

# the Alembic



## Chair's Corner

Each new year brings changes, challenges, and opportunities. I am pleased to have the opportunity to serve once again as your ACS Central Wisconsin Section Chair. When last in this seat, I was completing my Chemistry degree as a non-traditional student at UWSP. Due to the demands of school as well as personal demands (my daughter Laura was completing her high school career at the same time), I felt I could not give this position the attention I thought it deserved. With those obligations complete (Laura is now the UWSP student!) I look forward to devoting more time and attention to ACS. One activity that I am excited to be participating in this year is attending the American Chemical Society's 233 National Meeting and Exposition. If you have not attended a national meeting in the past, this year presents a great opportunity as the meeting will be held at the McCormick Place in Chicago from March 25th through March 29th. The fall meeting last year in San Francisco attracted over 15,000 attendees, featured over 9000 scientific presentations, and had an exposition of 500 booths. This is a great opportunity to meet

more of your fellow members and take advantage of a wide spectrum of technical presentations. Additional information is available on the ACS website at [www.acs.org](http://www.acs.org). You'll find a link there to information on the meeting, hotel information, and information on the presentations and the exposition.

Also under the category of opportunities, I had the opportunity to first meet this month's speaker during an ACS leadership training program several years ago. Dr. Thomas Holme is Professor of Chemistry at UW Milwaukee. He will be speaking on the interesting topic of Chemistry, Society and Science Fiction. Tom teaches a 300 level course using science fiction as a path to understanding of major themes in chemistry. More on his presentation may be found later in this newsletter.

I look forward to seeing you all on the 7th!

Steve



### ACS - CWS Mini-Directory

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### ACS-CWS Web Page

[www.uwsp.edu/chemistry/acscws/](http://www.uwsp.edu/chemistry/acscws/)  
Up-to-date information about section activities including the *Alembic* and meeting notices. Also visit [www.chemistry.org](http://www.chemistry.org) for latest chemistry news.



American Chemical Society

Central Wisconsin Section



“Chemistry, Society and Science Fiction”

by

Thomas A. Holme

University of Wisconsin - Milwaukee

Wednesday, February 7, 2007

7:30pm University of Wisconsin Stevens Point  
Room A109 of the Science Building



Science fiction has long served as a vehicle by which non-scientists encounter science topics. The use of science fiction as an organizing theme has a long history for classes for non-science majors. This talk reflects on past efforts and emphasizes the methods used by the speaker in his own “Chemistry and Science Fiction” course. Current trends in science background for SF stories will be noted and ways to introduce both a scientific and literature perspective will be addressed. A discussion of how SF tends to extrapolate from sound chemical principles to more speculative fiction will provide opportunities for audience participation.

\*\*\*About the Speaker\*\*\*

Dr. Holme is Director of the Examinations Institute of the ACS and a professor of chemistry at the University of Wisconsin - Milwaukee. He and his research group carry out computational modeling studies of physiological implications of molecules that include main group elements, particularly boron and silicon. As Director of the Exams Institute he also has a significant interest in research that focuses on how to assess learning of chemistry. The application of emerging information technologies in the assessment of student knowledge composes the main thrust of his research interests in Chemistry Education. Dr. Holme is also active in Chemical Outreach. He was the recipient of the 1999 Helen Free Award for Public Outreach from the ACS.

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Prior to the meeting, a 5:45 PM mixer and dinner will be held at the Chef Chu’s, **5720 Windy Drive (on HWY 10 east of Point across the street from McDonalds)**.

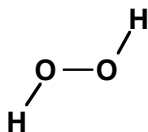
After dinner, the talk will be held in Room A109 of the Science Building at the U W – Stevens Point.

**For reservations contact Steve Nieland at 715-258-5525 x114 or Cristina Altobelli at (715)346-2888 (email: [snieland@gusmerenterprises.com](mailto:snieland@gusmerenterprises.com) or [caltobel@uwsp.edu](mailto:caltobel@uwsp.edu)) by 5 PM on Tuesday February 6<sup>th</sup>.**

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ACS - Central Wisconsin Section 2007 Meeting Schedule				
DATE	LOCATION	SPEAKER	TOPIC	HOST
February 7	Stevens Point	Thomas A. Holme	Chemistry, Society and Science Fiction	Steve Nieland
March 6	Marshfield	Henry R. Bungay	Confessions of a Bioenergy Advocate	
April 25	Stevens Point	Jeffrey I. Seeman	A Human Side of Chemistry: A Portrait of Contemporary Heroes	
May	Stevens Point		Awards Banquet and Spouse's Night	
September 19	Eau Claire	Ned D. Heindel	Tinctures, Tonics, and Patent Medicines: A History of Commercialized Quackery	Dave Lewis
October 16	Stevens Point	Michael Tunick	Molecules to Mozzarella: The Chemistry of Cheese	Tom Zamis
November 7	Waupaca	Steve Nieland	Depth Filtration Media in Biopharmaceutical Production - Plant Tour and Discussion	

### Molecule of the Month



**Hydrogen peroxide**, found in medicine cabinets around the world, is a powerful oxidizing agent. On human skin, an enzyme unlocks the oxidizing potential allowing it to kill germs. Concentrated hydrogen peroxide is used as a reactant in glow sticks, color safe bleach, and even rocket fuels.

### CAS Indexes A Million Documents In 2006

Chemical Abstracts Service (CAS) reported it has for the first time indexed and added to the CAS databases more than a million document records in a single year, reflecting the worldwide acceleration of scientific research and patents. CAS announced this signal achievement on the eve of the 100th anniversary of the organization and Chemical Abstracts™, which was first published in January 1907.

As the world's most authoritative scientific information resource, CAS' records reflect dynamic research and patenting activity worldwide as the United States still leads but the Asian powerhouses grow stronger.

CAS database statistics for 2006 indicate the international distribution of the 1,016,669 publications indexed this year:

Languages of publication: 50 (English: 68.1%, Chinese 13.1%, Japanese 10.3%)

Countries of origin: 194 (U.S.: 19.4%, China (PRC) 17.6%, Japan 16.6%)

Patents from 50 issuing authorities accounted for 24.4% of the publications, but contained more than 50% of the new chemical substance information recorded by CAS. The greatest number of publications were articles from CAS' extensive journal coverage in chemistry and related science, for which CAS monitors more than 9,500 titles. Additional sources included conference proceedings, symposia and other documents.

"Throughout the lifetime of Chemical Abstracts and the CAS databases, our records have mirrored the progress of research in chemistry and related sciences," said Matthew J. Toussant, CAS vice president, editorial operations. "It took 30 years for CA to publish its first million abstracts, and we have now exceeded that total in a little less than one year. This achievement dramatically illustrates the rapid pace of research occurring worldwide."

To gain access to the wealth of information in CAS databases, scientists, students, and patent professionals can use a variety of CAS products and search services. "Our comprehensive database of chemistry and related scientific information is an invaluable resource," said Catharina Maulbecker, CAS vice president of marketing and sales. "The added value of the STN® and SciFinder® search tools enables the scientific community to apply the information to full advantage as they build upon this century of knowledge."