

Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

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Intel International Science and Engineering Fair (ISEF 2003)

The 2003 Intel International Science Fair www.sciserv.org/isef was held at the Cleveland, Ohio Convention Center on May 11-17. Over 1,200 high school students from around the world exhibited the science projects that have been the focus of their attention for the past several months. Over nine hundred twenty-five (925) science fair judges (the largest number ever) also traveled to Cleveland (most at their own personal expense) for this event. From the SCV section, Dr. Howard Peters was a grand award judge for part of the 60+ chemistry projects. Dr. Roy Okuda, a chemistry professor at San Jose State University, participated as a special awards judge for the American Society of Pharmacognosy.

The presenting students were finalized in many regional fairs and were treated to demonstrations, discussions, lectures, and visits to museums (Cleveland Science Center with 7,000 years of Chinese science and The Rock and Roll Hall of Fame) and award dinners.

Six Nobel laureates www.nobel.se were in attendance to address the student participants and later the judges: Dr. Jocelyn Bell Burnell (Physics, astronomy work on pulsars); Dr. Robert F. Curl (Chemistry 1996, discovery of buckyball chemistry); Dr. Dudley R. Hershbach (Chemistry 1986, how chemicals collide and react); Dr. Leon

M. Lederman (Physics 1988, the muon neutrino); Dr. Richard Roberts (Medicine 1993, split genes) and Dr. Carl E. Wieman (Physics 2001, Bose-Einstein Condensation Condensation in gases).

INTEL provides about \$3,000,000 in scholarships to the winners. Furthermore, many colleges, universities, government agencies, and organizations provide special scholarships awards totaling about \$1,500,000. The three top students for their projects (Best of Show) each received a \$50,000 scholarship and a trip in December to the Nobel Prize award presentation in Stockholm, Sweden.

The 2004 ISEF will be held in Portland, Oregon for May 12-18. Please consider volunteering as a chemistry/biochemistry judge. The 2005 ISEF is planned for Phoenix, Arizona for May 13-19. There is a rumor that the 2008 ISEF will be in Sacramento and the 2010 ISEF will return to San Jose.



Howard Peters and Roy Okuda during the ISEF judging in Cleveland.

Chair's Message

For the last five months, Ean Warren, SCV-ACS Finance Committee Chair, has been investigating strategies to reduce our budget deficit of approximately \$15,000 for fiscal 2003. The reasons for this deficit are the anticipated reduced employment listings in "Chemployment" ads as well as the increased dinner meeting and monthly newsletter expenses. One possible strategy to reduce our deficit is, in lieu of sending paper copies of our newsletter to every member, to post our monthly newsletter on our SCV-ACS web site and then notify members of this posting via e-mail. Ean calculated that if 50% of the approximately 3,500 section members received only these notifications and not the paper copy, the monthly savings in printing and mailing costs would be about \$1,000 (yearly savings would be \$12,000) and if 75% received these notifications, the monthly savings would be about \$1,500 (yearly savings would be \$18,000). For your information, our current newsletter budget (layout, printing, mailing and postage) is approximately \$39,000 a year.

The Executive Committee would like to know how many SCV-ACS members would prefer to access their newsletter via the web or to receive a paper copy in the mail. Along with the 2004 SCV-ACS ballot in the September 2003 newsletter, a simple survey will be included for members

continued on next page

Chair's Message, continued from front page

to indicate their preference. Ean is also investigating the feasibility of managing and updating an electronic newsletter mailing list. I thank him for all his efforts in investigating this issue for the section. If you have any comments on our projected deficit, please e-mail me at chair@scvacs.org. Also, if you would like to receive an e-mail when the newsletter is published on our web site, please send an e-mail to: SCVACS-newsletters-subscribe@yahoo.com.

Other notes of interest:

Our SCV-ACS Newsletter Editor, Laura Jarvis, has just been accepted to the ACS Younger Chemist Committee (YCC) Leadership Workshop that will be held in New Orleans in November

2003. Congratulations, Laura!

Dr. Carolyn Bertozzi has graciously sent me her PowerPoint presentation from her wonderful May 2003 dinner meeting presentation. If you would like to download her slide presentation, it can be found on the SCV-ACS home page.

