



Advertisement for a JRF position

Indian Institute of Technology, Ropar (IIT Ropar)

Department of Chemical Engineering, Rupnagar, Punjab, 140001

Applications are invited for a Junior Research Fellow (JRF) position in the Department of Chemical Engineering, IIT Ropar, under the Anusandhan National Research Foundation (ANRF-ARG) sponsored project titled “**Dynamic Response of Granular Materials Under High-Speed Impact: Theory and Simulation**”. This project aims to understand the origin of drag forces experienced by a high-speed intruder moving through granular media, which can simultaneously exhibit solid, liquid, and gas-like behavior. The work will involve a combination of numerical simulations and theoretical modeling.

Essential qualifications:

1. Master's degree in Chemical/ Mechanical/ Civil/ Aerospace/relevant Engineering area or M.Sc. in Physics/Mathematics with a GATE or CSIR UGC NET qualified score. Candidates must have obtained at least 65% marks (or 6.5 CGPA) .

AND/OR

2. Bachelor's degree in Chemical/ Mechanical/ Civil/ Aerospace/relevant Engineering with a good academic record, a minimum CGPA of 6.5 on a 10.0 point scale (or 65% marks) with a GATE/NET score.

Deserving candidates will be considered for PhD admissions at a later stage if they meet all the institute requirements.

Desired qualifications: Experience in DEM simulation/ continuum mechanics/ Fluid mechanics/ rheology/ Granular matter will be an added advantage.

Duration: The position is for three years in total. However, it will be given initially for one year which can be extended further based on the evaluation of the performance by the principal investigator.

Salary: Rs 37,000 + HRA per month. Suitable accommodation on the campus may be provided based on availability.

The applicant must send the following documents in a single PDF file to **saikat.roy@iitrpr.ac.in (Dr. Saikat Roy)** on/before **31st July, 2026**.

1. A one-page cover letter describing the background and how it will help to pursue this project.
2. Resume with complete qualification and experience details.
3. Soft copy of all degree certificates.
4. Proof of GATE/NET qualification.

The selected candidates will be called for an online interview. Please note that no TA/DA will be provided. For any further information, please contact the PI/Co-PI:

Dr. Saikat Roy (PI), Assistant Professor

Department of Chemical Engineering, IIT Ropar, Email: saikat.roy@iitrpr.ac.in

Dr. Rajagopal Vellingiri (Co-PI), Assistant Professor

Department of Chemical Engineering, IIT Ropar, Email: rajagopalv@iitrpr.ac.in