

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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## Chair's Message

It is with sadness that our local section issues this current newsletter. Our long time member, Dr. Jack Riley, recently passed away. Jack was dedicated to the local section and illustrated his dedication through serving as chair several times and volunteering in many different capacities. We have included Jack's obituary here so that all of our members can truly appreciate Jack's many contributions not only to the local section, but also to the greater society and chemistry in general.

I do hope to see everyone at the May meeting. We will be at the Biltmore on the 15th, and the speaker will be Dr. Bego Gerber, of Chemists Without Borders.

You may have noticed that we have no dinner meeting scheduled for June – that is normal for the section, most years. Plans are underway for

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## John Francis Riley II

March 23, 1927-April 5, 2008

Our friend and colleague, Jack Riley, aged 81, a 50+ year member of the national American Chemical Society and 25-year member of the ACS Council, passed away on April 5, 2008 in Walnut Creek, California. He was a 40+ year member of the Santa Clara Valley Local Section and served in various functions including founder and editor of the Santa Clara Valley ACS newsletter. He also set a record serving as the section's Chair three times. He was active in the formation and nurturing of the now 25-year old ACS Division of Chemistry and the Law, and he received its Lifetime Achievement Award in 2001.

Jack was born and grew up in New Bedford, Massachusetts. He served in WWII in the US Navy as a



deep-sea rescue diver. He and Grace were married in November 1948. He graduated from Providence College (RI) Cum Laude in 1951 with a BS degree and received his Masters degree in 1952 and a PhD degree in Chemistry from Yale

University in 1954. His special interests in radiation chemistry led him to a professional lifetime of studying the effects of nuclear materials.

In 1954, he accepted a position as a chemist for Linde Chemical Company, a division of Union Carbide, in Tonawanda, New York. In 1960 he was transferred to Oak Ridge, TN, the "Atomic City" where he worked for six years at Plant X-10 - affiliated with the US Atomic Energy Commission. In

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## May Dinner Meeting

# Chemists Without Borders: The Power of Human Networks in the Information Age

Dr. Bego Gerber

Join us for our May 15th dinner meeting at the Biltmore with Dr. Bego Gerber. Dr. Gerber is the co-founder and president of Chemists Without Borders and he will present "Chemists Without Borders: The Power of Human Networks in the Information Age." We hope to see you there!

### Abstract:

With over 160,000 members, the



American Chemical Society is the largest scientific society in the world. The members also have a reach that is worldwide. In the age of the Internet and the cell phone any one of us can reach just about anyone else in our network almost

instantaneously (most of the time), no matter where s/he is on the planet.

This also enables us to do humanitari-

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*Jack Riley, continued from front page*

1966 he accepted a Staff Scientist position in the Research Laboratory at Lockheed Missiles & Space in Palo Alto, California where he worked for more than 30 years on "sensitive" programs before retiring in 1997. During his tenure at Lockheed, he received a commendation for providing over 20 years of support for the US Navy Fleet Ballistic Missile Program that included design and development of the Poseidon, Polaris, and Trident Missile Systems. He also worked on various programs for the US Air Force.

Jack was very active in the community, his church, and in professional organizations. In 1959, he received the Young Man of the Year award for the State of New York from the Chamber of Commerce. After moving to Palo Alto, California in 1966, he became actively involved at St. Albert the Great Catholic Church including the presidency of the Men's Club and he taught religion classes to teenagers. In 1996 he was fund raising chairman of the United Way Program for the Santa

Clara Valley on leave from Lockheed.

Jack was also a long-time member of Alpha Chi Sigma and of Sigma Xi, a scientific honor society, and was elected a Fellow in the American Institute of Chemistry in 1989.

His legacy is not just his lifelong accomplishments, but all the lives he touched in positive ways. He was always willing to help and to teach.

His wife, Grace Frances Tripp Riley, preceded him in death in 2000. Jack and Grace had seven children, most residing in the San Francisco Bay Area, as well as 18 grandchildren, all of whom live in the San Francisco Bay Area.

A memorial service mass was held on Saturday, April 19th in Lafayette, CA. In lieu of flowers or other donations, Jack requested that donations be sent in his name to the National Multiple Sclerosis (MS) Society, Silicon Valley Office, 2589 Scott Blvd., Santa Clara, CA 95050. Jack lived a very active life while dealing with MS for more than 40 years.

*Chair's Message, continued from front page*

our annual awards and family picnic meeting on Saturday, July 12th at Stanford University. The wine tasting will also occur, but we might do it with a twist – we are looking into the feasibility of said twist, and we will keep you posted. In addition to the wine-tasting, our usual picnic will take place, and we will be presenting awards and honoring those members of the section that have been members of the ACS for 50 years.

