



Department of Metallurgical 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 JRF recruitment are given below:

Name of Post	Junior Research Fellow
No. of post	One (01)
Tenure of Project	Maximum 2 years or till the end of the project, whichever is earlier <i>(If selected candidate will join Ph.D. program, then fellowship will be continued as per academic guidelines of IIT Indore even after the completion of the project).</i>
Principal Investigator (PI)	Dr. Vinod Kumar, Associate Professor MEMS, IIT Indore
Job Description	The candidate is expected to synthesize high quality steel and predict the formation of phases by using CALPHAD software. It is required to investigate the microstructure and phases developed in advanced steels utilizing XRD, OM, SEM and TEM. Candidate needs to investigate the mechanical behavior including wear study, and corrosion behavior of developed materials. Furthermore, it is required to perform casting followed by rolling and microstructure analysis of steel (used to manufacture URUMI swords) and perform comparative study.
Essential Qualification	Masters’ degree (M.Tech. or M.E. or MS) in Metallurgy/ Materials Science and Engineering/ Mechanical/ Manufacturing/ Production Engineering/ Nanotechnology/ Engineering Science/ Engineering Physics/Ceramics Engineering/ Electronics/ Chemical Engineering/ Energy Science and Engineering/Related Specializations (with first division as defined by the awarding Institute/ University) AND GATE qualified. <b>OR</b> Masters’ degree (M.Sc.) in Chemistry/ Physics/ Materials Science/ Electronics/ Nanoscience and Technology/Forensic Science/Related Specializations (with first division as defined by the awarding Institute/ University) AND either GATE qualified with a valid score card or valid UGC-JRF/CSIR- JRF/DST Inspire fellowship/other equivalent Fellowship or UGC-NET (LS) / CSIR-NET (LS) qualified. <b># The selected candidate will be encouraged to join the Ph.D. program at IIT Indore.</b>
Desirable Qualification	Knowledge and experience in casting process and material characterization.
Age Limit	Preferably below 32 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 ( <a href="mailto:vkt@iiti.ac.in">vkt@iiti.ac.in</a> ) on or before <b>September 07, 2025, 5:00 PM</b> (Please do not apply if you have earlier applied for this position).
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 shortlisted based on their merit and as per the requirement of the IKS project. Google meet link will be shared only with the shortlisted candidates before the date of the interview. <b>Tentative Interview Date: September 10, 2025 (11:00 AM onward)</b>	