

California Los Padres Section of ACS Newsletter

Fall 2002

At a glance.....

Table of Contents

Hearst Castle Visit.....	1
Zymax Event.....	2
NCW activities.....	2
Employment/Equipment Exchange.....	3
Local NewsClips.....	3
Member Profile.....	4
ACS on Professional Training....	4
How to Reach Us.....	5
"Starting with Safety" Online....	5
SciFinder 2002.....	6

Upcoming Events 2002

Fall Luncheon at Santa Paula Oil
Museum (October 19)
National Chemistry Week
(October 20-26)
Wine Tasting (December)

Congratulations to

50 year members:

Dr. Sigmund Jaffe (Camarillo)
Dr. Eugene Burns (Carpinteria)
Dr. William Wechter (Ojai)

Additional Notes:

If you would like a t-shirt from
the WERM meeting, there are
a few available from James
Pavlovich for \$15 each.

Newsletter Contributors:

Tyrena Chin
Kathy Jimison
Allan Nishimura
James Pavlovich
Bruce Rickborn

Hearst Castle Visit

On Saturday, May 18th, thirty five members of CALPACS enjoyed a fascinating tour and discussion of Art Preservation Efforts at Hearst Castle, San Simeon. Dane Jones from Cal Poly, SLO, organized the day's events and the tour was led by Victoria Kastner, author of the book "Hearst Castle, The Biography of a Country House". We were privileged to hear from Constance Faber and Zdravko Barov, partners in ETHOS, a private practice specializing in the restoration of ancient art and antiquities. Some recent projects include collaboration with the Department of Chemistry and Biochemistry, Cal Poly, SLO, to preserve a 3rd century Roman marble sarcophagus, as well as Greek vases. We enjoyed the discussion of the chemistry involved in preservation efforts as well as a detailed historical perspective.

In appreciation for a wonderful trip, CALPACS has donated \$250 to The Hearst Castle Preservation Foundation.

Kathy Jimison, CALPACS Chair



Zdravko Barov, Constance Faber, Victoria Kastner, and Prof. Dane Jones hosted the Hearst Castle event in May.

National Chemistry Week 2002

Chair, Kathy Jimison

The ACS Office of Community Activities invites you to participate in National Chemistry Week 2002, October 20-26. Involve your community in learning about the importance of chemistry by using the theme for this year "Chemistry Keeps Us Clean." Join with chemists across the country as they share the chemical story of the relevance of chemistry to cleaning by conducting presentations, demonstration shows, and hands-on activities for the public. Consider becoming involved in the unifying event for NCW 2002, "Chemistry Makes Cleaning Possible" a personal hygiene collection campaign to benefit local charities.

For more ideas and information about NCW, call 1-800-227-5558 ext. 6097 or visit the website at <http://chemistry.org/ncw>

Our local section along with students from Westmont College, UCSB, Cal Poly SLO, and Cuesta College, will be conducting several fun and educational activities highlighting this year's theme, *Chemistry Keeps Us Clean*. For further information or to conduct an activity, go to the NCW home page or contact Kathy Jimison, local NCW Chair, at kjimison@cuesta.edu.



ZymaX Visit

In March, over thirty CALPACS members visited ZymaX Envirotechnology, Inc. in San Luis Obispo. Zymax is a full service environmental testing and geo-forensics laboratory. The ZymaX staff, including Mike Ng, Dr. Jesper Nielsen, and Dr. Alan Jeffrey, presented introductory talks on the history of the company, beginning in 1991 with a mission to provide high quality environmental analysis using state-of-the-art instrumentation. The company later acquired the assets of a southern California geo-forensics firm and now includes an isotope ratio laboratory. They further went on to describe the types of data analysis they provide as well as the variety of analytical techniques used including hydrocarbon analysis by GC/MS, metals by ICP/MS, and stable isotope mass spectrometric analysis in a variety of matrices. Following the presentation, the staff led tours of the facility.



Dr. Alan Jeffrey leads a tour of CALPACS members through Zymax Labs.

James Pavlovich, CALPACS Secretary



Local NewsClips

Martin Kamen, died of pneumonia in early September according to the Santa Barbara NewsPress, dated September 7. He was a sixty-eight year member of CALPACS. He was also a pioneer in Carbon-14 dating. The NewsPress article highlighted Dr. Kamen's achievements and awards as well as hurdles during his career.

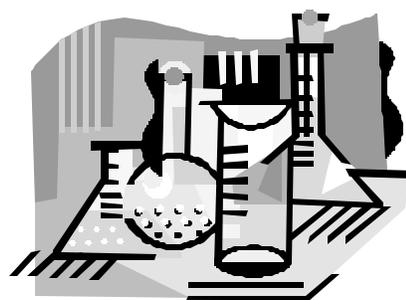


The Santa Barbara NewsPress (dated September 27) reported that a team of UCSB scientists are working on developing a method for faster and cheaper DNA testing. The method utilizes a blue LED polymer, genetic material and a green dye which attaches to the peptide nucleic acid. If a match exists, the green dye will absorb the polymer's blue light.



