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PETE researchers publish paper on how hydraulic fractures propagate and interact with discontinuities

Petroleum engineering researchers in the College of Engineering, Architecture and Technology have advanced the understanding of how fracture propagation in naturally layered sedimentary rocks influences the development and spread of hydraulic fractures underground. Dr. Hunjoo Lee, an assistant professor in petroleum engineering (PETE) in the School of Chemical Engineering, and Vishesh Bhadariya, a research assistant on Lee's team, published a paper in Rock Mechanics and Rock Engineering titled, "Strain Field Analysis of Fracture Interaction with Bedding Planes and Implications for Height Growth in Layered Rocks."

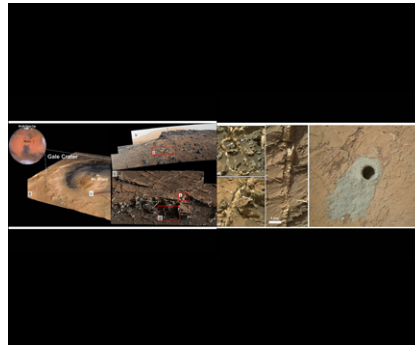
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OSU researchers take flight with study to advance weather-sensing UAS technology

Over the past decade, researchers from CEAT, along with others, have explored the use of weather-sensing unmanned aerial systems (WxUAS) to supplement existing weather observation tools and improve forecasting in the atmospheric boundary layer — the region from the surface to roughly 5,000 feet.

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Researchers aid safer Mars drilling and collection

A new study led by College of Engineering, Architecture and Technology researchers is helping shape how NASA collects and preserves rock samples from Mars. The work intends to ensure that the most scientifically valuable materials return to Earth intact.

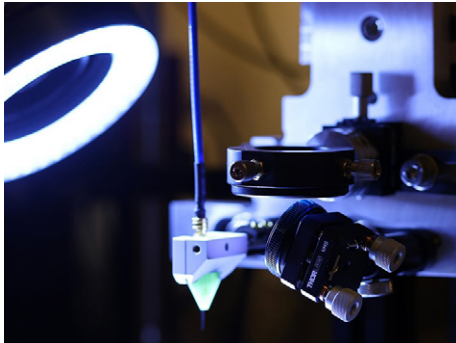


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OSU's new cold spray system positions Oklahoma at the forefront of advanced manufacturing

Researchers from the College of Engineering, Architecture and Technology are ushering in a new era of advanced manufacturing with the installation of a high-velocity cold spray system – the first of its kind at an Oklahoma university. Funded through the National Science Foundation's Major Research Instrumentation Program, the new system will expand CEAT's multidisciplinary research, education and workforce training capabilities in additive manufacturing, a field critical to national defense, aerospace and energy innovation.



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Bridging the Terahertz Gap: Dr. Weiling Zhang advances the frontier of light

In a field where the boundaries of physics and engineering converge, Dr. Weili Zhang, Regents Professor of electrical and computer engineering at Oklahoma State University, stands among the world's foremost authorities on terahertz science and technology. His work has fundamentally advanced how researchers generate, manipulate and apply electromagnetic waves that occupy the elusive spectrum between microwaves and infrared light — a region long referred to as the terahertz gap.

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NPDC: Turning ideas into real-world impact

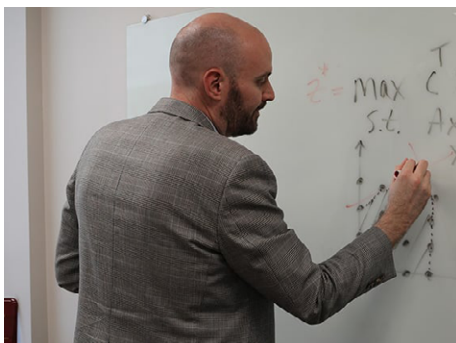
At Oklahoma State University, innovation isn't confined to research labs — it's designed to serve the public. The New Product Development Center, part of the College of Engineering, Architecture and Technology, helps entrepreneurs, inventors and small businesses transform ideas into tangible products that improve lives across Oklahoma, the country and beyond.

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Pioneering Energy Solutions: The work of Dr. Jeffrey Spitler

In an era defined by the urgent need for sustainable energy solutions, few researchers have made as profound an impact on building energy efficiency and geothermal technology as Dr. Jeffrey D. Spitler, Regents Professor and the OG&E Energy Technology Chair at Oklahoma State University's School of Mechanical and Aerospace Engineering.



