

# American Chemical Society Susquehanna Valley Section

# SEPTEMBER 2024 NEWSLETTER

# **LOCAL SECTION ELECTIONS:**

Our Local Section needs nominations for the following position:

o **Secretary** (three-year term)

and, although we have nominees for the following positions, additional nominations may be submitted for these as well:

- O Chair-elect (one year term as Chair-Elect, one year as Chair, and one year as Past Chair) and
- o **Treasurer, Councilor, and Alternate Councilor** (all three-year terms)

If interested, please contact the <u>Section Councilor</u>.

Expect a ballot to be emailed to you later in the fall. Our Local Section needs a full slate of officers to be in good standing with our Society. More information on these positions can be found in this newsletter (see below).

# **MONTHLY DINNER MEETING:**

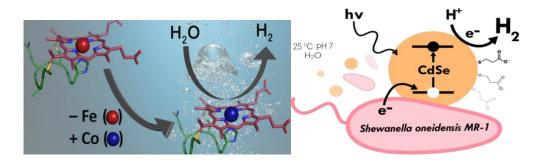
The four hundred and seventy-fourth meeting of the Susquehanna Valley Section of the American Chemical Society will be held on Wednesday, September 18<sup>th</sup>, 2024 on the Bucknell University campus. The meeting will begin at 7:00 p.m. and will be preceded by a dinner. The dinner will be in the Academic West Building in room 111 from 6:00 - 7:00 p.m. and the presentation will be from 7:00 - 8:00 PM in Hildreth -Mirza room 101. The speaker will be Kara Bren from University of Rochester.

# "Bioinorganic systems for artificial photosynthesis"

Dr. Kara L. Bren
Department of Chemistry, University of Rochester
Rochester, NY 14618, USA

**Abstract:** The storage of solar energy in the form of chemical fuels is needed to expand our use of the sun as a renewable and clean energy resource. Such systems require light absorption, charge separation, and catalysis of energy-storing reactions. In this work, we are constructing

systems for artificial photosynthesis that utilize heme proteins from the cytochrome c family as components for catalysis and charge transfer. For fuel production from abundant feedstocks, we employ semisynthetic and synthetic cytochromes for selective and facile proton and carbon dioxide reduction. To build systems for light-driven fuel production, these catalysts are paired with molecular or nanocrystalline photosensitizers. To provide electrons to these systems, we report the transfer of *Shewanella oneidensis* respiratory electrons via cell-surface cytochromes c to photocatalysts. Ongoing work includes the investigation of catalytic and charge transfer mechanisms to provide information needed to advance our fundamental understanding and optimization of these systems.



#### **BIOGRAPHY:**

Kara Bren is the Richard S. Eisenberg Professor in Chemistry and Chemistry Department Chair at the University of Rochester, NY, USA. She is a Fellow of the American Association for the Advancement of Science, a member of the American Academy of Arts and Sciences, and a Kavli Fellow of the U.S. National Academy of Sciences. She earned her B.A. in Chemistry at Carleton College in Minnesota, and her Ph.D. at Caltech working with Harry Gray and as a Visiting Student in the lab of Ivano Bertini in Florence, Italy. After an NIH Postdoc with Gerd LaMar at the University of California Davis, she started her independent academic career at the University of Rochester. Her research has included investigations of metalloprotein dynamics and electronic structure. Currently, her group is focused on developing bioinorganic systems for energy conversion and storage.

#### **DINNER:**

The meeting will be preceded by dinner in the Academic West Building Room 111 from 6:00 - 7:00 p.m. Dinner will be buffet style, including a vegetarian option and dessert. There is no cost for the dinner, but those wishing to reserve a spot for dinner should contact Charlie Guttendorf (charlie.guttendorf@bucknell.edu) by 3:00 p.m. Wednesday, 11 September 2024.

# **DIRECTIONS TO BUCKNELL UNIVERSITY:**

Address of the Academic West Building: 616 Coleman Hall Dr, Lewisburg, PA 17837

#### East of Lewisburg:

- 1. Interstate 80 West to Exit 210A
- 2. Route 15 South
- 3. At 11th traffic light (the first light after crossing Route 45 (Market Street)), turn left onto Moore Avenue. (Look for the Bucknell Athletic Stadium on the left.)

#### **South of Lewisburg:**

- 1. Take Routes 11&15 North
- 2. When Routes 11 & 15 split, stay on Route 15
- 3. Approx. 7 miles after Selinsgrove / Shamokin Dam, you'll come to a stop light. Bucknell is on your right. (Look for the Bucknell Athletic Stadium on right.)

