



भारतीय प्रौद्योगिकी संस्थान इंदौर

खंडवा रोड, इंदौर 453 552

**Indian Institute of Technology Indore**

Khandwa Road, Simrol  
Indore 453 552

Office: +91 731 2438 733

Fax : +91 731 2438 721

**IIT Indore**

**Date: 25-September-2025**

## **Recruitment for Project Position**

Applications are invited from motivated and eligible candidates for the project position of Junior Research Fellow in the project [TTDF/6G/461] titled: **“TARANG: Design of Terahertz Wireless Communications Systems for 6G,”** sponsored by Bharat 6G Mission from Department of Telecom (DoT) implemented by TTDF.

### **Selected candidates will be involved in:**

- Conducting a comprehensive study of emerging 6G scenarios, use-cases, and services, with a particular focus on THz-enabled communications.
- Investigating and developing THz channel modeling frameworks to analyze propagation characteristics and support realistic performance evaluation.
- Designing and implementing energy-efficient beamforming solutions aimed at enhancing coverage and reliability in 6G networks.
- Developing simulation models and analytical tools to evaluate system-level trade-offs between coverage, energy efficiency, and capacity.
- Contributing to the preparation of technical reports, research publications, and project deliverables based on the outcomes of the study.

The candidates are expected to have a good knowledge of Wireless Communications, Signal Processing, Internet-of-Things (IoTs), Simultaneous Wireless Information and Power Transmission (SWIPT), Machine Learning/Artificial Intelligence, and preferably have a good understanding of Software-Defined Radio (SDR) Platforms.

### **1. Junior Research Fellow (JRF)**

**Duration:** Initial appointment would be for one year, which is extendable further based on performance.

**Emolument:** INR 43,600 p.m. (inclusive of all benefits)

### **Eligibility:**

**Essential Qualification:** Master's degree in the relevant branch of Electronics/ Electronics and Communication Engineering/ Microwave engineering/ Electrical Engineering/ Computer Science or equivalent, with a valid GATE score. Post two years' experience, the (selected) candidate will be eligible for SRF position.

**Age limit:** As per TTDF norms. Relaxation for SC/ST/OBC candidates as per Government of India norms.

**How to Apply:** Interested candidates are requested to send their detailed CV to Dr. Sumit Gautam, Department of Electrical Engineering, Indian Institute of Technology Indore and Dr. Dibbendu Roy, Department of Electrical Engineering, Indian Institute of Technology Indore, via e-mail to [sumit.gautam@iiti.ac.in](mailto:sumit.gautam@iiti.ac.in) with a copy (cc) to [droy@iiti.ac.in](mailto:droy@iiti.ac.in) bearing the subject line: “[JRF] Application for TTDF/6G/461 project: TARANG”.

**Note:** CV should include academic grades starting from 10th standard onwards with details of the year of passing, University or Institute, etc., and work experience and nature of work if applicable. Complete details of NET/GATE such as year of passing/validity, discipline, marks, **All India Rank**, and number of candidates who appeared should be mentioned in the CV. Incomplete applications will be rejected. Only shortlisted candidates will be intimated by email for an interview. No **TA/DA** will be paid to appear in the interview.

Last Date for Application Submission: **12-October-2025**.

Webpages:

1. Dr. Sumit Gautam: <https://sites.google.com/site/sumitgautamjbp/>
2. Dr. Dibbendu Roy: <https://dibbend8.github.io/dibbendu/>