



**Department of
Chemical
Engineering**



Indian Institute of Technology, Kanpur

Student Placement Office



<https://www.linkedin.com/company/che-iitk/>



<https://www.iitk.ac.in/che/>



<https://www.facebook.com/cheiitk/>

**Placement Brochure
(2023–2024)**

Message From HOD

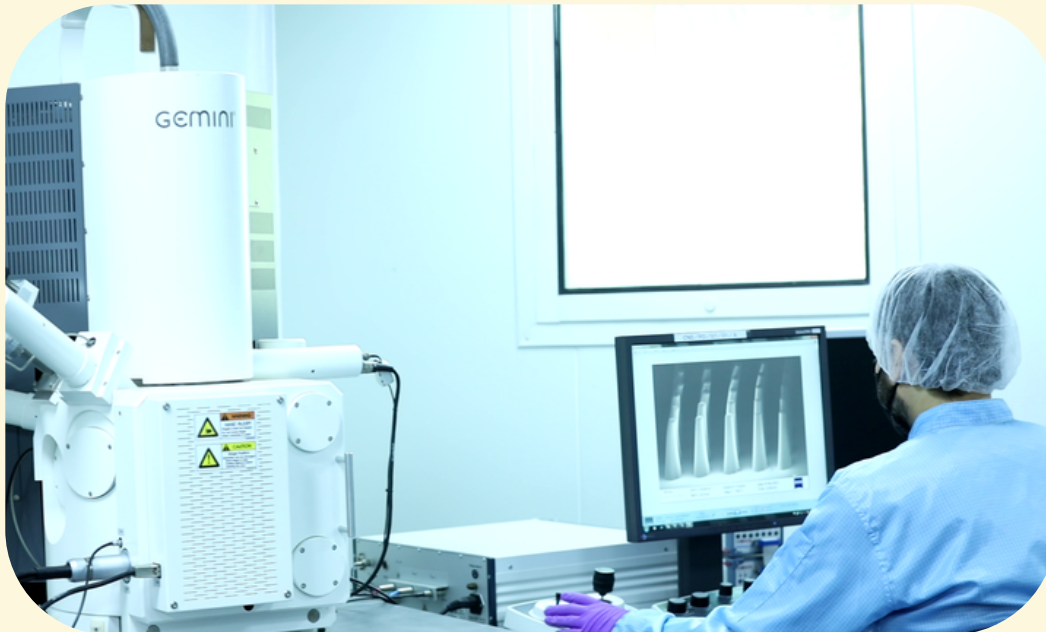


Prof. Jayant K. Singh

Ranked among the nation's top schools in Chemical Engineering, the department at IIT Kanpur is endowed with a highly competitive undergraduate program and a vibrant graduate program supported by state-of-the-art facilities and distinguished faculty members with both national and international recognitions. Our department's highly vibrant academic environment nurtures creativity, ethics, and out-of-the-box thinking. The students are guided by exceptional faculty, highly dedicated to research and teaching, and committed to providing cutting-edge knowledge and rigorous training to the students. Our students thus grow in an intellectually stimulating environment where the emphasis is on solving problems, allowing them to learn beyond the disciplinary boundaries. Thus, our alumni have made a remarkable impact in academia and industry. I heartily welcome companies to the campus recruitment at IIT Kanpur and become part of our extended community.

.....

About Us



The Department of Chemical Engineering at IIT Kanpur is ranked among the nation's top schools in Chemical Engineering. Aside from excellence in fundamental research, the department has made significant contributions to the chemical industry through its expertise in chemical process engineering, simulation, optimization and control, polymers, interfacial phenomena, and separations. Experimental research in the department is supported by state-of-the-art facilities, which include Scanning Tunnelling and Atomic Force Microscopes, Ellipsometer, Rheometers, Optical Profilometer, etc. IIT Kanpur was chosen by the Department of Science and Technology (DST) as one of the five places in India to have an operational state-of-the-art Nano-technology centre located in the Department of Chemical Engineering. Under the auspices of the FIST scheme of DST, several new facilities have been established. We take great pride in our alums, among whom we have recipients of almost all significant national and international recognitions: National Science Medal by the President of the United States of America, Membership of the National Academy of Science (USA), National Academy of Engineering (USA), National Medal of Technology and Innovation (USA), Infosys prize, Shanti Swaroop Bhatnagar prize, TWAS prize and many more.

.....

