



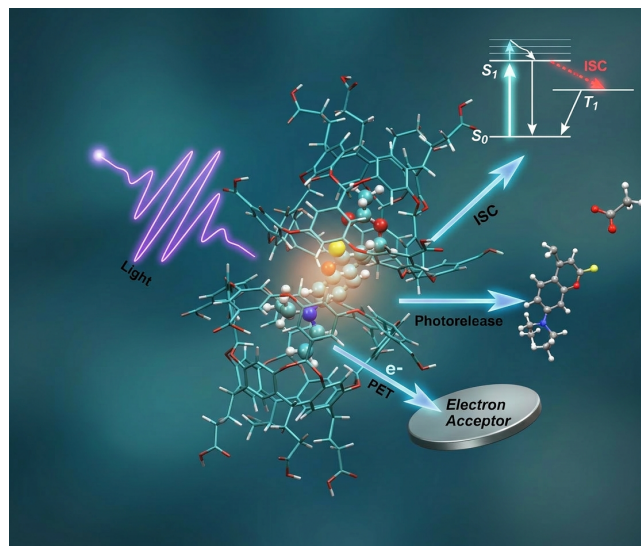
Anusandhan
National
Research
Foundation

Junior Research Fellow Position in *Ab Initio* Theory Group at IISER Bhopal



Applications are invited from Indian nationals for the post of “Junior Research Fellow”, ANRF-ARG project “**First-principles Theoretical Investigation of the Photophysics and Photochemistry of Chromophores Under Confinement**”.

Project description: This project investigates how nanoscale confinement in molecular hosts reshapes the electronic structure, excited-state dynamics, and reactive pathways of organic chromophores, using state-of-the-art density-functional and excited-state simulation techniques. We will elucidate solvent and host effects on spectra, uncover the origins of enhanced intersystem crossing and room-temperature phosphorescence, and determine the mechanisms of photocleavage-driven photorelease and photoinduced electron transfer between confined donors and external acceptors. Motivated students interested in this project are invited to join this effort and pursue a potential path to a PhD.



Duration: 12 months (extendible upon satisfactory performance)

Key Skills: DFT and TDDFT-based simulations, classical and *ab initio* molecular dynamics, Python programming, and high-performance computing.

Last date for applications: 30 August, 2026

Essential Qualifications: Prospective applicants **must** have

- (a) M.Sc. in Physics, Chemistry, or related disciplines from a recognized university with a good academic record (first class/division or minimum CPI of 7.0/10.0).
- (b) Demonstrable experience with programming, preferably in Python. Familiarity with a version control and collaborative platform such as GitHub is desirable
- (c) Preferably qualified in a National Eligibility Test (UGC, CSIR, LS, GATE, etc.) with a valid rank/score at the time of applying for this post.

Candidates with 2 or more years of research experience may be considered for an SRF.

Salary: As per the approved salaries for the selected posts and experience.

How to Apply: Applications containing a cover letter, a detailed CV, name and address of 2 Referees, as well as a brief write-up on any relevant work experience, should be sent by email **ONLY** to vardha@iiserb.ac.in on or before **30th August, 2026**. Shortlisted candidates will be called for an online interview.

For more details regarding the group and its research, visit <http://helios.iiserb.ac.in>