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CALIFORNIA SECTION
October 2012



Glenn Fuller May 18, 1929 - September 15, 2012

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Chair's Message

Jim Postma



Last month I wrote about the eight ChemLuminary nominations that the Section received. At the national ACS meeting in Philadelphia we were awarded four awards:

Best Activity or Program Stimulating Member Involvement—Science Cafés International Year of Chemistry 2011

Creative & Innovative Use of the Chemists Celebrate Earth Day Theme.

Outstanding Performance by a local Section (Very Large).

As the San Francisco Giants and the 49ers have both experienced, it is hard to repeat a championship season such as we had in 2011. But the dynasty of successful activities by our section since its founding in 1901 is expected to continue well into this century.

When you look at the range of Section activities, you can see that there are many avenues of potential success:

Monthly meetings, National Chemistry Week, Executive Committee (elected), Regional Meetings, EarthDay events, The Vortex (writing and/or editorial), National Meetings, Family Science Nights, Publicity,

Golf, baseball, etc., Project SEED, Younger Chemists Comm., Senior Chemists Comm., Science Cafés, Women Chemists, Educational Grants Comm., Undergrad Poster Symposium, Science Fairs, Section History, Chemistry Olympiad Awards, Student Chapters, High School Chemistry Clubs, Assorted Governance Committees, Career Support, and Interview Skills Workshops.

I invite you to join one of our winning teams. For more details or contact information, see our website: www.calacs.org or contact the Section Office: office@calacs.org or 510-351-9922.



Advanced Notice November Section Meeting

The November Section Meeting will be November 15th, the Speaker will be Dr. Carolyn Slupsky. The topic "Infant feeding strategy affects gut microbial composition, immunity, and metabolism".

October Section Meeting
UC Berkeley/BP Energy Biosciences Institute
Tour and Research Program

Topic: The EBI: A Unique Partnership for Catalyzing Activities in Renewable Fuels Research

Speaker: Dr. Susan Jenkins, EBI Managing Director

The tour and dinner is limited to 75 persons.

Date: Thursday, Oct 25, 2012. Tours and Social Hour: 5:00, Dinner: 7:00, Talk: 8:00

Place: Energy Biosciences Institute, 2151 Berkeley Way., Berkeley, CA

Cost: \$25 (Students \$12). Reservations at office@calacs.org (510-351-9922). Pay at door.

RSVP: By 10pm Friday, Oct 19, 2012

Directions: from I-80 or I-580; Take University Ave exit, head east on University, turn left on Milvia, turn right on Berkeley Way and park in lot., EBI is on corner of Oxford and Hearst

Dinner: Beer, wine and other refreshments will be served from 5-7:00 PM.
Catered Buffet Dinner 7:00 PM. Talk 8:00 PM

Biography:

Dr. Susan Jenkins is Managing Director for the Energy Biosciences Institute (EBI), a multi-campus research partnership involving UC Berkeley, University of Illinois, Lawrence Berkeley Lab and the energy company BP. As a member of the directorate she is involved in short and long term strategic planning for research in lignocellulosic fuels and fossil fuel bioprocessing. The EBI funds more than 70 research programs and projects spanning physical sciences, life sciences, engineering, environmental sciences, social sciences, policy and law.

A plant biologist by training, Dr. Jenkins holds a B.S. degree in Genetics from the University of California, Davis and a PhD in Plant Molecular Biology from University of California, Berkeley. Prior to joining EBI, Dr. Jenkins served for three years as Assistant Chair of UC Berkeley's Department of Plant and Microbial Biology, where she had researched biochemical pathways and regulatory gene networks controlling plant development. In addition, she served as the Principal Administrator for the UC Berkeley-Novartis Strategic Research Alliance, an innovative public-private partnership. Prior to her graduate work at UC Berkeley she spent time

studying plant-pathogen interactions at the Salk Institute.

She is currently the President of the Washington DC-based Council of Energy Research and Education Leaders (CEREL), a consortium of more than 30 universities committed to advancing the role of higher education and research in the energy field by informing policy makers across all energy sectors. She has served on advisory committees and participated in forums covering climate change and bioenergy issues for local, national and international agencies and companies.



Family Science Night

Celebrating National Chemistry Week 2012: Thursday October 18 October 2012, 6:30 PM to 8:30 PM. at the Martin Luther King, Jr. Middle School (1781 Rose Street in Berkeley)

S U R P R I S E

our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way you could also give credit to our advertisers who financially support us.

