

Chemical Engineering is a constantly evolving discipline which keeps pace with the developing world. Our department reflects this in its teaching curriculum, research focus, industry partnerships and entrepreneurial initiatives.

In the department, we endeavour to keep up with the current trends of the needs of industry and society at large through our research and consultancy projects, while maintaining a firm grounding in the fundamentals.

We have now embarked upon a very focused internship program for M. Tech. students that is aimed at helping them get an experience of working in core chemical and process industry and also an avenue that may help them seek gainful employment. In line with this we also have courses that focus specifically on the industry experience.

Our academic and research programs are also designed to prepare the students for a wide range of avenues for students to choose their career path. These include employment in industry or further



Prof. Ravikrishna R.

Head of the Department



research as part of a PhD program either in IIT Madras or elsewhere. With an average of 5-6 Ph.D. students and 1-2 PDFs per faculty, research groups are now reaching critical mass.

Faculty from our department are also involved in a number of inter-disciplinary centres of excellence and students can get to be a part of one of these.

In addition to being ranked as the top engineering school in India, IITM has also been recognized as one that has the best innovation/ incubation ecosystem. Nearly 20% of the faculty in ChE are actively involved in start-up's, facilitated by IIT Madras Research Park located next door.

## **Programmes (M.Tech.)**

- Chemical Engineering
- Catalysis Technology (Interdisciplinary programme)

## Research areas

### **Energy and Materials**

- Conventional energy
- Renewable and Unconventional

#### **Environment**

- Development of processes and materials for the management of waste and environmentalresources
- Fate and transport of pollutants in the environment

#### **Molecular Simulations**

- Computational material science
- Physics, chemistry and mechanics of materials
- Materials for energy & environment
- Computational material science

#### **Process Intensification**

- Efficient equipment design
- Use of external energy source
- Advanced processes





#### Process systems engineering

- Systems Engineering and Data Sciences
- Integrated Process Manufacture
- Systems Biology
- Energy and Water Systems

### **Placements**

















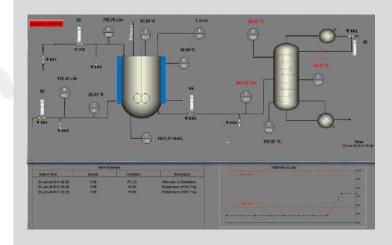


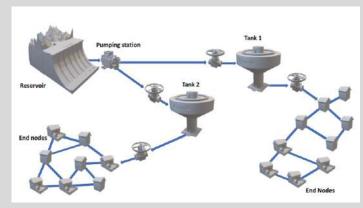


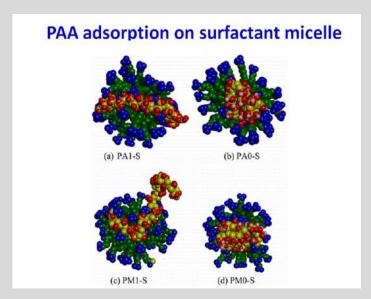














# **Faculty**

- Dr. Abhijit P. Deshpande
- Dr. Arun K. Tangirala
- Dr. Aravind Kumar Chandiran
- Dr. Basavaraj M. Gurappa
- Dr. Ethayaraja Mani
- Dr. Himanshu Goyal
- Dr. Jitendra Sangwai
- Dr. Jithin John Varghese
- Dr. Kannan A
- Dr. Nagarajan R
- Dr. Niket S. Kaisare

- Dr. Preeti Aghalayam
- Dr. Pushpavanam S
- Dr. Raghuram Chetty
- Dr. Ragunathan Rengasamy
- Dr. Rajagopalan Srinivasan
- Dr. Rajnish Kumar
- Dr. Ramanarayanan R
- Dr. Ramanathan S
- Dr. Ravi R
- Dr. Ravikrishna R
- Dr. Renganathan T

- Dr. Shankar Narasimhan
- Dr. Sreenivas Jayanti
- Dr. Sridharakumar Narasimhan
- Dr. Sumesh P. Thampi
- Dr. Susy Varughese
- Dr. Swapna Rabha
- Dr. Tanmay Basak
- Dr. Tarak Patra
- Dr. Upendra Natarajan
- Dr. Vinu R