

the Alembic



Chair's Corner



Fellow Chemists:

According to the by-laws of our section, we are required to hold elections for the section officers in December of each year. This past December, you may note, we did not hold those elections. "Why?" you may ask. The answer is frighteningly simple -- we had no candidates. Nobody stepped up to the plate to serve, which has placed us in a difficult position.

As of right now, we have a set of officers who have agreed to serve for the next year, also. In my own case, this will mean that I will be serving a full two and a half years as Chair-elect and Chair of the section. I am letting you know tight now that I will not serve another term after that, even if it means letting my membership lapse in order not to be eligible.

The American Chemical Society is the premier scientific society in the world, but it still gets much of its strength from grassroots activity at the local section level. The Central Wisconsin Section has been lucky in having a core of dedicated members who have been willing to undertake the job of leading the section -- Marv Lang, Bob St. Louis, Ilona Lin, Don Showalter, Don Campbell, Tom Marty, Al Denio, Tom Zamis and Laura Cole have all been there for the section while I have been in Wisconsin. I

feel privileged to have served with these people.

However, our failed efforts to fill the slate of candidates for the December ballot brings into sharp relief a problem. Looking through the list of past officers, we see the same names over and over again. In other words, in a section with well over 50 members, we have found less than a dozen willing to contribute more than their annual dues. I have news for the rest of you: This set of willing volunteers is getting older, retiring, and moving away. Pretty soon we won't have anyone left to fill executive committee positions.

I do recognize that the geographical size of our section does pose some problems not faced by more urban sections -- the large driving distances for one. However, you should know that committing to a leadership position in the section does not have an absolute requirement that you attend every meeting -- I certainly haven't been to every one. Like everyone with school-age children, I have had conflicts, and, like those same parents, I have resolved these conflicts in favor of my children. But I have also been willing to do my share for the section insofar as I have been able.

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ACS - CWS Mini-Directory

Chair

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American Chemical Society

Central Wisconsin Section



Plastic Wood: The Preparation of Polymers and Plastics from Forest Products

by

Dr. John J. Meister

Director, Forest Products Research Center

2008 Hendola Drive, NE

Albuquerque, NM 87110-4808

Wednesday, March 21, 2001

7:00 PM

Abstract:

Polymers are the fastest growing class of bulk chemicals and constitute the end product or use for one-half of all chemicals made in the United States. Plastics, the solid, thermoplastic polymers, are widely known because of the rapid transformation of consumer goods from items made of metal and wood to items made from synthetic polymers. Plastics are only a small subset of all polymeric materials, however. Polymers are being used more frequently in all of our activities. These materials now play major roles in water purification, oil recovery, mineral recovery, refining, shipping, construction, and other processes in an almost endless list. This increasing use of polymers will continue as long as cheap feedstocks are available. Such cheap feedstocks have, for the past 40 years, been obtained from petroleum. In the next two decades, that must change, and polymers must be developed that are derived from natural resources. Our supply of feedstocks based on fossil hydrocarbons is becoming precarious and ever more limited. Forests and agriculture supply us with four polymers in large supply: lignin, cellulose, hemicellulose, and starch. The conversion at low cost of these four products to commercial polymers with increased performance will be described, with some emphasis on the chemistry of the conversion of natural product to processing chemical or consumer product. The plant products can be drafted, blended, or surface modified to create plastics with high modulus and strength or polymers with high surface activity. Applications of these polymers to the needs of industry or the demands for cleaning up the environment will be detailed.

The Speaker:

John Meister is a chemist involved in the synthesis, application, and analysis of polymers. He worked his way through Pennsylvania State University as a dishwasher and laboratory technician before attending the California Institute of Technology as a graduate student in chemistry and physics. After working in the oil industry for 5 years as a research scientist designing better ways to recover oil from oil reservoirs, he entered academia and is now an associate professor of analytical and polymer chemistry at New Mexico Institute of Mining and Technology. John specializes in developing new polymers that can be made from natural products such as lignin and wood. He has designed process polymers based on lignin and wood. He has designed process polymers based on lignin for use in oil recovery and mineral processing. He is currently developing plastics from forest products and methods to form composites using parts of the corn plant.

Prior to the meeting, a 5:30 mixer and 6 pm dinner will be held at Tony Roma's Restaurant at the Cedar Creek Mall (Exit 185 off of I-39 (SH 51) south of Wausau near Gander Mountain, Culver's and Denny's).

