



THE HOWARD P. ISERMANN  
DEPARTMENT OF  
CHEMICAL & BIOLOGICAL  
ENGINEERING

[CBE.RPI.EDU](http://CBE.RPI.EDU)

**ABOUT RENSSELAER POLYTECHNIC  
INSTITUTE**

- Founded in 1824, one of the oldest engineering programs in the country
- CBE Department founded in 1914
- Located on a Hill above the Hudson River in Troy, NY, about 150 miles north of New York City
- 1366 graduate students
- 6203 undergraduate students
- Rensselaer Technology Park, a business incubator, with over 70 tenants

**RESEARCH HIGHLIGHTS**

- 30+ On-campus Research Centers
  - 17 Engineering Focused Research Centers
  - 1 NSF Engineering Research Centers (ERCs)

**NOTABLE ALUMNI**

- George Ferris, 1881- Creator of the Ferris Wheel
- Washington Roebling, 1857- Chief Engineer of the Brooklyn Bridge
- Ivar Giaever, 1964 – Nobel Laureate Physics in 1973, Professor of Physics RPI
- Claire Fraser, 1977 - President of *The Institute for Genomic Research* 1998 to 2011
- Ray Tomlinson, EE '63- Credited as the inventor of email.



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

**STUDENT ENROLLMENT (AY '21)**

267 Undergraduates  
86 Graduate students

**RANKED**

31st in US News & World Report for Graduate Program

**DEGREES OFFERED**

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

**DEGREES AWARDED IN 2020**

109 Bachelor's  
5 Master's  
19 Ph.D.s

**GRADUATE STUDENT SUPPORT  
(FALL 2021)**

Doctoral students receive competitive stipend and tuition support (research assistantship, teaching assistantship or fellowship)

**APPLY AT**  
[ADMISSIONS.RPI.EDU/GRADUATE](http://ADMISSIONS.RPI.EDU/GRADUATE)

**RESEARCH AREAS**

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

**AFFILIATED RESEARCH  
CENTERS**

- Center for Biotechnology & Interdisciplinary Studies (CBIS)
- Center for Materials, Devices and Integrated Systems (CMDIS)
- Many others

**CHEMICAL & BIOLOGICAL ENGINEERING FACULTY**

- Joel Plawsky, Professor, Department Head
- Georges Belfort, NAE, Institute Professor
- B. Wayne Bequette, Professor
- Vidhya Chakrapani, Associate Professor
- Steven Cramer, William Walker Professor
- 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
- Todd Przybycien, Professor
- Sufei Shi, Assistant Professor
- Patrick Underhill, Professor
- Helen Zha, Assistant Professor
- Nihat Baysal, Professor of Practice
- Ron Hedden, Professor of Practice
- Corey Woodcock, Lecturer

**CONTACT US:**  
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Chemical & Biological Engineering Current Research Interests 2020 - 2021	Advanced Materials	Biochemical Engineering	Biomedical Engineering	Energy Sustainability	Fluid Mechanics	Interfacial Phenomena	Molecular Modeling & Simulations	Nanotechnology	Process Control, Design & Optimization	Separation & Bioseparation Processes
<b>FACULTY</b>										
Georges Belfort	▪	▪	▪	▪	▪	▪	▪	▪		▪
B. Wayne Bequette			▪	▪			▪		▪	▪
Vidhya Chakrapani	▪			▪		▪		▪		
Steven Cramer		▪	▪			▪	▪	▪		▪
Jonathan Dordick	▪	▪	▪	▪		▪		▪		
Shekhar Garde	▪	▪				▪	▪	▪		▪
Pankaj Karande		▪	▪					▪		▪
Mattheos Koffas		▪	▪	▪						▪
Sangwoo Lee	▪			▪		▪		▪		
Joel Plawsky	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪
Todd Przybycien		▪				▪				▪
Sufei Shi	▪			▪				▪		
Patrick Underhill	▪				▪	▪	▪	▪		▪
Helen Zha	▪	▪	▪	▪		▪		▪		
<b>JOINT APPOINTMENT</b>										
Richard Gross, <b>Chemistry</b>		▪	▪							▪
Juergen Hahn, <b>BioMed Eng</b>		▪	▪						▪	▪
Amir Hirsa, <b>MANE</b>		▪	▪		▪	▪				
Robert Linhardt, <b>Chemistry</b>	▪	▪	▪					▪		▪
<b>ADJUNCT APPOINTMENT</b>										
Marlene Belfort, <b>SUNY-Albany</b>		▪								▪

