

SPRING
2026

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UNIVERSITY
OF WYOMING

School of
Energy Resources

**QUARTERLY
NEWSLETTER**

Vol. 7, Issue 1



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ABOUT THE SCHOOL OF ENERGY RESOURCES

The University of Wyoming (UW) School of Energy Resources (SER) was created in 2006 to enhance the University's energy-related education, research, and engagement. SER directs and funds cutting-edge energy research and technology development. It further bridges the gap between academics and industry through targeted engagement efforts. The partnerships formed between academics and industry ensure programs are relevant, current, and deliver impact and high value to stakeholders and the state.

Since its inception, SER has maintained flexibility in its focus and structure to meet the changing needs of Wyoming's energy industries and the State's economy—which is now more critical than ever.

This quarterly newsletter highlights SER's significant achievements from February through April 2026, in academics, research, newly emerging areas of focus, and engagement to keep UW and Wyoming at the forefront of the energy sector.



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SER GOVERNANCE

Burkhart Reappointed to UW Energy Resources Council

The University of Wyoming School of Energy Resources welcomed **Donald Burkhart Jr.** back to UW's Energy Resources Council (ERC).

Established by Wyoming statute, the ERC provides strategic guidance to SER on research priorities, educational programs and outreach initiatives. The council is composed of leaders from industry, government, academia and the community, and represents a broad range of perspectives on energy issues.

Burkhart, who previously served as one of the statutorily required legislative representatives on the governing body to SER, was reappointed by **Gov. Mark Gordon** and confirmed by the Wyoming Senate during the recent budget session.

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Outgoing Council Member

SER would like to extend its sincerest thanks to the outgoing member of the ERC, **Mark Doelger**.

Appointed to the ERC in 2020, Doelger is a registered professional geologist with nearly 50 years of experience in the energy field. He currently is president of Barlow & Haun, a partner in Stakeholder Energy LLC, and president of the Upper Green River Conservancy. He has also served as chairman of the Wyoming Pipeline Authority and acting chairman of the Wyoming Oil and Gas Conservation Commission.



Legislative Members

The ERC is statutorily required to include representatives of the Wyoming Legislature to ensure that SER's work is relevant, impactful and aligned with the needs of Wyoming and the nation. Serving a minimum of a two-year term, one member comes from the Wyoming Senate, appointed by the president of the Senate, and the other from the House of Representatives, appointed by the speaker of the House.

Sen. Ed Cooper was appointed to the Council in March of 2025, and served as the Vice Chairman.

In March of 2026, **Sen. Jim Anderson** replaced Sen. Cooper and was once again voted in as Vice Chairman.

Sen. Anderson has previously served on the ERC from 2013 to 2025, serving as Vice Chairman beginning in 2017.

SER extends its sincere thanks to our legislative appointees. Their vital connection to the Wyoming Legislature ensures SER's priorities remain strategically aligned with the needs of the state.



Sen. Jim Anderson



Sen. Ed Cooper

ACADEMICS

UW Students Visit Proposed Drilling Locations in Powder River Basin

Eight students in the Energy Resource Management and Development (ERMD) bachelor's degree program in the University of Wyoming's School of Energy Resources visited proposed drilling locations in the Powder River Basin to witness the complex processes behind permitting, environmental approvals, and multi-party negotiations.

The field trip offered a behind-the-scenes look at a standard meeting between WRC Energy Group - an independent oil and natural gas company that was formed through the combination of Wold Energy Partners LLC and Rebellion Energy II LLC, and Camino Natural Resources LLC - and the Bureau of Land Management (BLM) regarding two proposed pad locations.

Students observed the intricate balance of road amendments, regulatory compliance, and the critical dialogue required between federal agencies, energy companies, and private landowners.

Students in attendance represented both the Professional Land Management (PLM) and Energy and Environmental Systems (EES) concentrations in the ERMD program, including **David Meraz-Ordonez** of Cheyenne, Wyo.; **Will Baker** of Wheatland, Wyo.; **Connor Seely** of Sheridan, Wyo.; **Dylan Salgado** of Litchfield, Ariz.; **Wyatt Loham** of Livermore, Cali.; **Cadence Vollman** of Douglas, Wyo.; **Trevor Spomer** of Cody, Wyo.; and **Alex Villareal** of Hamlin, Tex.