Your Executive Committee is in the process of revising our election procedures. The section voted to do elections electronically, and now we need to actually implement same. The Executive Committee is prodding National and various committees at National for some help, but so far their advice has been for each local section to "invent the wheel" on their own. Hopefully, we will not need to actually reinvent the wheel – if anyone has suggestions for this implementation, or would like to assist with the process, please contact the Executive Committee.

*May Dinner Meeting, continued from front page*

an work which was heretofore less feasible. Dr. Gerber will discuss the portfolio of exciting opportunities that Chemists Without Borders are able to pursue as a result of the generous volunteerism of our members – chemists and non-chemists alike – and the benefits of the Information Age. Please bring your opinions and ideas to share. All are welcome.

#### **Biography:**

Dr. Bego Gerber is President and Co-Founder of Chemists Without Borders. He is an Executive Associate accredited by the Institute for Independent Business and a founding member of Advice That Works. He is Managing Director of Business Development International, a lifestyle marketing company. Dr Gerber's experience ranges from academic medical research to patented new product development in a no-walls start-up and in a Fortune 100 R&D. He has experience ranging from idea

processing and information management to entrepreneurial lifestyle marketing and the development of B-quadrant businesses on the Internet.

Dr. Gerber was educated at Heriot-Watt University in Scotland, has Masters and Doctoral degrees from the University of California, and was a postdoctoral fellow at Johns Hopkins University.

Dr. Gerber is a passionate Court Appointed Special Advocate for abused and neglected children, and he is a devoted family man who plays jazz and classical music.



## **May Dinner Meeting**

**Date:** Thursday, May 15, 2008

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

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

**Speaker:** Dr. Bego Gerber  
Chemists Without Borders

**Cost:** \$27.00 with the choice of  
Chicken Marsala  
Cheese Ravioli

**Reservations:** [www.scvacs.org](http://www.scvacs.org)  
Shirley Radding  
408-246-2564  
408-296-8625 Fax

Reservations should be made by May 12th stating your name, address, company affiliation, number of people in party, and menu selection. If you are unable to honor your reservation and do not cancel by Tuesday, May 13th, you will be invoiced following the dinner meeting.

## News from the New Orleans Meeting

The national meeting earlier in the month was very busy. The days were full of good technical sessions, presidential events, and too many governance meetings. The evenings were full of receptions and great food! Our section was represented by its full contingent of councilors with alternates Ferenc Makra and Natalie McClure, substituting for Ean Warren and Abby Kennedy.

This meeting was a joint meeting with AIChE. Meetings and Expositions reported that there were 13,454 ACS members registered, plus several thousand chemical engineers. The Exposition was very large and well laid out with a large number of AIChE exhibitors in a central area. I think several of the exhibitors had never gone home after PittCon in March!

The Membership Affairs Committee reported that at the end of 2007 we had 160,052 members. This is down 439 from 2006, but there were 16,533 new members added during the year, which is the second highest addition of new members ever. The total membership includes 16,565 emeritus members who do not pay dues.

During actions of the Council, Nominations and Elections announced that October ballots will be mailed for the election of our district's representative to the Board of Directors. District VI (Western Region) candidates are Bonnie A. Charpentier (from our section) and Dennis L. Lichtenberger. Don't forget to vote! N&E presented to the Council the following nominees for selection as candidates for President-Elect, 2009: Thomas J. Barton, R. Stephen Berry, Joseph S. Francisco, and Josef Michl. By written ballot, the Council selected Joseph S. Francisco and Josef Michl as candidates for 2009 President-Elect. These two candidates will stand for election in the Fall National Election.

The council voted to set the member dues for 2009 at \$140. This rate is established pursuant to an inflation adjustment formula in the constitution and bylaws.

The council also engaged in a lively debate on the merits of the Petition on Membership Categories and Requirements and ultimately voted to approve this petition via a recorded vote. (The individual votes cast will appear in C&EN.) This petition broadens qualifications for membership and creates a new category of student membership. The Board of Directors will vote within 90 days on whether to ratify the approved petitions. The Petition on Membership Categories and Requirements contains changes to the ACS Constitution, and not just the Bylaws. Therefore, these changes must be approved by ACS members in the fall to be valid.

Budget and Finance reported that the Society ended 2007 with a net from operations of \$9.6 million, which was \$2.2 million favorable to the

approved budget. This was based on total revenues of \$444.2 million and total expenses of \$434.6 million. The Society ended the year in full compliance with the Board established financial guidelines.

The most pressing question from everyone who did not attend the meeting was: "How is New Orleans?" Well, the downtown, French Quarter, and convention center area appear to be fine. They did not suffer much damage from Katrina. However, if you go beyond that area there is still a great deal of damage and destruction evident. A speaker from the Corps of Army Engineers, who spoke at a luncheon, said they have spent \$4.5 billion dollars so far, just getting the levees back to where they were before the storm and clearing out much of the debris. They have only \$3.0 billion dollars left to make significant improvements.

