

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

Volume 32 No. 10

## OCTOBER 2010 NEWSLETTER TOPICS

- November Dinner Meeting: Community College Education; 2010 Teacher-Scholar Award Presentation
- Chair's Message
- October Dinner Meeting: Career Opportunities in Biotechnology
- GREEN CHEMISTRY: Mission College, Santa Clara
- Celebrate NCW 2010 with Dr. Wow and Dr. Lang!
- Stephanie Gehling wins Ottenberg Award
- Welcome to the Santa Clara Valley Section of ACS
- New Members List for September
- Councilors' Report from the Boston Meeting
- Chemploment Abstracts

## Chair's Message

There is great news: Dr. Robert Galemmo has agreed to become our public relations contact with the media and public, and Aaron Novack has agreed to become the editor of our newsletter, the Silicon Valley Chemist. Please give either or both of them your thanks and welcome them if and when you meet them.

National Chemistry Week (NCW) is an annual October event. If you can, offer Abby Kennedy (akennedy@exelixis.com) your help. Details of local NCW activities are in the Newsletter and on our website ([www.scvacs.org](http://www.scvacs.org)).

November has a wonderful event, the Teacher-Scholar Award evening featuring our national ACS president, Dr. Joseph Francisco as speaker. November is also election time for our Section officers. We would like to have more members run for

*continued on next page*

## November Dinner Meeting

### The Chemical Enterprise: Thinking and Acting Globally; 2010 Teacher-Scholar Award Presentation

Dr. Joseph Francisco, President of American Chemical Society

Joseph S. Francisco completed his undergraduate studies in Chemistry at the University of Texas at Austin with honors, and he received his Ph.D. in Chemical Physics at the Massachusetts Institute of Technology in 1983. Dr. Francisco spent 1983-1985 as a Research Fellow at

Cambridge University in England, and following that he returned to MIT as a Provost Postdoctoral Fellow.

He has been an Assistant Professor at Wayne State University, and a Visiting Associate in Planetary Science at the California Institute of Technology. He has been a professor at Purdue University since 1986.

He served as President for the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCCChE) from 2005-2007. In 2008 he was elected into the ACS presidential cycle, and he is currently President of the American Chemical Society.

He has published over 400 peer-reviewed publications in the fields of atmospheric chemistry, chemical kinetics, quantum chemistry, laser photochemistry and spectroscopy.

Professor Francisco has received numerous national and international honors for his academic accomplishments. He was recently awarded an Alexander von Humboldt U.S. Senior Scientist Award by the German government, as well as being appointed a Senior Visiting Fellow at the Institute of Advanced Studies at the University



of Bologna, Italy. He has been appointed to and served on committees for the National Research Council, National Science Foundation, American Chemical Society, and the National Aeronautics and Space Administration.

## November Dinner Meeting

**Date:** MONDAY, November 15, 2010

**Time:** 6:00 Social Hour  
7:00 Dinner  
8:00 Presentation

**Location:** Biltmore Hotel & Suites  
2151 Laurelwood Blvd.  
Santa Clara, CA 95054

**Speaker:** Dr. Joseph Francisco, President, American Chemical Society  
The Chemical Enterprise: Thinking and Acting Globally; Teacher-Scholar Award Presentation

**Cost:** \$27.00 with a choice of:  
Filet of Salmon or Pasta Primavera

**Reservations:** [www.scvacs.org](http://www.scvacs.org)  
Sally Peters 650-812-4994

Reservations should be made by November 10th stating your name, address, company affiliation, number of people in party. Watch the web site for more information. If you are unable to honor your reservation and do not cancel by Thursday, November 11, you will be invoiced following the dinner meeting.

office; you can run by write-in or by petition. Contact Floyd Hobbs or Karl Marhenke for information, or see our

website.

October begins the season of holidays. Enjoy what they offer and reflect on their meanings.

Reminder **October Dinner Meeting** Reminder  
**Career Opportunities in Biotechnology**

**Dr. Toby Freedman and Debbie Brennan**

The October dinner meeting will include a short introductory talk on EnCorps by Debbie Brennan, followed by our featured October speaker, Dr. Toby Freedman.

**Toby Freedman Biography**

Toby is an author and the Founder and President of Synopsis Search. A scientist by training, she transitioned into business as a recruiter, writer, and entrepreneur.

