Date:13.03.2020



Adv. No.:NITMGH/ES/CDAC/MEITY/EE/84/2019-20/2385

#### Advertisement for Junior Research Fellow (JRF) Position

Applications are invited from highly motivated and eligible candidates for 1 (one) position of JRF in following Meity, Govt. of India funded sponsored research project:

Project Title: "Design & Development of High frequency Multilevel Resonant Inverter based New Generation Induction Heated Autoclave System for Sterilization of Surgical Instruments".

Funding Agency: Ministry of Electronics & Information Technology (MeitY), Government of India.

Name of the Project Investigator (PI): Dr. Atanu Banerjee.

**Designation & Department:** Associate Professor, Electrical Engineering.

**Duration of the project:** 2 Years.

### **Eligibility Criterion:**

#### Essential Qualification:

First class M. Tech. or M.E. degree in Electrical Engineering / Electrical and Electronics Engineering with specialization in Power & Energy/Power Electronics and Drives/ Power System or any other equivalent specialization. Candidates who are in final semester of M-tech may also apply but if selected their admission will be subjected to the submission of final certificate. GATE qualified candidates will be preferred.

#### Age limit:

Must not be over 28 years at the time interview (relaxation as per the norms/orders of Government of India).

## Desirable Qualification& Experience:

It is highly desirable that the candidates have research experience in: modelling, design and control of Power Electronic Converters (mainly dc-dc and dc-ac converters) and hands on experience in developing and working on hardware / laboratory prototype of the converters. Knowledge of simulation soft-wares like MATLAB (programming/SIMULINK), PSPICE and/or PSIM is also highly desirable. Candidates must be well conversant to programming with different digital controllers like FPGA/Microcontroller/DSP.

#### Job Profile:

The responsibility of the JRF will be to explore the opportunities and challenges of integrating multiple renewable energy sources and energy storage devices for the formation of hybrid system. The candidates will have to work on hardware/laboratory prototype of the advanced power converters. At the same it is required for them to design a smart & intelligent digital controller for successful integration & monitoring of the developed hybrid energy system.

#### **Duration of Appointment:**

Initially the appointment will be made for one year with can be extended up-to 2 (two) years purely based on the performance. The position is co-terminus with the project.

#### Fellowship:



A consolidated monthly salary/fellowship of Rs.31,000/- (rupees thirty-one thousand only) will be paid during the tenure of the project. Hostel accommodation will be provided. Medical facilities are available with institute doctor and two hospitals.

### Important Instructions:

- 1. Candidate possessing the requisite qualification and experience should apply, in the attached format within one month from the date of advertisement. Last date for submission of duly filled up application form is 13.04.2020.
- 2. PDF copy of the duly filled up application form should be sent to Dr. Atanu Banerjee (PI) by e-mail to <a href="mailto:atanu\_banerjee@nitm.ac.in">atanu\_banerjee@nitm.ac.in</a> with cc to <a href="mailto:atanubandyopadhyay2006@gmail.com">atanubandyopadhyay2006@gmail.com</a> and "Application for JRF in the Department of EE" to be written in the subject line. Duly signed hard copy of application form along with the self-attested copies of age-proof, mark sheets and related testimonials should be sent to the address mentioned at the end of this advertisement. Envelope contains the application form & others should be super scribed as "Application for JRF in the Department of EE".
- 3. The short-listed candidates, called for interview, will be intimated only through emails. Candidates are advised to check their email regularly. No TA/DA shall be paid to candidates for attending the Interview and/or joining the position.
- 4. Original documents of age proof/certificates/degrees/mark-sheets and other testimonials must be presented at the time of interview for verification.
- 5. The appointment is for time bound project and the candidate is required to work dedicatedly for the successful completion of the project. Selected candidate has to join immediately and may enrol for Ph.D as per rules of NIT Meghalaya.
- 6. Incomplete application forms and forms received after due date will be summarily rejected. Mere possession of minimum qualification does not guarantee an invitation for the interview. The authority reserves the right of accepting/rejecting any or all applications without assigning any reason thereof.
- 7. All the Terms and Conditions for this recruitment will be as per guidelines of Science and Engineering Research Board, Government of India.

S/d

Dr. Atanu Banerjee Project Investigator & Associate Professor Department of Electrical Engineering National Institute of Technology Meghalaya Bijni Complex, Laitumkhrah Shillong-793003

# Copy to:-

- 1. Director's office for kind information to Director.
- 2. Registrar for kind information
- 3. Dean (R&C) for kind information
- 4. CC Head, with a request to arrange for displaying on institute website.
- 5. Office Copy/Project File.