



Department of Metallurgy Engineering and Materials Science
Indian Institute of Technology Indore

Advertisement for Junior Research Fellow (JRF)

Applications are invited from motivated and eligible candidates for a junior research fellow (JRF) position in the research project supported by the Indian Knowledge System (IKS) division, Ministry of Education, Govt. of India. The details of the project are given below:

Name of Post	Junior Research Fellow
No. of post	One (01)
Title of The Project	Development and characterization of URUMI sword: A forgotten steel technology
Principal Investigator	Dr. Vinod Kumar, Associate Professor MEMS, IIT Indore
Tenure of Project	Maximum 2 years or till end of the project, whichever is earlier
Job Description	Candidate has to predict the formation of phases by using modern tool such as CALPHAD software. It is required to perform casting and Phase analysis of URUMI sword. Further, it is required to investigate the Microstructure and phases developed in synthesized coating materials utilizing XRD, OM, SEM and TEM. Candidate needs to investigate the mechanical behavior including wear study, and corrosion behavior of developed materials.
Essential Qualification	M. Tech. / ME in Metallurgical and Materials Engineering/ Mechanical Engineering/ Materials Engineering/ Production Engineering/ Manufacturing Engineering or equivalent (with first division as defined by the awarding Institute / University). The candidate should be GATE qualified in any branch of engineering/science. Selected candidate will be encouraged to join Ph.D. program at IIT Indore. Candidates who are going to complete his/her M. Tech. in the current academic year are also encouraged to apply.
Desirable Qualification	Knowledge and experience in casting process and material characterization.
Age Limit	Preferably below 30 Years
Salary/Fellowship	Rs. 37,000/- pm (Consolidated)
Last Date & Time	Interested candidates are requested to send their detailed CV, statement of purpose (SOP), and copies of educational qualifications, and other relevant documents to the Principal Investigator by Email (vkt@iiti.ac.in) on or before June 12, 2025, 5:00 PM.
Only shortlisted candidates will be informed about the date of the interview by email. The appointment is purely temporary and may co-terminus with the project. 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. Google meet link will be shared only with the shortlisted candidates before the date of the interview. Tentative Interview Date: June 15, 2025 (11:00 AM onward)	