

American Chemical Society Susquehanna Valley Section

NOVEMBER 2023 NEWSLETTER

The four hundred and seventy first meeting of the Susquehanna Valley Local Section of the American Chemical Society will be held on Wednesday, November 8th, 2023, at 7:00 pm in room G09 of the Heim Science Building on the campus of Lycoming College. The speaker will be Mallory Melton, Ph.D., Visiting Assistant Professor of Anthropology and Archaeology at Lycoming College. The presentation will be preceded by a dinner at 5:00 in the President's Blue Room in the Wertz Student Center.

"The Modern Science of Ancient Food: Advances in the Analysis of Starches and Phytoliths from Archaeological Contexts in the Americas"

Dr. Mallory Melton Visiting Assistant Professor of Anthropology and Archaeology Lycoming College Williamsport, Pennsylvania

Morphological analysis of microbotanical remains has opened new doors for understanding how humans prepare food and manage their environments. This talk will detail case studies in which I have used this methodology to study aspects of daily life in the Peruvian Andes and Mesoamerica. Starch and phytolith analyses set in the Andes have shed new light on early freeze-drying of potatoes, ancient drinking vessels, and human-camelid relationships, while studies in Pacific Guatemala have revealed how incipient urbanites kept their cities and ancestors fed. Extraction of microbotanical remains from the surrounding matrix is often performed chemically, but there are ongoing hesitations regarding the costs versus benefits of exposing starch to strong acids. I will end the talk by discussing our current best practices and new possibilities to be explored in the future.

BIOGRAPHY OF DR. Melton:

Dr. Mallory Melton received a B.A. in Archaeology and Anthropology from The University of North Carolina at Chapel Hill in 2014. She went on to earn an M.A. and Ph.D. in Anthropology from the University of California, Santa Barbara, graduating in 2022. She spent the following academic year as a Fellow in Pre-Columbian Studies at Dumbarton Oaks, a research institute of Harvard University headquartered in Washington, D.C. She spent much of this fellowship working on her first book, Learning How to Feed the Masses: Preclassic Agroforestry & Incipient Urbanism on the Pacific Coast of Guatemala, recently signing an advanced contract with the University of Texas Press. She joined Lycoming College this fall as a Visiting Assistant Professor of Anthropology & Archaeology. Her research uses food as lens for examining the impacts of sociopolitical change/crisis (e.g., culture contact, colonization, urbanization, state formation) on daily life within middle range and complex societies of the Americas.

DINNER:

Dinner will be at 5:00 pm on campus in the President's Blue Room, which is in the Wertz Student Center. When entering the Wertz Student Center, go up the stairs and immediately to the left. The President's Room will be on the right. Dinner will consist of sliced turkey, roasted potatoes, broccoli, a garden salad, and dessert. Those that would like to attend the dinner should contact Debbie Smith (570-321-4180 or smithdeb@lycoming.edu) by Tuesday, October 31st.

DIRECTIONS TO LYCOMING COLLEGE:

GPS address of the entrance to the Lynn Lot: 124 Washington Blvd, Williamsport, PA 17701

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/Lynn Science Center parking lot will be the first right.

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. Go to the third 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/Lynn Science Center parking lot will be the first right. Proceed straight after entering the main doors of the Lynn Science center into the Heim Building.



Detailed directions can be found at the following internet address:

https://www.lycoming.edu/admissions/visit/directions.aspx

A detailed campus map can be found at the following internet address:

https://www.lycoming.edu/admissions/ourcampus/campusmap.aspx

LOCAL SECTION NEWS:

LOCAL SECTION ELECTIONS FOR 2024 OFFICERS:

Nominations are due for the positions of:

Chair-elect (one year term as Chair-Elect, one year as Chair, and one year as Past Chair)

Secretary, Treasurer, Councilor, and Alternate Councilor (all three-year terms) If interested, please contact any <u>section officer</u>.

Expect a ballot to be emailed to you in the coming weeks.

OPEN POSITIONS IN THE LOCAL SECTION:

Do you want to use your talents to help other chemists in the Susquehanna Valley section? Listed below are examples of positions that need to be filled by willing individuals along with websites that give organizing ideas:

• SVS Chair-Elect

This three-year position is the usual office taken on by local chemists who want to begin to become more involved in the local section.

- <u>Chemistry Olympiad</u> Chair
 - Administer Local Chemistry Olympiad Competitions in coordination with the National Chemistry Olympiad.
- WCC (<u>Woman Chemists Committee</u>) Chair Help attract, retain, develop, promote, and advocate for women to positively impact diversity, equity and inclusion in the Society and the profession.
- CMA (<u>Committee on Minority Affairs</u>) Chair Help increase the number & participation of racially & ethnically underrepresented scientists in the Society and its governance.
- Project SEED (<u>Summer Experiences for the Economically Disadvantaged</u>) Coordinator *Coordinators are responsible for establishing programs, identifying mentors, recruiting students, fundraising, and organizing activities such as field trips.*
- CH&S (<u>Chemical Health and Safety</u>) Committee Chair Help provide authoritative technical resources and mentorship in chemical health and safety for all.
- SCC (<u>Senior Chemists Committee</u>) Chair

Help improve communication among senior chemists, increase the number of senior chemists' groups and the level of their engagement within local sections, and encourage the involvement of senior chemists in programs focused on K-12 education, undergraduate networking, and mentoring.

