

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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**JUNE 2012 NEWSLETTER TOPICS**

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## Annual Family Picnic and Award Ceremony

Our next event will be our summer wine tasting and picnic on **Saturday, July 14**, on the Stanford campus in the lobby of the Keck Science Building. Further information about the wines we will be tasting and any other special events at the picnic will appear on the Santa Clara Valley ACS website.

Featured will be our usual catered picnic outside the nearby Mudd chemistry building at Stanford. Wines will be available for the picnic dinner.

Afterwards, ceremonies inside the Mudd building will honor our 50th, 60th, 65th, 70th and (believe it or not!) 75th-year members, as well as other award winners. The picnic will be a buffet catered by Armadillo Willy's, as it has been for several years now,

and the menu will include:

- Barbequed chicken
- Smoked beef brisket
- BBQ baked beans
- Green salad
- Spicy coleslaw
- Cornbread muffins
- Wine (both red and white), sodas, water
- Enough dessert for all

**Where:** The Stanford Chemistry Department

**When:** 5:00 p.m. Wine Tasting in the Keck Science Building

6:30 p.m. Buffet BBQ dinner outside the Mudd Chemistry Building

8:00 p.m. Awards inside the Mudd Building

A reservation form is below and on our section's website. Remember, this is our one meeting where you have to send a payment with your reservation. The cost, however, will be the same as it was last year: \$16 for adults, \$5 for kids 4-12, kids 3 and under free. We'll need the reservation by Wednesday, July 11, 2012. See you there!



### RESERVATION FORM

#### Annual Family Picnic and Awards Ceremony

Stanford University – Saturday, July 14, 2012

Deadline for Reservations – Wednesday, July 11, 2012

**5:00 p.m. Wine Tasting, 6:30 p.m. Dinner, 8:00 p.m. Awards**

Name(s): \_\_\_\_\_  
Please list all names so we can make a name tag for every member of your family, including children.

\_\_\_\_\_ Telephone No.: (\_\_\_\_) \_\_\_\_\_

No. of Reservations at \$16.00 ..... x \$16.00 = \$ \_\_\_\_\_

No. of Children (age of 4-12) at \$5.00 ..... x \$5.00 = \$ \_\_\_\_\_

Total Amount Enclosed ..... \$ \_\_\_\_\_

Make check payable to: Santa Clara Valley Section – ACS

Send check and reservation form to: Karl Marhenke, 1710 Wilshire Drive, Aptos, CA 95003-2836

Please check if you can volunteer:  I can help set-up  I can help clean-up

## Chair's Message

At the May dinner meeting, we had a stimulating presentation by Nick Drobac and Captain Jim Holm of the Clean Ocean's Project. The Clean Oceans Project (TCOP) is an environmental non-profit organization formed in 2008 in Santa Cruz, California, by a



group of concerned scientists, educators, activists, and business professionals out of a shared sense of urgency that plastic accumulations in the world's oceans are threatening the lives of millions of marine mammals, birds and fish.

TCOP has focused on testing several remote sensing systems in the near shore environment to assess their efficacy in identifying debris field concentrations prior to offshore deployment. The results from these tests have been overwhelmingly positive and indicate that successful prediction and location of plastic debris is

possible.

Next they will build upon their early results and will involve testing protocols on a small scale, on site, in the North Pacific Gyre during the next available summer season. TCOP has been working with experts in the

oil spill response industry to design a prototype surface skimming collection system to be deployed during this phase of testing. A "gyre" is simply a large-scale circular feature made up of ocean currents that spiral around a central point creating a whirlpool effect that pushes water and marine plastic debris to its center. As plastic enters the marine environment, currents collect and transport it like a giant ocean conveyor belt laden with garbage bound for the North Pacific Gyre.

TCOP has partnered with Blest Co.

of Japan, makers of a unique, scalable plastic-to-fuel conversion system to develop the first shipboard plastic-to-fuel conversion system in the world. This system will be capable of transforming tons of plastic pollution harvested from the gyre into diesel fuel, thus eliminating the need to return to shore to dispose of the waste in a landfill, while also providing fuel for the collection vessels.

It was a very interesting discussion. If you would like more information, please consult their website, [www.thecleanoceansproject.org](http://www.thecleanoceansproject.org).

