



Indian Institute of Technology (ISM) Dhanbad
Office of the Dean (Research & Development)

Sanction No and Date: वि०प्रा०/कौ० - 02/2016 (पार्ट-II)-48 dated 20.02.2026	IIT (ISM) Project No. SRDP 1276 G	Date 18/08/2026
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Project Staff (Project Associate-I) position under JCSTI Project

Applications are invited under the sponsored project. The details of the project are as under:

Position	Project Associate-I
No. of Position(s)	01 (One)
Project Title	Resilient Edge-LoRa System for Early Gas Hazard Detection in Coal Mines and Adjacent Communities
Principal Investigator	Dr. Tamoghna Ojha (PI) Department of Mathematics & Computing, IIT (ISM) Dhanbad; Email: tamoghnaojha@iitism.ac.in
Tenure of Project	3 Years (30/03/2026 – 29/03/2029)
Job Description	The candidate will work on the design and development of an Edge-LoRa-based IoT prototype for real-time gas hazard monitoring in coal mines and nearby communities. The work will involve the integration of sensors and embedded devices, development of lightweight edge analytics and machine learning algorithms, evaluation of communication/network performance, and laboratory and field validation of the system. The candidate will also contribute to data analysis, technical documentation, project reports, research publications, and prototype demonstrations. Experience with embedded systems, IoT sensors, wireless communication protocols (preferably LoRa/LoRaWAN), C/C++/Python programming, Linux/Raspberry Pi/ESP platforms, and Machine Learning is preferred.
Essential Qualification	B.E./B.Tech/M.Tech/M.S./MCA/M.Sc in CSE, Mathematics & Computing, ECE, EE, Artificial Intelligence, Data Science, or related disciplines.
Desirable Qualification	Background in computer networks, IoT/embedded systems, and wireless communication, with proficiency in C/C++/Python programming and Linux/Ubuntu. Working knowledge of Machine Learning and hands-on experience with Raspberry Pi/ESP platforms, sensors, or LoRa/LoRaWAN will be preferred. GATE/NET qualification is desirable.
Age & Relaxation	35 Years and as per the norms of the Government of India/IIT (ISM), Dhanbad
Fellowship	₹ 31000/- per month (Qualified GATE or NET) or 25000/- per month (without GATE/NET)
Last Date & Time	- Interested candidates should apply on or before 3rd September 2026 (Thursday). - Online Application Link: https://forms.gle/gVrWEVTRasKnfqUp6  Application QR Code:

Only shortlisted candidates will be notified of the interview date. Mere possession of a minimum qualification does not guarantee an invitation to the interview. Candidates will be shortlisted based on their merit and in accordance with the project's requirements. The interview will be conducted via video conferencing; a link for this purpose will be shared with the shortlisted candidates in due course.


(Signature of PI)