

## NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA – 769 008(ODISHA) SPONSORED RESEARCH, INDUSTRIAL CONSULTANCY & CONTINUING EDUCATION

Advt. No.: NITR/SR/EE-010/2019/L/404

Date: 22.08.2019

Applications are invited on prescribed format for the following assignment in a purely time bound research project undertaken in the **Department of Electrical Engineering** of the Institute.

1.	Name of the Temporary Post	Research Associate – 1 No.
2.	Name of the Research Project	Design, development and prototyping of state of the art Hybrid Energy Storage System (HESS) based high power high speed Electric Vehicle (EV) drive train for a Multi Utility Vehicle (MUV)
3.	Name of the Sponsoring Agency	SERB-DST (IMPRINT 2)
4	Tenure of the Project	03 Years
5	Tenure of the Assignment	03 years or Completion of Project whichever is earlier.
6	Job Description	<ul> <li>Job Description: <ul> <li>i) Design and development of high power HESS</li> <li>converters design and also Energy</li> <li>Management Algorithm (EMA)</li> <li>ii) Design and development of auxiliary power</li> <li>modules for EV</li> <li>iii) Assist the PI/Co-PIs in preparation of reports</li> <li>related to the research work</li> <li>iv) Other works related to the project</li> </ul> </li> </ul>
7.	Consolidated monthly compensation / Fellowship	Rs. 36,000/- per month for the first year, and Rs. 38,000/- per month in the second year and Rs 40,000/- per month for the 3 <sup>rd</sup> year (may be enhanced as per the recent DST notification).
8.	Essential Qualifications and experience	The applicants should hold a PhD degree in Electrical Engineering or having 3 years of research, teaching and design and development experience after Mtech/ME (Power Electronics/Drives/Control System/Industrial Electronics related specialization) with at least one paper in Science Citation Indexed (SCI) Journal. Those who have already submitted the Ph.D. thesis is also eligible to apply ( <i>attach proof of submission of Ph.D. thesis</i> ).
9.	Desirable Qualifications/ Experiences	Experience in designing the DC/DC converter porotype, Writing control algorithms in different digital platforms, Knowledge about different EV simulation platforms.
10.	Accommodation	Bachelor accommodation in the Institute may be provided subject to availability.

For technical information on the project, the candidate may contact the Principal Investigator at the following address with an updated Curriculum Vitae:

Name : Prof. Susovan Samanta

Address : Department of Electrical Engineering, NIT Rourkela, Odisha 769 008.

Telephone No : 0661-246-2420, 94391 04535 E-mail : <u>samantas@nitrkl.ac.in</u>

Eligible persons may apply in the prescribed format (available in the Institute Website) affixed with color photographs to be submitted in duplicate along with photo copies of relevant certificates, grade/ mark sheets, publications etc., to Asst. Registrar, SRICCE, National Institute of Technology, Rourkela–769 008 on or before 10<sup>th</sup> September, 2019. The cover should be super- scribed clearly the post applied for & Name of the Project.

Mere possession of minimum qualification does not guarantee invitation to the interview. Candidates will be short listed based on merit and need of the project.

> Sd/-Asst. Registrar (SRICCE)

Copy to:

1) All Heads of the Departments, NIT, Rourkela for publication on Departmental Notice Boards.

- 2) Prof. S. Samanta, PI with a request to give wide publicity to advertisement.
- 3) Head of the Department, EE.
- 4) Project file.