Her book "Career Opportunities in Biotechnology and Drug Development", published by Cold Spring Harbor Laboratory Press, provides a comprehensive overview of the many careers in the life sciences industry. It covers over twenty vocational areas ranging from venture capital to marketing to discovery research.

She founded her own recruiting firm, Synopsis Search, which is focused on executive R&D and business placements in the life sciences industry. She previously worked at BioQuest, an executive search firm, placing VP to CEO-level executives, and as Director of Business Development at SLIL Biomedical, a drug discovery company developing therapeutics for cancer and other diseases.

Toby earned her B.S. from the University of California, a Ph.D. in molecular biology from the University of North Carolina at Chapel Hill, and as an NIH Fellow, conducted postdoctoral research at Harvard University and at the University of Texas-Austin.

Toby is the Program Chair for the BioScience Forum, a non-profit educational forum serving the Bay Area biotechnology community, and she also teaches classes in career development for the life sciences at UC Berkeley extension.

Toby's talk is titled "Career Opportunities in Biotechnology and Drug Development."

**Abstract**

There is a vast array of career oppor-



tunities for scientists in academia, biotechnology, pharma, medical devices, biofuels, health care and government. Toby will discuss the findings of her book, based on interviews with over 200 industry executives.

She will speak about the many opportunities in the life sciences discussed in the book, and talk about the current economy. If there is time remaining, she will talk about job search tips. With so many options available, it is important to identify the career that best matches your interests, skills, values and professional goals so that you can identify and embark on a fulfilling and meaningful career.

**Debbie Brennan Biography**

As the Community Development Consultant for EnCorps, Debbie Brennan performs a myriad of recruiting and placement activities:

- Building relationships with corporations, professional organizations, school districts and educational programs, and introduces the benefits of EnCorps partnership
- Counseling interested Science, Technology, Engineering and Mathematics (STEM) professionals through the EnCorps process
- Reviewing applications and encouraging participation in preliminary assessment days
- Strengthening the core of new math and science teachers

Debbie has a background of technology and education experience, having been both a COBOL programmer for several years as well as a high school volunteer mentor and tutor for many years.

Her introductory talk is titled "Career Opportunities from the EnCorps Teachers Program."



## October Dinner Meeting

**Date:** Thursday, October 14, 2010

**Time:** 6:00 Social Hour  
6:45 Dinner  
7:45 Presentation

**Location:** Cañada College  
Building 9, Room 251  
4200 Farm Hill Blvd.  
Redwood City, CA

**Speaker:** Dr. Toby Freeman  
Debbie Brennan  
Career Opportunities in  
Biotechnology

**Cost:** South of the Border Fajita Buffet  
Only \$20 for members  
\$10 for job seekers  
Free for students!

**Reservations:**

[www.scvacs.org](http://www.scvacs.org)  
Sally Peters 650-812-4994

Reservations should be made by October 11th stating your name, address, company affiliation, number of people in party. Watch the web site for more information. If you are unable to honor your reservation and do not cancel by Tuesday, October 12, you will be invoiced following the dinner meeting.

**Abstract**

Are you ready to inspire the next generation of engineers, mathematicians and scientists?

The EnCorps Teachers Program offers training and support to STEM professionals interested in transitioning to teaching math and science.

EnCorps is a nonprofit dedicated to increasing the number of credentialed math and science teachers in under-served middle and high schools in California. Because the California credentialing process can be confusing and overwhelming, EnCorps provides assistance to transitioning professionals who've applied and been selected to join the EnCorps Teachers Program. The EnCorps Teachers Program presents a pathway for EnCorps educators to gain classroom experience while becoming eligible for teaching credentials. Well prepared teachers are more likely to become successful educators.

# GREEN CHEMISTRY: Mission College, Santa Clara

By Dr. Jeanette Medina and Dr. Howard Peters

Late last month, 25 local high school and community college science instructors came to Mission College to hear internationally-renowned scientist and Green Chemistry leader, Dr. John Warner, explain the need for "Green" Chemistry.



In 1997, Dr. John Warner<sup>1</sup> wrote the seminal book on Green Chemistry titled *Green Chemistry: Theory and Practice*. Dr. Warner, then a chemistry professor at Boston University, soon established the Warner Babcock Institute<sup>2</sup> in Wilmington, MA to focus on ways to eliminate the use and generation of hazardous substances in chemical processes and the downstream effect that doing so will have on our environment.