Our next meeting will be the annual picnic and awards dinner where we recognize the 50, 60, 70 and even 75 year ACS members. It is always interesting to hear how chemistry has changed, and how much has remained the same over the years. I hope to see you at the picnic.



## 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 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 May

Mahesh Babubhai Amin	Pingping Gou	Efren T. Pacis
Athena Anderson	Dr. Michael C. Griffith	Cynthia Page
Dr. Cindy Chang	Dr. Wayne Dewald Inman	Dr. Brian J. Petteys
Shan Cheng	Nader Z. Kawadri	Dr. Christian S. Rondestvedt Jr.
Dr. Catherine Ciesla	Robert Ralph Kerr	Dr. Christina M. Stuart
Xiao Dong	Heather Kulik	Kalee Tock
Frank W. Dowd	Alp Kutlu	Dr. Stephen R. Weckler
Dr. Louay Eldada	Nerie Madulid	Dr. Guopin Xu
Dr. John Erve	Samantha Colleen McVey	Dr. Xinmin (Sam) Xu
David Gao	Hector Nuno	Ashish Suresh Yeri
Dr. Sarah A. Gerhardt		

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# 2012 Outstanding High School Chemistry Students

On April 21st, seventeen of Silicon Valley's top chemistry students met at Las Positas College in Livermore to compete in the national testing for the 2012 International Chemistry Olympiad. We joined eighteen students from the California Section for a grueling day of exams.

The students gave up a beautiful Saturday to spend 6 hours indoors working on problem sets, multiple-choice questions, and the "killer" lab problems.

This year 21 high schools and 452 students participated in the local exam at their high schools. This is the highest number of schools and students we have ever had participate. The top scorers then represented our section in the national exam. Some schools gave the local exam to all of their AP or honors chemistry classes as a prelude to the AP exam, while other schools administered it only to interested students. The ACS national exam, given on the 21st, is sent to national ACS for the Olympic committee to grade. The national committee, made up of about 40 professors, has 1,000 exams to grade and compare!

A special thanks goes to George Lechner, Howard Peters, and Lois Durham for also giving up their Saturday to proctor the exam. Dr. Bryan Balazs, from the CA section, is the national chair of the ACS Chemistry Olympiad committee. He also proctored the exam with other CA section members.

A very special thanks goes to the high school teachers who make it possible for their students to participate. They gave up personal and classroom time to communicate the program, organize the testing and grade the exams. Some even willingly accepted

students from other schools, which chose not to participate, and permitted them to take the exam with their students. Additional high schools that participated in the local exam were: Bellarmine, Cupertino, Fremont, Homestead, Leland, Live Oak, Los Altos, Mercy, Presentation and York.

Thank you everyone!

If you want to match wits with the students, go to the following ACS website (and no peeking at the answers!) for the 2012 local and national exams: <http://tinyurl.com/7gbrkra>

The Santa Clara Valley outstanding high school chemistry students and their teachers are:

Archbishop Mitty -- *Varun Naik* - Theresa Hannon

Castilleja High -- *Eleanor Berg* - Doris Mourad

Gunn High -- *Philip Liang & Chiu-Yin Cheung* - Elana Zizmor

Harker School -- *Varun Mohas & Christopher Fu* - Dr. Mala Raghavan

Kings Academy -- *Anita Li* - Dr. Jason Rosé

Lynbrook High -- *John Park & Jonathan Uesato* - Dr. Roy Rocklin

Monta Vista High -- *Stephen Ting & Daniel Yeung* - Dr. Kavita Gupta

Mt. View High -- *Evan Cohen* - Dr. Kati Thornburg

Palma High -- *Andre Chen* - John Chipley

Palo Alto High -- *Peter Lai & Nicholas Quach* - Carolina Sylvestri

Saratoga High -- *Albert Fang & Michael Lee* - Kathy Nakamatsu

Sally Peters, Chair

Santa Clara Valley Chemistry Olympiad Committee

## National Chemistry Olympiad Finalist

### Stephen Ting

Stephen is the Santa Clara Valley finalist in the 2012 U.S. National Chemistry Olympiad! He scored among the top 20 high school students in the country in the USNCO exams on April 21st. Stephen has been invited to the study camp at the Air Force Academy from June 5-20.



hosting the Olympiad in Washington, D.C. from July 21-30th.