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Academics Highlights

- Nominated by students in the Student Chapter of Energy Resources, SER Academic Coordinator **Larissa Rutz** was named the UW Student Organization Advisor of the Year for 2025-2026. 
- Students in the Professional Land Management concentration of the ERMD degree program attended the 2026 NAPE Summit and Expo. 
- In recognition of her academic achievements, senior **Harper Pollock** was nominated for the Tobin Memorial and Rosemarie Martha Spitaleri Awards, UW's prestigious recognition for outstanding graduates. Students are considered for the award based on their scholarship, leadership, and contributions to UW. 

- SER Adjunct Professor **Saman Aryana** interviewed UW Professor Emeritus **Norman Morrow** as part of the InterPore Time Capsule Award. [LISTEN HERE >](#)



- In recognition of his academic achievements, senior **David Meraz Ordonez** was nominated for the AAPL - American Association of Professional Landmen Outstanding Graduate Award as part of the Landman Scholarship Trust (LST). Representing the Outstanding Graduate from the University of Wyoming, Meraz Ordonez came in as the runner-up among all AAPL-accredited programs' undergraduate students. 

RESEARCH

Center for Economic Geology Research

UW SER Researchers Release Publication on Rare Earth Element Occurrences in Wyoming and Montana Coal

Researchers at the University of Wyoming School of Energy Resources have published a pioneering study in the *International Journal of Coal Geology*. The study represents a first-of-its-kind explanation of rare earth element (REE) enrichment in Powder River Basin (PRB) coals.

The geological process paper titled, "Rare Earth Element Occurrence and Distribution within the Largest U.S. Coal Resource: Geochemical Variability of Powder River Basin Coals, Wyoming and Montana," provides all the crucial background information on the conditions under which REEs were concentrated in coal strata, which is foundational to any further investigations for the recovery of REEs or examination of other coal basins.

Authors of the paper include members of SER's Center for Economic Geology Research (CEGR) minerals team, Principal Research Professional **Davin Bagdonas**, Senior Research Professional **Bob Gregory**, Assistant Research Professional **Cole Messa**, and Program Manager **Tyler Brown**, along with SER Director of Cross-Cutting Programs and Acting Senior Director of Research **Erin Phillips**.



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Hydrogen Energy Research Center

UW Researchers Publish Article on Hydrogen Production Using Wastewater

Researchers at the University of Wyoming School of Energy Resources published an article exploring the potential of wastewater usage for the hydrogen economy.

The paper, titled "Advancing hydrogen production: A comprehensive review of wastewater reforming techniques, feedstocks and opportunities," published in the *Renewable and Sustainable Energy Reviews*, provides the first comprehensive review of integrating wastewater treatment with hydrocarbon reforming.

Robert Cincotta, an assistant research professional in SER's Hydrogen Energy Research Center (H₂ERC), served as lead author of the article along with **Charles Nye**, senior research professional in H₂ERC, and **Xiaokun Yang**, assistant program director in charge of the Inorganic Isotopes and Actinide Chemistry Group at Los Alamos National Laboratory.

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Center for Energy Regulation and Policy Analysis

CERPA Releases Issue Snapshot on Oil and Gas Severance Taxes

The Center for Energy Regulation and Policy Analysis (CERPA) at the University of Wyoming's School of Energy Resources released a new "Issue Snapshot" paper covering state oil and natural gas severance taxes. Part of a resource series on the CERPA website, these mini-papers provide concise overviews of various topics.

Authored by **Esther Wagner**, a senior research professional at CERPA, the latest Issue Snapshot examines Wyoming's fiscal reliance on mineral wealth compared to other major energy-producing states.

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Jurisprudence of Underground Law and Energy Group

UW Releases Community Information Guides on Nuclear Energy in Wyoming

The University of Wyoming School of Energy Resources released a set of community information guides addressing topics related to nuclear energy in Wyoming.

Publications in this series include “What Every Wyoming Citizen Should Know About Nuclear Waste” and its companion guide, “Getting Involved: Community Guide to Participation in Nuclear Facility Authorizations,” which seek to answer some of the most frequently asked questions surrounding the emergence of a nuclear industry in Wyoming.

