

Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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MAY 2017 NEWSLETTER TOPICS

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Connect with Chemists

An early morning chat with fellow chemists

Thursday, May 18, 2017, at 7 a.m.

Coupa Café

538 Ramona Street, Palo Alto

Look for Ean at a table with an ACS card.

Chair's Message

Todd Eberspacher



April has been a busy month with the National ACS meeting in San Francisco and the Santa Clara Valley Section serving as a host with the Cal Section. At the meeting, Council

voted to approve our petition for a name change to "Silicon Valley" ACS Section. The name change process was started by my predecessor Jane Frommer when she was Chair. Jane has followed through with National on the process from the start. Interestingly, we recently learned about our Articles of Incorporation

Abstract

As per its mission statement: "FDA is responsible for protecting the public health by assuring the safety, efficacy and security of human and veterinary drugs, biological products, medical devices, our nation's food supply, cosmetics, and products that emit radiation." Up until now, much of the analytical work needed to ensure the safety of these products has been performed ipso facto (after people became sick) in a regulatory lab setting using the best available instrumentation to provide accurate results. This paradigm is slowly changing thanks to the introduction of new portable tools that enable rapid screening of products in a field setting such as a factory, import center, or mail facility. This presentation will review emerging tools including portable X-ray Fluorescence (XRF) analyzers, handheld Laser-Induced Breakdown Spectrometry

poration that was not known to me or to anyone on the ExComm giving just a hint of our section's beginnings. To complete the name change there is a significant amount of work that must be done to update by-laws and change legal identities with many governing bodies.

At a recent ExComm meeting, a small group was set up to review and update our by-laws. Anyone interested in participating can contact me for information. Our by-laws live in a Green Binder given to anyone that is elected to a position. This binder also contains our Operations Manual. Without the binder I would have been completely lost; fortunately I have had good mentors and my Green Binder to help guide how things are to be done. Along with an update of the by-laws is an update of the Operations Manual. These are

continued on next page

SCVACS May Dinner Seminar

Moving Ever Closer to Tricorders New Portable Tools to Screen FDA-Regulated Products

Dr. Peter T. Palmer, San Francisco State University

(LIBS) analyzers, portable X-Ray Diffraction (XRD) systems, Gamma-ray spectrometers, UV/Vis/IR and Raman spectrometers, and Ion Mobility Spectrometers (IMS). It will also provide examples of how these tools can be used to monitor trace levels of toxic elements, radioactive species, and/or illegal/contaminated/counterfeit drugs. Many scientists and administrators dismiss these new devices as "screening tools" and prefer to rely on "gold standard" methods based on ICP-MS, GC/

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May Dinner Seminar

Date: WEDNESDAY, May 24, 2017

6:00 p.m. Social Hour

7:00 p.m. Dinner

8:00 p.m. Presentation

Speaker: Dr. Peter Palmer, San Francisco State University and FDA

Moving Ever Closer to Tricorders

Location: Michael's at Shoreline Park Mountain View, CA

<http://michaelsatshoreline.com/>

Cost: \$30.00/ACS member

\$15/student

Breast of Chicken, Cordon Bleu Mushroom Crepes

Registration: <http://scvacs.org/>

Register by May 20, providing your name, email address, company/school affiliation, and choice of meal for each attendee. Watch the web site for more information. If you are unable to honor your reservation, please cancel by Tuesday, May 21st. We have to pay for all reserved dinners.

May Dinner Seminar, continued from front page
MS, and LC/MS/MS. The reality is that these new portable tools have an important niche, provide a much more efficient means to assess products, and can provide reliable qualitative and quantitative results in the hands of a trained user. This presentation will review these tools, their capabilities and limitations, and use in regulatory settings to find contaminated or potentially dangerous products.

Biography

Dr. Peter T. Palmer received a B.S. in Chemistry from Canisius College in Buffalo, NY, and a Ph.D. in Analytical Chemistry from Michigan State University. He has held positions as a lab technician in an environmental testing laboratory, a research scientist at Proctor & Gamble designing and developing laboratory robotics systems, and as a group leader at NASA Ames Research Center where he developed Mass Spectrometry systems for life support, atmospheric, and ecosystems monitoring applications.

