

Doctor of Philosophy Programme (Ph.D.)

Department of Chemical Sciences

Ph.D. Advertisement for Spring Semester 2025
Under the **Institute Fellowship** Scheme

The Department of Chemical Sciences (DCS) at IISER Kolkata invites applications for regular Ph.D. programme in the Spring Semester, 2025 in the disciplines of Inorganic, Organic, Physical, and Theoretical chemistry.

Eligibility Criteria:

(a) 1-year/2-semester master's degree programme after a 4-year/8-semester bachelor's degree programme or a 2-year/4-semester master's degree programme after a 3-year bachelor's degree programme or qualifications declared equivalent to the master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

(b) Candidates seeking admission after a 4-year/8-semester bachelor's degree programme should have a minimum of 75% marks in aggregate or its equivalent grade on a point scale wherever the grading system is followed. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per UGC norms.

Bright and motivated candidates satisfying any of the above criteria in any field of Chemistry or Physics or Mathematics are encouraged to apply.

In addition, the candidates must have valid **GATE** Score Card, CSIR/UGC-NET **LS** or other Equivalent National Eligibility Exam.

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

**Reservations for SC/ST/OBC/EWS/DIVYANG candidates are applicable as per Government of India rules.

Interview Date: **November 14, 2024 (Thursday)**

Reporting time at LHC: **9:30 AM**

[LHC = Lecture Hall Complex, IISER Kolkata]

Mode of Interviews: The mode of interview will be '**Off-line**'.

Important Note:

The Institute Fellowships are **ONLY** available with a selected number of faculty members that are provided as additional information (please see next page).

Candidates with CSIR/UGC-NET **JRF**, **INSPIRE** fellowship or other **Equivalent Fellowships** should **NOT** apply under this category.

ADDITIONAL INFORMATION

Please see below details of faculty members under whom the Institute Fellowship is available.

Inorganic Chemistry:

Faculty Name	Research Area	Webpage	Position
Arindam Mukherjee	Medicinal Inorganic Chemistry: Designing Complexes and Organic Compounds Inhibitors of Kinases, PARP, Notch1 and as PROTACS	www.arindammukherjee.weebly.com	01

Organic Chemistry:

Faculty Name	Research Area	Webpage	Position
Devarajulu Sureshkumar	Fluorination by Photocatalysis	http://www.iiserkol.ac.in/~suresh/	01
Dibyendu Das	Organic Chemistry with Supramolecular and Materials Applications	https://www.ddaslab.com/	01
Rahul Banerjee	Porous Materials, Covalent Organic Frameworks, CO ₂ capture and Conversion, Heterogeneous catalysis, and C–H activation reactions	https://www.rbanerjeeelab.com/	01
Suman De Sarkar	Redox Transformations through Electrolysis and Visible Light Photolysis	https://www.redoxlab.in	01

Physical Chemistry:

Faculty Name	Research Area	Webpage	Position
Ratheesh K. Vijayaraghavan	Organic Semiconductors, Molecular Spectroscopy and Organic Electronic Devices	https://www.iiserkol.ac.in/web/en/people/faculty/dcs/ratheesh/#gsc.tab=0	01
Sayan Bhattacharyya	Materials Chemistry; Renewable Energy; Nanotechnology; Solid State Chemistry	https://www.iiserkol.ac.in/~sayanb	01

Theoretical Chemistry:

Faculty Name	Research Area	Webpage	Position
Amlan K. Roy*	Density functional theory, Electronic structure theory, Quantum information theory, Quantum confinement	https://www.iiserkol.ac.in/~theochem/	01
Susmita Roy	Physical chemistry of nucleic acids (DNA/RNA) systems; Developing DNA/RNA simulation methods; DNA/RNA folding and structure prediction	https://www.drsmataroy.com/	01

*Understanding of quantum mechanics/chemistry and some programming knowledge is desirable.