
**UT Energy Bulletin | September 2021**

# Energy@UT News

## Solar Power Innovator Named Director of Energy Institute

Brian Korgel, a professor in the McKetta Department of Chemical Engineering and the founding director of UT's Industry/University Cooperative Research Center for Next-Generation Photovoltaics, will be the next director of the Energy Institute. Prof. Korgel is a member of the National Academy of Engineering and specializes in nanomaterials, energy storage, and chemical transformations. Prof. Korgel succeeds Prof. Varun Rai, associate dean of research at the LBJ School of Public Affairs and professor of Public Affairs and Mechanical Engineering, who has served as the

institute's director since January 2019. Read more **here**.

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## UT Energy Symposium Resumes September 7

This semester, the **UT Energy Symposium** (UTES) series features guest speakers from Center for Houston's Future, MIT Energy Initiative, California Energy Commission, Yardi Systems, and more. The symposium, which is free and open to the public, is held virtually on Tuesdays from 12:30 p.m. to 1:30 p.m starting September 7th. See the full schedule **here.**

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## Energy Institute Releases Timeline & Events of the February Texas Electric Grid Blackouts

The Energy Institute convened a diverse committee of energy experts to create an unbiased **report** of data and events related to the February 2021 Texas Blackouts. Without prescribing solutions, the report offers an unbiased description of the market, regulatory, and policy context in which the massive electricity generation failures took place, and provides a factual basis to inform the ongoing public policy debate on how to

make the Texas grid more resilient.

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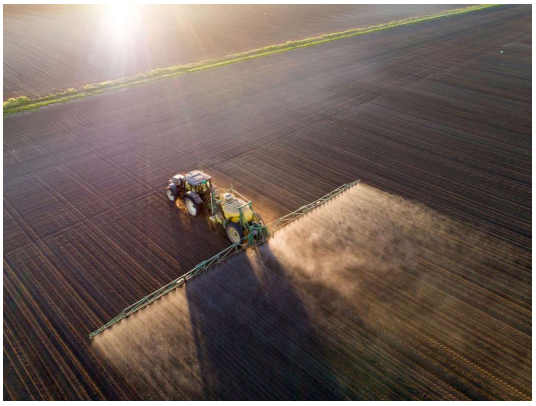

## New Method Makes Vital Fertilizer Element in a More Sustainable Way

A team of researchers in the Cockrell School of Engineering's Walker Department of Mechanical Engineering published a paper that outlines a new, more sustainable process for producing urea, a widely-used component in products ranging from fertilizer to skin care. The paper includes a roadmap for large-scale production of urea that is more energy efficient and generates less emissions than previous methods. Learn more **here**.

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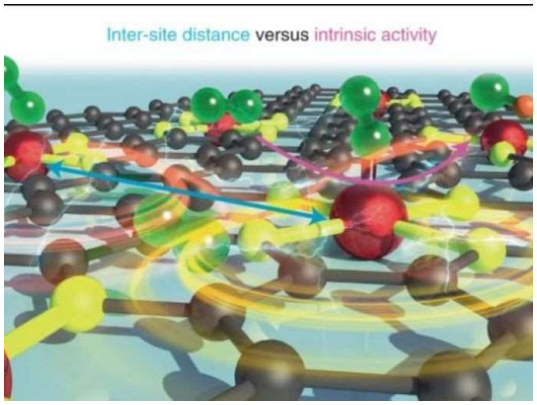
## Gulf Coast Ready to Develop Carbon Storage Hub

Researchers with the Gulf Coast Carbon Center released a **new report** that identifies the Texas Gulf Coast as an emerging hub for a new carbon storage economy. The paper highlights the latest policy measures, geographic advantages, and infrastructural benefits that are incentivizing the development of new, innovative carbon capture and storage technology across the region.

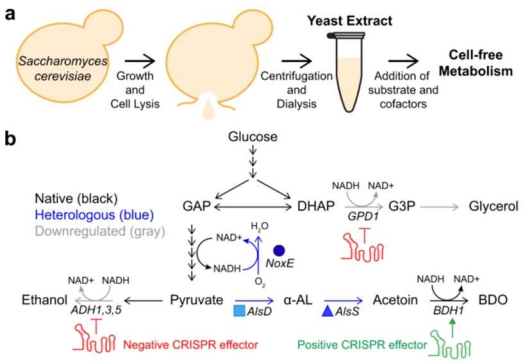

## New Study Offers Plan to Overcome Hurdles for Hydrogen Energy

Scientists and economists at the Bureau of Economic Geology published a **paper** that explores new methods for efficiently addressing transportation, storage, and cost issues for producing hydrogen energy. The research proposes a pathway to scale clean hydrogen production enough to reduce U.S. greenhouse gas emissions by as much as 3.2%, a significant step toward DOE's goals for a low carbon economy.




## Breathing New Life Into Fuel Cells

Researchers from the Cockrell School of Engineering and Texas Materials Institute published a new paper that outlines a method for supercharging a core chemical reaction using iron-based single atom catalysts. The findings will enable large-scale deployment of fuel cells that could provide power for systems as large as a utility power station and as small as a laptop. Learn more about the study **here**.




## Boosting Small Molecule Production in Super "Soup"

A team of researchers led by the Department of Chemical Engineering released a **study** describing a new approach for engineering yeast cells. The work advances efforts to develop more sustainable pathways for manufacturing bioproducts and biofuels that could deliver transformative impacts at industrial scales.

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## News from Around Campus

- **LBJ School**: **Joshua Busby joined the Biden Administration** as a Senior Advisor for Climate at the Pentagon in the Office of Secretary of Defense Policy.
- **Cockrell School**: Joshua Rhodes and Michael Webber shared insights with NBC for the piece on **"Request to conserve energy shows year-round vulnerability of Texas' grid."**
- **Energy Institute**: Carey King contributed to a Houston Chronicle article on **"Why oil companies are working with customers to cut petroleum consumption."**
- **Cockrell School**: Michael Webber authored an op-ed in The Hill on **"Here we go again: Texas, climate change and the power grid."**
- **LBJ School**: Vivek Shastry and Varun Rai released a new paper on **"Reduced Health Services at Under-Electrified Primary Healthcare Facilities: Evidence from India."**
- **Cockrell School**: The **Petroleum Extension** program partnered with the Permian Strategic Partnership to launch a **new energy workforce project.**

- **LBJ School**: Andrew Waxman, Sheila Olmstead and Ben Leibowicz published **new research** in Energy Policy on how federal tax credits can reduce GHG emissions.
- **Cockrell School**: Ross Baldick shared insights with the Houston Chronicle on how **"Wind and solar power is rapidly growing in Texas, but ERCOT limits how much actually goes to the grid."**
- **Cockrell School**: Michael Webber provided input to a KXAN-TV segment on **"State of Texas: Power grid reform and border barrier."**
- **Bureau of Economic Geology**: **Scott Tinker received an Energy Leadership Award** from E&P Magazine.
- **Cockrell School**: Robert Hebner was featured in a San Antonio Express-News article on the **"Legislature made progress on grid, but more work is needed."**
- **Cockrell School**: Joshua Rhodes contributed to ***KXAN-TV* piece** about the ERCOT reform bill.
- **Cockrell School**: Edward Yu provided input to a ScienceDaily piece on **"Making clean hydrogen is hard, but researchers just solved a major hurdle."**