# West of Lewisburg:

- 1. Interstate 80 East to Exit 210A
- 2. Route 15 South
- 3. At 11th traffic light (the first light after crossing Route 45 (Market Street)), turn left onto Moore Avenue. (Look for the Bucknell Athletic Stadium on the left.)

#### North of Lewisburg:

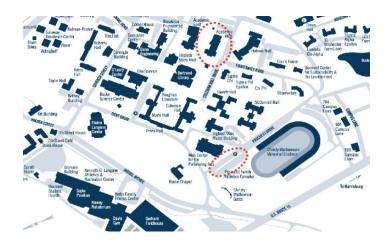
- 1. Take Route 15 south
- 2. Once past Interstate 80, turn left on Moore Avenue at the 11th traffic light (the first light after crossing Route 45 (Market Street)). (Look for the Bucknell Athletic Stadium on the left.)

**Once on campus:** Follow the campus map below to the visitor parking designated with a **P**.





LEWISBURG, PENNSYLVANIA



Online campus maps can be found at https://www.bucknell.edu/sites/default/files/public-safety/campusmap.pdf

#### **LOCAL SECTION NEWS:**

#### 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:

- Susquehanna Valley Local Section 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.
- Susquehanna Valley Local Section Secretary *Create and distribute the monthly newsletter by email. Coordinate with the webmaster.*
- Susquehanna Valley Local Section Treasurer Maintain the finances of the local section with routine reports to the Executive Committee.
- WCC (Woman Chemists Committee) Chair Help attract, retain, develop, promote, and advocate for women to positively impact diversity, equity and inclusion in the Society and the profession.

- CMA (Committee on Minority Affairs) 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.
- SCC (Senior Chemists Committee) Chair Help improve communication among senior chemists, increase the number of senior chemists' groups, and the level of their engagement within local sections.
- CCEW (<u>Chemists Celebrate Earth Week</u>) Coordinator

  Help promote the positive role that chemistry plays in the protecting our planet.

If you are interested in learning more about these volunteer activities, please contact the section Councilor (Donald Mencer, donald.mencer@wilkes.edu).

#### 2024 – 2025 UPCOMING LOCAL SECTION MEETINGS:

16 October 2024: Wilkes University – Guest Speaker: Dr. Nancy Levinger of CSU Note this is the third Wednesday in October

13 November 2024: Lycoming College Jan 2025: Executive Board Meeting

#### NATIONAL CHEMISTRY WEEK:



NCW will be celebrated 20-26 October 2024, with the theme "Picture Perfect Chemistry" which will have a *focus* on Photography and Imaging. The Susquehanna Valley Section is once again collecting illustrated poems for this year's event. If you know of a student in K-12 who would like to participate, please contact Charlie Guttendorf at cg029@bucknell.edu. The deadline for submissions is Sunday, October 20th. For further details, see the website.

# **REGIONAL ACS NEWS:**

#### MIDDLE ATLANTIC REGIONAL MEETING:



The 53<sup>rd</sup> Middle Atlantic Regional Meeting (MARM 2025) - "<u>Celebrating 100 years of Chemistry</u>" will be held at Seton Hall University 28 - 31May 2025 Sponsored by the North Jersey Local Section of the ACS

#### **NATIONAL ACS NEWS:**

#### 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: <a href="https://www.acs.org/content/acs/en/policy.html">https://www.acs.org/content/acs/en/policy.html</a> To find out how to become more active in ACS advocacy activities, see the <a href="advocacy website">advocacy website</a>.

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 <a href="Act4Chemistry X">Act4Chemistry X</a> account, or email advocacy@acs.org.

Act4Chemistry Advocacy Issues. To take action go to the website https://www.acs.org/policy/memberadvocacy.html

#### **NATIONAL MEETINGS:**



# Spring 2025 ACS National Meeting

The Spring 2025 national meeting will be a hybrid event.

The meeting will be held 23-27 March 2025, and the inperson event will take place in San Diego, CA.

Abstract submission is open now with a closing date of 30 September 2024. See the <u>website</u> for more information.

#### 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/membership.html

Susquehanna Valley Section Web Page: <a href="mailto:svs-acs.org">svs-acs.org</a>. Please send any comments about the monthly newsletter to your Local Section Councilor <a href="Donald Mencer">Donald Mencer</a>.