Following Dr. Warner's remarks, Dr. Amy Cannon, Executive Director of Beyond Benign, a non-profit organization that promotes sustainable science, conducted a two-day workshop teaching high school, community college science teachers and instructors how to infuse the 12 *Principles of Green Chemistry*<sup>3</sup> into their current curricula. Examples of these principles include: synthetic methodologies that generate substances that

possess little or no toxicity to human health and the environment, chemical products that break down into innocuous degradation products, and more generally, the idea that it is better to prevent harmful waste than it is to try to treat it after it is formed.

The focus of the two days of instruction was to show how substituting benign or neutral chemicals for their more toxic alternatives can be achieved with relative ease, without altering the desired chemical reaction. About the program, Dr. Cannon says that, "Beyond Benign looks for catalytic ways to bring green chemistry to the educational community. We highly value training teachers on green chemistry because teachers are wonderful multipliers of impact. By training one teacher, we are able to reach thousands of students each year through that one teacher. This is greater impact than we could ever hope to accomplish alone. Beyond Benign trains over 150 middle school, high school and community college instructors annually through their teacher training programs."

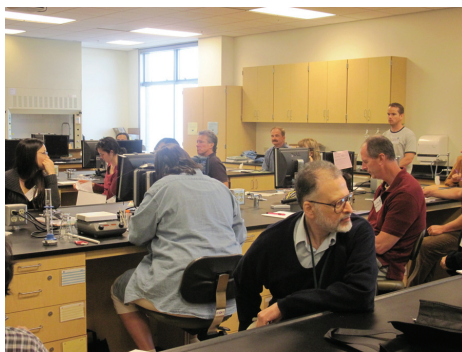
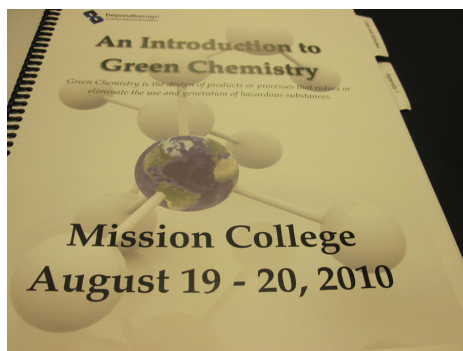
Santa Clara Valley section members Dr. Howard Peters, Dr. Mark Kent, and Dr. Jeanette Medina (recipient of our first Community College Teacher-Scholar Award) were among those who attended the event to lend a hand, and some valuable chemistry expertise. Reflecting on her experience, Dr. Medina said, "I think this workshop is a wonderful conversation starter. It allows us to

rethink chemistry, to stir the creativity juices, to view chemistry as the problem solver as opposed to the trouble maker, and to create materials that are harmless from the start to avoid potentially adverse consequences."

The chance to serve our community and help in making our environment a better and more sustainable place to live are just a few of the benefits to volunteering through ACS. Programs such as the one at Mission College serve to educate future scientists. As Dr. Medina states, we can find a way to, "reduce toxicity, reduce cost and reduce waste while introducing the same chemical principles we work on using traditional methods."

Notes:

1. [www.warnerbabcock.com/about\\_wbi/john\\_warner.asp](http://www.warnerbabcock.com/about_wbi/john_warner.asp)
2. [www.warnerbabcock.com](http://www.warnerbabcock.com)
3. [www.warnerbabcock.com/green\\_chemistry/12\\_principles.asp](http://www.warnerbabcock.com/green_chemistry/12_principles.asp)



## Celebrate NCW 2010 with Dr. Wow and Dr. Lang!

It's time to celebrate National Chemistry Week 2010! The week of October 17-23 is designated as our special week this year and we hope you will join our celebration of "Behind the Scenes with Chemistry!" This year's theme focuses on the fascinating use of chemistry for entertainment. We'll explore the special effects in movies to appreciate that it is not magic, but rather common chemical concepts which explain the mystery behind the "magic" that is shown. This year we have several great activities to help you celebrate

First up, our annual K-12 student poster contest is in full swing. Please visit [www.chemistryweek.org](http://www.chemistryweek.org) for all the rules and tips. Entries are due in to local NCW Coordinator Abby Kennedy ([akennedycali2007@yahoo.com](mailto:akennedycali2007@yahoo.com)) by Thursday, October 14 to be considered for the National contest.

