



## Research Centers

Researchers in the CPE department have access to brand new, state-of-the-art buildings, labs, and equipment in multiple buildings and research centers.

- The main [engineering complex](#) houses dozens of labs in the following buildings: M2SEC, LEEP2, Learned and Slawson Hall
- Multidisciplinary Research Building ([MRB](#))
- Center for Environmentally Beneficial Catalysis ([CEBC](#))
- Simon's Bioscience Lab ([SBIO](#))
- Bioengineering Center ([IBER](#))
- Tertiary Oil Recovery Program ([TORP](#))

## Explore Chemical & Petroleum Engineering at The University of Kansas



## Highlight of Active Research Projects

NSF-NRT "Internet of Catalysis" | [Learn More](#)

Project EARTH | [Learn More](#)

Dept of Energy in Data Mining | [Learn More](#)

Dept of Engery RAPID Project | [Learn More](#)

NSF-PFI "Renewable Materials from Lignin" | [Learn More](#)

## Where our students go after graduation

**Academic Positions** throughout the United States and around the world

**Post-Doctoral Positions** at institutions such as MIT, University of Texas-Austin, and the University of Colorado

**National Lab Research** at locations such as ORNL, PNNL, NETL, and the EPA

**Industry** careers started at ExxonMobil, Chevron, UTC, Schulmerger, Samsung, Arkema, GM, DuPont, ADM, ChevronPhillips Chem Co., Premier Oilfield Group, Energy Future Initiative, 3M, Chesapeake Energy, EQT Corporation, Burns & McDonnell, and more

**Startup Companies** resulting from graduate research - Avium, Bond Biosciences, Orion Biosciences, Savara Pharmaceuticals, Agrivida, Inc.

## Contact Information

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## Main Research Areas

### Sustainable Engineering

Catalysis (homogeneous, electrocatalysis, heterogeneous, and photoelectric), Batteries/Fuel Cells, Electrochemical Storage for Wind and Solar, Green Chemistry, Ionic Liquids, Biomass Conversion, Spektrokinetics, Process Engineering

### Biomedical Engineering

Tissue Engineering, Drug Delivery, Immunotherapy, Biomimetic Materials, Interfacial Nanomedicine

### Petroleum Engineering

Unconventional Reservoirs, Enhanced Oil Recovery, CO<sub>2</sub> Sequestering

## Academic Highlights

- Work with award-winning faculty
- Collaborate with major chemical, petroleum, and pharmaceutical companies
- Training in ethical conduct of research, laboratory safety, leadership, communication skills, and teaching pedagogy
- Excellent record of job placement
- Competitive GTA and GRA funding packages
- Fellowship and scholarship opportunities: School of Engineering, Dean's Fellowship, Chancellor's Fellowships, and the Self Graduate Fellowship, Conference Travel Scholarships
- Opportunities for entrepreneurship

## State-of-the-Art Facilities

### Adsorption equipment:

XEMIS gravimetric microbalance, Hiden intelligent gravimetric analyzers, Langmuir troughs, Setaram high-pressure calorimeter, Pressure-swing absorption system

### Electrochemical:

Conductive AFM, Multi-channel Potentiostat/Galvanostat, HT quartz reactors, SECM

### Imaging:

High resolution fluorescence microscopes, Live cell imaging, Atomic force imaging, SEM

### Catalysis:

Batch, continuous, fluidized bed, and high-pressure reactors, Catalyst characterization equipment, Mass Spectrometers, ReactIR Systems, Zeolite library

### Analytical techniques:

Time-domain NMR, X-ray microcomputed tomography, several GCs, ICP, HPLC, Hiden intelligent gravimetric sorption analyzer, Fuel property laboratory, and Particle characterization techniques

Sophomores and Juniors, learn about our **Summer REU program** @ <http://cpe.ku.edu/reu-program>