

# Silicon Valley Chemist

Santa Clara Valley Section

American Chemical Society

Volume 21 No. 1

## 1998 Mosher Award Address

*Dr. Glenn A. Crosby*

Professor of Chemistry and Materials Science, Washington State University

### An Outline of Educational Rubbish

#### Abstract

Webster's Dictionary defines a fad as "a custom, hobby, style, etc. adopted and pursued by many people for a time with undue zeal". Fads range from the truly inspired to the incredibly ridiculous.



spectroscopy of inorganic complexes and solids and for his educational programs for teachers and students. He has received numerous honors for both his research and educational activities, including the CMA Catalyst Award,

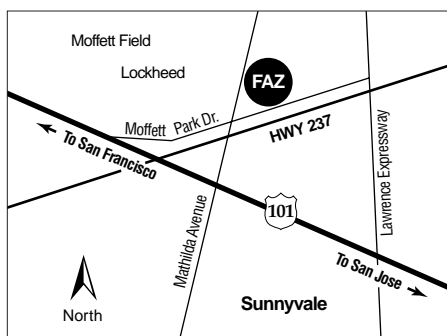
the ACS Award for Education in

*continued on next page*

They infect many groups, variously defined by age, race, profession, political leanings or what not. Fads usually do not last long enough to inflict genuine damage – except in the field of education. Education is almost unique in its propensity for the propagation of fads, for the length of time they remain in vogue, and for the extent of their damage. Moreover, in the field of education fads often come in the guise of policy statements festooned with practical justifications and pontifically proclaimed theoretical rationales. Drawing on over forty years of experience in public education, the author will discuss educational fads, past, present and likely in the future, employing examples from the literature and personal experience.

#### Biography

Dr. Glenn A. Crosby, Professor of Chemistry and Materials Science at Washington State University. A graduate of Waynesburg College, Crosby is nationally and internationally recognized for his research in the field of molecular electronic



### Chairman's Message

I hope that all of you had a happy holiday season. This is my first time that I had the privilege of addressing you as the Chairman of the Santa Clara section. I would like to thank all of you for giving the honor to serve you for this year. With this honor comes responsibilities. My promise to you is to meet these responsibilities and make this section a leader in the American Chemical Society.

The strength of any organization can be measured by the collective cooperation and efforts of all the members working together toward the same goal. We have several national and local programs for this year. First, for this year only, the National Chemistry Week is replaced with the International Chemistry Celebration year. As the title indicates, it is going to emphasize on cooperation and camaraderie among chemists world-wide. The themes will be colors and polymers. We will be planning programs and events for this occasion and we will be asking for your ideas and input.

*continued on page 4*

## January Dinner Meeting

**Date:** Thursday, January 21

**Place:** FAZ Restaurant  
1108 N. Mathilda Avenue  
Sunnyvale

#### Schedule:

6 PM Reception

7 PM Dinner (\$25.00)

8 PM Presentation

*"An Outline of Education Rubbish"*  
by Dr. Glenn A. Crosby

#### Reservations:

**Shirley Radding** (408) 246-2564  
e-mail: sradding@att.net

**Sally Peters** (650) 854-4614

Smoked pork chops with apple sauce, Spit roasted one-half chicken, or Vegetarian ravioli

Dinner reservations  
are required by  
**Monday, January 18**

*Mosher Award, continued from front page*

1985 and the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry in 1986. Washington State University has honored him three times: for research (Distinguished Faculty Address, 1981), for education (President's Excellence Award in Instruction, 1984), and for public service (President's Excellence Award for Public Service, 1989). Recently he was honored by his alma mater, Waynesburg College, with its most prestigious award, the Presidential Medallion for lifetime achievement.

An expanded biography of Dr. Crosby was printed in our August Issue.

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***LITERATURE SEARCHES***

## The Harry and Carol Mosher Award

The award was established in 1980 by the Santa Clara Valley Section of ACS to: (1) recognize and encourage outstanding work in chemistry; (2) advance chemistry as a profession; (3) recognize service to ACS. The award is named for Dr. Harry S. Mosher of Stanford University, Palo Alto, California, and Dr. Carol W. Mosher of SRI, Menlo Park, California, husband and wife, charter members and long-time supporters of this section.