To cap off the week, our fun annual public outreach booth will take place on National Mole Day--Saturday, October 23rd from 10 a.m. -1:30 p.m. at the Martin Luther King, Jr. Library in downtown San Jose (150 East San Fernando Street). Of course, the crowd-favorite Wheel of Chemistry Fortune will be spinning for all kids to win a prize, and we'll have fun hands-on activities for kids. This will also be your opportunity to pick up your free copy of "Celebrating Chemistry", the NCW newsletter for elementary-aged children. To volunteer for elementary-aged children, please contact Abby Kennedy ([akennedycali2007@yahoo.com](mailto:akennedycali2007@yahoo.com)).

Immediately following our public outreach booth, please stay for our highlight event for NCW this year: world-renowned chemistry demonstrators, Dr. C. Marvin Lang and Doctor "Wow" (Donald Showalter) will present "The World of Chemistry" Saturday, October 23 at 2:00 p.m. at the San Jose State University, Science Building, Room 142. Their powerful show combines energy, explo-

sions, explanations of the chemistry, and many elements of surprise! This show is perfect for children just starting to have a ball with chemistry, all the way up to college-aged, and chemistry enthusiasts of all ages.

As part of their whirlwind NCW tour, Drs. Showalter and Lang will also be performing at the following venues and dates:

Oct. 17 - UC Santa Cruz: 2:00 p.m.,  
Thimann Lecture Hall 3

Oct. 18 – St. Mary's College, Moraga:  
7:00 p.m. Moraga Room, Soda Center  
Oct. 19 – Sonoma State University  
Oct. 20 – Chico State University, 7:00 p.m.  
Plumas 102  
Oct. 21 – Dominican College, 7:00 p.m.  
Guzman Lecture Hall, Guzman Hall  
Oct. 22 – Cal State University East Bay:  
6:00 p.m., South Science 143.  
Oct. 23 – San Francisco Exploratorium:  
Teach the Teachers, 10:30 a.m.

## Stephanie Gehling wins Ottenberg Award

The 2010 winner of the Abraham Ottenberg Service Award, given for outstanding service to the Santa Clara Valley Section, is Alternate Councilor Stephanie Gehling. The award plaque and check were presented to her by Ottenberg Committee Chair Lois Durham at the September meeting of the Executive Committee.

Stephanie volunteered on short notice in 2009 to be interim editor of the section's newsletter, and did an outstanding job despite the heavy demands of her regular job. She continued as editor even after the expected interim period ended, until a replacement was found late in the summer. The Section is very grateful for her diligent proofreading, and for meeting every newsletter deadline during her time as editor.



## Welcome to the Santa Clara Valley Section of ACS

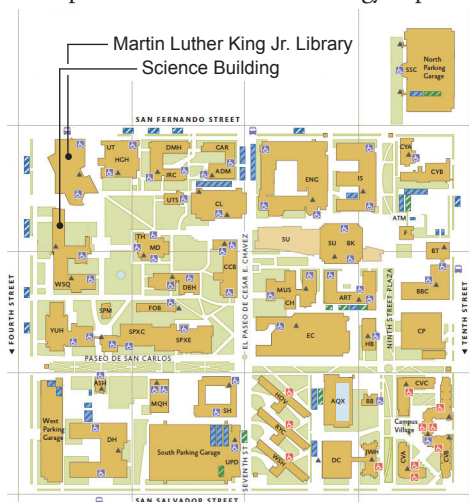
Each month the section receives a spreadsheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members -- the students. To welcome you to the section and get to know you, the Executive Committee offers new members a free dinner!! To encourage you to attend a monthly section dinner 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 spouse (or friend) will be our guests. The dinner meetings are often the 3rd Thursday of the month at a local spot, somewhat convenient to the entire section. If you are unable to attend in the evening, perhaps you would join us for an outreach event, like judging a science fair, participating in the chemistry olympiad, or 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 Members List for September

Dr. Frank Abild-Pedersen  
Elizabeth M. Anderson  
Caleb A. Bates  
Timothy Bowden  
Dr. Philip H. Bucksbaum  
Dr. Alan C. Cheng  
Pankaj R. Daga  
Rebecca L. Davis  
Dr. Anthony P. Ford