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IEM research focuses on balanced graph partitioning

Researchers in the College of Engineering, Architecture and Technology's School of Industrial Engineering and Management are developing new mathematical methods to solve problems where large networks must be divided into equal parts. From dividing workloads on computers to splitting territories for military recruitment, these datasets present a challenge. The data commonly changes or can be uncertain, leading to inconsistent results if not planned for in advance.



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OSU student brings global perspective to human performance

When Tom Booth was learning to ride a bike as a child in England, he imagined a career in competitive cycling. It turns out, his actual career path was not quite as easy as riding a bike. Booth never planned to go to college, but when all his friends started going, he gave it a shot and enrolled at the University of Bath in Bath, England.

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CEAT Alumna named to Building Design + Construction 40 under 40

Oklahoma State University alumna Mallory Buckley (née Hosey) has been named to Building Design+ Construction's 40 Under 40 Class of 2025, which recognizes emerging leaders in architecture, engineering and construction who combine technical excellence with community impact.

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Honors College students honored for Fall 2025

The Oklahoma State University Fall Honors College Award Presentation took place on Friday, Oct. 3 in the Student Union Little Theatre. The ceremony recognized students who received the General Honors award, Departmental or College Honors award or best essay for xL learning during the 2024-25 academic year.



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Gary Snyder honored with two prestigious awards at the 2025 IAAO annual conference

Gary Snyder, director of CEAT's Center for Local Government Technology, received two distinguished honors at the 2025 International Association of Assessing Officers Annual Conference, held in October in Orlando, Florida. Snyder was inducted into the 2025 class of IAAO Fellows, one of the association's highest professional recognitions.

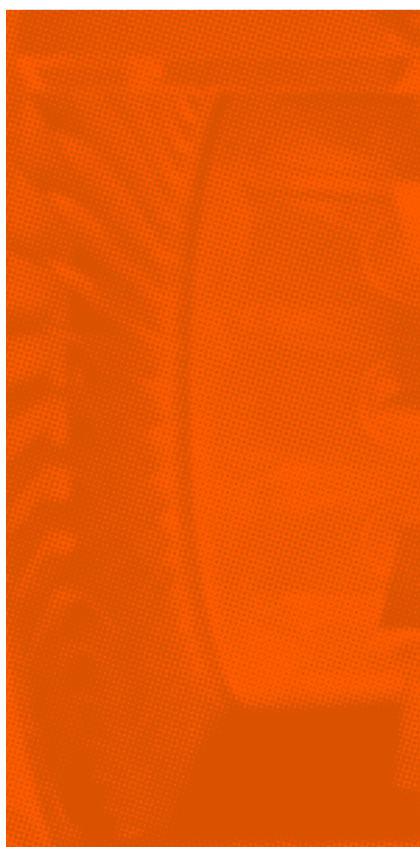


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Veterans Faculty and Staff Association leads with heart

OSU's Veterans Faculty and Staff Association continues to strengthen its mission of supporting military-affiliated students, faculty and staff through advocacy, connection and community engagement. OSU was recently recognized as a Champion Veteran Employer by Oklahoma Veterans United for the fifth consecutive year, an honor that underscores the university's dedication to those who have served. This year, only 19 employers across Oklahoma earned this honor and were recognized in both Oklahoma City and Tulsa.



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Dr. Bruce Russell awarded prestigious Charles C. Zollman Award

This September, Dr. Bruce W. Russell, professor for the School of Civil and Environmental Engineering, and his team were awarded the Charles C. Zollman Award for authoring the best transportation infrastructure paper in The Precast/Prestressed Concrete Institute Journal.

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CHE teams claim first place in Student Design Contest

Overseen by Drs. Josh Ramsey and Clint Aichele, the Student Design Contest team took on the challenge of designing a process to produce blue hydrogen, a fuel utilized for its low CO₂ emissions. The students were honored during the AIChE Annual Student Conference in Boston on Nov. 2, 2025.



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Transformative gift honors chemical engineering pioneer

On Tuesday, Nov. 11, the School of Chemical Engineering at Oklahoma State University held a reception to recognize Richard and Cynthia Ball for their commitment to a graduate student fellowship in CHE, a gift of \$500,000. The generous contribution honors Richard's grandfather and past CHE faculty member, Dr. Charles L. Nickolls. Nickolls, the namesake of OSU's first academic chair in the College of Engineering, Architecture and Technology, was a pioneering figure in chemical engineering whose career at OSU spanned nearly four decades.