DOCTORAL OPPORTUNITIES
AT
THE GENE AND LINDA VOILAND SCHOOL OF CHEMICAL ENGINEERING AND BIOENGINEERING

Scholars in the Voiland School seek innovative ways to conquer society’s most critical problems. Join them in conducting research to:
• Address needs for clean, sustainable energy
• Preserve and remediate the environment
• Maintain and improve human health

RESEARCH AREAS

CATALYSIS AND KINETICS
Faculty scholars examine various aspects of fundamental and applied catalysis.
• Bimetallic catalysis design
• Catalyst chemical stabilities
• Computational catalysis
• Electro catalysis (fuel cells)
• Nanoparticles
• Environmental catalysis

ENGINEERING EDUCATION
Voiland School scholars develop innovative practices to make engineering education more engaging and effective.

MOLECULAR BASIS FOR MUSCLE SYSTEMS
• Musculoskeletal disorders
• Cardiovascular health
• Biomechanics
• Biomechanics of the cell nucleus
• Cell-surface interactions
• Biosensor design
• Bioseparations

BIOFILM ENGINEERING
Studies explore the fundamental nature of biofilms. They also probe how microbes interact with their environment through the formation of biofilms.

ACCESS TO THE MOST ADVANCED SCIENTIFIC INSTRUMENTATION
• Operando surface analysis instruments
• Advanced microscope systems
• Chemical transient kinetic analysis systems
• Particle characterization equipment

TRAINING PROGRAMS FOR THE OPTIMAL CAREER EXPERIENCE
• PNNL
• NIH Protein Biotechnology Training Program
• Private Industry

THREE TO SIX YEARS TO A PH.D.
Average time required to earn a doctorate is 4.5 years. You’ll need only 16 graded credits to complete the program. The Voiland School offers two doctoral degrees:
• Chemical engineering
• Engineering science (bioengineering emphasis)

COMPETITIVE STIPENDS FOR STUDENTS
With good academic standing, you can cover full tuition and earn a monthly living allowance through scholarships, fellowships, and traineeships.

Voiland School advisors will work with you to design an individualized academic program. Contact us with questions.

APPLICATIONS
gradschool.wsu.edu

PROGRAM INFORMATION
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CONTACT US