



American Chemical Society Susquehanna Valley Section

APRIL 2017 NEWSLETTER

The four hundred and thirty seventh meeting of the Susquehanna Valley Section of the American Chemical Society will be held on Wednesday, April 19th, 2017 in the Comerford Theatre of the Center for Natural and Health Sciences Building on the campus of Marywood University in Scranton, PA. The meeting will begin at 7:00 PM and will be preceded by a dinner Grande Pizza in Dunmore, PA. The speaker will be Dr. Michael Fennie of the University of Scranton, Scranton, PA.

“Propargyl Imidate Hydroamination and Nitrile-Tagged Tryptophan Derivatives: New Synthetic Methods and Molecular Probes”

Dr. Michael Fennie
Department of Chemistry
University of Scranton
Scranton, PA

Medicinal chemists synthesize chemical matter to test for activity against particular therapeutic targets (enzymes, receptors, ion-channels, etc.). This task becomes more complicated, however, when there is limited structural information available on the targets. My research projects aim 1) to develop methods for synthesizing chemical matter of interest to medicinal chemists, and 2) to synthesize probes to be used for the structural elucidation of biological targets. This talk will discuss a project in each area.

Project 1: Intramolecular hydroamination (addition of H and N atoms to a π -bond) is an effective synthetic method for formation of nitrogen-containing heterocycles whose utility is often limited by the use of expensive gold or silver catalysts. Investigations of propargyl imidates derived from nitriles have shown that inexpensive Cu(I) salts are competent and practical catalysts providing cyclized products in good yield at low catalyst loadings. Further research regarding reaction rates, subsequent functionalization of the reaction products, and the development of a one-pot imidate formation / cyclization will extend the utility of this cost-effective method.

Project 2: 2D IR spectroscopy is a powerful technique used in structural elucidation. While nitrile-tagged peptides have been used to acquire atomic level structural information on various biophysical events, the availability of the appropriate amino acid derivatives is often the rate-limiting obstacle for such experiments. A reliable and concise synthesis of fully protected nitrile-tagged L-tryptophan derivatives has been developed to enable such spectroscopic investigations. The convergent route utilizes a de novo indole synthesis which allows for the individual preparation of multiple regioisomers. Preliminary IR spectroscopy data will also be presented.

BIOGRAPHY OF DR. FENNIE:

Michael Fennie received a B.S. in chemistry from Canisius College in Buffalo, NY in 2001. He then went on to graduate school at the University of Pennsylvania where he earned his Ph.D. in organic chemistry in 2006 studying asymmetric bifunctional catalysis and the total synthesis of the rubromycin family of natural products under the guidance of Prof. Marisa Kozlowski. He moved to medicinal chemistry as a senior research investigator at Sanofi-Aventis Pharmaceuticals working in the area of internal medicine. Michael joined the faculty at the University of Scranton in 2012 where he is currently an assistant professor of chemistry. He is broadly interested in the development of practical methods for the synthesis of medicinally interesting heterocycles, and the development of molecular probes for the elucidation of biochemical processes.

DINNER:

The meeting will be preceded by dinner at 5:30 PM at [Grande Pizza](#) at 300 S. Blakely St. in Dunmore, PA. (Note: Google Maps incorrectly indicates 301 S. Blakely St.) Their telephone number is 570-207-2222. Dinner will be ordered from the menu and entrees average \$15 per person. If you are interested in attending the dinner, please RSVP Dr. Deborah Hokien by email (hokien@marywood.edu) or phone 570-348-6279 by Tuesday, April 18, 2017.

DIRECTIONS TO GRANDE PIZZA:

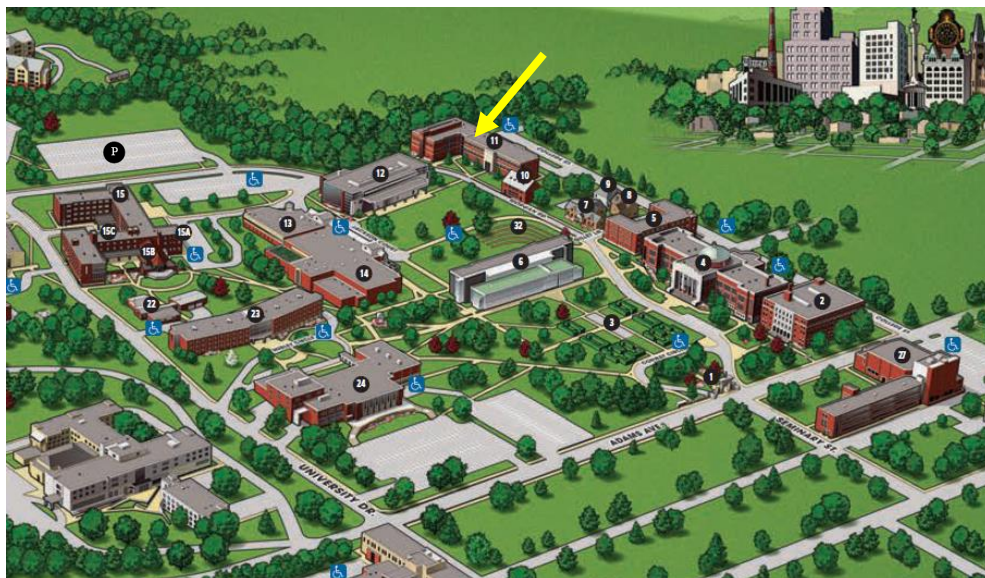
Grande Pizza is at 300 S. Blakely St. in Dunmore, PA. From I-81 N. take exit 187/186 to Drinker St. Turn left onto E. Drinker Street. Stay on E Drinker Street for about 1 mile, and then turn left onto S. Blakely St. Grande Pizza is 3 blocks on your left at Green Ridge St. / Potter St.

DIRECTIONS FROM THE RESTAURANT TO THE UNIVERSITY:

The University entrance is near 1299 Seminary St, Scranton, PA 18509. Make a right onto S. Blakely St. Follow Blakely Street to traffic light at Drinker Street. Turn right onto Drinker Street which merges with Electric Street. Proceed to second traffic light. At this intersection, turn right onto North Washington Avenue, and proceed four blocks. At third stop sign on North Washington, turn right onto Seminary Street. Proceed up the hill to the Memorial Arch. Parking areas are located in the Visitor Lot behind the Center for Athletics and Wellness.

DIRECTIONS TO MARYWOOD UNIVERSITY:

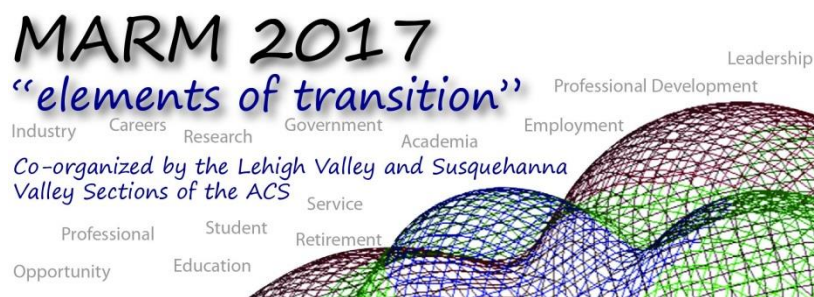
The University entrance is near 1299 Seminary St, Scranton, PA 18509. From U.S. Interstate 81, Exit 188 (old exit 55), follow directional signs at the end of the exit ramp toward Dunmore. (If you are traveling north on 81, make a left at the light at the O'Neill Highway, which becomes Blakely Street.) Follow Blakely Street to traffic light at Drinker Street. Turn right onto Drinker Street which merges with Electric Street. Proceed to second traffic light. At this intersection, turn right onto North Washington Avenue, and proceed four blocks. At third stop sign on North Washington, turn right onto Seminary Street. Proceed up the hill to the Memorial Arch. Parking areas are located in the Visitor Lot behind the Center for Athletics and Wellness.



- 1 Memorial Arch
- 11 Center for Natural and Health Sciences Building
- P Visitor Parking

See directions at their website as well: http://www.marywood.edu/virtual_tour/directions.html

SECTION NEWS:



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. [Book your room now](#) to take advantage of the discounted MARM rate. Many details about the program and offerings are on the website, marm2017.sites.acs.org.

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.

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.

CHEMAGINATION CALL FOR JUDGES:



The 2017 Mid-Atlantic Regional Chemagination Competition, which will be held on Sunday, June 4 from 12:00 pm to 5:00 pm at 2017 MARM is in need of volunteers to serve as judges. Judging would involve evaluation of articles submitted by student teams about a week before the competition and then the interviewing of up to 6 teams during the competition on June 4. The criteria for evaluation are scientific thought, creativity, clarity, and thoroughness. Information about the article topic is given in the [SVS website](#). Further information can be had from [Carol Stein](#).

JOB POSTING:



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>

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

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 is 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
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