Dr. Palmer is currently a Professor in the Department of Chemistry and Biochemistry



at San Francisco State University (SFSU), Co-Director of SFSU's Mass Spectrometry Facility, and Science Advisor for the FDA. His research interests focus on the development, characterization, and application of highly automated instrumentation for trace chemical analysis. Some of his applications to date include the development of Direct Sampling Mass Spectrometry and Solid Phase Micro-Extraction Gas Chromatography–Mass Spectrometry methods for monitoring pollutants in air water, development of the first Proton Transfer Reaction Ion Trap Mass Spectrometer for monitoring volatile organic compounds in air, numerous case studies on the determination of pesticide contamination on Native American artifacts, and pioneering the use of X-Ray Fluorescence Spectrometry for rapid screening of toxic elements in consumer products.

Chair's Message, continued from front page

both fundamental documents and are the core of the SCVACS or SVACS. Anyone interested in participating do contact me.

Also at the National Meeting local member, Bonnie Charpentier was nominated to run for President of the National ACS. Bonnie shares the ballot with Willie May. I have

known Bonnie for many years and her experience in and dedication to the ACS makes her an excellent candidate for national office.

Not to let the National Meeting steal all the press, our local programs continue to move along. I am particularly excited to see many new people get involved in the Teach The Teachers program. I am also proud to say that Stanford University will host the event on May 20 with a program titled "Solving Mysteries through Chemistry". This program will focus on forensic science and crime solving. Volunteers are welcome – please contact Stephanie Bachman as described in the article below if you are interested in participating.

The May dinner meeting will be with speaker Professor Peter Palmer (SFSU and the FDA). The title is quite intriguing, "Moving Ever Closer to Tricorders-New Portable Tools to Screen FDA-Regulated Products". Realizing not everyone may know what a tricorder is, it is short for TRI-function reCORDER and is worthy of a google search. I owe a debt of gratitude to Matt Greaney for quickly arranging this talk when our original speaker fell through at the last minute.

Workshop for Teachers

The annual Teach the Teachers Workshop sponsored by Santa Clara Valley ACS with generous support from Gilead Sciences, Inc. will be held on Saturday, May 20, 2017, at Stanford University. The theme for the workshop will follow the 2016 National Chemistry Week theme, Solving Mysteries through Chemistry. 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 register at: <http://teachtheteachers2017.bpt.me>. Registration is limited. Please register by May 6, 2017.

Volunteers are needed for this event. The opportunities and times are varied – come early (8:00 a.m.) and help set up; help with registration (9:00 a.m.); help with lunch setup and/or takedown (12:30-2:00 p.m.), or help with the take down (3:00-4:00 p.m.). If you have some time and would like to volunteer for this fun and worthwhile program, please contact Stephanie Bachman at: s_gehling@hotmail.com.

The 2017 National Inventors Hall of Fame Inductees

By Howard Peters

Since 1973, the National Inventors Hall of Fame (NIHF - located at the U.S. Patent and Trademark Office in Alexandria, VA, www.invent.org) - has inducted U.S. inventors whose inventions have advanced the American way of life. The 2017 Induction Ceremony will occur May 4 in Washington, DC. U.S. Patent copies can be obtained on the U.S. Patent & Trademark Office site www.uspto.gov or www.pat2pdf.org

2017 NIHF INDUCTEES – LIVING

Inductee	Born-Died	Patent	Invention Description
Iver Anderson	1953	5,527,628	Lead-Free Solder
Donald Arney	1947	4,474,245	BAMBI Bucket (Aerial Firefighting)
Carolyn Bertozzi	1966	7,807,619	Bio-orthogonal Chemistry
Eli Harai	1945	*****	Floating Gate EEPROM
Marshall Jones	1941	4,676,586	Industrial lasers
Tom Leighton	1956	6,108,703	Content Delivery Network
Daniel Lewin	1970-2001	6,108,703	Content Delivery Network
Frances Liger	1951	5,077,210	Portable Optical Biosensors

2017 NIHF INDUCTEES – HISTORICAL

Inductee	Born-Died	Patent	Invention Description
Earle Dickson	1892-1961	1,612,267	BAND-AID Adhesive Bandage
Harold Froehlich	1922-2007	3,104,641	ALVIN Deep-Sea Submersible
Haren Ghandi	1941-2010	5,102,853	Automobile Exhaust Catalysts
Howard Head	1914-1991	2,694,580	Ski Laminate Oversize Tennis Racket
Beatrice Hicks	1919-1979	3,046,379	Gas Density Sensing Device
Allene Jeanes	1906-1995	2,587,623	Dextran Production/Xanthan 3,000,790
Augustine Sackett	1841-1914	520,123	

