

Triannual Newsletter



ACS SIOUX
VALLEY SECTION

10 February 2026

PROVIDING A COMMUNITY TO INSPIRE, AMPLIFY AND COLLABORATE ON COMPELLING-CUTTING
EDGE RESEARCH, EDUCATION AND OUTREACH IN THE CHEMICAL/BIOCHEMICAL SCIENCES.



Message from the Chair

Chemistry moves the world forward, and the question is not whether our work matters, but how we choose to apply it. By aligning our curiosity, expertise, and integrity with ACS's mission "to improve all lives through the transforming power of chemistry," we can turn discoveries into solutions that address global challenges, from health and sustainability to equity and education. As a result of ACS's mission, our section's strategic goals are to increase collaboration with industrial partners, increase collaboration with new academic institutions and members in our region, and increase opportunities for community gatherings. In light of these goals, if you know of an industrial or academic partner with whom you would like the section to forge a lasting collaboration, we invite you to contact us and share their information.

Whether advancing fundamental research, building new partnerships, mentoring the next generation, or creating spaces for connection and idea-sharing, every contribution counts. When we act with purpose and collaboration, chemistry becomes more than a discipline, it becomes a force for positive, lasting change in the lives of people everywhere. Continue to advocate for the mission, the result will be improved lives for everyone.

Sioux Valley Goals for 2026

1. Increase collaboration with industrial partners.
2. Increase collaboration with new academic institutions & members in our region.
3. Increase opportunities for community gatherings.

UPCOMING COMMUNITY GATHERING!

At the conclusion of the American Academy of Science event on April 11, all are welcome to come to:

Grille 26

**1716 S Western Ave, Sioux
Falls, SD 57105**

**Saturday, April 11,th 2026
3:00-5:00 pm**

Appetizers will be provided!

**DO YOU HAVE A
RECOMMENDATION FOR AN
INDUSTRIAL AND/OR
ACADEMIC COLLABORATOR?**

Email:

chemistry@siouxvalleyacs.com

In this newsletter
you can expect:

2026 Goals

Election Results
and Meet New
Members

News from the
Region

Scientific
Conferences

Welcome new
territories to the
Sioux Valley
Region!

Fall Research
Symposium
Highlights

Summer
Research
Opportunities

Social Events

Upcoming
Events - Mark
your Calendar!

Election Results and New Members!

Office Elections: 15 people voted

Chair: Dr. Rachel Willand-Charnley (1 year)

Chair-elect: Dr. Rachel Willand-Charnley (1 year)

Secretary: Dr. Melody Jewell (2 years)

Treasurer: Dr. Chris Schwartz (2 years)

Members at Large: Dr. Benjamin Tokheim and Dr. Paula Mazzer (2 years)

Volunteers:

Public Relations Coordinator: Bethany Melroe

Webmaster: Gopala Krishna Murphy

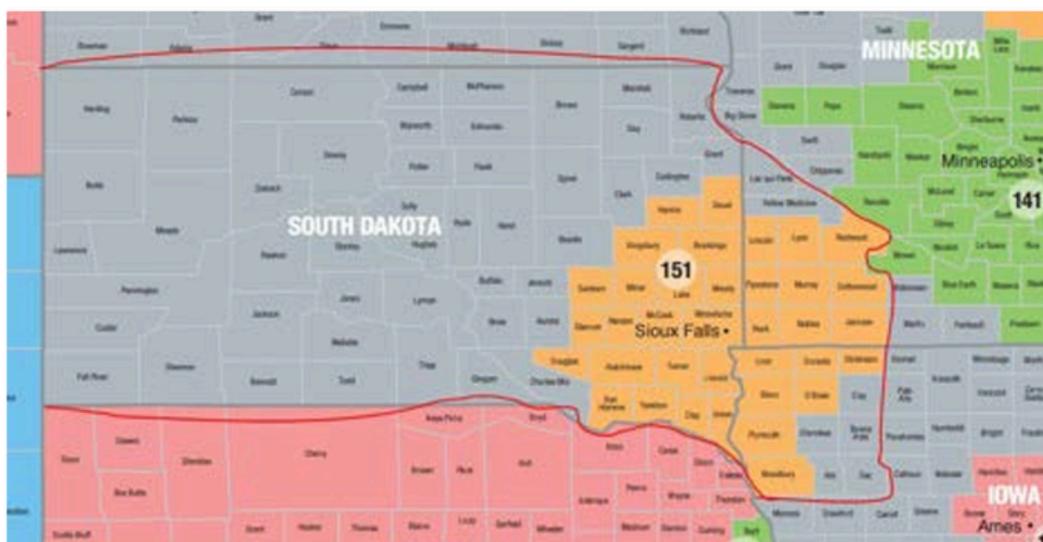
We are still seeking volunteers for: Minority Women's Affairs Coordinator, Outreach Coordinator and National Chemistry Olympiad Coordinator (Melody Jewell will finish out this cycle, but we would love someone to join to help with this next year!)