The first scientists to receive this award were Doctors Harry and Carol Mosher in recognition of the inspiration of their example. The committee noted that the Moshers, including a brother, Dr. William A. Mosher, also a chemist and former Chairman of the Department of Chemistry at the University of Delaware, are outstanding examples of the qualities to be recognized and honored by this award.

Any scientist residing in the United States who is a member of the ACS is eligible to be nominated for the Mosher Award. Five copies of the nomination, including printed materials (reprints) should be furnished for distribution to the award Selection Committee. The nomination and its accompanying material must be sent to the Award committee by May 15: Chairman of

the Mosher Award Committee, American Chemical Society, P.O. Santa Clara Valley Section - Box 395, Palo Alto, California 94302.

### PAST RECIPIENTS OF THE MOSHER AWARD

1980	<i>Harry and Carol Mosher</i>	<i>Stanford Univ. &amp; SRI International</i>
1981	<i>Robert C. Brasted</i>	<i>University of Minnesota</i>
1982	<i>Ernest L. Eliel</i>	<i>University of North Carolina</i>
1983	<i>Alfred and Helen Free</i>	<i>Miles Laboratories</i>
1984	<i>Albert C. Zettlemoyer</i>	<i>Lehigh University</i>
1985	<i>Malcolm Renfrew</i>	<i>University of Idaho</i>
1986	<i>Robert and Gloria Lyle</i>	<i>Southwest Research Institute &amp; UTSA</i>
1987	<i>John G. Verkade</i>	<i>Iowa State University</i>
1988	<i>Richard M. Lemmon</i>	<i>Lawrence Berkeley Laboratory, UCB</i>
1989	<i>Arthur W. Adamson</i>	<i>University of Southern California</i>
1990	<i>Fred Basolo</i>	<i>Northwestern University</i>
1991	<i>Jean'ne M. Shreeve</i>	<i>University of Idaho</i>
1992	<i>Carl R. Johnson</i>	<i>Wayne State University</i>
1993	<i>Koji Nakanishi</i>	<i>Columbia University</i>
1994	<i>Peter Beak</i>	<i>University of Illinois</i>
1995	<i>Ned D. Heindel</i>	<i>Lehigh University</i>
1996	<i>Joginder Lal</i>	<i>Goodyear Tire and Rubber Company</i>
1997	<i>Joseph A. Dixon</i>	<i>Pennsylvania State University</i>

# National Chemistry Week, 1998

## Santa Clara Valley Section

National Chemistry Week (NCW) was celebrated in the Santa Clara Valley Section with a wide variety of activities. The NCW celebration was made successful with the help of 60 dedicated volunteers. NCW was recognized with proclamations from mayors of area cities including Palo Alto, Los Altos, Sunnyvale, and Santa Clara.

We began our celebration on October 31 with some hands-on experiments at a soccer field where six games were in progress throughout the day. We set up an outdoor booth where children could mix a polyvinyl alcohol solution with a sodium borate solution to produce a thick and gooey polymer, slime. More than 500 kids visited our booth. The children and adults alike had a good time, and in so doing were exposed to chemistry and the ACS in a positive light.

We had a large number of volunteers for the soccer field event, including some professors and students from Stanford and Santa Clara University chemistry departments. The following quote from one of the volunteers sums up the event nicely: "I was really impressed by the whole operation. Although I initially had doubts about whether or not the kids would be interested, especially set against the soccer background, my



Soccer Field: volunteers getting ready for kids chemistry event

projection was proven completely wrong as we had hundreds of eager scientists rush the tent between games. The actual experiment was also well chosen; it was easy, quick, and colorful, yet still applied some basic chemical concepts to discuss with the kids. The tent was well worth the effort, and the balloons, food, and Halloween decorations added a professional touch. Overall, I had a terrific time."

The following volunteers made the soccer day event a great success: Jonathan Touster, Sangeeta Tiwari, Linda Brunauer, Anil Tiwari, Brenda Waller, Bernie Aitchison, Bonnie Charpentier, Ankur Nagaraja, Lisa Yiu, Beth Appleman, Simonette Jones, Nalini Calamur, Benjamin Staehlin, Jessica Chow, Vipin Narang, Pete Sclafani, Laura Crowley, Mimi Jobes, Carmen Rodriguez, Lois Durham, Peter Rusch, Ean Warren, William Penohist, Loi Kha, Tono Estradu, and Barry Elledge.

