

Publish date October 1st 2021

Ref. 60/2021

Code:

Project: Cell2Win

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 (SEMS) group announces a highly qualified laboratory Technician position (TL level 4.4.1) in the frame of the Cell2Win project, in the research line of:

Optimization of Kesterite PV baseline at 10% in 10x10 cm² area.

Position description: The candidate will carry out a multidisciplinary technical and scientific activity centered in the development and optimization of a kesterite thin film solar cell baseline for its future scale up to 10x10 cm² PV devices. This activity will include the systematic synthesis and advanced characterization of Cu₂SnZn(S,Se)₄ (CZTS) kesterite absorbers and PV devices in the frame of the Cell2Win research project. The candidate will be at the forefront of the photovoltaic device fabrication/characterization for the creation of fabrication protocols and standardization that allows to achieve reproducible 10% high efficiency devices in a 10x10 cm² area deposition.

Tasks to develop: The candidate will work on the standardization and optimization of the CZTS PV device fabrication baseline with a 10% efficiency in a 10x10 cm² area and will also provide support in the maintenance of the thin film fabrication systems including the management of the baseline-related purchase of consumables and services. Additionally, the candidate will be in charge of the preparation of: i) documentation for the CZTS baseline manufacturing standardization, and ii) support in the dissemination actions of the group.

Requisites: The candidate must be in possession of a PhD degree in Physics, Materials Engineering or equivalent before the incorporation date, and demonstrable previous research experience in thin film CTZS technologies by physical routes. Additionally, the candidate must have demonstrable experience in materials and device characterization techniques including the following: XRF, XRD, SEM, solar simulator, EQE. Availability for incorporation in the position on November 2021 is also required.

Candidacy: Send the CV, a motivation letter and PhD diploma (or certificate) to Prof. Alejandro Pérez-Rodríguez (e-mail aperezr@irec.cat) indicating Ref. 60/2021 in the subject of the e-mail.

Deadline: October 21st 2021

Starting date: 8th November 2021

Expected duration of contract: 12 months with a 3-month evaluation period