Written by **Scarlett Forrest**, an assistant research scientist in SER’s Jurisprudence of Underground Law and Energy (JOULE) Research Group – with support from **Tara Righetti**, JOULE director, SER professor of law and co-director of SER’s Nuclear Energy Research Center (NERC) – the guides were developed in response to a county commissioner’s request for public materials related to nuclear facilities and waste.



Pictured: Scarlett Forrest

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Research Highlights

- Minerals Program Director **Tyler Brown** in the *Center for Economic Geology Research (CEGR)* visited the Wyoming Innovation Center in Gillette with **Akira Ohnaka** of Japan Carbon Frontier Organization (JCOAL) to focus on SER-led projects utilizing Wyoming coal and share data under an MOU.
- In collaboration with *JOULE* and the *Center for Energy Regulation and Policy Analysis (CERPA)*, the Great Plains Institute developed and released a State Hydrogen Policy Webmap. Research for the project was led by **Scarlett Forrest**, an assistant research scientist in JOULE, working with UW College of Law student **McKenna Kail** and SER student **David Meraz Ordonez**.



[VIEW INTERACTIVE TOOL >](#)

- SER-funded students in the Energy and Petroleum Engineering Department competed in the student poster contest at the American Association of Drilling Engineers Fluids Technical Conference & Exhibition. Presenting on the Mowry Shale Project, undergraduate students **Tate Novodvorsky**, **Joseph Hajba**, and graduate

students **Paden Knull**, **Abdallah Mehanna** placed first and second in their respective categories. The Mowry Shale project is a premier initiative dedicated to unlocking Wyoming’s vast oil and gas reserves.



- The School of Energy Resources was pleased to welcome **Governor Mark Gordon** to the Wyoming Innovation Center to view the near-completion of the Coal Refinery Field Demonstration Plant, led by the *Center for Carbon Capture and Conversion (CCCC)*. In a guided tour with **Trina Igelsrud Pfeiffer**, director of the CCCC, and **Scott Quillinan**, acting executive director of SER, the Governor could see firsthand the tremendous impact that the new plant will have on Wyoming coal. The Coal Refinery Field Demonstration Plant is an upscaled coal-to-products facility that will provide intermediate feedstocks for downstream applications such as building materials, soil amendment, asphalt binder, and even synthetic graphite.



OUTREACH

EPA Region 8 Administrator to Visit UW for Student Engagement

Cyrus Western, Environmental Protection Agency (EPA) Region 8 administrator, spoke to students at the University of Wyoming School of Energy Resources, Tuesday, March 3.

Western's appearance was part of a larger visit by Region 8 representatives to engage with faculty, administrators and students at the university and provide insight into career opportunities at the agency.



Spring Distinguished Speaker Series

The School of Energy Resources successfully concluded its Spring Distinguished Speaker Series, drawing strong attendance from students, faculty, and the local community. This semester's lineup featured five exceptional experts representing diverse professional backgrounds across the energy sector. Designed as public lunchtime presentations, the series provided an accessible look into the state's changing energy economy. Attendees engaged directly with thought leaders on pioneering advancements in nuclear power, critical minerals supply chains, carbon capture technologies, and high-value coal innovation, highlighting SER's commitment to driving public dialogue on energy solutions.



Jeramie Adams
Western Research
Institute



Simon Pimblott
Idaho National
Laboratory



David Andersson
Los Alamos National
Laboratory



Peng Li
Stanford University



Melissa Sanderson
Critical Minerals
Institute

Outreach Highlights

- Please stay up to date on our upcoming events by checking the **EVENTS CALENDAR >**
- The School of Energy Resources completed the Rocky Mountain Land and Resource Management Conference in partnership with the College of Agriculture, Natural Resources and Life Sciences. The event, which relies heavily on student involvement, had record breaking attendance at over 250 attendees.
- The School of Energy Resources hosted a visit from **Brian Horn**, current president of the American Association of Petroleum Geologists (AAPG).



- The School of Energy Resources was pleased to be involved in hosting one of the Mountain West's British Consul Generals, **Eleanor Kiloh**, on her visit through Montana, Idaho, and Wyoming, as well as a separate visit from Nepal's Consul General in San Francisco, **Lakshuman Khanal**, in a series of high-level meetings and engagements in the state.



Pictured Left: UW Reps with UK Consul General Visit



Picture Right: UW Reps with Nepal Consul General Visit

Looking for ways to stay connected to SER?