Historical Pigments and the Perils of Painting

By Alex Klevay

Curt Frank, a professor of Chemical Engineering, and his wife, Sara, a calligrapher and art instructor, spoke at the SCVACS Dinner Meeting on March 23th. The artisan and engineer dynamic duo teach a class together at Stanford entitled Art, Chemistry and Madness: The Science of Art Materials. Curt admitted that the 'Madness' was a result of being in a van Gogh phase.

A painting like *The Starry Night* can provide a window into another world, but Professor Frank the materials engineer also sees it inherently as a physical object made of materials that can be degraded by light, heat, and water. Using an arsenal of instruments he amassed at the Center on Polymer Interfaces and Macromolecular Assemblies (CPIMA) on Stanford's campus, Professor Frank can tell what types of material failures a particular painting is susceptible to based on the pigment selections and techniques of an artist.

Whether a piece of history hanging in a famous museum or a family portrait above the fireplace, any painting still looks more or less like a cheeseburger when viewed cross-sectionally. A protecting varnish typically lies above the image-bearing paints that are applied to the ground layer which provides the mechanical and optical foundation on top of the support itself, which can be flexible like familiar canvas, but was originally rigid cave wall.

The animal imagery which romps across

the so-called 'Cave of Forgotten Dreams', first inhabited 36,000 years ago, is some of the best preserved Stone Age artwork ever discovered. Many historical pigments are naturally occurring minerals, and, in this prehistoric case, the rhinos (photo 1) were sketched with black MnO_2 while the signature-like stenciled hand print (photo 2) was created with red ochre, which is comprised of limonite iron(III) oxide-hydroxide, $\text{FeO}(\text{OH}) \cdot n\text{H}_2\text{O}$, peppered with anhydrous hematite, Fe_2O_3 .

In Montezuma era Mesoamerica, the red pigment of choice was carmine, and during the colonial era it was the second most popular export after silver. European traders were kept in the dark regarding the insectile origins of the carminic acid, so they believed the natural pigment came from a plant.

It was a colorful discovery by an English Chemist that ushered in organic chemistry as the language of contemporary paints. While attempting to synthesize quinine, Sir William Henry Perkin, a young man with an interest



Photo 1. Chauvet cave image

in painting, noticed he'd made something purple. Perkin's purple mauveine was the first synthetic dye to be mass produced and opened up a whole class of aniline synthetic pigments.

Mauveine replaced the incumbent Tyrian purple, which was reserved for only the most extraordinary garments as it required the mucus of roughly ten thousand mollusks to manufacture a single gram of the natural dye. A graduate student who took the Franks' course synthesized 6,6'-dibromoindigo, the main constituent of Tyrian purple, for their final project.

Sarah Frank actually came across a few milligrams of Tyrian purple in her art store adventures. She teaches what is essentially the lab section of the course, communicating the craft required to create art traditionally. The students learn to cut their own quills, process their own paints, and construct their own canvases.

A question from the audience about the rarity of natural blue pigments led Curt to discuss how Lapis Lazuli, a complex zeolitic aluminosilicate with a deep blue color that arises



Photo 2. Jaubert 2008 hand print

from S^{3-} anions, was disrupted by Prussian blue, the first synthetic pigment, which Vincent van Gogh used himself.

A Perfect Week for an ACS Meeting

by Councilor Matt Greaney

On Sunday, April 2, the 254th ACS National Meeting officially kicked off in downtown San Francisco. Nearly 19,000 attendees descended upon the city to participate in a packed 5-day schedule that included a plethora of technical presentations, exhibitors, ACS governance meetings, and social events. The meeting was perfectly timed to coincide with an unusually warm and sunny week by the Bay for all to enjoy.

The 18,917 in attendance set an all-time high for an ACS National meeting. This represents a 20% increase from the last time the meeting was held in San Francisco (in 2014) where the attendance was 15,774. The diverse crowd included 6,920 students who contributed to the 14,639 technical presentations given during the week. ACS appears to be stronger than ever!

