



भारतीय प्रौद्योगिकी संस्थान इंदौर

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IIT Indore

Dated: 29.03.2022

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 Space Research Organization (ISRO) under the RESPOND program (*Project No: ISRO/RES/3/909/21-22*). The details of the project are given below:

Position	Junior Research Fellow (JRF)
Number of Position (s)	One
Title of The Project	Development of Microstructure-Property-Processing Correlations for nickel based superalloys
Principal Investigator	Dr. Sumanta Samal
Tenure of Project	Maximum 2 years or till end of the project, whichever is earlier
Job Description (in maximum of 100 words)	The material in the fabrication condition will be subjected to various thermal or thermomechanical cycles. The integrated computational material engineering (ICME), along with a physical simulation of the manufacturing process, can accelerate the optimum processing condition. In this study, the simulation tools will be used to screen out the experimental trials and simulation guided experiments will be conducted. The processing maps and forming limit diagram will be generated at different processing conditions. The detailed characterization can be carried out using XRD, SEM, EPMA, TEM, APT and precipitation kinetics study will lead to the establishment of TTT diagram.
Essential Qualification	M.Tech./ME in Metallurgical and Materials Engineering/Mechanical Engineering/ Materials Engineering or equivalent selected through a process described through any one of the following: (a) Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE (b) The selection process through National level examinations conducted by Central Government Departments and their Agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc. The candidate should have defended M.Tech./ME thesis dissertation or is going to defend M.Tech./ME thesis dissertation in AY 2021-22.
Desirable Qualification	Knowledge and experience in thermodynamic simulation, casting process and material characterization
Fellowship	Rs. 31,000 per month + HRA (as per institute rules)
Last Date & Time	Interested candidates are requested to send detailed Bio-data, statement of purpose (SOP) and copies of educational qualifications, and other relevant documents to the Principal Investigator by Email (sumanta@iiti.ac.in) on or before April 20, 2022, 5:00 PM .
Only shortlisted candidates will be informed about the date of the interview by email. The appointment is purely temporary and 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.	