Glowstick update: To date, over 700 glowsticks have been distributed to pre-K to high school classrooms throughout Santa Clara Valley. One of our members, Dr. Vic Althouse, has described his adaptation of the glowstick lesson plan for his daughter's kindergarten class. We have posted this activity on our website at the end of the glowstick lesson plan.

Enjoy the summer!

2003 Radding Award

– Dr. Jean'ne M. Shreeve –

This year's recipient of the Shirley B. Radding Award is Dr. Jean'ne M. Shreeve. She received her B.A. in Chemistry from the University of Montana, M.S. from the University of Minnesota and Ph. D. from University of Washington with G.H. Cady. She is presently Professor of Chemistry at the University of Idaho after serving over twelve years as Vice-President for Research and Graduate Studies from 1987 to 1999, in addition to being Professor of Chemistry. Dr. Shreeve has over 340 refereed publications and a U.S. patent.

Dr. Shreeve is a fifty-year member of the ACS who has served in her local section (the Washington-Idaho Border Section) as Chair twice (1966-67 and 1972-73); as Chairman of the Inorganic Division of the Regional ACS Meeting; as Chair of the Fluorine Division; Councilor of both the Fluorine and Inorganic Divisions; and as a member of the ACS Board of Directors from Region VI. She has also been a member of the PRF Advisory Board and served on several National ACS committees including: Women's Chemists, Council Policy Committee, Committee on Science, and Budget and Finance Committee, among others.

Since 1987, she has been the Project Director for the Idaho State Committee on EPSCoR [Experimental Program to Stimulate Cooperative Research] and she currently chairs President Bush's Committee on the National Medal of Science. She has been active in the AAAS serving on that Board of Directors from 1991 to 1995. Dr. Shreeve received the Harry and Carol Mosher Award in 1991.



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View From The Board

Stanley Pine, ACS Director - District VI

Continuing my goal of communicating with the members, I want to bring you up to date on some of the major issues that were considered at the national meeting in New Orleans. I will try to keep you informed and ask that you do the same for me. You may also want to look at my web site, www.stanleypine.org.

2004 Dues – Following the bylaw guidelines for dues increases based on the consumer price index, the council voted to increase the 2004 dues by \$4 to a total of \$120.

Strategic Planning and Society Finances- The Board will develop a new strategic plan during 2003. It has been the custom every three years to review the existing plan (you can find this on the ACS website) and to modify as appropriate the society's direction for the next three year period. Since our strategic financial management bases spending priorities on the goals of the strategic plan, this becomes a particularly important document in our tight financial times. We would value your input!

Homeland Security and National Defense – Issues related to security were touched upon in essentially every committee meeting I attended.

It should not be surprising to those of us in the Chemical Sciences to find that there could be security implications to many of the things that we are involved in. And there is considerable discussion of the synergy that could result in several seemingly innocuous bits of data, when combined, leading to information of strategic importance. The editors of the ACS and related scientific journals are actively discussing how to best maintain the free flow of scientific information without jeopardizing national security interests. It's not an easy issue.

Executive Director – The search for a new executive director is underway. A national search firm has been retained to work with the Board. We solicit your suggestions. A web site will be established within www.chemistry.org to assist in this process.

Western Regional Meeting – Just another reminder that this year the Western Regional Meeting in will be in Long Beach, California, (October 15-17). I hope that you will consider participating in at least one of these.

Log on to www.chemistry.org for the broadest connection to ACS and its services.

2003 Chemistry Olympiad

This year's Chemistry Olympiad is over except for the announcement of the qualifying students. The section had nine high schools (five public and four private) and 72 students participating in this event. The teachers administered and graded the national exam at their high school in early April. Spring break created the normal difficulty for notifying the students who were eligible to represent us at the next level of exams. On Saturday, April 26th, five nervous but excited chemistry students found their way to Daly Science Hall at Santa Clara University. Interestingly enough, the California section, which participates with us in this level of competition, also only had five students attend. We had quite a range of experience, as three students were sophomores and two were seniors.

The students were faced with a difficult day. The morning was filled with 90 minutes of multiple-choice questions and 110 minutes of word problems. There was a much needed break for lunch, then 90 more minutes in the laboratory analyzing unknowns.

Many thanks go to Linda Brunauer for hosting us at Santa Clara University and her work in setting up the laboratory section of the exam. Thank you to Jamil Talhouk, Jack Riley, and Howard Peters for giving up a Saturday in April to help out.

