



American Chemical Society Wichita Section

June 2012 Newsletter
Stephen Donnelly, Editor

Section Meeting
Monday, 11 June, 7:00 PM
Cram Science Hall, Room 123
Emporia State University
Emporia, Kansas

Meal (optional): 5:30 p.m.

We will meet at the Emporia Pizza Ranch, 3000 West 18th Avenue (620-343-8646). The restaurant offers a buffet (including drink) for \$8.64 or patrons can order from the menu. More information can be found at www.pizzaranch.com.

Contact Eric Trump at etrump@emporia.edu for additional information.

Meeting: 7:00 p.m.

We will meet in Cram Science Hall, room 123 on the campus of Emporia State University. Dr. Jeff Bryan, Professor of Chemistry at the University of Wisconsin-La Crosse, will discuss the nuclear reactor disaster at Fukushima, Japan.

A campus map and other information can be found at www.emporia.edu.

Speaker: Dr. Jeff C. Bryan, University of Wisconsin-La Crosse

Title: *Fukushima*

A great deal of fear has been generated from the three core meltdowns and significant releases of radioactive material in Japan following the earthquake and tsunami in 2011. This presentation will discuss what happened at the damaged reactors as well as the significant fallout from this event. Along the way, we'll discuss some basic nuclear science, and attempt to put the outcomes into context.

Speaker Bio:

Jeff C. Bryan was born in Minnesota and raised in California, and believes that his odd childhood mixture of Jell-O salad and reticence in a free and open society have caused his various personality quirks. He earned an A.B. in chemistry from the University of California, Berkeley with emphasis on organic chemistry and Scandinavian studies. He earned his Ph.D. from the University of Washington studying inorganic chemistry under the supervision of Jim Mayer. His thesis presented a new chemical reaction, the oxidative addition of multiple bonds to low-valent tungsten. He then spent a year of postdoctoral work with Warren Roper at Auckland University investigating iridium-carbon multiple bonds.

He spent five years at Los Alamos National Laboratory, initially as a postdoctoral fellow, then as a staff member. Under the supervision of Al Sattleberger, he initiated a modestly successful research program synthesizing new compounds of technetium. He then spent eight years at Oak Ridge National Laboratory as a crystallographer in Bruce Moyer's chemical separations group. The major group project during that time was development of a process to separate $^{137}\text{Cs}^+$ from defense wastes.

He has spent the past nine years as a chemistry faculty member at the University of Wisconsin-La Crosse, where, despite his best efforts, he has been promoted to full professor. His current scholarship focuses on making nuclear chemistry and radiation physics more accessible to students with limited science and math backgrounds. As part of this effort, he has authored a textbook titled *Introduction to Nuclear Science*, and coauthored a lab manual titled *Experiments in Nuclear Science*.

Editor's Message

Greetings!

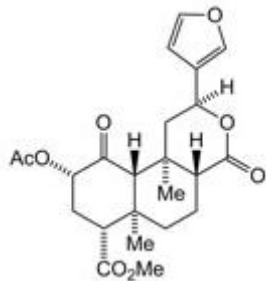
Jung was unable to provide the Chair's Message this month, so I thought I would add my two cents. First, I would like to thank Robin Jackson for hosting a Science Café at Central Christian College on the 10th. Her chosen topic - the environment and global climate change - was certain to stimulate a lively debate and by all accounts the discussion lived up to the expectation. The group, including students, academics, environmental sector employees, government officials, and just plain folk kept the dialogue alive well into the evening. Although I was unable to attend it is my understanding that no blood was spilled, so we can chalk this one up as a rousing success.

Our meeting this month is somewhat unusual in that it will occur outside of the academic year. Of course for the government and private sector members of the section this is a non-issue, but most of the students who we usually cajole into attending the meetings have, for the most part, flown the coop for the summer so we will not have them to bolster our numbers. I ask those of us who are available make an extra effort to attend the meeting so that we can demonstrate to the broader community that we have an active and thriving section.

There is a possibility that we will be able to put together an impromptu site visit later this month for those interested. The NSF, NASA, and NOAA sponsored Deep Convective Clouds and Chemistry Experiment (DC3) is in progress through the first week of July and is operating out of the Salina Airport among other sites across the country (see <http://www.eol.ucar.edu/projects/dc3/> for more information). The goal of the mission is to better understand the affect of deep convective activity (i.e. thunderstorms storms) on the composition and chemistry of the upper troposphere. The experiment includes three extensively instrumented aircraft: the NASA DC-8, the NSF/NCAR G5, and the German Aerospace Center (DLR) Falcon. I am working on putting together a visit through the mission's education and outreach program - most likely for the last week in June. Please let me know (via email) if you are interested so that I can begin to tally a head count. It is last minute and a long shot - but it's worth a try...

See you in Emporia,
Stephen, Newsletter Editor and Chair Elect

Molecule of the Week



Salvinorin A, the most potent naturally occurring hallucinogen, is found in *Salvia divinorum*, a rare Mexican plant from the mint family. Unlike most hallucinogens, salvinorin A is a terpenoid, not an alkaloid. In 2007, D. A. Evans and co-workers reported an asymmetric synthesis of salvinorin A.

Wichita Section Web Site:

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

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