Welcome New Territories to the Sioux Valley Region

ACS has assigned some previously unassigned areas to the Sioux Valley Region! We would like to extend a warm welcome to these new counties, so now our membership includes all of these counties:

- In South Dakota: Aurora, Beadle, Bennett, Brown, Brule, Buffalo, Butte, Campbell, Charles Mix, Clark, Codington, Corson, Custer, Day, Deuel, Dewey, Edmunds, Fall River, Faulk, Grant, Gregory, Haakon, Hamlin, Hand, Harding, Hughes, Hyde, Jackson, Jerauld, Jones, Lawrence, Lyman, Marshall, McPherson, Meade, Mellette, Oglala Lakota, Pennington, Perkins, Potter, Roberts, Sanborn, Spink, Stanley, Sully, Todd, Tripp, Walworth, Ziebach)
- In Minnesota: Lac qui Parle and Yellow Medicine counties
- In Iowa: Ida, Sac, Cherokee, Buena Vista and Clay

The Sioux Valley Local Section now encompasses the areas in the red line on the map below including all of South Dakota and several counties in southwest Minnesota and northwest Iowa!



Meet the new members of the Executive Board

**Treasurer:
Dr. Chris
Schwarz**



My name is Chris Schwartz. I first became interested in Chemistry when I was a Biology major taking my first Chemistry course (Environmental Chemistry). The professor was great and made me very curious about all of the Chemistry going on around me. When I took Fundamentals of Organic Chemistry, I helped my classmates and friends understand what the professor was saying because everything he said made sense to me. I decided to add Chemistry as a major and planned to teach at a college. I got my doctorate from the University of Nebraska at Lincoln in 2010 where my research mostly focused on ozonolysis methodology. I then taught at the University of Nebraska at Kearney for two years as a visiting professor. I have taught at many institutions over the years and am now an assistant professor at Morningside University.

**Public Relations Coordinator:
Dr. Bethany Melroe-Lehrman**

Dr. Melroe-Lehrman joined the Chemistry Department at Dakota Wesleyan University in 2011, where she teaches general and organic chemistry and serves as Chair of the department. She enjoys mentoring students through classroom and laboratory learning, academic advising, and involvement in student organizations such as CHAOS. Dr. Melroe Lehrman earned her degrees in chemistry from South Dakota State University and has been recognized with teaching awards, including the DWU Clarke Award for Teaching Excellence. She lives in rural South Dakota with her husband, Jeremy, and their two children, Cash and Emerson, where they own and operate Windy Creek Cattle Company. In her free time, she enjoys playing golf and volleyball and pursuing creative interests in photography and graphic design.



**Member-At-Large:
Dr. Ben Tokheim**



Dr. Tokheim joined the Science Department at Southwest Minnesota State University in the fall of 2022. He teaches the year-long general chemistry sequence along with upper-level courses in physical and inorganic chemistry. Dr. Tokheim has a Ph.D. from Washington State University in inorganic chemistry and wrote his dissertation on rare-earth metal separations from spent nuclear fuel. His research group at SMSU still focuses on rare-earth metal separations but instead targets electronic waste. Dr. Tokheim is a co-advisor for the SMSU Chemistry Club where he helps students develop chemistry demos for community outreach. He is also the faculty mentor for the chemistry concurrent enrollment (College Now) program at SMSU and enjoys visiting high school classrooms throughout southern Minnesota. Dr. Tokheim grew up in rural southwestern Minnesota and loves the big skies of the prairie. He enjoys playing tennis in the summer months and cross country skiing in the winter months with his wife, Elisabeth, and sons, Ari and George.

SAVE THE DATE!