Dr. Paul T. Furuta  
Serkan Y. Kabak  
Vinit Gopal Kathardekar  
Erik Krogh-Jespersen  
Dr. Scott Le Grand  
Dr. Xingrong Liu  
Maria Montero Diez  
Poul G. Moses  
Marja Mullings

Michael R. Musumeci  
Brooke Suzanne Olson Blair  
Alexander Parkhomovsky  
Dr. Michael Schelle  
Juliet Tabajonda  
Dr. Christy L. Vogel  
Dr. Jun Wang  
Junpeng Xiao  
Zhiyong Zhang



## Councilors' Report from the Boston Meeting

The 240th national ACS meeting was held in Boston, Massachusetts, August 22-26. While California enjoyed its only warm part of this summer, your eight councilors enjoyed four days of rain in Boston! Yes, we were inside most of the time, but when we were not, it was grey, drizzly, blustery, and cold! But as one Boston councilor said, "My garden looks great!"

Meeting registration was respectable, considering the economy. As of August 24, the ACS fall national meeting had attracted 14,059 registrants. Totals are as follows: Regular attendees 8,211; Students 3,230; Guests 393; Exhibit Only 733; and Exhibitors 1,492. San Francisco meetings still hold the record with 18,064 registrants last Spring.

The Younger Chemist group held their traditional fun run and had 85 cold, wet runners!

The Committee on Professional

Training (CPT) announced at the council meeting that there are 663 colleges and universities offering ACS-approved bachelor's degree programs in chemistry, and 223 Ph.D.-granting schools.

According to the Committee on Economic and Professional Affairs, the career area was really bustling with 1066 chemists participating in workshops and interviews. Sixty-eight employers had 484 positions for which the chemists were interviewing. There will be another Virtual Career Fair on November 2 and 3.

The council met Wednesday morning from 8 until after 12:00. The candidates for the fall 2010 ACS national election that our section will vote on are:

### President-Elect 2011

- Luis A. Echegoyen, Professor, University of Texas at El Paso, El Paso, TX
- Bassam Z. Shakhshiri, Professor, University of Wisconsin, Madison, WI

### Directors-at-Large 2011-2013

- Janan M. Hayes, (Retired) Professor Emeritus, Merced College, Sacramento, CA
- Robert L. Lichter, Principal and Co-Founder, Merrimack Consultants, LLC, Barrington, MA
- Kathleen M. Schulz, President, Business Results Inc., Albuquerque, NM
- Kent J. Voorhees, Professor, Colorado School of Mines, Golden, CO

The ballots for the national election will be available electronically or in hard-copy on September 24th.

The 2010 membership numbers are on track to meet year-end goals. The Student Member community has continued to grow since creation of this new member category in June 2009. The number of undergraduate Student Members was 12,815 as of July 31, 2010.

## CHEMPLOYMENT ABSTRACTS OCTOBER 2010

For a complete list of current abstracts, please visit: [www.scvacs.org/Local\\_Folder/abstract.htm](http://www.scvacs.org/Local_Folder/abstract.htm)

### CHEMPLOYMENT ABSTRACT 3956

*Position Title:* Medicinal Chemist

*Job Description:* Highly motivated scientist member of 3-6 medicinal chemists team in a 25 person department of medium-sized pharmaceutical company. Designing target molecules, planning syntheses and executing the syntheses in collaboration with an experienced supervisor doing the same work. Requires fluency in written and spoken English, and a record of publications/presentations/patents.

#### QUALIFICATIONS DESIRED:

*Education:* PhD, prefer relevant post-doc experience also

*Experience:* 0-5 years in industrial drug discovery. Skilled in planning and executing synthetic organic chemistry. Knowledge of protein-small molecule interactions and/or small molecule pharmacology is a plus.

#### LOCATION, SALARY, EMPLOYER:

*Job Location:* South San Francisco, CA 94080

*Salary:* DOE

*Employer:* Elan is a neuroscience-based company based in Dublin, Ireland focused on developing new medicines for neurodegenerative diseases. Elan's principal research and development sites are in the United States and Ireland.

