

# Malaviya National Institute of Technology Jaipur

## Department of Physics

### Advertisement for the post of 'Project Assistant' in a SERB-funded Research Project

Applications are invited from Indian nationals for the contractual position of '**Project Assistant**' as per the details given below.

- 1. Title of the Project:** Development of High-performance Energy Storage Devices with Earth Abundant Materials
- 2. Principal Investigator (PI):** Dr. Debasish Sarkar, Department of Physics, Malaviya National Institute of Technology Jaipur.
- 3. Funding agency:** Science and Engineering Research Board (SERB), Government of India.
- 4. Project position(s) and number:** Project Assistant (One only)
- 5. Qualifications:** M. Sc. in Physics or in relevant disciplines with minimum 60 % marks or CGPA 6.75 (on 10-point scale).
- 6. Fellowship:** 20,000/- (consolidated) per month
- 7. Duration:** One year (likely to be extended further as per project tenure, subject to annual performance review)
- 8. Job description:** Experimental research work, data analysis & reporting. Candidates having hands-on experience in nanomaterial synthesis, materials science, electrochemistry, and electrochemical techniques, will be given preference.
- 9. Project description:**

Supercapacitors (SCs) have emerged as a new class of storage devices that can be charged or discharged quickly with higher power densities than storage batteries. However, their energy densities are still limited and there is a definite need to increase it to cope with the global energy demand. Indeed, energy density of supercapacitors can be enhanced by increasing their capacitance as well as operating potential window. Enhancing capacitance of electrode materials still remains a challenge to the global research community. There is increasing evidence that electrochemical energy storage devices stand to gain from the rapidly strengthening nexus between electrochemistry and nanoscale science. Accordingly, our aim is to realize some novel nanostructures of various metal oxides, carbides, phosphides and other transition-metal-dichalcogenides derived from metal-organic-frameworks (MOFs) and to investigate their electrochemical properties for their usage as high-performance electrodes in next-generation energy storage devices, including batteries and supercapacitors.

Interested candidates may submit their application online by clicking at the "**Apply here**" link on or before **06.07.2020**. Candidates are required to upload detailed CV (including Name/Date of Birth/Category/Educational Qualifications/Master's project/Work experience/Publication details (if any)/communication address with valid email id and mobile no. etc.). Copies of all the Certificates/Marksheets must be uploaded in a single pdf file named after the candidate.

**[Apply here!](#)** (On or before 06.07.2020)

**Candidates may also note the following:**

- a) Appointment is purely temporary and will terminate automatically without any notice or compensation on termination of the research scheme and the research student shall have no claim of appointment/absorption in funding agency or in MNIT Jaipur.
- b) MNIT Jaipur reserves the right to fix suitable criteria for short-listing of eligible candidates satisfying advertised qualification and requirements of the project post.
- c) The committee also reserves right for not selecting any candidate/offering lower post in case candidates are not found suitable for the post advertised.
- d) Only shortlisted candidates will be informed for the interview by e-mail/Mobile and no separate interview letter will be issued for the same.
- e) Candidates should appear for the interview at their own cost along with their original certificates. No TA/DA is admissible for attending the interview.
- f) The selected candidates can opt for regular PhD program offered by MNIT provided they satisfy eligibility criteria.

For any further information, the applicants may contact the PI by email.

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