October 2017 Newsletter

Silicon Valley Chemist

Silicon Valley Section
American Chemical Society

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OCTOBER 2017 NEWSLETTER TOPICS

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National Chemistry Week - Calling All Volunteers

Hands-on science experiments for children are among the many activities planned for area residents during this year’s celebration of National Chemistry Week, October 22-28. This year’s theme is “Chemistry Rocks!” and will feature geochemistry!

Join us on Saturday, October 21, 10am to 1pm at Dr. MLK Jr. Library, San Jose (150 East San Fernando Street) for a day of geochemistry-themed, hands-on science activities for elementary-school children and their parents. The Chemistry Wheel of Fortune will be spinning for all children to win a prize. Children will make colorful slime in the slime lab, experiment with boop bubbles and learn about the chemistry of rocks, soil, minerals and crystals.

This will be followed closely by the annual STEM Day at Mountain View High School, on Wednesday, October 25. We are seeking ACS member volunteers to again oversee the efforts of the local college volunteer crew who will run a hands-on experiment with these high school scientists. Last year we helped students solve a chemical mystery (what is that substance in extreme sour candy?) We need help from 11am to 2pm.

Finally, again this year our section will participate in the National Illustrated Poem contest and entries are due to Abby Kennedy (akenedycali2007@yahoo.com) by October 31. For details and rules, please visit website www.chemistryweek.org. And please pass

Chair’s Message
Todd Eberspacher

“…We’re going to need a brief refresher course in high school chemistry for the few people who might have forgotten it. Just kidding. Everyone’s forgotten it.”

The above is a quote from National Geographic magazine (June 2017 page 144 if you want to look at the rest of the article.) Harsh words if you are a chemist or chemical engineer, I happen to be both. This month’s column is brief and I will cover a few things

ACS 254th National Meeting
Council Report

The 254th annual National Meeting of the ACS was held in our nation’s capitol in late August this year. Nearly 13,000 attendees (including about 3000 students) participated in a very full schedule of events that balanced thousands of informative technical presentations with a wide-range of ACS governance and social events.

The technical program this year included a variety of Presidential symposia and events including a symposium on “Building a Safety Culture Across the Chemistry Enterprise” and a joint symposium with the Royal Society of Chemistry on the art of scientific communication. Other symposia had links to the

Washington D.C. meeting location: “On the Hill Advocacy Workshop”, “Chemistry in an Evolving Political Climate: Research Priorities and Career Pathways in Public Policy” and “The Road Less Traveled: Career Opportunities in the Government Sector”. The popular Kavli Lecture Series was once again in full swing with Dr. Prashant Jain (University of Illinois-Urbana Champaign) giving the Kavli Foundation Emerging Leader in Chemistry Lecture on “Turning photons into chemical bonds” and Professor Joanna Alzenberg (Harvard University) delivering the Fred Kavli Innovations in Chemistry Lecture entitled

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Chair’s Message, continued from front page

this month that should not be forgotten.

First, the ACS National election will begin soon. This year it is all electronic balloting unless you request a paper ballot. I’d like to remind everyone that Bonnie Charpentier is running for President Elect. Wouldn’t it be nice to have a Silicon Valley Section member running the ACS? Next, the local section ballot will be out next month. We typically have a low participation of ~15%, it only takes a few minutes to vote. Along with election of officers there will be ByLaws changes that must be approved.

Everyone should be getting a renewal notice in the mail or email this month. On the membership renewal form will be dues for the local section. These dues are voluntary, please consider paying them and supporting the local section activities. Why is a question many of you might ask. The first sentence of this column hints at a good reason—chemistry is apparently forgettable. The local section has many outreach activities. Project SEED, Teach the Teachers, Tech Trek, National Chemistry Week outreach, and the Chemistry Olympiad come to mind. All of these events help promote chemistry as a field and are supported by the local section dues.

Chemist
Asima Chatterjee

On September 23rd, Google.com users were greeted with the daily doodle commemorating the 100th anniversary of the birth of chemist Asima Chatterjee (23 September 1917–22 November 2006). She was an Indian organic chemist noted for her work in natural products. Her most famous work includes her research on vinca alkaloids, and the development of anti-epileptic and anti-malarial drugs. She also wrote extensively on the medicinal plants of the Indian subcontinent.

ACS National Meeting, continued from front page

“Multifunctionality of liquid-filled nano-structured materials: From encryption to anti-fouling”.

On August 22 and 23, the first ACS NASA Mars Symposium was held—talks focused on cutting-edge technological developments in the vast spectrum of chemical sciences needed to advance human space travel to Mars as well as ways to translate these discoveries into new products and procedures useful to benefit those of us still on planet Earth! Speaking of celestial issues, one of the main topics of interest to just about everyone at the meeting was the solar eclipse. Just imagine thousands of chemists taking time from meetings and other activities to stare at the sun! Even at just 80% of totality, it was a spectacular event. Of course, the ACS wouldn’t appreciate it if all of their scientists went blind so they kindly provided all of us with special eclipse glasses.

On Monday, August 21st, many of use were tickled to participate in an official attempt at staging the world’s largest chemistry lesson! Dr. David Sedlak (UC Berkeley), Editor-in-Chief of Environmental Science & Technology and Environmental Science & Technology Letters gave a fascinating 45 min lesson on the chemistry of drinking water and the future of drinking water treatment. The huge ballroom location for the talk was packed with scientists eager to hear the lesson and proudly wear their Guinness attempt T-shirts! We are still waiting to hear from the folks at Guinness to see if we broke the record so stay tuned…

There were, of course, numerous events linked to ACS governance at the meeting. Of note were the Town Hall Meeting held on Sunday where everyone was able to hear 2018 candidates for Director-At-Large field questions from Nominations and Elections as well as questions from the audience. Following the town hall meeting, the various district caucus meeting took place. In the District VI meeting, SV councilors caucused with colleagues from neighboring District VI local sections. We were updated on ACS finances by a member of Budget and Finance and it looks as though we are in pretty good shape with a favorable net from operations that was a little more favorable than originally projected. We also received a report on the activities of the ACS Board of Directors and other ACS entities. On Wednesday, the Council meeting was held and attended by local section, divisional, and national Councilors and Officers. As usual there was spirited discussion on several topics. One of note was a proposal by the Committee on Divisional Activities to create a probationary Division of Space Chemistry; this was defeated as this area of investigation is already a featured subdiscipline for one of the divisions but it was interesting to hear the thoughts of so many Councilors on this topic. Another topic of interest was a recommendation by the Committee on Membership Affairs to amend the bylaws to permit financial support for International Chemical Sciences Chapters. This recommendation was narrowly defeated when the needed 2/3 majority was not achieved.

All in all, this was a really successful meeting and we are already beginning to make plans for the Spring meeting in New Orleans this coming March. See you there!

Suggestion for future meetings and/or speakers are always welcome.
Send them to:
programming@svacs.org.

YCC Home Brew Competition
Golden State Brewery

The YCC and Senior Chemists are hosting a home brew competition at Golden State Brewery on Saturday, November 11, from noon to 3pm. Several teams will be sampling their home brews to a panel of judges and any attendees who wish to try. We are still looking for additional entrants, so please contact Matt Greaney (greaney19@gmail.com) if you wish to enter a brew or if you have any questions. All entrants will be reimbursed up to $40 for the cost of raw materials. Anyone interested in attending this event should register on Brown Paper Tickets page (http://www.brownpapertickets.com/event/3095253).
Outreach to Children in Homeless Shelters

Started in 2012 with funds from an Innovative Project Grant, the shelter outreach project was designed to provide hands-on activities for children in homeless shelters to interest them in science and potentially broaden their view of what they might do in the future.

In the first year, the project brought science to the summer day camps of four shelters in the bay area. Volunteers facilitated hands-on experiments such as exploring polymers through making slime, flubber and bouncy balls and demonstrating freezing point depression by making ice cream in plastic bags. Each child received a gift bag with chemistry-themed items and the shelter libraries received copies of the book “Apples, Bubbles, and Crystals”.

In later years, the shelter outreach project evolved into offering afterschool and evening programs at shelters once a month. We partnered with InnVision Shelter Network, which encompasses shelters in Menlo Park, Palo Alto, San Jose, and San Mateo. The plan for the program was to match volunteer student groups at area colleges and universities with nearby shelters to establish regular schedules of visits to shelters to work with the children there.

