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Code:

Project: LESGO

Area: Advanced Materials for Energy

Area leader: Prof. Joan Ramon Morante

Group: Solar Energy Materials and Systems, SEMS

Group leader: Prof. Alejandro Pérez Rodríguez

The Solar Energy Materials and Systems Group (SEMS) announces a project engineer position (R2 2.1.2) in the following technological line:

Design and implementation of optimized Raman systems and data processing algorithms for in-line evaluation of graphene-based materials in electrochemical cells.

Position description: Engineer position to give support in the design, implementation, and calibration of a Raman-based system for in-line monitoring of a graphene-based electrolyte in the framework of the activities performed in the LESGO project by the Solar Energy Materials and Systems Group (SEMS) of IREC.

Tasks to develop: The candidates will carry out and coordinate independently a multidisciplinary activity centred in:

- 1) Optical (spectral transmittance, reflectance) and Raman spectroscopy characterization of graphene-based reference samples
- 2) Development of optical-based methodologies compatible with in-line process monitoring.
- 3) Design of a Raman system (including all the optical and mechanical parts) of a Raman system compatible with an in-line monitoring.
- 4) Development and programming of a user-friendly software for a fast data analysis of the data obtained with the in-line process monitoring Raman system
- 5) Autonomous management and coordination of experiments and the interaction with the rest of the LESGO project partners.
- 6) Performing reporting activities: reports presentations, dissemination activities, etc.

Candidate requirements: The candidates need to be in possession of a Master degree in the field of materials, metrology, instrumentation, optics, physics or related topics and demonstrable experience in:

- 1) Research: have publications in indexed scientific journals and/or participations in international conferences on optics, metrology and/or instrumentation topics.
- 2) Previous experience in the design and implementation of optical metrology systems.
- 3) Experience in software development for the control of spectroscopy hardware using LabView.

- 4) Demonstrable active participation (work developed and coordination) as a project manager in industrial, national and international R&D projects.
- 5) Experience in participation in cooperative projects with international research or technological centres.
- 6) Experience in the management of small work groups and coordination tasks.

Candidacy

Send the CV, Degree and Master Diplomas, and Degree and Master records to Dr Victor Izquierdo-Roca (vizquierdo@irec.cat) indicating “LESGO Position” in the subject of the e-mail.

Deadline: 22th March 2021 at 17:00 hs.

Starting date: 1st May 2021

Duration of contract: Temporary contract (work and service contract) with a maximum of 12 months

For additional information please contact with Dr. Victor Izquierdo-Roca (vizquierdo@irec.cat)