As a junior at Monta Vista High School (MVHS), Stephen is an enthusiastic, intelligent young man. His interest in chemistry began in a summer school class before his freshman year. In 10th

During the camp, Stephen will receive college-level training, with an emphasis on organic chemistry, through a series of lectures, problem-solving exercises, lab work, and testing. At the camp's conclusion, four students will be chosen to represent the U.S. at the International Chemistry Olympiad where they will compete with their peers from more than 70 nations for gold, silver and bronze medals. This year the United States is

grade he took the honors chemistry class and as a junior completed Monta Vista's very competitive AP class. Besides studying chemistry, he is an "unofficial" tutor for other students. Currently he thinks chemistry might be in his future in college. His extracurricular activities in high school include running on the MVHS cross country and track and field teams.

Ms. Kavita Gupta, his AP teacher, emphasized Stephen's work ethic, curiosity and desire to learn in an interview for

the school newspaper.

Congratulations Stephen and good luck at the study camp!

## Happy Farther's Day!



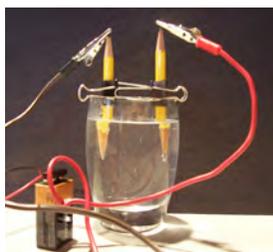


## SCIENCE EDUCATORS - WIN A BUBBLE GRANT!



### SUBMISSION GUIDELINES

The Santa Clara Valley Section of the American Chemical Society wants to provide elementary and secondary school educators with the tools they need to revitalize science programs. The section is pleased to announce a call for proposals from K-12 science teachers to apply for a BUBBLE grant of up to \$500 for worthwhile science projects. Grants will be awarded for projects that enhance the teaching of physical, life or earth science. This grant program will consider funding of amounts requested in a proposal, but reserves the right to fund some proposals partially. The grant may not be used for teacher awards or compensation. Qualified uses of the funds are for purchases related to the proposed project such as scientific equipment, instructional materials and/or supplies.



### PROJECT DESCRIPTION

The proposals should total no more than two pages (700 words or less) and should include the following items:



- An explanation of the project and/or specific learning activities
- Targeted student population
- Expected outcomes
- Effective evaluation methods to measure achievement
- Grant amount requested (up to \$500)
- Specific use of the funds
- Brief description of the school and how this grant would be beneficial including information that demonstrates financial need (200 words or less).
- Contact person for proposal (name, school affiliation, phone, e-mail)



### TIME SCHEDULE

The 2012 grant program is now open for applications. The deadline for submission of all proposals is August 15, 2012. The winners will be announced and contacted by e-mail after September 1, 2012.

### PROPOSAL EVALUATION

A panel of professional scientists who are members of the American Chemical Society will score all applications on the basis of innovative ideas, plans for implementation and financial need.

### GRANT TERMS AND CONDITIONS

Schools must be state accredited and have 50 or more students. Only one application per school is allowed. The grant application must be submitted by an employee of the school who is 18 years of age or older. The winners are expected to submit a summary report for dissemination. **All applications must be submitted electronically in either a Word or Adobe PDF file and sent by e-mail to: [BUBBLE\\_Grant@scvacs.org](mailto:BUBBLE_Grant@scvacs.org).**

## Laboratory Safety Under Scrutiny

In recent months and in the last several years, we have been reading accounts of serious injuries and even deaths occurring in academic laboratories of colleges and universities, like UCLA, Yale and Texas Tech University. What's going on? What are the real risks to our students and faculties? Of course, if you've been in the lab for any appreciable time, you're bound to have encountered a mishap or two that you have been involved with or are a witness to. Accidents can and do happen but their effects can be minimized by careful attention to the chemistry involved and taking appropriate precautions to protect life, limb and property.