Reservations made be made by leaving a message with Ilona Lin at:

715-355-3672 or (illi@ltus.com) by March 21

ACS - Central Wisconsin Section 2001 Meeting Schedule				
DATE	LOCATION	SPEAKER	TOPIC	HOST
March 21	Wausau	John Meister	Synthetic Lumber	Iona Lin
April 25	Eau Claire	Jeffrey Zink	Optical Sol-Gel Materials	Dave Lewis
May ?	Marshfield	TBA	Awards Banquet & Spouse's Night	
September 19	Stevens Point	Ronald DeLorenzo	Mysteries in Science	Marv Lang
October 17	Eau Claire	Anthony Trozzolo	Photochromism	TBA
November ?	Marshfield		Student Research Meeting-In-Miniature	Dave Lewis
December ?	Marshfield		Tour of Marshfield Clinic Labs	Ron Haas

ACS-CWS Web Page

<http://chemdept.uwsp.edu/acscws/>

or you can link there from the American Chemical Society home page - Local Sections. Contains the most up-to-date information about section activities.

HELP!

The Central Wisconsin Section needs your help in finding people willing to carry on the work of the ACS at our local level.

We need nominations/volunteers to run for **Chair Elect** next year. We need a person to act as **Career Counselor** for the section. We need a person to act as **Media Relations Coordinator**. We need a person to act as **National Chemistry Week Coordinator** for the section. We need **nominations for section awards** for next year.

Please contact Dave Lewis or any other member of the Executive Committee.

Chair's Corner (continued)

The ball is now in your court -- do you want a local section of the ACS here in west-central Wisconsin, or don't you? Is it worth some of your time to save the section or not? Like many of you, I have school-age children, and I know the demands that they place on your time. What am asking is if you can spare just some of your time to help our section. Without new blood in the leadership, this section *will* die.

I hope your answer to my questions is, "Yes." I can tell you that as of next year, mine is, "No."

Dave

National Chemistry Week 2000

by Iona Lin

The American Chemical Society Central Wisconsin Section celebrated the National Chemistry Week with chemistry demonstrations and hands-on classes designed for elementary school children in the Wausau area. The students signed up in their respective age group on the flyers

distributed in the local schools. Professors' Joel Case and Theo Koupelis, the faculty of the University of Wisconsin Marathon Campus among with Michelle Maeder, Scott Sargent held classes for grades 4-6 titled "Behind flames and light, the firefly reaction, food and interaction between electrons". The younger age group, K-3 made cheese under the watchful eye of Debra Zastrow. Following the classes, the public was invited to a chemistry demonstration. In spite that some of the most spectacular demonstration had to be cancelled due to the very sensitive smoke alert system, the demonstration was entertaining and educational for all ages. The children, who participated in the classes, were eager to volunteer to help during the demonstration. Dr. Case discussed the chemical reactions with the youngsters, and he pointed out the importance of the safe laboratory practices. Tim Corcoran and the Science Club from the Stevens Point Area Senior

High school hosted their annual hands on chemistry demonstration in the Central Wisconsin Children's Museum. Mr. Corcoran and his students spend a great time and effort to introduce the youngsters to the principles of today's chemical technology. National Chemistry week is our chance to make the public aware about the importance of the chemical industry in the everyday life. I would like to encourage you all to take part of it in 2001.



ACS Honors Scientists for Their Creative Discovery

Five researchers received the 2000 Industrial Innovation Award on December 8th at the Southeast-Southwest Combined Regional Meeting in New Orleans. The recipients were honored for their discoveries and inventions that have contributed to the commercial success of their companies and to the enhancement of the quality of life.

Susan Daluge for her help in the development of Ziagen®, a new anti-HIV drug that can dramatically simplify treatment. It can be combined with AZT and 3TC in a single pill that is taken twice daily instead of as 10 to 20

separate pills. Glaxo Wellcome Inc. in Research Triangle Park, North Carolina, sponsored her work.

James Hall for his contribution to the science and technology of making a type of synthetic rubber used in products ranging from garden hoses to motor oil. DSM Elastomers Americas in Addis, Louisiana, sponsored his work. Donald Kelemen for his development of a system that uses oil-eating bacteria to purify the bilge water that ships discharge into lakes, rivers, and oceans. Known as Petroliminator™, the system is sold by Ensolve Biosystems, Inc. in Raleigh, North Carolina.

Clifford Venier and Edward Casserly for their creative use of fundamental science —organic chemistry— to develop new lubricants for satellites, automobiles and computers. The Pennzoil-Quaker State Company and Penreco in The Woodlands, Texas, sponsored their work.

An awards luncheon was held to honor the award recipients and their companies, which included the awardees, members of management at their companies, ACS officers, and invited guests. Dr. James D. Burke, ACS Region IV Director gave a general overview of the Industrial Innovation Awards Program. Dr. Attila Pavlath, ACS President introduced the awardees and presented each recipient with an official ACS plaque of recognition.