Contact SER Director of Outreach Christine Reed at christine.reed@uwyo.edu

PHILANTHROPIC SUPPORT

\$1M Gift to UW Establishes New Multidisciplinary Advanced Stimulation Laboratory

A transformative \$1 million gift from **Richard and Marilyn Lynch** has made possible the creation of the Richard and Marilyn Lynch Multidisciplinary Advanced Stimulation Laboratory in the University of Wyoming's Department of Energy and Petroleum Engineering.

The gift, made through a donor-advised fund to the UW Foundation, will advance cutting-edge research and education aimed at improving primary recovery in unconventional energy reservoirs.

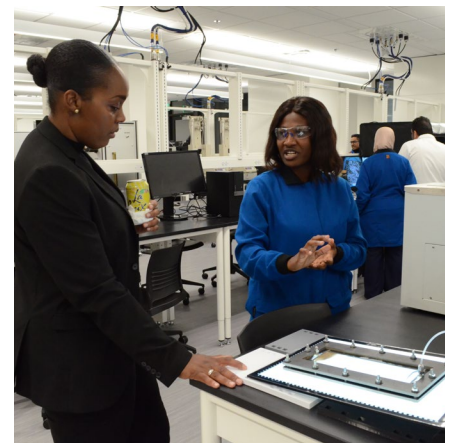
Housed in the Science Initiative Building, the new laboratory will serve as a multidisciplinary research hub integrating geomechanics, fluid dynamics, advanced reservoir characterization and artificial intelligence. Through a partnership between UW's School of Energy Resources and the College of Engineering and Physical Sciences, the lab will address critical industry challenges associated with unconventional reservoirs, which are characterized by low-quality rock and high capital investment requirements.

Optimizing primary recovery from these reservoirs is essential to improving long-term economic value. Higher production rates can boost return on investment, shorten time to pay out and help sustain responsible drilling activity. The new lab is designed to directly support these goals while establishing UW as a center of excellence in subsurface energy research.

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Pictured: Richard and Marilyn Lynch



MAKE A GIFT

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PEOPLE

School of Energy Resources Employees Honored for Outstanding Contributions at UW Staff Recognition Day and UW Experiential Education Showcase

The University of Wyoming celebrated its dedicated staff at the annual Staff Recognition Day, with three outstanding employees from the School of Energy Resources receiving prestigious accolades for their exceptional service and commitment.

James Christensen, SER business manager; **Sabrina Summerfield**, SER marketing outreach coordinator; and **Carrie Ver Burg**, SER assistant director of business operations, were each nominated by their colleagues for their exemplary work ethic, leadership, and unwavering reliability.

Both Christensen and Summerfield were among four UW recipients to receive the Unsung Hero Award, a distinction recognizing individuals who consistently make significant contributions beyond their defined roles without seeking public acknowledgment.

Ver Burg was selected as the recipient of the Jodi K. Humphrey Inspirational Staff Award for her ability to inspire others through positivity, professionalism, and dedication.

Meanwhile, **Kristen Pritchett** was recognized at the inaugural Experiential Education Showcase and Celebration with an Excellence in Experiential Education Award.

Featuring student-driven inquiry and educator excellence in experiential learning, the showcase honored the rich educational opportunities that are intricately driving high-impact learning, shaping the future of UW's students.

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Pictured top to bottom: James Christensen, Sabrina Summerfield, Carrie Ver Burg, Kristen Pritchett



Staff Retirement

The University of Wyoming School of Energy Resources announced the retirement of **Zunsheng "John" Jiao**, a principal scientist in the Center for Economic Geology Research (CEGR).

Jiao's professional career spans over four decades, characterized by a steady progression from academic instruction to high-level leadership in geological research. He leaves behind a profound legacy in Wyoming's energy, carbon management, and subsurface research.

He began his career as a geological instructor at Shaanxi Normal University. After serving as a geological assistant at California State University, he earned his Ph.D. in geology from UW in 1992, commencing years of research service to the university and the state.

For the last fourteen years, Jiao has been a cornerstone of the CEGR research team (formerly the Carbon Management Institute). His work has been pivotal in advancing carbon management characterization, specifically through sophisticated reservoir modeling and geomechanical analysis for CO₂ storage.

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Pictured: John Jiao



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