The Safety Culture Task Force of the ACS Committee on Chemical Safety has prepared a report that discusses what's going on in our academic institutions across the country. The title of the report is: "Creating Safety Cultures in Academic Institutions: A Report of Safety Culture Task Force of the ACS Committee on Chemical Safety." It can be found on this website – check it out: [membership.acs.org/c/acs](http://membership.acs.org/c/acs). This report provides guidance, suggestions, examples, and recommendations that can help strengthen the safety culture in two- and four-year under-

graduate, graduate, and postdoctoral programs. Specifically, it identifies the best elements and best practices of a good safety culture, identifies specific recommendations that could be used by universities and colleges to strengthen their safety culture; and identifies tools and resources that would be beneficial to these efforts. And while you're there, look over the other resources available from the Committee on Chemical Safety.



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## CHEMEMPLOYMENT ABSTRACTS JUNE 2012

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

### CHEMEMPLOYMENT ABSTRACT 3979

*Position Title:* Scientist-Discovery Chemistry

*Job Description:* Genentech has an exciting opportunity for a Scientist Chemist to join the innovative program in small molecule drug discovery. Individuals need to possess a thorough understanding of synthetic chemistry and demonstrate a strong record of achievement in at least two pharmaceutical development programs. Qualified candidates will play a significant role in the management of current small molecule projects and leading multidisciplinary teams.

#### QUALIFICATIONS DESIRED:

*Education:* The successful candidate will have a PhD in Organic Chemistry.

*Experience:* The candidate should have at least two years of experience in the pharmaceutical industry and demonstrated impact on drug discovery programs (patents, process improvements, publications, etc.). This should include team leadership experience.

#### LOCATION, SALARY, EMPLOYER:

*Job Location:* South San Francisco, California

*Salary:* DOE

*Employer:* Passionate About Science. We're passionate and rigorous about our science. For more than 30 years, Genentech has been at the forefront of the biotechnology industry, using innovative science to develop breakthrough medicines that improve the lives of people with serious or life-threatening diseases.

*Application Instructions:* We recognize that our people are our most important asset. It's why we foster an inclusive environment that encourages diversity and offer competitive health-care and benefits to help you bring the best to the business and to your personal life. Join us as we continue to tackle medicine's most challenging problems and live a life inspired. To apply for this job, visit [http://jobs.gene.com/wms/gne/jobdetail\\_pdf.php?id=0jfg9j4xDsMxtekg4Nkf eDAFANEi6QrgmRJ9i9%2F06Gm67gdZaP61shVmsNoK4v1o6QES7PC1ggVtkQ8pC3KvLdzPQQdjXkV27oo%2BJCAa92rMGeagQ%3D%3D](http://jobs.gene.com/wms/gne/jobdetail_pdf.php?id=0jfg9j4xDsMxtekg4Nkf eDAFANEi6QrgmRJ9i9%2F06Gm67gdZaP61shVmsNoK4v1o6QES7PC1ggVtkQ8pC3KvLdzPQQdjXkV27oo%2BJCAa92rMGeagQ%3D%3D)

Now a member of the Roche Group, Genentech has multiple medicines on the market for cancer and other serious illnesses. We are an equal opportunity employer.

### CHEMEMPLOYMENT ABSTRACT 3980

*Position Title:* Sr. Development Associate, Process Development & Manufacturing

*Job Description:* The primary responsibility will be to perform process optimization experiments for Geron's Telomerase Inhibitor Program (imetelstat sodium and other Oligos) and the peptide-paclitaxel conjugate GRN1005 using solid-phase and/or solution-phase reaction chemistry.

- Operation of the Akta Oligopilot 100 DNA synthesizer and bench-scale solution-phase reactions followed by downstream process experiments such as prep scale chromatography, Ultra Filtration and Lyophilization or drying
- Test and analyze R & D samples, API and drug product samples from contract manufacturers (as needed) by LC-MS, HPLCs, UV spectrophotometry

#### QUALIFICATIONS DESIRED:

*Education:* BS/MS in Chemistry with a minimum of 2-5 years experience in synthesis of small molecules, peptides and/or oligonucleotides/nucleosides

*Experience:* • Experience in synthetic organic chemistry especially in heterocycles and coupling reactions

• Experience in NMR, HPLC, LCMS, UV and interpretation and presentation of the results to the team

• Familiarity with GMP practices and knowledge of CFR, ICH guidelines

#### LOCATION, SALARY, EMPLOYER:

*Job Location:* Menlo Park, California

*Salary:* Commensurate with experience

*Employer:* Geron is a biopharmaceutical company developing first-in-class therapies for cancer. The company has two lead product candidates in clinical development, imetelstat and GRN1005. GRN1005 is a peptide-drug conjugate that is designed to transport a proven anti-cancer drug, paclitaxel, across the blood-brain barrier by targeting low-density lipoprotein receptor-related proteins (LRPs), specifically LRP-1.