*Application Instructions:* Submit resumes directly to [gary.probst@elan.com](mailto:gary.probst@elan.com) or [lee.lattimer@elan.com](mailto:lee.lattimer@elan.com)

# Happy Halloween





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

Visit our web site at:



<http://www.scvacs.org>

To receive an email when our newsletter  
is published on our web site, sign up at:  
<http://www.scvacs.org/newsletter/>

## SANTA CLARA VALLEY SECTION

### 2010 Section Officers

|             |                        |              |                                   |
|-------------|------------------------|--------------|-----------------------------------|
| Chair       | <b>Bruce Raby</b>      | 408-294-6718 | bruceraby@att.net                 |
| Chair-Elect | <b>Abby Kennedy</b>    | 209-640-2005 | akennedy@exelixis.com             |
| Past Chair  | <b>Natalie McClure</b> | 650-906-7831 | nmclure@drugregulatoryaffairs.com |
| Secretary   | <b>Karl Marhenke</b>   | 831-688-4959 | karlmar@armory.com                |
| Treasurer   | <b>Ihab Darwish</b>    | 650-594-1654 | darwishis@yahoo.com               |

### Councilors

|           |                       |              |                           |
|-----------|-----------------------|--------------|---------------------------|
| 2008-2010 | <b>George Lechner</b> | 408-226-7262 | glechner@aol.com          |
| 2008-2010 | <b>Herb Silber</b>    | 408-924-4954 | hbsilber@science.sjsu.edu |
| 2009-2011 | <b>Abby Kennedy</b>   | 209-640-2005 | akennedy@exelixis.com     |
| 2009-2011 | <b>Howard Peters</b>  | 650-854-4614 | peters4pa@sbcglobal.net   |
| 2009-2011 | <b>Ean Warren</b>     | 650-329-4554 | ewarren@scvacs.org        |
| 2010-2012 | <b>Linda Brunauer</b> | 408-554-6947 | lbrunauer@scu.edu         |
| 2010-2012 | <b>Sally Peters</b>   | 650-812-4994 | Sally.Peters@parc.com     |
| 2010-2012 | <b>Peter Rusch</b>    | 650-961-8120 | pfrusch@aol.com           |

### Alternate Councilors

|           |                          |              |                                   |
|-----------|--------------------------|--------------|-----------------------------------|
| 2008-2010 | <b>Mark Kent</b>         | 408-736-0989 | markkent@yahoo.com                |
| 2009-2011 | <b>Ihab Darwish</b>      | 650-594-1654 | darwishis@yahoo.com               |
| 2009-2011 | <b>David Parker</b>      | 408-615-4961 | dparker@santaclaraca.gov          |
| 2009-2011 | <b>Bruce Raby</b>        | 408-294-6718 | bruceraby@att.net                 |
| 2010-2012 | <b>Lois Durham</b>       | 650-322-3507 | ldurham9398@sbcglobal.net         |
| 2010-2012 | <b>Natalie McClure</b>   | 650-906-7831 | nmclure@drugregulatoryaffairs.com |
| 2010-2012 | <b>Stephanie Gehling</b> | 408-429-9681 | s_gehling@hotmail.com             |
| 2010      | <b>Harry Ungar</b>       | 831-708-2049 | haungar@cruzio.com                |

### Public Relations

**Robert Glemmo** 650-866-4702 [glemmo@lan.com](mailto:glemmo@lan.com)

### Newsletter

Editor **Aaron Novack** 650-796-3665 [aaronnovack@yahoo.com](mailto:aaronnovack@yahoo.com)

### ChemPloyment Abstracts

Director **Charles Sullivan** 650-728-7034 [cdansullivan@sbcglobal.net](mailto:cdansullivan@sbcglobal.net)

## FUTURE MEETINGS

**Oct 14**

SCV Dinner Meeting  
Dr. Toby Freedman  
Debbie Brennan  
Career Opportunities in Biotechnology  
Cañada College, Redwood City, CA

**Oct 23**

National Chemistry Week Celebration  
Public Outreach 10 am to 1 pm  
Martin Luther King Jr. Library  
San José, CA

**Oct 23**

Dr. Donald Showalter  
Dr. Marvin Lang  
Dazzling Chemistry Show  
Duncan Hall  
San José State University

**Nov 15**

Dr. Joe Francisco, President of the  
American Chemical Society  
The Chemical Enterprise: Thinking  
and Acting Globally; Teacher-Scholar  
Award Presentation  
Biltmore Hotel, Santa Clara, CA

**Dec 15-20**

PacifiChem 2010  
Honolulu, Hawaii  
<http://pacifichem.org>