Applications from Indian nationals are invited for Project Appointment under the following project. Appointment shall be on contractual basis with consolidated pay, renewable yearly or up to the duration of the project, whichever is earlier.

Objectives of the project: Design and product level development of Solar PV and Battery Storage based AC/DC hybrid Multiport Converter (MPC).

<table>
<thead>
<tr>
<th>Title of the Project</th>
<th>Sustainable Energy system for Achieving Novel Carbon neutral Energy communities (SUSTENANCE) (RP04137G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Agency</td>
<td>Department of Science and Technology (DST)</td>
</tr>
<tr>
<td>Name of the Project</td>
<td>Prof. Subhendu Dutta [email id: <a href="mailto:subhendu@dice.iitd.ac.in">subhendu@dice.iitd.ac.in</a>]</td>
</tr>
<tr>
<td>Investigator</td>
<td>Department of Energy Science and Engineering</td>
</tr>
<tr>
<td>Duration of the Project</td>
<td>Upto 31/12/2024</td>
</tr>
</tbody>
</table>

**Post(s)** | **Consolidated Pay-slab / Fellowship** | **Qualifications** |
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<tbody>
<tr>
<td>Jr. Research Fellow (1)</td>
<td>Rs. 31,000/-p.m. plus HRA @ 24%</td>
<td>(i) 1st class or equivalent in M.Tech/ME/MS(R) in Electrical Engineering with a Specialization in Power Electronics/Electric Drives/ Power Electronics and Drives/Electrical Machines/ Power Electronics and Power System + 1st class in B.Tech in Electrical Engineering + post-graduation done through valid GATE score in Electrical Engineering, OR (2) 1st class or equivalent in B.Tech in Electrical Engineering + Valid GATE Score in Electrical Engineering. *The requirement of NET/GATE examination for the selection to the post of JRF/SRF may be relaxed for the candidates who have graduated from Centrally Funded Technical Institutes (CFTIs) with a CGPA of more than 8.00 (80% aggregate marks).</td>
</tr>
</tbody>
</table>

**Type of work to be performed as a project staff:** (i) Devising suitable power circuit and control strategies for multiport converter, (ii) Simulation of power electronic circuit, (iii) Experimental and product level development of power electronic circuit, (iv) Digital implementation of control strategy through DSP, (v) Designing of PCB for the MPC, (vi) Auxiliary circuit design for the MPC, (vii) Purchase of various equipments, consumable, etc and lab development activities with PI, (viii) Preparation of project related documents, (ix) Other work as instructed by the PI.

**Additional quality required:** (i) Simulation software known: MATLAB/Simulink and/or PSCad, (ii) Interest/Knowledge in Experimental Prototype/Product level development of Power Electronic Circuits.

**Subjects to study for this selection procedure:** (i) Basic Electrical Engineering, (ii) Electrical Machine, (iii) Power electronics, (iv) Electric Drives, (v) Control System.

The candidates who are interested to apply for the above post should download Form No. IRD/REC-4 from the IRD Website (http://ird.iitd.ac.in/rec) of IIT Delhi and submit the duly filled form with complete information regarding educational qualifications indicating percentage of marks/division, details of work experience etc. by e-mail with advertisement No. on the subject line to Prof. Subhendu Dutta at email id: subhendu@dice.iitd.ac.in. IIT Delhi reserves the right to fix higher criteria for short-listing of eligible candidates from those satisfying advertised qualification and requirement of the project post and their name will be displayed on web link (http://ird.iitd.ac.in/shortlisted) alongside the online interview details. Only short-listed candidates will be informed for online interview. In case any clarification is required on eligibility regarding the above post, the candidate may contact Prof. Subhendu Dutta at email id: subhendu@dice.iitd.ac.in. *Your candidature will be rejected if you furnish any false information during the recruitment process.*

What I am looking for in a candidate: Highly motivated, dedicated to his/her work and hard working. He/she should have a good understanding of the subjects which are mentioned below. Also, he/she should have done significant work in his/her MTech/BTech project work. If he/she has developed any kind of experimental prototype during his/her project work, and has a good understanding on power electronic circuit design, it will give him/her an added advantage. A candidate should be passionate enough to develop experimental/product level power electronic circuits.

Contd. ...
Accommodation: No hostel accommodation will be provided. The selected candidate should arrange his/her accommodation outside the IIT Delhi campus. NO WORK FROM HOME until and unless it is instructed by the PI. Covid appropriate behavior/protocals as instructed by IIT Delhi should be followed strictly. Once selected, the candidate should move to Delhi and start coming to the lab as early as possible.

5% relaxation of marks may be granted to the SC/ST Candidates. In case of selection of a retired/superannuated government employee, his/her salary will be fixed as per prevailing IRD norms. The last date for submitting the completed applications by e-mail is 15/04/2022 by 5.00 p.m Mode of examination: Online through MS Team/Google Meet. Examination date: Any date between 22nd -30th April 2022.

It is requested that the contents of the Above Advt. be brought to the notice of the staff working in your Deptt./Centre/Unit
To put advertisement at IITD website.

वितरण
- Head of the Deptt./Centres/Units
- Webmaster, IRD
- Notice Boards
- Advertisement file
- Prof. Subhendu Dutta, PI, Department of Energy Science and Engineering
- Copy to Chairperson, DRC/CRC
- Dr. Harshita Bhatnagar, RD Coordinator, (R&D) Wing