*Application Instructions:* Apply online at: <http://www.geron.com/careers/view/2412> or email resume to [hr@geron.com](mailto:hr@geron.com)



SANTA CLARA VALLEY SECTION  
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## SANTA CLARA VALLEY SECTION

### 2012 Section Officers

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Chair Elect	Jeanette Medina	650-306-3255	<a href="mailto:medinaj@smccd.edu">medinaj@smccd.edu</a>
Past Chair	Abby Kennedy	209-640-2005	<a href="mailto:akennedycali2007@yahoo.com">akennedycali2007@yahoo.com</a>
Secretary	Karl Marhenke	831-688-4959	<a href="mailto:karlmar@cruzio.com">karlmar@cruzio.com</a>
Treasurer	Ihab Darwish	650-594-1654	<a href="mailto:darwishis@yahoo.com">darwishis@yahoo.com</a>

### Councilors

2010-2012	Linda Brunauer	408-554-6947	<a href="mailto:lbrunauer@scu.edu">lbrunauer@scu.edu</a>
2010-2012	Sally Peters	650-854-4614	<a href="mailto:sallybrownpeters@gmail.com">sallybrownpeters@gmail.com</a>
2010-2012	Peter Rusch	650-961-8120	<a href="mailto:pfrusch@aol.com">pfrusch@aol.com</a>
2011-2013	George Lechner	408-226-7262	<a href="mailto:glechner@aol.com">glechner@aol.com</a>
2011-2013	Herb Silber	408-924-4954	<a href="mailto:hbsilber@science.sjsu.edu">hbsilber@science.sjsu.edu</a>
2012-2014	Abby Kennedy	209-640-2005	<a href="mailto:akennedycali2007@yahoo.com">akennedycali2007@yahoo.com</a>
2012-2014	Ean Warren	650-329-4554	<a href="mailto:ewarren@scvacs.org">ewarren@scvacs.org</a>

### Alternate Councilors

2010-2012	Lois Durham	650-322-3507	<a href="mailto:ldurham9398@sbcglobal.net">ldurham9398@sbcglobal.net</a>
2010-2012	Natalie McClure	650-906-7831	<a href="mailto:nmclure@drugregulatoryaffairs.com">nmclure@drugregulatoryaffairs.com</a>
2010-2012	Stephanie Bachmann	408-429-9681	<a href="mailto:s_gehling@hotmail.com">s_gehling@hotmail.com</a>
2011-2013	Mark Kent	408-736-0989	<a href="mailto:marklent@yahoo.com">marklent@yahoo.com</a>
2011-2013	Harry Ungar	831-708-2049	<a href="mailto:haungar@cruzio.com">haungar@cruzio.com</a>
2012-2014	Lisa Milstein	510-624-4019	<a href="mailto:lisa.milstein@balazs.com">lisa.milstein@balazs.com</a>
2012-2014	David Parker	408-615-4961	<a href="mailto:dparker@santaclaraca.gov">dparker@santaclaraca.gov</a>

### Newsletter

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### ChemPloyment Abstracts

Director	Charles Sullivan	650-728-7034	<a href="mailto:cdansullivan@sbcglobal.net">cdansullivan@sbcglobal.net</a>
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## FUTURE MEETINGS

- Jun 25-26** Basics of Polymer Structure and Characterization  
Golden Gate polymer Forum  
[www.ggpf.org](http://www.ggpf.org)
- Jun 27** Dr. Trevor Hallam  
Sutro Biopharma  
BioScience Forum  
<http://www.biosf.org/programs.htm>
- Jul 14** Annual Family Picnic and Awards Ceremony  
Department of Chemistry  
Stanford, CA
- Aug 19-23** Fall National ACS Meeting  
Philadelphia, PA