



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్  
भारतीय प्रौद्योगिकी संस्थान हैदराबाद  
Indian Institute of Technology Hyderabad


# CHEMICAL ENGINEERING PhD Admissions 2024-25

---

DEPARTMENT OF CHEMICAL ENGINEERING  
IIT HYDERABAD

Website: <https://che.iith.ac.in>

Email: [phd.admissions@che.iith.ac.in](mailto:phd.admissions@che.iith.ac.in)

Tel: +91 40 2301 6200  @che\_iith

HOD's Message	2
Chemical Engineering @ IITH	3
Academic Programs	4
Elective Courses	6
Eligibility Criteria for PhD Programs	7
Financial Assistance	11
Category of Admission	13
Application Procedure	14
After PhD Admission	15
Research Themes	17
Research Facilities	25
University & Industry Collaboration	26
Faculty Achievements	27
Student Achievements	28
Gallery	29





Welcome to the Department of Chemical Engineering at IIT Hyderabad (ChE@IITH). On behalf of the department, it is my great privilege to present this wonderful stream of engineering to you. ChE@IITH is one of the fastest growing Chemical Engineering Departments in the country and has an excellent reputation in teaching and research, built over the last 14 years.

Our aim is to provide an excellent and accessible chemical engineering education program that is tailored to address technology challenges of the real world. Our dream is to become a department from which future technology leaders of the modern world will emerge. We hope to achieve our objective and fulfill our dreams with the help of young and vibrant team of faculty members, technical staff and scholars. Our core values of responsible training, integrity and mutual respect are the primary pillars on which the department stands. I believe that with these core values we can build centers of excellence from which future technology leaders will emerge.

Faculty from the department actively address challenges in the fields of health, energy security and national security. We address these challenges by utilizing our research expertise in a range of domains like- Advanced Materials, AI/ML, Biofuels, Catalysis, Drug Delivery, Fuel Cells, Mineral Processing, Nanoengineering, Polymer Engineering, Soft Matter and Systems Biology. The web pages of the department provide more information about the programs, facilities and the faculty members. Please reach out to the Office of Chemical Engineering([office@che.iith.ac.in](mailto:office@che.iith.ac.in)) or the faculty members if you have any queries about the programs in the department and the research facilities.

Sincerely,

Balaji Iyer  
Head of Department, Chemical Engineering  
[head@che.iith.ac.in](mailto:head@che.iith.ac.in)



Chemical Engineering at IITH (ChE @ IITH) is one of the fastest growing ChE departments in the country. With 22 faculty members engaged in cutting edge research, we provide quality programs in chemical engineering education, research, and expert consulting support to process industries.

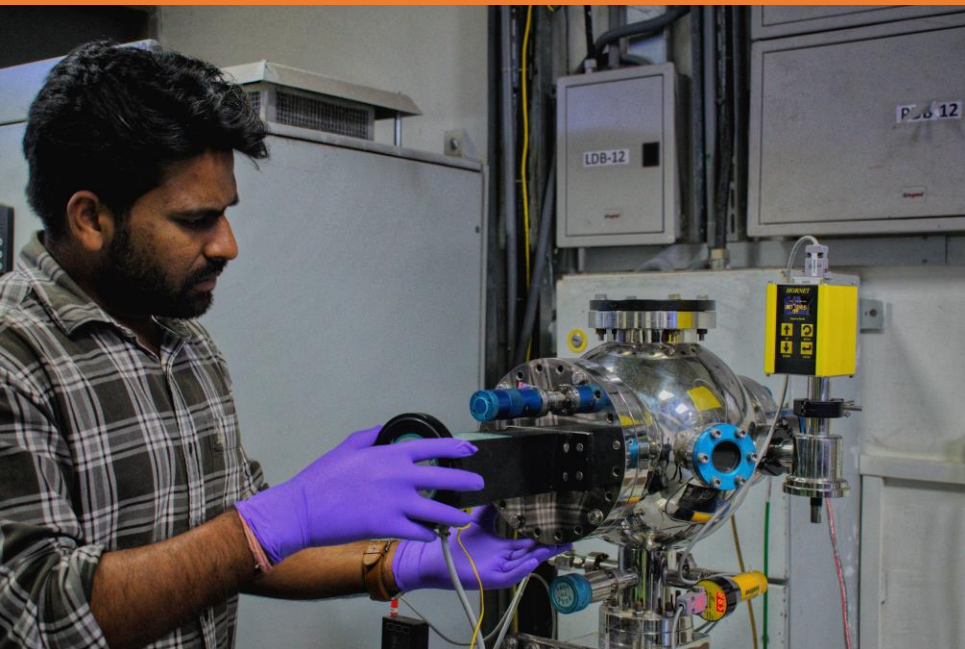
### VISION

"To be recognized as an outstanding contributor to chemical engineering education in the country and be the preferred hub for learning, research, and development of global technology leadership."



### MISSION

"To serve the country and society at large by catalyzing positive transformations that help address challenges in chemical engineering education and practice."

