Department of Chemical Engineering
Indian Institute of Technology Indore

Ph.D. Admission Autumn 2026

Application Start Date: 02 April 2026

~~**Application Last date: 15 May 2026**~~

Extended Last Date: 31 May 2026

The Department of Chemical Engineering at IIT Indore invites applications from motivated and research-oriented students for admission to its Ph.D. Program for Autumn semester 2026-27. The list of faculty members and their research areas is listed below.

Sr. No.	Name	Research area and Google Scholar link
1	Dr. Abhilasha Maheshwari	➢ Process Systems Engineering ➢ Water Distribution Networks ➢ Smart Water Infrastructure ➢ Water chemistry ➢ Water-energy-food Nexus ➢ Net-zero carbon pathways ➢ Sustainability ➢ AI and ML for Environmental and Chemical Systems ➢ Digital twins for Operational Excellence ➢ Hybrid modeling ➢ Large-scale optimization ➢ https://scholar.google.com/citations?user=deYBcfgAAAAJ&hl=en
2	Dr. Gaurav Chauhan	➢ Coupling of biochemical reactions to phase equilibria of proteins in the intracellular environment ➢ Computational enzyme engineering for biofuel production ➢ Understanding the role of phase separation of associative polymers (proteins and RNA) on biochemical reactions using theory and computer simulations. ➢ https://scholar.google.com/citations?user=MdAFTWoAAAAJ&hl=en

3	Dr. Rajan Singh	➢ heterogeneous catalyst ➢ Reaction kinetics and reactor design ➢ CO2 capture and conversion ➢ Hydrogen production ➢ thermochemical water splitting ➢ https://scholar.google.com/citations?user=JFf0XsYAAAAJ&hl=en
4	Dr. R. Kailasham	➢ Computational Soft Matter ➢ Polymer physics ➢ rheology ➢ active matter ➢ nonequilibrium statistical mechanics ➢ Brownian dynamics simulations ➢ stochastic thermodynamics ➢ colloidal hydrodynamics ➢ https://scholar.google.com/citations?user=PPv41igAAAAJ&hl=en
5.	Dr. Preetika Karnal	➢ Soft materials ➢ Interfacial mechanics ➢ Adhesion ➢ Instabilities ➢ https://scholar.google.com/citations?user=csVZYykAAAAJ&hl=en
6	Dr. Jacob John	➢ Rheology and microstructure of complex fluids ➢ Biofilm formation, mechanics, and antimicrobial resistance ➢ Collective behaviors in bacterial populations ➢ Colloids and interfaces ➢ Active colloids in complex and heterogeneous environments ➢ https://scholar.google.com/citations?user=-fH7jhgAAAAJ&hl=en
7	Dr. KVS Chaithanya	➢ Microhydrodynamics ➢ Complex fluids ➢ Multiphase flows ➢ Active nematics ➢ Tissue mechanics ➢ Vertex models

		➢ Lattice Boltzmann simulations ➢ https://scholar.google.com/citations?user=nWllBLEAAAAJ&hl=en&oi=sra
8	Dr. Srashtasrita Das	➢ Advanced catalyst characterization, ➢ X-ray microscopy, ➢ Heterogeneous catalysis, ➢ Sustainability ➢ https://sites.google.com/view/srashtasrita-das/home/
9	Dr. Naveen Agrawal	➢ Heterogeneous Electro/Thermal Catalysis ➢ Computational Catalysis ➢ Electrochemical Kinetic Theory for Catalysis and Energy Storage ➢ Machine Learning Interatomic Potentials for Catalysis ➢ Multi-Scale Modeling of Catalytic Processes ➢ https://scholar.google.com/citations?user=9gXxsQkAAAAJ&hl=en&authuser=3
10	Dr. Rupanjali Prasad	➢ Crystallization ➢ Particle Engineering ➢ Drug Polymorphism ➢ Online Process Monitoring ➢ Process Analytical Technology ➢ Molecular Modeling ➢ https://rupanjaligp.wixsite.com/the-prasad-group

A detailed faculty profile can be seen on the department website (https://chemical.iiti.ac.in/**)**

Application Procedure: (for Indian Students)

- For Category of application, application fees, and to apply online, please refer to http://academic.iiti.ac.in/phdadvt.php
- In case a candidate wishes to apply to more than one department, then a separate application must be filled out for each department.
- **No TA/DA will be provided to the applicants if called for a written test /interview.**

- **The shortlisted candidates should arrange to send a minimum of two letters of recommendation directly to dpgcconvenor_chemeng@iiti.ac.in or provide them in a sealed envelope before appearing for the interview.**
- Mere fulfillment of the essential qualifications does not guarantee admission to the Ph.D. program in the Department of Chemical Engineering. The selection will be based on overall performance, which will include a written exam, an interview, academic background, suitability for research in the chosen field/area, research aptitude, and communication skills, among other factors.
- **Shortlisted candidates will have to appear in person for a written exam and personal interview on the IIT Indore campus (Tentative Date 21st May 2026). No online interviews will be conducted.**

Minimum Educational Qualifications (MEQs) for Teaching Assistantship (TA) category-

- Masters' degree (M.Tech./M.E./M.S.(Res.)) in Chemical Engineering, Material Science and Engineering, Mechanical Engineering, Chemical Technology (Polymer, Petroleum, Petrochemical etc.), Engineering Sciences, Energy Science and Engineering, civil engineering, environmental engineering, ceramic Engineering, Metallurgical Engineering, Mineral Processing and Engineering, Biotechnology, Biomedical Engineering, Rubber/ Oil/ Paint/Paper and Pulp/ Textile/ Food Technology, (with first division as defined by the awarding Institute/ University) **and GATE qualification** or **UGC-CSIR-NET/ PhD only.**

  OR

- Four-year Bachelors' degree in Chemical Engineering or allied disciplines such as Material Science and Engineering, Mechanical Engineering, Chemical Technology (Polymer, Petroleum, Petrochemical etc.), Chemical Science and Technology, Industrial Chemistry, Engineering Sciences, Energy Science and Engineering, Ceramic Engineering, Metallurgical Engineering, Mineral Processing and Engineering, Biotechnology, Biomedical Engineering, Rubber/ Oil/ Paint/Paper and Pulp/ Textile/ Food Technology (with first division as defined by the awarding Institute/ University) **and a valid GATE score** or **UGC-JRF/PhD.**

Minimum Educational Qualifications (MEQs) for College Teacher (CT) category-

- Permanent Employee of the sponsoring College/Institute/University WITHOUT any scholarship from the Institute.

- The College/Institute/University from which the faculty member is sponsored should be amongst the top 100 NIRF-ranked Colleges or Institutes or Universities in the respective category in the immediate preceding year.

- The applicant should have at least one publication in a SCI-indexed journal, proceedings of a peer-reviewed, ranked international conference/a chapter in a book published by a reputed international or national publisher, or a patent, or have developed state-of-the-art patentable and/ or transferable technology.

- **No GATE Qualification required.**

- For more details, please refer to https://academic.iiti.ac.in/phdforms/Rules%20and%20Form%20for%20CT%20category.pdf

Minimum Educational Qualifications (MEQs) for Sponsored Part-Time (SWP) category-

- For applicants sponsored by a highly reputed R&D organization or Industry. [After completion of required coursework, either on a Full Time (SWF) or Part Time (SWP) basis, with approval of the competent authority].

- Minimum 2 years of work experience at the sponsoring institution.

- **No GATE Qualification required.**

- For more details, please refer to https://academic.iiti.ac.in/phdforms/5022015Additional-Rules-for-IS+SW-Part-Time-PG+PhD-Programs.pdf

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