



Ph.D. ADMISSION

DEPARTMENT OF CHEMISTRY

INDIAN INSTITUTE OF TECHNOLOGY INDORE

November 2026

Advertisement No.: IIT/ACAD/PhD-Admission/2026/qtr4/01

Applications are invited from highly motivated applicants for admission to the Ph.D. program in the **Department of Chemistry** (<https://chemistry.iiti.ac.in/>), Indian Institute of Technology Indore [IIT Indore: <https://www.iiti.ac.in/>], for Spring 2027.

Deadline for Online Application for Ph.D.:	October 18, 2026
Date of Interview (at IIT Indore campus only):	October 29, 2026

❖ **Eligibility Criteria:**

Minimum Educational Qualifications and Qualifying Examination:

➤ **For Indian applicants:**

(i): Master's Degree in Chemistry or other fields relevant to Chemical Sciences with first division (or as defined below*) from a recognized institution@

OR

A Four-year undergraduate program (FYUP) in Chemical Sciences or a field related to Chemical Sciences or in the relevant Department of Engineering/Technology with first division (or as defined below*) from a recognized institution@

AND

(ii): A valid CSIR/UGC-JRF (Category-I: Qualified for JRF) or a valid DST- Inspire Fellowship for Ph.D. or a valid equivalent fellowship for Ph.D.

OR

A valid & qualified GATE/GPAT score with good rank or a valid and qualified UGC/CSIR-NET-Lectureship or a valid Qualifying score in UGC/CSIR NET for "Category III - admission to Ph.D only".

OR

B.Tech./M.Sc. in Chemistry or the respective branch with a minimum CPI of 8.5 or above on a 10-point scale from any IIT are also eligible without a GATE or CSIR/UGC NET qualification. [under TA Category only].

*** Marks /CGPA/ CPI/ Percentage requirements in Qualifying Degrees:**

For UR/EWS/OBC(NCL) category:

- A minimum of 60% marks in aggregate, OR
- A First class as specified by the university, OR
- A minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 6.0 on a scale of 0 – 10, OR
- An equivalent to 6.0 CGPA/ CPI on other corresponding proportional requirements when the scales are other than 0 – 10.

For SC/ST/PwD category

- A minimum of 55% marks in aggregate, OR
- A First class as specified by the university, OR
- A minimum Cumulative Grade Point Average (CGPA) / Cumulative Performance Index (CPI) of 5.5 on a scale of 0 – 10, OR
- An equivalent to 5.5 CGPA/ CPI on other corresponding proportional requirements when the scales are other than 0 – 10.

@ means all institutions/universities incorporated by an act of parliament or state legislature in India, or other institutions declared to be “Deemed to be University” under Section 3 of the UGC Act, 1956, or possess an equivalent qualification recognized by the Ministry of Education, Government of India, AICTE, UGC, AIU, or reputed foreign university only

The candidate must meet the above two criteria (i) & (ii).

Note: Candidates who are appearing or are about to appear for the final examinations of the qualifying degree program are eligible to apply for the PhD program. However, if selected, admission to the PhD program would be conditional upon completing the above Minimum Educational Qualifications and Qualifying Examination criteria points (i) & (ii), before or at the time of registration to our PhD program, as communicated by our admission department.

- **For International applicants:** Master’s degree in chemistry or other fields relevant to Chemical Sciences (with first division as defined by the awarding Institute/ University) **AND** Valid **TOEFL/IELTS** OR equivalent qualification.

❖ **Categories of Admission Available Currently:**

For Indian Applicants: -

- ✓ **FA:** Applicants having a valid CSIR-JRF/UGC-JRF (Category I- Qualified for JRF) or a candidate who secured a **DST-INSPIRE Fellowship** for Ph.D. or any other valid equivalent fellowship for Ph.D. from any funding agency.
- ✓ **TA:** Applicants have a valid & qualified following:
GATE/GPAT or UGC or CSIR-NET-LS/ category-III admission to PhD only within the validity period of the score.
- ✓ **CT**
- ✓ **SW**
- ✓ **DF**
- ✓ **IS**

For more details about the admission category and eligibility, kindly refer to the website:
https://www.iiti.ac.in/admissions/phd_info/sciences/categories

For International Applicants: -

ISF: Self-Financing Students

ISW: (i) Industry Sponsorship (ii) NGO Sponsorship

GSW: (i) ICCR Scholarship of the Govt. of India (ii) Foreign Govt. Scholarship

For more details about the admission category and eligibility, kindly refer to:

https://www.iiti.ac.in/admissions/international_students

❖ Application Procedure & Further Process:

