



# Ph.D. ADMISSION

## DEPARTMENT OF CHEMISTRY

## INDIAN INSTITUTE OF TECHNOLOGY INDORE

(Mar 2026 Advertisement)

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.

<b>Last Date of Online Application for Ph.D.:</b>	<b>22<sup>nd</sup> March 2026</b>
<b>Date of Interview:</b>	<b>24<sup>th</sup> March 2026</b>

❖ **Eligibility** [*Minimum Educational Qualifications and Qualifying Examination*]:

- For **Indian** applicants: Master's degree in Chemistry or other fields relevant to Chemical Sciences with first division **AND** valid **CSIR/UGC-NET-JRF** or valid **INSPIRE Fellowship** for Ph.D. or **valid Equivalent Fellowship** for Ph.D.
- Four-year BS degree in the relevant Department of Sciences or Bachelor's degree in the relevant Department of Engineering/Technology with first division and valid UGC-JRF OR valid CSIR-JRF qualification.
- 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 for this session:

- ✓ **FA:** Applicants having valid **CSIR/UGC-NET-JRF** OR Candidate secured valid **INSPIRE Fellowship** for Ph.D. or **valid Equivalent Fellowship** for Ph.D. (The fellowship should be tenable at IIT Indore from the funding agency.)

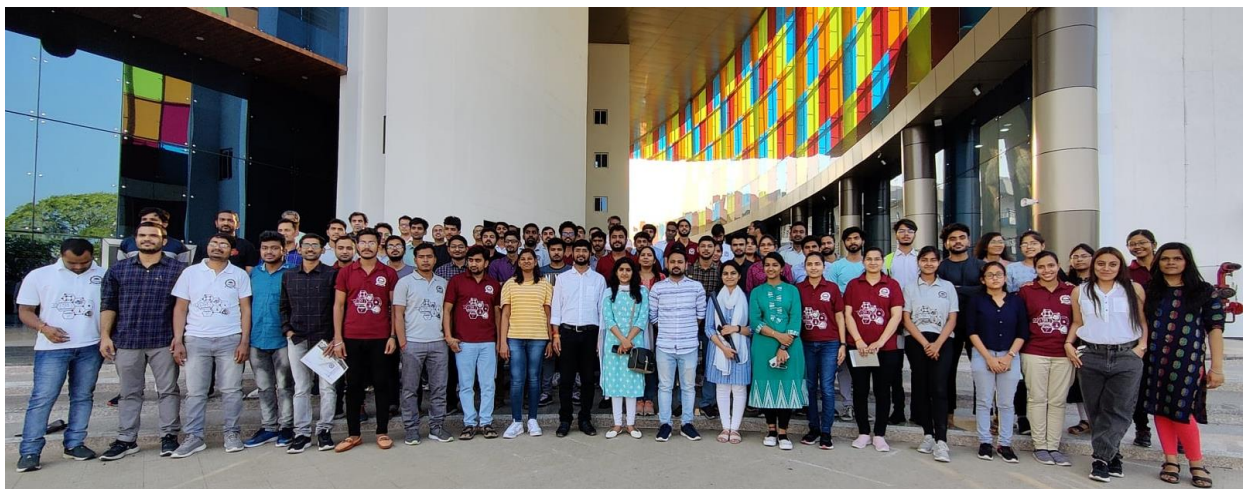
For more details about the admission category and eligibility, kindly refer to the main Ph.D. Advertisement section of the Institute, which is available at <https://academic.iiti.ac.in/phdadvt.php>

**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>

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

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**). **Please note that the CSIR-JRF/UGC-JRF candidates can reimburse their 3-tier AC class for the 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.**

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](mailto: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.



## 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<sup>#</sup> 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.

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For further information contact: [admission-chem@iiti.ac.in](mailto:admission-chem@iiti.ac.in)  
(Chemistry Office Phone: 0731-660-5168/0731-660-3340/0731-660-3415)

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**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 provide all the basic infrastructure facilities to support our research students/staff to excel best output. Campus Hostels, several eating outlets, service providers are available to students. For more details please visit: (<https://iiti.ac.in/page/campus-facilities> and [www.iiti.ac.in](http://www.iiti.ac.in))



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**Applicants are strongly advised to visit the profiles of all the <sup>#</sup>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.**

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## # 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. Sanjay Kumar Singh

**Research area:** Catalyst design & synthesis for H<sub>2</sub> production & storage, biomass transformation, organic transformations, CO<sub>2</sub> capture & utilization.

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

**Email:** sksingh@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

#### 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

#### 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. 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. 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/~sompaks/>

**Email:** sampaks@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. 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://anjanachakrabortyii.wixsite.com/anjanciiti>

**Email:** anjanc@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

#### 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. 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



***Faculty at Department of Chemistry, IIT Indore***

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## **Format of Recommendation Letter**

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

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

Date:

I am writing this letter of recommendation for **Mr/Ms.** \_\_\_\_\_ **(Full Name of 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 of 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