Glenn Fuller
May 18, 1929 - September 15, 2012

Wally Yokoyama's words express the thoughts and feelings of all of us in The California Section who knew Glenn. Glenn was a role model of unselfish, devoted volunteerism. He was a member of many community and national organizations and we were fortunate that he selected ACS and Cal ACS as one of his interests. Despite many health setbacks in later life he continued to participate in ACS activities until he was unable to physically move from his home. He enriched the lives of everyone he touched, particularly,



Glenn Fuller, Elaine Yamaguchi (Project SEED Chair), and Lee Latimer (California Section Chair) with the 2003 ChemLuminary Award for the Outstanding Project SEED Program by an ACS Local Section

the hundreds of project SEED students that were encouraged to go on to higher education. I hope he got back from us a fraction of what he contributed.

Born in Lancaster, California on May 18, 1929, Glenn Fuller received his B.S. in Chemistry from Stanford University in 1950 and his Ph.D. in Chemistry from the University of Illinois in 1953. He then went to work for Shell Development Company in Emeryville until 1964 when he began teaching at Mills College in Oakland. In 1965 he joined the U.S. Dept. of Agriculture, Western Regional Research Center where he worked until his retirement in 1993. Dr. Fuller's ACS activities span the California Section, Agricultural and Food Chemistry

Division and the Western Regional Meeting. He was an active participant in the Chemathon program of intensive local high school activity in chemical information partially sponsored by the California Section. He had been program chair and division chair and received the Distinguished Service Award of the Agricultural and Food Chemistry Division in 1999. He had a long connection with the Western Regional Meeting starting as co-chair of the program committee in 1982 and becoming general chair of the meeting in 1998. He had been a long-time member of the steering committee. In addition to his ACS activities, Dr. Fuller is the author of more than seventy publications and four patents.

Among his awards are the Petersen Award in 1989 and the Radding award in 2005. In 2009 Glen was among the first to be recognized as an ACS Fellow. These are members of the ACS who share a common set of accomplishments, namely true excellence in their contributions to the chemical enterprise coupled with distinctive service to ACS or to the broader world of chemistry".

Glenn contributed to many of the Section's activities, from Project SEED, various Western Regional meeting committees, researching and writing the Section's history from 1901 that, thanks to Glenn, is available to all on the Section website. If there was a committee that needed help, Glenn was the first to volunteer. He also served as Chair and Councilor. We offer our condolences to his family and friends, mourn his passing, and will miss him.

Glenn is survived by son Eric, daughter Nancy, daughter-in-law Pam, and two grandsons. His wife Verna predeceased him. A Memorial service is being planned for November.



ACS Fellow

The ACS Fellows Program was created by the ACS Board of Directors in December 2008 “to recognize members of ACS for outstanding achievements in and contributions to Science, the Profession, and the Society.” In 2012 there were three Fellows selected from the California Section. In the last issue of the *Vortex*, the editor mistakenly omitted two of the recipients. Here now are the three Fellows. Congratulations.

Head-Gordon, Martin, University of California, Berkeley

- Contribution to the science/profession: Main research achievements have significantly advanced the state of the art in electronic structure calculations, as a result of new developments in quantum chemical theory, algorithms, and analysis.
- Contribution to the ACS community: Volunteered as Program Chair (2009) and Chair (2010) of the Division of Physical Chemistry, Chair of the Theory Subdivision (2003); symposium organization, and service on ACS journal editorial boards.

Latimer, Lee H., Independent Consultant

- Contribution to the science/profession: Leading medicinal, process, and analytical chemistry teams for Alzheimer’s Disease program at Elan Pharmaceuticals; contributions at other companies to chemistry for emphysema and cardiovascular therapy programs.
- Contribution to the ACS community: Service at the Local Section level as Chair of the Rochester and California Sections; national-level service as Chair of the Committee on Local Section Activities and developing joint activities among sections.

