



American Chemical Society Susquehanna Valley Section

NOVEMBER 2011 NEWSLETTER

The three hundred and ninety ninth meeting of the American Chemical Society Susquehanna Valley Section will be held on Wednesday, November 9, 2011 in Room G09 of the Heim Building on the Lycoming College campus. The meeting will begin at 7:30 PM and will be preceded by dinner at 5:45 PM at the Bullfrog Brewery at 231 West Fourth Street, Williamsport, PA. The speaker will be Dr. Molly McGuire of Bucknell University.

"The Chemistry of Fe-bearing Clay Minerals"

Dr. Molly McGuire
Department of Chemistry
Bucknell University

The oxidation state of iron in clays influences many of the chemical and physical properties of the minerals including their ability to swell. These properties in turn affect the interactions of the clay mineral with both inorganic and organic substances in the environment. Although it is generally recognized that many differences in reactivity can be correlated with the ratio of ferrous to ferric iron within the clay mineral structures, little is known about the nature of the actual iron sites. We are using electronic (diffuse reflectance) and infrared (ATR-FTIR) spectroscopies to investigate iron speciation and redox processes in a class of Fe-bearing clay minerals known as nontronites. These studies have yielded clues about the crystallographic site distribution of Fe in these minerals and differences in redox activity. Additionally, ATR-FTIR and in situ atomic force microscopy (AFM) are providing information about the interactions of water molecules with the mineral surface and the dynamic changes in mineral structure that accompany the swelling process.

DINNER: Dinner will be at 5:45 PM at the Bullfrog Brewery (231 West 4th Street, Williamsport). Please call or email reservations to Debbie Smith (570-321-4180 or smithdeb@lycoming.edu) by November 4.

DIRECTIONS TO LYCOMING COLLEGE:

From I-80, take U. S. Route 15 north. Travel approximately 15 miles to Williamsport. Continue over the Market Street Bridge (stay in left lane) and follow the signs for the Business District. Go to the fourth traffic signal and turn right onto Little League Boulevard. Go one block east and turn left at the stop sign onto Mulberry Street. At the next traffic signal, turn right onto Washington Boulevard. The entrance to the Heim Building parking lot will be the first right (Park in the row closest to the building).

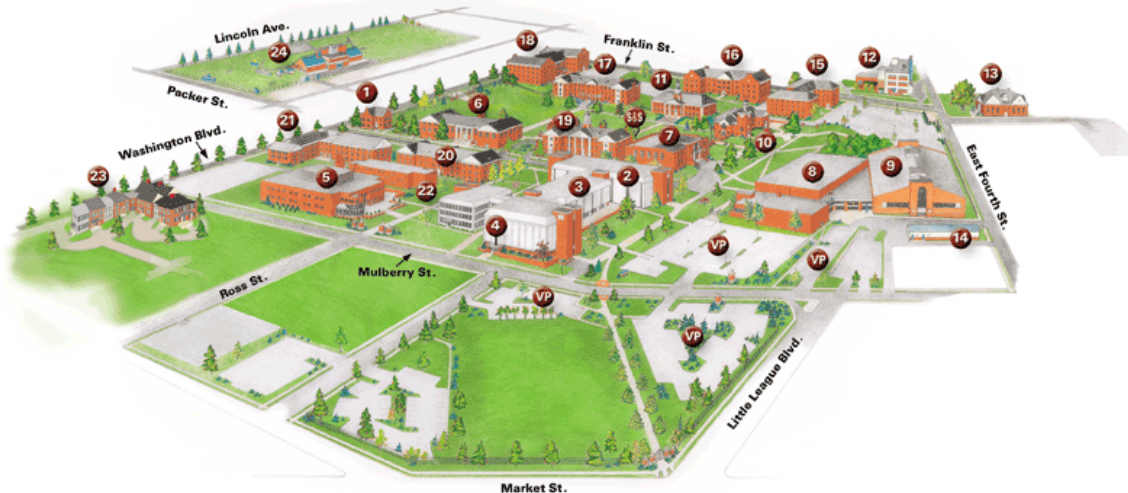
DIRECTIONS TO THE BULLFROG BREWERY RESTAURANT:

From I-80, take U. S. Route 15 north. Travel approximately 15 miles to Williamsport. Continue over the Market Street Bridge (stay in left lane) and follow the signs for the Business District. At the third traffic signal, turn left onto 4th Street. Follow 4th Street west to the third traffic signal, which is Hepburn Street (there will be a movie theater on the right at the corner). Parking is available along Hepburn Street (on the street and in a public parking lot). The Bullfrog Brewery is directly next to City Hall on 4th Street, one block east of Hepburn Street.

From I-180/US-220, exit onto Market Street (Exit 27A). Turn left from the exit ramp at the traffic signal and follow Market Street north into the city. At the second traffic signal, turn left onto 4th Street. Follow 4th Street west to the third traffic signal, which is Hepburn Street (there will be a movie theater on the right at the corner). Parking is available along Hepburn Street (on the street and in a public parking lot). The Bullfrog Brewery is directly next to City Hall on 4th Street, one block east of Hepburn Street.

DIRECTIONS FROM THE BULLFROG BREWERY RESTAURANT TO LYCOMING COLLEGE:

Follow Hepburn Street north to the traffic signal at Little League Boulevard (0.2 mi). Turn right onto Little League Boulevard and follow it until it ends at Mulberry Street (0.3 mi). Turn left at the stop sign onto Mulberry Street. At the next traffic signal, turn right onto Washington Boulevard. The entrance to the Heim Building parking lot will be the first right (Park in the row closest to the building).



A campus map can be found at [Campus Map - Lycoming College](#)

ACS ELECTIONS:

Ballots for President-Elect, 2012 were mailed to all ACS members eligible to vote. You may still vote by the traditional paper or online at <http://www.vres.us/acs.html> with your member account number and Personal PIN that were included in your ballot package. The voting deadline is **November 18, 2011**. Two candidates will vie for the office of president-elect of the American Chemical Society for 2012 in this fall's election. They are Dennis Chamot, associate executive director of the National Research Council's Division on Engineering & Physical Sciences, in Washington, D.C., and Marinda Li Wu, founder and president of Science is Fun!, in Orinda, Calif. The successful candidate will serve as ACS president in 2013 and as a member of the ACS Board of Directors from 2012 to 2014. Information regarding each of these candidates can be found in the Sept 12th issue of *Chemical and Engineering News*.

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