

the HOWARD P. ISERMANN department of  
**chemical & biological  
 engineering**

**CBE.RPI.EDU**

**ABOUT RENSSELAER POLYTECHNIC  
 INSTITUTE**

- Founded in 1824, one of the oldest engineering schools in the country
- Chemical Engineering Department founded in 1914
- Located on a hill above the Hudson River in Troy, NY, 150 miles north of New York City
- 6366 undergraduate students
- 1267 graduate students
- Rensselaer Technology Park, business incubator with >70 tenants

**RESEARCH HIGHLIGHTS**

- 30+ On-campus Research Centers
- 17 Engineering Focused Research Centers, including one NSF Engineering Research Center (ERC)

**NOTABLE ALUMNI**

- George Ferris, 1881 – Creator of the Ferris Wheel
- Washington Roebling, 1857 – Chief Engineer of the Brooklyn Bridge
- Ray Tomlinson, 1963 – Credited as the inventor of email.
- Ivar Giaever, 1964 – Nobel Laureate Physics in 1973, Professor of Physics RPI
- Claire Fraser, 1977 – Genomics Pioneer, President of *The Institute for Genomic Research* 1998 to 2011

**Center for Biotechnology and Interdisciplinary Studies**



**ABOUT THE HOWARD P. ISERMANN DEPARTMENT OF  
 CHEMICAL AND BIOLOGICAL ENGINEERING**

**STUDENT ENROLLMENT**

- 434 Undergraduates
- 70 Graduate students

**RANKING**

27th in US News & World Report Graduate Rankings

**DEGREES OFFERED**

B.S. M.S. M.Eng. Ph.D.

**DEGREES AWARDED**

- 110 Bachelor's
- 4 Master's
- 15 Ph.D.'s

**GRADUATE STUDENT  
 SUPPORT**

Doctoral students receive competitive stipend and tuition support (research assistantships, teaching assistantships or fellowships)

**RESEARCH AREAS**

- Advanced Materials
- Biochemical Engineering
- Biomedical Engineering
- Complex Fluids
- Drug Design and Delivery
- Interfacial Phenomena
- Molecular Modeling/Simulations
- Nanotechnology
- Process Control and Design
- Separations and Bioseparations
- Synthetic Biology/Metabolic Engineering

**AFFILIATED RESEARCH  
 CENTERS**

- Center for Biotechnology & Interdisciplinary Studies (CBIS)
- Center for Materials, Devices and Integrated Systems (cMDIS)
- Institute for Data Exploration and Applications (IDEA)
- Many More

**CHEMICAL & BIOLOGICAL ENGINEERING FACULTY**

- **Georges Belfort**, NAE, Institute Professor
- **B. Wayne Bequette**, Professor
- **Vidhya Chakrapani**, Assistant Professor
- **Cynthia Collins**, Associate Professor
- **Steven Cramer**, William Walker Professor of Polymer Engineering
- **Jonathan Dordick**, Howard Isermann '42 Professor of Chemical and Biological Engineering
- **Shekhar Garde**, Dean of Engineering, Elaine & Jack Parker Professor in Engineering
- **Pankaj Karande**, Associate Professor
- **Mattheos Koffas**, Dorothy & Fred Chau '71 Career Development Constellation Professor
- **Sangwoo Lee**, Assistant Professor
- **Joel Plawsky**, Professor and Department Head
- **Todd Przybycien**, Professor
- **Sufei Shi**, Assistant Professor
- **Patrick Underhill**, Associate Professor
- **Miao Yu**, Priti & Mukesh Chatter Career Development Associate Professor
- **Helen Zha**, Assistant Professor
- **Nihat Baysal**, Professor of Practice
- **Ron Hedden**, Professor of Practice
- **Corey Woodcock**, Lecturer

**CONTACT US:**

**Chemical & Biological Engineering**  
 cbe.rpi.edu (518) 276-6929



Chemical & Biological Engineering Current Research Interests 2018 - 2019	Advanced Materials	Biochemical Engineering	Biomedical Engineering	Energy Sustainability	Fluid Mechanics	Interfacial Phenomena	Molecular Modeling & Simulations	Nanotechnology	Process Control, Design & Optimization	Separation & Bioseparation Processes
Georges Belfort	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪
B. Wayne Bequette			▪	▪			▪		▪	▪
Vidhya Chakrapani	▪			▪		▪		▪		
Cynthia Collins		▪	▪	▪					▪	
Steven Cramer		▪	▪			▪	▪	▪		▪
Jonathan Dordick	▪	▪	▪	▪		▪		▪		
Shekhar Garde	▪	▪				▪	▪	▪		▪
Pankaj Karande		▪	▪					▪		▪
Mattheos Koffas		▪	▪	▪						▪
Sangwoo Lee	▪			▪		▪		▪		
Joel Plawsky	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪
Todd Przybycien		▪				▪				▪
Sufei Shi	▪			▪				▪		
Patrick Underhill	▪				▪	▪	▪	▪		▪
Miao Yu	▪			▪		▪		▪		▪
Helen Zha	▪	▪	▪	▪		▪		▪		
<b>JOINT APPOINTMENT</b>										
Chulsung Bae, <b>Chemistry</b>	▪			▪						▪
Richard Gross, <b>Chemistry</b>		▪	▪							▪
Juergen Hahn, <b>BioMed Eng</b>		▪	▪						▪	▪
Amir Hirsra, <b>MANE</b>		▪	▪		▪	▪				
Robert Linhardt, <b>Chemistry</b>	▪	▪	▪					▪		▪
<b>ADJUNCT APPOINTMENT</b>										
Marlene Belfort, <b>SUNY-A</b>		▪								▪