**Sioux Valley Spring Awards Banquet
April 18, 2026 from 11:30am-1:30pm
Vinyl Taco in Sioux Falls**

Watch your email for details on how to RSVP and how to nominate for awards including Outstanding Senior Undergraduate Student, Graduate Student Research Excellence Award and Excellence in Diversity and Outreach Award



2026 BIENNIAL CONFERENCE ON CHEMICAL EDUCATION

UNIVERSITY OF WISCONSIN—MADISON
JULY 26–30, 2026



SHARE WHAT YOU DO!

<https://conferences.union.wisc.edu/bcce2026/>

The Request for Abstracts for BCCE 2026 is now open! We invite educators, researchers, and practitioners to submit abstracts and help shape the conference program. Abstracts are now being accepted for:

- oral presentations for in-person and global remote symposia
- poster presentations
- birds-of-a-feather gatherings

BCCE welcomes contributions that reflect the many ways our community engages in chemistry education (including teaching, curriculum and assessment design, education research, faculty development, and educational leadership) across a wide range of institutional and professional contexts. Whether this is your first BCCE or one of many, we encourage you to share your work at BCCE 2026.

 [Consult abstract submission guidelines.](#)

 [Search for an ideal in-person symposium for your work.](#)

 **Abstract submission deadline:** March 01, 2026



All abstract submissions are managed through **Ex Ordo**, our conference management system.

[Highlights from the Region](#)

An NSF proposal from Principal Investigator Grigoriy Sereda, “Oncoplant Therapeutics” (#14308-26), has been selected for participation in National Science Foundation I-Corps™ 2026 Winter Cohort 1 and an NSF I-Corps™ Teams Award of \$50,000. The award period is January 20, 2026 - January 20, 2027. The team (Mahadi Hasan (Entrepreneurial Lead), Morgan Eikanger (Co-Entrepreneurial Led), Grigoriy Sereda (Technical Lead) and Randolph Faustino (Industry Mentor) will discover and explore customers for their novel targeted therapeutic for metastatic colorectal cancer (currently 15% 5-year survival rate) with the occurrence age shifting to earlier thirties.

“Chem” Hangout with us!

Sioux Valley Local Section “Hangout”

Saturday, April 11, 2026

3:00-5:00pm at Grille 26

1716 S Western Ave, Sioux Falls, SD 57105

In conjunction with the SD Academy of Science Meeting the Sioux Valley Local Section is hosting a “social time”. Come join us for alkynes of conversation and some relaxed networking. Watch your email for additional details coming soon!

Come
Join
us!



UNIVERSITY OF SIOUX FALLS

10-11 APRIL 2026



ORAL AND POSTER PRESENTATIONS

SUBMISSIONS
NOW
ACCEPTED!

JOIN US!

SOUTH DAKOTA ACADEMY OF SCIENCE ANNUAL MEETING

Present your research at South Dakota's
premier science meeting!

Oral and poster presentation sessions
Graduate and undergraduate awards
Submission deadline: 1 April 2026

Join researchers, educators, and students
as they share research and findings
that impact our state and beyond.

More information and registration:



<https://southdakotaacademyofscience.wildapricot.org>

Former SDSU department head visits Egypt as part of Fulbright project!

Douglas Raynie, professor emeritus and former head of South Dakota State University's Department of Chemistry, Biochemistry and Physics, visited Egypt's Beni Suef University in November 2025 as part of the U.S. Fulbright Specialist Program.

For thousands of years, farmers have been growing medicinal and aromatic plants – like basil, cumin and mint – on the banks of the Nile River in what is known as the Beni Suef region of Egypt. The dry climate, intense sunlight and low humidity make for ideal growing conditions, which is why Beni Suef, located just 70 miles from Cairo, is considered a major hub for producing medicinal plants, essential oils and spices. The Egyptian government has made it a priority to increase its agricultural exports, with a specific focus on medicinal and aromatic plants. As a result, the Research Institute of Medicinal and Aromatic Plants was established at Beni Suef University.



Dr. Tariq Ali (right), Acting President of Beni Suef University, presents the University seal to Fulbright Specialist Dr. Doug Raynie (left), Professor Emeritus at South Dakota State University.

Last fall, Douglas Raynie, a former faculty member at SDSU, visited the university to share his research expertise in “green chemistry”. This work will help the university strengthen its research capacity and advance more efficient and sustainable extraction technologies for the production of medicinal and aromatic plant-based products. “As I am entering the end of my career, it was good to share my acquired knowledge with emerging researchers internationally,” Raynie said. Raynie’s visit was part of the U.S. State Department’s prestigious Fulbright program, a flagship international educational exchange program sponsored by the federal government and designed to build lasting connections between people of the U.S. and people of other countries.

