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Deadline for application: 1st November 2026

Ref. 26/090

Project: REBORN

Area: EiEP

Group: Power Systems

Group leader: Jose Luis Domínguez-García

PI: Lluís Trilla

‘R1: Part-Time Junior Engineer in the field of Battery Management Systems design, testing and validation’

Description:

The Power Systems Group announces the opening of a position as Junior Engineer to work on the REBORN project under the HORIZON EUROPE programme, in the field of innovative Battery Management Systems (BMS). The tasks to be carried out will include development a BMS hardware-/software-in-the-loop (HIL/SIL) testing platform, as well as State-of-X estimation algorithms using core programming languages for data processing, test platform monitoring, and embedded systems operation. The position includes lab testing activities.

Qualifications and experience required:

Essential:

- BsC or MSc in Engineering, industrial, electronics, automotive, or similar.
- Hands-on experience on BMS validation platforms.
- Practical experience in laboratory battery testing, including cell/module characterization, cycling equipment, and instrumentation (e.g., climatic chambers, power supplies).
- Programming skills in C/C++ (embedded microcontrollers such as STM32, AURIX, or Arduino) and scripting/automation in Python or MATLAB/Simulink.

Preferred:

- Background in electric vehicle (EV) powertrain architectures and stationary battery energy storage systems (BESS), including familiarity with system-level voltage, thermal, and dynamic load requirements.
- Experience in battery electrochemical modeling, and State-of-X estimation algorithm design and implementation.
- Experience in firmware integration of BMS algorithms and communication bus protocols (CAN, LIN, SPI, UART).

Personal skills:

- Team Worker

- Initiative in Research and Innovation
- Flexibility
- Results-oriented
- Analytical and synthesis capabilities
- Communication skills and fluency in English

Required documents:

Applicants must submit the following documents by email to irecjobs@irec.cat; jldominguez@irec.cat and lltrilla@irec.cat.

Reference:

- Curriculum Vitae, specifying the completed degrees and any relevant professional experience.
- University Grades
- Motivation letter.

Offer of job position:

We offer a part time R1 position for 12 months on the frame of REBORN European project.

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

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