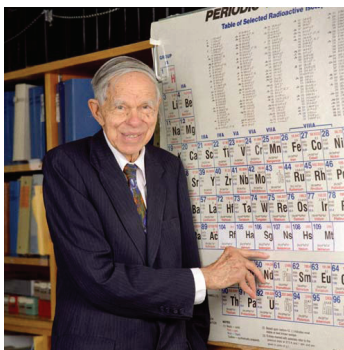
Sobolev, Igor, Kaiser Aluminum & Chemical Corp (Retired)

- Contribution to the science/profession: Serving initially as Kaiser Aluminum’s science representative, contributions to international research programs on stratospheric ozone depletion by fluorocarbons ranged from testimony before government committees (1974 – 1975) to a published study on ozone and Antarctic phytoplankton (2000).
- Contribution to the ACS community: Served as Chair of the California Section twice, then as Treasurer (1998 – 2011), and as Trustee (1996 – present).

Nominees for ACS Fellow must be current members in good standing with the American Chemical Society [ACS]. The selection of ACS Fellows is based on documented excellence and leadership in BOTH of two areas: (1) science, the profession, education, and/or management, AND (2) volunteer service in the ACS Community. Nomination documents must address BOTH of these areas. Excellence and leadership that have a lasting beneficial impact in science, the profession, education, and/or management. Fellows are selected by a broadly representative Selection Committee appointed by the Board Committee on Grants & Awards, which has governance oversight for the program. Additional information on the ACS Fellows Program can be obtained by sending an email to: fellows@acs.org.



Glenn T. Seaborg Award for Nuclear Chemistry



The Glenn T. Seaborg Award for Nuclear Chemistry is a National award sponsored by the Division of Nuclear Chemistry and Technology of the American Chemical Society (ACS). It is named to honor Dr. Seaborg, whose diverse contributions to the field embody the full spectrum expected of an ACS national award in Nuclear and Radiochemistry. The award, or its predecessors, has been given annually since 1955.

Unfortunately the award is not endowed or presently sponsored by an institution or corporation. Recently, the ACS has reviewed their National Awards and determined that funding for the Seaborg Award is not self-sustaining. The Division of Nuclear Chemistry

and Technology has agreed to fund this award for the next three years and find funding for its future. This is the beginning of our award fund campaign.

If you would like to honor Dr. Seaborg's legacy or our past award recipients, help us with the future of this award. To donate, please visit www.donate.acs.org where you can type in "Glenn T. Seaborg Award" under Other Program for your donation.

RESOLUTION TO HONOR THE MEMORY OF GLENN T. SEABORG IN THE CENTENNIAL YEAR OF HIS BIRTH

Whereas Glenn Theodore Seaborg, Nobel Laureate in chemistry in 1951, educator, co-discoverer of plutonium and nine other transuranium elements (including element 106, seaborgium), pioneer in nuclear medicine, scientific advisor to ten U.S. presidents, and avid hiker, was born in Ishpeming, Michigan on April 19, 1912;

Whereas Glenn T. Seaborg served on numerous federal and state commissions and committees, notably as Chairman of the Atomic Energy Commission (1961-1971); was active in many international organizations for fostering the application of chemistry to world economic, social, and scientific needs; and was an advocate for better education in science and mathematics, having served with distinction as Professor and Chancellor at the University of California, Berkeley;

Whereas Glenn T. Seaborg held the office of president of the American Chemical Society during its centennial anniversary in 1976, was a member of the Board of Directors from 1975 to 1977, Councilor for more than 28 years, and a member or chair of several ACS bodies spanning his six decades of membership in the Society;

Therefore, be it resolved that the Council of the American Chemical Society, on the occasion of the centennial year of his birth, honors the memory of Glenn Theodore Seaborg, recognizes his many contributions to the advancement of the chemical sciences (and science in general) both in United States and globally, and commends the story of his life as an inspiration to all.

*At the SOLANO STROLL with
the California Section, ACS on
Sunday, September 9th, 2012*

When California Section Chair-Elect Wally Yokoyama took the initiative and signed the Section up for a booth at this year's Solano Stroll, he helped take our public outreach efforts to a whole new level. Two dozen volunteers answered the call to staff the booth, and Elaine Yamaguchi, Steve Binder and I were there to set up at 9:30 AM on Sunday, September 9th, 2012, aided by Wally's USDA coworkers, Charles Lee and James Pan, who assembled an impressive pair of display boards. A blue canopy proved to be the perfect match for the brilliant blue "ACS Chemistry for Life Banner" while the inside of the booth featured our ChemLuminary Awards banner and photos of our Project SEED students.

We were ready for the crowds that followed the opening parade, and by 10:30 AM our volunteers were busy handing out information about the California Section, Periodic Table posters, Celebrating Chem-

istry activity booklets, NCW balloons, temporary tattoos, and the ever-popular Nanomoles. A big thank you for everyone who showed up. Their dedication and enthusiasm made this event a success.