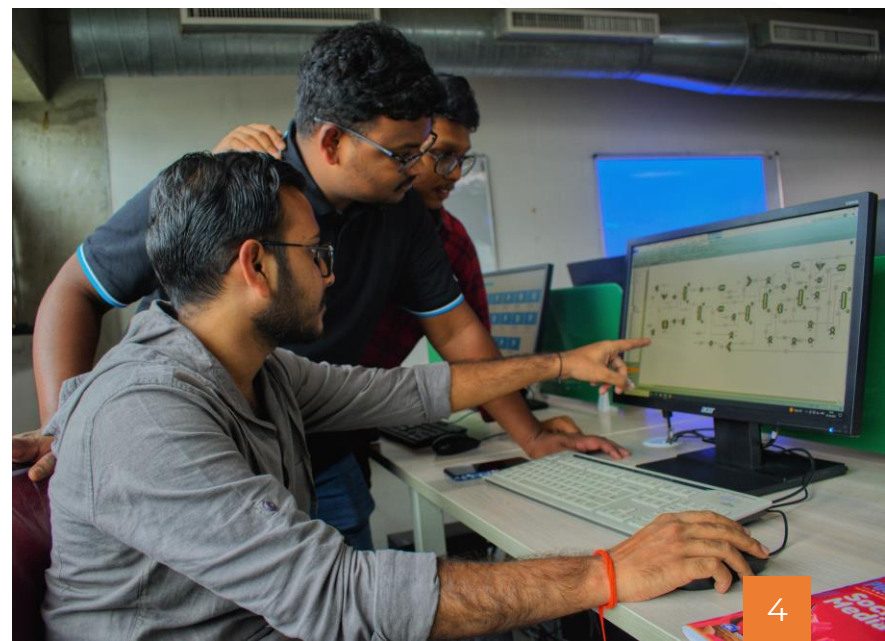


### CORE CHEMICAL ENGINEERING ACADEMIC PROGRAMS

ChE @ IITH offers BTech, MTech and PhD programs. The core curriculum builds strong foundations in chemical thermodynamics, reaction kinetics, fluid mechanics, process control, principles of heat and mass transfer, and transport phenomena. The department electives that encompass the state-of-the-art topics in chemical engineering spanning materials, energy, healthcare and computing along with training on live projects prepare our students to address problems that cut across the boundaries of conventional chemical engineering.

### INTERDISCIPLINARY GRADUATE PROGRAMS

Faculty in ChE @ IITH are also engaged in several interdisciplinary programs. This includes, for example, MTech in Polymer and Biosystems Engineering, Climate Change, Additive Manufacturing, E-Waste Resource and Engineering Management.



## B.TECH

## B.Tech

*Features:*

- Total credit requirement is 129
- B.Tech (Hons) is also offered by the department
- A project work is compulsory for B.Tech (Hons) students
- Students can opt for ChE as minor or major through earning specified additional credits

*Duration:* 4 years (8 Semesters)

*Entrance:* Admission through JEE Advanced

## Dual Degree (B.Tech + M.Tech)

*Features:*

- A student can choose to continue for higher program by converting to dual degree
- Master's thesis is compulsory for all dual degree students
- Dual degree students are eligible to receive fellowship in the last two semesters as per regular M.Tech students

*Duration:* 5 years (10 Semesters)

*Entrance:* Admission through JEE Advanced

## M.TECH

## Regular M.Tech

*Features:*

- Total credit requirement is 52, which includes 17 core courses, 7 electives, and 4 laboratory courses
- M.Tech thesis credit requirement is 24
- Several M.Tech thesis topics are motivated by the industry
- Industry lectures have been introduced in the M.Tech curriculum to get students acquainted with different topics of industry interest

*Duration:* 2 years (4 Semesters)

*Entrance:* Admission through GATE, IIT graduate with minimum CGPA 8.0 without GATE score

## Self-Sponsored M.Tech

*Features:*

- Self sponsored M.Tech is non-subsidized master's degree program.
- Academic requirement is similar to the regular M.Tech program.
- Candidates are required to pay tuition fees on per credit basis.
- Such candidates are not eligible for financial assistantship under MoE.

*Duration:* 2 years (4 Semesters)

*Entrance:* Minimum CGPA 7.0 and based on the performance in written test and interview

## PHD

## Direct PhD

*Features:* Total credit requirement is 24

*Duration:* 5 years with Fellowship

*Eligibility criteria:*

- B.E/B.Tech with valid GATE score
- M.Sc with UGC/CSIR NET and department specified cut off CGPA

## Regular PhD

*Features:* Total credit requirement is 12

*Duration:* 5 years with Fellowship

*Eligibility criteria:*

- M.E/M.Tech with department specified cut off CGPA or equivalent
- IITH project sponsored candidates are also eligible to apply

## External/Sponsored PhD

*Features:*

- Total credit requirement is 24
- Candidates from national laboratories, academia and industry are eligible.

*Duration:* 5 years with no Fellowship

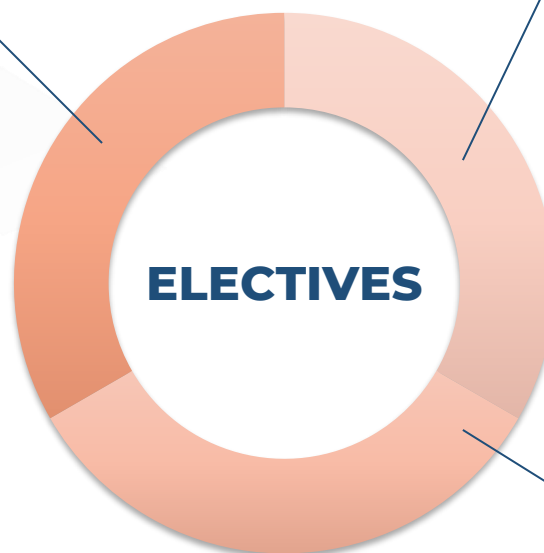
*Eligibility criteria:* M.E/M.Tech with minimum 2 years of experience



A unique feature of the department's academic program is its carefully curated list of electives that expand the curriculum beyond the foundations presented via the core courses. The electives expose students to the present multi-disciplinary state of the field of chemical engineering which underpins materials, health care and energy science and engineering. Our electives cover these state-of-the-art fields and help prepare students to be competent to engage in industrial, research or academic careers of their liking.

