Silicon Valley Chemist
November 2017

American Chemical Society Silicon Valley Section

Annual Election of Section Officials
Richard Bone, Section Secretary

The Silicon Valley Section of the American Chemical Society is conducting its annual election electronically. The election concludes on November 27, 2017 at 11:59pm (U.S. Pacific time).

You have received an email from Vote-now.com because you are a voting member of the ACS Silicon Valley Section. Vote-now is acting as the election agent for this organization.

When you are ready to vote, click the link in the email to load the ballot in your web browser.

Please do not share the email with others. The candidate biographies are available via links within the online ballot.

If you have questions about the election process, or require a paper ballot, please contact the Section Secretary, Richard Bone, rbone@mwe.com; (650) 815-7524; (650) 714-7897.

For technical problems, please reply to the email to contact support@vote-now.com, or call (888) 993-9801.

Executive Committee Positions to vote on:

1. **Chair-Elect 2018** - vote for one (1-year position, becomes Chair in 2019)
   - Grace Baysinger, Stanford University
   - ________

2. **Secretary 2018** - vote for one (1-year position)
   - Jigisha Shah, Cytokinetics
   - ________

3. **Treasurer 2018** - vote for one (1-year position)
   - Ihab Darwish, Rigel Pharmaceuticals
   - ________

4. **Councilors** - vote for two (3-year positions)
   - Charlie Cox, Stanford University
   - Ean Warren, USGS
   - Natalie McClure, Adamas Pharmaceuticals
   - ________

continued on next page

Connect with Chemists
An early morning chat with fellow chemists
**Thursday, November 16, 2017, at 7 a.m.**
Coupa Café
538 Ramona Street, Palo Alto
Contact Ean Warren (ewan@scvacs.org) for more information or ask for Ean at Coupa.

Chair's Message
Todd Eberspacher

By the time you read this we will have a new President-Elect of the ACS. Everyone in our section should know local member Bonnie Charpentier was nominated for the post and it would be exciting to have a local member serve in the position. Related, election of the local section officers, councilors, and alternate councilors will be taking place. Voting is typically only done by a few percent

continued on next page

YCC ACS 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 our Brown Paper Tickets page: http://www.brownpapertickets.com/event/3095253

Suggestions for future meetings and/or speakers are always welcome. Send them to: programming@scvacs.org.
of the members—it takes a few seconds to vote. Please watch for an email and place your votes. Bios of the candidates are available on our website.

I hope everyone has noticed that the name of the local section has changed to Silicon Valley from Santa Clara Valley. The name change process has taken place over the last 18 months and involved a lot of work by my predecessor, past-chair Jane Frommer and the Executive Committee. Look for changes to the website, email addresses, and letterhead in the future. Thank you to everyone for making this happen.

Prompted by the name change, the By-Laws Committee has undertaken the task of updating the section’s by-laws to conform with the standards set by the National ACS. This too has been a long process. Special thanks to the committee for taking on this task and special thanks to George Lechner for chairing the committee. Look for a summary of the proposed changes in the near future. Any changes are subject to approval by the ACS and a vote of the section membership.

The first meeting of the Silicon Valley ACS Book Club took place on October 21 at Stanford. Ean is looking for leaders for future meetings and suggestions of books to read. If you are interested in participating, please contact Ean (ewarren@scvacs.org).

The Program Committee is always interested in your ideas for dinner meetings and events. Please email programming@scvacs.org with suggestions, wish lists, and ideas.

Finally, the younger chemists committee (YCC) is hosting a Home Brew Competition with judging of the reaction products on November 11 at the Golden State Brewery. Registration details are on the website and in this newsletter.

Alternate Councilors - vote for three
(Top two votes are for 3-year positions; third ranked candidate will assume a 1-year position)
☐ Madalyn Radlauer, San Jose State University
☐ Alex Klevay, Natron, Inc.
☐ Howard Peters, Retired, Patent Attorney
☐ Dave Parker, Retired, Safety Officer
☐ Jane Frommer, IBM
☐ ______________________________________

Other Instructions for Vote Now:
1. Randomize the ordering of candidates for positions where more than one candidate is standing. This randomization should be done individually for each ballot; the intent is that the ballots do not all have the same ordering of the candidates.
2. Please certify results no later than 17:00 PST; November 29, 2017
3. The election must maintain anonymity and confidentiality of member votes (i.e., the Silicon Valley Section must not know which members voted, or how an individual voted).
4. The e-ballot should ensure that eligible members only vote once.
5. Submitted ballots must be archived for one year in the event of a contested election, so that the election results can be reviewed.
6. The Internet voting site should be https compliant (encrypted transmissions).

Chair’s Message, continued from front page
Battling Flames Increases Firefighters’ Exposure to Carcinogens
ACS News Service

The threat of getting burned by roaring flames is an obvious danger of firefighting, but other health risks are more subtle. For example, firefighters have been found to develop cancer at higher rates than the general population. Now researchers have measured how much firefighters’ exposure to carcinogens and other harmful compounds increases when fighting fires. Their study, appearing in ACS’ Environmental Science & Technology, also points to one possible way to reduce that exposure.

