

**Doctor of Philosophy Programme (Ph.D.)  
Department of Chemical Sciences**

Ph.D. Advertisement for Spring Semester 2024  
Under the **Institute Fellowship** Scheme

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The Department of Chemical Sciences (DCS) at IISER Kolkata invites applications for regular Ph.D. programme in the Spring semester, 2024 in the disciplines of Inorganic, Organic, Physical, and Theoretical chemistry.

**Minimum Eligibility Criteria:** Bright and motivated candidates who have passed M.Sc. examination with minimum 55% marks in any field of Chemistry or Physics or Mathematics. 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 16, 2023 (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**.’

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Please note the following:

The Institute Fellowships are **ONLY** available with a selected number of faculty members that are provided as additional information.

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.

### **Chemical Biology:**

Faculty Name	Research Area	Webpage	Position
<b>Dr. Pradip Kumar Tarafdar</b>	Supramolecular Chemistry, Chemical Biology	<a href="https://www.iiserkol.ac.in/~tarafdar/">https://www.iiserkol.ac.in/~tarafdar/</a>	01

### **Inorganic Chemistry:**

Faculty Name	Research Area	Webpage	Position
<b>Swadhin Mandal</b>	Development of Metal-Free Catalyst in Activation of Greenhouse Gas Molecules	<a href="https://www.iiserkol.ac.in/web/en/people/faculty/dcs/swadhin-mandal/#gsc.tab=0">https://www.iiserkol.ac.in/web/en/people/faculty/dcs/swadhin-mandal/#gsc.tab=0</a>	01
<b>Sumit Khanra</b>	Bioinspired Inorganic Catalysis. Small molecules like O <sub>2</sub> , H <sub>2</sub> O Activation. C-C bond formation Catalysis.	<a href="https://www.iiserkol.ac.in/web/en/people/faculty/dcs/sumit-khanra/#gsc.tab=0">https://www.iiserkol.ac.in/web/en/people/faculty/dcs/sumit-khanra/#gsc.tab=0</a>	01

### **Physical Chemistry:**

Faculty Name	Research Area	Webpage	Position
<b>Priyadarsi De</b>	Polymer Chemistry	<a href="https://priyadarside441.wixsite.com/academic">https://priyadarside441.wixsite.com/academic</a>	01
<b>Debansu Chaudhuri</b>	Organic Semiconductors, Supramolecular assembly	<a href="https://ooliiserk.wixsite.com/dclab/">https://ooliiserk.wixsite.com/dclab/</a>	01
<b>Prasun K. Mandal</b>	Single molecule spectroscopy and ultrafast dynamics of nanomaterials, Quantum Dots, and Perovskites	<a href="https://www.iiserkol.ac.in/~prasunchem/">https://www.iiserkol.ac.in/~prasunchem/</a>	01
<b>Pradipta Purkayastha</b>	Physical Chemistry and Spectroscopy (SERB sponsored project)	<a href="http://www.pradiptapurkayastha.com">www.pradiptapurkayastha.com</a>	01

### **Theoretical Chemistry:**

Faculty Name	Research Area	Webpage	Position
<b>Debasis Koley</b>	Computational chemistry research on reactivity and catalysis	<a href="https://www.iiserkol.ac.in/web/en/people/faculty/dcs/koley/#gsc.tab=0">https://www.iiserkol.ac.in/web/en/people/faculty/dcs/koley/#gsc.tab=0</a>	01
<b>Amlan K. Roy*</b>	Density functional theory, Electronic structure theory, Quantum information theory, Quantum confinement	<a href="https://www.iiserkol.ac.in/~theochem/">https://www.iiserkol.ac.in/~theochem/</a>	01

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