Technical highlights included the popular Kavli Lecture Series held on Monday afternoon. Professor Bradley Olson from MIT discussed groundbreaking advances in the design and characterization of complex polymer networks. The intriguing talk about polymers was followed with a presentation from Professor Jennifer Doudna of UC Berkeley who talked about the programmable gene-editing technique CRISPR/Cas9. The Kavli Series continues to draw large crowds as both talks packed the house.

Another notable item in the technical program included Immediate-Past Chair Dr. Jane Frommer being honored with the ACS Award in Industrial Chemistry for her pioneering work in scanning probe microscopy. Part of the recognition included a dedicated half-day symposium from leading microscopy

experts in the field as well as an award presentation at the ACS Awards Reception. Well done, Dr. Frommer!

In parallel with the technical programming, ACS governance was in full swing. On Sunday, SCV Local Section Councilors attended the Town Hall meeting to hear from 2018 ACS President-Elect candidates. Afterward, the District VI Councilor Caucus took place where SCV councilors caucused with neighboring District VI local sections. During the Caucus meeting, Councilors were updated on the director's report, which highlighted ongoing ACS-wide efforts to build bridges with Congress, hold meetings, and to communicate concerns about the status of science funding. On the same day, the SCV and California Local Section YCCs partnered with the National YCC to host an entrepreneurship panel followed a networking social. Both events were very successful with over 100

continued on next page

National Meeting, continued from previous page

smiling young chemists attending.

The Council meeting was held later in the week and attended by nearly 500 local section, divisional, and national Councilors and Officers. The agenda was packed with action items and lively discussion. Selected talking points include Council-wide approval of the Santa Clara Valley Local Section name change to the Silicon Valley Local Section. This name change will go into effect after a handful of items are completed, including rewriting parts of section bylaws to reflect the name change. This work is currently being addressed by your local Councilors, and a future announcement will be made once the name change is official.

In addition to the approval of our name change, SCV Local Section Councilor (and past-chair) Dr. Bonnie A. Charpentier was selected as one of two finalist nominees for 2018 ACS President-Elect. Congratulations to Dr. Charpentier and fellow candidate Dr. Willie E. May. Now the hard work begins. Also of relevance to the SCV Local Section, District Director Lee Latimer's term will be ending in 2018. Rita R. Boggs and Paul W. Jagodzinski were the two candidates selected to the upcoming election to replace Director Latimer. The balloting for the 2018 ACS national election will be announced later this year. Be sure to stay tuned and to cast your ballots!

Overall, the 254th ACS National Meeting was a huge success. The beautiful weather, record-setting attendance, and excellent programming raised the bar on what we will come to expect from future meetings. A National Meeting will not return to San Francisco until 2020, but upcoming locations like Washington, DC, New Orleans, and Boston will continue to provide the basis for successful meetings and happy attendees.

Chemistry Quiz

Which membrane-bound protein has 46 chains, weighs more than 1MDa, and performs the first step in respiratory electron transport?

Last Month's Chemistry Quiz

Gemstones of the mineral corundum (Al_2O_3) are commonly called by what two names depending on the color?

Red corundum gemstones are called rubies. All other color corundum gemstones are called sapphires.

Silicon Valley U.S. Patent and Trademark Office Upcoming Events

by Howard Peters

Please link to this [website](#) to register early for the events described below.

For all events: Please note that the Silicon Valley USPTO is a federal facility. Visitors are required to show a valid form of government-issued identification (driver's license or passport) and may be subject to security screening.

Silicon Valley USPTO
26 South Fourth Street
San Jose, CA 95113
1-408-918-9900

There is metered street parking on South Fourth Street and surrounding streets, as well as public parking garages, including the Fourth Street Garage (which is not available to motorcycles). The USPTO does not provide parking validation.

May 5, 2017 12:00 p.m. PT - 1:00 p.m. PT Silicon Valley USPTO Public Tour

The Silicon Valley USPTO serving the West Coast region will host an informational public tour from noon to 1:00 p.m. Pacific Time. Participants will tour the office and learn about the U.S. Patent and Trademark Office, the services and resources it provides to the public, famous inventors from the region, and basic patent and trademark information and the role they play in innovation and the economy. The event is free and open to the public. Please register [here](#) or 408-918-9900.