This year, we aided assisted the Orange County section by administering the test to one of their finalists who was in the Bay Area visiting Stanford University.

The finalists' international representation of our valley was noticeable. Four of our finalists were not able to participate at the next level because of their citizenship status. The international rules state that the student must compete for the country in which they are citizens and these students unfortunately did not have their U.S. citizenship. Their teachers knew the rules, but did not stress this with their students.

As is typical of teenagers, when they were asked for opinions at the

end-of-the-day evaluation, the best part of the day was THE FOOD!

Editor's Corner Confusion and Apologies

Hopefully, everyone has July ready for summer to start. It seems that the weather has been short of it! Anyhow, if you're like me I am sure you are ready for some warmer and sunnier days!

Apparently, there seems to have been some confusion in the last newsletter issue in the calendar and with the article for the Chemistry Olympiad. If they looked familiar, they were published last year at this time. I sincerely apologize for these mistakes. I assure you that this month's issue has been corrected and is current.

Please feel free to contact me if you have any questions, concerns, or comments.

SCV-ACS Nominations

2003 Petition Candidates

Petition candidates can be nominated by the membership. Offices are: Chair-Elect, Secretary, Treasurer, Councilor, and Alternate Councilor.

The requirements are:

- Member (grade) of SCV Section
- Agreement to run for the office
- Agreement to attend Executive Committee meetings
- Signatures of 15 members (member grade) of the SCV Section
- Petitions along with a brief biography and statement must be received by August 1, 2003.

Mail nominations to:

Dr. Karl Marhenke
1710 Wilshire Drive
Aptos, CA 95003-2836

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History of the Division of Analytical Chemistry

From the original writings of Galen W. Ewing and Theodore Williams

Updated by Al Ribes and Roland Hirsch

A history of the first twenty years of the Division can be found in Analytical Chemistry, Volume 31, Number 4, page 17A, 1959, and references cited therein. Also "A History of Analytical Chemistry", edited by H. A. Laitinen and G. W. Ewing, published during the ACS Centennial (1976) chronicles the history of modern analytical chemistry.

For several years, papers on analytical chemistry were presented at ACS national meetings through the Analytical Section of the Division of Physical and Inorganic Chemistry. This was manageable until a monograph by Fritz Pregl on quantitative organic microanalysis sparked a significant increase in analytical contributions. The differentiation started as early as September 1935, when a symposium on Microchemistry was organized, filling a half-day session.

It wasn't until the autumn of 1940 and after much discussion that the Division name was changed to the Division of Analytical and Microchemistry. In 1949, the name of the Division was changed to its present-day name, the Division of Analytical Chemistry (ANAL), to reflect that the field had broadened to such an extent that microchemistry was only one of a number of disciplines represented in the continually growing field of Analytical Chemistry.

The Subdivision of Chromatography and Separation Chemistry was created in 1984. The main objectives were to sponsor symposia on the above-related fields and to increase the professional contacts between practitioners. Some feared that the creation of one Subdivision would lead eventually to many others and to the fragmentation of the Division. Others saw a possibility of chromatographers leaving the Division if a Subdivision was not authorized. As it has turned out, the Subdivision thrives within the Division with a current membership of over eleven hundred. And since 1996 the newsletter of the Subdivision is being published as a section of the DAC newsletter, reaching out to the whole membership of DAC, which numbers 11,000 strong.

ANYL offers a wide-variety of

achievement awards. To name a few, there is the ACS Award in Chromatography, the Frank H. Field and Joe L. Franklin Award for Outstanding Achievement in Mass Spectrometry, Award for Excellence in Teaching, and the Arthur F. Findeis Award for Achievements by a Young Analytical Scientist. To develop new researchers in the Analytical Chemistry field, there are established achievement and travel grant programs for graduate students as well as undergraduate students. In addition to these programs, undergraduate students have a summer internship program.

The rich history has provided the

ANAL division the opportunities to cooperate with other groups. A few of those groups are the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) and the Eastern Analytical Symposium. The international scope of analytical chemistry and the common interests shared with colleagues in other countries has led the Division to take active roles in international meetings.

As we reflect about and pay our respects to the many workers who laid the foundations and built the structure that has brought the Division to its present estate of activity and service, we must consider the challenges of tomorrow. The future of the Division depends on our members for support and guidance. Get involved! The sense of accomplishment and satisfaction you get in return are significant and guaranteed. Visit the Analytical Chemistry website for more information www.acs-analytical.duq.edu.



