



RESEARCH AREAS



**Advanced Materials,
Devices, and
Nanotechnology**



**Biomolecular and
Cellular Engineering for
Human Health**



**Complex and Multiphase
Flow Dynamics**



**Energy, Environment,
and Sustainability**



**Heterogeneous Catalysis
and Surface Science**



**Modeling, Theory, and
Simulation**



**Transport,
Electrochemistry
and Thermodynamics**



Carlos Rinaldi, Ph.D.
Department Chair &
Dean's Leadership Professor

The University of Florida has over 100 years of history in **Chemical Engineering** education. Our students are among the best in the nation, as evidenced by their scholastic achievements, awards, and recognitions. Our alumni contribute to important industrial sectors and are entrepreneurs that drive the global economy. Our faculty are dedicated educators and recognized leaders in their research fields. Together we aim to make the world a better place through application of the principles and the practice of Chemical Engineering.



DEGREE PROGRAMS

- BACHELOR OF SCIENCE (B.S.)
- MASTER OF ENGINEERING (M.E.)
- MASTER OF SCIENCE (M.S.)
- DOCTOR OF PHILOSOPHY (Ph.D.)



BEST CHEMICAL ENGINEERING GRADUATE PROGRAM AMONG PUBLIC UNIVERSITIES

2023 U.S. News & World Report
Best Graduate Schools Ranking

UNDERGRADUATE STUDENTS (FALL 2019)

540 **32%** **40%**
ENROLLED UNDERREPRESENTED MINORITIES WOMEN

30
RESEARCH AND
TEACHING FACULTY
AND GROWING

14
NEW FACULTY
SINCE FALL
2018

BACHELOR DEGREE PROGRAM:

Top 20 in number of **Bachelor** degrees awarded
#5 in degrees awarded to **hispanics**

MASTERS DEGREE PROGRAM:

#6 in total number of **master's** degrees awarded
#6 in number of degrees awarded to **women**

DOCTORAL DEGREE PROGRAM:

#8 in total number of **doctoral** degrees awarded
#2 in number of degrees awarded to **african americans**
#3 in number of degrees awarded to **hispanics**
#7 in number of degrees awarded to **women**

Information sourced from ASEE's "Engineering by the Numbers" 2017 Report

61% OF SPRING 2019
B.S. GRADUATES
PARTICIPATED IN
**UNDERGRADUATE
RESEARCH**

71% OF SPRING 2019
B.S. GRADUATES
PARTICIPATED IN
INTERNSHIPS

71% OF SPRING 2019
B.S. GRADUATES
**ACCEPTED A JOB
OR GRADUATE
SCHOOL OFFER BY
GRADUATION**

che.ufl.edu

352-392-0881

@UFLChE

2019 AVERAGE STARTING SALARY

\$77,000

FOR UNDERGRADUATES

EMPLOYERS (Partial List):

ABInBev
Accenture
Albemarle
Andritz USA
Anheuser Busch
Cargill
Cherokee Enterprises
Dold Foods
Dow Chemical Company
Eli Lilly
Epic Systems
ExxonMobil
Frito Lay
GE Appliances
General Mills
Honeywell International
Intel
Kraft Heinz

Michelin
NextEra Energy
PepsiCo
Proctor & Gamble
Schlumberger
Solenis
SynQuest Labs
Tropicana

MEET OUR FACULTY



Jason E. Butler

Professor

Dynamics of Complex Fluids, Suspension and Multiphase Fluid Mechanics, Polymer Dynamics, Microfluidic Flows of Complex Materials



Won Tae Choi

Assistant Professor

Design, engineering, and analysis of electrochemically active soft materials for energy conversion and storage applications



Henry Chu

Assistant Professor

Transport Phenomena, Colloid and Interface Science, Electrokinetics, and Rheology



Oscar Crisalle

Professor

Multivariable Control Systems, Robust Control Design for Uncertain Systems, Predictive Control, Virtual Sensors, Green and Renewable Energy Optimization, Fuel Cells



