

भारतीय प्रौद्योगिकी संस्थान इंदौर

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Dated: 26-03-2022

Advertisement for a <u>JRF</u> Position in a SERB project

Applications are invited from motivated and eligible candidates for a **Junior Research Fellow (JRF)** position in the research project "*Polymer-Ceramic Composite Electrolytes for Rechargeable Lithium Metal Batteries*" funded by Science and Engineering Research Board.

The project involves the fabrication and characterization of fast lithium-ion conducting and mechanically robust solid electrolytes to be used in next-generation rechargeable lithium batteries. The focus of this project would be on ceramic-polymer composite materials for the potential application in all-solid-state lithium batteries as electrolytes.

Eligibility: MSc/ MTech in Physics/ Chemistry/ Materials Science/ Nanotechnology/ Ceramics Engineering. Candidates who have qualified **NET/** *GATE* will be given preference, and candidates with expertise in any of the followings are strongly encouraged to apply:

- Synthesis of inorganic (oxides, phosphates, or sulfides) materials.
- Experience in crystal structure and microstructure determination using powder XRD, SEM, TEM, Raman spectroscopy, etc.
- Familiarity with impedance spectroscopy.
- Basic electrochemistry characterization.

Stipend:

Junior Research Fellow (JRF) will be paid a consolidated salary of Rs. 31,000/- per month for the first 2 years and Rs. 35,000/- per month for the 3rd year as per the SERB norms.

Conditions:

(i) House Rent Allowance (HRA): JRF may be provided accommodation based on availability, and those residing in accommodation provided by the institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed to JRF as per Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic for calculating the HRA.

(ii) The appointment is initially for one year and could be extended for two additional years on mutual consent. The candidate may be absorbed for the regular Ph.D. position once they qualify the interview/screening by the MEMS department admission committee.

(iii) Interested candidates are requested to submit a detailed CV to **Dr. Sunil Kumar** (Associate Professor, Metallurgy Engineering and Materials Science, IIT Indore) via e-mail: **sunil@iiti.ac.in** by **17th April 2022**. Information relevant to NET/GATE qualification, including the year of passing and validity, discipline, score, marks, all India Rank, and the number of candidates who appeared, must be mentioned in the CV. Please use *"Application for JRF position under SERB project"* as the subject of your email.

(iv) Only shortlisted candidates will be intimated by email for an online interview.