

the Alembic



Chair's Corner



Another year passes, and a new Chair of our section has taken the helm. I am pleased to serve our section in this capacity. In the past, I was in charge of the Chemistry Olympiad. Paul Hladky has agreed to take over the Chemistry Olympiad duties starting this year. He will be contacting the schools in our section soon about participating. If you have connections with your local high schools, please remind them about this opportunity. We choose the student who is awarded the Outstanding High School Student in our section from the students who participate in the Chemistry Olympiad.

The results from our election in November are in: Steve Nieland was elected as Chair Elect, Tipton Randall was reelected as Secretary/Treasurer, C. Marvin Lang was reelected as Councilor for another term, and David Lewis was reelected as

Alternate Councilor. Thank you all for serving our section. We do need a National Chemistry Week Coordinator for the coming year. If you are interested in serving in that capacity, let me know.

I was reading the Sunday comics and there is a section for kids where chemistry ideas are sometimes explained. This past Sunday the topic was salt and how it melts ice. I thought that was highly appropriate this morning when I was walking through our newest snowfall! I love it when I find examples of chemistry explained for kids.

Our tour speakers look interesting and I am working on scheduling the rest of the meetings. If you have a great idea for a meeting, let me know. I am looking forward to seeing you at our first meeting this year in Wisconsin Rapids on Feb. 8.

Laura

ACS - CWS Mini-Directory

Chair

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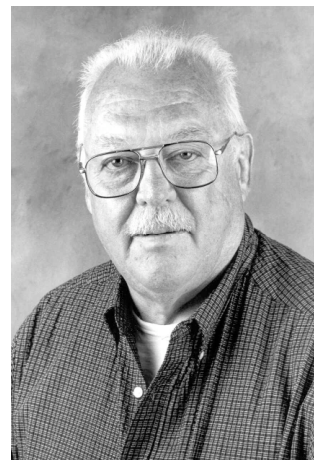


Plants as a Source of Drugs

Dr. Ralph N. Blomster

7:30 PM Wednesday, February 8, 2006
Alexander House,
1131 Wisconsin River Drive , Port Edwards

Dinner 6:00 Café Mulino
(in the Hotel Mead, 451 E. Grand Avenue in Wisconsin Rapids)



It is remarkable to what a large extent medicinal treatment for many centuries rested on the use of plants. Plants have given the field of medicine many useful drugs; such as digitalis, cinchona, ergot, and opium, to mention a few. Humankind's first investigation of the plant kingdom was prompted by a dependence on plants as a source of food. From varied observations of the effects of plants on themselves, human use of plants arrow and weapon poisons, as hallucinogens, and medicaments slowly evolved. In the early days, witch doctors, apothecaries, and physicians used plants to treat disease, elevate mood, and relieve pain. As the art of chemistry evolved, humans learned to isolate the pure chemicals that caused the medicinal effect and to use them. Opium yielded codeine and morphine to relieve pain, and Digitalis provided digitoxin for the heart. Ergot made available ergonovine and ergotamine for migraine and childbirth and, paradoxically, the synthetic LSD as a hallucinogen. The presence of such a wide and diversified group of compounds has prompted the search of plants for new narcotics, heart drugs, and psychoactive and anticancer compounds. Although many drugs are produced synthetically, natural products have served as the molecular model for their starting point. Today, some 40% all prescriptions include compounds of natural origin. Many diseases still cannot be effectively treated with current therapy. How does one find effective agents for these diseases? Plants contain many more compounds than chemists can synthesize. The more than 250,000 uninvestigated higher plant species on the face of the Earth are a source of potential new and effective drugs. However, in the face of the destruction of the Amazon rain forest, time grows short.

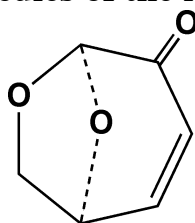
Brief Bio: B.S. 1953 Massachusetts College of Pharmacy
 M.S. 1958 University of Pittsburgh
 Ph.D. 1963 University of Connecticut
 1968-1989 Professor, University of Maryland at Baltimore
 1989-1996 Professor Emeritus, University of Maryland at Baltimore

Gather at 5:30. Eat at 6:00 at Café Mulino in the Hotel Mead, three blocks east of the Wisconsin River on East Grand Avenue. **Please call or e-mail Dave Thiel at (715) 346-3714 or dthiel@uwsp.edu before noon on Wednesday, February 8 to make a reservation for dinner.**

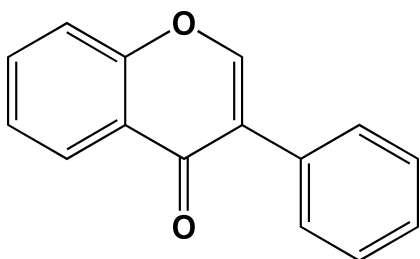
From the Hotel Mead go west on Grand Avenue to the first stop light at 3rd St.. Turn left (south) onto 3rd St. and proceed about 0.7 miles to the Riverview Expressway (Hwy 54/13). Turn right, cross the river, and turn left at the end of the bridge onto Highway 54/73. Proceed 2.7 miles to the Alexander House on your right. The Alexander House is a combination art gallery and historical museum, and will open especially for us at 6:30 pm.

ACS - Central Wisconsin Section 2006 Meeting Schedule				
DATE	LOCATION	SPEAKER	TOPIC	HOST
February 8	Wisconsin Rapids	Ralph Blomster	Plants as a Source of Drugs	Dave Thiel
April 19	Eau Claire	Suzanne Quillen Lomax	Application of Chemistry to the Examination of Works of Art	
Sept. 20	Stevens Point	Robert S. H. Liu	The Chemistry of Vision	
October 18	Marshfield	Ramon Barnes	Analytical Plasma Source Mass Spectrometric Analysis for Nutrition and Toxicology	

Molecules of the Month



Levoglucosenone is a versatile chiral building block easily available from renewable resources. The compound is obtained by pyrolysis of cellulose or cellulose-containing materials such as waste paper and has been used as chiral raw material for the synthesis of a wide variety of compounds and the development of new chiral auxiliaries.



Isoflavone is a plant estrogen, found chiefly in soy. It has been studied as a means of slowing or reversing symptoms of osteoporosis and alleviating the effects of menopause, but the evidence is ambiguous, indicating no significant effect, and there is a potential for this compound to cause harm.

Important Dates To Note for The ACS Spring National Meeting

Housing reservations and early registration are now open for the Spring ACS National Meeting to be held in Atlanta, Georgia, March 26 – 30, 2006. Take advantage of the lower rate for early meeting registrants.

The technical program went online January 30, the same day the C&EN Preliminary Program was published. Check the workshops, events, and special programs you want to attend and order tickets when you register for the meeting.

Visit www.chemistry.org and click on national meetings in the left column. On the national meetings page, click on Atlanta Georgia meeting in the left column. All the information you will need to make the most of your national meeting experience is listed on this page. Don't miss out!

ACS-CWS Web Page

www.uwsp.edu/chemistry/acscws/

Up-to-date information about section activities including the Alembic and meeting notices.

Also visit www.chemistry.org for latest chem news.

