



American Chemical Society Susquehanna Valley Section

APRIL 2019 NEWSLETTER

The four hundred and fifty second meeting of the Susquehanna Valley Section of the American Chemical Society will be held on Wednesday, April 10th, 2019 at the Swartz Center, Room A, McGowan Community Room, on the campus of Marywood University in Scranton, PA. The meeting will begin at 7:00 PM and will be preceded by a dinner at Grande Pizza in Dunmore, PA. The speaker will be Dr. Sireesha Mamilapalli of Marywood University.

“Fighting Anthrax: A new approach towards an old disease”

Dr. Sireesha Mamilapalli
Department of Science, Math, and Computer Science
Marywood University
Scranton, PA

ABSTRACT:

Anthrax is one of the most dangerous zoonotic diseases over years threatening grazing livestock as well as diverse human population. Treatment for anthrax has evolved over years from just the usage of antibiotics to most reliable monoclonal antibodies that provide significant protection. However, several attempts were made against developing a robust vaccine over an appreciable amount of time. Towards addressing this issue, our work is focused on understanding anthrax pathogenesis. Anthrax toxin involves a major conformational change producing a β -barrel transmembrane pore through which the enzymatic toxin components gain entry in to the cytosol thereby causing lethality. Our recent studies revealed an interesting intermediate during pore formation, which marked an initial step for a better understanding of the mechanism. Ongoing studies involve generation of a chimeric molecule, by exploiting the structural similarity between a fungal immuno modulatory protein (FIP Fve) isolated from golden needle mushroom *Flamulina velutipes* and anthrax toxin protective antigen domain IV (PAD4). We have designed a chimeric protein molecule that retains both the stable hydrophobic core form FIP Fve and key antigenic epitopes from PAD4. This protein is hypothesized to provide improved thermodynamic stability and immunogenicity at one shot that could be the initial step towards developing a robust vaccine candidate for anthrax.

BIOGRAPHY OF DR. SIREESHA MAMILAPALLI:

Sireesha Mamillapalli Ph.D., graduated with a B.S. in Chemistry (2005) and M.S. in Organic chemistry (2008) from Andhra University, India. Later, she worked as a research associate for a Pharmaceutical company in India. She gained expertise in handling organic reactions from milli to multigram scale and purification using different chromatographic techniques. Due to her immense interest towards obtaining a Ph.D., she moved to USA to pursue a graduate degree under the supervision of Dr. James G. Bann at Wichita State University in 2012. Her graduate work was focused on “Structural and Stability studies on Domain 4 of anthrax toxin protective antigen (PA) and Its role on Anthrax pathogenesis”. After obtaining her Ph.D., she landed at Marywood University as a tenure track Assistant Professor for Fall 2018. Her diverse and inter disciplinary educational and professional background in both India and the United states are definitely an asset to building a successful career.

DINNER:

The meeting will be preceded by dinner at 5:30 PM at [Grande Pizza](#) at 300 S. Blakely St. in Dunmore, PA. (Note: Apple 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 to Dr. Mary Lynn Grayeski by email (grayeski@marywood.edu) or phone 570-961-4598 by Tuesday, April 9, 2019.

DIRECTIONS TO GRANDE PIZZA:

Address: 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 SWARTZ CENTER:

Address: 1400 University Ave, Scranton, PA 18509

Take Green Ridge Street to North Washington St. and turn right. At third stop sign on North Washington, turn right onto Seminary Street. After about 0.7 mile turn right onto University Ave. Parking areas are located in the visitor lot behind the Center for Athletics and Wellness.

DIRECTIONS TO THE SWARTZ CENTER, MARYWOOD UNIVERSITY:

Address: 1400 University Ave, 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. After about 0.7 mile turn right onto University Ave. Parking areas are located in the visitor lot behind the Center for Athletics and Wellness.

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

SECTION NEWS:

2019 SUSQUEHANNA VALLEY SECTION CHEMISTRY HIGH SCHOOL EXAM:

The annual exams, hosted by the Susquehanna Valley Section of the ACS, will be held Saturday, April 6. 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 1 at the [Pine Barn Inn](#) in Danville, PA. See the [website](#) for details.



