

**Advertisement for one (1) JRF position in Environmental Engineering,
Department of Civil Engineering, IIT Hyderabad**

30 June 2026

Applications are invited from motivated candidates with good academic background, relevant research interests, and strong analytical and teamwork skills for the research project titled ‘Sustainable Closed-Loop Sequential Column Systems for Selective Recovery of Rare Earth Elements from Coal Fly Ash Using Novel Functionalized Solid Supported-Ligands’ in a purely time-bound manner undertaken in the Department of Civil Engineering, IIT Hyderabad. Further details are as follows:

Name of the post	Junior Research Fellow (JRF)
Title of the research project	Sustainable Closed-Loop Sequential Column Systems for Selective Recovery of Rare Earth Elements from Coal Fly Ash Using Novel Functionalised Solid Supported-Ligands
Description of the job	The selected candidate will be involved in: <ul style="list-style-type: none"> • Design and operation of batch and columns systems for selective recovery of rare earth elements (REEs) from coal fly ash. • Synthesis, functionalization, and characterization of adsorbent materials. • Laboratory-scale leaching, adsorption, desorption, and separation experiments. • Analysis of aqueous and solid samples using advanced analytical techniques such as ICP-OES/ICP-MS, XRD, SEM-EDS, FTIR, BET, etc. • Process optimization, mass balance calculations, and data interpretation. • Preparation of technical reports, journal publications, conference presentations, and project documentation. • Assisting in project management and laboratory activities.
Keywords	Rare Earth Elements, Coal Fly Ash, Critical Minerals, Hydrometallurgy, Adsorption, Functionalised Ligands, Resource Recovery
Sponsoring agency	Anusandhan National Research Foundation (ANRF)
Appointment period	6 months, extending to 3 years (renewal every 6 months, subject to satisfactory performance and continued funding availability). There is a possibility of enrolling in the PhD program, depending on the candidate's performance and the institute's norms.
Remuneration	Years 1-2: INR 37,000 per month Year 3: INR 42,000 per month
Application deadline	12.07.2026 (5:00 pm)

Essential qualifications	First-class B.Tech./B.E. and M.Tech./M.E./M.S. in Environmental, Chemical, Metallurgical, Materials, Mining, Civil Engineering or allied disciplines; or M.Sc. in relevant disciplines with valid NET/GATE qualification.
Desirable qualifications	Knowledge of hydrometallurgy, adsorption, column studies, rare earth elements, analytical instruments (ICP-OES/MS, XRD, SEM-EDS, FTIR), and scientific writing.
Research opportunity	<ul style="list-style-type: none"> ➤ Work on a nationally and internationally significant research problem in separating REE ➤ Gain expertise in advanced experimentation in Environmental Engineering-extraction and separation of critical metals. ➤ Contribute to high-quality academic publications. ➤ Pursuing a Ph.D. at IIT Hyderabad, subject to the institute norms and performance. ➤ Collaborate with researchers working in Center of Excellence (CoE) on critical minerals at IITH
Age limit	30 years

- Eligible applicants are encouraged to apply via email by **12.07.2026 (5:00 pm)** by sending the **following documents in a single PDF file** to [:praneeth.sai@ce.iith.ac.in](mailto:praneeth.sai@ce.iith.ac.in) with the subject of email as “**Rare-JRF ANRF**”:
1. Latest CV with photograph
 2. Scanned copy of degree certificates and grade sheets or transcripts for both bachelor's and master's
 3. Proof of date of birth
 4. Contact details of two academic/professional referees.
- Candidates will be shortlisted for an interview based on merit and the requirements of the project and will be communicated via email.
 - Shortlisted candidates will be called for an online interview.
 - The selected candidate is expected to join immediately.

For any queries, please contact the PI of the project:

Dr. D.V. Sai Praneeth

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