### Materials and Health Sciences Research

- Engineering Materials
- Interfacial Chemistry
- Introduction to Nanotechnology
- Intermolecular Forces
- Surface Interactions
- Physico-chemical Fundamentals for Chemical Engineers
- Introduction to Microfluidics and Microreactors
- Food Rheology
- Membrane Separation Process
- Fluidization Technology
- Colloids Emulsions and Foams
- Light Scattering Methods for Complex Fluids
- Fundamentals of Droplet Drying
- Polymer Science and Engineering
- Introduction to Cardiovascular Mechanics



### Computing and Applied Mathematics Research

- Introduction to Statistical Hypothesis Testing
- Machine Learning for Process System Engineering
- Introduction to Stochastic Differential Equations
- Optimization Techniques
- Computational Fluid Dynamics
- Non-Newtonian Fluid Mechanics
- Data Analysis Tools in Experimental Research
- Modern Probability Theory
- Molecular Modelling of Catalytic Reactions
- Linear and Nonlinear Stability of Fluid Flows

### Energy Research

- Chemical Reactor Modelling
- Petroleum Refinery
- Principles of Heterogeneous Catalysis
- Sustainable Energy
- Energy Storage Systems
- Fuel Cell Technology

## DIRECT PhD

The Department of Chemical Engineering offers a Direct PhD program with financial assistance for highly motivated undergraduate students with excellent academic achievements.

- Candidates with BE/BTech degree from government recognized institute/university in Chemical Engineering or allied field with valid GATE Score (CH, BT, BM, PE, ME and XE with Fluid Mechanics, Polymer Science and Engineering, and Material Science, GATE paper) are eligible to apply.
- **CGPA requirement:** minimum of 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55 % marks) for other categories such as OBC/SC/ST in the qualifying degree
- Candidates with MSc degree with valid CSIR/UGC NET fellowship are encouraged to apply. CGPA requirement: BSc and MSc with minimum of 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST.



## REGULAR PhD

The Department of Chemical Engineering offers a Regular PhD program with financial assistance.

- Candidates with MTech/ME degree in Chemical Engineering or allied engineering disciplines such as Mechanical Engineering, Material Science and Engineering, Chemical Technology (Polymer, Petroleum, Petrochemical etc.), Biomedical Engineering and Technology and Mineral Processing and Engineering are eligible to apply. A valid GATE score is not a pre-requisite.
- Candidates with fellowships from an external funding agency (e.g., DST Inspire) are encouraged to apply.
- Candidates working in a sponsored project at IITH can apply under this category.
- **CGPA requirement:** BE/BTech in Chemical Engineering or allied discipline with minimum of 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST and ME/MTech in Chemical Engineering or allied discipline with minimum 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST.

## EXTERNAL PhD

- Candidates from national research laboratories/academic institutions/reputed industrial organizations are encouraged to apply under this category.
- A minimum of two years of research/teaching experience is required.
- Candidates with MTech/ME degree in Chemical Engineering or allied engineering disciplines such as Mechanical Engineering, Material Science and Engineering, Chemical Technology (Polymer, Petroleum, Petrochemical etc.), Biomedical Engineering and Technology and Mineral Processing and Engineering are eligible to apply. **CGPA requirement:** BE/BTech in Chemical Engineering or allied discipline with minimum of 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST and ME/MTech in Chemical Engineering or allied discipline with minimum 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST.
- Candidates with BE/BTech/MSc from government recognized institute/university in Chemical Engineering or allied field are encouraged to apply. CGPA requirements for BE/BTech is same as previous point. **CGPA requirement for MSc:** BSc and MSc with minimum 6.0 CGPA (or 60% marks) for General category and 5.5 CGPA (or 55% marks) for other categories such as OBC/SC/ST

Department of Chemical Engineering reserves the right to set a different criterion which can be equal to or above the eligible criteria for shortlisting the candidates for the selection process.



## Category of Admission

- **Full time Institute Fellowship (MoE)**
- **Fellowship from external funding agency:** Candidates with valid DST Inspire, CSIR/UGC NET etc. fellowships are encouraged to apply.
- **Sponsored Project:** Positions funded through faculty's sponsored research projects. Candidates working in a sponsored project at IITH can apply under this category.
- **External PhD:** Industry, Research Laboratory and Academic Institution sponsored candidates with a minimum of two years of research/teaching work experience.

## Financial Assistance

- Candidates admitted to the PhD program under the Direct and Regular program (full-time) under MoE funding are eligible for financial assistance from the Institute (Teaching Assistance TA).
- Candidates with TA are required to assist the department for 8 hours of teaching assistance (TA) work per week. The TA works are related to academic activities of the department such as laboratory demonstration, tutorials, evaluation of assignments, quizzes, seminars, research projects etc.
- Renewal of assistance every semester will be contingent on enrolment, satisfactory progress, and performance in the preceding semester.
- Candidates admitted under various sponsored categories are not eligible for financial assistance from the Institute. However, they are eligible to receive financial assistance from projects or sponsoring academic and research institutes, industry etc.

