**Chair's Message**

As I sit down to write this message, school has sprung! The fall 2011 school year has started for Santa Clara county students, and you can hear the sound of chemistry textbooks cracking open everywhere! And with the fall semester, National Chemistry Week is right around the corner—October 16-22! This year’s theme is “Chemistry—Our Health, Our Future!”—focusing on the chemistry of nutrition, hygiene and medicine.

Encourage your kids’ teachers or Scout troop leaders to participate in our First Annual NCW Illustrated Poem Contest. The illustrated poem, in any style, should be fun, motivational, informative, and inspire students to learn about the chemistry of health and medicine. (See continued on next page)

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**September Dinner Meeting**

**When the Flowing Gets Tough, Rheology Gets Things Moving**

**Dr. Gerald Fuller**

*Abstract*
Complex fluids surround us and are essential to living systems, processing of materials, foods, and personal products. The complexity of their microstructure leads to very nonlinear flow responses and the science of rheology attempts to describe and predict this behavior. This presentation will introduce research in the laboratory of Professor Fuller that examines a variety of rheological problems connected with non-Newtonian fluid interfacial behavior. Two examples that will be explored in detail concern the rinsing with complex liquids to clean solid substrates and the stability of the tear film of the eye. The presentation will also highlight the work of Ms. Alison Logia, a high school intern in the laboratory, who is exploring droplets of one miscible liquid impacting a reservoir of a second liquid.

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**September Dinner Meeting**

**Date:** Thursday, September 15th, 2011  
**Time:** 6:30-7:30 Dessert and Coffee Reception  
**Time:** 7:30-8:30 Presentation  
**Location:** Stanford Chemical Engineering Gazebo  
(directions on SCV-ACS website)

**Speaker:** Dr. Gerald Fuller, Stanford Professor, Chemical Engineering Department  
Alison Logia, Project SEED summer intern  
When the Flowing Gets Tough, Rheology Gets Things Moving

**Cost:** $10.00 per person  
**Reservations:** [www.scvacs.org](http://www.scvacs.org)  
Sally Peters 650-812-4994  
Reservations MUST be made by Monday, September 12th, 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 Wednesday, September 14th, you will be invoiced following the dinner meeting.
Many artists spend time making their own materials to create a work of art that is unique to them. They may be looking for a certain texture, color, interaction with light or special ability to be molded, bent, twisted or carved in a certain way. Creating the right material requires a lot of experimentation until the result is exactly what the artist needs. In the activity below, you can make a colorful art material that looks bright in the light!

**Materials:**
- Yogurt or Pringles lid or Styrofoam bowl
- Small plastic cup
- Elmer’s glue
- Water
- Popsicle stick
- Food coloring
- Liquid dish detergent
- Toothpick

**Procedures:**
1. Place about 1 teaspoon of Elmer’s glue in a small plastic cup. Add about 1/4 teaspoon of water. Mix with a Popsicle stick.
2. Pour the glue and water mixture into a lid or Styrofoam bowl. Tilt the lid or bowl all around until the glue solution completely covers the inside surface.
3. Place a little liquid dish detergent in a small cup. Place two or three drops each of different colored food coloring on the glue solution.
4. Put a very small amount of detergent on the end of a toothpick. Touch the center of each food coloring drop and quickly remove the toothpick. Do not stir.
5. Experiment with touching the food coloring again with detergent or adding more food coloring and touching it with detergent.

**Think about this…**
Colored material such as colored glass has been used for centuries to make beautiful stained glass. Glass makers use chemicals in different combinations to produce the many different colors of glass for stained glass artwork. The combination of the design, the colors, and the effect of the light passing through the material can create wonderful works of art.

Can you think of a way of using your Stained “Glass” Glue to make a stained glass design that light can shine through? Hint: Wax paper might be a good surface to work on. Good Luck!