• CCEW (Chemists Celebrate Earth Week) Coordinator

Help promote the positive role that chemistry plays in the protecting our planet (recyclable plastics, cleaner-burning fuels, phosphate-free detergents, environmental monitoring, and green chemistry initiatives).

If you are interested, contact the section Chair (Daniel McCurry, <u>dmccurry@commonwealthu.edu</u>), Secretary (Ronald Supkowski, <u>ronaldsupkowski@kings.edu</u>) or any member of the Susquehanna Valley Section leadership team (<u>executive committee</u>, <u>committee chairs</u>, <u>liaisons</u>).

LOCAL STEM COMPETITIONS:



A list of all STEM competitions for high school students is posted on our <u>website</u>. 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 <u>ronaldsupkowski@kings.edu</u> or 570-208-5900 x5733

NATIONAL ACS NEWS:

COVID-19:

ACS is committed to helping combat the global COVID-19 pandemic with initiatives and free resources. Learn More at their website <u>acs.org/content/acs/en/covid-19</u>

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: <u>https://www.acs.org/content/acs/en/policy.html</u>

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 <u>Act4Chemistry X</u> (formerly Twitter) account, or email <u>advocacy@acs.org</u>.

Act4Chemistry Advocacy Issues. To take action go to the website acs.org/content/acs/en/policy/memberadvocacy/issues.html#/takeaction

Ask the Senate to Reauthorize CFATS and Protect the Public

The Chemical Facility Anti-Terrorism Standards (CFATS) program enables the Department of Homeland Security (DHS) to work with chemical facilities to protect against terrorism incidents. Unfortunately, this program expired in July, preventing DHS and site operators from working together. On July 25, 2023, the House passed <u>Protecting and Securing Chemical Facilities from Terrorist Attacks Act, H.R. 4470</u>, which would reauthorize DHS to continue this valuable cooperation. The measure passed with overwhelming bipartisan support by a vote of 409-1. Now, the Senate must act so that the bill may become law. <u>ACS has already written to Senate Leadership requesting prompt action</u>, but we would like your help to raise this issue with all of the Senate as well.

Ask Congress to complete appropriations and fund the CHIPS and Science Act in FY24

As Congress continues to negotiate FY24 funding levels, now is the time for you to advocate on behalf of chemistry and remind your members of congress about the importance of investing in STEM education, basic research, and strengthening the domestic supply chain. We are asking you to email your Representative and Senators today and request they fund research agencies at the levels included in the CHIPS and Science Act.

Ask Congress to support climate change legislation

With the growing climate crisis, the American Chemical Society recently endorsed a package of legislation to help address climate change, both to reduce greenhouse gas emissions, improve the sustainability of our energy and transportation sectors, and adapt to a changing world. ACS believes these steps are only part of addressing our changing climate, but it is a step towards leaving a better planet to our children and grandchildren. We ask you to raise these important issues to your Representative and Senators as they consider their legislative activities and priorities.

Support the Chemical Safety Board

The CSB is an independent federal agency that saves companies, universities, and local communities billions of dollars and countless lives by helping them prevent catastrophic incidents. Despite its great value, the administration has called for \$9.4 million for FY 2019 to be allocated to CSB, specifically for its elimination. Join us in asking appropriators and other members of Congress for their continued support of the CSB and its mission to protect workers and the public.

Keep Science Funding Strong

Congress and the White House are working to complete the budget appropriations process. Join us in asking appropriators for a strong and predictable boost in federal funding for scientific research.

Congressional Chemistry Caucus

The Caucus' mission is to educate Members of Congress, their staff, and the public on the benefits of chemistry in today's society and its economic impact on our country. If you do not see your Representative or Senators represented in the Chemistry Caucus ask them to join.

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: <u>https://www.acs.org/membership.html</u>

NATIONAL MEETINGS:



Spring 2024 ACS National Meeting

The Spring 2024 national meeting, "Many Flavors of Chemistry" will be a hybrid event. The meeting will be held March 17-21, and the in-person event will take place in New Orleans, LA. See the <u>website</u> for more information.

SAVE THE DATE:

The 28th Biennial Conference on Chemical Education will be held at the University of Kentucky in Lexington on July 28 – August 1, 2024. See the <u>website</u> for more details.



Susquehanna Valley Section Web Page: <u>svs-acs.org</u>. Please send any comments about the monthly newsletter to Ron Supkowski, Section Secretary <u>ronaldsupkowski@kings.edu</u> King's College 131 N River St Wilkes-Barre, PA 18711