## Reservation Policy

Government specified reservation policy is strictly followed during selection and admission. 15% seats for SC candidates, 7.5% seats for ST candidates, 10% seats for EWS candidates and 27% seats for OBC candidates are reserved in Direct and Regular PhD program. Candidates are advised to apply with relevant category certificate from a competent authority.



### ONLINE APPLICATION

Candidates are required to submit their applications through the online PhD admissions web portal. Instructions for completing the online application form are provided on the portal.

### APPLICATION FEE

Details regarding application fees and accepted payment methods for all categories of candidates can be found on the IIT Hyderabad PhD admissions web portal.

### SELECTION PROCEDURE

- Candidates are admitted based on the performance in written test and/or interview. Depending on the number of applicants, the Department reserves the right to conduct a written exam or subject oriented interview for initial screening.
- The purpose of the interview is to gauge fundamental knowledge in Chemical Engineering/relevant engineering and research aptitude for the candidates. In general, candidates will be tested for clarity of thought, analyzing skills, confidence levels and passion for research.
- The written test and interview are likely to be performed in the same day or spread over a few days based on the number of shortlisted candidates.

**COURSES:** The PhD candidate is required to undergo course work during the first two semesters. The typical course requirement in the department is 12 credits, with a minimum cumulative grade point average of 7.0. The candidates, in consultation with their supervisor, may also choose to take relevant courses from other departments. **Candidates with BE/BTech and MSc degree will have to do extra credits as per institute policy.**

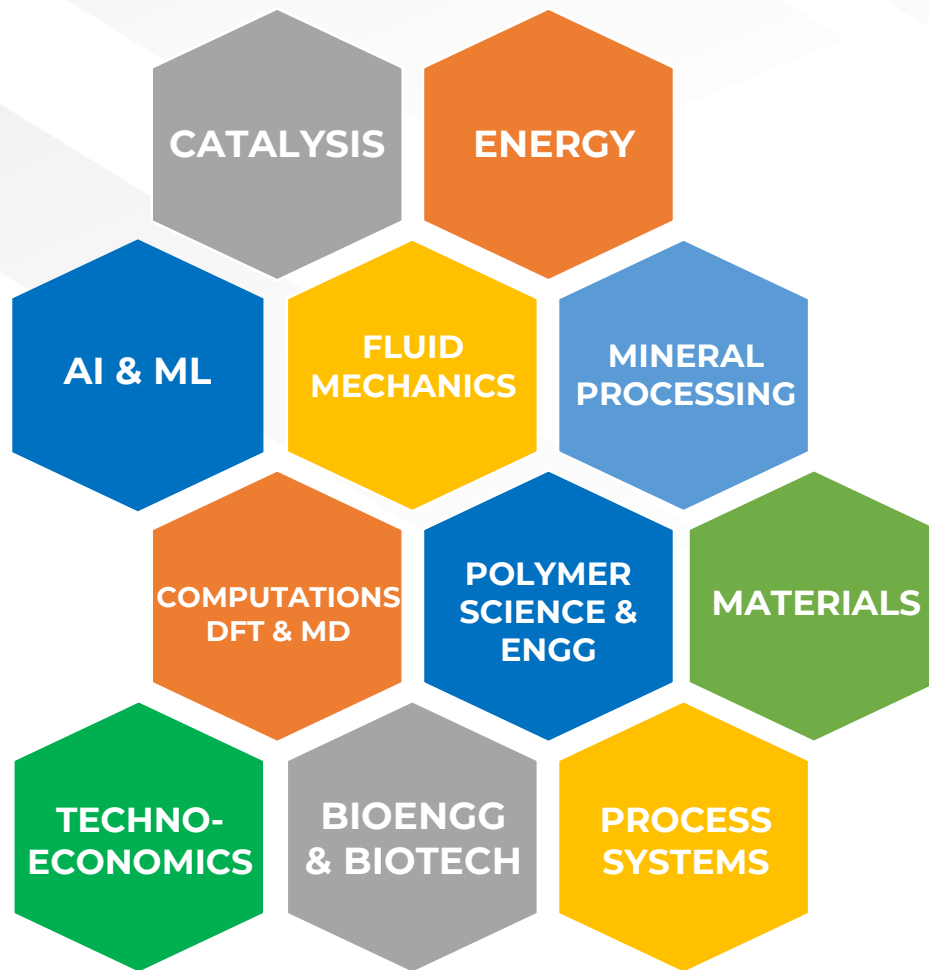
**GUIDE SELECTION:** The candidates are allocated supervisor either at the beginning of first semester or the end of the first semester based on the student's choice. PhD candidates are encouraged to discuss with department faculty members working in research areas of interest. PhD candidates are required to provide names of faculty members whom they wish to work with, listed in order of preference. The supervisor is allocated based on the preferences received from all PhD candidates.

**COMPREHENSIVE EXAM:** Candidates must appear for the comprehensive exam after successful completion of course work and within 12 months from the date of joining the department. Candidates must pass the comprehensive exam in order to continue in the PhD program. Details of the comprehensive exam will be communicated after joining the department.

**PhD THESIS PROPOSAL DEFENSE:** After successful completion of comprehensive exam, all PhD candidates are required to defend their thesis proposal within 06 months of successfully passing the comprehensive exam or before 18<sup>th</sup> months from date of joining whichever is earlier. The thesis proposal consists of a written document outlining the research plan, and the candidates must make a presentation before the doctoral committee.

