

DEPARTMENT OF ELECTRICAL ENGINEERING VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY

South Ambazari Road, Nagpur - 440 010, Maharashtra

16th Jan 2023

Call for the position of <u>Junior Research Fellows</u> for the DST-SERB Sponsored Research Projects

Applications are invited from motivated and eligible candidates for the position of Junior Research Fellow (JRF) for the below mentioned Department of Science and Technology (DST-SERB) sponsored projects.

Project 1:

Title: DST-SERB IRHPA project on "Sustainable Technology for Smart Off-Grid Renewable Energy Transformation and Electrochemical Storage"

Number of Positions: One

Job Profile: To design, develop and deploy the ac/dc microgrid with PV and Storage support based on Smart Solid State Transformer components. This project needs work to be completed in the area of power electronic converters and their control with PV and storage support.

Duration: 3 Years.

Project 2:

Title: India-European Union Horizon 2020 Consortium Project on "Development of 25 kW Smart Solid-State Transformer based EV Charger"

Number of Positions: Two

Job Profile: To design, develop and deploy the 25 kW Multiport EV Charger with PV and Storage support based on Smart Solid State Transformer components. This project needs work to be completed in the area of power electronic converters, high frequency magnetics and their control.

Duration: 2 Years

Essential Qualifications:

- 1. M. Tech/M. E. in Electrical Engineering Department with specialization in Power Electronics/Electrical Drives/Power System/Energy System/Control System or equivalent.
- 2. Candidate should have qualified GATE in the past.

Desirable Qualifications:

- 1. Experimental knowledge in the hardware/control design of power electronic converters.
- 2. First division in UG and PG will be given preference.
- 3. Proficient in MATLAB, PSIM, PCB Design Software and Microcontroller/Digital Signal Controller.
- 4. Good analytical ability and competent in report writing,

Fellowship: Rs. 31,000 p.m. (Consolidated)

Accommodation: Suitable accommodation will be provided in the institute hostel on payment basis.

Duration:

Initially, appointment will be made for six months, which can be extended later for every six months till the completion of project subject to approval of Director, VNIT. The extension shall be solely based on satisfactory performance.

How to apply:

Interested candidates are required to submit duly filled and signed application form in proper format (available online on institute website), detailed Curriculum Vitae, proof of educational qualification, publications, GATE score, work experience, two Reference Letters, one page details on the skills and achievements and any other relevant document.

Selection Procedure: Shortlisted candidates have to attend the Written Test and Interview on the date to be communicated later.

Note: No TA/DA will be paid to appear for written test/interview. Candidate selected for this position will have the opportunity to register for regular PhD program provided they satisfy the eligibility criteria for PhD program. Decision of Director VNIT Nagpur will be the final in all respect.

Last Date to submit the application by post and e-mail: 05 Feb 2023

Correspondence address (Principal Investigator):

Dr. Pradyumn Chaturvedi, Associate Professor, Department of Electrical Engineering, VNIT Nagpur, South Ambazari Road, Nagpur – 440010, M.S., India Phone: +91 9826585016 (Mob), +91 712 2801339 (Off) e-mail: pradyumn.c@eee.vnit.ac.in

DIRECTOR (VNIT, NAGPUR)