Publish date November 2nd 2023

Ref. 2023/66

Code:

Project: Hi-BITS

Research line: Advanced characterization processes in thin film PV technologies (Processos avançats de caracterització en tecnologies fotovoltaiques de capa fina)

Area: Advanced Materials for Energy

Area leader: Prof. Joan Ramon Morante

Group: Solar Energy Materials and Systems, SEMS

Group leader: Prof. Alejandro Pérez Rodríguez

First Stage Researcher (R 1.1) in the frame of the Advanced PV characterization research line

The Solar Energy Materials and Systems (SEMS) group announces a position for a First Stage Researcher (R 1.6) in the frame of the Advanced PV characterization research line.

Position description: The candidate will carry out a multidisciplinary technical and scientific activity centred in the advanced characterization of chalcogenide based thin film photovoltaic devices, with special focus on advanced CIGS bifacial devices, including the application of advanced spectroscopic techniques and their correlation with structural, physicochemical and optoelectronic techniques for process and device optimisation. The work will be implemented in frame of the characterization of PV devices and materials research line.

Tasks to develop: The candidate will work on the application of different techniques that allow control the structural (XRD, Raman), compositional (XRF, EDX, XPS), morphologic (SEM, AFM, confocal), optical (transmittance/reflectance) and electrical (4-point probe, Hall effect, I-V) properties of the layers, devices and processes for device and process optimistion. This also include the extension of these techniques to methodologies for quality control and process monitoring.

Requisites: The candidate must be in possession of a Master degree in Physics, Materials Engineering or equivalent before the incorporation date. Previous experience in thin film chalcogenide technologies and advanced characterisation techniques will be well evaluated.

Candidacy: Send the CV, a motivation letter and PhD diploma (or certificate) and academic certificates (of both degree and master studies, with topics and qualifications) to Prof. Alejandro Pérez-Rodriguez (e-mail aperezr@irec.cat) indicating Ref. 2023/66 in the subject of the e-mail.

Deadline: November 22nd 2023

Starting date: December 14th 2023

Expected duration of contract: three years contract with potential extension to a 4th year