One of my goals as chair of the Santa Clara Valley Section was to address the growing need for career support and job searches for the members of the Section who are looking for new career opportunities. On March 9, Bonnie Charpentier, Abby Kennedy and I staffed a table at the South San Francisco Biotech Job Fair. We were there to remind the participants of the support services offered by the ACS. The ACS has an excellent website (www.acs.org/careers) that includes job search strategy suggestions, and a handbook on resume preparation and interviewing skills. In addition, there is an on-line database where job seekers can post their resumes and where employers can post position descriptions. Please refer to the attached flyer for a summary of unemployed member benefits.

On a lighter note, the 50 people, including 15 middle and high school students, who attended the February dinner meeting were amazed by the presentation by Anshul Samar, the high-school-age entrepreneur who has invented and is now marketing a new chemistry based card game called Elementeo. Despite his young age, Anshul gave an animated, enthusiastic, and polished presentation describing his card game and all the challenges he faced in arranging for manufacture and distribution of it. He is a remarkable young man, a natural public speaker and has a bright future ahead of him. We rarely hear bursts of laughter and shouts of joy at our dinner meetings, but that was observed on next page

May Dinner Meeting

Date: Saturday, May 2nd
Time: 4:00 Social Hour/Appetizers
      5:00 Presentation
Location: Pacific Forum Room,
          Monterey Bay Aquarium Research Institute (MBARI)
          7700 Sandholdt Road
          Moss Landing, CA 95039-9644
          Tel: (831) 775-1700
          FAX: (831) 775-1620
http://www.mbari.org/about/directions/directions.html
Speaker: Dr. Ken Johnson
Observing the Ocean and its Response to a Changing Climate with a Global Chemical Sensor Network

The May dinner speaker will be Dr. Ken Johnson from the Monterey Bay Aquarium Research Institute. This meeting will be cohosted by the Santa Clara Valley and Los Padres Sections of the ACS. The meeting will be held in Moss Landing on Saturday, May 2 in the Pacific Forum Room at the Monterey Bay Aquarium Research Institute (MBARI).

Directions can be found at http://www.mbari.org/about/directions/directions.html

A reception will be held from 4:00 to 5:00 pm with buffet appetizers and light snacks followed by the presentation from 5:00 to 6:00 pm. The cost for the reception is $15. Make your reservations today! We look forward to seeing you at this exciting meeting.

Abstract:

The ocean and its organisms play a major role in regulating the flow of carbon dioxide through the atmosphere. Atmospheric
Observing the Ocean, continued

CO$_2$ concentrations would be nearly double pre-industrial levels without biological uptake of CO$_2$ during photosynthesis at the sea surface and export of these particles to ocean depths. Further, the ocean has absorbed about one half of all anthropogenic CO$_2$ emissions, an ecosystem service that is worth hundreds of billions of dollar per year at current prices for carbon credits. However, the fraction of anthropogenic CO$_2$ that enters the ocean each year is decreasing and the mechanisms (physical or biological) that might drive such a decrease are not well understood.

Monitoring the flow of carbon through the ocean, and understanding the processes that regulate this flow on a global scale, both require new methods of chemical sensing that don’t involve scientists with conventional laboratory instruments carried to sea on ships. There are never enough ships or personnel to obtain an annual assessment of biogeochemical processes over the three quarters of the planet’s surface covered by the ocean. Developments in the past decade have enabled a remarkable shift in measurement capabilities that are now revolutionizing our ability to observe ocean biogeochemistry on a global scale. Arrays of chemical and biological sensors can be deployed in the ocean on profiling floats and return data with little detectable drift in sensor response over multiple year periods and with no direct human intervention. These systems are becoming sufficiently affordable. It is possible to envision biogeochemical sensor networks with hundreds of nodes or more, similar to the current Argo network of 3000 profiling floats that monitor ocean temperature. This will allow the development of ocean basin-scale and, ultimately, global-scale observing systems. This presentation will describe work in the Chemical Sensor Laboratory at MBARI to develop the sensors needed for these autonomous observations of ocean chemistry. Examples from sensors operating in remote areas of the North Pacific, in the Southern Ocean and the tropics and the lessons that are being learned will be discussed.