At SDSU, Raynie’s research focused on green chemistry, which utilizes a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products. He shared his expertise to help researchers at Beni Suef University’s Research Institute for Medicinal and Aromatic Plants address technical concerns surrounding chemical separations and using waste products from plants. “My Egyptian colleagues are very interested in improving the efficiency of isolating essential oils and other compounds from local plants”, Raynie said. “They desire to do this using state-of-the-art techniques which are both economic and safe to the environment.”

The Beni Suef region is home to several essential oil processing plants that produce valued oils like jasmine, chamomile and lavender. Raynie visited two of these plants to better understand the extraction process and the challenges these factories face. Tariq Ali, acting president of Beni Suef University, said, “The exchange of such international experiences contributes to opening new research horizons related to extraction and industrial applications.”

Raynie also led six technical lectures on his research, one keynote address and one general lecture on educational engagement and the nature of the U.S. higher education experience, titled “The Power of Thinking Differently: Insight from the American Educational Experience”. Raynie discussed the concept of “creative destruction,” which is the economic process behind the 2025 Nobel Prize in Economics.

“The intent was to stimulate thinking toward innovation in academics and research and the relationship between education and economic growth”, Raynie said. Eman Kandeel, executive director of Beni Suef University’s Office of International Cooperation and External Relations, noted the visit “made a significant impact on the university”. As part of the trip, Raynie attended the meeting of the Egyptian Pharmaceutical Studies Committee of the Supreme Council of Universities. There, he addressed the deans of the faculties of pharmacy representing the 27 governorates in Egypt and shared his experience at Beni Suef University. He also met with Ali El-Ghamrawy, president of the Egyptian Drug Authority.

Raynie, who retired from SDSU in 2023, is one of over 400 U.S. citizens selected to share their expertise with host institutions abroad through the Fulbright Specialist Program. Recipients are selected based on academic and professional achievement, demonstrated leadership in their field and their potential to foster long-term cooperation between U.S. and international institutions. The program is funded through an annual appropriation made by Congress to the State Department.

Seeking Science Fair Judges

The 2026 Eastern SD Science & Engineering Fair will take place on Tuesday, March 31, 2026, at the Dana J. Dykhouse Stadium in Club 71 on the SDSU Campus. Your expertise helps inspire the next generation of scientists and engineers as students showcase their innovative projects.

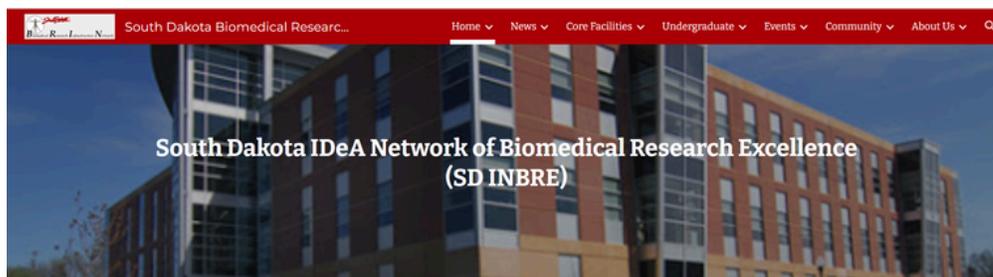


If you're available to help this year, please sign up here:

https://www.online-registration-system.com/sd/esdsef/judges_volunteers/

All judges—including returning ones who have judged with us for many years—must register every year. This keeps our records current, helps with planning, and ensures we have the latest contact and availability details.

Most judging occurs between 9:00 am and 11:30 am, with judge orientation/training at 8:15 am.



SD INBRE Summer Research Program

The fellowship requires a commitment to scholarly activities. It is not just a summer job, but an excellent opportunity to learn and grow as a student researcher — it must be the main focus of your summer!

Applications for summer undergraduate research fellowships are due February 14. Applications are evaluated by the SD INBRE Selection Committee made up of SD INBRE Director Dr. Victor Huber, representatives from each SD INBRE partner institution and a representative from the USD Honors Program. Each committee member evaluates the applications individually and then the final selection is made at a group meeting at which all applications are discussed. It is the undergraduate fellows who are selected NOT the undergraduate fellow/mentor team.