May 9, 2017 12:00 p.m. PT - 1:00 p.m. PT Public Researching

Public searching on Universal Public Workstations is available from 9 a.m. - 4:45 p.m. PT, Monday - Friday, except federal holidays. Universal Public Workstations provide access to the agency's public electronic patent and trademark collections. The public search room enables researchers to conduct self-directed searches. The Silicon Valley USPTO has six public workstations with the same access requirements and print capabilities as public workstations in the Public Search Facility at USPTO headquarters in Alexandria, Virginia.

The Patent and Trademark Resource Centers (PTRCs) are also located in various public and university libraries offer beginner orientation on searching for patents and trademarks and other intellectual property resources. The Dr. Martin Luther King, Jr. Public Library (link is external) is a PTRC

and is located a block away from the Silicon Valley USPTO at 150 East San Fernando Street, San Jose, CA 95112. Please register [here](#) or 408-918-9900.

May 18, 2017 12:00 p.m. PT - 1:00 p.m. PT Patent Brown Bag "Lunch and Learn"

The Silicon Valley USPTO hosts a monthly patent brown bag lunch and learn session in its San Jose office from noon to 1:00 p.m. A supervisory patent examiner will give an overview of the patent system and answer general patent questions during a live information session. This session is designed for inventors, entrepreneurs, and those who would like to learn more about the patent system and have a beginning to intermediate knowledge of the patent system. This event is free and open to the public. Please bring your own lunch to enjoy during the session, lunch is not provided. Space is limited. Please register [here](#) or 408-918-9900.

May 23, 2017 12:00 p.m. PT - 2:00 p.m. PT Hands-on Patent Search Workshop

As part of its Patents Education Curriculum, the Silicon Valley USPTO will host a two-hour workshop on patent searching. Learn to search databases used by patent examiners on the USPTO Universal Public Workstations (UPWS) which are publicly available at the regional office. A supervisory patent examiner will instruct the attendees on the following: What are the benefits of searching? Where can you search? When should you search? How do you search using USPTO search tools?

This session is designed for inventors, entrepreneurs, and those who have a beginning to intermediate knowledge of patents and would like to learn more about patent searching.

If you do not already have a UPWS login account, which are valid for one year, please arrive approximately 30 minutes before the workshop to register for one. Most of the class will be lecture; however, you will have the opportunity to practice on our Universal Public Workstations during the last 30-45 minutes. There is limited availability for the workstations so you may want to allow extra time after class to use a workstation. This event and UPWS accounts are free and open to the public. Space is limited. Please register [here](#) or 408-918-9900.

Welcome to the Santa Clara 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 SCVACS Members