Volunteers from San Jose State University chemistry department



San Jose State University students at the Tech Museum booth demonstrating chemistry activities

set up a booth on October 31 and November 1, 1998 during the opening celebration of the new San Jose Tech museum. In this event the fun and excitement of doing chemistry as well as its impact on technology was shown to over 1000 people

who visited the booth. Three chemistry demonstrations were presented: 1) levitating magnet on a superconductor, 2) making slime and superballs, and 3) computer modeling of molecules. San Jose State University Professors and students worked hard and did a wonderful job in organizing this event. Our special thanks to Dr. Paul Wagenknect for making this event possible. We acknowledge the participation of following volunteers: Robert Jackson, Bich Thanh Le, Tommy Chang, Alma Guerrero, Meguel Vardu, Thanh thao Le, Deborah Moore, Kristina Mulyono, Grace Monis, Joy Nguyen, Edward Tzuang, Khoi Nguyen, Angela Bolger, Hieu Van, Aarti Kuver, Nastaran Ghajari, Alex Calvillo, Karen Pontius, Samantha Mirands, Dr. Wagenknect, Dr. Kesler, Dr. Djurovich, Dr. Collins, Dr. Terrill, Dr. Okuda, and Dr. Chin. We also thank Dr. Herb Silber for his support.

We set up a table at the children's library in Palo Alto with some children's chemistry books and other chemistry fun items during the NCW. We also provided a subscription for WonderScience to the library. We acknowledge help from the Children's library staff in organizing this event.

A workshop for teachers sponsored by Roche Palo Alto was held on Saturday, November 7.

At all these events we gave away copies of Chem Matters and WonderScience to the kids and teachers. We also distributed these publications to various schools in the Palo Alto School District. We provided career materials to Stanford, Santa Clara and San Jose University students to help them

*continued on next page*

*National Chemistry Week, continued from previous page*

with resume writing and interview skills and also on options for careers in chemistry. Overall, it was an active, fun week with a lot of chemistry. Our thanks to Roche Bioscience, Dr. Paul Cook of the Stanford Research Institute, and Hobe's Restaurants for their generous donations which made the celebration of NCW possible in the Santa Clara Valley Section.



*Kids enjoying making slime at the soccer field*

## *Editor's Corner*

Reach Out and Touch Someone?

This month I would like to highlight the SETI@Home project at <http://setiathome.ssl.berkeley.edu/>. The purpose of this web site is to get your help in the search for extraterrestrial intelligence! Software is being developed that will use thousands of personal computers to sift through the terabytes of data that is being collected from radio-telescopes. The search will take place as part of a screen saver so the process will not slow your computer down. Visit the site to sign up.

You just might be the one that makes the first contact...

*Chairman's Message, continued from front page*

Second, this year the American Chemical Society is focusing on California for a State Capital Day. The Office of Legislators and Government Affairs (OLGA) has designated April 28, 1999 as ACS California State Capital Day. On this day, chemists will be visiting Sacramento and meeting with our government leaders and Chairs of key legislative committees and the local members of the legislators. This occasion will give us the opportunity to discuss with our leaders issues like environment, education, regulations, trade and other issues that concern us both as Californians and chemists. A luncheon will be arranged by the ACS and an invitation to the Governor to be a key-note speaker will be extended. The Santa Clara section will be arranging the transportation. We would like from you to keep the day of April 28, 1999 open on your calendars, sign up early for the trip and give us your feedback on issues you would like to see addressed.

For local activities, we would like to remind you that we have several committees addressing specific interests such as: Analytical chemists groups, medicinal and biotechnology group, retired chemists group, Women in Chemistry group, Chemistry Olympiad committee, Kids-in-Chemistry, National Chemistry Week (this year will be International Chemistry Celebration), and MTBE group affiliate. We are also planning new committees such as: Chemistry Teachers committee and Industrial Relations committee. Our aim is to provide you with different venues for your participation. To sign up you may either con-

tact me, or you may sign up at the registration tables for the Mosher Award evening dinner.

We always try to provide you with monthly dinner programs which address interesting topics. This year is no exception. The Mosher Award is the most prestigious award that our section offers. I would like to encourage your participation on January 21, 1999, where we will be able to hear Dr. Glenn Crosby's address, which we expect to be very interesting. If you have any preference for an activity or a topic to be addressed, please contact me, or any member of the executive committee.

