

# PUGET SOUND CHEMIST

BULLETIN OF THE PUGET SOUND SECTION OF THE AMERICAN CHEMICAL SOCIETY

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## Thomas Greenbowe discusses chemistry computer animation

Dr. Thomas J Greenbowe of Iowa State University will speak on "Improving Conceptual Understanding in Chemistry Through Computer Animations and Simulations" at the April meeting of the Puget Sound Section, ACS. The talk will be at the University of Washington in the new Chemistry Building, room CHB 102, at 7:00 p.m. on Tuesday, April 21.

His seminar will focus on his chemical education research efforts, trying to answer such questions as "What factors are important for students to be successful in learning chemistry?" and "How can instructional technology be used to facilitate teaching and learning?"

These two questions

(please see page 5)

**Who:** Dr. Thomas J Greenbowe (Iowa State University)

**What:** "Improving Conceptual Understanding in Chemistry Through Computer Animations and Simulations"

**Where:** University of Washington in the Chemistry Building, room CHB 102

**When:** Tuesday, April 21 at 7:00 p.m. (Dinner 6:15 p.m)

**How much for dinner:** \$10. Please make reservations by Friday, April 17. You may call Toni Curtis at the Division of Natural Sciences, Pacific Lutheran University at (253) 535-7530, or you can e-mail a reservation at [fryhle@rainier.chem.plu.edu](mailto:fryhle@rainier.chem.plu.edu). Please specify a choice of one of the following:

- Roasted turkey /havarti sandwich
- Black forest ham /havarti sandwich
- Pasta salad — turkey salami, olive, mozzarella and fusilli with lemon-rosemary dressing.



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THE BULLETIN OF THE PUGET SOUND  
SECTION, AMERICAN CHEMICAL SOCIETY



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## Puget Sound Section ACS Executive Committee Future Meetings in 1998

Meetings are open to all members and are held at 6:30 p.m. on the second Wednesday of each month in room 2430C (above the bookstore) at North Seattle Community College, 9600 College Way North in Seattle (across I-5 from Northgate Mall). The next meeting will be Wednesday, April 8.



# Hey! Submit papers to the SPU Undergraduate Research Symposium

This is the first call for papers to the 1998 Undergraduate Research Symposium of the Puget Sound Section of the American Chemical Society. The Symposium will be held Saturday, May 2, in the Miller Science Learning Center at Seattle Pacific University, beginning at 8:15 a.m..

Students who are doing undergraduate research projects are encouraged to present papers; students who are contemplating research in chemistry are encouraged to attend in order to discover what research is occurring in the Puget Sound Section. A panel of faculty judges will present two awards from the Section: one for best research, and one for best presentation.

The time format, in general, will be 15 minutes for the presentation with an additional five minutes for questions and answers. We will have available overhead projectors, slide projectors, computer projection capabilities, and, of course, chalk boards. Box lunches can be reserved for \$7.50; please make reservations by April 22.

For further information, please contact Lyle Peter in the Department of Chemistry at SPU at (206) 281-2103 or at [lpeter@spu.edu](mailto:lpeter@spu.edu). Abstracts (no more than 300 words), including the title, authors, affiliation and address of the authors and e-mail address, should be received by Lyle Peter by e-mail at [lpeter@spu.edu](mailto:lpeter@spu.edu) or by fax at (206) 281-2882 or by mail at the Department of Chemistry, Seattle Pacific University, Seattle, WA 98119, by 5 p.m. on April 17.

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## AN EDITORIAL COMMENT

Chair-elect Craig Fryhle reports that "multiple new subscriptions to the PSS\_ACS list are coming in every day (probably when the *Chemist* arrives in the mail at various places). I'd guess there are perhaps 25 subscribers so far with about 5 or so new each day." To subscribe, send the message "subscribe pss\_acs [your e-mail name]" to listproc@rainier.chem.plu.edu

Along with that observation are some related comments. One reader asked "While reading through my March issue of the *Puget Sound Chemist*, I wondered if it was possible to send this out via E-mail? It would certainly save some money on postage to members like myself who are in Canada. It also would ensure that it arrives on time."

Fryhle responded, "I have also wondered about this. Overall I think it is a good idea. We can't replace the printed copy because email is not guaranteed for all 1800 or so of our members, nor will they all subscribe to the pss\_acs list I presume, but it seems to me that there's no reason why we can't do both. I'll bring it up with the executive committee.

"Another option (perhaps preferable to email) would be to put it on the web (again, in addition to the printed version)," he continued. "Since this is an all volunteer effort, we need to be cognizant of the time involved. To do text-only versions by email or the web would be easy. Including advertisements and other graphics add to the commitment. We'll see what is possible."