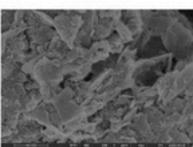
After the selection of the fellows, institutional representatives contact potential mentors and consult the mentor/location choices of the selected fellows in order to place fellows in a laboratory. Decisions and placements will be sent to the applicants around April 1.

Application details found here: <https://www.sdbrin.org/undergraduate/apply-now>

Summer Research Opportunities

SDSMT: Applied Ceramic Engineering

Research Experience for Undergraduates
Summer 2026: May 26 – July 31, 2026



Program Description

- 10 Week Summer Program
- \$7,000 stipend
- \$3,850 Housing Stipend
- Seminars and Workshops
- Indigenous Guest Speakers
- Geology & Ceramic Training
- Field Studies in the Badlands

Research Project Topics

- Ceramic Armor
- Ceramic 3D Printing
- Mineral Processing
- Protective ceramic coatings
- Extreme ceramic materials
- Archeology of Lakota Tribal Objects
- Paleoenvironment and Paleoclimate

How to Learn More

- QR Code or <https://tinyurl.com/BACE605>

How to Apply

- <https://etap.nsf.gov/award/7328/opportunity/11456>

Contact Information

Dr. Katrina Donovan, Senior Lecturer
Department of Materials and Metallurgical Engineering
Katrina.Donovan@sdsmt.edu

This REU site (Award Abstract # 2149113) is jointly funded by the Department of Defense in partnership with the Division of Earth Sciences (Directorate for Geosciences), the Established Program to Stimulate Competitive Research (EPSCoR), and the Division of Engineering Education and Centers (Directorate for Engineering).

<https://www.sdstate.edu/chemistry-biochemistry-physics/willand-charnley-lab/collaboration-combat-crime-c3-nsf-research>

<https://www.sdsmt.edu/academics/academic-departments/materials-and-metallurgical-engineering/back-to-the-future.html>

2026 Summer Research
The Back to the Future REU program is an NSF funded summer research program that provides undergraduate students the opportunity to work on research topics in Metallurgy and Materials Science many of which have historical and artistic components.

Program Description

- Open to all majors
- 10-week summer program, May 26 – July 31
- Faculty mentored research
- \$7000 stipend and room and board included
- Workshops on historical impact of metallurgy

Research Topics

- Archaeometallurgy
- Welding and Joining
- Advanced Alloys
- Critical Minerals
- Thin Films Research
- Biomaterials
- Corrosion Engineering

How to apply
Visit REU Website: met.sdsmt.edu/backtothefuture

Contact
Michael West, Materials and Metallurgical Engineering, South Dakota Mines
Michael.West@sdsmt.edu

Ten-Week Summer Research Intensive

The requisite training, skills and experience needed for undergraduate researchers to successfully pursue graduate studies in security-based topics calibrated towards undermining the illicit economy and advancing scientific fields.

Multi-Site Collaboration

The C3 collaboration is a multi-site collaboration that includes South Dakota State University, University of South Dakota and South Dakota School of Mines & Technology that are providing an interdisciplinary approach to combating the cyber, physical and social elements of the illicit economy.

Conduct Transformative Research in:

- Analytical Chemistry
- Behavioral Science
- Biochemistry
- Chemistry
- Machine Learning & Predictive Modeling
- Material and Metallurgical Engineering
- Mathematics

Explore the program, meet the scientists, and apply to C3!



Apply by March 6th for full consideration.
The program runs from June-to-August.

With more questions? Contact: Dr. Willand-Charnley
Rachel.willand@sdstate.edu



Fall 2025 Poster Symposium Recap!

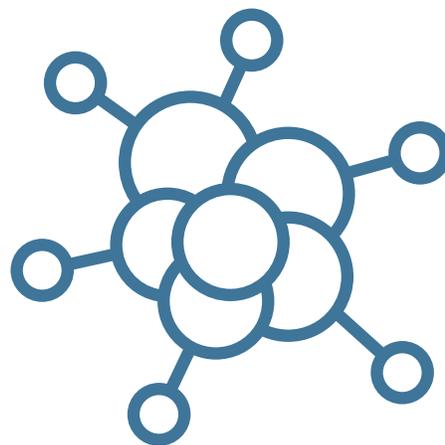
Sioux Valley ACS RESEARCH SYMPOSIUM HIGHLIGHTS

