

the Alembic



Chair's Corner



It never fails to amaze me what endeavors my colleagues undertake. Last night, John Droske described his efforts to preserve artifacts from the NASA space program of thirty years ago. I enjoyed learning about the complexity of the spacesuits when they were fabricated and was curious how quickly they have begun to degrade. I thank John for an excellent seminar and Tom Marty for hosting this first meeting of 2003.

Tom Marty received the 2002 Outstanding Service Award for his enthusiastic commitment to the Central Wisconsin Section. Who will receive this recognition in 2003? Please consider people who have served our section perhaps by publishing a newsletter eight times a year, running the Chemistry Olympiad, organizing meetings or chemical outreach programs for this award. I would like to receive your nomination letters by April 15, 2003. In addition to this award, our local section gives awards to outstanding chemistry students and teachers. Dave Lewis is contacting college chemistry majors to nominate outstanding high school chemistry teachers. Laura Cole is identifying outstanding high school chemistry students through the Chemistry Olympiad. Tom Marty is leading

the effort to recognize an outstanding college student majoring in chemistry. All of these awards will be presented at our meeting on May 7, 2003 in Stevens Point. In addition these awards, we have at times recognized a chemist in our local section for their contributions to the field of chemistry. If you would like to recognize someone in Central Wisconsin for this award, please send a nomination letter by April 15, 2003.

Our next meeting is on March 5, 2003 in Eau Claire. Dave Lewis is hosting William Zoller from the University of Washington. Professor Zoller is speaking on "The Former Soviet Union and the Nuclear Waste Program."

I look forward to receiving your nomination letters!

Robin

ACS-CWS Web Page

www.uwsp.edu/chemistry/acscws/

Contains the most up-to-date information about section activities including all issues of the Alembic and meeting notices.

ACS - CWS Mini-Directory

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American Chemical Society

Central Wisconsin Section



The Former Soviet Union and the Nuclear Waste Program

by
Dr. William H. Zoller
University of Washington

Wednesday, March 5, 7:30 pm
UW-Eau Claire
Phillips Hall Room 267

5:30 Cocktails; 5:45 Dinner, Sweetwaters Restaurant

Abstract:

With the changes that have been occurring in the former Soviet Union (FSU), we are finding out more about the fate of radionuclides that were produced during the production of plutonium for the weapons programs. The weapons production facilities in the Southern Ural Mountains have left a vast quantity of radioactive debris in the environment that has impacted vast areas of the country. Much of the debris was dumped into areas that have left highly contaminated areas of the region so that entire areas of the country are biologically "dead." Much of the debris was dumped into rivers, on lakes and is still moving in the environment. One of the options available to the United States is to help with studies of this material to learn how things will move through the environment. By working with scientists in the FSU we can learn much about how to mitigate problems of this type, and in the process assist them to help themselves and their country.

The Speaker:

Bill Zoller was born in Cedar Rapids, Iowa, on March 3, 1943, but grew up in Alaska during the 1950's and 60's. He graduated in chemistry from the University of Alaska in 1965 and went to graduate school at the Massachusetts Institute of Technology where he studied nuclear chemistry and graduated in 1969 with a Ph.D. He became an Assistant Professor of Chemistry at the University of Maryland in 1970 after a brief post doc at the University of Hawaii. He became a Full Professor in 1969 at Maryland, and while there published numerous research papers and led research programs in urban air pollution, volcanic chemistry, and atmospheric chemistry in Antarctica. Most of his research has been to use Instrumental Neutron Activation Analysis to measure trace elements in samples from the atmosphere. His work also has been with the measurement of radioisotopes in the environment from atmospheric weapons testing and reactor accidents, such as Chernobyl in the former Soviet Union. In 1984 he moved to the University of Washington in Seattle as a Professor of Chemistry where he still works. Within two years of arriving in Seattle, he suffered a serious auto accident in which he suffered a traumatic brain injury that has removed much of his memory of both the past and day-to-day functions. Because he had to learn how to teach freshman chemistry without having a memory himself, he devoted his time to learning how to teach in a different way. He learned to teach chemistry using a computer and the computer PowerPoint program. Since then, he has produced over 500 computer slides for teaching freshman chemistry. These slides are now used with the Silberberg Freshman Chemistry book (McGraw-Hill). Since then, all major textbooks also have obtained computer slides, which the students love!

The social mixer at 5:30 and dinner at 5:45 PM will be at Sweetwaters Restaurant, 1104 W. Clairemont Ave, Eau Claire (near the intersection of Clairemont (US 12) and State Highway 37). **Make reservations by Tuesday at 5 PM** by leaving a message at 715-836-4744 or email lewisd@uwec.edu.



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ACS - Central Wisconsin Section 2003 Meeting Schedule

DATE	LOCATION	SPEAKER	TOPIC	HOST
March 5	Eau Claire	William Zoller	The Former Soviet Union and the Nuclear Waste Program	Dave Lewis
April 16	Eau Claire	Jim Phillips	A Concerned Scientist's Best Attempt at Assessing Global Climate Change	Dave Lewis
May 7	Stevens Point	John Fortman	The Chemistry of Flight	Marv Lang
Sept 10	Wisconsin Rapids	Robert Radel	Chemical Weapons: What, Where, How	Dave Thiel
October 15	Wausau	Robert Bates	The Chemistry and Alchemy of Brewing	Martin Rudd
November	Marshfield	Kevin Lang	Monoclonal Antibodies	Dana Haagenon

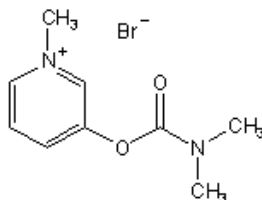
New Green Chemistry Education Materials Available

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.

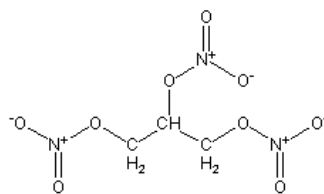
A new lab manual for undergraduate chemistry, two beautiful poster designs, and a set of FREE introductory readings in green chemistry are now available. These products mark the conclusion of our cooperative agreement with the U.S. Environmental Protection Agency to develop materials that relate green 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.

Check online at www.chemistry.org/education/greenchem, or contact us at 202-872-4523 or education@acs.org for more information.

Molecules of the Month



The FDA recently approved **pyridostigmine bromide**, a reversible acetylcholinesterase inhibitor, for use by US combat personnel. As a pretreatment, pyridostigmine increased survival rates of animals exposed to Soman nerve gas.



Nitroglycerin is the active component in dynamite—the most frequently used high explosive in the world. Given this, trying to soothe a "broken" heart with nitroglycerin would appear ludicrous. But through a quirk of fate it is a powerful vasodilator, and the most popular angina (heart pain) medication in the world.

Call for Nominations 2003 Awards

One of the more significant activities that the Central Wisconsin Section of ACS sponsors each year is the recognition of outstanding performance by chemists in our area. Recipients of these awards are recognized at our annual Awards Banquet and Spouse's Night, this year to be held on May 7, 2003. The time has come for **YOU** to submit your nominations. Please consider taking a little time and submitting nominations for:

- Outstanding Contribution to Chemistry
- Outstanding Company
- Outstanding Service

Nominations for these awards should be submitted by April 15 to:

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