

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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OCTOBER 2016 NEWSLETTER TOPICS

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## ACS Honors SCVACS Couple with Public Outreach Award

Howard and Sally Peters, SCVACS members known as "Mr. and Mrs. Chocolate" because of their use of the delectable sweet to explain the wonders of chemistry to non-scientists, were the recipients of the



Howard and Sally Peters

ACS 2016 Helen M. Free Award for outstanding public outreach. They were honored at a ceremony on August 23 during the 252nd ACS National Meeting and Exposition in Philadelphia.

For nearly 20 years, the Peters have toured the United States sharing their

signature presentation, "Chocolate — Food of the Gods," which explores the history and chemistry of one of America's favorite treats. They also have been scientist-author lecturers on Cunard's Queen Mary 2

and on Princess Cruise ships. Other venues have included churches, science clubs, children's museums and schools. Through these activities, they say they have reached out to virtually every demographic, including underrepresented groups in science.

The chocolate presentation was inspired, in part, by Howard Peters' childhood — he grew up about 100 miles from the Hershey chocolate factory in Pennsylvania and can still recall sweet scents wafting through the air.

Howard Peters, Ph.D., earned his bachelor's degree in chemistry at Geneva College in Beaver Falls, Pennsylvania, and his

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## Connect with Chemists

Meet fellow local chemists for an early morning coffee.

Look for Ean at a table with molecular models.

**Thursday, October 20, 2016, at 7 a.m.**

Coupa Café, 538 Ramona Street, Palo Alto (a half a block off from University Avenue)

## SCVACS By The Numbers

**1974** American Chemical Society's Young Chemists Committee was established

To advocate for early career chemists and young professionals under the age of **35**

**6** Flight of signature golden state beers can be tasted at the tour on Nov 15th; an YCC event

Number of people who joined the ACS Fall National Meeting in Philadelphia **12800**

## Chair's Message

Jane Frommer



As this year winds down, our local section activity ramps up. Several of these events arise from new areas of activity in our section for you to check out. Evidence follows.

**SCVACS Younger Chemists Committee (YCC) is back!**

Matt Greaney is working with the ownership of the *Golden State Brewery* in Santa Clara to host a *gathering of chemists* on their premises for the evening of November

15, 2016. Brewmaster Seth Hendrickson will lead a tour of the facility and speak about the brewing process. The event is jointly sponsored by the YCC and the Senior Chemists Committee. Flights of beer and food truck refreshments will lubricate intergenerational conversations.

Matt is an Alternate Councilor for the SCVACS. He has been active in the California section's YCC and has plans to organize joint Younger Chemists programs between the two vicinal sections. **Contact him** with your ideas for future YCC events and to become involved with this dynamic YCC group.

**Monterey Bay ACS activity thrives!**

Slava Bekker is taking the reins in organizing our future Monterey Bay (MB) area

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ACS Honors, continued from front page

doctorate at Stanford University. He received his law degree from Santa Clara University in California. As a chemist, he led research projects on volatile anesthetics, organic fluorine compounds, herbicides and high explosives. Following his career in the lab (becoming a co-inventor on seven U.S. patents), he was a patent attorney in Silicon Valley for more than 30 years. He has been an ACS member for more than 50 years and a member of the ACS Council for 30 years. He served on the Society's Board of Directors from 2005 to 2007.

Sally Peters also earned her bachelor's degree in chemistry at Geneva College and received a master's degree in library and information science from San Jose State University. She was an information specialist at Xerox PARC in Palo Alto, California, for more than 28 years. Earlier in her career, she conducted virus research at Stanford under

the direction of Hubert Loring, Ph.D., the chemist who first crystallized the polio virus, which was later used by Jonas Salk to create the first effective vaccine for the disease. Sally has served as an ACS councilor for more than 20 years.

In addition to their chocolate presentations, the couple has for years supported the ACS-UN International Chemistry Olympiad, the Intel International Science & Engineering Fair and KIDvention, a program that encourages teams of children from underprivileged backgrounds to try inventing devices using common household items.

The Helen M. Free Award was established in 1995 to recognize outstanding achievements in public outreach. Free, a former ACS president, initiated many programs and activities designed to improve the public's awareness of chemistry's contributions to the quality of daily life.