Dr. Paul Abbyad	Nathan Colby Contino	Dr. Sunhee Hwang	Aanchal Mohan	Dr. Hunter Shunatona
David Nicholas Abram	Alesha Corral	Salman Jabri	Amy Mongersun	Dr. Tatiana Shvareva
Zoe Adams	Jennifer Cosman	Dr. Erik Tomas Jansson	Jared Thomas Moore	Adam Slavney
Dr. Manali Aggrawal	Dr. Robert Allen Craig	Thomas F. Jaramillo	Ryan Muir	Mahima Sneha
Muzaffar Alam	Jeffrey Louis DaRos	Debin Ji	Prasenjit Mukherjee	James William Snyder
Dr. Robert D. Allen	Dr. Murat Kadir Deliomeroğlu	Jennifer Jiang	Melissa Mun	Karin Ann Stein
Stina Al Maleh	Ginger DeMars	Dr. Haolun Jin	Maya Nag	Dietrich Steinhuebel
Zoe Amaris	Dr. Nick DeMello	Zexin Jin	Masayoshi Nagaya	Jessica Su
Antaeres Antoniuk-Pablant	Yichuan Ding	Brian Kanoh	Noah Fine Nathel	Judy Szeto
Simon Jean Marius Arragain	Jennifer Dionne	Dr. Ana Kareh	Dr. Danny Chung-Yin Ng	Yat Kong James Tam
Dr. Vinothini Balasubramanian	Dr. Antonio G. Dipasquale	Ivy Kekessie	Bianca Nguyen	Chuheng Tang
Shibdas Banerjee	Christop Dizon	Moonhee Kim	Katrina Nguyen	Jack Tang
Elizabeth Barile	Phuong Do	Michael Tae-Jong Kim	Nikki Nguyen	Dr. Adrienne Tanur
Patrick Batoon	Dr. Feng Dong	Dr. Laurie King	Vy Nguyen	Yew Chin Teo
Matthew Batz	Mary Dougherty	Todd Kohn	Ashley Nguyen	Dr. M. Tim Tian
Giovanna Elizabeth Bauer	Songzhan Du	Seetha Krishnamoorthy	David Nguyen	Daniel Tiano
Brooke Maurin Bayless	Vincent Duong	Andy Kwong	Stephanie Nitopi	Stephen I-ming Ting
Dr. W Henry Benner	Jason Duquette	Dr. Naida Lacevic	Simiao Niu	Janelle Tobias
Christopher Berglund	Krystyna Marie Elbel	Dr. Chandraiah Lagisetty	Alan Northrup	Alejandra Toledo
Diane Beylkin	Dr. James Bernard Ellern	Yin-Hung Lai	Taeseok Oh	Zhiwei Tong
Saloni Bhardwaj	Graham Ewing	Holden Lai	Ogadinma K. Okakpu	Jed L. Tran
Katherine Blanco	Vivian Feig	Alan Landers	Professor Scott Oliver	Minh Tran
Dr. Jeffrey Mark Blaney	Harry Feldman	Blake Langdon	Dr. Steven H. Olson	Vivian S. Truong
Dr. Brian Blank	Matthew Findlay	David Lao	Jose Andres Orozco	Kate Tschudi
Dr. Jonathan E. Bock	Stefan Fischer	Austin Will Lau	David Palm	Amy E. Tuzon
Naomi Boissy	Bridget I. Foley	Rachel Law	Ching Pan	Mariangela Urbano
Ilbert Bourang	Breana Fraga	Sze Ho Law	Robert Parrish	Eva Cristina Uribe
Livia M. Braga	Madison Frame	Candace Laxamana	Janice Patton	Manuel Ventura
Dr. Lance Brockway	Lisa Fredenburg	Jae Kyoo Lee	Kumar Paulvannan	Vi-Anh Thi Vu
Crystal Bross	Daniel Nestor Freitas	Michael Peter Lee	Sierra L. Peace	Domagoj Vucic
Dr. Brenda Chan Burke	Boyi Fu	Ting Lei	Kayvon Pedram	Can Wang
Dr. Brenda Burke Chan	Dr. Zice Fu	Hailian Li	William Perreault	Ging-Ji Nathan Wang
Kim K. Burson	Kirin Furst	Zerong Li	Daniel Pham	Rui Wang
Haiying Cai	Prof. Kelly Gaffney	Mie Lillethorup	Dr. Johnny D. Pham	Benjamin Wang
Bin Cai	Jonathan Galazka	Dr. Sung Lim	Bryn Phillips	Sihong Wang
Musette Caldera	Dr. William J. Galush	Dr. Debora Winnie Lin	Yuan Ping	Yan Wang
Carla Campos	Dr. Siva Ganapathi	Andrew Lindsey	Dr. Hilary Plake Beck	Seiichiro Watanabe
Dr. Yeyu Cao	Theodore Zhenyu Gao	Xikun Liu	Dr. Russell C. Pratt	Yenny Webb Vargas
Dr. Matteo Cargnello	Angeles Rubi Garcia	Renqi Liu	Adam Printz	Dr. Janice L. Wee
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Diane E. Carrera	Hasti Gheibi Dehnashi	Brian Lopez	Sana Quraishi	Susan Williams
Julio Catalan	Jennifer Gile	Junzhe Lou	Saividyaa Ramaswamy	Matthew Winnick
Nicole Catly	James Girotti	Yu Lu	Jacenda Rangel	Michael Winslow
Danny Daneth Ceron	Christopher Graves	Dr. Sunghoon Ma	Jevgenij Raskatov	Walter Won
Jacob Cha	Jenny Green	Jenny Mac	Karli Rasmussen	Andrew Wright
Dr. Johann Chan	Jie Gu	Katharine Maher	Dr. Harlan Frederick Reese	Wan-Ting Wu
Karen Chan	Christopher Hahn	Margaryta Makhanov	Maureen Reilly	Jie Xu
Roy Chan	Dr. Ryan K. Hamilton	Dr. Stacy Malaker	David B. Repke	Xin Yan
Michael Chang	Guojun Han	Gregory Manoukian	Ygnacia A. Rivas	Jiayi Yang
Yung-Lin Chang	Dr. Peter Harms	Dr. Mark Martello	Michael Roders	Qian Yin
Zhihua Chen	Stefanie Harvey	Saul Martinez	Howard Roth	May Young
Beijing Chen	Jesse Hauser	Dr. Autumn Maruniak	Dr. Steve C. Rothman	Dr. Jingjiong A. Your
Shucheng Chen	Alejandro Gabriel Herrera	Joshua McEnaney	Francis S. Ruado	Kristen Zachariah
Yanru Chen	Kanaka Hettiarachchi	Colin McKinlay	Dr. Daniel P. Sanders	Julia Zaks
Kaylee Choi	Drew Higgins	Spivey McLane	Shawn Sanders	Dr. Xiaolin Zheng
Spencer Clark	Kallie Hilsabeck	Dr. Brian John McNelis	Ed Sartor	Zhenpeng Zhou
Dr. Jacob Clary	Thy X. Hoang	Jana Meiser	Saumya Saurabh	Jiang Zhu
Dr. Leah Brigit Cleary	Annika Rachel Holm I	Ricki J. Menard	Alex Seay	Jingyuan Zhuo
Allisa Clemens	Jim Holm	Ricardo Mendez	Carmen Segura	Mikhail Zibinsky
Elysia P. Cohn	Kimberly A. Houghton	Diana M. Mikhail	Matthew Semere	Ryan Zolyomi
Emily Cole	Jingli Hu	Kevin William Miles	Elaine Seraya	
Ian Rodrigo Colinas	Beibei Huang	Ryan Miller	Leo Shaw	
Qiang Cong	Lyra L. Huang	Honghua Mo	Ian Shieh	