**Where’s the Chemistry?**
Elmer’s glue has water in it plus a much longer, more flexible chemical called polyvinyl acetate. These long flexible molecules are moving around in the water like intertwined strands of boiling spaghetti. When the food coloring drops are added, they are prevented from spreading out much by the combination of water and polyvinyl acetate molecules. When the detergent is added, detergent molecules help to break up this combination and allow the food coloring to flow more easily.
Advancing Business Practices with Green Chemistry

UC Berkeley Extension and the UC Berkeley Center for Green Chemistry are developing innovative multidisciplinary coursework in green chemistry so professionals can update their business processes, meet requirements, and stay competitive. From the European Union’s REACH regulations to the California Green Chemistry Initiative, new economic and legal incentives now make sustainable green chemistry practices a must-do for many businesses.

These Extension courses address the challenges faced by professionals—in chemistry, engineering, public policy, toxicology, and business—who need to work collaboratively with colleagues on global opportunities in green chemistry. The Certificate Program in the Essentials of Green Chemistry offers a comprehensive education that prepares professionals to lead the development of sustainable chemical products and processes in their businesses and communities.

The certificate curriculum consists of five required courses (10 semester units) and a varied number of elective courses for a minimum of 14 semester units (210 hours of instruction). Students may take up to five years to complete the curriculum. Alternatively, students can take individual courses as needed to better understand a specific topic.

Certificate courses include:
• Principles of Green Chemistry
• Decision Making and Comparative Risk Assessment
• Green Chemistry and Chemicals Policy
• Alternatives Assessment: Chemicals, Materials, Products, and Processes
• Business and Financial Planning for Green Chemistry Innovation

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 August

Matthew G. Berlin
Ulhas Bhatt
Mariano Caunday
Dr. Jonathan Chen
Laura Cooper
Barney Cruz
Dr. Nazanin Davani
Dr. Melissa Fardy
Dr. Francine S. Farouz
Dr. Cynthia Marie Friend
Kevan Hassanzadeh
Sondra Hellstrom
Lara Henry
Timothy Mark Hightower

Dr. Christine Iborn
Dr. Kristie Jo Koski
Dr. Oleg Kostko
Dr. Kevin Krogman
Dr. Heather J. Kulik
Christina Li
Levi Lowry
Dr. Kenneth W. Lux
Dr. Robert J. Madix
Andrey Malkovskiy
Claire Elizabeth Parker
Ryan L. Patman
Dr. Marija Prhavic
Dr. Richard C. Quinn

Andrew Galen Scheuermann
Dr. Feng Shi
Salma Siraj
Dr. David P. Smith
Akira Sugisaki
Nguyen Thai
Alexey Titov
Pratik Verma
Emily Ai-Mei Wang
Dr. Samuel M. Webb
Mark A. Witschi
Yaoyan XI
Beth Ann Zito

SACNAS Annual National Meeting

October 27-30, 2011

The 2011 Society for the Advancement of Chicanos and Native Americans in Science (SACNAS, www.sacnas.org) National Conference “Empowering Innovation and Synergy Through Diversity” will take place in the heart of Silicon Valley—San Jose, California—the birthplace of the world’s high-tech industry.

Join us October 27-30 for four days of scientific research presentations, professional development, networking, exhibits, culture, and community! Interdisciplinary, inclusive, and highly interactive, the SACNAS annual national meeting offers an unparalleled venue for the advancement of scientists and science students. National ACS will be a sponsor for this exciting event, please see http://sacnas.org/events for agenda, events and registration details.
Call for Nomination Petitions
By Karl Marhenke, SCV Secretary

It’s nearly time for our annual election, as mandated by our bylaws, to elect or re-elect a Secretary, a Treasurer, and a Chair Elect. The Section membership has declined compared to other ACS Sections, therefore we are losing one Councilor position, and one Alternate Councilor position. Starting in 2012, we will have 7 of each, instead of our former 8.

We have three Councilors whose terms end on December 31, 2011, and we can only replace two of them. We also have three Alternate Councilors whose terms end, but one of them has chosen to resign, leaving two to be replaced.

The present Councilors and Alternates can choose to run for reelection, and doing that has become the norm, very often resulting in a ballot with no contested races (e.g., two names on the ballot, and directions to vote for no more than two).

We ask for your help to change this often criticized situation: nominate a friend or colleague for one of the above positions. All we need is a petition, consisting of a sheet of paper with:

- The name of the office
- The name of the proposed candidate
- The signatures and printed names (so that we can read them and verify their eligibility to sign) of 15 or more Section members.