Biography:

Dr. Ken Johnson received a BS in Chemistry and a BS in Oceanography from University of Washington in 1975. He then moved to Oregon and received a Ph.D. in Oceanography from Oregon State University in 1979. He is Senior Scientist at the Monterey Bay Aquarium Research Institute. His research interests are focused on the development of new analytical methods for chemicals in seawater and application of these tools to studies of chemical cycling throughout the ocean. Dr. Johnson and his group have developed a variety of analytical methods for metals present at ultratrace concentrations in seawater using flow injection analysis with chemiluminescence and fluorescence detection. These methods have been used in a variety of studies of metal cycling in the ocean. Analytical methods for iron, an essential micronutrient, have been used in the IRONEX experiment to map iron as it was added in the equatorial Pacific and to study iron in coastal ecosystems. Methods sensitive to metal speciation have been used to study copper complexation in polluted harbors and to study the physical chemistry of metal oxidation. Over the past 15 years, he has also developed a variety of sensors and analyzers that operate in situ to depths of 4000 m. These instruments have been used to study processes ranging from the distribution of sulfide in deep-sea hydrothermal vent systems to nitrate in coastal ponds surrounded by intensive agricultural activities.

ACS Fellows Program

The ACS Board of Directors has created a new program intended to recognize members of the ACS. The ACS Fellows Program was created by the Board of Directors in December 2008 “to recognize members of the American Chemical Society for outstanding achievements in and contributions to Science, the Profession, and the Society.” Unlike ACS national awards, the distinguished honor of a Fellows designation will go to those who have distinguished themselves in multiple areas, including promoting the science, the profession, and service to the American Chemical Society. Ultimately, the body of Fellows is intended to reach approximately 1-2% of ACS membership.

Nominations are now open for this new honor. Our section has been asked to nominate up to 8 Fellows. If you would like to nominate someone, please send an email to Natalie McClure (nmclure@dru-gregulatoryaffairs.com) or any other Section Officer by April 7, 2009. Nominees for ACS Fellows must be current members in good standing of the American Chemical Society. The selection of Fellows will be based upon excellent contributions in two defined areas:

1. Excellence in Science/Profession which could be achieved via excellence in basic or applied research; distinguished accomplishment in teaching or education; or demonstrated leadership or managerial excellence in an organization within the chemical sciences; and
2. Outstanding Service to the ACS which could include, but not limited to, governance on a divisional, local, regional and/or national level; publications such as editor, assistant or associate editor; meetings through organization of symposia or major presentations; involvement in National Chemistry Week, Chemists Celebrate Earth Day, environmental efforts and similar outreach activities or public communication by press, radio, TV or electronic media.

Chair’s Message, continued from front page

what happened as the Elementeo tournament began. We had trouble getting the younger new chemists to quit the game when it was time to leave.

If you missed this meeting, Jeanette Medina, Professor of Chemistry, Cañada College has invited Anshul to come back for another presentation and Elementeo tournament on April 15. Please see the flyer in this newsletter and come meet Anshul. In addition, the section has purchased 3 copies of Elementeo which we will use at our Family Science Nights and other outreach settings.

I hope to meet you at the upcoming dinner meetings. We have several great talks scheduled, including a discussion on “Herbal Products: They’re Natural but Are They Safe?” as well as a meeting in Moss Landing on Saturday, May 2 on “Observing the Ocean and its Response to a Changing Climate with a Global Chemical Sensor Network.”

Natalie McClure
Harry Mosher Recognized for His Mentorship

The contributions of Harry Mosher and Arthur Cope toward mentorship of women chemists has been described in an article by Anne Wilson, Butler University, published in the Bulletin of the History of Chemistry (Bull. Hist. Chem., Vol 34, 2009). The article notes that both Mosher and Cope supported women chemists when many of their peers did not, and concludes with the comment that "the continued relative shortfall of female Ph.D.s in organic chemistry could be improved by studying the examples of Cope and Mosher and learning from their leadership." Lois Durham, a long time active member of the Santa Clara Valley Section is specifically mentioned in this article. Her contributions to the management of the NMR lab at Stanford University and the training of many undergraduate and graduate students in the operations of the instruments are acknowledged. The Harry and Carol Mosher Award, established by SCV in honor of Harry and Carol’s contributions to chemistry and to ACS, is also mentioned. A full copy of this article has been posted on the SCV website at www.scvacs.org.

Happy Easter

Reminder April Dinner Meeting Reminder

**Herbal Products: They’re Natural but Are They Safe?**

**Abstract**

Herbal products have become big business in the United States. Infomercials, radio and television commercials and print ads trumpet the benefits of natural remedies for various illnesses or as aids for weight loss or in programs to stop smoking. These products are commonly described as “all-natural” and draw on the common belief that if something is natural it must be safe. But does this belief have any scientific basis? Native peoples often have used plants to treat disease or illness, and both traditional remedies and other plants have given rise to many of the drugs used in western medicine. However, many natural materials are highly toxic, and some natural products are useful precisely because they are highly toxic. In this presentation, examples of both the beneficial and harmful compounds found in nature will be presented, along with a description of the strategies that are used to isolate biologically active compounds from natural sources.

