

Newsletter

Spring 2003

At a glance.....

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Upcoming Events 2003

- o Chemistry Olympiad
- o National Chemistry Week
- o Wine Tasting Holiday Event

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*Special acknowledgement to
Dr. Peter Ford for his
contribution to the Member
Profile*

Veeco Instruments Tour

The February CALPACS lunch meeting was held at the Camino Real Café, followed by a talk and tour of Veeco Instruments, Inc. in Goleta. Twenty-seven members attended. Dr. Craig Prater presented current development projects for the Scentris product line. These projects involved cantilever sensors with specific chemical coatings for the applications of explosives detection, medical diagnostics, aroma/flavor industry, DNA sequence detection, molecular film thickness, hazardous material detection and other "electronic nose" usage. The insightful event was very informative and fascinating.



Bob Neuman and William Quam



Cathy Stupak and Craig Prater

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Chemistry Olympiad

Seventeen students participated in the local exam. They represented four high schools: Cate, Santa Barbara High, Righetti High and North County Christian. The top students from these schools have been invited to take the national exams to be held on April 24 and 26.

Allan Nishimura, CALPACS Chair

Update on Undergraduate Research Symposium

The 2003 Southern California ACS Undergraduate Research Conference was held at California Lutheran University on April 12. Approximately seventy students and teachers participated in this annual event. The following colleges contributed high caliber research presentations, both oral and poster: Cal State LA, Fullerton, Long Beach, Dominguez Hills, Occidental, Cal Lutheran, Pomona, Mt. St. Mary, Westmont, Chapman, UCLA, UCR and USC. Henry Alegria, one of our executive committee members, was in charge, and did a great job!

Allan Nishimura, CALPACS Chair

CSI: Ventura!

The next CALPACS event will feature Dr. Renee Artmann, Forensic Sciences Laboratory Manager at the Ventura County Sheriff's Department Forensic Science Laboratory on Friday, May 23 at 6:00 p.m. at Cal State Channel Islands. There will be a light dinner following her talk. Dr. Phil Hampton will provide a campus tour for interested individuals. Watch for the flyers!

Allan Nishimura, CALPACS Chair

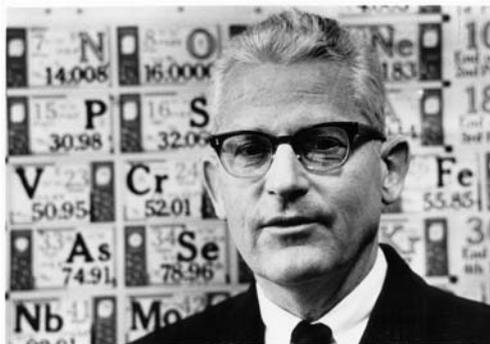
Patents — What Every Chemist Should Know

A new patent is granted every 3 minutes – 155,000 were granted by the U.S. government last year. The chemical sciences account for a significant portion of those patents. And for people in the chemical sciences, knowing how to register a patent or protect a patent is an important aspect of their professional skills.

Copies are available through the ACS Office of Society Services by calling 800-227-5558. The first copy is free, and additional copies are \$5 per copy. Bulk orders of more than 25 copies are \$3 each. The booklet is also available on the ACS Office of Legislative & Government Affairs Web site at <http://www.chemistry.org/government/patentprimer.pdf>



Member Profile



(ca. 1975)