In order of appearance:

Elaine Yamaguchi, Steve Binder, Laurie Craise, Sandi Tillin, Jeanne Pimentel, Eileen Nottoli, Shuai Jiang, Jeanne Killian, Soheil Pourshahian, Steve Xie, Eric Gee, Rebecca Milczarek, Toni Miao, Sheila Kanodia, Margareta Sequin, Kathy Shepler, and John and Anne Frazer

I think everyone enjoyed the chance to meet members of our community who care about science and science education. Indeed, we made many new contacts with local teachers as well as with parents and students. There's no question we will be back next year.

A special thanks to Kathy Shepler, and John and Anne Frazer and to Chris Silva of the USDA who stayed to disassemble the booth and load everything up at 6 PM when it was time to go.

Alex Madonik



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October Historical Birthdays In Chemistry

Dr. Roland May

October 1, 1867 Wilder D. Bancroft, first systematic study of oxidation cells; research on heterogenous equilibria, emulsions, and theory of dyeing; founded the Journal of Physical Chemistry & Editor from 1896-1932; President of ACS (1910).

October 1, 1868 Georg Bredig, researcher on anomalous atomic weights of lead (Pb, 82) from different sources, catalytic action of colloidal platinum, "poisoning" of catalysts & preparation of colloids by electrical means.

October 3, 1904 Charles J. Pedersen, found that alkali metal ions could be bound by crown ethers in a rigid layered structure; Nobel Prize (1987) with Jean-Marie Lehn and Donald J. Cram for their development and use of molecules with structure-specific interactions of high selectivity.

October 7, 1885 Niels Bohr proposed "solar system" model of atom, 1913, based upon Planck's quantum law; Nobel Prize (1922) for his services in the investigation of the structure of atoms and of the radiation emanating from them.

October 7, 1886 Neil E. Gordon, founder and editor of the Journal of Chemical Education; founder of the Gibson Island Conferences, later known as the Gordon Research Conferences.

October 10, 1731 Henry Cavendish discovered hydrogen (H, 1) 1766; synthesized water; independent discoverer of nitrogen.

October 11, 1884 Fredrich Bergius, researched chemical reactions at high pressure, conversion of coal into oil, hydrolysis of wood to sugar and cattle feed; Nobel Prize (1931) with Carl Bosch in recognition of their contributions to the invention and development of chemical high pressure methods.

October 14, 1840 Friedrich W. G. Kohlrausch, researcher on electrical conductivity, dilution of strong electrolytes & conductivity (Kohlrausch's equation).

October 15, 1608 Evangelista Torricelli, first man to create sustained vacuum;

discovered principle of barometer.

October 17, 1844 Harvey W. Wiley, "Father of Pure Food Law".

October 19, 1870 Robert Bowie Owens detected thorium radiation. b. 1909 Maguerite Perey discovered francium (Fr, 87), 1939.

October 18, 1799 Christian F. Schönbein discovered ozone, 1840, & collodion, 1846; researcher on hydrogen peroxide & gun-cotton.

October 20, 1891 James Chadwick, discovered neutron, 1932; Nobel Prize (1935) for the discovery of the neutron. (1891-1974)

October 21, 1660 Georg E. Stahl, researcher on oxidation & reduction; prepared glacial acetic acid; responsible for theory of phlogiston with Johann J. Becher.

October 23, 1875 Gilbert N. Lewis developed theories of chemical bond & valency, researcher in thermodynamics.

October 23 Mole Day, 6.02 a.m. through 6.02 p.m. (Mole Times); Mole Moment: 50.453 s after 6:42 p.m.

October 28, 1845 Zygmunt F. von Wróblewski, first to liquefy air on large scale & with K. S. Olszewski; liquefied nitrogen (N, 7), oxygen (O,8), & carbon monoxide (CO).

October 31, 1835 Adolf von Baeyer (Johann Friedrich Wilhelm Adolf Von Baeyer), researcher on indigo; evolved strain theory of carbon rings; prepared acetylene; discovered barbituric acid, 1863; Nobel Prize (1905) in recognition of his services in the advancement of organic chemistry and the chemical industry, through his work on organic dyes and hydroaromatic compounds,



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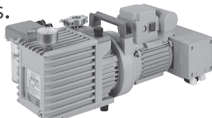
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