**RESEARCH PROGRESS:** PhD scholars are required to regularly apprise the doctoral committee of progress made in solving the research problem. Continued involvement in the PhD program is subject to satisfactory progress, as deemed by the doctoral committee.





**Research in the department spans a wide variety of areas including fluids, mineral processing, catalysis, materials for energy and biological applications, nanotechnology, bioengineering, process control, optimization, microfluidics, and DFT studies. Faculties are actively involved in hosting conferences and outreach workshops benefitting the students and faculty across several institutes in India. The Department also houses state of the art research and teaching equipment.**

### CATALYSIS

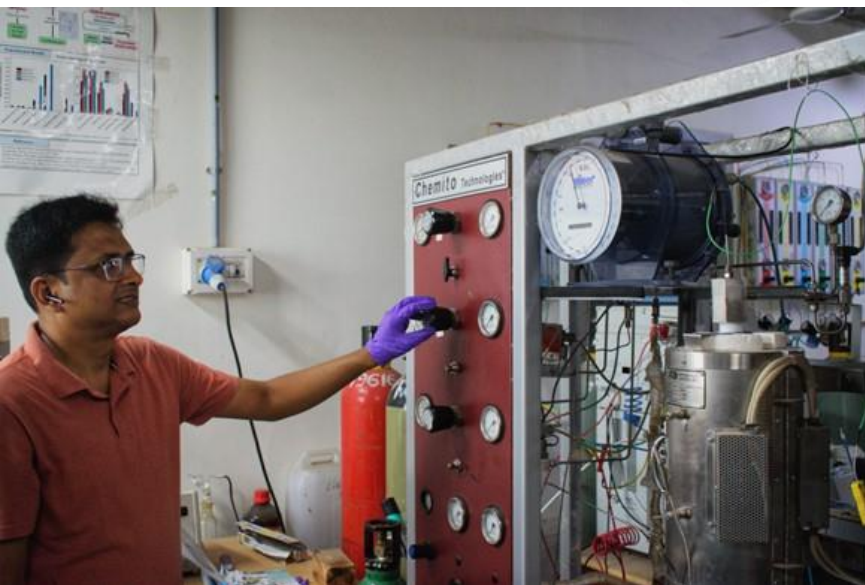
Our research is focused on the design and development of catalyst materials – ranging from zeolite, and supported metal/metal oxide – with improved reactivity, stability, and selectivity. The catalysts are tested for various industrial processes (e.g., steam reforming, water-gas shift reaction, CO<sub>2</sub> conversion and fine chemicals) and biomass-based fuels and chemicals. These studies aim to produce hydrogen, bio-fuels, and value-added chemicals and utilize renewable feed stocks, low-value by-products, and waste materials. The design and optimization of chemical processes using Aspen Plus are an also integral part of this research. An integrated approach considering experimental, and density functional theory (DFT) calculations is applied for rational design of catalyst.





### ENERGY

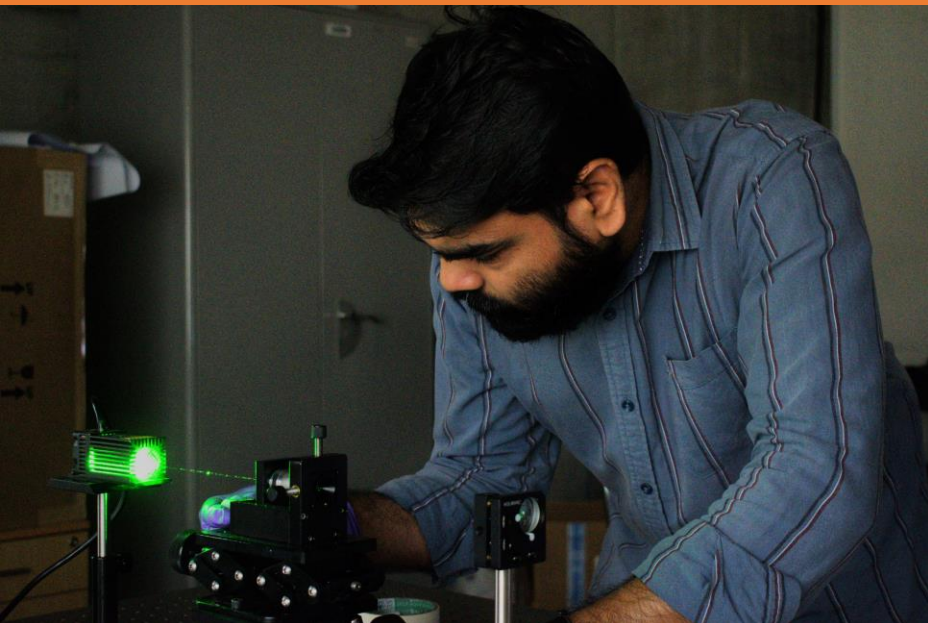
The department is at the forefront of pioneering energy research, exploring the realms of biofuels, fuel processing, and novel energy conversion and storage solutions. Our faculty members are fervently engaged in the fundamental and applied dimensions of heterogeneous catalysis; transforming vegetable oils through hydro-deoxygenation, and direct conversion of CO<sub>2</sub> into valuable chemicals, steam and oxidative steam reforming of hydrocarbon fuels and biomass conversion to name a few. On the electrochemical side, we are exploring the potential of fuel cells, electrolyzers, and cutting-edge batteries. Our experimental efforts are supported by the power of computational research. This includes the computational identification of novel catalyst materials, intricate reaction pathway analyses, kinetic modeling, and comprehensive reactor modeling for seamless scalability.