(continued on page 5)

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## **GREENBOWE** (continued from page 1)

drive his group's science education research efforts. He states, "it is not sufficient for students to have an equation- or formula-centered approach to solving chemistry problems. Our research has shown that successful students know the prerequisite chemical facts, utilize several problem solving heuristics, and are able to construct an appropriate conceptual understanding of the problem using microscopic, symbolic, and macroscopic levels of representations." His group is studying the effect of computer animations and simulations that accompany lecture presentations of chemical demonstrations, laboratory experiments, and recitation or tutorial sessions.

Greenbowe received his B.A. from the William Paterson College of New Jersey in 1972 and his M.S. in physics education from Indiana State University in 1974. After teaching science courses at the middle school and high school level, he earned his M.S. in chemistry in 1979 and his Ph.D. in chemical education in 1983 from Purdue University. He joined the faculty at Iowa State University in 1990 as an associate professor and as coordinator of the general chemistry program. He works collaboratively with high school chemistry teachers, community college chemistry instructors, and university chemistry and education faculty to improve the introductory chemistry experience and curriculum. He has served on the 1991, 1993, and 1995 ACS Division of Chemical Education General Chemistry Examinations Committees and is currently serving on the ACS General Chemistry Conceptual Examination Committee. He is a member of the editorial review board for the Journal of Multimedia Chemical Education.

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## **EDITORIAL** (continued from page 4)

We are determining the feasibility of maintaining an on-line version of the *Chemist*. If you are interested in helping develop a *Chemist* webpage, please contact the editor at [furutani@seaccd.sccd.ctc.edu](mailto:furutani@seaccd.sccd.ctc.edu). In addition, if you are a Canadian member, the editor has very little idea when you receive the *Chemist*. Please e-mail [furutani@seaccd.sccd.ctc.edu](mailto:furutani@seaccd.sccd.ctc.edu) when you receive this issue and we will try to adjust our deadlines accordingly for more timely delivery.

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# College Chem meets in Leavenworth

The Washington College Chemistry Teachers Association (WCCTA) meeting will occur Friday, April 17, and Saturday, April 18 at the Sleeping Lady Conference Center in Leavenworth (just over Stevens Pass on Highway 2). The conference will emphasize innovations in college chemistry laboratory experiments and computer usage. In addition to listening to panel discussions and viewing vendor booths, attendees are encouraged to talk to each other.

Though the allocated rooms are filled at the conference center, there is plenty of lodging in Leavenworth and nearby Wenatchee. The cost of the conference itself is \$10/day (no meals included); contact Bob Kieburtz at Olympic College by calling (360) 478-6486. Though this conference is aimed at chemists who teach at the undergraduate level, all are welcome.

(continued on page 7)

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## **NCCTA** (continued from page 6)

Stop by and see the Puget Sound Section's information booth, which will have member applications, member development resources and information on services provided by the national organization.

### **JOB OPPORTUNITIES**

**Part-time Organic Chemistry Instructor** — Seattle University has two open teaching positions for this summer teaching organic chemistry. It would be two four-week sessions, covering Organic Chemistry I and Organic Chemistry II. Our laboratory supervisor, Kasia Pietrzyk, will coordinate the lab preparation. Rumor has it that SU pays well. Interested people should contact Susan C. Jackels in the Department of Chemistry at (206) 296-5946 or fax her at (206) 296-5786 or e-mail her at [sjackels@seattleu.edu](mailto:sjackels@seattleu.edu).

**Teaching Surface Science/Catalysis Postdoctoral Position** — Western Washington University has a position available from September 1998 to August 1999, teaching general chemistry and doing research in fundamental studies of HDS catalysis. Ph.D. required. Send resume, transcripts and two letters of recommendation to Prof. Mark Bussell, Dept. of Chemistry, Western Washington University, Bellingham, WA 98225-9150. E-mail: [bussell@chem.wwu.edu](mailto:bussell@chem.wwu.edu). Review of applications will begin May 1st. AA/EO.

**Part-time Chemistry Instructor Pool** — Edmonds Community College is accepting applications for possible teaching positions for Fall quarter, 1998. Please call Mary O'Brien at (425) 640-1641 or e-mail her at [mobrien@edcc.ctc.edu](mailto:mobrien@edcc.ctc.edu).

**Part-time Chemistry Instructor Pool** — Olympic Community College is accepting resumes for possible teaching positions for Fall quarter, 1998. Please call Marty Lewis at (360) 478-4676 or send a resume to: Marty Lewis, Olympic College, 1600 Chester Ave., Bremerton, WA 98337.



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## **FUTURE MEETINGS in 1998**

**Who:** Dr. J. Ernest Simpson (California State Polytechnic University, Pomona)

**What:** "The Chemistry of Wine"

**Where:** The Silver Lake Winery in Woodinville

**When:** Friday, May 15 at 6:00 p.m.

**How much for dinner:** \$25 per person, featuring a dinner entree of Lemon Herb Chicken with Saffron Risotto and, of course, wine and coffee. The deadline for reservations is noon, Friday, May 8. Please call (253) 535-7530 in the southern Puget Sound area and (206) 527-3747 in the northern Puget Sound area.

More details will be available in the next issue of the *Chemist*.

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