



Date: 01/04/2025

Advertisement for JRF Position in Anusandhan National Research Foundation Program

Applications are invited from motivated and eligible candidates for a Junior Research Fellowship (JRF) position in the ANRF-IRG research project on **“Tailored Coaxially Electrospun Separator for High Performance Magnesium-Ion Batteries Using Functional Polymers and Nanomaterials.”**

Brief description of the project: This research focuses on developing a tailored coaxially electrospun separator for high-performance magnesium-ion batteries (MIBs) by integrating functional polymers and advanced nanomaterials. The innovative design aims to enhance ionic conductivity, mechanical stability, and electrochemical compatibility with MIB electrolytes. By optimizing fiber morphology and surface chemistry, the separator will improve Mg-ion transport and cycling performance. This work contributes to next-generation energy storage solutions with enhanced safety and efficiency.

Eligibility:

- (I) M. E. or M. Tech. or equivalent degrees in **Mechanical Engineering, Materials Science and Engineering, Nanotechnology or relevant engineering discipline** (with at least 60% marks or first class or equivalent). Candidates should have knowledge in electrospinning, polymer processing, and nanomaterials synthesis, along with electrochemical characterization, and materials analysis techniques relevant to rechargeable batteries.
- (II) **GATE qualifications are mandatory, but a valid GATE is not required.**

OR

- (III) Four-year bachelor's degree OR five-year integrated degree in Mechanical Engineering Materials Science and Engineering (with first division as defined by the awarding Institute/ University) AND valid GATE score. **NOTE: Candidates without a valid GATE score in this category can also appear for JRF interview, but registration for Ph.D. program will only be possible after they qualify for GATE.**

Duration: The appointment will be for 1 year initially, and based on the performance of the candidate, tenure can be extended up to three years.

Admission to PhD Program: Candidates may also be considered for admission to the Ph.D. program under FA category depending upon the eligibility criteria given by the Department of Mechanical Engineering, IIT Indore.

Stipend: (i) Rs 37,000/- per month (for first two years) + HRA as per funding agency norms.
(ii) Rs 42,000/- per month (for third year) + HRA as per funding agency norms.

How to Apply:

- ☐ Interested candidates are requested to apply for the position through Google form: <https://forms.gle/1hd3uXN31Kop2vfu5>
- ☐ The last date for submitting the application form is **April 15, 2025**.
- ☐ The CV should include details of academic grades starting from 10th standard onwards with details of the year of passing, institute/university/college, etc., and work experience and nature of work if applicable.
- ☐ Incomplete applications will be rejected.
- ☐ For any technical problem with submitting the application please write to **janakiramans@iiti.ac.in**

Selection process (online interview): Only shortlisted candidates will be called for an interview. Selected candidates will be intimated by email for an interview. No TA/DA will be paid for appearing in the interview. Interviews are likely to be conducted around **April 17, 2025**.