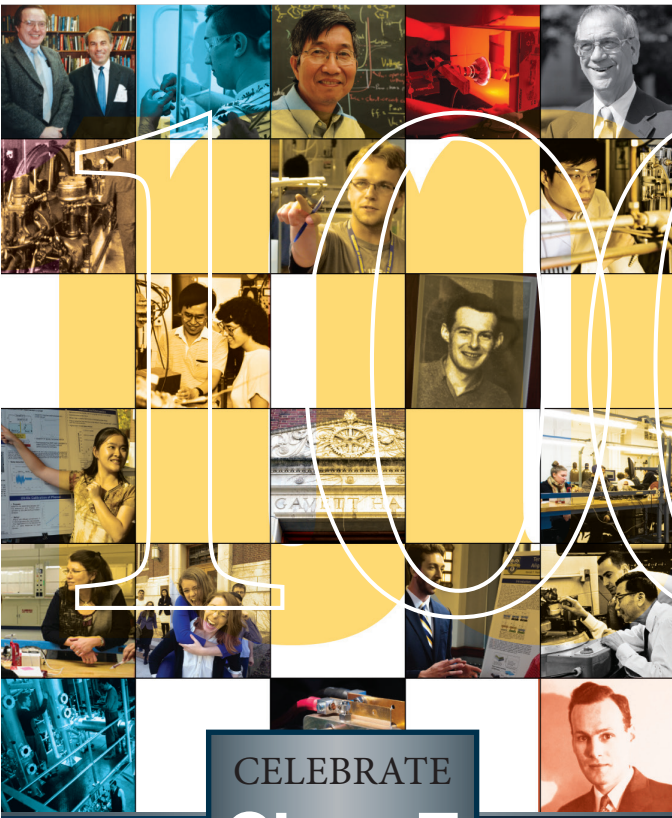
Chemical Engineering

AT THE UNIVERSITY OF ROCHESTER



CELEBRATE

ChemE

100 YEARS

1915 –2015

HAJIM SCHOOL OF ENGINEERING & APPLIED SCIENCES
UNIVERSITY of ROCHESTER

100 YEARS OF THE EXTRAORDINARY

Chemical Engineering

To learn more, please visit
www.che.rochester.edu/about/100th_anniversary.html
for event details and a description of the photos in this brochure.

A VISIONARY FOUNDATION

Chemical engineering was initiated in 1915 when only nine other similar programs were in existence at other universities in the United States. The visionary founders were remarkably farsighted in the broad impact the program would have, stating that valuable training would be provided for "manufacturing chemistry in the strict sense of the term, but also for those who intend to enter that very large class of manufacturing industries where chemical processes play an important though minor part."

They have been proven correct. Our graduates impact a broad spectrum of domains, including energy, transportation, microelectronics, pharmaceuticals, and advanced materials. Our faculty, students, and alumni create technological breakthroughs that improve our daily lives and address the grand challenges of society.

Join the Party!

Help us celebrate our 100th by attending the following events:

Su Distinguished Lecture in April
Eisenberg Summer Internship Poster Session in October
Meliora Weekend Open House, Lunch and Learn in October
Senior Design Presentations in December

INTERNATIONAL IMPACT IN EDUCATION

Throughout the world, virtually anyone studying chemical engineering today will at some point learn from textbooks either written by our professors and alumni or containing their theoretical and experimental advances.

- Professor Gene Su's outstanding papers on applied thermodynamics are considered landmarks in the field. Every thermodynamics textbook contains his generalized equations of state for real gases.
- The most widely used chemical engineering text of all time, *Introduction to Chemical Engineering Thermodynamics,* was written by the Rensselaer Polytechnic Institute professor Hank Van Ness, who received his BS and MS degrees at Rochester.
- Berkeley professor John Prausnitz, who received his MS degree from Rochester, is considered the father of the field of molecular thermodynamics that is now widely taught at the graduate and undergraduate levels.
- Professor Dave Foster recently coauthored the latest edition of the popular textbook *Fundamentals of Momentum, Heat and Mass Transfer,* published in 2014.

RESURGENCE AND GROWTH

Enrollment in chemical engineering is currently at an all-time high in the 100-year history of the program. This follows a remarkable resurgence from nearly all-time lows. The number of faculty and of students both have doubled over the last 10 to 15 years.

We have recently renovated both the physical infrastructure and curriculum of our undergraduate laboratories to provide an improved educational experience while meeting the growing demand. The alternative energy master's program was recently introduced for students interested in specializing in this growing field. Several new faculty have been hired in recent years who are maintaining and expanding our excellence in research and education.

VISION FOR THE FUTURE

Our goal is to achieve international recognition in basic and applied research by addressing key issues in energy, resource sustainability, and human health and to leverage research excellence to provide outstanding education in graduate and undergraduate degree programs.

Recent faculty additions enhance research expertise in alternative energy, advanced materials, biofuels, and computational modeling.

POINTS OF PRIDE

- Our PhD program was ranked in the top 10 in the country in 2010 by the National Research Council.
- Professor Ching Tang of our faculty, recipient of the 2011 Wolf Prize in chemistry, is the father of the multibillion dollar OLED display industry.
- Women made up 37 percent of our undergraduates in the 2013–14 academic year.
- A $30 million gift was made to the Hajim School of Engineering & Applied Sciences by chemical engineering alumnus Edmund Hajim '58, chairman of the University of Rochester Board of Trustees.

CENTENNIAL FUND

In honor of the 100th anniversary of Chemical Engineering, the department has created the Centennial Fund to support its student initiatives, including but not limited to student research grants, student travel awards (to and from conferences and presentations), and study abroad grants. Once we reach $25,000, the fund will convert to an endowed fund. Distributions from this fund will be made with the approval of the chair of chemical engineering.

To make a donation to the Centennial Fund through a secure online form, visit uofr.us/givechem.

Questions? Please contact

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Matthew Yates, Department Chair: (585) 273-2335

1915: ChemE established as a new engineering major and listed in the 1915 catalog.

1920: Otto Wiele Cook receives first degree.

1930: ChemE and other engineering programs move into what is now Gavett Hall on the River Campus.

1937: Loss of accreditation leads to University's commitment to improve program.

1938: Howard Gardner, first faculty member trained in ChemE, brings "instant credibility."

1941: ChemE is accredited.

1947: Engineering divided into separate departments, including Chemical Engineering.

1947: Gouq-Jen (Gene) Su joins faculty, shoulders bulk of research load, and supervises record number of MS and PhD theses.

1952: Department chair Geoffrey Broughton lays foundation for PhD program, increased research, and expanded curriculum.

1955: Shelby Miller is appointed chair, institutes Broughton's changes.

1957: Robert Heeks is first ChemE PhD graduate.

1981: Enrollment peaks during energy crisis and then abruptly declines.

1995: University's Renaissance Plan suspends doctoral enrollments in ChemE and three other departments; all but four ChemE faculty depart.

2010: Reinvigorated ChemE doctoral program is ranked among the best in the nation by the National Research Council.

2011: Assistant professor Hitomi Mukaibo is first woman to join the faculty.

2014: ChemE department celebrates all-time high enrollment with almost 250 undergraduate students.

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