Chair's Message, continued from front page

ACS activity with a dinner lecture scheduled for Friday evening, October 21st. **This second MB event** follows the **inaugural Monterey Bay ACS event** that took place in April 2016 at Cabrillo College. It sold out due to **high demand!**

The October 21st event will take place at the Moss Landing Marine Labs. Dr. Kenneth Coale will speak about his research "Seeing Through The Fog: Discovering the Cycling of Mercury From Sea To Land". Preview it [here](#).

Slava is on the chemistry faculty of Hartnell Community College in Salinas. She is a member of the SCVACS Teacher Scholar Community College **Award** Committee. Her extracurricular activity includes mobilizing to provide after-school science tutoring in Salinas-area high schools, in longer term preparation for their participation in the ACS Chemistry Olympiad.

**Also on tap for October and November:**

**Saturday, October 1:** a repeat of last year's popular multi-section ACS event at UC Davis, "The Flavors of Chemistry". Professors Moshe Rosenberg and Andrew Waterhouse will speak about the chemistry of cheese and wine, respectively. Their talks will be followed by a selection of wine and cheese pairings.

**Saturday, October 15:** local celebration of National Chemistry Week with the theme "Solving Mysteries through Chemistry". Martin Luther King Library, San Jose. A day of hands-on science activities for elementary-school children and their parents organized

by SCVACS member Abby Kennedy. Area chemists will supervise and explain the importance of each activity. **Volunteers welcomed. Saturday, November 5:**

**The Bay Area Science Festival Discovery Day at AT&T Park** - hundreds of hands-on activities and opportunities to meet local scientists and engineers in a forum of educational entertainment on a major league baseball field. The entire ballpark is packed with booths, including ours with hands-on ACS activities. SCVACS member Natalie McClure oversees our participation and **welcomes you as a volunteer.**

**November 17:**

SCVACS Community College Teacher-Scholar Award Ceremony and Dinner at San Jose City College. More info to follow on our website and in our newsletter.

Contact: **Jose Cabrera.**

**November 30:**

SCVACS tour of the new **Silicon Valley US Patent and Trademark Office**, San Jose. More info to follow on our website and in our newsletter. Contact: **Howard Peters.**

We hope to see you at one or several of these upcoming events. Bring a friend or family member to introduce them to your dynamic local ACS science organization.

Don't forget to participate in the 2016 elections of your SCVACS 2017 leadership team! You will receive a ballot and voting instructions by email early November.



## ACS Council Report

Peter F. Rusch

The ACS council met Wednesday morning, August 24 in Philadelphia during the 252nd ACS National Meeting.

Each of three elected committees of the Council held an election for new members: Council Policy Committee (CPC); Committee on Nominations and Elections (N&E); and Committee on Committees (ConC). Sally Peters was elected to a three-year term on CPC. Results of the elections will be reported in a future issue of C&ENews.

Council also voted to approve the continuation of the Committee on Analytical Reagents and the Committee on Chemical Abstracts Service. Continuations are also subject to further approval of the Board of Directors.

Two local sections, one in West Texas and the other in Northern Michigan requested annexation of counties adjacent to their current territories. Both were approved.

On the recommendation of the Committee on Membership Affairs, the Council approved a petition to amend the ACS Bylaws to extend the Unemployed Members' Dues Waiver, which will extend waivers for unemployed members' dues from the current two years to three years, subject to confirmation by the Board of Directors. One of our Councilors cast the only "No" vote noting the change was vague and ambiguous.

On the recommendation of the Committee on Economic and Professional Affairs, the Council approved the Chemical Professional's Code of Conduct, subject to confirmation by the Board of Directors.

On the recommendation of the Committee on Constitution and Bylaws, the Council approved the Bylaws for Divisions in Probationary Status and the Charter Bylaws for New Local Sections.

On the recommendation of the Committee on International Activities, the Council approved the establishment of ACS International Chemical Sciences Chapters in Greater Beijing, Southwestern China, and Iraq, subject to confirmation by the Board of Directors.

There was a half-hour open discussion on the proposed recommendations from the ACS Presidential Task Force on the U.S. Employment of Chemists. It was a subdued discussion with a small number of councilors participating. The report is expected to be released later this year.

The Society's current projection is for a

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net from Operations of \$17.3 million. This is \$3.9 million higher than the Approved Budget. Total revenues are projected to be \$528.8 million, essentially on budget, and total expenses are projected at \$511.5 million, which is 0.6% favorable to budget.