I will be looking forward to seeing you at the reception of the Mosher Award dinner and to listen to your suggestions and concerns.

*Happier  
New Year*

*David W. Rabuck*

# Teacher Workshop was Finale of National Chemistry Week Celebration

A workshop for teachers sponsored by Roche Palo Alto and The Santa Clara Valley Section of American Chemical Society was held on Saturday, November 7, as the last event in our National Chemistry Week celebration. Elementary and middle school teachers from the five counties covered by the Section were invited; teachers from some 55 schools attended. The teachers participated in hands-on experiments and listened to presentations by teacher/instructors Juanita Ryan, Julie Shultz, Cheryl Connolly, and Gail Chaid. The focus of the workshop was the chemistry of color and included topics ranging from the chemistry of color change markers, cabbage and tie-dye to rainbows and astronomy. Morning refreshments and lunch were included in the workshop to provide opportunities for further discussions and interactions. Teachers also heard a presentation on drug development from Dr. Joyce Filppi, Site Head for Roche Global Development Palo Alto, and partici-

ated in laboratory tours hosted by Roche scientists. Teachers received the materials needed to carry out workshop experiments in their classrooms, other gifts and educational materials, and subscriptions to WonderScience or Chem Matters (depending on grade level). A generous grant from Roche allowed us to provide the workshop and all materials at no charge to teachers. Thanks go to Roche for funding, to the instructors mentioned above who took so much time and energy to prepare and present wonderful activities, and to the volunteers from Roche and from the Section who gave generously of their time and effort to make the workshop possible. Volunteers included Sangeeta Tiwari, Jamil Talhouk, Carmen Rodriguez, Karen Ramsay, Steve Smith, Mike Maddox, Gary Hedden, Barbara Murphy-Wesley, Shavonne Wilson, Joyce Filppi, Chris Conroy, Bonnie Charpentier, and Alexander, Austin, and Barry Elledge.



*Teachers listen to introduction by Bonnie Carpentier*



*Banner welcoming teachers to the workshop*



*Teachers concentrate during workshop experiments*



*Workshop participants performing experiments*



*Teacher experimenting with the chemistry of tie-dye*



*Teachers gather materials to take back to their classrooms*

## **FREE Bioscience/Technical Job Fairs**

*for all BS, MS and PhD level job seekers*

*January 11 11:00AM - 6:00PM*

### **Marriott Hotel**

55 Fourth Street, San Francisco

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*January 20 11:00AM - 6:00PM*

### **Westin Hotel**

5101 Great America Pkwy, Santa Clara

Bring plenty of resumes for your on-the-spot interviews.  
Sponsored by Life Science Assoc./Lendman Group West.

**e-mail: [resume@cejobfair.com](mailto:resume@cejobfair.com)**

**Website: [www.bayareajobfair.com](http://www.bayareajobfair.com)**

**Telephone: 510-436-3976**





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**JANUARY 1999 NEWSLETTER TOPICS:**

- 1998 Mosher Award Address
- Chairman's Message
- January Dinner Meeting
- The Harry and Carol Mosher Award
- Past Recipients of the Mosher Award
- National Chemistry Week, Santa Clara Valley Section
- Teacher Workshop was Finale of NCW Celebration
- Editor's Corner

*Time Value!*

**CHEMPLOYMENT ABSTRACTS**



<http://www.scvacs.org>

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Treasurer	Hong Gao	650-494-5197
Past-Chair	Herb Silber	408-924-4954

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1998-00	Linda Brunauer	408-554-6947
1997-99	Carol Mosher	650-322-3120
1997-99	Maureen Scharberg	408-924-4966
1999-01	Bonnie Charpentier	650-354-2344
1999-01	Herb Silber	408-924-4954

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1997-99	Jamil Talhouk	510-449-2664
1999-01	Jonathan Touster	650-723-4340
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**FUTURE MEETINGS**

<b>Jan 6</b>	Executive Committee Meeting
<b>Jan 21</b>	Mosher Award
<b>Feb 18</b>	SCV Dinner Meeting "Conference on MTBE"
<b>Mar 18</b>	SCV Dinner Meeting "Use of Gas Plasma in the Polymer Industry" Stephen Kaplan
<b>May 20</b>	Student Affiliates Stanford University

For the latest information, please visit the  
 SCVACS Web Site: <http://www.scvacs.org>

**CHEMPLOYMENT ABSTRACTS**

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