Ralph G. Pearson

Hard and soft acids and bases principle. Need we say more? This spring, Dr. Ralph G. Pearson is the topic of our member profile. Dr. Pearson was born in Chicago Illinois in 1919 to parents who had emigrated from Sweden in 1905. His childhood was spent in Chicago and New York City where he attended public schools. He went to college at the Lewis Institute in Chicago where he earned a B.S. degree in 1940. He then attended graduate school at Northwestern University in Evanston IL and completed a Ph.D. in Physical Chemistry in 1943. After military service, he joined the Northwestern Faculty in 1946 and rose to the rank of Full Professor in 1957. In 1976, Dr. Pearson accepted a position in the Department of Chemistry of the University of California, Santa Barbara where he has remained since. In 1989, Dr. Pearson became Professor Emeritus at UCSB, but he continues to carry out research in theoretical studies to this day. During his tenure on the faculties of Northwestern and UC Santa Barbara, Dr. Pearson mentored a number of outstanding undergraduate, graduate and postdoctoral students who have gone on to distinguished careers in industrial and academic settings. He has published well over two hundred papers as well as a number of textbooks and monographs that have been very influential to the development of physical inorganic chemistry. Numerous collaborations with high-powered associates have led to a dynamic career. Honors accorded to Dr. Pearson include a Guggenheim Fellowship in 1951-52 while he spent a year at Oxford University and the Royal Institute of Technology in Sweden. He has also been awarded the Midwest Medal of the American Chemical Society (1966) and the ACS Award for Distinguished Service to Inorganic Chemistry (1970). In 1974, he was elected to the US National Academy of Science. His proudest achievement is his work on the HSAB principle. The big news more recently is that the Journal of the American Chemical Society (JACS) has listed two of Dr. Pearson's papers among the 125 most cited papers in JACS 125 year history (#13 and #124).

Timeline of Career Highlights

1919	Born in Chicago, Illinois
1940	B.S. from Lewis Institute, Chicago
1943	PhD. from Northwestern University
1946	Joined Northwestern University
1957	Full professor at Northwestern University
1976	Joined faculty at University of California, Santa Barbara
1989	Professor emeritus at University of California, Santa Barbara
1953	Published "Kinetics and Mechanisms" with A.A. Frost
1958, 1967	Published two editions of "Mechanisms of Inorganic Reactions" with Fred Basolo
1997	Published "Chemical Hardness, Applications from Molecules to Solids"
1951-1952	Guggenheim Fellowship
1963	Hard and Soft Acid and Bases principle was born [<i>JACS</i> , 85 , 3533, (1963)]
1966	ACS Midwest Medal recipient
1970	ACS Award for Distinguished Service to Inorganic Chemistry
1974	Elected to the Academy of Science
2003	Recognition that two papers are among the 125 most cited papers in JACS' history

Opportunities for You!

We are still accepting any leads you may have regarding an employment and/or equipment exchange. If you would like to contribute, please e-mail either advertisement to Ty at mtbceddy@worldnet.att.net. Deadlines for future submissions are as follows:

July 30 (Summer issue) July 10
October 30 (Fall issue) October 10

In the meantime, here is a list of websites to check out.

Websites to check out:
<http://www.CaliforniaCoasthelpwanted.com>
http://www.cen_chemjobs.org
<http://www.chemistryjobs.com>
<http://www.chejobs.com>
<http://www.chemsoc.org/careers.careers.htm>
<http://www.jobsspectrum.org>
<http://www.medzilla.com>
<http://www.monstertrak.com>
<http://www.nature.com/naturejobs>
<http://www.newscientistjobs.com>
<http://recruit.sciencemag.org>
<http://nextwave.sciencemag.org>
<http://www.sciencejobs.com>
<http://www.scijobs.com>

The American Chemical Society Offers Two Types of Continuing Education Courses Online

Instructor-Led Courses-ACS Webcast Short Courses

Now you can take an ACS Short Course at your desktop. Make your plans now to attend an ACS Webcast Short Course from the convenience of your office or home. These courses meet during scheduled times and are directly guided by expert instructors.

Webcast Short Courses scheduled for 2003:

- Interpretation of Mass Spectra
- Infrared Spectral Interpretation, I
- Effective Technical Writing

For more information visit <http://chemistry.org/elearning>.

Self-Paced Courses-ACS Internet Courses

Register in and start a course anytime. These courses are completely self-paced. Help from an instructor is available by e-mail.

ACS Internet Courses include:

- Basic Statistical Analysis of Laboratory Data
- **NEW!** *Chemical Laboratory Techniques*
- **NEW!** *Starting with Safety-An Introduction for the Academic Chemistry Laboratory*

To review a complete on-line catalog, visit the ACS Virtual Campus at <http://www.vcampus.com/acs>.

Need more information or don't see what you're looking for? Let us know what topics you would like for us to add by sending an e-mail message to c_gerson@acs.org.