Many Thanks to the 35 students who shared their research at the symposium



SEPTEMBER 20, 2025

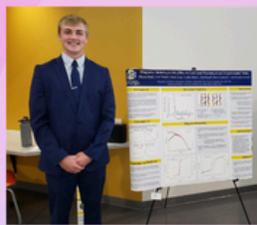
Raven Precision Agriculture Center
South Dakota State University



Undergraduate Student Awards

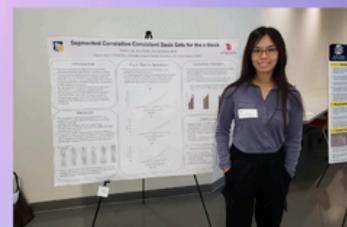
TOP 3 FINISHERS

EACH RECEIVE \$400 FOR TRAVEL TO SCIENTIFIC CONFERENCE



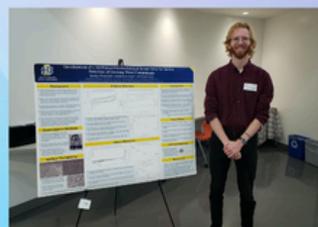
Mason Pulse, SDSU

Magnetic Ordering in Mn₂PtIn: A Combined Theoretical and Experimental Study



Alexis Ung, USD

Segmented Correlation Consistent Basis Sets for the S-Block



Matthew Wieberdink, SDSU

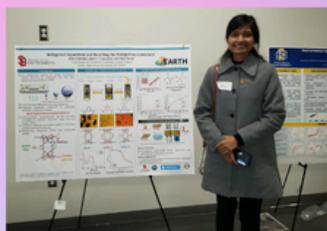
Development of a 3D-Printed Electrochemical Sensor Array for On-Site Detection of Drinking Water Contaminants



Graduate Student Awards

TOP 3 FINISHERS

EACH RECEIVE \$400 FOR TRAVEL TO SCIENTIFIC CONFERENCE



Kriti Chitrakar, USD

Refrigerant Separation and Recycling Via Nanoporous Container Molecules



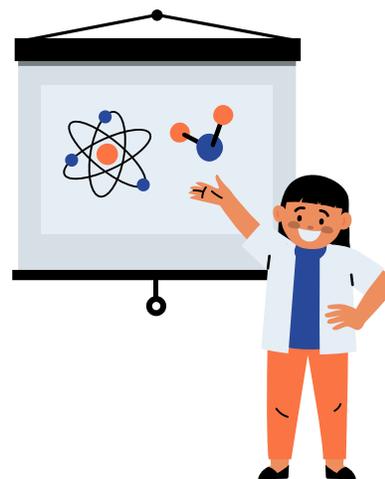
Amirhossain Amjad, SDSU

MXene-Enhanced Electrochemical Sensor for Point-of-Care Therapeutic Drug Monitoring in Chemotherapy



Mahadi Hasan, USD

A Mesoporous Silica Nanoparticles-Based Targeted Drug Delivery Against Human Metastatic Colorectal Cancer



Call for Nominations for the 2026 ACS Midwest Award



Your assistance in identifying candidates for the **2026 American Chemical Society (ACS) Midwest Award is solicited**. In 1944, the St. Louis Section of the ACS established, and since then sponsors and funds the ACS Midwest Award to recognize “those who have made meritorious contributions to the advancement of pure or applied chemistry or chemical education” in the Midwest Region. The award is conferred annually on a scientist who has made such meritorious contributions in the profession of chemistry. **The contributions must have been made during a period of residence in the geographic area defined by the territories of the Local Sections of the ACS that participate in the Midwest Regional Meeting (MWRM) of the ACS.** These 17 Local Sections have been listed in programs for Midwest Regional Meetings and they are: Ames, Iowa, Kansas City, Kansas State University, Mark Twain, Mo-Kan-Ok (The Tri-State), Nebraska, Omaha, Ozark, St. Louis, Sioux Valley, South Central Missouri, Southern Illinois, University of Arkansas, University of Missouri, Wakarusa Valley, and Wichita.

Nominees need not be members of the ACS and can work in industry, academia, government, or in private practice. Those ineligible for the Midwest Award include prior recipients of either the Midwest Award or any National Award administered by the ACS; see <https://www.acs.org/funding/awards/national/awards-by-title.html> for a listing of ACS National Awards. Ineligible also are members of the Midwest Award Jury. For the St. Louis Section of the ACS, also ineligible are the Past Chair, the Chair, the Chair-Elect, the Secretary and members of the Awards Committee. More details concerning the main features of the Midwest Award can be found at https://www.stlacs.org/docs/bylaws_042417-cert.pdf in BYLAW XII.