**Biography**

David F. Wiemer received a Bachelor of Science degree in chemistry from Marquette University in 1972, before moving to the University of Illinois at Champaign-Urbana to pursue graduate study in organic chemistry. He received his Ph.D. in 1976 for work in synthetic organic chemistry under the direction of Nelson J. Leonard, and then continued his career with postdoctoral study at Cornell University under the direction of Jerrold Meinwald. He joined the faculty in the Department of Chemistry at the University of Iowa in 1978, and now holds the rank of professor. His honors include a National Institutes of Health postdoctoral fellowship, a fellowship from the Alfred P. Sloan Foundation, a University of Iowa Faculty Scholar Award, and a University of Iowa Collegiate Teaching Award. Dr. Wiemer is interested in the isolation, characterization, and synthesis of biologically active natural products and the field of chemical ecology. His research projects include studies of the chemical basis of host-plant resistance to defoliation by leafcutter ants and of natural insecticides and anti-fungal agents in general. He also is involved in the chemical synthesis of various terpenoids with anti-viral, anti-leukemic, and anti-proliferative properties and in the development of new methodology for organic synthesis based on organophosphorus chemistry.

**Dinner**

Dinner will be provided by Ben Franklin School for volunteers from 6:00 to 6:45 pm. Entertainment with the Science Band will be from 6:45 to 7:30 pm and science activities will take place from 7:30-9:00 pm. Please come to as many of these events as you can.

To join the fun, please contact Natalie McClure, at nmcclure@drugregulatoryaffairs.com

**Address:**

Benjamin Franklin Intermediate School
700 Stewart Avenue, Daly City, CA 94015
Phone: (650) 991-1200
James Parrish III, Principal

**Directions:**

- Take Highway 280 to the Mission Street exit.
- Turn left at Junipera Serra Boulevard and continue 0.7 miles to 87th Street.
- Turn right again (Stewart Avenue is a one-way street) and continue a short distance to the point where Stewart Avenue makes a right angle bend to the left.
- The school is on the right side, with the main parking lot just before the bend.

Note to navigational system users: Some navigational systems list this school in Daly City rather than Colma.

**Reminder**

April Dinner Meeting

**Herbal Products: They’re Natural but Are They Safe?**

Dr. David F. Wiemer

[Image 177x323 to 252x408]
Want to survive the recession? Difficulty getting your products or services noticed?

If you want to succeed as a scientist entrepreneur or as a small/medium size company in this recession, you can’t afford to miss this event!

**ACS Small Business Webinar Series presents**

Steps to successful technology commercialization for scientist entrepreneurs and small/medium businesses in lean times.

An interactive hour of idea-sharing with speaker Craig S. Galbraith, MBA, MSc, Ph.D; a chance for scientist entrepreneurs and small/medium businesses to learn strategies and tips on how to successfully promote your products or services during the economic downturn.

**About The Presenter**

Craig S. Galbraith, MBA, MSc, Ph.D., is a Professor of Entrepreneurship and Technology Management and a GSK Faculty Fellow of Economic Development at the Cameron School of Business at UNC, Wilmington. He has published 6 books and over 100 scholarly articles. In addition to his academic accomplishments, Dr. Galbraith is an active private equity “angel” investor, works with numerous DoD technology transfer agencies specializing in bio/chem warfare agent detection and port security technologies. As an entrepreneur, he has been the co-founder of a California-based biotechnology firm, and is currently the Vice-President of Commercialization for Horizon Vision Research, Inc., a start-up medical instruments R&D firm.

**Webinar Details**

Date: Thursday, April 23, 2009
Time: 2:00-3:00 pm EST
Fee: Complimentary

Don’t miss out – Space is limited.

Details and advanced registration: [http://boilthisdown.com/small-business](http://boilthisdown.com/small-business)

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**Ottenberg Service Award 2009 Call for Nominations**

It is again time to nominate candidates for the Abraham Ottenberg Service Award of the Santa Clara Valley Section.

This Award was established in 1973 by the Santa Clara Valley Section to recognize members who have rendered outstanding service to the Section. It is named after Abraham Ottenberg, a former member who devoted much of himself to service to the Section. The award consists of an engraved plaque and a check for two hundred dollars. The award recipient is selected from candidates nominated by members of the Section. Nominees must be members or affiliates of the Santa Clara Valley Section.


