

JRF position under SERB-SRG funded project

Applications are invited for the position of Junior Research Fellow (JRF) in the Department of Mechanical Engineering at BITS Pilani, K. K. Birla Goa Campus, Goa for a SERB-SRG sponsored research project titled "Bio-inspired flow dynamics of tandem flapping foils" (SRG/2022/000419).

Principal Investigator: Dr. Vaibhav Joshi

Broad area of Research: Computational Fluid Dynamics, Fluid-Structure Interaction, Bio-inspired Flapping

Duration of the project: 2 years

Fellowship Amount (Rs.): 31,000 pm + 16% HRA

Last date of Application: 16th November 2022, 23.59 PM

Accommodation: Accommodation will be provided subject to availability and will be governed by the rules and regulations of the institute prevailing at the time of joining of the candidate.

Qualification: First class Post Graduate/ Graduate Degree (M.E./M.Tech./M.S.) in Mechanical Engineering/Computational Mechanics, selected through a process described through any one of the following:-

- 1. Scholars who are selected through National Eligibility Tests: CSIR–UGC NET including lectureship (Assistant Professorship) and GATE.
- 2. The Selection process through National level examinations conducted by central Government departments and their agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, IIT, IISc, IISER etc.

Candidates who have not appeared in the above examinations may be considered for the position.

Required Skills: Fundamental knowledge of fluid mechanics; basic mathematics including calculus, linear algebra and numerical analysis

Desirable Skills: Passion towards problem solving using programming languages MATLAB/C/Fortran; computational fluid dynamics; tools such as Gmsh, OpenFOAM, Tecplot

The project entails studying the hydrodynamic performance of heaving and pitching as well as morphing foils for potential bio-inspired engineering applications. The candidate will be involved in developing numerical algorithms, implementation, analyzing the simulation results and some preliminary experimental work.

How to Apply: Interested candidates may send application and curriculum vitae with details of research experience to the principal investigator (email: <u>vaibhavj@goa.bits-pilani.ac.in</u>) by 16th November 2022, 23.59 PM. Only shortlisted candidates will be contacted via e-mail within 2 weeks of the application deadline for online/Personal interview to be held at BITS Pilani, Goa Campus.

Note: Selected candidate will get a chance to apply for PhD degree at BITS Pilani, K. K. Birla Goa Campus (Rules of PhD program for BITS Pilani are applicable)