The 2026 ACS Midwest Award will be presented at the 2026 Midwest Regional Meeting of the ACS to be held in Manhattan, Kansas, from October 25-27, 2026, hosted by Kansas State University. Ceremonies associated with the award feature a Midwest Award Symposium, a Midwest Award Lecture and the Midwest Awards Banquet scheduled on October 26. The Award consists of a medallion and a cash honorarium; it is presented by the St. Louis Section Chair at the Midwest Awards Banquet. A condition of acceptance of this Award is that the recipient gives the Midwest Award Lecture at the time of presentation of the Award.

Nominations should consist of a nominating letter for the nominee and two or more seconding letters; a CV for the nominee; a brief biography for the nominee; and documented and objective information regarding the outstanding achievements of the nominee. Other recent practices include the following. If the nominee is an academic, a list of people who received advanced degrees under her or his direction should be provided. Activities by the nominee that support the ACS in the Midwest Region constitute additional criteria of merit. Please submit nominations electronically via a single pdf file to the e-mail address given below. They must be received on or before the **deadline of Tuesday, March 31, 2026 (by 11:59 pm CST) the deadline specified in Bylaw XII of the St. Louis Section of the ACS. Nominations are retained and reconsidered** (if unsuccessful) over a period of 3 consecutive years.

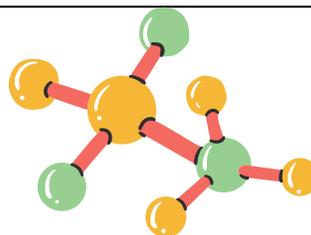


Thank you for your assistance. If you have questions, please contact Leah O'Brien at lobrien@siue.edu or call (314) 757-3179 (cell).

Nominations should be directed to:
Dr. Leah O'Brien, St. Louis Section ACS
E-Mail address: lobrien@siue.edu
2026 ACS Midwest Award Coordinator



UPCOMING EVENTS



Join us for upcoming local, regional and national events!

- **2026 ACS Spring Meeting**
 - March 22-26 in Atlanta, GA
- **2026 South Dakota Academy of Science Meeting**
 - April 10-11 in Sioux Falls, SD at University of Sioux Falls
 - “Chem Hangout” Saturday, April 11 from 3-5pm
 - Grille 26: 1716 S Western Ave, Sioux Falls, SD 57105
- **Sioux Valley Spring Awards Banquet**
 - April 18 (11:30am-1:30pm) in Sioux Falls - Vinyl Taco
 - Watch your email for nomination and RSVP information coming soon!
- **2026 BCCE (University of Wisconsin)**
 - July 26-30, 2026 in Madison, WI
- **2026 ACS Fall Meeting**
 - August 23-27 in Chicago, IL
- **2026 Midwest Regional ACS Meeting (Kansas State University)**
 - October 25-27 in Manhattan, Kansas

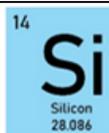


Resources

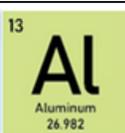
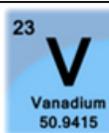
- [ACS Meetings & Events](#)
- [Chemistry News](#)
- [ACS Webinars](#)
- [ACS Division of Chemical Education](#)
- [Molecule of the Week](#)

*Thank you for reading!
Look for the next edition in May!*

FOLLOW US ON SOCIAL MEDIA	<p>https://www.facebook.com/SiouxValleyLocalSectionACS/ https://www.instagram.com/siouxvalleyacs/ Website: https://www.siouxvalleyacs.com/ Email: chemistry@siouxvalleyacs.com</p> <p>Submit Spotlight Information or suggestions for events/articles to chemistry@siouxvalleyacs.com or to bethany.melroe@dwu.edu</p>
WE WANT TO HEAR FROM YOU!	<p>Seeking volunteers for Member Spotlight (Research and Teaching), Undergraduate Student Spotlight and Graduate Student Spotlight</p> <ul style="list-style-type: none">• For all spotlights, please submit photo along with blurb to include current position/institution, brief description of current position and fun information about you and your relationship with chemistry!• Students also include any research, accolades, and future plans. <p>Seeking interesting research or pedagogical techniques for a “Feature” Corner</p> <ul style="list-style-type: none">• Consider sharing the things you are doing in the world of chemistry!



X



le