- ✓ Candidates must apply **ONLINE** through the institute website:
<https://phdapply.iiti.ac.in/>
- ✓ For fee details: https://www.iiti.ac.in/admissions/phd_info/sciences/fees
- ✓ A detailed interview schedule will be sent to the shortlisted candidates via email after the application deadline.
- ✓ **Note: Interviews will be in OFFLINE mode only, and no requests for online interviews will be entertained.**
- ✓ Candidates must arrange for recommendation letters from at least two referees and should request that the referees send their recommendations online. Therefore, you must select the referee details carefully when filling out the online application, as changes to the referee will not be permitted. The same should be available before the interview date.
- ✓ Mere fulfillment of the essential qualifications does not guarantee admission to the Ph.D. program in the Department of Chemistry. The selection will be based on overall performance, including written tests and interviews, academic background, suitability for research in the chosen field/area, research aptitude, and communication skills.
- ✓ On the day of the interview: The selection process includes a written test (MCQ-based, syllabus will be of MSc Chemistry of Indian Universities) & in-person interviews. Candidates, irrespective of marks obtained at the written test, will appear for the interview. Combined selection will be based on marks scored in the written test and the in-person interview.
- ✓ CSIR-JRF/UGC-JRF (category I- qualified for JRF) candidates can reimburse their 3-tier AC class shortest distance train fare (or up to the equivalent bus fare) to attend the interview after registering for the Ph.D. program at IIT Indore.

Come, Live, and Explore Chemistry at the Department of Chemistry, IIT Indore!



The Department of Chemistry offers a Doctor of Philosophy (PhD) degree in Chemistry, in which students are required to complete coursework and defend a thesis based on original research conducted under the direct supervision of at least one faculty member from the Department of Chemistry.

Department of Chemistry offers a variety of cutting-edge research areas# under broad areas:

- Inorganic Chemistry
- Organic Chemistry
- Physical Chemistry
- Theoretical & Computational Chemistry.

The Department of Chemistry at IIT Indore is very well equipped with research facilities and laboratories, along with a Sophisticated Instrument Center (SIC, for more details please visit (<http://people.iiti.ac.in/~sic/>), state-of-the-art sophisticated instrumentation facilities to assist research in almost all areas of chemistry and interdisciplinary research.

The Department of Chemistry at IIT Indore has been ranked 19th among Indian institutions in Nature Index Institutional Ranking 2025.

For further information contact: admission-chem@iiti.ac.in
(Chemistry Office Phone: 0731-660-3333 & dial extn. as 5168/0731-660-3340/3415)

Student Life at IIT Indore:

IIT Indore is a residential campus where most of our students live. The institute is committed to providing all the basic infrastructure facilities to support our research students and staff in delivering the best possible outcomes. Campus Hostels, several eating outlets, and service providers are available to students. For more details, please visit: (<https://iiti.ac.in/page/campus-facilities> and www.iiti.ac.in)



✓ Grants of up to 1.2 Lakhs can be supported for international/national conferences, foreign collaboration, and exchange programs.

Applicants are strongly advised to visit the profiles of all #faculty members (<https://chemistry.iiti.ac.in/people/faculty/>) before applying to the Ph.D. program and are encouraged to contact interested faculty members for more information.

Faculty at the Department of Chemistry, IIT Indore



Details of the Faculty & Research at the Department of Chemistry, IIT Indore

INORGANIC CHEMISTRY

Prof. Suman Mukhopadhyay

Research area: Metal complexes in therapeutics and drug delivery, nanostructured metallogel, molecular recognition, metalloenzymes, and porous materials.

Group website: <https://suman729.wixsite.com/mysite>

Email: suman@iiti.ac.in

Prof. Shaikh M. Mobin

Research area: Inorganic complexes, MOF & COF for energy storage, conversion, & generation, Crystal engineering, Applications in catalysis, bioimaging & sensing.

Group website: <https://iiti.ac.in/people/~xray/index.html>

Email: xray@iiti.ac.in

Prof. Sanjay Kumar Singh

Research area: Catalyst design & synthesis for H₂ production & storage, biomass transformation, organic transformations, CO₂ capture & utilization.

Group website: <https://iiti.ac.in/people/~sksingh/>

Email: sksingh@iiti.ac.in

Dr. Amrendra Kumar Singh

Research area: Ligand design in metal catalysis, Multidentate N-heterocyclic carbene ligands, Small molecule activation by transition metal complexes, Metal-ligand multiple bonds.

