

Advertisement for the Position of Junior Research Fellow (JRF)

Applications are invited for the Junior Research Fellow (JRF) within a project funded by Anusandhan National Research Foundation (ANRF) at the Department of Chemical Engineering, IIT Hyderabad.

Name of the post	Junior Research Fellow (JRF)
Sponsoring agency	Anusandhan National Research Foundation (ANRF)
Number of vacancies	One (1)
Project title	Self-assembly of colloids in designing light weight solid foams
Job description	This project is on the freezing-induced self-assembly of the shape-anisotropic colloidal particles. The aim is to develop a thorough mapping of how the particle aspect ratio, particle/polymer concentration, freezing rate, and freezing direction can be manipulated in designing lightweight particulate foams. Further developing a correlation of the mechanical and thermal performance of the particulate foams to their microstructural features. The project will involve the synthesis of colloidal building blocks and their assembly. Microstructural characterization using optical microscopy, SEM, X-ray tomography, and image analysis, as well as understanding mechanical and thermal performance using UTM, rheometry, and thermogravimetric test.
Qualifications	Essential: M.Tech/ME degree in Chemical Engineering/Chemical Technology/Biotechnology/Material science & Engineering/ aligned engineering disciplines or MSc in Physics/Physical Chemistry with valid NET or GATE. Candidates with exceptional BTech with valid GATE in above mentioned disciplines are also encouraged to apply. CGPA Requirement: 6.0 (or 60%) and above in all qualifying degrees Desirable: Experience in wet-lab projects specifically synthesis of colloidal particles and handling polymers. Experience in characterization techniques such as optical microscopy, SEM, rheometry.
Age limit	35 years (can be relaxed based on applicant's experience and provisions)
Appointment period	12 Months (extendable based on performance)
Pay	As per Govt. of India and ANRF norms (Rs. 37,000/- + HRA)

Application Process:

Eligible applicants must submit the application by filling the details in the google form:

<https://forms.gle/CJaVhBba7YNR525Z6>

Upload the following documents in a single PDF while filling the application.

- ❖ Cover letter describing the background and how it will help to pursue this project.
- ❖ Latest CV
- ❖ A maximum one page statement of interest

Selection Process:

- **This is a rolling advertisement; the PI will evaluate and shortlist the applications received after every 15 days until suitable candidate is selected.**
- Shortlisted candidates will be informed by email about the online interview date and time.
- Joining will be immediate after selection.

For any queries, please write to Dr. Ranajit Mondal (ranajit@che.iith.ac.in)