

भारतीय प्रौद्योगिकी संस्थान तिरुपति INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

SPONSORED RESEARCH AND CONSULTANCY

Yerpedu - Venkatagiri Road, Yerpedu Post, Tirupati District, A.P - 517619

No.: Advt/ IITT/CSRC/24-25/54

Date:21-03-2025

<u>Applications are invited from eligible Indian nationals for ONE Junior Research Fellow posts in a sponsored project undertaken in the Department of ELECTRICAL ENGINEERING</u>

CENTRE FOR

Position	Junior Research Fellow
Essential Qualification	B.E/B.Tech in ECE Engineering/relevant discipline with NET/GATE qualified with minimum CGPA 7 (or marks 70%) **Relaxation:* 6.5 CGPA or 65% for OBC/EWS 6.0 CGPA or 60% for SC/ST/PWD
Desirable Qualification	Knowledge of antenna design and signal processing. Knowledge of semiconductor devices will be an added advantage. Candidates with relevant master's or higher degrees.
Project No.	ELE2425004NHUBABHJ
Research Area/ Project title	Radar Detection and Positioning System Based on Microwave Spintronics Sensor
Sponsoring Agency	TIH NiF
No. of Position	1
Monthly Salary	37,000+HRA
Principal Investigator	Dr. Abhishek Kumar Jha
Department/Centre	Electrical Engineering
Maximum Tenure of Assignment	Initially for ONE year, with a possible extension of ONE year based on performance
Desired Experience	Beam-forming antenna design, Direction finding algorithm (MUSIC) OR, Semiconductor device fabrication
Brief Project Description and Nature of the Work	Radar signal detection and direction finding is a cutting-edge technology that is essential in modern warfare and civilian applications. Far-field electromagnetic signal gets weaker with the distance and hardly gets detected by the standard diode due to barrier potential equipped with a low-profile antenna. However, the spintronics device, which works on the electron's spin, can easily detect electromagnetic power if designed and biased properly. The candidate will work on state-of-the-art systems and design indigenous systems.
Age Limit	Not more than 30 years as of the last date of advertisement (relaxed for exceptional candidates)
Last date application	05-04-2025
Application Link	https://forms.gle/TSnj3kBtpUBdjsmFA

Eligible candidates must attach a detailed CV specifying their Qualifications and Experience with scanned copies of marksheets and certificates from X class till date. A brief statement of purpose (Why they are interested in this project topic?) also to be attached with the application link.

The shortlisted candidates will be informed by Email only. Selection will be based on the qualification, experience, and in-person interview at IIT Tirupati. No TA/DA shall be paid to candidates appearing for an interview online or offline. The interview date will be notified to the shortlisted candidates by Email. For any queries send mail to csrc_recruitment@iittp.ac.in

IIT Tirupati also reserves the right to discontinue the position with 1 month notice if the performance is not satisfactory.

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