

Publish date: March, 8<sup>th</sup> 2024 Deadline for application: April 2024 Ref. 24/037 Project: SCAPE Area: EiEP Group: Power Systems Group leader: Jose Luis Domínguez-García PI: Àlber Filbà

# **'R2 – PostDoc Researcher in the field of Power Electronics'**

## Description:

The Power Systems Group announces the opening of a position as PostDoc Researcher to work on the SCAPE project funded under the HORIZON EUROPE programme, as well as on similar technical research projects in the fields of Power Electronics. The tasks to be carried out will be focused on designing advanced power converter topologies and control schemes, together with the development of advanced electro-thermal models for the implementation of power converter digital twins. Additionally, experimental activities with power converters are expected, including the design and implementation of experimental setups within IREC's lab facilities.

## Qualifications and experience required:

Essential:

- PhD in Electronic Engineering, Electrical Engineering, Telecommunications Engineering, Automatic Control, or similar, or a Master (or equivalent) in the same disciplines and more than 5 years of experience in research related to Power Electronics..
- Experience on design, modelling, and operation of power electronics converters.
- Experience with control boards design and programming.
- Experience in analog and digital electronic systems design, simulation, and testing.
- Hands-on experience with power electronics is a must.

## Preferred:

- PhD or more than 5 years of experience in research related to Power Electronics.
- Knowledge on multilevel power converters topologies and operation.
- Experience in communications and automation systems.
- Experience in supervising, guiding and/or training people.
- Experience in competitive project proposal preparation.
- Experience on writing papers for technical journals and conferences.

Personal skills:



- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities

### **Required documents:**

Applicants must submit the following documents by email to <u>irecjobs@irec.cat</u>; <u>jldominguez@irec.cat</u> and <u>afilba@irec.cat</u>.

#### Reference:

- Curriculum Vitae, specifying the completed degree and any relevant professional experience.
- Motivation letter.

### Offer of job position:

We offer a R2 position for 24 months on the frame of SCAPE European project.

Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience.