

Silicon Valley Chemist

Silicon Valley Section

American Chemical Society

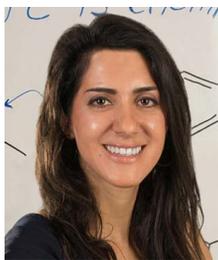
Volume 40 No. 4

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Chair's Message

Melody Esfandiari



April is a busy month for us, and we have many events lined up to connect with you. To kick the month off, we have a beer release party scheduled for April 7th. The Younger Chemists (YCC) of the Silicon Valley Section partnered with the Cal Section YCC to host a home brew beer competition at Golden State Brewery in Santa Clara. The event was well attended, bringing the two groups together to share some delicious brews and network. Dr. Richard Rucker won the event and as a bonus was invited to make a commercial 30-barrel

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SVACS April 28th Seminar: Tour and Talk at Hopkins Marine Station

Curating the Legacy of Stanford's Oceanographic Work in Monterey Bay

a science journey told through our collections

Dr. Amanda Whitmire

Abstract:

Contemporary oceanography involves the use of large research vessels, autonomous robots and satellites, and produces vast amounts of digital data. Scientists are able to collect information at an unprecedented rate, and it truly is an exciting time to be studying the ocean. But what of times past? As we become ever more focused on new technologies and methods of ocean sensing, observations from decades past are vulnerable to being left in the dust. In this presentation, Amanda will take you along on her journey to explore, preserve and share the important history of oceanographic work undertaken by researchers at the Hopkins Marine Station (HMS) of Stanford University. The remarkable story goes all the way back to the founding of Stanford, and can mostly be told through the exploration of original field data and materials that still reside in the library at Hopkins Marine Station.

Biography:

Amanda Whitmire is the Head Librarian and Bibliographer at the Harold A. Miller Library, and Assistant to the Director of Hopkins Marine Station. Prior to joining Stanford Libraries, Amanda was the Data



Management Specialist at Oregon State University Libraries. She earned her BS in Aquatic Biology at the University of California at Santa Barbara, and her PhD in Oceanography at Oregon State University. When she's not working,

Amanda enjoys spending time outside with her family, usually in the garden or on a hiking trail.

Tours:

Groups of 20, guided by graduate students doing research at HMS.

Date: Saturday, April 28, 2018

Location:

Hopkins Marine Station on 120 Ocean View Blvd., Pacific Grove, CA. The talk will be given in the Boatworks Auditorium. [Map](#)

Parking:

Free parking available at Hopkins Marine Station. The gate for entering the parking lot at HMS will be open from 1:00 to 1:45 pm.

Schedule:

Talk 1:30 – 2:30 pm

Tour 2:30 – 3:30 pm

Attendees:

This event will be free to attend and ACS Members are welcome to bring their family members. College Students who are not ACS Members are also welcome to attend this event. Donations (cash or checks made out to Stanford University) are welcome for the Hopkins Marine Station Graduate Student Fund. [Advanced registration](#) to attend this event is required.

Refreshments:

No food or drink will be served so please bring your own snack and drink.

Connect with Chemists

An early morning chat with fellow chemists

Thursday, April 19, 2018, at 7 a.m.

Coupa Café, 538 Ramona Street, Palo Alto
Contact Ean Warren (ewarren@scvacs.org)
for more information or ask for Ean at Coupa.

Chair's Message, continued from front page

batch for Golden State Brewery. Brewing beer involves a series of chemical reactions and processes, so it's logical to think that chemists could be great brewers, and Richard made one heck of a beer. Hope to see you at the release party on April 7th to try Richard's Sippin Citra Pale Ale.

To celebrate Earth Day on April 22nd, we will be at your local Whole Foods in Palo Alto and Cupertino (we may also add ad-

ditional locations). Come and check out our table. This year's theme is "Dive into Marine Chemistry." We will have information about how seafood is sourced and why it's important to know the source of your seafood. We'll have some books for kids with information about marine chemistry, including some fun experiments kids can do at home. Our alternate counselor, Elizabeth Migicovsky, will be at the Whole Foods in Palo Alto, and I'll see you at

the Cupertino location. As the date gets closer, you will be able to find more information on our Facebook page SiValleyACS and our website.

In addition, on April 28th, we will have a free event at the Hopkins Marine Station (HMS) in Pacific Grove. Amanda Whitmire, Assistant to the Director of Hopkins Marine Station, will take us on a journey to see the oceanographic work done by researchers at HMS. Attendees will also get tours by graduate students doing research at the Hopkins Marine Station (20 per group). Your friends and family are welcome, but please register in advance so we can plan accordingly.

Last month, I added a 'fun fact' to the end of my chair message. Here is the fun fact for this month. When I go to Starbucks to grab coffee in the morning, the first thing I look for is a yellow package with blue writing. And I usually have a spare one in my purse in case Starbucks is out. Yes, I'm talking about the artificial sweetener, Splenda, which was introduced in the U.S. in 1999 and has since become one of the most popular sweeteners on the market. Many things in chemistry have been discovered by accident, artificial sweeteners are no exception. This artificial sweetener was discovered by pure accident in the 70s. In 1976, Tate & Lyle Sugar Company in Britain was testing halogenated sugars in collaboration with Queen Elizabeth College. When the leading advisor, Professor Hough, asked his students to "test" the chlorinated sugars, one of the international students from India thought he had asked the students to "taste" them. This language barrier led to the discovery of Splenda. Surely one of the most important rules in a chemistry lab is to not taste anything in the laboratory. Luckily for those of us who have a sweet-tooth, Professor Hough's student didn't know the safety rules in detail.

255th National ACS Meeting in New Orleans, LA

Brief Summary of the ACS National Council Meeting

Written by Howard Peters and Matt Greaney

The following summary is intended to highlight important items from the March 21, 2018 ACS Council Meeting, held during the 255th National ACS Meeting in New Orleans, Louisiana. These items may be of interest to our Silicon Valley Local Section members. Much more detail is on the web and will appear shortly in C&E News. We will also be including an article in our May newsletter that deals with the rich technical side of the meeting as well as some of the highlights of the social programming, so stay tuned!

By Monday, March 19, the meeting had over 16,500 attendees, with a breakdown as follows: 8,470 regular paid attendees, 6,432 students, 877 exhibitors, 301 expo only 301, and 505 guests

Council Meeting:

The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2019: Harmon B. Abrahamson, Luis A. Echegoyen, Thomas R. Gilbert, and Mary Virginia Orna. By electronic ballot, the Council selected **Luis A. Echegoyen** and **Thomas R. Gilbert** as **candidates for 2019 President-Elect**. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election. Be sure to cast your ballot when you receive it!

The Committee on Nominations and Elections announced the results of the election held prior to the New Orleans meeting to select candidates from the list of nominees for Directors from District I and District V on the Board of Directors for the term 2019-2021. (Recall that our Silicon Valley section

resides in District VI, so no need to worry about casting a ballot for this one!)

By internet ballot, the Councilors from these districts selected Katherine L. Lee and Laura E. Pence as District I candidates; and John E. Adams and Joseph A. Heppert as District V candidates.

The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for 2019-2021 terms: Frank D. Blum, Lee H. Latimer, Ingrid Montes, and Angela W. Peters. The election of two Directors-at-Large from among these four candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on or before October 1, 2018.

The Council approved Petition on the Composition of Society Committees [Bylaw III, Sec. 3, e, (3), (4), and (8)], which will change the requirement for Councilors on Society Committees from at least two thirds (2/3) to a majority, and remove the requirement that the Chair and Vice-Chair of a Society Committee must be Councilors.

The Petition for Election of Committee Chairs [Bylaw III, Sec. 3, c, (1); d, 3, (3), (8); e, (3), (8); g, (3); i (3)], which would allow the voting members of all ACS committees to select their own Chairs, failed to gain the approval of Council.

1. The Council voted on the recommendation of the Committee on Budget and Finance to set the member dues for 2019 at the fully escalated rate of \$175.
2. The proposed formula for allocating dues funds to divisions, recommended by the Committee on Divisional Activities, was recommitted to the committee.

Chemistry Quiz

Who has won the Nobel prize in Chemistry twice?

The answer will appear in next month's newsletter.

Last Month's Chemistry Quiz

At standard temperature and pressure, what liquid has the highest density?

Mercury

2018 Local Science Fairs

By Susan Oldham-Fritts

The 58th annual Santa Clara Valley Science and Engineering Fair, the Synopsys Championship (www.science-fair.org), was held Thursday, March 15, at the San Jose McEnery Convention Center. As our regional competition, it showcased and celebrated 1031 local 6th-12th grade students who will become our future scientists, engineers, technologists, and mathematicians. While these students were supported by their parents, teachers/mentors, and schools, they performed and presented independent research that exceeded the bounds of their normal classroom studies. So, whether or not they were selected for the SVACS awards or to represent Santa Clara County at the California State or International Science and Engineering Fairs, they are all winners.

The SVACS special award team of Dr. Mary Price, Dr. Owen Gooding, Dr. Phil



Enriquez, and I judged 188 incredible projects to select our three section awards:

\$500 First Place Individual Award:

Pujita Tangirala, 8th grade, Challenger School, Strawberry Park, for *A Green, Low Cost Solution for the Removal and Recovery of Dye from Industrial Wastewater*

\$200 Second Place Individual Award:

Henry Yao, Challenger School, Sunnyvale, for *The Effect of Time and Temperature on Nitrite Level in Cooked Foods*

\$300 Team Award:

Ethan Hsiao, Cupertino High School, and Charles Huang, Lynbrook High School, for Molecular Dynamics of Metal Nanoparticles with Caveolae for *Surface Enhanced Raman Spectroscopy of Membrane Microdomains*

The students will receive their prizes on April 8 at the Heritage Theater in Campbell.

We'd also like to thank the many SVACS members that were category, grand prize, and other special award judges for volunteering their time and expertise. Additionally, we extend our thanks to Dr. Aart de Gues, chairman and CEO of Synopsys, and Gary Robinson and Heidi Black of the Synopsys Outreach Foundation for their continuing and generous support of local science students and their teachers. Science fairs don't happen without these committed students, teachers, and sponsors.

This Week in Chemical History

April 2

- Carl L. Alsberg, born 1877, researcher on the chemistry of food.
- Francis H. C. Crick and James D. Watson mailed a 900-word article on the structure of deoxyribonucleic acid (DNA) to Nature in 1953.

April 3

- Pierre-Fidèle Bretonneau, born 1778, first to distinguish typhoid from typhus; first to clinically describe diphtheria; performed first successful tracheotomy.
- Nikolai N. Semenov, born 1896, researcher in chemical kinetics; Nobel Prize in Chemistry (1956).
- The Electrochemical Society was organized on this date in 1902 as the American Electrochemical Society.

April 4

- Otto Folin, born 1867, pioneer in clinical chemistry; introduced Folin-Wu reagent for glucose analysis.
- Ira Remsen was awarded first Priestley Medal in 1923.
- Synthesis of vitamin B6 was announced by Merck, Sharp & Dohme in 1939.

April 5

- Joseph Lister, born 1827, introduced antiseptics such as carbolic acid (phenol).
- Marshall Gates and G. Tschudi announced synthesis of morphine in 1956.

April 6

- James Walker, born 1863, researcher on hydrolysis, ionization constants, and amphoteric electrolytes with organic compounds.
- First official organizational meeting of American Chemical Society was held at New York University in 1876.
- James D. Watson, born 1928, researcher on double-helix structure of deoxyribonucleic acid (DNA) molecule; Nobel Prize in Medicine (1962).
- Edmond H. Fischer, born 1920, researcher on protein phosphorylation as a biological regulatory mechanism; Nobel Prize in Physiology or Medicine (1992).

April 7

- New law instituted metric decimal system in France and established its nomenclature in 1795.
- Louis P. Hammett, born 1894, developed Hammett equation for linear free-energy relationship and correlation of changes in chemical properties with chemical structures.
- Walter H. Stockmayer, born 1914, a researcher in polymer chemistry.