B.Tech

- 108 students
- 4-year program
- Admission through JEE
- Basic engineering & departmental courses
- Undergraduate projects

M.Tech & MS(R)

- 49 students (42 + 7)
- 15+1 female candidates
- 2-year program
- Admission through GATE
- Compulsory departmental courses & electives
- 1.5 years thesis



STUDENT

DEMOGRAPHICS



Dual Degree

- 18 students 5-year program
- Admission through JEE
- Basic engineering & departmental courses.
- 1.5 years thesis

Ph.D

- 23 students
- Admission through written test and interview
- Compulsory departmental courses & electives
- PhD thesis

Laboratory Courses

- Chemical Process Simulation
- Unit Operation and Process
- Control Laboratory Courses
- Chemical Engineering Design



Fundamental Courses

- Thermodynamics
- Fluid Mechanics & its Applications
- Heat Transfer & its Applications
- Mass Transfer & its Applications
- Chemical Process Industries
- Process Dynamics and Control
- Chemical Reaction Engineering
- Biochemical Engineering
- Chemical Engineering Design
- Applied Numerical Methods in Engineering

Specialization Courses

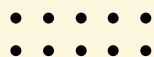
- Petroleum Refinery Engineering
- Computer Aided Process Control
- Molecular Modelling & Simulation
- The Structure and Rheology of Complex Fluids
- Process Engineering & Optimization
- Chemical Plant Safety & Hazard Assessment
- Reaction Engineering of Polymers
- Advanced Fluid Mechanics
- Environmental Pollution: Control & Modelling
- Mechanics of Soft Matter
- Statistical Thermodynamics
- Nano-sciences & Micro-fluids
- Modelling & Simulation of Separation Processes
- Hydrodynamic Stability

In addition to the Unit Operations & Process Control lab and Design Lab, course projects involving various tools, like MATLAB, COMSOL, ASPEN PLUS, HYSYS, & FLUENT, equip the students with sufficient practical skills.

Departmental Activities

► Chemineers society

- A student body aiming to promote intellectual and cultural activities of students of the Department of Chemical Engineering, IIT Kanpur.
- Helps students identify campus resources and foster harmonious relationships among students, faculty, staff, and administrators.
- The activities aim to groom student personalities to make them responsible citizens dedicated to the nation's development.



► SimuTech group

- Conducts group workshops and offers projects related to the field of simulation in Chemical Engineering to students.
- Workshops introduce simulation and modeling softwares like Aspen Plus, Aspen Dynamics, Aspen HYSYS, and COMSOL.
- The group offers various projects with students on topics like Computational fluid dynamics, Computational heat transfer, Modelling of chemical reactors, and Plant control and design.



Past recruiters



A Navratna Company



IndianOil



Navin Fluorine
International Limited

Dr.Reddy's



BHARAT OMAN
REFINERIES LIMITED



Johnson Matthey
Inspiring science, enhancing life



SAINT-GOBAIN



Hindustan Unilever Limited

ExxonMobil



ITC Limited



Reliance
Industries Limited

INGENERC
Excellence Through Insight

ESSAR



LUMMUS
TECHNOLOGY

JINDAL
STEEL & POWER



Honeywell

Technip

Petrofac



TATA STEEL



FOXCONN

MCDERMOTT

Bloomenergy®

vedanta

Our Distinguished Alumni



Smt. Vartika Shukla
Chairperson & Managing Director
Engineers India Limited (EIL)



Dr. Ashutosh Sharma
Former Secretary DST
Government of India



Mr. Nitash Balsara
Faculty Senior Scientist
University of California, Berkeley



Dr. Rakesh Agrawal
Professor Purdue University



Dr. Kamal Kishore Sharma
Vice Chairman Lupin Limited



Dr. Rakesh K. Jain
Professor, Tumor Biology
Harvard Medical School



Mr. Jagjeet Singh Bindra
Former president
Chevron Global Manufacturing



Dr. Ashok Mishra
Former Director IIT Bombay



Dr. Santosh K. Gupta
Distinguished Professor
UPES, Dehradun



Mr. Kushal Chand Sacheti
Founder and CEO Galaxy,
USA, Inc



Dr. K. Vijay Raghavan
Principle Scientific Advisor
Government of India



Mr. Hemant Jalan
Founder Indigo Paints

and many more...

Collaborators and Sponsors

We Collaborate with



Department of
Biotechnology,
Government
of India



सत्यमेव जयते
Department of science and technology
Government of India



UPL



Sterlite



SAINT-GOBAIN



TATA
CONSULTANCY
SERVICES



Hindustan Unilever Limited



State of the Art Facilities

- Rheometer
- Polarized Optical Microscope
- Micro PIV
- Atomic Force Microscope
- Optical Profilometer
- Real time PCR
- Atomic Absorption Spectroscopy
- Confocal laser scanning microscope
- Dispersive Raman Spectrometer
- Nano Imprint Lithography
- 3D Bioprinter
- ICP Mass Spectrometer
- Surface Area Analyzer
- Universal Testing Machine
- Temperature Programmed Reduction

And many more...

Faculty list and Expertise

Dr. Vishal Agarwal

Catalysis, Biofuels, Nucleation, Gas-Surface and Liquid Surface Interactions, Molecular Simulation.

Dr. Pankaj A. Apte

Statistical Mechanics, Interfacial Thermodynamics, Phase equilibria and nucleation.

Dr. Goutam Deo

Catalysis and reaction engineering, Supported catalysts, Reaction kinetics.