The nominating letter should include a brief biography of the candidate and a description of evaluation of the service(s) to be recognized by the award. Seconding nominations are not required but will be accepted.

Nominations should be sent to:

Chairman, Ottenberg Award Committee
Santa Clara Valley Section, ACS
Post Office Box 395
Palo Alto, CA 94302-0395

Nominations must be received by June 1, 2007 to be considered for the 2009 Award.

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**ACS Offers Special Benefits for Unemployed Members**

During these tough economic times it’s more important than ever to belong to the American Chemical Society. Unemployed members can tap into a host of valuable benefits and services that help them get back in the workforce. And, members in good standing may qualify for an unemployed member dues waiver, allowing them to renew their memberships and keep their member benefits at no cost. Contact ACS at service@acs.org, 800-333-9511 or 614-447-3671 for complete details.

Other valuable benefits that help ACS member get back in the workforce include:

- Free registration at ACS National Meetings and registration fees at Regional Meetings of just $25. Meetings offer ACS Career Fairs with on-site interviews.
- Special discounts for ACS/Harvard courses, ACS ProSpectives and Short Courses, and the ACS Leadership Development System.
- Membership in the ACS Network, your online resource to connect and communicate with friends, colleagues, and potential employers.
- Free Guidance from ACS Career Consultants – ACS mentors offer resume reviews, job search strategies, and interview tips that make you stand out from the rest.
- Free access to InterviewStream, an online tool that will sharpen your interview skills.
- Members-only access to the ACS Salary comparator.
- And more!

Contact ACS customer service today and let us know how we can help.
The “ACS Strategic Plan for 2009 and Beyond,” was released in January at www.acs.org/strategicplan, (available for mobile devices at http://strategy.acs.org/mobile). The plan provides a blueprint for the ACS to advance our vision of “Improving people’s lives through the transforming power of chemistry.”

What is changing, and what is not, in the plan for 2009 and beyond?

The plan’s evolution for 2009 and beyond represents a modest change from last year’s release. It continues to emphasize the six aspirational goals. Briefly, these goals are:

- Providing indispensable resources
- Engaging global community
- Affecting world challenges
- Communicating chemistry
- Advocating for the profession
- Maintaining financial health

The ACS vision, mission, and core values remain unchanged from last year’s plan.

All plan content, except for the core values, has been structured around the plan’s six goals. New sections on challenges and opportunities and how success will be measured have been added. The trends and strategies have been updated, as well.

Process of the plan’s evolution

The ACS Board of Directors worked diligently to conduct a wide-ranging environmental scan to aid in shaping the revisions. It explored the chemistry enterprise, received formal and informal feedback from ACS governance volunteers, and enlisted a leading association futurist to suggest key trends. Based upon these trends, the Board listed key challenges and opportunities related to each goal, and focused on strategies such as:

- Focus on increasing awareness among members and potential members of the wide array of valuable resources that ACS provides.
- Strengthen the emerging global community through the ACS Network and its online collaboration tools.
- Build on past endeavors to achieve greater sustainability in the areas of food, water, and energy.
- Prepare for active participation in the 2011 International Year of Chemistry, recently announced by the United Nations, which provides the opportunity to promote our science on a grand scale.
- Strengthen the policy development process, by strengthening the strategic dialogue between the committees which recommend policy and the Board committee that approves it.

As we continue to implement the plan, it will require the creativity, experience, and talents of each ACS member to succeed. If you have suggestions, ideas, or approaches that should be included, please email them to strategicplan@acs.org at any time. The Board and its Planning Committee welcome your input.

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**Elementeo, the Chemistry Card Game**

Learn how the game is played... followed by a TOURNAMENT!

Cañada College

Wednesday, April 15th – 5:00pm to 6:30pm
Building 22, Room 116

**Elementeo** is a strategic battle game!

- Players can use elements, compounds, supernovas and black holes to simulate an epic chemical war.
- Use your card elements across the battlefield to reduce your opponent’s electrons to zero.
- Harness the strength and moving properties of elements and compounds by using their reactionary powers. (For example: Oxygen can rust any neighboring metal, or copper conductor can shock any metals and send them back to the deck.)
- Choose a nuclear fusion reaction to release energy and increase the cards’ power.
- Have an acid rain storm destroy element cards on the battlefield.

RSVP by Monday, April 13th.
For sign-up forms go to the Activities page at: www.canadacollege.edu/nsfgrant
Or call: (650) 306-3304; or email us at: Canada.NSFGrant@smccd.edu

FREE PIZZA! Prizes for game winners!

