

THE Core SAMPLE

Internal Newsletter of the School of Energy Resources

July | 2021

UW SCHOOL OF ENERGY RESOURCES TO HOST PUBLIC CARBONSAFE PROJECT PROGRAM IN GILLETTE AUG. 3

The University of Wyoming School of Energy Resources' (SER) Center for Economic Geology Research (CEGR) — along with Basin Electric Power Cooperative — will host a public outreach meeting at the Integrated Test Center at Dry Fork Station in Gillette at 6:30 p.m. Tuesday, Aug. 3.

The public will learn about carbon capture, utilization and storage, and hear updates on the Wyoming CarbonSAFE Project. A glimpse into the upcoming field activities at that site also will be discussed.

[Continue Reading >>>](#)



UW SCHOOL OF ENERGY RESOURCES TO HOST PANEL DISCUSSION ON THE IMPORTANCE OF HYDROGEN ENERGY IN WYOMING

The UW School of Energy Resources (SER) will host a webinar panel discussion on hydrogen energy in Wyoming on Thursday, July 29, 2021 at 1:00 p.m. MDT. The panel gathers leading experts in an emerging energy technology and related policy to examine the use of hydrogen as part of the worldwide decarbonization strategy – and why Wyoming could be an early leader in its deployment.


The panel will feature SER Executive Director, Holly Krutka, Wyoming Energy Authority Executive Director, Glen Murrell, the Director of Emerging Opportunities for CSD Williams Companies, Brian Hlavinka, and Shannon Angielski who serves as the Principal for Government Issues for Van Ness Feldman LLP.

[Continue Reading >>>](#)



HIGHLIGHTS

Research Centers of Excellence

- *The Center for Energy Regulation & Policy Analysis (CERPA)* hosted a webinar on a potential approach for a technology-neutral Clean Electricity Standard that accommodates both CCS/CCUS and nuclear energy. Watch the presentation on the CERPA [website](#).
- CERPA has hired a contract energy economist, **Melissa Firestone**, who will assist with research projects in the center. 
- CERPA is assisting the Wyoming Energy Authority with carbon benchmarking issues and recently met with the organization to agree upon an approach for an “energy export” paper in development.
- CERPA is assisting the Wyoming Business Council with carbon market issues.
- CERPA presented the preliminary results of various CCS/CCUS analyses to SER leadership.
- With the assistance of the *Center for Economic Geology Research (CEGR)*, CERPA (1) responded to DEQ’s comments on the pending Class I permits for Wyoming CarbonSAFE; and (2) continues to support the CORE/CM grants.

*** more details in features

To submit news and updates email: Christine.reed@uwyo.edu



School of Energy Resources

UW'S GRANA NAMED WYOMING EXCELLENCE CHAIR IN GEOLOGY AND GEOPHYSICS

The University of Wyoming has recognized the prodigious work and efforts of Associate Professor **Dario Grana** by naming him the Wyoming Excellence Chair in Geology and Geophysics.

Dr. Grana has a split appointment with the a UW School of Energy Resources in the Department of Geology and Geophysics where he has worked diligently to advance the development of innovative and quantitative methods to improve the characterization of subsurface reservoirs.

The 2006 Wyoming State Legislature established the Excellence in Higher Education Endowment, which included a \$70 million endowment to create senior faculty positions for highly distinguished scholars and educators at UW. The legislation states that the endowed positions must expand university instruction and research in disciplines related to economic and social challenges facing Wyoming.

The UW Wyoming Excellence chairs are nationally and internationally recognized leaders in their fields.

[Continue Reading >>>](#)



SER PROFESSOR OF LAW TARA RIGHETTI PUBLISHES ARTICLE ABOUT THE CARBON STORAGE FUTURE OF PUBLIC LANDS

School of Energy Resources Professor of Law **Tara Righetti** recently published an article about the carbon storage future of public lands in the *Pace Environmental Law Review*, a top ranking law journal for environment and natural resources.

According to Righetti, current federal law presents numerous challenges and opportunities associated with utilization of federal pore space for carbon capture, utilization, and storage (CCUS). Although federal grant programs and tax incentives encourage deployment of CCUS technologies, legal and land-management issues related to public lands have received comparatively little legislative or agency attention.

The article examines the use of public lands for carbon dioxide removal activities, including CCUS. It further seeks to bring attention to land-management aspects of geologic storage and to broaden conversations regarding pathways to encourage CCUS technology deployment on federal lands.

[Continue Reading >>>](#)



(top) Tara Righetti; (left) co-author Professor Kris Koski

HIGHLIGHTS CONT.

Research Centers of Excellence Cont.

- *Center for Economic Geology Research (CEGR)* is hosting a Public Outreach meeting on the CarbonSAFE project in Gillette on Aug. 3. ***
- *CEGR* is please to announce the hiring of **Dr. Minh Nguyen** as a new research scientist specializing in geostats. Profile coming soon!
- *CEGR* Director **Dr. Fred McLaughlin** is presenting an overview of SER's CCUS programs and synergy with the Wyoming Energy Authorities' energy strategy for the State to the Wyoming Energy Authority Board.
- *CEGR* Director **Dr. Fred McLaughlin** is presenting an overview of SER's CCUS programs and synergy with the Wyoming Energy Authorities' energy strategy for the State to the Wyoming Energy Authority board.
- Data from advanced core analysis of material from the Wyoming CarbonSAFE well is being presented at UrTEC by Phase II project partner Welldog, with an accompanying paper co-authored by **Erin Phillips** and **Fred McLaughlin** of *CEGR*.
- Award negotiations for the CORE-CM projects are advancing as planned. The projects are set to begin in the Fall.
- *CEGR* is preparing to drill a second well as part of the CarbonSAFE project. The anticipated spud date has been moved to September 12-13, with the potential to be later in the month.
- *The Center for Carbon Capture and Conversion (CCCC)* is pleased to announce **Dr. Stefan Holberg** as its new associate research scientist. Profile coming soon!



