

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

Ph.D. Advertisement for Spring Semester 2023
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, 2023 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. 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 Dates: **November 25-26, 2022**

Mode of Interviews: The mode of interview will be '**Off-line**' for better interactions with the students appearing for the PhD interview. However, a candidate may be allowed for an online interview, if sufficient justifications is/are provided.

For the details of faculty profiles please see: [Click Here](#)

ADDITIONAL INFORMATION

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

Inorganic Chemistry:

Faculty Name	Research Area	Webpage	Position
Soumyajit Roy*	CO ₂ reduction to Formic acid, Methanol, Ethanol, etc. Catalysis Inorganic Synthesis	https://www.iiserkol.ac.in/~s.roy/	01

Organic Chemistry:

Faculty Name	Research Area	Webpage	Position
Prasun Mandal**	Synthesis of organic fluorophores, fluorescent protein chromophores, meta-fluorophores, etc. Investigation of steady state fluorescence and fluorescence decay in plastic and elastic crystals of those fluorophores.	https://www.iiserkol.ac.in/~prasunchem/index.php	01

Physical Chemistry:

Faculty Name	Research Area	Webpage	Position
Prasun Mandal**	Development of quantum dots, perovskites, etc. and ultrasensitive single molecule spectroscopy and ultrafast dynamics in those systems.	https://www.iiserkol.ac.in/~prasunchem/index.php	01
Soumyajit Roy*	Crystallization Studies using model Soft-matter systems. Synthesis and study on Nanobots in Catalysis, Design of Lab-on-a-Chip catalyst systems using optical tweezers.	https://www.iiserkol.ac.in/~s.roy/	01

Theoretical Chemistry:

Faculty Name	Research Area	Webpage	Position
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Amlan K. Roy	Density functional theory Quantum confinement Quantum Information theory	https://www.iiserkol.ac.in/~theochem/publications.html	01
Ashwani K. Tiwari	Quantum Dynamics	https://www.iiserkol.ac.in/~ashwani/index.html	01
Debasis Koley	We study structure, bonding and reactivities of varied chemical species using Computational Chemistry. Our group (CCMM Lab) employs state-of-the-art computational methods to study reaction mechanisms, kinetics and design catalytic systems.	https://www.iiserkol.ac.in/~koley/	01
Mousumi Das	Theoretical and computational studies in low-lying excited states from molecules to materials	https://www.iiserkol.ac.in/~mousumi/	01
Pradip K. Ghorai	Computational and theoretical studies of physiochemical properties of complex chemical systems	http://www.iiserkol.ac.in/~pradip	01
Sangita Sen	Electronic Structure theory Quantum Chemistry in Strong Magnetic Fields	https://www.iiserkol.ac.in/web/en/people/faculty/dcs/sangita-sen	01

*One position only, either from IC or PC.

**One position only, either from OC or PC