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

Sanction No and Date: DAR/27/2026-27	**IIT (ISM) Project No.** SRDP1415 F	Date: 16/10/2026

Project Staff (JRF/SRF/RA/Project Assistant/Project Associate) position under the Gates Foundation

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

Position	Junior Research Fellow (JRF)
Number of Position (s)	01
Title of The Project	Predictive Tools for Antibiotic Discovery in Klebsiella pneumoniae
Principal Investigator	Dr. Niladri Patra, Associate Professor, Department of Chemistry and Chemical Biology, IIT(ISM) Dhanbad
Tenure of Project	Two years, or until the completion of the project, whichever comes earlier. (*The position may be converted into a regular JRF of the institute at any point, subject to the IIT(ISM) rule)*
Job Description (in maximum 100 words)	The initial tenure will be for 01 (one) year. Upon completion of the first year, the tenure may be extended based on annual performance evaluation and project requirement. The position may be converted to PhD at IIT (ISM) Dhanbad as per institute rules and performance. Can structural biology-based computational models reliably distinguish antibiotics with known efflux challenges from those that evade efflux, and can this be turned into a validated predictive tool for early-stage efflux liability assessment? The work involves data collection and curation, machine learning model development, DFT and Molecular dynamics simulations and enhanced sampling simulation of Efflux pump.
Essential Qualification	Valid CSIR/UGC NET (including LS) or GATE qualification
Desirable Qualification	Experience in Molecular Dynamics and enhanced sampling simulation, machine learning, data analytics.
Age and Relaxation (if any)	As per the norms of the Govt. of India
Fellowship	Rs. 37,000/- +HRA (as applicable) per month
Last Date & Time	• Interested candidates should mail a single PDF containing (i) CV (ii) GATE/NET score card (iii) self-attested copies of all mark sheets and certificates from class 10th (iv) proof of work experience (if any) to PI npatra2@iitism.ac.in **30th November 2026.** • Candidate should write **"Application for the position of JRF under Gates Foundation project"** in the subject of the email.

Shortlisted candidates will be informed on the date of interview. Mere possession of the minimum qualification does not guarantee an invitation to the interview. Candidates will be shortlisted based on their merit and as per the requirements of the project. All candidates should make their own arrangements for their stay at Dhanbad, if required. No TA/DA will be paid to attend the interview.

Nilabri Patra

[Signature of PI]