The Committee on Budget and Finance considered several program funding requests for 2017, and on its recommendations, the Board subsequently approved funding for the Atlantic Basin Conference on Chemistry, the ChemIDP Program; and the International Student Chapter Program. Additional information can be found at [www.acs.org](http://www.acs.org), at the bottom of the page, click 'About ACS', then 'Financial'. There you will find several years of the Society's audited financial statements and IRS 990 filings.

As of Tuesday evening, August 23, total attendance was 12,800 in the following categories:

Attendees	7,437
Students	3,249
Exhibitors	1,181
Expo only	613
Guest	320

The Council passed traditional, pro-forma resolutions in memory of deceased Councilors; acknowledging President Donna Nelson's service as presiding officer of the Council; and in gratitude for the officers and members of the Philadelphia Local Section, the host Section for the 252nd National Meeting, the divisional program chairs and symposium organizers, and ACS staff. Adjournment followed.

## Elections for 2017 SCVACS Leadership

The election of members of our 2017 SCVACS leadership team will take place in November 2016. As a member of this section, you will receive on-line voting instructions by email.

The Santa Clara Valley Section Executive Committee is pleased to present the slate of candidates, below.

Positions on the slate include Chair-Elect, Secretary, Treasurer, Councilors and Alternate Councilors. See descriptions of those positions here.

### Chair-Elect

*Melody Esfandiari, San Jose State University*

### Secretary

*Richard Bone, Patent Attorney*

### Treasurer

*Ihab Darwish, Rigel Pharmaceuticals*

### Councilor

3 positions: two 3-year terms and one 1-year term

The two candidates with the most votes will fill the 3-year positions.

The candidate with the 3rd most votes will fill the one-year position.

*Charlie Cox, Stanford*

*Matt Greaney, Clariant*

*George Lechner, Retired, Xerox*

*Peter Rusch, Retired, Lockheed Martin*

*Herb Silber, Retired, San Jose State University*

### Alternate Councilor

3 positions: two 3-year terms and one 1-year term

The two candidates with the most votes will fill the 3-year positions.



The candidate with the 3rd most votes will fill the one-year position.

*Andrew Bartynski, Ubiquitous Energy*

*Slava Bekker, Hartnell Community College*

*Mark Kent, Educator*

*Howard Peters, Retired, Patent Attorney*

*Elizabeth Pollom, San Jose State University*

A call for nominations of petition candidates went out to all members of the section by email on September 9, 2016. Properly completed petitions received by the due date of October 3, 2016, 5pm local time will appear on the ballot. Requirements for petition candidates include:

- the name of the proposed candidate
- the proposed position
- 15 supporting SCVACS member names and signatures and ACS membership numbers
- submission by email of the completed petition (as a PDF) by October 3, 2016, 5pm local time to the SCVACS Secretary at [rgab@scvacs.org](mailto:rgab@scvacs.org).

All candidates must be members of the 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.

### Upcoming Event for November 15, 2016

## What's Brewing with the YCC?

The Younger Chemists Committees (YCC) of the Santa Clara Valley Section and the California Section of the ACS will host a brewery tour, tasting, and talk at Golden State Brewery in Santa Clara on Tuesday, November 15, from 6-8 pm. This event requires registration and is open to all. We would especially like to extend this invitation to the Senior Chemists of the SCV and CA sections to attend and see first-hand what's happening with local YCC efforts. The mingling of generations can yield pleasant surprises.

The event will begin with a tour from the head brewer and owner, Seth Hendrickson. Following the tour, Seth will give a brief talk about the brewing process with a Q&A session to follow. Registration will include a flight of six signature Golden State beers as well as a meal voucher to be used at the on-site food trucks. The YCC will also be announcing details of a future event, so be sure not to miss this one!

Golden State Brewery is located at 1252 Memorex Dr., Santa Clara, CA 95050

Standard registration: \$20/person

Discounted registration (for enrolled students and 50-year ACS members): \$10/person

Register at [www.scvacs.org](http://www.scvacs.org)



# We're Back! Rejuvenating Our Local SCV YCC

By Matt Greaney, Alternate Councilor for the Santa Clara Valley ACS Section



The American Chemical Society's Younger Chemists Committee (YCC) was established in 1974 to advocate for early career chemists and young professionals. Officially for those under the

age of 35, the YCC is intended to serve as the voice of younger chemists to the Society as a whole. There are three primary goals that drive YCC activity: (1) to make ACS relevant to younger chemists, (2) to help prepare and develop tools to assist in the transition from academia to the professional sector, and (3) to increase involvement of younger chemists at all levels of ACS.

