



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

Sanction No and Date: PSF-HH-4Y-TD-102, 01/01/ 2026	IIT (ISM) Project No.: SRDP 1261 G	Date: 20/01/2026
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Project Staff (JRF) position under TEXMiN Project

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

Position	Junior Research Fellow
Number of Position (s)	1
Title of The Project	Development of Cyber-Physically Enabled Laser-Assisted Low-Pressure Cold Spray (LA-LPCS) Based Repair Methodology for Worn Metallic Components in Mining Machinery
Principal Investigator	Dr. Kesavan Ravi, Assistant Professor, Department of Fuel, Minerals & Metallurgical Engineering, IIT (ISM) Dhanbad
Tenure of Project	2 years
Job Description (in maximum of 100 words)	The JRF will work on the development and validation of a Laser-Assisted Low-Pressure Cold Spray (LA-LPCS) repair system for worn mining components. Responsibilities include experimental trials, system integration of laser-cold spray modules, cyber-physical system development (sensors, data acquisition, feedback control), materials characterization, field-scale testing on mining components, documentation, and preparation of technical reports, publications, and patents under the TEXMiN project.
Essential Qualification	B.E./B.Tech (with NET/GATE qualification) or M.E./M.Tech (with GATE qualification) in Metallurgical & Materials Engineering / Mechanical Engineering/ Manufacturing Engineering or allied disciplines
Desirable Qualification	- Background in thermal spray / cold spray / laser processing / surface engineering - Experience with experimental mechanics, sensors, data acquisition, or CAD/CAM

	Familiarity with materials characterization techniques (SEM, microhardness, profilometry, etc.)
Age and Relaxation (if any)	- Upper age limit: 35 years - Age relaxation applicable as per Government of India / IIT (ISM) norms for SC/ST/OBC/Women/PwD candidates
Fellowship	Rs. 37000/- per month
Last Date & Time	05/02/2026, 11:59 PM
Shortlisted candidates will be informed on the date of interview. Mere possession of minimum qualification does not guarantee an invitation to the interview. Candidates will be short listed based on their merit and as per the requirement 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. Application (CV and relevant supporting documents) need be sent to kesavanravi@iitism.ac.in by the deadline.	

(Signature of PI)