Unfortunately, we have lost key volunteers who helped coordinate the program because they moved out of state. We are looking to revitalize and grow the program, and involve new volunteers. There are opportunities to match any amount of time you can contribute and many tasks can be done at home. We want to establish a committee to share the work of preparing, organizing and delivering materials, and coordinating student volunteers working with shelters. If you have an interest in helping with this program, please contact Bonnie Charpentier at charpentierbon@yahoo.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

Dr. Shibu Abraham
Yilma Adem
Vincent Aguirre
Vinicius Amaral
Bhupinder Singh Baath
Matthew Brown
Kathy Dao
Naga Sai Gopi Krishna Devaraju
Juana Du
Dr. John Leonard Freeman III
Kevin M. Johnson
Jonathan Josephs
Jasmine Keane
Hani Lakkis
Casper Jia Wang Lee
Yeon-Hee Lim
Bowen Liu
Dr. Matthew Michael Logan
Jocelyn Marie Macho
Jessie Peh
Daniel Rehn
Dr. Bruce Richman
Philomena Schlexer
Rachel Ann Snelling
Yuki Tahara
Lilley Tran
Phuc H. Truong
Dr. Shengjiang Tu
Tamara Varranian
Caroline Weller
Bruce James Wittmann
Rudy Wojtecki

Chemistry Quiz

At the American Chemical Society meeting in 1909, one of the first plastics made from synthetic components was reported: polystyrene. What is the common name for this material?

The answer will appear in next month’s newsletter.

Last Month’s Chemistry Quiz

What are the metals that make up the alloy pewter?

Pewter is traditionally composed of 85–99% tin, mixed with copper, antimony, bismuth, and sometimes lead.

Committee Members Needed

The BUBBLE GRANT program was established in 2011 by a generous donation from an ACS member. Awards of up to $500 per year are granted to worthwhile science projects at K-12 California schools. Grants are awarded for projects that enhance the teaching of physical, life or earth science. Qualified uses of the funds are for purchases related to the proposed project such as scientific equipment, instructional materials and/or supplies. Time commitment is minimal and mainly includes reading proposals and awarding the grant. If you are interested in improving K-12 education in our state, please join our committee. Please contact Joseph A. Castellano, Ph.D. (drjcast@aol.com) if you’re interested in participating.

ACS Book Club

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).
The American Chemical Society
Comes to Monterey Bay

October 27, 2017

Design, Fabrication and Testing of Functional Nanomaterials

Dr. Claudia Luhrs
Naval Postgraduate School
Department of Mechanical and Aerospace Engineering

Friday, October 27, 2017
5:30 socializing/networking
7:00 dinner
8:00 seminar

Location
Sesnon House
Cabrillo College
6500 Soquel Dr., Aptos, 95003

Click here to register (required)

Open to all students, faculty, practitioners & admirers of chemistry
ACS Bay Area Comp Together & UCSF Pharm Postdocs (Ph-ocs) Present

Computers in Chemistry Symposium
Thursday, October 5th, 6-9 pm
Genentech Hall Room GH114N

Register at

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6 – 7 pm: Poster session
(pizza and refreshments provided)

7 – 7:30 pm: Huifen Chen (Genentech)
Twists and Turns: Challenges and Opportunities of Supporting an Ion Channel Drug Discovery Project

7:30 – 8:00 pm: Alan Cheng (Merck)
Designing Beyond Rule of 5 Molecules for Tough Targets

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Sponsored by:

[Logos of PH-OCS, COMP, and Genentech]
FUTURE EVENTS

Oct 5  ACS Computers in Chemistry Monthly Symposium (Register here!)  UCSF Mission Bay
Oct 21  SVACS National Chemistry Week Celebration "Chemistry Rocks!"  Hands-on Chemistry Fun for Elementary to Middle-School Students  MLK Jr. Library, San Jose, CA
Oct 21  First Silicon Valley ACS Book Club Meeting  Chemistry Gazebo, Stanford, CA  Contact Ean Warren for more info
Oct 27  Monterey Bay ACS Dinner Seminar  Dr. Claudia Luhrs, Naval Post Graduate School  Sesnon House at Cabrillo College, Aptos, CA  Register here.
Nov 11  YCC ACS Home Brew Competition in Partnership with the ACS Senior Chemists  Golden State Brewery, Santa Clara CA  Participate as a brewer or partaker here.
Nov 11  Seventh Annual Discovery Day at AT&T Park  FREE Hands-on activities for kids of all ages  San Francisco, CA  Click on links for more information or see this newsletter at http://scvacs.org/?page_id=99