

The Gene and Linda Voiland School of Chemical Engineering and Bioengineering

Addressing critical societal challenges

- Developing clean, novel sources of energy
- Maintaining and remediating the environment
- Advancing health care

Offering unique internship and training programs

Internships at the Pacific Northwest National Laboratory (PNNL)
Participate in biofilm and catalysis research, and other programs.

Training program in protein biotechnology, sponsored by the
National Institutes of Health

Collaborate with leading engineers and scientists.



Leading the nation in key research areas

CATALYSIS & KINETICS

Yong Wang

**Voiland Distinguished Professor
and PNNL Fellow**

Washington State University
*Development of novel catalytic materials
and reaction engineering for the conversion
of fossil and biomass feedstocks to fuels and
chemicals*

Norbert Kruse

**Voiland Distinguished Professor
and PNNL Fellow**

Technical University of Berlin
*Heterogeneous catalysis: from fundamentals
to industrial applications*

Marc Levin

**Brian Wise Professor of Energy
Production**

University of California, Berkeley
*Process/Technical Safety, Catalysis, Plant
Design*

Kirk Schulz

**Professor and Washington State
University President**

Virginia Polytechnic Institute and State
University
Reactive Surface Analysis

Mary Rezac

**Dean of the Voiland College of
Engineering and Architecture**

University of Texas at Austin
*Polymeric membranes to separate gas and
liquid mixtures*

Peter Pfromm

University of Texas at Austin
*Fundamentals and applications of membrane
separations*

Su Ha

University of Illinois
Urbana-Champaign
Energy generation from alternative fuels

Hongfei Lin

Louisiana State University
*Catalytic conversion of biomass into liquid
fuels*

Jean-Sabin McEwen

Dalhousie University, Canada
*Atomistic modeling of catalytic
processes for energy and
environmental applications*

Steven Saunders

Auburn University
*Nanotechnology for novel
catalytic systems, sustainable
solvent technologies*

Di Wu

University of California, Davis
Heterogeneous and Homogeneous catalysis

Xiao Zhang

University of British Columbia
*Biomass chemistry, biomass conversion to
bioproducts and bioenergy*

MOLECULAR & CELLULAR ENGINEERING

Cornelius Ivory

Princeton University
*Electrofocusing, forensic microelectrophoresis,
nanochannel separations, diagnostic
microfluidic devices, microchannel
sample preparation*

Birgitte Ahring

University of Copenhagen
Microbiology and biofuels

**James Petersen
Professor and Director**

Iowa State University
*Bioremediation of contaminated aqueous
systems, modeling of biological processing
operations and online optimization
of biological processes*

Wen-ji Dong

University of London, England
*Cardiac muscle biology and mechanics,
protein chemistry and engineering,
fluorescence techniques, computer
modeling, nanoscale biosensor design
and engineering*

Alla Kostyukova

Institute of Protein Research,
Russian Academy of Sciences &
Moscow State University
*Regulation of actin dynamics
by actin-binding proteins; protein
structure and protein-protein
interactions; circular dichroism*

Haluk Beyenal

Hohenschuh Distinguished Professor
Hacettepe University
Biofilm engineering

ENGINEERING EDUCATION

Howard Davis

University of Oregon
*Engineering and entrepreneurship
pedagogy, technology development
and clinical applications of biomedical
instrumentation*

David Thiessen

University of Colorado at Boulder
*Fluid mechanics of drops, bubbles and
capillary channels, applications in
microgravity*

Bernard Van Wie

Oklahoma University
*Biotechnology including biosensors
and bioanalytical devices, cell and
tissue culture, engineering
education research*

BIOMECHANICS

David Lin

Northwestern University
*Integrated mechanical properties
of skeletal muscle and spinal reflexes*

Anita Vasavada

Northwestern University
*Biomechanics and neural control of
the musculoskeletal system, focusing on the
human head and neck system*

TWO DOCTORAL DEGREES:

- Chemical engineering
- Engineering science
(bioengineering emphasis)

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