New Green Chemistry Education Materials Available

Green chemistry is sometimes called preventive medicine for the environment. It is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. You can teach or learn more about green chemistry with relevant, stimulating, and hands-on materials from the ACS Education and International Activities Division.

A new lab manual for undergraduate chemistry, two beautiful poster designs, and a set of FREE introductory readings in green chemistry are now available. These products mark the conclusion of our cooperative agreement with the U.S. Environmental Protection Agency to develop materials that relate green chemistry to standard topics in the chemistry curriculum. Other products available from ACS include an introductory video, an activity book for introductory chemistry, green chemistry case studies, and a FREE searchable bibliography. Full descriptions of these products are available online at www.chemistry.org/education/greenchem, or contact us at 202-872-4523 or education@acs.org for more information.



Members in the headlines...

Alan Heeger and associates are working on developing a new plastic, a mix of polystyrene and a conducting polymer with applications to electronic components and oxygen-blocking food wrap. (*Santa Barbara NewsPress, April 6, 2003*)

Walter Kohn donates his collection of notes, articles, manuscripts, research documents and correspondence to the Special Collection Division at the UCSB library. (*Santa Barbara NewsPress, April 6, 2003*)

Galen Stucky and co-workers are developing a novel cell design targeting lower costs in the manufacture of photovoltaic devices. (*Chemical & Engineering News, February 10, 2003*)

Science and Engineering Council (SEC) hosted the High School Science Fair. An awards presentation for the winners was held on May 8 at the Elephant Bar.



2003 ChemComTeacher Training Workshops

ACS sponsors one-week, residential summer workshops for teachers using or intending to use ChemCom. Apply today for one of this summer's workshops, or pass this information along to a chemistry teacher. In each workshop, experienced ChemCom Teacher Leaders guide participants through the ChemCom text and provide hands-on experience with many of the laboratories, modeling exercises, and culminating activities. Participants are also introduced to the many ancillaries new to the most recent edition of ChemCom. Teachers using previous editions of ChemCom, or any other textbook, who intend to use ChemCom in the future, are also invited to apply. The locations and dates of the 2003 weeklong workshops are listed below.

- June 8-13, 2003, Dallas, TX
- July 6-11, 2003, Lake Forest, IL
- July 20-25, 2003, Lawrenceville, NJ
- August 3-8, 2003, Malibu, CA

ACS coordinates and pays for lodging, meals, and all workshop expenses during the workshop. Attendees arrange and pay for their own travel to and from the workshop site and pay a \$50 registration fee. Each workshop begins on a Sunday afternoon and is completed at noon on Friday.

In addition to the workshops listed above, this summer ACS will offer several three-day, non-residential workshops. These workshops will take place at locations around the country during June, July, and August. Participants will have many of the same experiences as in the weeklong workshops and will commute to the site each day. A \$50 registration fee is required and lunch is provided daily. If your organization is interested in hosting a three-day ChemCom workshop, please call 202-872-6383 or email chemcom@acs.org. The following three-day ChemCom workshops are currently scheduled:

- June 2-4, 2003, Jacksonville, FL
- June 23-25, 2003, Chatsworth, CA

The latest workshop information and workshop applications are available online at <http://chemistry.org/chemcom/workshops.html>

Revised Career Services Publications Now Available

Four popular, free ACS Department of Career Services publications have been updated recently and are now available. They include:

- *Employment Guide for Foreign-Born Chemists in the United States*, 2nd edition. The new version of this guide includes a section covering changes in U.S. immigration laws following the September 11, 2001 attacks.
- *The Interview Handbook*. This publication discusses the various techniques and skills needed for a successful interview. This updated edition discusses how cultural "fit" is an important criterion in how chemists are hired by U.S. employers.
- *Tips on Resume Preparation*. Readers of this text will find a discussion of the most successful types of resumes with samples of each. The new edition includes tips on marketing your resume in the electronic market.
- *Targeting the Job Market*. This publication focuses on several components of targeting the job market: personal assessment, identifying market trends, credentials, conducting research, and networking.

All four publications can be downloaded from <http://chemistry.org/careers> or by requesting them from ACS Office of Society Services at help@acs.org.

