

## CALL FOR RESEARCH STAFF (JRF) POSITION (Date: 08 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/2023/006155) for a temporary period purely on contractual basis as per the following details:

Position:	Junior Research Fellow (JRF)
Number of Vacancy:	01
Project Title:	Implications of Inelastic Scattering and Spin Dephasing Mechanisms in Graphene Nano Ribbon- Based Spintronics
Funding Agency:	SCIENCE & ENGINEERING RESEARCH BOARD (SERB)
Investigators:	Prof. Niladri Sarkar, Department of Physics (email: niladri@pilani.bits-pilani.ac.in) (P.I) Prof. Navneet Gupta, Department of Electrical & Electronics Engineering ( <u>ngupta@pilani.bits-pilani.ac.in</u> ) (Co-P.I)
<b>Project Tenure:</b>	3 Years (2 Years JRF + 1 Year SRF after evaluation)
Job Description:	The project aims to investigate the inelastic scattering and dephasing mechanisms in graphene nanoribbon-based spintronic devices. Due to the scaling down of the device channel lengths to the nanometer regime, issues like short channel effects, limitations in the gate dielectric thickness, and several quantum effects begin to dominate that may compromise the device performance. Because of such challenging issues, a new class of devices based on spintronic transport is realized in the present context which is not constrained by the scaling down issues of electronics-based devices.
Qualification:	MSc in Physics with atleast 60% marks or equivalent. <b>Desirable: NET/GATE qualified</b>
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 <b>NET/GATE qualified candidates</b> . 25,000 per month for <b>non- NET/GATE qualified candidates</b>
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 apply Online with CV, cover letter & your passport size photo (showing alignment and justification with the roles/responsibilities/requirements to: niladri@pilani.bits-pilani.ac.in) Shortlisted candidates will be informed of the interview which will be conducted through online mode. 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: 20 April 2024** 

