



## Indian Institute of Technology (ISM) Dhanbad

Office of the Dean (Research & Development)

<b>Sanction No and Date:</b>	<b>IIT (ISM) Project No.</b>	<b>Date</b>
SRG/2023/002723 dated 20.11.2023	DST(SERB)(400)/2023-24/1054/CHEMICAL	24.03.2025

### Project JRF position under DST-SERB Project

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

<b>Position</b>	Junior Research Fellow (JRF)
<b>Number of Position (s)</b>	1 (one)
<b>Title of The Project</b>	Investigation of modal and non-modal instability in fluid-porous double-layer configuration
<b>Principal Investigator</b>	Dr. Sourav Sengupta, Department of Chemical Engineering, IIT (ISM) Dhanbad, Dhanbad – 826004; Email: <a href="mailto:souravsengupta@iitism.ac.in">souravsengupta@iitism.ac.in</a>
<b>Tenure of Project</b>	2 years (appointment of JRF is for 1 year, co-terminous with the project)
<b>Job Description (in maximum of 100 words)</b>	The project is aimed at investigating hydrodynamic stability of fluid-porous configuration, via a combination of analytical, numerical and experimental investigation. The candidate needs to employ the techniques of modal and non-modal analyses to attempt the problem analytically and numerically. Additionally, the job will entail the development of experimental setup and conducting experiments to corroborate findings from analytical and numerical investigation. Based on performance and meeting the eligibility criteria, the candidate may be subsequently allowed to enroll for PhD at IIT (ISM) Dhanbad.
<b>Essential Qualification</b>	ME/MTech in Chemical Engg./Mechanical Engg./Civil Engg./Aerospace Engg./Applied Mathematics/Modelling and Simulation/allied fields, or MSc. in Physics/Mathematics/allied fields. The candidate must be GATE/NET qualified.
<b>Desirable Qualification</b>	Sound knowledge of fluid mechanics and competency in programming (preferably MATLAB) ; aptitude and willingness to conduct fluid flow experiments, with previous relevant experience, if any
<b>Age and Relaxation (if any)</b>	As per the norms of the Govt. of India/DST-SERB for JRF recruitment.
<b>Fellowship</b>	₹ 37000/- per month + HRA (as applicable, in case hostel accommodation is not provided)
<b>Last Date &amp; Time</b>	Interested candidates should email a single PDF [containing (i) CV, (ii) GATE/NET score card, (iii) self-attested copies of all marksheets and certificates starting from 10 <sup>th</sup> class, (iv) proof of work experience (if any)] to PI (both to <a href="mailto:souravsengupta@iitism.ac.in">souravsengupta@iitism.ac.in</a> and <a href="mailto:souravsg18@gmail.com">souravsg18@gmail.com</a> ), on or before 24 April 2025, 6 PM. Candidates should write “ <b>Application for JRF position in DST(SERB)(400)/2023-24/1054/CHEMICAL</b> ” in the subject of email.
Shortlisted candidates will be informed on 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. The interview will occur in video-conferencing mode; a link for the same will be shared with shortlisted candidates in due course.	

*Sourav Sengupta*

(Signature of PI)