



Birla Institute of Technology & Science, Pilani

Pilani Campus

Grants Consultancy and Industrial Research (GCIR)

CALL FOR RESEARCH STAFF (JRF) POSITION

Date: 1st April, 2024

About: Applications are invited from interested and motivated candidates for the post of Junior Research Fellow (JRF) in a time-bound research project sponsored by the **Science & Engineering Research Board (Project No. CRG/2023/002411)** for a temporary period purely on contractual basis as per the following details:

Position:	Junior Research Fellow (JRF)
Number of Vacancy:	01
Project Title:	<i>All-solid-state supercapacitors using Li⁺ ion garnet-polymer hybrid composites</i>
Funding Agency:	SCIENCE & ENGINEERING RESEARCH BOARD (SERB)
Principal Investigator (PI):	Dr. Anshuman Dalvi, Professor, Department of Physics
Project Tenure:	3 Years (2 Years JRF + 1 Year SRF after evaluation)
Job Description:	The project aims to develop all-solid-state supercapacitors using Li ⁺ ion conducting garnet-polymer hybrid membranes as electrolytes, eliminating liquid electrolytes. Garnet-type Li ⁺ ion conductors are considered the most promising solid electrolyte for all-solid-state batteries, and this work aims to incorporate them into all-solid-state supercapacitors. The project involves the synthesis of various compositions of garnet polymer hybrids and their thorough characterization. Finally, 2032 and laminated cells will be fabricated and tested under various temperature and load conditions to optimize their performance. The project requires a good knowledge of solid state physics, materials science, materials synthesis, and characterization. Some experience in electrochemical energy storage, energy materials, and characterization is desirable.
Qualification:	MSc in Physics with at least 60% marks or equivalent. Desirable: NET/GATE qualified
Upper Age Limit:	Age not exceeding 35 years as of the date of the interview. Age relaxation is allowed up to 5 years for SC/ST/PH/OBC/WOMEN candidates.
Fellowship:	37,000/- per month for NET/GATE qualified candidates . 25,000 per month for non- NET/GATE qualified candidates
Registration for PhD.:	Selected candidates may be permitted to register for the PhD program of BITS Pilani subject to fulfilling the requirements of the PhD qualification process as per the institute norms.

How to Apply:

Please email your CV, cover letter, and passport size photo in alignment with the role requirements to adalvi@pilani.bits-pilani.ac.in

Shortlisted candidates will be informed of the interview which will be conducted through online mode. Mere possession of minimum qualification does not guarantee an invitation to the interview. Candidates will be shortlisted based on their merit and as per the requirements of the project.

Please note that only qualified and suitable candidates will be called for an interview.

Application Deadline: 15th April 2024