SER PARTICIPATES IN A REGIONAL ENERGY STUDY TITLED I-WEST

The I-WEST project (Inter-mountain West Energy Sustainability & Transitions) is a DOE-funded collaboration being led by Los Alamos National Lab and includes partners from throughout the inter-mountain west. Its objective is to develop a roadmap to transition the region to a carbon-neutral energy mix, while ensuring that this transition is sustainable economically, socially, and environmentally in the long term.

The project has two parts: 1) widespread stakeholder engagement to understand and include the perspectives, concerns, and goals of the communities and people that will be most affected by this transition, 2) an analysis of the technologies and expertise that will allow us to achieve carbon-neutral energy, in particular including CCUS, hydrogen, and bioenergy.

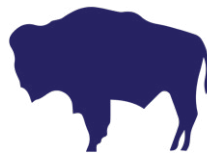
Other project partners include Arizona State University, Colorado School of Mines, Montana State University, national Energy Technology Laboratory, New Mexico Institute of Mining and Technology, San Juan College, University of New Mexico, and the University of Utah.

As part of the collaboration, the School of Energy Resources will be hosting the *'Pathways to Net-Zero'* workshop in Gillette in September. The workshop will be a discussion with representatives from the Gillette community, focused on exploring Gillette's goals, needs, and concerns in achieving a net-zero energy mix.

SER'S CENTER FOR ECONOMIC GEOLOGY RESEARCH AND ENHANCED OIL RECOVERY INSTITUTE ARE SUB-RECIPIENTS IN WYOMING HYDROGEN PROJECT

SER's CEGR and EORI are sub-recipients on the Tall Grass MLP Operations project recently selected for DOE award negotiations. The project titled Blue Bison will design a commercial scale will design a commercial-scale carbon capture unit capable of separating and storing 1.66 million tonne/year of 95% pure CO₂ with more than 97% carbon capture efficiency.

As designed, the Blue Bison plant will, for the first time, will combine carbon capture, pure H₂ production (220 MMSCFD at 99.97% purity), and H₂ combustion in auxiliary burners.




This project will act as a precursor to the proposed development of a replicable world scale ATR blue H₂ plant that could produce a cost competitive, carbon-neutral fuel that can significantly decarbonize the energy economy while simultaneously capitalizing on the nation's vast natural resources.

[More Info >>>](#)

HIGHLIGHTS CONT.

- Through the CCCC funded research project with WRI that is investigating the creation of coal derived asphalt products for paving and roofing applications, the United Soybean Board (USB) has conditionally awarded funding of up to \$267,506 to investigate hybrid asphalt materials formulated from high oleic soy bean oil (HOSO) and Wyoming PRB coal.

General Announcements

- **Scott Quillinan** and **Kipp Coddington** testified at the Joint Minerals Committee on July 26th. The topics included an update on carbon capture and storage research projects and carbon markets. 
- Leonard technologies Institute is funded by the Department of Energy to lead a study on Wyoming based hydrogen and critical minerals. SER is helping to provide publicly available data that can be utilized in the analysis. The study is expected to be completed in mid-August.
- The FY21 SER seed funding projects have been completed and reports are being submitted. Once fully received, the project summary reports will be posted on the SER webpage.
- ***IMPORTANT*** The School of Energy Resources will be hosting several visitors in the coming month. Please be prepared to have high profile people in the building for upcoming meetings and tours, including the Wyoming Legislative Joint Minerals Committee meeting. Please reach out to Trish or Christine with any questions.

Academics

- Jen Paintin has accepted a position in another dept. on campus. Her last day is August 2. Academics will be replacing her position in the coming weeks.

IMPORTANT DATES

- **Hydrogen Energy Panel Discussion**
July 29, 2021
- **CarbonSAFE Public Outreach Meeting**
August 3, 2021
- **Joint Minerals Committee at SER**
August 12-13, 2021
- **Energy Resource Council Meeting**
August 19-20, 2021
- **NAPE Summit Meeting (Academics)**
August 18-20, 2021
- **Welcome Back Student Event**
August 20, 2021
- **Fall Semester Classes Start**
August 23, 2021
- **SER All Staff Meeting**
August 24, 2021
- **PAW Annual Meeting**
August 25-27, 2021
- **WYDEQ Region 8 Director's Meeting**
August 31 - September 1, 2021
- **CarbonSAFE Drill PRB#2/Media Day**
September TBD, 2021
- **Subsurface BBQ**
September 10, 2021
- **SER Distinguished Speaker Series #1**
September 17, 2021
- **Energy Day (UW v. Ball State)**
September 18, 2021
- **SER Distinguished Speaker Series #2**
October 1, 2021

ENERGY JOKE

What does Hydrogen do when it needs a new leader?

It holds an electron!

