

American Chemical Society Wichita Section

November 2010 Newsletter Stephen Donnelly, Editor

Section Meeting

Monday, 8 November, 7:30 PM Cram Science Hall room 123 Emporia State University Emporia, Kansas

Meal (optional):

6:00 p.m.

Dinner will be at The Pizza Ranch restaurant in Emporia. To get to the restaurant take I-35 to exit 128 (Industrial St.) go north to the stoplight. At that corner there is a McDonalds and a Taco Bell on the left and a fuel plaza on the right. Turn left and go past the McDonalds and the Golden Corral. Pizza Ranch will be on the right.

Meeting: 7:30 p.m.,

The meeting will take place in room 123 of the Cram Science Hall on campus of Emporia State University. Dr. John Forman will present a talk on the impact of chemistry on human energy production.

A map of the ESU campus can be found at: http://www.emporia.edu/esu/esumap/campus.htm

Speaker: Dr. John Fortman

Title: Energy from Chemistry Through the Ages: A Demo Presentation

Description: Man's first and greatest chemical invention – fire - began a parade of uses of combustion reactions to produce heat, light, mechanical energy, and electricity, as well as to cook food, refine metals, and produce materials. Voltaic cells and batteries gave man other ways to use chemical reactions to produce other forms of energy and do work. Chemiluminescence now gives man a way to produce light without fire, heat, or electricity. Chemical demonstrations will be done which illustrate the principles and applications of fires and explosions, voltaic cells, and luminescence. Analo-

gies will be made to the internal combustion engine. Short video clips may be shown of applications and bloopers.

Speaker Bio:

John Fortman received the 2007 Helen M. Free Award for Public Outreach. He is Professor Emeritus of Chemistry at Wright State University where he retired in 2001 after 36 years of teaching freshman and inorganic chemistry. In 1998 he was appointed the Robert J. Kegerreis Distinguished Professor of Teaching and won seven different teaching awards over the years at Wright State. In 1998 he received the CMA Catalyst Award for Outstanding Teaching of College Chemistry. Dr. Fortman received his B.S. from the University of Dayton in 1961 and his Ph.D. in physical inorganic chemistry from the University of Notre Dame in 1965. He has published over 50 papers in chemical education in addition to his research publications. With Rubin Battino he has produced a seven DVD set which contains ten hours of chemical demonstrations for use at middle school through college levels plus a live show and blooper outtakes. For over 30 years he has done chem demo outreach shows for middle and high school students in the Dayton area and continues to inspire and fascinate over 8000 students each year with at least 17 shows. He has done workshops on teaching and demonstrations around the country. He has designed alternative courses for general chemistry, elementary chemistry and chemistry for elementary education majors. His course for non-science students was cited as a model in the 1990 AAAS report on "The Liberal Art of Science: Agenda for Action". The alternative general chemistry course was developed while he was a member of the General Chemistry Task Force of the ACS Division of Chemical Education and starts with organic and biochemistry moving through materials and finishing with energy while empathizing applications and bringing in only those principles that are needed as they are necessary. The course has been characterized as being taught inside-out, upside-down, and backwards. His interests in addition to demonstrations and course content and organization include the use of analogies and videotaped material. John has been an ACS member since 1962 and was Councilor for the Dayton Local Section from 1996 to 2004. Since he became an ACS Tour Speaker in 1991 he has given over 310 section talks, visiting 163 of the 190 different local sections while doing 65 tours including all 29 different tours at least once. He has presented in all 50 states and Puerto Rico.

Chair's Message

Greetings to the Wichita Local Section of the American Chemical Society!

November finds us headed to Emporia for the final section meeting of 2010. We gather in Emporia on Monday, November 8, for dinner and a lecture by Dr. John Fortman highlighting "The Energy in Chemistry." See the details for the dinner and meeting above. I hope many of you had the opportunity to engage in the Midwest Regional Meeting just held in Wichita, Kansas. I would like to take this time to say a big "thank you" to the chairs of the meeting for all of their time and effort: Paul Rillema, Art Landis, Tom Wiese, Doug English, and Jim Bann. I am probably leaving someone out, so please forgive me and accept my heartfelt thanks for a job well done! I would also like to thank all of the folks who have served as officers and board members and have made this a great section in which to be a member.

As I have done before and really enjoyed sharing with all of you, I would like to share some profiles in the History of Chemistry that have occurred in time during the month of November:

- Nov. 7, 1867: Marie Curie was born in Poland
- Nov. 8, 1895: William Roentgen discovered X-rays
- Nov. 12, 1802: John Dalton presented his paper on the first explanation of "the law of multiple proportions"
- Nov. 15, 1810: Sir Humphry Davy named the element chlorine-it had been called oxymuriatic acid
- Nov. 23, 1837: Johannes van der Waals was born
- Nov. 28, 1887: Alfred Nobel obtained a patent for smokeless gunpowder

I would like to take this opportunity to say thank you to all of the members of our local section and let you know that I have appreciated your attendance at meetings and your involvement in the American Chemical Society. It has been a privilege to serve you for the past two years as chair of our local section. As I reflect on this season of Thanksgiving, I am truly grateful for an organization such as ours that advances our area of interest and professional applications.

Sincerely,

Robin Jackson, Chair ACS Wichita Section

Wichita Section Web Site:

http://wichita.sites.acs.org/

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