Transitioning from college to a new job can sometimes produce an unexpected sense of isolation from the greater scientific community. During graduate studies, we are immersed in an intellectually invigorating environment with experts in every field just a door, floor, or building away. You eat, drink, and sleep thinking about your work, and your colleagues do the same. Daily conversations about your research, weekly special topic seminars, and annual technical conferences provide a sense of comradery and involvement in the scientific community. These feelings can quickly evaporate after moving onto an industry position. Highly technical jobs demand expertise and experience accumulated during academic studies, yet they do not necessarily provide the means to stay informed and exposed to the rich happenings of the scientific community outside of your specific field.

Enter your local ACS section and the YCC. As a recent PhD recipient, I know firsthand the void one may experience in the year after graduation. Don't get me wrong- I love my job as an R&D chemist. I find it incredibly rewarding and interesting, and I consider myself very lucky to have such an opportunity. Yet it's hard to ignore the drop-off in scientific variety and activity that can accompany the transition. That's why I decided to explore what my local ACS Section could offer. Our very active local Section provides a forum for members to engage the greater technical community through excellent monthly events including special topic dinner seminars, weekend tours to scientifically appealing destinations (see May 2016 newsletter article: Tour of Silicon Valley Advanced Water Purification Center), a plethora of local volunteer

opportunities to interact with the nonscientific community, and the opportunity for young professionals to get together in the activities of the YCC.

Much like the governing structure of the ACS, the YCC is composed of a single national committee and numerous local section committees. Although dormant for the past two years, the local SCV Section YCC has had a rich history of activity, which we are determined to carry on. Thus far in 2016, we have partnered with the California Section YCC to plan and host several events including a Motherhood in Chemistry panel discussion and a speed-mixer for young professionals on the UC Berkeley campus. We are currently in the midst of preparing for an upcoming brewery tour, tasting, and talk on the chemistry of brewing (see- What's Brewing with the YCC in this edition of the SCV newsletter, The Silicon Valley Chemist). Other events are now being planned, including a fun run, a



networking social, and an entrepreneur panel to be held during the upcoming spring 2017 National Meeting in San Francisco.

Participating in the YCC and your local ACS Section is a great way to stay engaged and active in the greater scientific community. Whether you are looking for a means of networking with fellow young professionals, volunteering at local science outreach activities, or just enjoying a flight of beers at a local brewery, we are always looking for new YCC members to enrich our ranks and contribute their talents and enthusiasm. If you are interested in learning more about your local YCC, contact Matt Greaney at [greaney19@gmail.com](mailto:greaney19@gmail.com).

**The American Chemical Society  
Comes to Monterey Bay**



Santa Cruz

**Seeing Through the Fog:  
Discovering the Cycling of Mercury  
from Sea to Land**

Monterey

**Dr. Kenneth Coale  
Moss Landing  
Marine Labs**

**October 21, 2016  
evening**

Open to all  
students, faculty, practitioners and  
admirers of chemistry

registration info appearing soon on  
[scvacs.org](http://scvacs.org)

Preview [here](#)

Location:  
**Moss Landing  
Marine Labs**

## The Information Landscape for Chemists at Work and Play

Grace Baysinger – the Head Librarian and Bibliographer at the Stanford Swain Chemistry and Chemical Engineering Library – was the speaker for our monthly dinner lecture in September.

She provided an illuminating overview of the state-of-the-art in chemical information resources, most in digital form. While some resources are limited to current students, faculty, and staff at subscribing institutions, a growing number of resources are openly accessible to everyone. Her presentation took us on a tour of key chemistry resources plus interesting and cool resources to explore for fun. It included opportunities and challenges facing 21st century research libraries. As a long-time participant in ACS National committees, she also summarized opportunities for serving on committees or participating in Divisions in ACS that have a chemical information focus.