Meet the game’s inventor:

Anshul Samar
# The American Chemical Society is here for you!
**SPECIAL BENEFITS FOR UNEMPLOYED MEMBERS**

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<td>ACS National Dues</td>
<td>WAIVED</td>
<td>May be waived for up to two years for members in good standing who are seeking employment</td>
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<tr>
<td>ACS National Meeting Registration</td>
<td>FREE</td>
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<td>ACS Regional Meeting Registration</td>
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<td>ACS Network</td>
<td>FREE</td>
<td>Online community where you can connect with potential employers and other colleagues around the globe.</td>
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<tr>
<td>ACS Salary Comparator</td>
<td>FREE</td>
<td>Members-only guide to salaries currently being paid to ACS chemists</td>
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<td>ACS Careers Consultants</td>
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<td>Get help from the pros with resume preparation, interview techniques, salary negotiation, job search strategies, career transitions, and more.</td>
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<td>ACS ProSpectives &amp; Short Courses</td>
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“Here’s how we can help!”

For more information about these benefits from American Chemical Society, go to www.acs.org/careers or contact Member Services at **800-333-9511** or email: service@acs.org
CHEMPLOYMENT ABSTRAcTS APRIL 2009

CHEMPLOYMENT ABSTRACT 3933

Position Title: Research Associate - Synthetic Organic/Medicinal Chemistry

Job Description: Genentech has an exciting opportunity for a synthetic chemist to participate in our innovative program in small molecule drug discovery. The individual will be responsible for the design and synthesis of novel drug-like compounds.

QUALIFICATIONS DESIRED:

Education: This position requires a Bachelor's degree in Organic Chemistry

Experience: The candidate must have at least one year of experience in synthetic or medicinal chemistry. Demonstrated expertise in multi-step synthesis, compound purification and structural characterization is preferred.

LOCATION, SALARY, EMPLOYER DESCRIPTION:

Job Location: South San Francisco, CA

Employer Description: For more than 30 years, Genentech has been at the forefront of the biotechnology industry, using human genetic information to develop novel medicines for serious and life-threatening diseases. Today, Genentech is among the world's leading biotech companies, with multiple therapies on the market for cancer and other serious medical conditions. Please take this opportunity to learn about Genentech, where we believe that our employees are our most important asset.

Application Instructions: Genentech is dedicated to fostering an environment that is inclusive and encourages diversity of thought, style, skills and perspective. To learn more about our current opportunities, please visit: http://careers.gene.com and reference Req. #1000025933. Please use “Web - ACS” when a source is requested. Genentech is an Equal Opportunity Employer.

CHEMPLOYMENT ABSTRACT 3934

Position Title: Senior Scientist - Protein Engineering

Job Description: The candidate will work with hands-on NMR data acquisition, processing and analysis, focused on assessing ligand-binding and analyzing the solution structures of proteins or protein/ligand complexes involved in modulating cell-signaling events of therapeutic interest.

QUALIFICATIONS DESIRED:

Education: This position requires a PhD in a relevant discipline.

Experience: The candidate must have at least three years of postdoctoral training. Industry experience in fragment-based small molecule drug discovery strongly preferred (Significant more working experience is required for Senior Scientist candidates). Senior candidates with experience participating in or leading multi-disciplinary structure-based drug design efforts are encouraged to apply.

LOCATION, SALARY, EMPLOYER DESCRIPTION:

Job Location: South San Francisco, CA

Employer Description: Genentech is among the world's leading biotech companies, with multiple therapies on the market for cancer and other serious medical conditions. To learn more about Genentech, where we believe that our employees are our most important asset.

Application Instructions: To learn more about this opportunity, please visit: http://careers.gene.com and reference Req. #1000021966. Please use “Web - ACS” when a source is requested. Genentech is an Equal Opportunity Employer.
FUTURE MEETINGS

Apr 15
SVC Dinner Meeting
Herbal Products: They’re Natural but Are They Safe?
Dr. David Wiemer
Biltmore Hotel, Santa Clara, CA

Apr 16
Family Science Night
6:30 - 8:30 pm
with the CA Section
Ben Franklin Intermediate School
Colma, CA

Apr 22
47th AIChE Norcal Symposium
http://aiche-norcal.org/meetings.php

Apr 25
Finalist testing for the Chemistry Olympiad
9:00 am to 4:00 pm
Santa Clara University

May 2
Joint meeting with Los Padres Section of the American Chemical Society
Dr. Ken Johnson
MBARI, Monterey, CA

May 20
BioScience Forum
Dr. Lynn Seely
Chief Medical Officer, Medivation
www.biosf.org/programs.htm