

CHEMICAL ENGINEERING **Graduate Assistant**

ChE PROGRAM PROFILE

Graduate Degrees

MS in Chemical Engineering MEng in Chemical Engineering PhD in Chemical Egninering

\$5 M in annual research 450 undergraduate students 40 graduate students 16 full-time research faculty 2 new Polymer faculty in 2023

Che Research FOCI

Energy and Environment Bio/Life Sciences Membranes/Separation Technologies Soft Matter/Polymers Catalysis/Advanced Materials Bioengineering

Anastasios P. Angelopoulos, PhD, ChEE Dept. Head Fuel Cells and batteries, electrocatalysis, colloid synthesis, metal plating.

nanostructured polymeric membranes, sensors

Gregory Beaucage, PhD

Scattering, polymers, nanomaterials, soft matter

Junhang Dong, PhD

Nanotechnology

Microporous membranes for molecular and ionic separations in hydrogen production, brine desalination, flow battery operations, and environmental sensor monitoring

Rakesh Govind, PhD

Process synthesis, design, simulation and control, membrane separations, biological treatment of air, water, and soil

Vadim Guliants, PhD

Heterogeneous catalysis for energy and environmental applications, nanomedicine for gene and drug delivery

Greg Harris, PhD

Regenerative medicine, tissue engineering, biomaterials, extracellular matrix, and microscopy

Joo-Youp Lee, PhD, ChE Program Chair Heterogeneous catalysis for energy and environmental applications, nanomedicine for gene and drug delivery

Jonathan Nickels, PhD Structure and Dynamics of Soft Matter and Biological Materials. Biomaterials, Biofuels, Membranes and Water. Neutron, X-ray and Light Scattering, Molecular **Dynamics Simulations.**

Yooniee Park, PhD

Colloids, biophysics, drug delivery, and imaging.

Jonathan Pham, PhD

Soft matter, polymers, interfaces, wetting, adhesion, soft materials mechanics.

Aashish Priye, PhD

Micro-fluidics and micro-scale physics, biophysics, computational fluid dynamics, chaotic flows, POC diagnostics, bioengineering

Vesslin Shanov, PhD

on, and processing of nanostructured materials including CNTs and graphene for electronics, aerospace, and medicine

Peter Smirniotis, PhD

Molecular sieves for catalytic processes, heterogeneous catalysis for environmental restoration, hydrogen generation, photocatalytic processes for environmental protection, CO2 removal

John W. Weidner, PhD, CEAS Dean

Multi-scale modeling of batteries, fuel cells, and electrolyzers; synthesis and characterization of electrochemically active materials.

Jingjie Wu, PhD

Heterogeneous/electro/photo catalysis of C1 and light alkane feedstock, atomic scale materials, electrochemical energy storage

Benjamin Yavitt,PhD

Rheology, polymer processing, advanced materials and composites, scattering and rheo-optics, polymer physics

The University of Cincinnati is an affirmative action/equal opportunity institution.