Employment and Equipment Exchange

Starting from next issue of the newsletter, as a service to the chemistry community, an insert will be placed in the newsletter that will feature job search for chemists looking for position (and positions looking for chemists!). Listings can be in the same format as in the "situation wanted" section of the C&E News. A second part to this insert will include an equipment exchange: if your company or institution has glassware or equipment (no chemicals!) that you no longer need, this would be the place to put it before the dumpster. Please give a good description, including the condition of the equipment (new, used in good condition, used for parts only, etc.) Be sure to include your phone number and e-mail address. Please e-mail either advertisements to Ty at mtbceddy@worldnet.att.net.



Alan Nishimura, CALPACS Chair-Elect



Is this a Record?

I thought it must be a mistake when I first saw that the CALPACS roster lists a member with 80 years in the ACS, more that a decade longer than the next person in our Section.

But it is correct! Dr. Joseph (Joe) KOEPFLI joined the ACS in 1922 as an 18 year old undergraduate at Stanford (AB 23, MA 25). I had the pleasure of meeting Joe recently, and learning some details of his distinguished career. He was born in Los Angeles (2/5/04), and completed a PhD in organic chemistry under W. H. Perkin, Jr. at Oxford in 1928. After two years as a Caltech Fellow, he served as Instructor of Pharmacology at Johns Hopkins School of Medicine (1931-33) before returning to Caltech as a Research Associate and subsequently Senior Research Associate (Emeritus in 1974). He and his graduate students worked primarily on plant hormones, auxins, and alkaloids, with an eye towards medical applications. Early in his career he isolated and characterized rauwolfine, which proved to be one of the less bio-active components of *Rauwolfia Serpentina* (snakeroot plant; used extensively in the treatment of high blood pressure and manic insanity in India).

In addition to his career in chemistry, he served the US Government, first as the Senior Science Advisor, American Embassy, London (1947-48), and then as the first Science Advisor in the US State Department (1951-53). The latter role was noted in the 1978 National Academy of Science report, "The First Hundred Years," as a "milestone in the long effort of the Academy to make scientific counsel

ACS Committee on Professional Training

The Chemistry Education Option for degree certification of undergraduates in ACS-approved chemistry departments has been offered since 1988. It was designed to provide a route for students planning to teach at the secondary level to receive a certified degree in an ACS-approved program while simultaneously obtaining teaching credentials. Since instituted, very few students have been certified to the ACS under the Chemistry Education Option at the six institutions offering it. Consequently, the Committee on Professional Training (CPT) performed an extensive re-evaluation of the degree requirement of this option. This extensive study has led to a proposed revision of the requirements for the Chemistry Education Option, as well as a new approved Chemistry Education Minor. This minor recognizes that currently a large number of high school chemistry teachers have undergraduate degrees in other science disciplines and relatively weak preparation in chemistry. The new minor would provide a mechanism for students planning to become state certified teachers in secondary science fields other than chemistry to obtain a substantial preparation in chemistry.

The highlights of the proposed revisions to the requirements for the chemistry education option would include the following:

- the same first two years as any other ACS certified major, except that only one semester of organic chemistry lab would be required
- comparable exposure equivalent to one-semester to other areas of chemistry: analytical (environmental), biochemistry, inorganic, and physical
- in-depth study of one area of chemistry via course work or research, equivalent to three semester credit hours
- reduction in lab hours (minimum of 300 lab contact hours vs. present 500 hours)
- three semester-credit hours (or equivalent) in chemistry teaching methods (new)

No change in ancillary course requirements (one year each of calculus and physics with lab).

Students electing option are expected to complete education courses needed for teaching certification in their state.

The requirements for this minor would be:

- 23 semester-credit hours (or equivalent) of chemistry with two or more of the following areas represented beyond general chemistry: analytical, biochemistry, environmental, inorganic, organic, and physical
- 200 lab contact hours from two different areas beyond general chemistry
- eight semester-credit hours of physics
- three semester-credit hours (or equivalent) in chemistry teaching methods (new)

The experience in chemistry methods would include exposure to experimental design and preparation, stockroom procedures, safety, disposal of chemical waste, teaching assistant experience, and the

available on a continuing basis at the highest levels of government.” He also spent 1957 as chair of a NATO Task Force on Science and Technology, then on various Presidential commissions and panels, finishing in 1968 with a four-year term on the UNESCO National Commission.