Dr. Sanjeev Garg

Bioinformatics, Bioremediation, RNA Interference, Computer Aided Product and Process Design, Flexibility Analysis of Chemical and Biological Systems

Dr. Animangsu Ghatak

Adhesion and friction on soft interfaces, Fracture of soft thin sheets, Bio-inspired approaches in design of engineering material.

Dr. Raju K. Gupta

Photocatalysis, Green synthesis of nanomaterials, Surface chemistry, High dielectric constant materials, Perovskite solar cells, Supercapacitors.

Dr. Yogesh M. Joshi

Rheology, Polymer science and engineering and Fluid mechanics.

Dr. Nitin Kaistha

Process modeling, Simulation and control, Plantwide control system structure synthesis, Control of reactive distillation columns.

Dr. Harshwardhan H. Katkar

Soft matter, Biophysics, Nanopores, Bacterial Assemblies, Fluid Mechanics, Multiscale modeling, Bottom-up coarse-graining, Enhanced sampling.

Dr. K. P. Krishnaraj

Flow, structure and stress transmission in granular media, structure and transport in spatial networks.

Dr. Nishith Verma

Adsorption, Synthesis of nanomaterials including adsorbents and catalysts, Environmental pollution control (air/water purifications).

Dr. Rahul Mangal

Polymer physics, colloids, complex fluids, nanocomposites, active matter, liquid crystals.

Dr. Raj Ganesh Pala

Electrochemical and reaction engineering, Sustainable energy and environment, Photoelectrochemical systems, CO₂ Capture.

Dr. Ishan Bajaj

Process systems engineering, Nonlinear optimization, Technoeconomic and life-cycle analyses, Energy system modeling, Operations research

Dr. Siddhartha Panda

Chemical sensors, Lab-on-a-chip, Micro/nano fabrication, Microfluidics, Materials processing for microelectronic and display technologies..

Dr. Dipin S. Pillai

Stability Theory, Nonlinear Dynamics, Reduced-Order Modeling, Hydrodynamic Stability, Thin Films, Electrohydrodynamics, Multiphase flows.

Dr. Raghavendra Ragipani

Carbon dioxide capture and mineralization, Resource recovery and solid waste utilization, Sustainable process engineering.

Dr. Indranil Dalal Saha

Modeling and simulation of the dynamics of polymer chains in flow, Mesoscale and molecular dynamics simulations.

Dr. V. Shankar

Stability of fluid flows, Rheology of complex fluids.

Dr. Ashutosh Sharma

Confined Soft Materials, Nanomechanics, Meso-Patterning, Colloids and Interfaces, Wetting and Adhesion, Functional Interfaces.

Dr. Himanshu Sharma

Flow through porous media, Enhanced oil recovery, Colloids & interfaces, Nanotechnology.

Dr. Jayant K Singh

Thermodynamics, Selective adsorption and separation, Energy storage materials, Wetting transition, Self assembly and crystallization at nanoscale.

Dr. Raghvendra Singh

Signal transduction, Systems biology, Biophysics.

Dr. Sri Sivakumar

Synthesis and characterization of nanomaterials, Layer-by-Layer (LbL) assembly, Polymer capsules, Thin films, Drug delivery, and Photonic crystals.

Dr. Naveen Tiwari

Transport Phenomena, Instabilities in micro-scale free surface flows, Flow through porous media.

Dr. Anurag Tripathi

Modelling and simulation of complex fluids, Rheology and segregation of granular mixtures, Wet granular flows.

Dr. Akash Choudhary

Complex fluids and flows, Active Colloids & Biological Microswimmers: Dynamics & Rheology, Microfluidics, Electrokinetics

Dr. Soumik Das

Chemical sensors, Lab-on-a-chip, Micro/nano fabrication, Microfluidics, Materials processing for microelectronic and display technologies.

Contact Us

Student Placement Office

109, Outreach Building, IIT Kanpur

Phone: +915122594433/34

Email: spo@iitk.ac.in



Dr. Jayant K. Singh
Professor and Head



Dept. of Chemical Engineering, IIT Kanpur
Email: jayantks@iitk.ac.in, Phone: 0512-2596141



Dr. Dipin S. Pillai
Faculty Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: dipinsp@iitk.ac.in, Phone: 0512-2592109



Aditya Choumal
Department Placement Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: adityaac22@iitk.ac.in, Phone: 7016302404



Hemant Singh Kumaiya
Department Placement Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: hemantsk22@iitk.ac.in, Phone: 9760562747



Sagnik Saha
Department Placement Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: sagniksaha22@iitk.ac.in, Phone: 8620868016



Soniya
Department Placement Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: Soniyakum20@iitk.ac.in, Phone: 9664237426



Pratibha Sharma
Department Placement Coordinator



Dept. of Chemical Engineering, IIT Kanpur
Email: pratibha20@iitk.ac.in, Phone: 7986358708