Group website: <http://people.iiti.ac.in/~aks/>

Email: aks@iiti.ac.in

Dr. Abhinav Raghuvanshi

Research area: Luminescent complexes of late transition metals and applications, Inorganic & organometallic TADF materials, and inorganic conducting materials.

Group website: <https://rabhinav9.wixsite.com/inorgmatlab>

Email: r.abhinav@iiti.ac.in

Dr. Dipak Kumar Roy

Research area: Low-valent s- and p-block compounds and small molecule activation, Multiple-bonded main group compounds, Organic-Inorganic hybrid polymers.

Group website: <http://people.iiti.ac.in/~dipak.roy/>

Email: dipak.roy@iiti.ac.in

ORGANIC CHEMISTRY

Prof. Rajneesh Misra

Research area: Organic π -conjugated molecular systems, Organic Synthesis, organic/inorganic and organometallic materials for photonics & electronics.

Group website: <https://rajneeshmisraiiti.wixsite.com/rajneeshmisra>

Email: rajneeshmisra@iiti.ac.in

Prof. Apurba K. Das

Research area: Organic synthesis, Bio-organic chemistry, and Supramolecular chemistry.

Group website: <https://apurbadas.org/>

Email: apurba.das@iiti.ac.in

Prof. Sampak Samanta

Research area: Asymmetric synthesis, metal-mediated synthetic transformation, Green chemistry, Total synthesis of biologically active compounds.

Group website: <https://www.iiti.ac.in/people/~sampaks/>

Email: sampaks@iiti.ac.in

Prof. Chelvam Venkatesh

Research area: Natural products, Heterocycles & carbocycles, Diagnostic applications of targeting ligands for cancers & inflammatory diseases, Drug-delivery, NIR, Medicinal chemistry

Group website: <https://iiti.ac.in/people/~cvenkat/>

Email: cvenkat@iiti.ac.in

Prof. Debayan Sarkar

Research area: Visible Light Catalyzed Reactions, Electrocatalytic Organic Transformations, Total Synthesis of Natural Products and important biomolecules, Atom-economic synthetic transformations Asymmetric Dearomatization Reactions

Group website: <https://dslab.co.in/index.php>

Email: sarkard@iiti.ac.in

Dr. Selvakumar Sermadurai

Research area: Photo-redox catalysis, Asymmetric synthesis, Synthesis of biologically active natural products, Green chemistry.

Group website: <https://sites.google.com/view/selvargp/home>

Email: selva@iiti.ac.in

Dr. Umesh A. Kshirsagar

Research area: Organic Synthesis, Photo-catalysis, Transition Metal-catalysis, & Electro-catalysis for Organic Synthesis & C-H Activation, CDC reaction, Total Synthesis of Bioactive molecules.

Group website: <https://uakshirsagar.wixsite.com/synchem>

Email: uakshirsagar@iiti.ac.in

PHYSICAL CHEMISTRY

Prof. Anjan Chakraborty

Research area: Study of the bio-nano interface by spectroscopic and imaging techniques.

Group website: <https://anjanachakrabortyii.wixsite.com/anjanciiti>

Email: anjanc@iiti.ac.in

Prof. Tushar K. Mukherjee

Research area: Fluorescence spectroscopy and imaging, Photoactivated Reactions.

Group website: <https://kantitushar2.wixsite.com/tushar>

Email: tusharm@iiti.ac.in

Dr. Tridib Kumar Sarma

Research area: Nanostructured materials, Polymer composites, Biomimetic materials chemistry.

Group website: <https://tridibsarma.wixsite.com/college-sorority-1>

Email: tridib@iiti.ac.in

Dr. Pravarthana Dhanapal

Research Area: Solid and liquid-state batteries, Solid-state functional and wearable devices.

Group website: <https://sites.google.com/iiti.ac.in/pravarthana-dhanapal/home>

Email: dpravarthana@iiti.ac.in

THEORETICAL & COMPUTATIONAL CHEMISTRY

Prof. Biswarup Pathak

Research area: Application of Machine learning and Artificial Intelligence in nanoclusters for Catalysis, Dual-ion Batteries, and Molecular electronics.

Group website: <https://iiti.ac.in/people/~biswarup/>

Email: biswarup@iiti.ac.in

Prof. Satya S. Bulusu

Research area: Developing Orbital Free DFT methods, Kinetic Energy Functionals, TDDFT, parallelization on hardware to solve QM problems, Potential Energy Surfaces, ML methods.

Group website: <https://iiti.ac.in/people/~sbulusu/>

Email: sbulusu@iiti.ac.in