

Date: 7 June, 2026
Ref: CoEAM/2026/VJ/adv-1

ADVERTISEMENT FOR THE POST OF JRF IN CENTER OF EXCELLENCE IN ADVANCED MANUFACTURING, THAPAR INSTITUTE OF ENGINEERING & TECHNOLOGY, PATIALA IN COLLABORATION WITH TEL AVIV UNIVERSITY, ISRAEL.

Applications are invited from highly motivated and eligible Indian citizens for a Junior Research Fellow (JRF) position in CoEAM, Thapar Institute of Engineering & Technology, Patiala.

Project Details:

Project title	AI-Driven Design of Functionally Graded Patient-Specific Orthopedic Implants from Medical Imaging Using Directed Energy Deposition
Sponsored Agency	Center of Excellence in Advanced Manufacturing, TIET
Name of the Post	Junior Research Fellowship
Vacancy	01 Post
Duration	02 Years
Principal Investigator	Dr. Vivek Jain , Professor, Department of Mechanical Engineering, Thapar Institute of Engineering and Technology, Patiala, India.
Co-PI's	Dr. Francesco Travascio , Associate Professor, Department of Mechanical and Aerospace Engineering, University of Miami, Florida, USA. Dr. Dheeraj Gupta , Professor, Department of Mechanical Engineering, TIET, Patiala. Dr. Tarunpreet Bhatia , Associate Professor, Department of Computer Science & Engineering, TIET, Patiala. Dr. Anubhav Sharma , Assistant Professor, Orthopedic surgeon, DMC, Ludhiana
Opportunity	The selected candidate can register for full-time Ph.D. program at TIET (upon fulfilling admission norms)

Other Details:

1. Essential Qualification	M.E./M.Tech/B.E./B. Tech Degrees with at least 60% marks (or a CGPA of 6.0 on 10 point scale) in Mechanical/Production/Manufacturing/Mechatronics/Biomedical Engineering or related disciplines. Applicants having a valid GATE/NET score will be preferred .
2. Desirable Skills	Candidate with strong interest and having pre-experience in Additive Manufacturing, FGM, Smart Implants, Medical Image Processing, 3D medical imaging software .
3. Fellowship	Rs. 30,000/- per month as per norms for Non-GATE/NET candidates Rs. 45,000/- per month as per norms for GATE/NET candidates
4. Important	<ul style="list-style-type: none"> The assignment is purely temporary in nature, and it is co-terminus with the project. No TA/DA will be paid for appearing in the interview and/or joining the position. All terms & conditions for this recruitment will be as per the guidelines of CoEAM.
5. Job description	The selected JRF will work on the development of AI -based computational frameworks for the design of functionally graded patient-specific orthopedic implants from CT/MRI data, along with the optimization of Directed Energy Deposition (DED)-based additive manufacturing processes for fabricating metallic implants with graded microstructures and tailored mechanical properties.
6. How to Apply	Interested candidates should fill the google form (http://tiny.cc/jrf-coeam) and submit your curriculum vitae with self-attested photocopies of all mark sheets, certificates, GATE/NET score card, and other testimonials as a single pdf. <i>The last date to receive the applications is 26th June, 2026. The shortlisted candidates will be intimated about the interview date by e-mail.</i>

Dr. Vivek Jain

Professor, DME, TIET, Patiala

Profile link: <https://med.thapar.edu/facultydetails/MTE2MQ==>