

# American Chemical Society Wichita Section

February 2011 Newsletter Stephen Donnelly, Editor

# **Section Meeting**

Thursday, 24 February, 7:00 PM Rhatigan Student Center, Room 203 Wichita State University Wichita, Kansas

# **Meal (optional):**

6:00 p.m.

Dinner will be served in Room 203 of the Rhatigan Student Center on the Wichita State University campus. The meal will be a Wichita BBQ buffet and will include beef Steak tomatoes marinated in vinaigrette, stuffed baked potato salad, barbeque pulled pork, grilled chicken quarters, beef brisket, corn on the cob, baked beans, and smores bread pudding. The cost of the meal is \$12 and the local section will cover half the cost of the meal for students who also attend the presentation. RSVP to Jim Bann (jim.bann@wichita.edu) by Tuesday, 22 February.

# **Meeting:** 7:00 p.m.,

The meeting will take place in the same room as the meal. Dr. Al Hazari, Director of the University of Tennesse at Knoxville Science and Engineering Community Outreach Program, will present.

A map of the WSU campus can be found at: www.wichita.edu/thisis/campustour/parking.asp

Speaker: Dr. Al Hazari

**Title**: *Show Me the Chemistry* 

Chemistry is everywhere, is for everyone, and happening every day. Come and experience several exciting activities (experiments) that ignite curiosity and inspire the lifelong discovery, learning and enjoyment of the science of chemistry. Common and familiar substances will be used in this presentation.

# Speaker Bio:

A native of Lebanon, Al received a B.S. degree in Chemistry from the American University in Cairo in 1968. He also holds an M.S. degree in Chemistry (1972) from Youngstown State University in Ohio and a doctorate in Science Education (1997) from the University of Tennessee, Knoxville. Al has taught science and chemistry for several years at the school and the college levels here and overseas. Currently, he is the Director of the Undergraduate Chemistry Labs and a Lecturer in Chemistry at the University of Tennessee, Knoxville. In addition, he regularly teaches science education courses in the College of Education. He has received several grants from government agencies, industry, and various organizations to improve undergraduate chemistry lab instruction and also to support K-16 hands-on science and chemistry outreach activities. He was the 2000 recipient of the ACS Helen M. Free Award for Public Outreach. Al is a very active ACS member. He is the immediate past-chair of the ACS Committee on Chemical Safety, an ACS tour speaker, and the councilor for the ACS East Tennessee Section. Al is an affiliate of the Institute for Chemical Education and a member of the National and the Tennessee Science Teachers Associations. He has made several presentations and given talks to local, regional, national and international chemical and science education conferences.

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# Chair's Message

This year marks the International Year of Chemistry, and is intended to highlight throughout the year "achievements of chemistry and its contributions to the well-being of humankind". One of the greatest chemists of all time and who strove for improving the quality of human life was Linus Pauling, born February 28<sup>th</sup>, 1901 - this month marks the 110<sup>th</sup> anniversary of his birth. His contributions in quantum chemistry lead to the electronegativity scale for atoms, and the concept of hybrid atomic orbitals, such as  $sp^3$  which describes the tetrahedral arrangement of bonds in methane and ammonia, for instance. Through X-ray crystallographic studies on hemoglobin, his work lead to the discovery of the planarity of the amide bond, the alpha-helix and beta sheet structures in proteins, and determining that sickle-cell anemia was due to defects in the structure of hemoglobin. He was awarded the Nobel Prize in Chemistry in 1954, "for his research into the nature of the chemical bond and its application to the elucidation of the structure of complex (http://nobelprize.org/nobel\_prizes/ substances"

chemistry/laureates/1954/). Perhaps even greater was his persistent campaigning against nuclear proliferation, for which he was awarded the Nobel Peace Prize of 1962. Gunnar Jahn, Chairman of the Nobel Committee, wrote in 1963: "Through his campaign, Linus Pauling has manifested the ethical responsibility which he believes science should bear for the fate of mankind, today and in the future".

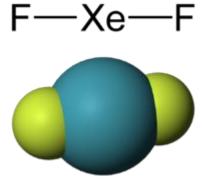
I would also like to take this moment to thank Dr. Robin Jackson, Professor of Chemistry at Central Christian College, for serving as Chair of the Wichita Section ACS for the past two years. We are so grateful to have someone committed to growing and improving the ACS here in Kansas, and we have greatly benefited from your unwavering leadership. Thank you!!

Sincerely,

Jim Bann, Chair, ACS Wichita Section

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### Molecule of the Week



Xenon difluoride is a white crystalline solid with an unpleasant odor. One of the first compounds to be prepared from "inert" gases, it was synthesized by the low-pressure photochemical reaction of xenon and fluorine by J. L. Weeks, C. L. Chernick, and M. S. Matheson in 1962. The same year, R. Hoppe and co-workers produced it via electrical discharge. XeF2 is a strong fluorinating agent.

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#### **Wichita Section Web Site:**

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

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#### On The Calendar...

Spring 2011 National Meeting & Exposition Anaheim, CA 27-31 March, 2011

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#### 2011 Section Officers:

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