



Indian Institute of Technology Jodhpur

Office of Research and Development

Advt. No.: IITJ/R&D/2021-22/55

24 January 2022

Project Recruitment

Applications are invited from the citizen of India for filling up the following temporary position in the Sponsored Research Project at this Institute. The position is purely temporary, initially for a period of 01 Year, and extendable but co-terminus with the duration of the project, on contractual basis with consolidated pay. The requisite qualification, experience and others details are given below:

1.	Project No.	S/SERB/ATS/20210073
2.	Project Title	Numerical Modeling and Experimental Characterization of Dynamic Behavior of Soft Dielectric Elastomer Minimum Energy Structures
3.	Name of the Project Investigator	Dr. Atul Kumar Sharma
4.	Duration for initial appointment	01 Year
5.	Name of the Post	Junior Research Fellow
6.	Post	01
7.	Consolidate Pay	Rs. 31,000/-
8.	Minimum Qualification and Experience	<u>Essential Qualification:</u> M.E. /M.Tech. or B. Tech. with specialization in Mechanical Engineering or equivalent. GATE qualification in relevant disciplines is Mandatory. <u>Desired Qualification:</u> Sound knowledge of fundamentals of Finite element method, Nonlinear dynamics, Continuum mechanics. Proficiency in MATLAB
09.	Brief description of Project	The objectives of the project are <ul style="list-style-type: none">• To develop a numerical framework for investigating the nonlinear dynamic behavior of dielectric elastomer minimum energy structures (DEMES).• To perform a detailed parametric study to examine the effect of membrane pre-stretch and frame compliance by tailoring the geometrical properties of the compliant frame on the equilibrium state, DC and AC dynamic response, periodicity of the DEMES actuators.• To incorporate the material viscoelasticity and anisotropy in the numerical framework for investigating the membrane anisotropic and viscoelastic effects on the dynamic response of

		the DEMES actuators. <ul style="list-style-type: none"> To set up a dedicated experimental facility to test predictions of the numerical model and designing the futuristic dielectric elastomer minimum energy structures by tailoring the compliant frame geometry.
10.	Job Description	The selected candidate is expected to write in-house FEM codes, set up an experimental facility for the dynamic characterization of DEMES and other tasks for the successful completion of the project.
11.	Maximum Age	Below 35 Years

The candidates possessing the requisite qualification and experience should apply through the ONLINE process up to **07 February 2022**. The candidates are advised to send a soft copy of the application with all relevant documents to recruitment_rnd@iitj.ac.in (*Please mention the advertisement number in the subject line of the email*). *No need to send a hard copy.*

General Instructions to Applicant(s)

1.	The post(s) is purely temporary and contractual for a period of 01 Year, and extension based on satisfactory performance, but co-terminus with the duration of the project
2.	Application which is incomplete, not in prescribed format, without photograph or unsigned will be summarily rejected.
3.	Certificate in support of experience should be in proper format i.e. it should be on the organizations letter head, bear the date of issue, specific period of work, name and designation of the issuing authority along with his signature.
4.	Institute reserves the right to: a. Fix, modify or revise the eligibility conditions, age and selection criteria as per its requirements, at any time. b. Fill up the post, not to fill up the post or cancel the advertisement in whole or partly without assigning any reason. c. Place a reasonable limit on the total number of candidates to be called for the Written Test and/or Skill Test, Interview.
5.	The Institute shall verify the antecedents or documents submitted by a candidate at the time of appointment or during the tenure of the service. In case, it is detected that the documents submitted by the candidates are fake or the candidate has a clandestine antecedents/background and has suppressed the said information, then his/her services shall be terminated.
6.	Higher initial pay may be given to exceptionally qualified/deserving candidate.
7.	No TA/DA shall be paid to the candidates for attending the interview.
8.	No correspondence will be entertained from candidates regarding interview and reasons for not being called for interview.
9.	Canvassing in any form will be a disqualification.
10.	No interim correspondence will be entertained.
11.	No need to send hard copy.

Officer In-charge
Research & Development