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## This Month in Chemical History

I have on the desk before me two books that, in a sense, share a subject matter. Both of them have to do with the forms of atoms. In this column and the next I will describe their very different approaches to this topic.

The first book bears the interesting title of "Occult Chemistry". The copy I own has the subtitle "A Series of Clairvoyant Observations on the Chemical Elements". The authors are Annie Besant, P.T.S., and Charles W. Leadbeater. The book is described as being reprinted from "The Theosophist" and was published by the Theosophical Publishing Society, London and Benares City in 1908.

Annie Besant was a quite remarkable woman. An early supporter of birth control, throughout her life she was a prominent feminist and social reformer. She became a socialist, was a close friend of George Bernard Shaw, and supported and wrote on the doctrines of Karl Marx. After reviewing a book by Blavatsky she met the author and was converted to theosophy, a mystical and occult philosophy which included the use of

clairvoyance as a way to truth and the understanding of the physical world. After Blavatsky's death in 1891 Besant became the leading figure in the movement. She met her co-author of "Occult Chemistry", the clairvoyant Charles W. Leadbeater in 1897, and together they embarked on a wide ranging set of clairvoyant experiences including those that led to this book. Incidentally my copy was once in the library of the Los Angeles Lodge of the Theosophical Society, which still has a building there.

"Occult Chemistry" is fully illustrated with diagrams of the 57 elemental atoms examined by clairvoyance. The two "observers" were the authors. The samples included common salts and minerals. The authors acknowledge some assistance from Sir William Crookes who was a distinguished scientist and discoverer of the element thallium, and a believer in spiritualism. His assistance was confined to the loan of his three dimensional spiral periodic table.

The periodic table in "Occult

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*Chemical History, continued from front page*

Chemistry" has some interesting features. The atoms of the elements are composed of "sub-atoms", there being 18 of these in hydrogen and 3546 in gold. There are a number of "elements" not yet recognized by conventional chemistry. Occultum, with an atomic mass of 3, is found between hydrogen and helium. The noble gases have a secondary form, labeled as meta.

Thus meta-neon has a larger atomic mass (22.33) than neon (20). All atoms exist as one of two fundamental types: positive or male, from which force comes out; and negative or female, into which force disappears.

I first encountered this amazing book, in a much later edition, in the library of the Chemistry Department of Cambridge University. I believe that

the Theosophical Society of Great Britain distributed copies to each University's chemistry library in the country, perhaps in the hope of influencing the direction of future research on the structure of the atom. So far that influence has been minimal.

*Harold Goldwhite*  
California State University, Los Angeles  
hgoldwh@calstatela.edu

## Sally Ride Science Festival on March 29th

Photos courtesy of Lois Durham



# Call for Nominations - Ottenberg Service Award 2008

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.

Previous recipients are: Shirley B. Radding (1974), Oliver F. Senn (1975), Floyd M. Hobbs (1976), Frank R. Mayo (1977), Harry S. Mosher (1978), Lois J. Durham (1979), Richard W. Gaver (1980), Alan C. Ling (1982), Ludwig A. Mayer (1983), John F. Riley (1983), Howard M. Peters (1984), June G. Jones (1986), Robert L. Montoya (1986), Malcolm Dole (1987), Donald E. Green (1991), Hubert E. Dubb (1992), Karl Marhenke (1993), Stephen N. Senzer (1994), Carol W. Mosher (1995), Bonnie Charpentier (1998), Linda Brunauer (1999), Herbert B. Silber (2000), Sally Peters (2001), Jamil Talhouk (2002),

Ean Warren (2003), Maureen Scharberg (2004), Hong Gao (2005), George Lechner (2006) and David Parker (2007).

The nominating letter should include a brief biography of the candidate and a description or 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  
American Chemical Society  
P. O. Box 395  
Palo Alto, CA 94302

Nominations must be received by June 1, 2008 to be considered for the 2008 award.



## CHEMPLOYMENT ABSTRACTS MAY 2008

### CHEMPLOYMENT ABSTRACT 3900

*Position Title:* Chemist and Lab Manager

*Job Description:* Management of waste treatment and recycling; staying current on all applicable waste treatment compliance requirements; managing of lab technicians; training and managing waste treatment operators; monitoring process tanks and maintaining related records; assisting with facilities issues, such as requesting waste treatment equipment and supplies; initiating projects for continuous improvement and advancing sustainability of operations.

#### QUALIFICATIONS DESIRED:

*Education:* B.S. or greater in Chemistry or Chemical Engineering

*Experience:* Prefer 10 years experience in an industrial setting with hands-on management of waste treatment operations and chemical laboratory operations.