2018 CHEMISTRY OLYMPIAD:



U.S. National Chemistry Olympiad

A reminder that students who qualified will take the National Chemistry Olympiad Exam on Saturday April 27th at Bucknell University at 9 am. Please contact Patrick Martino (patrick.martino@bucknell.edu) if you have any questions. For more details about the exam see the [local website](#) and [national website](#). Best of luck to our section's participants!

THE 2019 MEETING OF THE PENNSYLVANIA ACADEMY OF SCIENCE:

The 95th annual PAS meeting will be held on March 29-31 at Cedar Crest College. There will be oral and poster sessions broadly encompassing all fields of science, as well as student presentation awards, graduate school and career panels, and a parallel symposium exploring the importance of communicating science to the public. The Keynote Speaker will be Lorraine Soisson, Ph. D., of the USAID Malaria Vaccine Development Program. Register at the website: pennsci.org/annual-meeting-registration



MARM2019:



The 47th Mid Atlantic Regional Meeting (MARM) will be held May 30-June 1, 2019. The meeting is hosted by the Maryland Local Section of the American Chemical Society.

BOOK YOUR STAY: The Days Inn in Baltimore's Inner Harbor is offering rooms for \$99/night. Check their website, marm2019.org, for more information.

Abstract submission for POSTERS ONLY extended until April 4th; Consider submitting your work.

CERM 2019:



The 50th Central Regional Meeting (CERM) will be held June 4 - 8, 2019. The meeting is hosted by the Midland Local Section of the American Chemical Society. Check their website, acscerm2019.org, for more information.

NATIONAL ACS NEWS:

NATIONAL MEETINGS:

Spring 2019:

Registration is now open for the 2019 spring national meeting in Orlando, FL from March 31 – April 4. See the [website](#) for details.

Fall 2019:

The 2019 fall national meeting will be held in San Diego, CA from August 25 – 29. The call for papers for some divisions having a deadline of March 25th are still open. See the [website](#) for further details.

23rd Annual Green Chemistry & Engineering Conference and 9th International Conference on Green and Sustainable Chemistry:

These events will be held together from June 11-13, 2019 in Reston, Virginia. See the website, gcande.org, for more details.

SERVICE ON ACS NATIONAL COMMITTEES:

There are many national committees of the ACS that welcome non-councilors. If you are interested in being considered for a committee appointment at the national level, you are encouraged to create a listing in the ACS Yellowbook and fill out a committee preference form.

If you are not already in the Yellowbook system, you can request access from Cheryl Vockins (c_vockins@acs.org)

The online committee preference form to select and inform our office of your committee interests will be open until June 7, 2019 and is located at <https://www.yellowbook.acs.org> (note: you will need your ACS member number or ACS ID for access).

If you would like to be considered for an appointment, the Committee on Committees now requires that you provide specific details/rationale (500 character limit) about your qualifications/expertise for that appointment so be sure and fill out that text box.

Although not all can be appointed to committees, you can be sure that you will get thorough consideration for an assignment.

Please contact Cheryl Vockins (c_vockins@acs.org), if you have any questions.

ACS LEGISLATIVE ACTION NETWORK:

Legislation that may impact the chemical enterprise comes before Congress on a regular basis, and the ACS is committed to keeping its members informed and encouraging them to weigh in on high-priority issues. To see the position of the ACS on many legislative issues visit the ACS LAN website: <https://www.acs.org/content/acs/en/policy.html>

To find out how to become more active in ACS advocacy activities, see the website: <https://www.acs.org/content/acs/en/policy/memberadvocacy/advocacy-tools.html>

To join ACS' grassroots legislative advocacy network, ACT4CHEMISTRY, which will allow you to stay up to date on policy issues and contact legislators on behalf of chemistry and chemists, go to their [website](#), follow the [Act4Chemistry Twitter account](#), or email advocacy@acs.org.

JOIN THE ACS:

If you know of anyone who would benefit from being a member of the American Chemical Society, please direct them to the membership website:

<https://www.acs.org/content/acs/en/membership-and-networks/acs/join.html>

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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