

Postdoctoral/Research Associate Positions in Condensed Matter Physics Theory (CMPT) Group at IOP, Bhubaneswar

The Institute of Physics (IOP), Bhubaneswar, invites applications for multiple Postdoctoral/Research Associate positions in the Condensed Matter Physics Theory (CMPT) Group under the DAE project “Research and development on cutting-edge topics in theoretical and experimental physics” at IOP (UID: RIO 4004). The broad areas of interest are as follows.

1. Quantum Condensed Matter Physics

Research interests include, but are not limited to, **topological quantum matter, quantum transport, frustrated magnetism, quantum thermodynamics, physics of disordered systems, correlated electrons, Floquet systems**, and related areas of quantum condensed matter physics.

Desirable expertise: Candidates with a strong background in theoretical condensed matter physics and expertise in one or more relevant areas with peer-reviewed publications are encouraged to apply. Experience with analytical and/or computational methods appropriate to the candidate's research area is desirable.

2. Active Matter, Biological Physics, and Complex Systems

Research interests span two complementary areas: **active matter, the physics of living systems, pattern formation, and non-equilibrium phase transitions**; and **magnetic systems modeling, hysteresis, rheology**, and related topics in complex systems.

Desirable Expertise:

Physics of living systems and active matter: Demonstrated expertise, preferably evidenced by peer-reviewed publications, in non-equilibrium statistical physics, active matter, hydrodynamic theories, pattern formation, and numerical methods is desirable. Relevant expertise includes stability analysis, pseudo-spectral and finite-element methods, molecular dynamics, agent-based simulations, and related computational approaches.

Magnetic and complex systems: Demonstrated expertise in equilibrium statistical physics, phase transitions, magnetism, and complex fluids, as well as experience with analytical and computational approaches, is desirable.

Eligibility

Candidates who have completed their Ph.D., submitted their Ph.D. thesis are eligible to apply. Selected candidates must submit their Ph.D. degree certificate or provisional Ph.D. certificate before joining.

Tenure and Fellowship

The initial appointment is for **one year**, with the possibility of extension for a **second year** subject to a performance evaluation in accordance with the rules of the Institute. A further extension into a **third year** may be granted, subject to satisfactory performance, the estimated time needed to complete the project, and the availability of funds. The extension may be granted for the full year or for a shorter period.

The fellowship will be provided as per the prevailing guidelines of IOP, Bhubaneswar in accordance with the Department of Atomic Energy norms: **Rs. 58,000/- for RA-I** (immediately after Ph.D.), **Rs. 61,000/- for RA-II** (with one year of postdoctoral experience), and **Rs. 67,000/- for RA-III** (with two or more years of postdoctoral experience), along with an **annual contingency grant of Rs. 60,000/-**. Campus accommodation will be provided subject to the availability. Candidates residing outside the campus will be eligible for House Rent Allowance (HRA) at the applicable rate, as per the Institute rules.

How to Apply

Interested candidates should email the following to **cmpth@iopb.res.in**:

- **Curriculum Vitae**, including the current status of the Ph.D. degree (awarded, thesis submitted, or thesis to be submitted)
- **List of publications**
- **Research statement** (maximum two pages)
- **Cover letter**

Applicants should arrange for **at least two letters of recommendation** to be sent directly by the referees to **cmpth@iopb.res.in** by the application deadline.

Application Deadline. October 31, 2026

Selection: Shortlisted candidates will be invited for an interview and/or presentation of their research work.

The selected candidates are expected to contribute actively to the successful execution and completion of the project, alongside other academic duties at IoP as appropriate to the position.

For further information, the candidates may contact: A. Saha (arijit@iopb.res.in), S. Mandal (saptarshi@iopb.res.in), D. Chaudhuri (debc@iopb.res.in), or G. Tripathy (goutam@iopb.res.in).