April 8

- Melvin Calvin, born 1911, researcher in photosynthesis; Nobel Prize in Chemistry (1961).

Workshop for Teachers

A Teach the Teachers Workshop will be held on Saturday, April 21, 2018, at Stanford University. The workshop is sponsored by Silicon Valley Section ACS with generous support from Gilead Sciences, Inc. The theme for the workshop will follow the 2017 National Chemistry Week theme, Chemistry Rocks! The workshop is designed for elementary and middle school educators, and will feature several chemistry-related activities. Resources including a curriculum binder and all the materials needed to recreate the activities in the classroom will be provided free of charge to each educator that participates. If you are a 4th through 8th grade educator, and would like to attend, please visit <https://teachtheteachersspring2018.brownpapertickets.com> to register. Registration is limited. Please register early and no later than April 7, 2018.

Volunteers are needed for this event. The opportunities and times are varied – come early (8:00 am) and help set up; help with registration (9:00 am); help with lunch set and/or takedown (12:30-2:00 pm); or help with the take down (3:00-4:00 pm). If you have some time and would like to volunteer for this fun and worthwhile program or you have any questions regarding this workshop, please email us at TeachTheTeachersACS@gmail.com.

Follow-up to the March 2018 article on the SVACS Ale Contest Winner

Nearly 4 months after taking home the gold in the 1st Annual YCC and Senior Chemists Home Brew Competition, Dr. Richard Rucker returned to Golden State Brewery to test the scalability of his award winning Sippin' Citra Ale. Head Brewer Seth Hendrickson sweetened the stakes of the Nov, 2017, Competition by offering the winner a chance to join him at Golden State to brew a commercial batch of their beer. To prepare for brew day, 700 pounds of rye malt and 2-row malt, 70 pounds of Cascade and Willamette hops, and 4 pounds of brewer's yeast were ordered.

Starting around 9 am on a Tuesday, Richard and Seth began the brewing process by using a pallet of malt to make the mash. The mash is the rich soup of sugars, proteins, and tannins made by steeping grains in 160°C water for a couple hours. Richard has spent years perfecting the malt bill for his Sippin' Citra Ale by empirical optimization. After steeping for 90 minutes, the mash was pumped into the boil kettle through firehose-sized transfer lines, and then heated to a boil in preparation for hops addition. Once boiling, a proprietary blend of hops was added by 5-gallon buckets into the kettle, initiating the start of the 60-minute hopping period. Hops are best described as contributing the characteristic bitter and aromatic flavors in beers through extraction of their pungent alpha acids. Interestingly, hops are a close cousin of cannabis, thriving under similar cultivation conditions and sharing a distinct "skunky" smell. Following the 60-minute hopping period, the sugar- and alpha acid-rich wort was transferred into a fermentation tank, passing through a heat-exchanger on the way. The target temperature for the wort once it is in the fermentation is around 70°C. Deviation of 10°C or more in either direction can kill or inhibit the yeast that is pitched into the filled fermentation tank, potentially ruining the entire batch. Most successful breweries utilize sophisticated and expensive equipment to carefully control sanitation and process

conditions, and Golden State is no exception. After transfer to the fermentation tank was complete, Richard took a several 100 mL aliquot to measure the specific gravity of the solution (to be used for alcohol by volume determination), pitched a 5 gallon bucket of foaming yeast-water mixture on top of the 300 gallons of wort, and sealed the tank.

Over the following weeks the yeast will consume the complex sugars from the mash through anaerobic fermentation, generating the desired flavor profile and alcohol content. Continuing their spirit of generosity and support for our local SVACS section, the owners

of the brewery would like to host a "release party" once this brew is ready for consumption. We have scheduled Saturday, April 7 at 3 pm for this gathering. This event is open to the public, and everyone is invited to join us in tasting Richard and Seth's collaboration. The brewery is family and pet friendly, and this will be an excellent opportunity to enjoy some beers and network with some like-minded chemists, engineers, and beer lovers. There is no formal registration required for attending this event. For questions or requests, please contact Matt Greaney (Councilor 2017-2019) at greaney19@gmail.com.

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 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!