Legislative Action Network

Are you concerned about federally supported R&D? Are you concerned about the future of K-12 science education? If yes, then JOIN the ACS's Legislative Action Network (LAN) and let your concerns be heard.

The LAN gives ACS members an easy, effective way of providing sound, nonpartisan advice to elected officials. Participating LAN members will receive approximately six e-mail alerts per year prior to key congressional decisions. These alerts explore the issue's background, the potential effect it might have on the scientific enterprise, and the position ACS holds. By clicking on a link, members have direct access to the ACS Legislative Action Center where they can review action alerts, edit sample letters, and send them to their legislators within minutes. In addition, monthly e-mail news summaries keep members up-to-date on decisions being made in both the Congress and the White House.

You can sign up for the LAN online at chemistry.org/government/action. If you have any questions regarding the LAN, please contact Brad Smith in the ACS Office of Legislative and Government Affairs at 1-800-227-5558, extension 4479.



Cycling and Walking Tours in Europe



Imagine yourself in France. You're cycling along the beach in Normandy and Brittany, stopping in tiny harbor towns on your way to Omaha Beach and Mont St. Michel. Or perhaps you'll be walking in Provence, staying in exclusive Provencal villages and exploring the area's rich Roman and pre-Roman antiquities.

The choices don't end there; in fact, that's just the beginning. Because so many people are interested in active vacations, ACS is proud to offer members a 5 percent discount on more than 70 deluxe biking and walking tours with the leading company in active European travel, Euro-Bike and Walking Tours.

Here's a chance to travel on quiet traffic-free roads and pathways known only to the locals, visit Europe's most impressive sights and out-of-the-way treasures, taste fine wines from world-famous vineyards, stay in luxury hotels, dine on fine regional cuisine, and meet the locals. Traveling 25-35 miles per day on bike tours and 6-8 miles per day on walking tours, you'll be encouraged to go at a leisurely pace. There's plenty of time to walk under waterfalls, tour a cave with pre-historic paintings, or visit the colorful shops.

Best of all, the tours are fully supported, so all you need to do is enjoy yourself and let the experienced English-speaking guides transport your luggage and take care of the details. They'll also offer a lift in the van when you want one and provide you with information about the routes, towns, and sights along the way.

These exciting vacations are offered in 14 countries: Austria, Belgium, Denmark, England, France, Germany, Holland, Hungary, Ireland, Italy, Luxembourg, Sweden, Switzerland, and new this year the Czech Republic.

The company carefully researches each route to offer the best scenery, sightseeing, and local color available. Here's a sampling of their destinations: the Italian Lakes, Bavarian Alps, Islands of Scandinavia, Tuscany, southwest Ireland, Germany's Romantic Road, England's Cotswolds, Burgundy, Loire, and Alsace. All tours feature luxury accommodations and gourmet cuisine from the area. Travel through varying landscapes and terrain: each tour is rated from easy to challenging. People with varying levels of ability are welcome.

Euro-Bike and Walking Tours has been leading active vacations in Europe for 28 years, offering scheduled departures from April to October with specialty tours for beginners, singles and solos, private groups, and families. When you sign up, provide your ACS membership number, and all members of your party will receive 5 percent off the tour price.

For more information or a full-color tour catalog, contact **Euro-Bike and Walking Tours** at **1-800-321-6060**, fax **1-815-758-8822**, info@eurobike.com, or www.eurobike.com.

ACS Expeditions

ACS Expeditions, sponsored by Betchart Expeditions is offers great trips and learning experiences for the intelligent traveler. Our co-sponsorship with Betchart offers something very few travel programs can: trips to exotic places led by knowledgeable experts-naturalists, archeologist, or anthropologists-who can provide you with insights into your experiences.

The groups are small, so there is plenty of opportunity to ask questions and set your own pace for exploration. The locales are unique, not the standard tourist fare, for those who want to enjoy a once-in-a-lifetime experience rather than just a vacation. These trips are a treasure trove of memories and special moments. Betchart Expeditions has been leading vacationers to the less-traveled parts of the world for two decades.

For a detailed brochure and more information, contact **ACS/Betchart Expeditions** at **1-800-252-4910** or **1-408-252-4910**.



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