Based on a study of 30,000 firefighters in three cities, the U.S. National Institute for Occupational Safety and Health reported in 2013 that firefighters had higher rates of several kinds of cancer than the general population. The burning of wood, plastics, furniture, electronics and other building materials releases hazardous substances, including polycyclic aromatic hydrocarbons (PAHs), into the air. Exposure to PAHs is of particular concern as the compounds can cause DNA mutations and are known carcinogens. But few studies have investigated firefighters’ on-the-job exposure to PAHs and other combustion emissions. So Jules M. Blais and colleagues set out to get a clearer picture.

The researchers collected samples of urine and wiped the skin and clothing of more than two dozen firefighters in Ottawa before and after they responded to fires in 2015 and 2016. On average, post-fire levels of PAH metabolites in urine were 2.9 to 5.3 times higher than pre-fire levels. The average urinary mutagenicity — or the potential to cause genetic mutations — increased 4.3-fold. “There’s a relationship between firefighters’ urinary PAH metabolite levels and the levels of PAHs on their skin, which leads us to suspect that dermal contact may be an important route of exposure,” says Jennifer Keir, an author on the study. The researchers conclude that skin decontamination immediately after fighting a fire could be one way to help reduce firefighters’ exposure to these potentially cancer-causing compounds.

Adventures in Chemistry
Copyright © 2017 American Chemical Society

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

Felix Alfonso
Chibueze Amanchukwu
Dr. Alexander S. Bayden
Joseph Michael Becerra
Chelsea Lynn Broderick
Jianhua Chao
Dr. Anatoly Chlenov
Joseph Michael Dennis
Zachary Miller Detweiler
Laura Marie Hagenah
Ioannis Kipouros
Tom Lam
Dr. Jie Jack Li
Dr. Kevin Martin
David M. Navarro
Thao Nguyen
Dr. Robert V. O’Brien
Dr. Angshuman Pal
Anna Pereira
Walter Ralston
Dr. Krishnaswamy Rengan
Kimberly Robin Sabsay
Frederick James Seidl
Tsegaye Gebremedhin Teshale
Boris A. Veytsman
Linfeng Yao

Chemistry Quiz

Which familiar Thanksgiving spice is illegal in Saudi Arabia because it contains the hallucinogenic compounds myristicin and elemicin?

The answer will appear in next month’s newsletter.

Last Month’s Chemistry Quiz

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

Polyoxybenzylmethylenglycolanhydride is commonly known as Bakelite.

The Silicon Valley Section of the American Chemical Society is the copyright owner of all material published in The Silicon Valley Chemist. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without advance permission in writing from the editor, particularly for commercial purposes. Authorization to photocopy items for limited internal or personal use, or the limited internal or personal use of specific clients, is granted by the Executive Committee of the Silicon Valley Section of the American Chemical Society.
SILICON VALLEY SECTION

2017 Section Officers

Chair          Todd Eberspacher  650-723-2505  eberspacher@stanford.edu
Chair Elect    Melody Esfandiari  408-924-4973  melody.esfandiari@sjtu.edu
Past Chair     Jane Frommer  408-927-2224  frommer@scvacs.org
Secretary      Richard Bone  650-714-7897  rgab@scvacs.org
Treasurer      Ihab Darwish  650-624-1389  darwithis@yahoo.com

Councilors

2015-2017    Ean Warren  650-329-4554  ewarren@scvacs.org
2017-2017    Charlie Cox  650-485-1041  cccox@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  650-447-3027  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  650-447-3027  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
2017-2017    Elizabeth Pollom  408-924-5012  elizabeth.pollom@sjtu.edu
2017-2019    Slava Bekker  831-759-6005  sbekker@hartnell.edu

Newsletter

Editor        Kevin Greenman  408-634-2309  editor@scvacs.org
Assoc. Editor Partha P. Bera  partha.pb@gmail.com

ChemPloyment Abstracts

Director      Liang Cao  liang.cao@aol.com

FUTURE EVENTS

Nov 7  ACS Computers in Chemistry Monthly Seminar, Posters, and Networking  
      UCSF Mission Bay
Nov 11  YCC ACS Home Brew Competition in Partnership with the ACS Senior Chemists  
       Golden State Brewery, Santa Clara, CA
Nov 11  Seventh Annual Discovery Day at AT&T Park  
       FREE Hands-on activities for kids of all ages  
       San Francisco, CA
Nov 13  Golden Gate Polymer Forum Dinner Lecture  
       Electroactive Fluorinated Polymers  
       Larry Judovits, Principal Scientist, Arkema  
       Michaels at Shoreline, Mountain View, CA
Nov 15  DFJ Entrepreneurial Thought Leader Series  
       Anne Wojcicki, CEO/co-founder of 23andMe  
       NVIDIA Auditorium, Stanford University
Nov 27  The Chemical Biology of Protein Misfolding Disease  
       Jason Gestwicki, Professor, UCSF  
       Clark Center Auditorium, Stanford University
Nov 29  More from Patrick Brown on Impossible Foods  
       NVIDIA Auditorium, Stanford University  
       Click on links for more information or  
       see this newsletter at http://scvacs.org/?page_id=99