

Indian Institute of Technology Indore

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## IIT Indore

## Advertisement for Recruitment of Junior Research Fellow (JRF)

Advt. No: MEMS/2024/Oct

Date: 04/10/2024

Applications are invited from interested and motivated candidates for the post of Junior Research Fellow (JRF) in a research project as per the following details.

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Position	Junior Research Fellow (JRF)
	(Under Aeronautical Research and Development Board (DRDO),
	Project No. <u>ARDB/MM/4171/2149</u> )
Number of	01
Vacancy	
Project Title	High temperature fretting fatigue behavior of Titanium alloys and nickel based super alloys under severe loading conditions
Department	Metallurgical Engineering and Materials Science
Fellowship	3 years (initially 1 year, upon performance the fellowship will be
duration	extended until the completion of the project) (The selected
	candidate will be encouraged to register for the Ph.D. program at
	IIT Indore as per institute norms) If selected for PhD program,
	fellowship will be extended for PhD duration as per institute
	norms.
Job Description	To investigate fatigue, fretting fatigue and fracture behavior of
	advanced materials for defense application. The studies to be
	carried out both at room temperature and high temperature of these
	advanced materials. The project involves both experimental study,
	numerical analysis (FEM), Machine learning.
	The project provides learning opportunities in the areas of
	mechanical testing of materials, fatigue, fretting fatigue, fracture
	mechanics, materials characterization, numerical analysis, material
	processing like advanced welding, advanced manufacturing
	techniques, additive manufacturing metal forming and etc.
Essential	Master's degree in mechanical / metallurgy / materials / production/
Qualification	manufacturing engineering/ material science engineering / industrial
	engineering/ CAD/CAM/ welding engineering / physics / relevant
	branch of Engineering or Science.
	GATE qualified candidates will be preferred.
Fellowship	Junior Research Fellowship (JRF):
	Rs. 37,000/- p.m. (First & Second years)
	Rs. 42000/- p.m. (3 <sup>rd</sup> year upon upgradation)
	Plus HRA will provided as per institute norms.

Interested candidates are requested to submit a detailed softcopy of their CV with all relevant Essential Qualification Degree Certificates, Marks Sheets, GATE qualifying certificate, class X and XII marksheet in a single pdf file to jayaprakash@iiti.ac.in by 24 Oct, 2024. Tentative Date of Interview: last week of October 2024.

Only shortlisted candidates will be called for interview. Selected candidates will be intimated by email. Interview will be conducted through online mode (google meet).

## **Address for Correspondence:**

Dr. Jayaprakash Murugesan\_(email: jayaprakash@iiti.ac.in)

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