In his spare time he managed to serve as a Trustee on the Southern California Symphony-Hollywood Bowl Association, as well as the Boards of the Museums of Natural History, and County Art Museum.

While there is no doubt that he holds the record for longest ACS membership in the local Section (500+ members), it remains unclear if this record also applies to the more than one hundred thousand National ACS members.

Bruce Rickborn, Treasurer of CALPACS



literature of chemical education. This requirement could be met in a variety of ways including independent study, teaching assistantships, specific methods courses, and interdisciplinary approaches.

The Committee is now seeking comments from the chemistry community on these two proposals. For a more detailed description of the proposed changes, please visit the CPT website at <http://chemistry.org/education/cpt>. In addition to the specific requirements of the proposals themselves, of particular interest to CPT are the following questions:

- Do you think that these changes will make the chemistry education option a viable possibility for more institutions?
- Should all ACS-approved departments be able to offer this minor or only those with an approved chemistry education option?
- How easily could the chemistry methods requirement be met?
- Do you think that these proposed changes will increase the number of students electing to pursue a career in secondary school chemistry education?

Comments on both proposals should be directed to the ACS Office of Professional Training at m_thompson@acs.org or to Matt Thompson, Office of Professional Training, American Chemical Society, 1155 16th St., NW, Washington, DC 20036.



Here's how to reach us:

2002 Chair

Kathy Jimison
kjimison@cuستا.org

2003 Chair-Elect

Allan Nishimura
nishimu@westmont.edu

2002 Secretary

James Pavlovich
pavlovich1@cox.net

2002 Treasurer

Bruce Rickborn
rickborn1@cox.net

2002 Councilor

Sandra Lamb

Starting with Safety Now Available Online

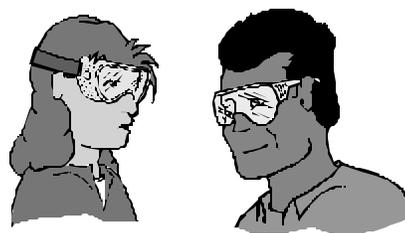
The highly popular ACS Video Course, *Starting with Safety*, has been adapted for delivery via the Internet. The Internet version includes all of the materials from the original Video Course including the video scenes and the Teacher's Guide. As an added bonus, the complete ACS Video Course, *Seeing the Light—Eye and Face Protection*, is also included in this ACS Internet Course.

Now you and your students can access this valuable training program from any computer connected to the Internet at any time—day or night. (We do recommend a relatively high-speed connection, such as a DSL, cable modem or higher. And you will need to install the Flash 6 player to view the videos).

This program is designed to be used as part of a standard high school or introductory college chemistry curriculum that is taught by an experienced chemistry teacher. The program is NOT meant to be a stand-alone training course. Students should only use this program under the supervision of a qualified teacher.

sandave@sbcglobal.net
2002 Alternate Councilor
Al Censullo
acensull@calpoly.edu
Executive Committee members
Tyrena Chin
mtbceddy@worldnet.att.net
Tom Hooker
hooker@chem.ucsb.edu
Richard Hurst
alasarwh@aol.com
Dave Marten
marten@westmont.edu
Israel Rabinowitz
irabinowitz@worldnet.att.net
Bruce Rickborn
rickborn1@cox.net
Ata Shirazi
Shirazi@chem.ucsb.edu
Jerry Skarnulis
ajskar@silcom.com
E-mail us at *calpacs@chem.ucsb.edu* or
visit our website at
www.chem.ucsb.edu/~calpacs.

For complete details about this program, visit the American Chemical Society website at <http://chemistry.org/elearning> and click on the link to *Starting with Safety*.



SciFinder® 2002 Offers New Enterprise-wide Information Solutions for Chemical, Pharmaceutical and Biomedical Research

Scientists in a variety of research fields will find new capabilities matching their interests in SciFinder 2002, the newest release of the award-winning desktop research tool from Chemical Abstracts Service (CAS). Among the most important additions are analysis features for stereochemistry, new links to synthetic chemistry information and reactions and current-awareness features for bioscience information. SciFinder 2002 is scheduled to become available this fall with an extensive array of new and improved features, including new analysis tools for stereo chemistry, experimental properties for over 825,000 substances, more reactions from 1907-1985 documents, new Panorama "pre -sets," and new "Keep Me Posted" and "Get Reference" features for sequences. More information about SciFinder can be found at <http://www.cas.org/SCIFINDER/scicover2.html>.

*California Los Padres Section
of the American Chemical Society*
Department of Chemistry and Biochemistry
University of California
Santa Barbara, CA 93106

NON-PROFIT
US POSTAGE
PAID
PERMIT NO. 510
SANTA BARBARA, CA