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Area: Electric EngineeringHead of the Area:Group: Power SystemsHead of Group: José Luís Domínguez García

TITLE: Recognized Researcher (R2) in the field of Future electrical systems

JOB DESCRIPTION

The Power Systems Group announces the opening of a permanent position as Recognized Researcher (R2) to work on different technical research projects in the fields of power electronics, BMS, microgrids and smart grids. The tasks to be carried out will be focused to the development and implementation of control and communication boards for laboratory and research projects, power distribution grid management algorithms, cybersecurity, DigitalTwin development, and grid flexibility controls. Additionally, experimental activities with micro grids including design and implementation of experimental set ups with IREC's micro grid are expected. The professional is expected to actively participate in the IREC Energy SmartLab Team.

Qualifications and experience required:

Essential:

- Master and Bachelor in Industrial Electronics and Automatic Control, Electronics, Telecommunication, electrical engineering or similar.
- Proven experience on research (more than 4 years on research or PhD)
- Experience with communications and automation systems.
- Experience with control boards (e.g. Raspberry pi, or others)
- Experience with industrial/laboratory SCADA systems.
- Experience in research industrial and competitive projects.
- Experience in optimal management of distribution grids.
- Knowledge in cybersecurity on electrical systems.
- Experience with Battery Management Systems and power electronics development.
- Proven experience in related fields and work places.
- Proven publications track-record on the field.
- Existing IP protection on innovations (e.g. patents, registrations, ...)

Preferred:

Experience on leading Tasks on collaborative international projects, knowledge of different programming languages and optimization, experience in modelling, control, design or operation of power converters. Experience in power converter reparation and in communication platform deployment. Experience in real field work and installations. *Language required:*

Fluent in Spanish, Catalan and English. *Personal Skills:*



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

Proposed Jury:

Presidency	Titular	José Luís Domíguez
Vocal 1	Titular	Oriol Gomis-Bellmunt
Vocal 2	Titular	Manel Sanmartí