### MACHINE LEARNING IN PROCESS SYSTEMS ENGINEERING

Recent improvements in infrastructures and their affordability, automation, ubiquitous connectivity resulted in generation, processing and management of enormous amounts of heterogeneous data in the domain of Process Systems Engineering (PSE). The research in this direction is to investigate how deep supervised / unsupervised learning methods can be used to solve PSE problems (e.g., surrogate optimization, system identification and control, image-based sensing, uncertainty quantifications, optimal control) more efficiently. Targeted applications are wind farm layout optimization, new alloy discovery, monitoring climate change parameters, fast charging protocols in Li<sup>+</sup> battery, bio-fuel supply chain, systems biology to name a few.





### FLUID MECHANICS

We pursue research on a variety of problems of fundamental and applied interest in fluid mechanics, and heat and mass transfer using a combination of tools ranging from basic modeling, computational fluid dynamics (CFD), and linear stability analysis. Fluid mechanics research conducted in the department spans a wide range of topics such as multiphase flows, spatially developing flows in complex geometries, micro-fluidics, and biological flows. A major focus of our research is on understanding the transition to turbulence, with high emphasis on the laminar-turbulent transition.

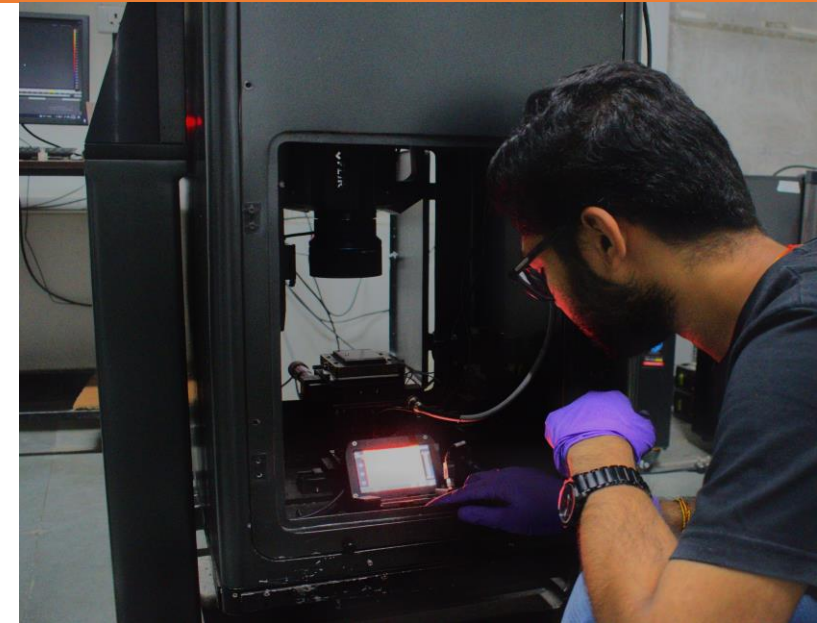
### MINERAL PROCESSING

In mineral processing research, we are involved in flow sheet development and optimization for various mineral beneficiation plants. We study dense medium cyclones (DMC), hydro-cyclones (HC), feed slurry distributors, grinding mills and flotation devices for understanding the process by using computational modeling techniques (multi-phase CFD/discrete element methods/coupling CFD-DEM models). New innovative/novel improved mineral processing equipment designs through integrated CFD/DEM studies and physical modeling is our major focus. Mathematical models based on industrial data and inputs from CFD/DEM are also being developed using non-linear model building techniques for various mineral processing units.



### MOLECULAR & CELLULAR BIOENGINEERING

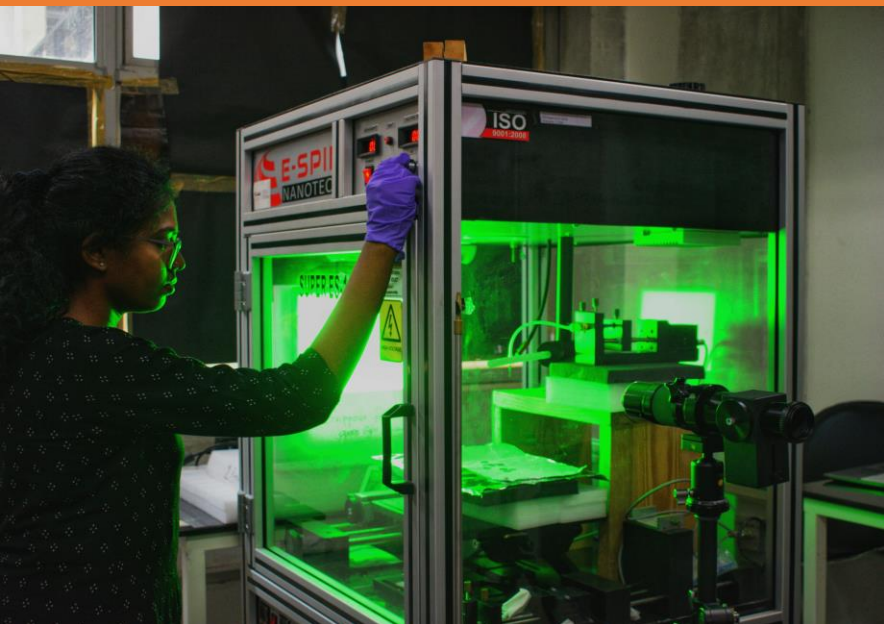
The key to understanding the role of chemical engineers in biological engineering research is to recognize that biological systems are inherently chemical in nature. Chemical engineering provides a unique integrated perspective across a wide range of length scales (molecular to macroscopic) that makes it well suited to tackling problems of great interest in modern biology. The thrust of this research theme is to understand and control intercellular interactions and cell-matrix interactions involved in conditions such as inflammation, thrombosis, retinopathy and cancer metastasis. Our efforts are also focused on developing models for vascular processes such as bulk phase intercellular interactions in blood flow.



