



American Chemical Society Susquehanna Valley Section

MARCH 2017 NEWSLETTER

The four hundred and thirty sixth meeting of the Susquehanna Valley Section of the American Chemical Society will be held on Wednesday, March 8th, 2017 in Room 321 in the Natural Sciences Center on the campus of Susquehanna University in Selinsgrove, PA. The meeting will begin at 7:00 PM and will be preceded by a dinner at BJ's Steak and Rib House at 5:30pm. The speaker will be Dr. Will Kerber of Bucknell University in Lewisburg, PA.

“How do proteins choose their metals? A model for Fe/Mn discrimination in the ferritin-like superfamily”

Dr. William Kerber
Department of Chemistry
Bucknell University
Lewisburg, PA

Equilibrium binding of Fe(II)/Mn(II) mixtures to the dinucleating ligand F-HXTA (5-fluoro-2-hydroxy-1,3-xylenediamine-tetraacetic acid) is a chemical model of cofactor assembly in the R2 subunit of class Ic ribonucleotide reductases (R2c) and R2-like ligand binding oxidases (R2lox). The relative stability of bimetallic clusters has been investigated by fluorine NMR, and as predicted by the Irving-Williams series, F-HXTA forms more stable complexes with Fe(II) than with Mn(II). An unexpected thermodynamic preference for the heterobimetallic Fe/Mn cluster was also observed, which could contribute to the assembly of metallocofactors in R2c and R2lox. This appears to be a general phenomenon with F-HXTA and other biologically relevant pairs of divalent metal ions, namely Fe(II)/Zn(II), Fe(II)/Mg(II), and Zn(II),Mg(II). The origin of the effect and the synthesis of 2nd-generation R2c/R2lox models will be discussed.

Will Kerber received a B.S. in chemistry from Case Western Reserve University in 2000. He then went on to graduate school at the University of North Carolina at Chapel Hill where he earned his Ph.D. in 2005 studying the mechanisms of Pt(II)-catalyzed diene cycloisomerizations under the guidance of Prof. Michel Gagné. He moved to first-row transition metals as a Camille and Henry Dreyfus postdoctoral fellow at Johns Hopkins University working with Prof. David Goldberg on the synthesis and reactivity of high-valent iron oxo porphyrinoids. Will joined the faculty at Bucknell University in 2007 where he is currently an assistant professor of chemistry. He is broadly interested in structure/function relationships in coordination chemistry.

DINNER:

The lecture will be preceded by dinner at 5:30 PM at BJ's Steak and Rib House located at 17 North Market Street, Selinsgrove, Pennsylvania. RSVP to Bill Dougherty at doughertyw@susqu.edu or 570-372-4255 by 4:00 P.M. on Monday, March 6, 2017. Dinner will be ordered from the menu. Menu and directions to BJ's Steak and Rib House can be found at www.bjsribs.com.

DIRECTIONS TO SUSQUEHANNA UNIVERSITY:

Address: 514 University Avenue, Selinsgrove, PA 17870

From Route I-80 West:

Take the Danville exit, 224. Take route 54 east to Route 11 south towards Selinsgrove. Continue left on Route 11/15 south (continue as directed below from Route 11/15).

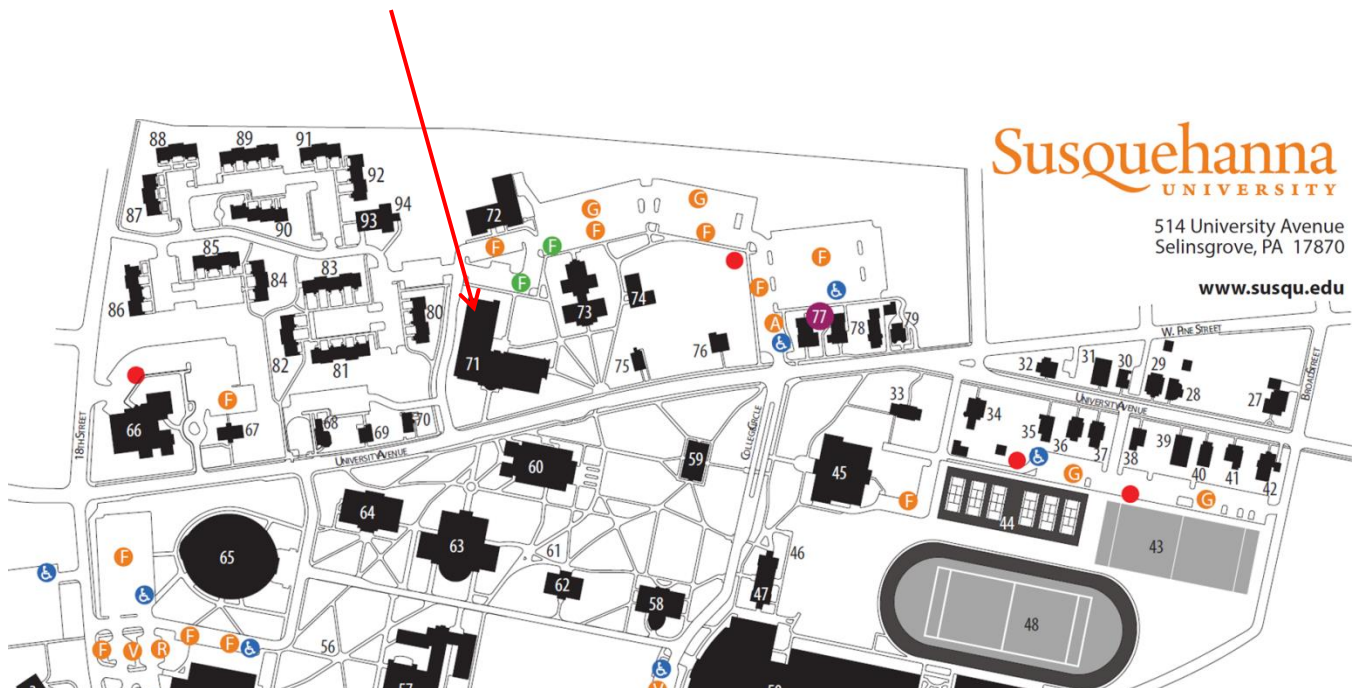
From Route I-80 East:

Take the Lewisburg exit, 210A. Take Route 15 south towards Selinsgrove. Turn right onto Route 11/15 south (continue as directed below from Route 11/15).

From Route 11/15:

Route 11/15 south becomes Market Street. Turn right onto W. Pine Street. West Pine Street becomes University Avenue. Follow the campus map to visitor parking.

A full campus map can be found at [Susquehanna University Campus Map](#). The Natural Sciences Center (# 71) is designated with the arrow on the map below:



SECTION NEWS:

2017 SUSQUEHANNA VALLEY SECTION CHEMISTRY HIGH SCHOOL EXAM:

The annual exams, hosted by the Susquehanna Valley Section of the ACS, will be held Saturday, April 8. Students from across the section are nominated by their teachers to take this exam. Students with high scores in our different districts receive a David H. Frederick Memorial Award in High School Chemistry at our Awards Banquet on Wednesday, May 3 at the Pine Barn Inn in Danville, PA. See the [website](#) for details.

JOB POSTINGS:



Bucknell University announces a search for a one-year Visiting Assistant Professor. Teaching responsibilities include physical chemistry, general chemistry, and related laboratories. For the full listing and application, see: <https://apply.interfolio.com/40402>



Marywood University announces a search for a tenure-track Assistant Professor of Biochemistry. The successful candidate will be expected to teach Biochemistry I and II for Science majors, Biochemistry for Nutrition & Dietetics majors, and general Chemistry courses for non-majors. For the full listing and application, click Assistant Professor-Biochemistry under Faculty at: <http://marywood.edu/about/employment/>

2017 CHEMISTRY OLYMPIAD:



U.S. National Chemistry Olympiad

The local 2016 U.S. National Chemistry Olympiad (USNCO) will be held on Saturday, April 22, 2017 at Marywood University. If you know of a truly outstanding chemistry student please submit his or her name to Dr. Deanne Garver, dgarver@maryu.marywood.edu, by the end of March. See the [website](#) for more details.

LOCAL STEM COMPETITIONS:

We have posted a list of all STEM (Science, Technology, Engineering, Mathematics) competitions for high school students on our website:

<http://departments.kings.edu/SusquehannaValleyACS/services/STEM.html>

If you have any questions about the contests or have suggestions for others, please contact either the person indicated on the site or the section webmaster, Ron Supkowski at ronaldsupkowski@kings.edu or 570-208-5900 x5733

JOSEPH PRIESTLEY HOUSE:

Sunday, March 12, is the opening day of the current season at the Joseph Priestley House in Northumberland. The visitor center is open from 1 - 4 PM and will feature costumed guides and live chemistry shows. For more information call the house at 570-473-9474 or go to:

www.josephpriestleyhouse.org/event/commonwealth-charter-day-and-priestleys-birthday/

MARM 2017:



A call for abstracts has been issued by MARM 2017. The deadline for abstract submission is March 13. Use the following link for submission: <https://marm2017.abstractcentral.com/login>. The 45th MARM is scheduled for June 4-6, 2017 and is being co-hosted by the Susquehanna Valley and Lehigh Valley Sections of the American Chemical Society. It will be held at Hershey Lodge in Hershey, PA. See their [website](#) for more details.

NATIONAL ACS NEWS:

ACT4CHEMISTRY:

Legislation that may impact the chemical enterprise comes before Congress on a regular basis, and ACS is committed to keeping its members informed and encouraging them to weigh in on high-priority issues. One of the main ways the ACS does this is through Act4Chemistry. To learn more please visit their [website](#) or email advocacy@acs.org.

NATIONAL MEETINGS:

The 2017 spring national meeting will be held in San Francisco, California from April 2-6. A call for papers has been opened with most divisions having a deadline of Monday, Oct. 31. See the [website](#) for details and registration instructions.

The 2017 fall national meeting will be held in Washington DC from August 20-24. Call for papers has been made; see [website](#).

Susquehanna Valley Section Web Page: <http://departments.kings.edu/SusquehannaValleyACS>

Please send any comments about the monthly newsletter to Ron Supkowski, Section Secretary
King's College 131 N River St Wilkes-Barre PA 18711 ronalsupkowski@kings.edu
