



Indian Institute of Technology Hyderabad

भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Advertisement for the post of Senior Research Fellow SRF

IIT Hyderabad Dated 9th April 2021

Applications are invited from eligible candidates having basic knowledge and skills to work on the research project titled, '*Thermo structural analysis for predicting damage/fracture in functionally graded thermal barrier ceramic coatings using a Peridynamics approach*' in a purely time-bound manner undertaken in the Department of Civil Engineering, IIT Hyderabad.

Details are as follows:

Name of the Post	Senior Research Fellow (SRF)
Number of Vacancies	2-(Post 1 and Post 2)
Title of the research project	Thermo structural analysis for predicting damage/fracture in functionally graded thermal barrier ceramic coatings using a Peridynamics approach
Job Description	Deriving the formulation for damage/fracture in FGMs from the Peridynamic approach and implementing it in Abaqus/Matlab
Sponsoring Agency	DRDO - DFTM
Salary	INR 35,000 per month + HRA as per GOI norms
Required Qualification of Candidates For Post 1 Department of Civil Engineering	<ol style="list-style-type: none">1. M.E./ M.Tech. in Civil Structural/Mechanical -Design/Applied Mechanics/Aerospace Engineering with 80% aggregate or equivalent CGPA2. Desirable Credentials<ul style="list-style-type: none">• Basic knowledge in Mechanics, Finite Element Method with good analytical and mathematical skills.• Knowledge in Programming FEM using MATLAB• Knowledge in using Commercial Software like ABAQUS/ANSYS
Required Qualification of Candidates For Post 2 Department of Materials Science and Metallurgical Engineering	<ol style="list-style-type: none">3. M.E./ M.Tech. in Materials Engineering/ Metallurgical Engineering/Mechanical - Design/Applied Mechanics/Aerospace Engineering with 80% aggregate or equivalent CGPA4. Desirable Credentials<ul style="list-style-type: none">• Basic knowledge of Physical Metallurgy and Phase Transformations with good analytical and mathematical skills.• Knowledge in Programming using C/ C++/MATLAB/Python• Basic Knowledge of Linear Algebra and Numerical Techniques (FDM/FVM/FEM) is highly desirable

Eligible applicants should send the following documents via email to **rajagopal@ce.iith.ac.in** with the subject as “**Application for the post of SRF in DFTM Project**” on or before **23rd April 2021**:

1. Latest CV with photograph.
2. Scanned copy of degree certificates and grade sheets/ transcripts for both B.Tech. and M.Tech.
3. Brief description of projects undertaken in the past or M.Tech. thesis
4. Papers published in Journals/ Conference

The Candidates will be shortlisted for an online interview based on their merit and skills required for the project and the same will be informed via email.

Shortlisted candidates will be called for an online interview. The tentative date of interview is 24th April 2021. The selected candidates are expected to join immediately.

Accommodation may not be available on campus currently. However, there is a possibility of getting hostel accommodation as and when it becomes available. The candidates, if selected, must make his/her own arrangements for the accommodation nearby the campus for which HRA will be provided from the project.

For any queries, please contact the PI of the project:

Prof. Amirtham Rajagopal.

Professor

Department of Civil Engineering

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Telangana

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