



# Indian Institute of Technology Jodhpur

## Office of Research and Development

Advt. No.: IITJ/R&D(Advt.)/2024-25/065

10 December 2024

### **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 same extendable but co-terminus with the duration of the project, on a contractual basis with consolidated pay. The requisite qualification, experience and other details are given below:

1.	Project No.	S/DRDO/NPA/20240144
2.	Project Title	Development and testing of a bioinspired flapping wing model with morphing capability for aerial and aquatic locomotion
3.	Name of the Project Investigator	Dr. Nipun Arora
4.	Duration for initial appointment	01 Year
5.	Name of the Post	Research Assistant
6.	Post	01
7.	Consolidate Pay	Rs. 35,800/-+HRA @18%
8.	Minimum Qualification and Experience	<p><b><u>Eligibility:</u></b> B. Tech/B.E. (Mechanical/Civil/ Aerospace/Engineering Design)/ B. Des / Diploma (Mechanical/Civil/ Aerospace /Engineering Design or related fields) with 2 years' work experience.</p> <p style="text-align: center;">OR</p> <p>ITI (2 years duration) in relevant field with 8 years of relevant work experience.</p> <p><b><u>Desirable Qualification:</u></b> M. Des (Industrial/Mobility &amp; Vehicle/Mechanisms) or other relevant fields with following expertise</p> <ul style="list-style-type: none"><li>• Proficient in design software such as SolidWorks, Creo, CATIA, AutoCAD, FreeCAD or equivalent.</li><li>• Ability to generate 3D models, detailed drawings, and perform simulations.</li><li>• Strong understanding and ability to design kinematics and functional mechanisms.</li><li>• Hands-on experience with assembling components and creating working prototypes.</li><li>• Understanding of manufacturing processes relevant to precision mechanisms.</li></ul>

		The experience requirements can be relaxed for exceptional candidates.
09.	Job Description	<ul style="list-style-type: none"> <li>• Integrate a flapping mechanism with morphing.</li> <li>• Collaborate with other team members to fabricate and test the wing in experimental setups.</li> <li>• Conduct iterative design modifications based on experimental data and CFD simulations.</li> </ul>
10.	Brief description of Project	This study explores bioinspired locomotion for next-generation unmanned vehicles. A morphing wing model will be fabricated and tested for aerodynamic and hydrodynamic performance in both wind and water tunnels. Experiments using force/torque sensors and PIV flow visualization will elucidate vortex dynamics, while CFD simulations and reduced-order models will predict thrust and power to support the experiments. This project requires one Research Assistant who will be responsible for designing the experimental setups and flapping mechanisms.
11.	Maximum Age	35 Years
12.	Age Bar	Age will be calculated on the closing date of the online submission of the application. Relaxation in age for the category candidates only would be admissible as per Central Government Rules. Also kindly enclose the Caste Certificate along with the application.

The candidates possessing the requisite qualification and experience should apply through the **ONLINE process up to 24 December 2024.**

**It is mandatory to send the soft copy of the application with all relevant documents to [recruitment\\_rnd@iitj.ac.in](mailto:recruitment_rnd@iitj.ac.in)** (Please mention the advertisement number in the subject line of the email). **Without documents, your application will not be considered.** There is no need to send the 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.	<p>Institute reserves the right to:</p> <p>a. Fix, modify or revise the eligibility conditions, age and selection criteria as per its requirements, at any time.</p> <p>b. Fill up the post, not to fill up the post or cancel the advertisement in whole or partly without assigning any reason.</p> <p>c. Place a reasonable limit on the total number of candidates to be called for the Written Test and/or</p>

	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