### CARDIOVASCULAR MECHANICS

Pathologies of the cardiovascular system due to coagulation abnormalities are greatly influenced in their progression by the mechanics of vascular tissue, by the flow behavior of blood in blood vessels, and by the biochemistry of the reactions in the coagulation cascade and fibrinolysis. The thrust of our research is to better understand these pathologies by characterizing the rheological and biochemical variables in flow situations that present in the human vasculature, and by identifying conditions that precipitate potentially life-threatening events (like thromboembolisms and strokes). Towards this end, we perform computational simulations of blood flow with suitable complex fluid models of blood in various pathologies. Simulations are validated with experimental data from collaborating groups.





### DRUG DELIVERY

Recent advances in materials design offers several new avenues for the development and application of novel materials in drug delivery. This theme is currently focused on developing new methods, materials and technologies to achieve controlled, targeted and sustained release of drugs and cytokines using polymeric biomaterial carriers. We are also interested in investigating mechanisms of drug release and fundamental forces/interactions between polymer and drug molecules. We are equally interested in applying cutting-edge polymer processing techniques that can be used to develop novel drug formulations for application in specialized biomedical domains.

### NANOSCIENCE & NANOTECHNOLOGY

Nanoscience and nanotechnology is a rapidly emerging interdisciplinary field at the interface between physics, chemistry, materials science, electronics, and biology. Broad activities in this fast-changing arena of research include synthesis of a wide range of nanomaterials, their characterization and applications in energy and environment. Presently, we focus on synthesis, fabrication of carbon-based nanostructures and their applications in energy storage devices such as Li ion rechargeable batteries etc. We also deal with nanopatterning of soft matters for various applications such as superhydrophobic surfaces.



### POLYMERS

Conventional polymers are currently facing a lot of issues related to the environment as well as their petrochemical origin. Our research program aims to address these aspects by coming up with new grades of environment friendly polymers and/or building knowhow of making biodegradable polymers with customized features for specific applications. The main focus is on building polymerization technology through modeling, optimization, and lab scale implementation and then optimally linking with rheology and processing with desired end use properties. Our program also includes research on other polymeric soft materials such as colloids and biopolymers where, we are integrating fundamental, and application driven projects to efficiently create advanced materials of tunable properties.



### PROCESS CONTROL & STOCHASTIC CONTROL

Process Control deals with the use of automatic control strategies to improve efficiency of a chemical process. Apart from the applications of standard control techniques, we develop novel sensor technologies (known as "soft sensors") based solely on data obtained from a running plant. For example, the data could be in the form of images, sound or just input output data of a process stored in a chemical plant. We also study the application of non-linear and stochastic control techniques.

# RESEARCH THEMES

Faculty	Materials	AI & ML	Bio-engg. & Biotech	Computations, DFT, MD	Mineral Processing	Energy	Fluid Mechanics	Catalysis	Process Systems	Polymers	Techno-economic
Alan Ranjit Jacob	★									★	
Anand Mohan			★				★				
Balaji Iyer			★	★						★	
Chandra Shekhar Sharma	★					★					
Debaprasad Shee								★			
Giridhar Madras	★					★		★			
Kirti Chandra Sahu							★				
Kishalay Mitra		★		★		★			★		
Lopamudra Giri		★	★	★							
Mahesh Ganesan	★									★	
Narasimha Mangadoddy					★		★				
Parag Pawar				★							
Phanindra Jampana		★		★			★		★		
Ramkarn Patne	★						★				
Ranajit Mondal	★									★	
Santhosh Kumar Devarai			★								
Saptarshi Majumdar	★			★						★	
Satyavrata Samavedi	★		★							★	
Shelaka Gupta				★				★			
Suhanya Duraiswamy	★		★			★		★			
Sunil Kumar Maity								★			★
Vinod Janardhanan						★		★			



In addition to the Central Institute Facilities, ChE @ IITH in collaboration with the Japan International Cooperation Agency (JICA) and IITH has setup several key high-end research facilities that cater to the different research projects in the department. Some of our capital equipment are indicated below.



## Selected List of Facilities

- *Scanning Electrochemical Microscope*
- *Gel Permeation and Size Exclusion Chromatograph Systems*
- *Biosensor for gas & Humidity testing Unit*
- *Integrated reverse High performance Liquid Chromatography*
- *Chemical Reactor below 1 L 500ML, above 1L 2000ML with accessories, spectrophotometer, analytical balance & 3L laboratory fermenter*
- *Multiple Array Systems for High Throughput Assays*
- *Circular Dichroism Spectrometer/Polarimeter*
- *Differential Scanning Calorimetry*
- *Isamill/Agitator Mill for Fine Grinding*
- *Force-Sensing Optical Tweezer*
- *Module Scale Battery Testing System*
- *Driving Simulator*
- *Multimode Microplate Reader With Live Cell Imaging Facility*
- *UPLC-HRMS Systems*
- *Volumetric PIV Systems & Accessories*
- *Wire Mesh Sensors System*
- *Multifunctional High Resolution X Ray Diffractometer (HR-XRD)*
- *Stereolithography (SLA) Based 3D Production Printer Model Project 6000*
- *MP-AES Microwave Plasma Atomic Emissions Spectrometer*
- *HPC Cluster-250 Crores*
- *Rheometer with different geometry and accessories*
- *Confocal Laser Scanning Microscope with Incubation Chamber*
- *Dynamic light scattering and zeta potentiometer*





Faculty in the department are engaged in several collaborative research projects with industry, other academic institutions both within and outside the country as well as contributing to several national missions via joint projects with governmental research establishments such as DRDO.

