

RE: Admission for the academic year 2018-2019

Dear Prospective Student:

The Department of Chemical and Biochemical Engineering at Rutgers University provides a comprehensive, modern chemical engineering graduate program, with exciting and innovative research efforts in core areas such as nanoscience and nanotechnology, transport phenomena, reaction engineering, thermodynamics and molecular simulations, separations, and process systems engineering. We also have extensive cross-disciplinary activities in bioengineering and biotechnology, and polymer science and materials engineering. In addition, the department is the first of its kind in the country to offer a full spectrum of graduate training and research in pharmaceutical engineering, an emerging area that will have expanding impact in the decades to come.

The program provides an intellectual climate for graduate students to conduct high impact cutting-edge research. It comprises 21 core chemical engineering and 17 interdisciplinary faculty members from various disciplines in engineering, physical and biological sciences. Four core faculty joined the program in the past two years, complementing our strengths with their expertise in metabolic engineering, biofuels and biomass engineering, and novel catalytic transformations for energy production. Our annual research expenditures exceed \$7 million dollars. Core faculty published 419 scholarly, refereed articles in world class journals in the past four years (5.0 annual publications per faculty).

The graduate faculty in Chemical and Biochemical Engineering is particularly interested in attracting well-qualified candidates to its advanced degree programs. Admission is competitive based on GRE general test scores, GPA in your undergraduate major, three letters of recommendation, and a personal statement. TOEFL or IELTS is required of all applicants whose undergraduate education was completed in a non-English speaking country. Scores must be current within 2 years of the applied semester. The minimum Paper based TOEFL score is 575. The minimum Computer based TOEFL score is 233. The minimum IBT-internet based TOEFL is as follows: Writing 22, Speaking 23, Reading 21, Listening 17. The acceptable IELTS score is bandwidth 7. MS admits have had average GPA of 3.4, GRE Verbal of 154, GRE Quantitative of 162, and GRE Writing of 3.8. PhD admits have had average GPA of 3.6, GRE Verbal of 159, GRE Quantitative of 164, and GRE Writing of 4.2. These are averages. Being below the average does not exclude you from consideration, and being at or above the average does not guarantee admission. The admissions decisions are made by a committee and are based on the applicant's entire admission packet, not just scores and grades.

Applications to the **PhD program received by December 15th** can be considered for fellowships and assistantships that include stipends from \$28,000/year and full tuition remission. In addition, the program hosts an NIH sponsored doctoral training program in Biotechnology, and an NSF and industry sponsored Engineering Research Center for Structured Organic Particulate Systems. Some fellowship programs provide stipends up to \$30,000/year and tuition remission. Rutgers fosters diversity through several special fellowship and training programs and encourages underrepresented minority students to apply. All admitted full-time Ph.D. students receive funding through either teaching assistantship (TA), graduate assistantship (GA) or fellowship and can expect funding for at least five years subject to satisfactory progress.

We are not able to offer tuition waiver, GA or TA positions to **Masters students, for whom the application deadline is April 15th**. TA and GA positions are very limited and are reserved for Ph.D. students. A number of our Masters students are able to find grader or other positions in departments such as Math and Physics that serve a large undergraduate population. The students themselves seek out and acquire these positions. We have a very limited number of grader positions in our

department as well depending on course enrollment. Some of our Masters students have been successful in obtaining summer internships in the relevant chemical or pharmaceutical industries, which can be accommodated in the form of CPT (curricular practical training) for international students.

Further information can be found and the application process initiated at <http://gradstudy.rutgers.edu/apply.shtml>. If you have questions, please send e-mail to cbemail@soemail.rutgers.edu, or to pharmeng@soemail.rutgers.edu if your interest is in pharmaceutical engineering. Information regarding Chemical and Biochemical Engineering at Rutgers can be found at <http://cbe.rutgers.edu>.

Sincerely,



Charles Roth
Professor and Graduate Program Director