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Deadline for application: January , 2024

Ref. 24/004

Project: Advagen

Area: Advanced Materials for Energy applications

**Group**: Nanoionics and Fuel Cells **Group leader**: Albert Tarancon

PI: Alex Morata

# 'R2.1 – [Development of interfaces for LiB]'

**Description**: [The work will consist in the development of stable interfaces in the line of interfaces on solid-state batteries. It will include deposition of oxide and metallic thin-films. Experimental work will include:

Advanced materials characterization relevant to the field (XRD, FTIR, Raman spectroscopy, spectroscopic ellipsometry, SEM, TEM)

Electrochemical characterization of materials (EIS, CV, CA)

Ceramics processing

Work with air sensitive samples (glovebox)

Thin film deposition (PLD, evaporation, sputtering)

# Qualifications and experience required:

### Essential:

- PhD on chemistry or materials science
- Thin film deposition with techniques such as PLD, sputtering, and thermal evaporation.
- Experience in the synthesis of materials
- Knowledge on advance characterization of ceramics and thin films (SEM, XRD, FTIR, NMR, Raman, FT-IR, UV-vis, and TEM)
- Fluid English

# Preferred:

- Experience in nanomaterials synthesis and characterization
- Knowledge on the management of atmosphere-sensitive samples
- Experience in research in the field of energy storage, electrochemistry or catalysis

#### Personal skills:

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- Team work
- Motivation and open to learning

# **Required documents:**

Applicants must submit the following documents by email to <a href="mailto:irecjobs@irec.cat">irecjobs@irec.cat</a>; <a href="mailto:[mailto:m

#### Reference:

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

# Offer of job position:

We offer a R2 position for 48 months on the frame of Advagen 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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