## FUNDING AGENCIES SUPPORTING RESEARCH IN CHE @ IITH



... and many more

For more details, please check our departmental website

## Research – Journal Editorship

- Dr. Chandra Shekhar Sharma has been inducted in the Editorial Advisory Board, Nano Express.
- Dr. Satyavrata Samavedi has been selected as the Guest editor for Special issue of JoVE.
- Dr. Alan R Jacob has been invited as review editor in Frontiers of Physics as a specialist in soft matter physics.
- Dr. Kishalay Mitra inducted in the Editorial board of Materials and Manufacturing Processes, Taylor and Francis Journal, USA.
- Dr. Anand Mohan has been selected for the Editorial Board, Computer Research & Modeling.

## Research – Fellows and Committee Membership

- Dr. Kirti Chandra Sahu has been elected as Fellow of the Indian Academy of Sciences (FASc).
- Dr. Chandra Shekhar Sharma has been selected as PAC Member, SERB SRG & NPDP Committee (Engineering Sciences) (2022-24).
- Dr. Kirti Chandra Sahu has been selected as Elected Fellow of Institute of Physics, UK.

## Research – Visiting Positions

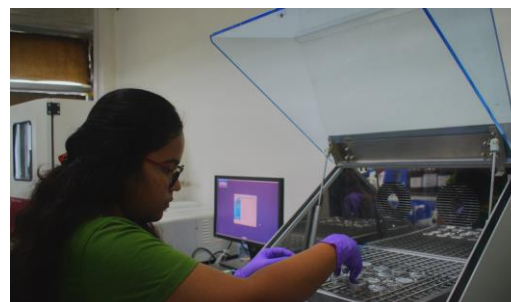
- Dr. Narasimha Mangadoddy has been selected as Visiting faculty at University of Cape Town.
- Dr. Satyavrata Samavedi has been selected as a Guest Researcher at NIMS, Japan.

## Teaching

- Dr. Suhanya Duraiswamy (2023), Dr. Parag Pawar (2022) and Dr. Santhosh Kumar Devarai (2020) have been awarded with IIT Hyderabad Teaching excellence Award.

## Research Recognitions

- Dr. Chandra Shekhar Sharma has been featured as one of the 75 under 50 scientists Shaping Today's India in a DST compendium as a part of Azadi ka Amrit Mahotsav Celebration of India's 75th year of Independence.
- Dr. Giridhar Madras has been awarded with the Research.com Chemistry in India Leader Award for being ranked in the top 10 scientists in India in chemistry.
- Dr. Kirti Chandra Sahu has been selected for the VASVIK Industrial Research for the Year 2021.
- Dr. Suhanya Duraiswamy has been awarded for the Best Poster presentation in International Research Conference on Microfluidics and Organ-On-A-Chip Technologies, Singapore.
- Dr. Chandra Shekhar Sharma, Dr. Giridhar Madras, Dr. Kirti Chandra Sahu, Dr. Kishalay Mitra, Dr. Narasimha Mangadoddy and Dr. Sunil Kumar Maity have been featured in Stanford University's ranking of the world's top 2% of scientists.
- Dr. Kishalay Mitra (2022), Dr Kirti Chandra Sahu (2021), Dr. Chandrasekhar Sharma (2020), have been awarded with IIT Hyderabad Research Excellence Award.
- Dr. Shelaka Gupta has been selected as one of the 75 Women in STEM to be featured in the second edition of She Is.
- Dr. Chandra Shekhar Sharma has been awarded with DST-Swarna Jayanti Fellowship in Engineering Sciences.



## GRADUATE STUDIES & POSTDOCTORAL POSITIONS

**UNIVERSITY OF MICHIGAN**



**JOHNS HOPKINS UNIVERSITY**



**UC San Diego**



## FACULTY POSITIONS



HINDUSTAN ZINC



## INDUSTRY CAREERS





# GALLERY



FACULTY & STAFF



FACULTY



MASTERS STUDENTS



FACULTY & PGs



# GALLERY

STAFF



POSTGRADUATES



FACULTY & UGs



PHD STUDENTS





## Department of Chemical Engineering

### Location:

Chemical Engineering Building  
IIT Hyderabad, IITH Main Road, Near NH-65  
Sangareddy, Telangana, PIN 502284, INDIA

### Email:

[phd.admissions@che.iith.ac.in](mailto:phd.admissions@che.iith.ac.in)

### Website:

<https://che.iith.ac.in/>

### Call:

+91 40 2301 6200



Scan this QR Code to visit the  
departmental website or go to  
<https://che.iith.ac.in/>



భారతీయ పాఠశాల విజ్ఞాన సంస్థ హైదరాబాద్  
भारतीय प्रौद्योगिकी संस्थान हैदराबाद  
Indian Institute of Technology Hyderabad