Carl Denard

Assistant Professor

Protein Therapeutics, Synthetic Biology, Biocatalysis, Bioengineering



Richard Dickinson

Professor

Cellular and Molecular Bioengineering, Cell Motility, Cell Mechanics, Cytoskeletal Dynamics



LiLu T. Funkenbusch

Instructional Assistant Professor
Unit Operations



Helena Hagelin-Weaver

Associate Professor, Dr. and Mrs. Frederick C. Edie Term Professor, and Ph.D. Recruitment Coordinator
Heterogeneous Catalysis, Energy Applications, Nanoparticle Oxides, Atomic Layer Deposition, Advanced Characterization



Charles Hages

Assistant Professor

Semiconductor Materials and Devices, Nanomaterials, Energy, Optical Spectroscopy, Modeling



David Hibbitts

Associate Professor and Moreno Rising Star Professor
Heterogeneous Catalysis, Kinetic Studies, Density Functional Theory, Catalyst Synthesis and Characterization



Piyush Jain

Assistant Professor and Shah Rising Star Professor

Bioengineering, Gene Editing, CRISPR/Cas, Nucleic acids and Protein Engineering, Nanomaterials, Responsive Systems



Yeongseon Jang

Assistant Professor

Self-Assembly, Colloid and Surface Science, Functional Coating, Polymer Engineering, Biomaterials, Recombinant Proteins



Peng Jiang

Professor

Nanooptics, Functional Coatings, Smart Shape Memory Polymers, Sensors



Dmitry Kopelevich

Associate Professor

Self-Assembled Surfactant Systems, Stability of Biomembranes, Transport in Self-Assembled Systems



Anthony Ladd

Professor

Complex Fluids, Transport Phenomena



Fernando Mérida

Instructional Assistant Professor

Engineering Education, Underrepresented Minorities, Unit Operations, Bioprocess/Biochemical Engineering



Ranga Narayanan

Distinguished Professor

Interfacial Instability, Pattern Formation in Materials Science and Space Operations, Fluid Mechanics



Mark Orazem

Distinguished Professor, UF Preeminence Term Professor
Electrochemical Engineering, Impedance Spectroscopy, Mathematical Modeling, Corrosion



Sumant Patankar

Instructional Assistant Professor

Supercritical fluids, Adsorption, Nano-porous solids, Neutron Scattering, Photolithography and Design of Experiments



Fan Ren

Distinguished Professor

Health Sensors, Ceramic Coatings, Semiconductor Materials and Devices



Carlos Rinaldi

Department Chair and Dean's Leadership Professor

Nanomedicine, Magnetic Nanoparticles, Colloidal Hydrodynamics



Sindia Rivera-Jimenez

Instructional Assistant Professor

Engineering Education, Underrepresented Minorities, Unconscious Bias, Instructional Design, Product/Process Design, Process Simulation



Janani Sampath

Assistant Professor

Polymer Membranes, Polymer-Protein Conjugates, Self-Assembly, Computational Materials Design



Whitney Stoppel

Assistant Professor and William P. and Tracy Cirioli Term Professor

Biomaterials, Regenerative Medicine, Striated Muscle, Transport Phenomena, Rheology of Natural Biopolymers



Spyros A. Svoronos

Harry and Bertha Bernstein Professor and Undergraduate Program Coordinator

Modeling and Optimization of Biological, Chemical, Particle Processes



Vincent Tocco, Jr.

Instructional Assistant Professor

Engineering Education, Active Learning, Teamwork Dynamics, Graduate Student Research Methods, Life-Long Learning



Sergey Vasenkov

Professor

Transport in Porous Membranes and Catalysts, Single-File Diffusion in Nanochannels, Membrane-Based Separations



Jason Weaver

Professor

Surface Chemistry of Metals and Metal Oxides, Reaction Kinetics and Catalysis, Oxide Thin Films



Kirk J. Ziegler

Associate Chair for Graduate Studies and Charles A. Stokes Endowed Professor

Nanomaterial Interfaces, Porous Materials, Renewable Energy, Membrane-based Separations, Optical Spectroscopy