Ph.D. ADMISSION

DEPARTMENT OF CHEMISTRY
INDIAN INSTITUTE OF TECHNOLOGY INDORE
May 2026

Advertisement No.: *IITI/ACAD/PhD-Admission/2026/qtr2*

Applications are invited from highly motivated applicants for admission to the Ph.D. program in the **Departments of Chemistry** (https://chemistry.iiti.ac.in/), Indian Institute of Technology Indore [IIT Indore: https://www.iiti.ac.in/] for 2026.

Deadline for Online Application for Ph.D.:	**Monday, 11th May 2026**
Date of Interview (at IIT Indore campus only):	**Wednesday, 13th May 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 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 ICMR-JRF or DBT-JRF or a valid DST-Inspire Fellowship for Ph.D. or 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 & rank in UGC/CSIR NET for "Category III - admission to Ph.D only".

OR

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

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

Criteria [Any one criterion from below to be full filed]	UR / EWS / OBC (NCL)	SC / ST / PwD
Minimum Percentage	60% aggregate **OR**	55% aggregate **OR**
Class Requirement	First class (as per university rules) **OR**	First class (as per university rules) **OR**
CGPA/CPI (0–10 scale)	Minimum 6.0 **OR**	Minimum 5.5 **OR**
CGPA/CPI (Other scales)	Equivalent to 6.0 (proportional scale)	Equivalent to 5.5 (proportional scale)

@ 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 or AICTE or UGC or 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 final examinations of the qualifying degree program are eligible to apply for PhD program. However, if selected, admission to the PhD program would be conditional upon completing the above *Minimum Educational Qualifications and Qualifying Examination* criteria point (i) & (ii), before or at the time of registration to our PhD program.

- **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:**

- ✓ **FA:** Applicants having valid **CSIR-JRF/UGC-JRF (Category I- Qualified for JRF)** or Candidate secured **DST-INSPIRE Fellowship** for Ph.D. or any other valid equivalent fellowship for Ph.D. from any funding agency.
- ✓ **TA:** Applicants having valid **GATE/GPAT** or **UGC/CSIR (NET-LS qualified or Eligibility for admission to PhD within validity period)** qualification (good score/rank).
- ✓ **CT:** College Teacher.
- ✓ **SW:** Sponsored without Institute scholarship.
- ✓ **DF:** Defense Forces.
- ✓ **IS:** Institute Staff.

For more details about the admission category and eligibility, kindly refer to the main Ph.D. Advertisement of the Institute is available at https://academic.iiti.ac.in/phdadvt.php**.**

❖ **Application Procedure:** Candidates must apply **ONLINE** through the institute website https://academic.iiti.ac.in:8443/nregistration.jsp. Fee**:** https://academic.iiti.ac.in/phdadvt.php.

A detailed schedule regarding the interview will be given to the **shortlisted candidates** via email after the last date of application (**Note: Interviews will be in OFFLINE mode only**).

Candidates must arrange recommendation letters from at least two referees and should request the referees to send recommendation letters in the given format (format of recommendation letter attached) to admission-chem@iiti.ac.in well before appearing for the interview.

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 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 written test will be appearing for the interview. Combined selection will be based on marks scored in written test and in person interview.

- **Additional Benefits for joining for PhD at Department of Chemistry at IIT Indore**

  - ✓ 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.
  - ✓ **Grant up to 1.2 Lakhs can be supported for international/national conference, foreign collaboration and exchange programs.**

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

The **Department of Chemistry** offers **Doctor of Philosophy (PhD) degree in Chemistry**, where students require completion of course work and a thesis defense on original research performed 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-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.

Student's Life @IIT Indore: IIT Indore is a residential campus, where most of our students are staying inside the campus. Institute is committed to providing all the basic infrastructure facilities to support our research students/staff to excel best output. 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)

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

Faculty at Department of Chemistry, IIT Indore

Details of the Faculty & Research at 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 H_2 production & storage, biomass transformation, organic transformations, CO_2 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 pi-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, 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 Catalysed Reactions, Electrocatalytic Organic Transformations, Total Synthesis of Natural Products and important biomolecules, Atom economic synthetic transformations Asymmetric Dearomatisation 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 bio-nano interface by spectroscopic and imaging techniques.
Group website: https://anjanchakrabortyii.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 nanocluster 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

Format of Recommendation Letter

(To be printed on the letterhead and signed by the referee with his/her seal.)

To:
The Selection Committee,
Department of Chemistry,
IIT Indore.

Date: DD/MM/YY

I am writing this letter of recommendation for **Mr/Ms. Full name of the applicant** who has applied for the PhD Program of Chemistry Department at IIT Indore.

Details of Referee	
Name	
Position and department	
Institute/university	
Email id and Telephone/Mobile No.	

Comments on Applicant's attributes	
In what capacity do you know the applicant?	
How long have you known the applicant?	
Please comment on the subject/specialization knowledge of the applicant.	
How would you characterize the applicant's field of expertise?	
Please comment on the relevant elements in relation to the applicant's research. (If applicable)	
Please comment on the applicant's ability to work alone and in a team.	
Please comment on general character of the applicant.	
Please comment on the special attributes that the referee may have noticed in the applicant at a personal level.	
Please comment on the applicant's major abilities, strengths and weaknesses.	
Please comment on the applicant's ability to communicate in English.	
Please comment on your assessment on the applicant's potential or suitability to the PhD program in Chemistry.	
Please provide any other comment that would help the committee to make decision on applicant's suitability for the PhD program.	

Please contact me if you need any further information.

Date:

Name of Referee:

Place:

Signature and seal