SANTA CLARA VALLEY SECTION
AMERICAN CHEMICAL SOCIETY
P.O. Box 395, Palo Alto, CA 94302



To receive an email when our newsletter
is published on our web site, sign up at:

http://scvacs.org/?page_id=99

SANTA CLARA VALLEY SECTION

2017 Section Officers

Chair	Todd Eberspacher	650-723-2505	eberspacher@stanford.edu
Chair Elect	Melody Esfandiari	408-924-4973	melody.esfandiari@sjsu.edu
Past Chair	Jane Frommer	408-927-2224	frommer@scvacs.org
Secretary	Richard Bone	650-714-7897	rgb@scvacs.org
Treasurer	Ihab Darwish	650-594-1654	darwishis@yahoo.com

Councilors

2015-2017	Ean Warren	650-329-4554	ewarren@scvacs.org
2017-2017	Charlie Cox	650-485-1041	ctcox@stanford.edu
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
2017-2019	George Lechner	408-226-7262	glechner@aol.com
2017-2019	Matt Greaney	510-410-0195	greaney19@gmail.com

Alternate Councilors

2015-2017	David Parker	408-615-4961	drdparker@comcast.net
2017-2017	Howard Peters	650-854-4614	peters4pa@sbcglobal.net
2017-2017	Heddie Nichols	310-435-2133	nichols@scvacs.org
2016-2018	Natalie McClure	650-906-7831	nmclure@drugregulatoryaffairs.com
2016-2018	Heidi Vollmer-Snarr	650-723-9518	hrvsnarr@stanford.edu
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FUTURE EVENTS

- May 6** *Restoring Blair Island*
Redwood City, National Wildlife Refuge
- May 14** *Mother's Day Free at the Exploratorium*
San Francisco, CA
- May 18** Ripudaman Malhotra
Replacing Cubic Miles of Oil
Café Scientifique Silicon Valley HanaHaus
Palo Alto, CA
- May 23** *Stanford Chemistry: Tradition and Transition*
Stanford Historical Society
SAPP Center Auditorium
- May 24** SCVACS Dinner Seminar: Moving Ever
Closer to Tricorders
Dr. Pete Palmer
San Francisco State University and FDA
Michael's at Shoreline Park, Mountain View
- May 25** *Alongshore Sediment Transport, Rip Currents
and Erosion in Southern Monterey Bay*
Pacific Grove Museum of Natural History

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