#### LOCATION, SALARY, MAIL ADDRESS:

*Job Location:* Hayward, CA

*Salary:* Negotiable, depending on qualifications and experience

*Employer Description:* A major player in precision chemical cleaning, serving the needs of the semiconductor industry and other high technology businesses; Closely-held for 25 years, ISO 9001-2000 certified; fully committed to spearheading "green" practices in waste treatment, processing, and reclamation.

*Application Instructions:* Please visit website at [www.tmpi-quickclean.com](http://www.tmpi-quickclean.com) for more information. Interested persons, please email resume to [eric@tmpi-quickclean.com](mailto:eric@tmpi-quickclean.com) with copy to [atrujillo@tmpi-quickclean.com](mailto:atrujillo@tmpi-quickclean.com).

### CHEMPLOYMENT ABSTRACT 3901

*Position Title:* Entry-level Scientist

*Job Description:* Oxonica Inc is looking to hire an entry-level Scientist to be part of our Research and Development team. The successful candidate will work in the area of nanoparticle synthesis and characterization.

#### QUALIFICATIONS DESIRED:

*Education:* Bachelor's degree in chemistry or a related field

*Experience:* Must have some experience with chemical synthesis and have used measurement techniques such as optical absorbance, fluorescence, etc. Candidate must be able to work in a cross-functional team, have excellent written and verbal communication skills, and be comfortable working with Excel, Word and related programs.

#### LOCATION, SALARY, MAIL ADDRESS:

*Job Location:* Mountain View, CA

*Salary:* DOE Oxonica has an immediate opening for this position. Do you have what it takes to join our rapidly growing team? We offer a complete benefits package (Medical, Dental, Vision, FSA, HSA, Life/AD&D, 401(k) with company match).

*Employer Description:* For more details about Oxonica Inc, the Nanoplex™ Technology and the Mountain View team please see [www.oxonica.com](http://www.oxonica.com).

*Application Instructions:* To apply, please send your resume and cover letter (addressed to Human Resources) to [jobs@oxonica.com](mailto:jobs@oxonica.com), with "Scientist" in the subject line. No phone calls please!



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

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## SANTA CLARA VALLEY SECTION

### 2008 Section Officers

Chair	<b>Mark Kent</b>	408-736-0989	marklent@yahoo.com
Chair-Elect	<b>Natalie McClure</b>	650-906-7831	nmccclure@drugregulatoryaffairs.com
Past Chair	<b>George Lechner</b>	408-226-7262	glechner@aol.com
Secretary	<b>Karl Marhenke</b>	831-688-4959	karlmar@armory.com
Treasurer	<b>Herb Silber</b>	408-924-4954	hbsilber@science.sjsu.edu

### Councilors

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2006-2008	<b>Ean Warren</b>	650-329-4554	ewarren@scvacs.org
2007-2009	<b>Linda Brunauer</b>	408-554-6947	lbrunauer@scu.edu
2007-2009	<b>Sally Peters</b>	650-812-4994	Sally.Peters@parc.com
2007-2009	<b>Peter Rusch</b>	650-961-8120	pfrusch@aol.com
2008-2010	<b>George Lechner</b>	408-226-7262	glechner@aol.com
2008-2010	<b>Herb Silber</b>	408-924-4954	hsilber@science.sjsu.edu
2008	<b>Howard Peters</b>	650-854-4614	peters4pa@sbcglobal.net

### Alternate Councilors

2006-2008	<b>Ihab Darwish</b>	650-594-1654	darwishis@yahoo.com
2006-2008	<b>David Parker</b>	408-615-4961	dparker@ci.santa-clara.ca.us
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### ChemPloyment Abstracts

Director: **Charles Sullivan** 650-359-0731 [cdansullivan@sbcglobal.net](mailto:cdansullivan@sbcglobal.net)

## FUTURE MEETINGS

- May 15** Section Dinner Meeting:  
Chemists Without Borders  
Dr. Bego Gerber  
Biltmore Hotel, Santa Clara, CA
- Jun 24-26** 12th Annual Green Chemistry &  
Engineering Conference  
Washington, DC  
**<http://www.gcande.org>**
- July 12** Annual Awards, Wine Tasting,  
and Picnic  
Stanford Chemistry Department  
Stanford, CA
- Aug 3-8** Gordon Research Conference  
on Green Chemistry  
Bates College  
Lewiston, ME  
**[www.grc.org/programs.aspx?  
year=2008&program=green](http://www.grc.org/programs.aspx?year=2008&program=green)**
- Aug 17-21** 236th ACS National Meeting  
Philadelphia, PA
- Oct 19-21** Topics and Tactics in Current  
Drug Design  
ACS ProSpectives Conference  
Cambridge, MA