



CHEMICAL ENGINEERING AND MATERIALS SCIENCE

The Department of Chemical Engineering and Materials Science at Wayne State University provides a collegial and supportive environment for our diverse student body. Our faculty and students conduct cutting-edge experimental and computational research in the areas of:

- Battery technology
- Biomaterials and tissue engineering
- Catalysis
- Drug and gene delivery
- Molecular modeling
- Polymer and colloidal engineering
- Process optimization and control
- Sustainable systems engineering

Our location in the heart of Detroit, MI, with the largest number of engineers per capita in the United States, provides students an unprecedented opportunity to interact with industry professionals in a broad range of fields, such as: automobile manufacture, energy production, advanced materials, and specialty chemicals.

Degree Programs

- Bachelor of Science in Chemical Engineering
- Master of Science in Chemical Engineering
- Master of Science in Materials Science and Engineering
- Graduate Certificate in Polymer Engineering
- Doctor of Philosophy in Chemical Engineering
- Doctor of Philosophy in Materials Science and Engineering

Contact us!

EngineeringGrad@wayne.edu

<https://engineering.wayne.edu/che/index.php>

Follow us on Instagram! @wsu_aiche

FACULTY

Zhiqiang Cao

Antifouling coatings,
nanomedicine, tissue engineering

Da Deng

Energy storage, electrochemistry,
materials science

Helen Durand

Process control, optimization,
cybersecurity

Carolyn Harris

Tissue engineering,
neuroinflammation, cell-biomaterial
interactions

Yinlun Huang

Process systems engineering,
sustainability

Haipeng Liu

Drug delivery

Charles Manke

Polymer rheology

Howard Matthew

Tissue engineering, biomaterials

Ka Ng

Energy storage, catalysis, alternative
energy

Eranda Nikolla

Electrochemistry, catalysis, energy
storage

Jeffrey Potoff

Molecular modeling, algorithms,
software, environmental fate

Susil Putatunda

Materials science, magnetic
materials, high-strength steels

Erhard Rothe (Emeritus)

Gina Shreve

Environmental microbiology

Korosh Torabi

Statistical mechanics, protein
structure and function

Yingxi Elaine Zhu

Nanocolloidal and supramolecular
assembly, polymers

WARRIOR STRONG



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College of Engineering