#### **UF** Herbert Wertheim College of Engineering UNIVERSITY of FLORIDA

# **DEPARTMENT OF CHEMICAL ENGINEERING**



#### **RESEARCH AREAS**

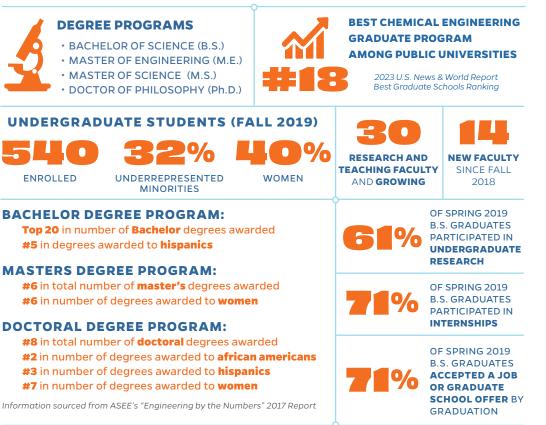
- Advanced Materials, Devices, and Nanotechnology
- Biomolecular and Cellular Engineering for Human Health
- २००२ Complex and Multiphase Flow Dynamics
- Energy, Environment, and Sustainability
- Heterogeneous Catalysis and Surface Science
- Modeling, Theory, and Simulation
- Transport, Electrochemistry and Thermodynamics

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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.





- 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 Schumberger Solenis SynQuest Labs Tropicana



#### **Jason E. Butler** Drofessor

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



#### **Charles Hages Assistant Professor**

Characterization

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





### **Peng Jiang** Professor Nanooptics, Functional Coatings, Smart Shape Memory Polymers, Sensors









#### 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

# MEET OUR FACULTY

#### **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**

**Spyros A. Svoronos** 

Program Coordinator

Processes

Harry and Bertha Bernstein

**Professor and Undergraduate** 

Modeling and Optimization of Biological, Chemical, Particle



Assistant Professor and William P. and Tracy Cirioli Term Professor **Biomaterials**, Regenerative Medicine, Striated Muscle, Transport Phenomena, Rheology of Natural Biopolymers



#### Vincent Tocco. Ir. Instructional Assistant Professor Engineering Education, Active Learning, Teamwork Dynamics, Graduate Student Research



#### Sergey Vasenkov Professor

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

## **Jason Weaver**



#### **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

**Dmitry Kopelevich** Associate Professor Self-Assembled Surfactant Systems, Stability of Biomembranes, Transport in Self-Assembled Systems

> **Anthony Ladd** Professor

**Yeongseon Jang** 

Self-Assembly, Colloid and

Surface Science, Functional

Biomaterials, Recombinant

Coating, Polymer Engineering,

**Assistant Professor** 

Proteins

**Complex Fluids**, Transport

Fernando Mérida Engineering Education, Underrepresented Minorities, Unit Operations, Bioprocess/



# Instructional Assistant Professor