*Peter Rusch, Bonnie Charpentier, Lee Latimer, Grace Baysinger (speaker and member) Jane Frommer, Heddie Nichols and Jeanny Yao (both new members) and Todd Eberspacher.*



*Lois Durham (founding member), Sally Peters, Howard Peters, Steve Boyer, Harold Lip and Susan Oldham-Fritts*



*New Members Heddie Nichols and Jeanny Yao*

## CHEMPLOYMENT ABSTRACTS OCTOBER 2016

### CHEMPLOYMENT ABSTRACT 3994

*Position Title:* Tenure Track Assistant Faculty

*Job Description:* The successful candidate is expected to establish a vigorous and productive undergraduate research program in the broadly defined area of biochemistry, pursue external funding for research objectives, and excel in teaching biochemistry, general chemistry, and special topics courses in their area of expertise.

#### QUALIFICATIONS DESIRED:

*Education:* Ph.D.

*Experience:* Postdoctoral experience in biochemistry or a closely allied field is required, along with a strong commitment to teaching and undergraduate research. College teaching experience of a diverse student body is desirable.

#### LOCATION, SALARY, EMPLOYER:

*Job Location:* Santa Clara, CA, in the heart of Silicon Valley

*Salary:* Competitive salary, benefits package and housing assistance program

*Description:* Santa Clara University is a private, Jesuit Catholic university committed to promoting social justice; and as an Equal Opportunity/Affirmative Action employer, is committed to excellence through diversity and inclusion, and, in this spirit, particularly welcomes applications from women, persons of color, and members of historically underrepresented groups

*Application Instructions:* Completed applications must be received by October 14, 2016. For complete job description and instructions for submission of materials, visit <https://www.scu.edu/hr/prospective-employees/employment-opportunities/>

## Chemistry Quiz

What substance was invented in the 9th century by mixing sulfur, charcoal, and potassium nitrate?

### Last Month's Quiz

Vermilion is a brilliant red pigment that was used in ancient Rome, illuminated manuscripts of the Middle Ages, and lacquerware of China from the 16th century B.C.E. onward. What is the inorganic compound that gives vermilion its color?

**Mercury(II) sulfide**



SANTA CLARA VALLEY SECTION  
AMERICAN CHEMICAL SOCIETY  
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is published on our web site, sign up at:

[http://scvacs.org/?page\\_id=99](http://scvacs.org/?page_id=99)

## SANTA CLARA VALLEY SECTION

### 2016 Section Officers

Chair	Jane Frommer	408-927-2224	frommer@scvacs.org
Chair Elect	Todd Eberspacher	650-723-2505	eberspacher@stanford.edu
Past Chair	Abby Kennedy	209-640-2005	akennedycali2007@yahoo.com
Secretary	Richard Bone	650-714-7897	rgab@scvacs.org
Treasurer	Ihab Darwish	650-594-1654	darwishis@yahoo.com

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2014-2016	Herb Silber	408-924-4954	hbsilber@science.sjsu.edu
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2015-2017	Ean Warren	650-329-4554	ewarren@scvacs.org
2016-2018	Bonnie Charpentier	650-380-5353	charpentierbon@yahoo.com
2016-2018	Linda Brunauer	408-554-6947	lbrunauer@scu.edu
2016-2018	Sally Peters	650-854-4614	sallybrownpeters@gmail.com

### Alternate Councilors

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### ChemPloyment Abstracts

Director:	Liang Cao	liang.cao@aol.com
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## FUTURE EVENTS

- Oct 14** *William S. Johnson Symposium*  
Stanford University
- Oct 15** *ACS National Chemistry Week Celebration*  
Dr. Martin Luther King Library  
San Jose, CA
- Oct 21** Monterey Bay Area ACS Dinner Seminar  
"Seeing Through the Fog: Discovering the  
Cycling of Mercury from Sea to Land"  
Dr. Kenneth Coale  
Moss Landing Marine Labs  
More info at [www.scvacs.org](http://www.scvacs.org)
- Nov 5** *Discovery Day at AT&T Park*
- Nov 10-11** *Pressure Sensitive Adhesive Fundamentals*  
(Short Course)  
Sponsored by Golden Gate Polymer Forum  
Michael's at Shoreline
- Nov 15** What's Brewing With the ACS YCC and the  
Senior Chemists?  
Golden State Brewery  
Santa Clara, CA
- Nov 17** SCVACS Presentation of the Community  
College Teacher Scholar Award  
San Jose City College  
More info at [www.scvacs.org](http://www.scvacs.org)

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