



American Chemical Society Wichita Section

September, 2016 Newsletter

Stephen Donnelly, Editor

Section Meeting
Monday, 19 September
Tabor College
Hillsboro, KS

Meal: 6:00 p.m.

Presentation: 7:00 p.m.

We will meet in the Wohlgemuth Music Education Center (WMEC) on the Tabor College campus for both dinner and the speaker's presentation - the building address is 400 S. Jefferson in Hillsboro. The meal will include chicken fajitas and beef tacos with the usual sides, southwestern salad, fruit salad, and carrot cake for desert. The cost is \$12.00. We ask those interested in joining us for dinner to RSVP to Norman Schmidt by email (normans@tabor.edu) by 5:00 PM on Thursday, 15 September.

A map of the Tabor College campus can be found at the following web site.

<https://tabor.edu/about/map-directions/>.

Speaker: *Dr. Jeff Bryan*
Chemistry Professor,
University of Wisconsin - La Crosse

Title: *Nuclear Science and Fiction in Star Trek*

Abstract:

Much of the Star Trek universe can be understood or disputed based on our current understanding of nuclear chemistry and physics. This presentation will examine "future" technologies such as photon torpedoes, transporters, and holodecks using contemporary nuclear science. We'll also look at antimatter as a power source/fuel, medical imaging and the possibility of superheavy elements. Finally, we'll boldly go where few scientists have gone before to try to understand what dilithium really is and

what it does in a starship. Even if you're not a trekkie (or a trekker), don't worry, the context of each topic will be provided through video clips from the shows and movies. Engage!

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 post-doctoral 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 joined the chemistry faculty of the University of Wisconsin-La Crosse in 2002, where, despite his best efforts, he has been promoted to full professor. He currently teaches nuclear and general chemistry courses. His scholarship focuses on making nuclear science 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.

He is an engaging and entertaining speaker. He has given over 50 invited presentations at a variety of conferences and meetings including Gordon Conferences and National ACS meetings, and currently specializes in speaking to various groups on nuclear science.

Message from the Chair

With the coming of the autumn season and the beginning of a new year for those of us in academia, the Wichita Section's monthly section meetings are recommencing with the September 19th meeting at Tabor College in Hillsboro. Guest speaker, Dr. Jeff Bryan will be presenting on "Nuclear Science

and Fiction in Star Trek” a topic that should be appealing to a broad audience, so please come, and bring students and guests for a fun and informative evening.

At the request of the National ACS office, we have been working on a revision of our Section’s bylaws, last updated in 1976. Most notably, the bylaws need to be updated to allow voting by email. We are also proposing a few other changes which will be discussed at the September and October meetings. Our goal is to have the updated bylaws approved by the Section in time for the October elections; otherwise, to be in compliance with our current bylaws, we will need to send out ballots by postal mail. We are currently awaiting approval of our updated bylaws by the National ACS office.

As you may know, our Section will be hosting the 2019 Midwest Regional Meeting. Chair of the Planning Committee Dr. Paul Rillema, and Co-Chair Dr. Arvin Cruz, along with the rest of the Committee, have been busy laying the groundwork for the meeting. Planning for this is a formidable task and we appreciate their efforts very much. If you are interested in assisting with the 2019 MWR meeting, please let us know.

As always, we are looking for ways by which the Section can better serve the needs of its members and reach out to the public. If you have any ideas or requests, please contact me or one of the other executive committee members.

Dorothy A. Hanna,
ACS Wichita Section Chair

ACS District V Meeting

Several District V local sections are collaborating for a weekend event in Kansas City, MO, September 16-17, 2016. An Innovative Project Grant from the ACS will fund housing (Saturday night only) and transportation for members of the Wichita Local Section to attend, particularly members of student affiliate chapters. The agenda is attached to this message; highlights include a banquet dinner for the Kenneth A. Spencer Award for Outstanding Achievement in Agricultural and Food Chemistry, employment discussions, poster and oral presentations by students, and a BBQ crawl. All events will be held at the University of Missouri-Kansas City (UMKC), except for the BBQ and brewery social outings.

Graduate and undergraduate students may submit abstracts for posters or ten-minute oral presentations to Martha Morton at mmorton4@unl.edu no

later than September 15. Please indicate which type of presentation is preferred.

A block of hotel rooms has been reserved and participants requesting a free overnight stay or reimbursement for a vehicle rental should contact Diane Nutbrown at dnutbrow@emporia.edu by Monday, September 12. Members who plan to attend, but do not need financial support, should also RSVP to Dr. Nutbrown by September 12. The cost of Friday’s banquet dinner is \$20 for professional members, but students presenting research at the event gain free admission. In addition, college faculty and high school teachers may bring two students free of charge, as well. Additional students receive a discounted rate of \$10 each.

The Spencer Award ceremony on Friday night, as well as the poster session, will be held at UMKC’s Pierson Auditorium, located in the Atterbury Student Success Center at 50th and Holmes. The award address by Dr. Agnes Rimando is titled, “Think of Pterostilbene When You Eat Blueberries.” A biography of Dr. Rimando and an abstract for her talk is also attached.

Wichita Section Web Site:

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

2016 Section Officers

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