You and the proposed candidate can both be signers.

Please send petitions to:
Karl Marhenke, Secretary, Santa Clara Valley Section
1710 Wilshire Drive, Aptos CA 95003-2836
Petitions must be received by Friday, September 30, 2011.
Section Affiliates cannot participate in the election in any way. Student Members cannot run for office, but they may sign petitions and they may vote.

The qualifications for running for office are:
1. Be a member of the Santa Clara Valley Section (except as noted above)
2. Agree to serve if elected.
Number 2 is the hard one! It’s the main reason we have trouble avoiding uncontested elections, despite our 3300 members.
CHEMPELOYMENT ABSTRACT 3965

Position Title: Assistant Professor of Biophysical Chemistry (tenure-track)

Job Description: The successful candidate is expected to establish an externally-funded and productive undergraduate research program in experimental biophysical chemistry, contribute to departmental research and teaching objectives, and demonstrate the ability to effectively teach physical chemistry and general chemistry (for details visit www.scu.edu/hr/careers/faculty.cfm)

QUALIFICATIONS DESIRED:
Education: Ph.D. in Physical Chemistry, Biophysical Chemistry, or closely allied field.
Experience: Postdoctoral experience in physical chemistry, biophysical chemistry, or closely allied field is strongly preferred. College teaching experience is highly desirable, and experience in teaching a diverse student population is preferred.

LOCATION, SALARY, EMPLOYER:
Job Location: Santa Clara, CA
Salary: Competitive, depending upon experience.
Employer: Santa Clara University, a highly-ranked Jesuit, Catholic institution with an ACS-approved undergraduate program and a housing program, is an EO/AA employer committed to excellence through diversity.

Application Instructions: All materials should be sent in electronic form (Word and/or PDF format) to ChemApp@scu.edu. For specific information about required application materials, visit www.scu.edu/hr/careers/faculty.cfm or http://www.scu.edu/cas/chemistry/Job-Opportunities.cfm

CHEMPELOYMENT ABSTRACT 3966

Position Title: Development Associate II, Process Development and Manufacturing (Job Code 4711)

Job Description:
• Primary responsibility will be to perform process optimization experiments for Geron’s Telomerase Inhibitor Program (imetelstat sodium and others) and the peptide-paclitaxel conjugate GRN1005
• Maintain and operate the Akta Oligopilot 100 DNA synthesizer, LC-MS, HPLCs, UV, Ultra Filtration, Lyophilizer and other equipment as assigned.
• Test and analyze R&D samples, API and drug product samples from contract manufacturers as needed.
• Conduct experiments based on statistical software such as design expert.

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.
• Proficiency in Word, Excel, PowerPoint, ISIS draw or ChemDraw
• Familiarity with GMP practices and knowledge of CFR, ICH guidelines.

LOCATION, SALARY, EMPLOYER:
Job Location: Menlo Park, CA
Salary: DOE
Employer: Geron is developing first-in-class biopharmaceuticals for the treatment of cancer and chronic degenerative diseases. The company is advancing anti-cancer therapies through multiple Phase 2 clinical trials in different cancers by targeting the enzyme telomerase and with a compound designed to penetrate the blood-brain barrier.

Application Instructions: Please submit resumes to hr@geron.com with the Job Code in the subject line. Resumes can also be sent to:
Attn: Human Resources, 230 Constitution Drive, Menlo Park, CA 94025 or via fax at (650) 473-7759
FUTURE MEETINGS

Sep 15
Monthly Section Meeting
Dr. Gerald Fuller, Professor, Chemical Engineering Department, Stanford University
When the Flowing Gets Tough, Rheology Gets Things Moving

Oct 16-22
National Chemistry Week

Oct 26
Johnson Symposium
Department of Chemistry
Stanford University
www.stanford.edu/dept/chemistry/events

Oct 27-30
SACNAS National Conference
San Jose, CA
http://sacnas.org

Nov 10-12
Western Regional Meeting (WRM 2011)
Pasadena, CA
www.wrmacs.org/index.html

Nov 17
Community College Teacher/Scholar Award