

Department of Chemical Sciences (DCS)

IISER Kolkata

PhD Advertisement for Autumn 2026

Applications are invited from motivated candidates to pursue research in the broad fields of Chemical Sciences.

Minimum Eligibility Criteria: Applicants must satisfy one of the following:

(i) Master's degree with at least 55% (50% for the reserved category) aggregate marks in Chemistry or Physics or Mathematics or Biology.

(ii) 4-year BS with 75% (70% for the reserved category) aggregate marks with Chemistry as one of the subjects.

Final-year MSc/MS/BS students who have yet to obtain their degree may also apply; however, they must complete the MSc/MS/BS degree at the time of admission with the requisite aggregate marks.

The selection of candidates will be in accordance with the GoI norms. Candidates belonging to the respective reserved category must submit the relevant certificates and documents.

Selection Channels:

Self-funded: In addition to meeting the minimum eligibility criteria, candidates must have their own PhD fellowship, such as UGC-JRF/CSIR-JRF/NET-Category-1/any other equivalent fellowships.* The departmental Faculty profiles and Scientific Officers can be found at the URL (<https://www.dcsiiserkol.com/faculty> and <https://www.iiserkol.ac.in/web/faculty/chemical-sciences>).

Institute/Project Funded: Apart from satisfying the minimum eligibility criteria, candidates must have a valid rank in one of the following national-level exams: GATE/NET-LS/NET-Category-2/NET-Category-3/INSPIRE/Project-JRF/others. Institute/Project-funded positions are available in the following areas/topics and **ONLY**** with the following faculties/research groups:

SL. No.	Faculty Name	Positions available	Research Area	Webpage
1	Prof. Amlan Kusum Roy	2	Electronic structure theory, Density functional theory, Information theory in chemistry, Confined quantum systems	https://www.iiserkol.ac.in/~theochem/index.html
2	Prof. Debasish Haldar	1	Supramolecular Bioorganic Chemistry	https://www.iiserkol.ac.in/~deba_h76/
3	Prof. Ashwani Kumar Tiwari	1(Project JRF)	Theoretical Reaction Dynamics, Quantum Chemistry, Laser Control of Chemical Reactions, Study of Gas-Surfaces Reactions, Study of Heterogeneous Catalysis	https://www.iiserkol.ac.in/~ashwani/index.html

4	Prof. Priyadarshi De	1+1(Project JRF)	Polymer Chemistry	https://priyadarside441.wixsite.com/academic
5	Prof. Devarajulu Sureshkumar	1	Photoredox catalysis	http://www.iiserkol.ac.in/~suresh/
6	Prof. Mousumi Das	1	Theoretical and Computational Organic and Opto-electronics	TCOOE Group
7	Prof. Pradipta Purkayastha	1	Photophysical studies on metal nanoclusters and photoluminescent materials	Homepage of Pradipta Purkayastha
8	Prof. Pradip Kumar Ghorai	1	Computational and Theoretical Chemistry	SMS Group
9	Dr. Ritambhara Gond	1	Benchmarking Sodium-ion Batteries	IISER Kolkata Home
10	Prof. Sumit Khanra	1	Small Molecule Activation & Catalysis by Transition Metal Complexes	IISER Kolkata Home
11	Dr. Debabrata Mukherjee	1	Synthetic Inorganic and organometallic chemistry, Catalysis	Home Mysite
12	Prof. Sanjio S. Zade	1	Organic Synthesis, pi-conjugated systems, and organic electronics.	IISER Kolkata Home
13	Prof. Supratim Banerjee	1	Supramolecular chemistry, organic functional materials, luminescent sensors, photoresponsive materials	https://supratimban.wixsite.com/dcs-iiserk/supratim-banerjee
14	Dr. Sangita Sen	1	Quantum Chemistry, Computational Modelling of Spectroscopy and Reactivity	QuantAct
15	Prof. Venkataraman Mahalingam	1	Development of metal and metal-free catalysts for electrocatalytic H ₂ generation and CO ₂ fixation	Nano Materials research Lab @IISER Kolkata
16	Prof. Soumyajit Roy	1	CO ₂ reduction reactions, N ₂ to Urea, micro bubble lithography, pharmaceutical crystallization	EFAML Team Prof. Dr. Soumyajit Roy
17	Dr. Subila K B	1	Design and excitonic engineering of inorganic semiconductor nanostructures in perovskites and chalcogenides for advanced optoelectronic, ferroelectric, and energy applications.	IISER Kolkata Home
18	Prof. Ratheesh K. Vijayaraghavan	1(Project JRF)	Organic molecular semiconductors: Synthesis, spectroscopy and various optoelectronic devices	https://www.iiserkol.ac.in/~rvlab/

19	Prof. Debasis Koley	1	Computational Chemistry on Organometallics and Catalytic Systems	https://ccmmlab072.wixsite.com/my-site
20	Prof. Alakesh Bisai	1(Project JRF)	Organic Synthesis and Natural Products	https://www.iiserkol.ac.in/~alakesh/index.html
21	Dr. Susmita Roy	2(Project JRF)	Computational Biophysical Chemistry & AI-Driven Discovery (Focus: Structural Dynamics of Nucleic Acids and Protein-Nucleic Acid Interactions)	https://www.drroyresearchgroup.com/drsusmitaroy

*Please note that fulfilling the minimum essential criteria does not ensure that a candidate will be called for the interview. Additional short-listing criteria may be set by the Department based on candidates' academic records, experience, and research interests.

**For institute/project-funded selection mode: The research interest of the candidate must be aligned with the research areas/topics of the available positions (see the above table).

Interview Window: May 29 to June 19, 2026.

Mode of Interview: The mode of the interview will be 'Offline'.

Additional benefits of the PhD program at DCS, IISER Kolkata:

- A PhD student may be sponsored to attend an international conference abroad, subject to the availability of the institute's funds.
- State-of-the-art instrument facility; medical and counselling facility; 24*7 internet, electricity, library facility; student-monitored mess and private food courts; Cricket, Football, and Athletic Grounds; Gymkhana.
- Tennis/Table Tennis/Volleyball/Badminton/Basketball courts, Swimming pool, R. N. Tagore auditorium for academic and cultural events.