As an added component, a special Awards Symposium was held. This new feature gave the honorees an opportunity to speak about their innovation. Dr. Armand Pepperman, chair of the Southeast/Southwest Combined Regional Meeting, presided over the symposium, and Dr. Maurice M. Bursey, ACS Director-at-Large closed the symposium with gratifying remarks. In addition, a poster exhibit and tabletop display

of their innovation was displayed throughout the regional meeting.

The industrial innovation awards program administered by the American Chemical Society's Office of Industry Relations is an opportunity for the chemical industry to showcase its contributions to the community. In addition, to foster better understanding of the chemical industry; and to stimulate interest in science and the chemical industry as contributors to our enhanced quality of life.

This regional awards program is open to any 2001 regional-meeting chair interested in organizing an awards program to honor chemists and chemical engineers working in the chemical industry. For more information, contact Felicia Foxworth Dixon, Regional Industrial Innovation Awards Program, Office of Industry Relations, 1155 Sixteenth Street, NW, Washington, DC, 20036, 202-872-4454, 1-800-227-5558 ext. 4454, fax 202-872-6098, or at cheminnovations@acs.org.

CAS Product Finder Simplifies Electronic Information

If you are sometimes confused by the increasing number of choices for electronic information services, there's help on the CAS web site!

Directly accessible at <http://www.cas.org/products/finder/index.html>, the Product Finder presents a few simple choices to specify your occupations and interest in information. Then just click a button to see a listing of CAS or STN International services that may fit your information needs. You can try out the Product Finder at no charge.

33rd Central/ 33rd Great Lakes Joint Regional Meeting

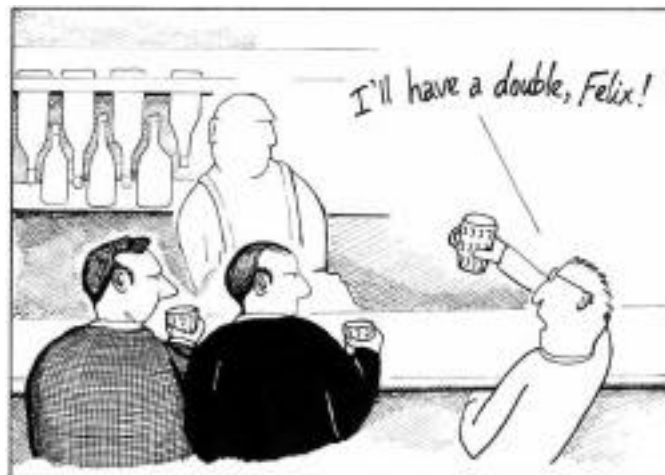
The 33rd Central/ 33rd Great Lakes Joint Regional Meeting, "2001: A Grand Chemical Odyssey", will be held from Monday, June 11 to Wednesday, June 13, 2001, in Grand Rapids, MI. The meeting, hosted by the Kalamazoo and Western Michigan Sections, will be held at the Amway Grand Plaza Hotel located on the bank of the Grand River in the heart of the business and entertainment district.

The meeting will feature key symposia in Education, Food and Agricultural Chemistry, Pharmaceutical Chemistry, and Polymer Chemistry. In addition, there will be more than 90 symposia including the following areas: Analytical Chemistry, Biochemistry, Biotechnology, Chromatography, Computational Chemistry and Computer Modeling, Environmental Chemistry, Green Chemistry, Health Care, Inorganic Chemistry, Natural Products, Organic Chemistry, Physical Chemistry, and Polymer Chemistry. The meeting will also include general and poster sessions in all areas of chemistry.

Special events planned for the meeting include several short courses, an Opening Evening Reception, an undergraduate poster session, a Women Chemist's luncheon, a White Caps minor league baseball game, a visit to Fredrik Meijer Gardens and the famed Leonardo da Vinci's Horse sculpture, the High School Chemistry Teacher Awards presentation and banquet, a Student Affiliates and Undergraduates program, an Employment Clearinghouse, and an exhibition of scientific equipment, products and services.

Other nearby entertainment opportunities include the G. R.

Ford Presidential Museum, Children's Museum, Grand Rapids Art Museum, Van Andel Arena, and Van Andel Museum.



Cambridge, 1953. Shortly before discovering the structure of DNA, Watson and Crick, depressed by their lack of progress, visit the local pub.

The most exciting phrase to hear in science, the one that heralds the most discoveries, is not Eureka! I found it!, but, That s funny....

Isaac Asimov

Discovery consists of seeing what everybody has seen and thinking what nobody has thought.

Albert von Szent-Gyorgyi

