



**Indian Institute of Technology (Indian School of Mines), Dhanbad**  
The Office of Dean, Research & Development

Sanction No and Date: CRG/2023/000389 dated 02.02.2024	IIT (ISM) Project No. SERB(CRG)(414)/2023-2024/1081/CE	Date 05.03.2024
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**JRF position under SERB Sponsored Project**

Applications are invited under the sponsored project. The details of the project are as under:

<b>Position</b>	JUNIOR RESEARCH FELLOW
<b>Number of Position (s)</b>	01 (one)
<b>Title of The Project</b>	<b>Improved Lightweight Design of Variable Stiffness Composite Aircraft Panels Enabled by Tow-Steering and Machine Learning</b>
<b>Principal Investigator</b>	Dr. Tanish Dey, Department of Civil Engg., IIT (ISM) Dhanbad
<b>Tenure of Project</b>	The position is temporary and co-terminus with the project which is sanctioned for a period of <b>Three YEARS</b> .
<b>Job Description (in maximum of 100 words)</b>	The proposed research will develop methods to enable post-buckling, calculate the failure modes activated in the post-buckling regime, and estimate how they affect the collapse of stiffened composite panels. The challenges that will be encountered in terms of optimization will be solved using Bayesian-based Machine Learning (ML) schemes that are able to map the complex design space and find suitable optimum designs. A detailed experimental investigation will be carried out to validate the developed design framework. Analyze data, draft reports and manuscript preparation to help for ensure the timely and successful completion of the project, in consultation with the PI. The selected candidate may be allowed to enroll for Ph.D. program if the required criteria for Ph.D. admission of IIT(ISM) Dhanbad are satisfied.
<b>Essential Qualification</b>	An applicant must have a Master's degree in Civil Engineering or in the relevant subject with first class/division or a minimum of 60% marks/CGPA of 6.0 (on a 10 point scale) with B.Tech. / B.E. in Civil. / Env./Aerospace/Applied Mech or in the relevant field. Qualified GATE/Appropriate National Level Examination.
<b>Desirable Qualification</b>	IIT graduates (Masters and/or Bachelor's degree holders) having a CGPA/OGPA of 8.0. The candidate is expected to be conversant with MATLAB, FEM software (eg: ABAQUS/ANSYS) for structural modelling for laboratory tests.
<b>Age and Relaxation (if any)</b>	The upper age limit is 28 years at the time of appointment (Age relaxation for SC/ST/OBC/PH/Female candidate as per GoI rules)
<b>Fellowship</b>	Fellowship: @ 37,000/- per month for first two years and: @ 42,000/- per month for third year.
<b>Last Date &amp; Time</b>	March 31, 2024 and 6:00 PM
<b>Application Procedure</b>	Interested and eligible candidates are requested to email their CV, mark sheets, certificates, experience certificates in a .zip file to the Principal Investigator (Email: <a href="mailto:tanish@iitism.ac.in">tanish@iitism.ac.in</a> ) before 6 PM on March 31, 2024.
Shortlisted candidates will be informed the date of interview. Mere possession of minimum qualification does not guarantee an invitation to the interview. Candidates will be short listed based on their merit and as per the requirement of the project. No TA/DA will be paid to attend the interview.	

(Signature of PI)

*Tanish Dey*