



राष्ट्रीय प्रौद्योगिकी संस्थान, दुर्गापुर  
**National Institute of Technology Durgapur**  
Mahatma Gandhi Avenue, Durgapur-713209  
West Bengal, INDIA, [www.nitdgp.ac.in](http://www.nitdgp.ac.in) \

(An Autonomous Institution of the Govt. of India under MHRD)

Advt. No.: NITD/PH/AKC/2024/JRF-RA

Date: 30/05/2024

**Advertisement for the following two contractual posts at NIT Durgapur**

Applications are invited from eligible Indian citizens for **one Junior Research Fellow (JRF)** and **one Research Associate II** in the SERB (DST) funded Project (IPA/2021/000048). The candidates will work primarily at NIT Durgapur as members of a collaborative team from departments of Physics, Chemical Engg. & CoE in Advanced Materials. The project is a multi-institute multi-investigator and multi-disciplinary project in close collaboration with IIT Bombay (Energy Science & Engg.) and VNIT Nagpur (Electrical Engg.) and is funded under the special call of SERB for IRHPA (Intensification of Research in High Priority Areas). The main goal of this project is to develop Sodium ion hybrid capacitors / batteries with improved electrochemical performance (energy density, cycling stability, rate capability, etc.) for eventual integration into a smart off-grid renewable and sustainable energy storage management system.

Sl. No.	Name of the Post, salary, & duration	Required Qualifications
1	<b>Junior Research Fellow(JRF)</b> <b>No. of post: 01</b> <b>Fellowship:</b> ₹ 37,000/- per month for JRF <b>Duration:</b> Three years subject to yearly renewal of contract upon satisfactory performance. The selected candidate can register for a PhD program at NIT Durgapur as per institute norms.	<b>M.E./M. Tech</b> in Chemical Engg./ Chemical Technology/ Nanotechnology/Materials Science & Engg. or related discipline with minimum 6.5 CGPA or 60% marks from any recognized Institute/ University. <b>OR</b> <b>MSc.</b> in Physics/ Chemistry/Materials Science/ Nanotechnology with minimum 6.5 CGPA or 60% marks from any recognized Institute/University with valid NET/GATE score. <b>Prior experience in electrochemistry/supercapacitor/ battery research would be an advantage.</b>
2	<b>Research Associate II (RA II):</b> <b>No. of post: 01</b> <b>Fellowship:</b> will be ₹ 61,000/- per month + HRA (as per institute norms) <b>Duration:</b> Initially for one year and extendable by a further two years subject to satisfactory performance and fund availability.	<b>PhD</b> in Electrochemistry/Chemistry/Chemical Engg./ Energy Science & Engg./Physics/Materials science or any relevant discipline with throughout excellent academic background. Post-doctoral experience (of 1-2 years) in the relevant topic of Li-ion battery or similar chemistries is desirable. Expertise in nanomaterial synthesis, their characterization and analysis using techniques such as SEM, TEM, XRD, UV-DRS, AFM, XPS, BET, etc. in addition to in-depth knowledge of electrochemical methods such as cyclic voltammetry, ac impedance spectroscopy and galvanostatic cycling. Excellent written communication skill demonstrated through high quality publication in the relevant topic, preferably as the first author. Excellent inter-personal skill to cope up with the demand to work in a multi-institute project which may require travelling to partnering institutes and to work as a member of different multidisciplinary teams. RA-II is also expected to perform other academic duties beyond this research project as assigned by the PI/department.



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**How to Apply:**

The eligible and interested candidates are encouraged to send the following documents as a single pdf file via email to the PI as undersigned. Further, the subject line of the email should be “**Application for Junior Research Fellow**” or “**Application for Research Associate II**” as applicable to the candidate.

1. A cover letter explaining why you are fit for this post
2. Your up to date CV mentioning relevant research experience (if any) and names and contact details of two academic referees
3. First pages of your journal publications (if any) and a brief write up describing what was your contribution to each of your publications.

**Mode of Selection:**

Based on the applications received, a short-list of candidates will be prepared to be called for an online interview. The shortlisted candidates will be notified through email (as mentioned in the applicant’s CV).

**Important Dates:**

**Publication of the advertisement: May 30, 2024**

**Deadline for submission of application: June 21, 2024**

**Tentative date of interview: June 24, 2024**

**Tentative start date: July 1, 2024**

**Terms and Conditions:**

1. The above position is purely temporary and is for the duration of the project only.
2. Applications reaching after specified time will not ordinarily be entertained.
3. Canvassing in any form will disqualify the candidature.
4. The selected candidate is expected to join immediately after recruitment.
5. The selected candidate may have to work outside the normal working hours and normal working days without additional incentives.
6. Selected candidate will have to produce a Govt. issued ID in original, the original mark-sheets, and certificates etc. at the time of joining failing which the candidature will be cancelled.
7. Other terms and conditions will be as per those of DST and NIT Durgapur.

**Dr. Amit K. Chakraborty.**  
**Professor, Department of Physics &**  
**Professor-in-Charge,**  
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