Plans Underway for 2003 Fall Regional Meetings

The ACS Fall Regional Meetings have issued their "Call for Papers" (C&EN, June 9 issue). The online abstracts opened in June for most of the meetings and mid-July for SERMACS. To submit an abstract, go to www.acs.org/meetings/regional and click on the meeting you plan to attend. That will take you to the website of that meeting, where you will be able to enter the online website to submit your paper. Please note that the information you enter is confidential and is only used by the meeting committee to contact you. Your contact information is not used for any other purpose.

Advance registration for the meetings opens in mid-July for the five meetings. You can register online at the chemistry.org website, and take advantage of the lower rates offered for early registration.

The meetings this fall include the Western Regional Meeting in Long Beach, California, October 15 – 18; the Central Regional Meeting in Pittsburgh, Pennsylvania, October 19 – 22; the Southwest Regional Meeting in Oklahoma City, Oklahoma, October 26 – 28; the Midwest Regional Meeting in Columbia, Missouri, November 5 - 7; and the Southwest Regional Meeting in Atlanta, Georgia, November 16 – 19. All offer exciting and eclectic programs not to be missed.

Good chemistry continues at regional meetings. Join your colleagues for topnotch technical programming, an opportunity to network, within driving distance for most, at an economical cost.

CHEMPLOYMENT ABSTRACTS 3724

Position Title: Chemical Technician/Scientist

Job Description: Support proteomics-related R&D & prod manfg efforts, ranging from routine to discovery-focused. Profiles include: BIO-ANALYTICAL exp in protein seps & sequencing, using gel capillary electrophoresis & mass spect tech; ORGANIC CHEM, exp in small mol synthesis & protein labeling.

QUALIFICATIONS DESIRED

Education: Relevant Science BS degree
Experience: sample & buffer prep, use of sterile tech, GLP or GMP exp with lab notebook maintenance, spectroscopy, HPLC chromatog, mass spect (ESI-TOF & MALDI), protein chem, familiarity with general lab equip, computer (instrumentation interfaces, Office, Kaleidograph, etc.) Ability with scientific math & statistics.

LOCATION, SALARY, MAIL ADDRESS

Location: Palo Alto
Description of Employer: TDI is a "Discovery Biology" platform technology company

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 4015 Fabian Way, Palo Alto, CA 94303
 650-812-8120
 650-812-8130 FAX
 Info@targetdiscovery.com
 Visit our website at www.targetdiscovery.com

Patent Truths

There will be no Patent Truths column this month. For about the past year, we have carried a new column Patent Truths written by member Howard Peters. Last month's issue also carried a request of the SCV membership for more feed back if the column was really of interest. At the time of this issue going to press and out of the 3,600 members of SCV, there has been a ground-swell of 9 responses to the request at peters4pa@aol.com. If you were not one of the interested nine, then you still have time to comment - but hurry.

New Chemistry Education Minor

In the new edition of the ACS guidelines for ACS-approved programs a new chemistry education minor was introduced, as were revised requirements for the chemistry education option. The new guidelines and application forms for the minor and the chemistry education option are now available from the Office of Professional Training by calling 202-872-4589 or emailing cpt@acs.org.



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JULY 2003 NEWSLETTER TOPICS:

Intel International Science and Engineering Fair (ISEF 2003)
Chair's Message
View From The Board
2003 Radding Award
2003 Chemistry Olympiad
SCV-ACS Nominations
Editor's Corner
History of the Division of Analytical Chemistry
Plans Underway for 2003 Fall Regional Meetings
Patent Truths
New Chemistry Education Minor

CHEMPLOYMENT ABSTRACTS



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FUTURE MEETINGS

Aug 6	Open Executive Committee Meeting
Sep 7-12	ACS National Meeting New York City
Sep 21-24	Combinatorial Chemistry ACS ProSpectives Leesburg, VA
Sep 25	SCV Dinner Meeting Dr. Ken Carter Material Science
Oct 15-18	Western Regional Meeting Long Beach, CA
Nov (TBD)	SCV Dinner Meeting Dr. Karl Marhenke
Nov 9-12	Preteomics and Genomics ACS ProSpectives Leesburg, VA

For the latest information, please visit
SCV/ACS web site: www.scvacs.org



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