New SVACS Members

Hadi Abroshan
Akanksha Agrawal
Patrick Ahyow
Lida Baghernejad
Dr. Roland Barbosa
Tabitha Batte
Amber Bill
Jonathan Bradshaw
Jason Chiu
Dr. Darryl Dixon
Minh Quan Do
Rachel Dorin
Kelly J. Eberle
Dylan Gary
Sangita Ghosh

Emmett Goodman
Uma Gorti
Jim Jacob
Chris Jakobson
Zhe Jia
Dr. MuthuKumar Kaliappan
Dr. Jed N. Lampe
Jasper C. Lin
Xin Xin Lin
Xu Liu
Dr. Gary Vladimir Lopez
Mohammad S. Masnadi
Michael Mendoza
Komal Mittal
Victoria Nguyen

Aaron Ong
Christopher Petry
Jennifer Quijada
Andrew Riscoe
Dr. Duane E. Rudisill
Walter Russ
Jeff Rutherford
Victor Saucedo
Kevin Smith
Hyongsok Soh
Eric Lars Stangeland
Doris Tang
Dr. Michael Toney
Pa N. Xiong
Michael Yang

Call for Nominations 2018 Shirley B. Radding Award

First awarded in 1994 to its namesake, the Shirley B. Radding Award annually honors someone who has been a member of the ACS for at least 20 years. Nominees must have demonstrated dedicated, unselfish leadership, service and significant contributions over a sustained period of time to industrial, applied or academic chemistry and to the ACS through elected or appointed positions at local, district and national levels.

Award Criteria

- Member of the American Chemical Society for more than twenty (20) years.
- Demonstrated dedicated and unselfish service to ACS and its members over a sustained period of time.
- Provided leadership through elected and appointed ACS positions at local, district and national levels.
- Made significant contributions to industrial, applied or academic chemistry.

The award consists of an honorarium of \$1,000 and a suitably inscribed memento. Nominations must consist of at least one letter of nomination stating how the nominee's work relates to all aspects of the award. It is strongly recommended that seconding letters accompany the nomination.

Nominations are due on or before May 1, 2018, and may be sent electronically to Radding-Award@scvacs.org or be mailed to:

Radding Award Committee
Silicon Valley Section ACS
Post Office Box 395
Palo Alto, CA 94302



Call for Nominations Ottenberg Award

The Ottenberg Award is presented annually to a member of our local section for outstanding service to the section. Previous recipients are not eligible to receive it again. Nominations should include the nominee's biography, description of the service(s) for which the member is nominated, and a discussion or evaluation of the service to be recognized by the award. Please send your nomination to PFRusch@aol.com or by fax (650-961-8120) before June 15, 2018.



Chemists Celebrate Earth Week

2018 Illustrated Poem Contest Dive into Marine Chemistry

In celebration of Earth Week, the Silicon Valley ACS Local Section is sponsoring an illustrated poem contest for students in Kindergarten through 12th grade.

Contest Deadline: April 29, 2018

Prize: \$25 Visa Gift Certificate and a chance to compete in the National Contest!

Contact: Dr. Elizabeth Migicovsky at elizabeth.migicovsky@sjsu.edu

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

Write and illustrate a poem using the CCEW theme, "Dive into Marine Chemistry." Your poem must be no more than **40 words** and in the following styles:

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

Possible topics related to marine chemistry include:

Alginate	Coral	Bioluminescence	Brine
Salinity	Seaweed	Thermal Vents	Oil Spill

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:

- Poems must conform to the styles mentioned above. No poem may be longer than 40 words.
- The topic of the poem and the illustration must be related to the yearly CCEW theme of marine chemistry.
- All entries must be original works without aid from others.
- Each poem must be submitted and illustrated on an unlined sheet of paper (of any type) not larger than 11" x 14". The illustration must be created by hand using crayons, watercolors, paint, colored pencils, or markers. The text of the poem should be easy to read and may be printed with a computer before the hand-drawn 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.
- Only one entry per student will be accepted.
- All entries must include an entry form.
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners' names, likenesses, and entries for editorial, advertising, and publicity purposes.

