**Advertisement for an admission to the full-time PhD position under Visvesvaraya PhD program**

**Department of Physics**

**Indian Institute of Technology Ropar, Rupnagar, Punjab 140001**

**About the fellowship:** This is a highly competitive national level PhD fellowship scheme under the National Policy on Electronics, Govt. of India for motivated students in the upcoming state-of-art Electronic System Design and Manufacturing research areas. The salient features of the program are:

* This is a full-time PhD program with fellowship for a maximum period of five years. \*Fellowship @ Rs. 38,750 per month for 1st and 2nd year, and @ Rs. 43,759 per month for 3rd, 4th, and 5th yr.
* Chances of getting support for 6 months “Visit to Labs Abroad” from 3rd year.
* Conference travel supports up to 2 Lakh from the institute.
* Support to attend selected International Conferences up to Rs. 1.5 Lakh per Full Time PhD candidate from 3rd year from funding agency.
* Contingency Research Grant @ Rs. 1.20 Lakh/year per Full Time PhD candidate

**Project Title:** Growth and Characterization of Quantum materials for Spintronic Applications

**Research Supervisors:** The selected candidate will work under the supervision of **Dr. Ritu Gupta** and most of the work will be done in **Q-Mat lab**, Department of Physics, IIT Ropar.

**Key Areas of Research:**

* Crystal growth and design
* Low temperature physics
* Magnetization, transport and thermodynamic studies

**Essential Qualifications:**

| **Sr. No.** | **Qualifying Degree** | **Minimum Performance in Qualifying Degree for General/OBC (Non-Creamy Layer)/EWS Category Candidates** | **Minimum Performance in Qualifying Degree for SC/ST/PwD category Candidates** | **Qualification Through National Level Examination Requirements** |
| --- | --- | --- | --- | --- |
| 1. | M.Tech./M.E/M.D. or equivalent | 60% marks or 6.00 CGPA on a 10-point scale | 55% marks or 5.5 CGPA on a 10-point scale | Nil |
| 2. | M.Sc/MBA/M.A/M.B.B.S. or equivalent | 60% marks or 6.00 CGPA on a 10-point scale | 55% marks or 5.5 CGPA on a 10-point scale | Qualified GATE/CSIR/UGC-NET/DST-INSPIRE/JEST/NBHM or other national fellowship |
| 3. | B.E./B.Tech. or equivalent four years program | 60% marks or 6.00 CGPA on a 10-point scale | 55% marks or 5.5 CGPA on a 10-point scale | Qualified GATE/CSIR/UGC-NET/DST-INSPIRE/JEST/NBHM or other national fellowship |

**Exemptions:** Requirement of qualification in GATE / National level Exam is waived off for the following categories of applicants.

Candidates currently registered in Centrally Funded Technical Institutes (CFTIs) and pursuing B.Tech./B.E./Integrated M.Tech./Integrated M.Sc. programmes (or any other programme of a minimum four-year duration, with admission based on JEE), who have completed six or more semesters and have a CGPA of 7.5 or above (on a 10-point scale), are eligible. Additionally, candidates enrolled in a two-year M.Sc. programme from a CFTI are also eligible, provided they obtain a CGPA of 7.5 or above (or 75% aggregate marks, if marks are the primary mode of evaluation) at the time of graduation and before formally registering for the Ph.D. programme.

**Desired Qualifications:**

* Strong understanding of Solid-State Physics, Crystallography, and Magnetism.

**Roles and Responsibilities:**

* Conduct high-quality experimental research in crystal growth of Quantum Materials and their characterization.
* Collaborate with team members, including other Ph.D., and Postdoc fellows.
* Provide mentorship and guidance to Masters and Undergraduate students in the group, helping them develop their research skills.
* Contribute to the dissemination of research through publications and presentations.
* Be open to exploring and contributing to additional areas of research ongoing in the group, such as magnetism, superconductivity and spintronics.

**Application Process:** Applicants must send the following documents as a **single PDF file** named in the format 2025\_Firstname\_Surname.pdf to **ritu.gupta@iitrpr.ac.in** by **July 21st, 2025**:

1. **Cover Letter** — A one-page letter describing your background, research interests, and alignment with the project.
2. **Application Form** — Completed in the prescribed format (Appendix A).
3. **Degree Certificates** — Soft copies of all relevant degree certificates.
4. **Thesis** — Soft copy of your Master’s thesis if available.

**Selection Process:** Shortlisted candidates will be invited for an **online/offline interview**. The interview details will be shared with the shortlisted candidates via email.

**Contact:** For any queries, please contact: **Dr. Ritu Gupta** Department of Physics, IIT Ropar Email: [ritu.gupta@iitrpr.ac.in](mailto:ritu.gupta@iitrpr.ac.in).

**A. Application Format**

1. Name:

2. Correspondence address:

3. Permanent address:

4. Email and contact number:

5. Gender:

6. Date of Birth:

7. Marital Status:

8. Category:

9. Nationality:

10. Whether differently abled:

11. Academic Qualification: (The qualification details must include the details starting from 10th standard onwards)

Qualification Subject Institute/University Year of Passing % of Marks/CGPA

12. Professional Recognition/Award/Prize/Certificate/Fellowship received by the applicant:

**B. Declaration**

I hereby declare that all the statements made in this application are true and complete, and nothing has been concealed/distorted. I am aware that, if at any time I am found to have concealed/distorted any material information, my engagement is liable to be summarily terminated without notice.

Place:

Date: Signature of the Applicant