



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 project are given below:

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| 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 (after the completion of the project) as per academic guidelines of IIT Indore).</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 and phase analysis of steel used to manufacture URUMI swords and perform comparative study. |
| 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. The selected candidate will be encouraged to join the 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 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 (vkt@iiti.ac.in) on or before August 17, 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 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. Tentative Interview Date: August 23, 2025 (11:00 AM onward) | |