

Postdoctoral Fellow Position Announcement @IITGN

Applications are invited from bright, motivated and qualified candidates for the project entitled “Smart Power Electronics for Renewable Energy Integration & Transportation Electrification”. One position is advertised in this cycle.

Name of the Posts: Post-doctoral Fellow

Duration: Six Months (extendable to 1 year or more based on performance)

Remuneration: INR 72000-84000 per month (as per experience).

Qualification: Ph.D. in Electrical Engineering, with good scientific publications and power electronics hardware experience. Candidates who have submitted their thesis may also apply. The candidate should have a good academic record throughout and the percentage/grade points with respect to the academic qualifications will be a minimum of 60% or equivalent in Graduation and above and 55% or equivalent grade in 10th and 12th. Experience in power converters and drives, design and control using FPGA/DSP, know-how of power engineering simulations and modelling along with power hardware experience. Experience in power electronics with wide-band gap semiconductor devices is preferred. Basic knowledge of machine learning will be good.

Job description: The selected candidates will work on design and development of compact, lightweight power electronic conversion system for fuel cell, solar photovoltaic and battery interface in electric vehicle application. The project will involve design and development of a power electronics converter that will control the output power of the source along with the EV motor to provide required range-speed performance. This project will also interface energy storage with primary source and motors in a bidirectional power exchange by ensuring motoring and regenerative braking operation. Use of data-driven control algorithms will be central to the problem to ensure high performance, efficiency and reliability of the system.

Application Procedure: Interested researchers should send the following documents via google form at <https://forms.gle/Gc2EHy1AaRmfUe7f6>

1. CV containing all qualifications, research experience, research skills, list of publications, and contact details.
2. Transcripts of course work in undergraduate, post-graduate, and Ph.D degrees.
3. A statement of purpose (1-page) showing summary of previous research experience and motivation to apply for the stated project.
4. Names and contact details of 2 referees.

Deadline for submission of application is **20th March 2025**, or until the position is filled. The selection will be based on the online/offline interview and the shortlisted candidates will be intimated regarding the date and time of the interview via email.

For any queries, contact Dr. Pallavi Bharadwaj via email (pallavib@iitgn.ac.in).