SVACS Book Club: Update

The next meeting of the SVACS Book Club has been rescheduled to 3 p.m. on May 12th at the Stanford University Chemistry Gazebo.

The book for discussion is: "The Poisoner's Handbook: Murder and the Birth of Forensic Medicine in the Jazz Age New York" by Deborah Blum.

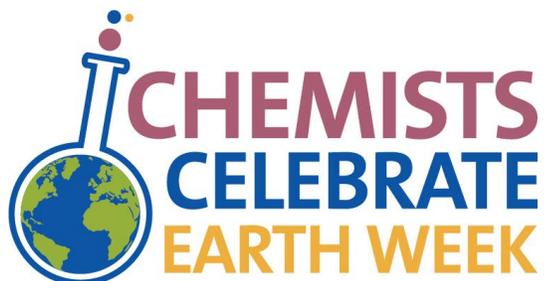
This is a story of the development of Toxicology Forensics in New York City during the Prohibition years. The book is a quick read, although occasionally a little gruesome, as it deals with the causes of murders and deaths. The chemistry is mostly accurate but a little lightweight. The book contains some interesting stories of industrial radium poisoning; deliberate arsenic poisoning; and a lot of methanol poisoning, both deliberate and inadvertent.

Paperback copies are available at Kepler's (1010 El Camino Real, Menlo Park, <http://www.keplers.com>) or from www.amazon.com.

Interested in joining the ACS Book Club? Add yourself to the email list (svacs-book-club+subscribe@googlegroups.com) or contact Ean Warren (ewarren@scvacs.org).



SILICON VALLEY SECTION
AMERICAN CHEMICAL SOCIETY
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is published on our web site, sign up at:
http://scvacs.org/?page_id=99

SILICON VALLEY SECTION

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Secretary	Jigisha Shah	315-289-5115	jssheth@syr.edu
Treasurer	Ihab Darwish	650-624-1389	darwishis@yahoo.com

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2016-2018	Sally Peters	650-447-3027	sallybrownpeters@gmail.com
2018-2018	Peter Rusch	650-961-8120	pfrusch@aol.com
2017-2019	George Lechner	408-226-7262	glechner@aol.com
2017-2019	Matt Greaney	510-410-0195	greaney19@gmail.com
2018-2020	Ean Warren	650-329-4554	ewarren@scvacs.org
2018-2020	Natalie McClure	650-906-7831	nmclure@drugregulatoryaffairs.com

Alternate Councilors

2018-2018	Alex Klevay	408-561-0087	alex.klevay@gmail.com
2018-2018	Richard Bone	650-714-7897	rgab@scvacs.org
2018-2018	Howard Peters	650-447-3027	peters4pa@sbcglobal.net
2017-2019	Elizabeth Migicovski	408-924-5012	elizabeth.migicovsky@sjsu.edu
2017-2019	Slava Bekker	831-759-6005	sbekker@hartnell.edu
2018-2020	Madalyn Radlauer	408-924-5482	madalyn.radlauer@sjsu.edu
2018-2020	Jane Frommer	408-927-2225	jane@collabra.net

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ChemPloyment Abstracts

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

- Apr 21** ACS High School Chemistry Olympiad
National Exam 8:30 am – 3:00 pm
Las Positas College, Livermore, CA
- Apr 21** SVACS Teach the Teachers Workshop
Stanford Chemistry Department
Chemistry Gazebo
teachtheteachers@gmail.com for more info
- Apr 22** SVACS Earth Day Information Table
Whole Foods Market at Emerson Street
Palo Alto, CA
1:00 – 4:00 pm
- Apr 28** SVACS April Semilar
Tour and Talk at Hopkins Marine Station
Amanda Whitmire, Head Librarian
Pacific Grove, CA
www.scvacs.org
- May 12** SVACS Book Club
http://scvacs.org/?page_id=1337
- Jun 21** SVACS Annual Joint Meeting with the
Golden Gate Polymer Forum
Professor Robert Grubbs, CalTech
Michael's at Shoreline Park
Mountain View, CA

Click on links for more information or
see this newsletter at http://scvacs.org/?page_id=99