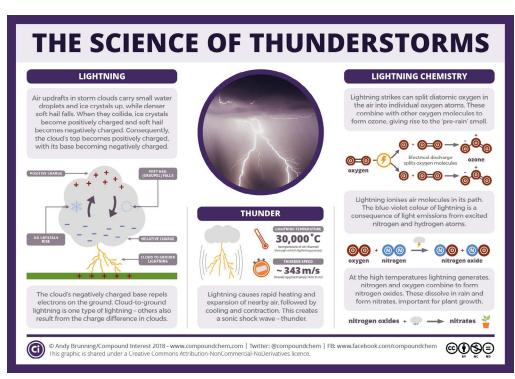
## **Freddy Tellez**

"The recent ACS Webinar "Teaching Remotely Together: Lessons Learned" shared insights and common experiences with the chemistry education community. The June 30 webinar was the result of a partnership between the Journal of Chemical Education (JCE), the American Association of Chemistry Teachers (AACT), the Education Division of the American Chemical Society, and the ACS Technical Division of Chemical Education. ACS Division of Chemical Education Chair Dawn Del Carlo moderated the event, which featured ACS Education Executive Vice President LaTrease Garrison, AACT President Heather Weck, and JCE Editor-in-Chief Thomas Holme.

The COVID-19 pandemic has greatly hampered chemistry teachers' ability to interact with students in classroom or laboratory settings. These conditions forced many teachers to adapt quickly, and they sought resources on how best to do so. The expert panelists in this ACS Webinar described how remote teaching continues to advance STEM education, and how the broader education community collaborates in these difficult times.

The webinar featured a variety of additional chemistry teaching resources offered by ACS. In May, Holme hosted a Twitter chat in which he answered questions about student engagement and technology solutions, among other topics. JCE has also produced two relevant virtual issues, one featuring freely available publications to aid in transitioning to teaching chemistry online, and another virtual issue focusing specifically on laboratory learning." *Read full article in ACS Axial and download list of resources to assist with teaching remotely.* 

- Strategies for building laboratory curricula that develop essential knowledge and skills
- Approaches for determining what students are gaining from laboratory experiences



The science of thunderstorms – thunder, lightning, and chemical reactions click to enlarge

#### 2020 Section Officers

Chair	Matt Greaney	510-410-0195	greaney19@gmail.com			
Chair-Elect	Jigisha Shah	315-289-5115	jssheth@syr.edu			
Past-Chair	Grace Baysinger	650-725-1039	graceb@stanford.edu			
Secretary	Laura Yeager	626-826-3145	laura.yeager123@gmail.com			
Treasurer	Ihab Darwish	650-624-1389	darwishis@yahoo.com	-		
Councilors						
2018-2020	Ean Warren	650-714-5133	ewarren@scvacs.org			
2018-2020	Natalie McClure	650-906-7831	nmcclure@drugregulatoryaffairs.com			
2019-2021	Linda Brunauer	408-554-6947	lbrunauer@scu.edu			
2019-2021	Jane Frommer	408-927-2225	jane@collabra.net			
2019-2021	Sally Peters	650-447-3027	sallybrownpeters@gmail.com			
2020-2022	Matt Greaney	510-410-0195	greaney19@gmail.com			
2020-2022	Madalyn Radlauer	408-924-5482	madalyn.radlauer@sjsu.edu			
Alternate Councilors						
2019-2021	Sogol Teschler	408-896-2367	sgyahyazadeh@gmail.com	-		
2019-2021	Laura Yeager	626-826-3145	laura.yeager123@gmail.com			
2020-2022	Todd Eberspacher	650-723-2505	eberspacher@stanford.edu			
2020-2022	Avni Gandhi	626-831-8230	avni.caltech@gmail.com			
2020-2022	Heddie Nichols	310-435-2133	hnichols105@gmail.com			
2020-2020	Howard Peters	650-447-3027	Peters4pa@sbcglobal.net			
2020-2020	Peter Rusch	650-961-8120	pfrusch@aol.com			
Newsletter						
Editor, Interim	Grace Baysinger	650-725-1039	editor@scvacs.org			
Asst. Int. Editor	Jane Frommer	408-927-2225	jane@collabra.net			
ChemPloyment Abstracts						
Director	Liang Cao		liang.cao@aol.com			
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ACS Local Section Silicon Valley P.O. Box 395, Palo Alto, CA 94302



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Communities and Interest Groups Local Sections | Outreach Students and Educators Chemical and Laboratory Safety Green Chemistry Volunteer | Donate

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