

Resolution date February 10th 2020

**PROPOSAL FOR THE ASSIGNMENT OF R2 PRE-CONSOLIDATED POSITION -
DURACIS PROJECT (NºRef.04/2020)**

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NºRef.4/2020

Project: DURACIS: Advanced global encapsulation solutions for long term stability in industrial flexible Cu(In,Ga)Se₂ photovoltaic technology

Area: Advanced Materials for Energy

Head of the Area: Prof. Joan Ramon Morante

Group: Solar Energy Materials and Systems Group, SEMS

Group leader: Prof. Alejandro Pérez-Rodríguez

The Solar Energy Materials and Systems Group (SEMS) announce a postdoctoral position in the frame of the DURACIS project, in the research line of:

Degradation processes of advanced TCO contacts in high efficiency chalcogenide based thin film solar cells:

The candidate will carry out a multidisciplinary scientific activity centered in the study of the stability and degradation mechanisms of advanced TCO contacts in chalcogenide thin film solar cells. This will include the synthesis and characterization of TCO layers before and after ageing processes, in combination with different encapsulation strategies that are being developed in DURACIS.

This activity will include the synthesis of reference TCO contacts compatible with high efficiency CIGS solar cells, the deposition and assessment of barrier layers on the TCO contacts and the structural, chemical and optoelectronic characterization of the processed samples and devices for the analysis of the degradation mechanisms in the TCO contacts.

Requisites: The candidates need to be in position of the doctoral degree in Physic, Chemistry, Electronic Engineering, Materials Engineering or equivalent, before the incorporation date. Previous experience in deposition of transparent conductive oxides (as those related to ZnO or ITO) by PVD processes (thermal and e-beam evaporation) and sputtering processes, as well as optoelectronic devices knowledge will be highly valued.

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

Deadline: 3 February 2020



Shaping Energy for a Sustainable Future

Starting date: 19 February 2020

Expected duration of contract: 7 months

For additional information please contact with Prof. Alejandro Pérez-Rodríguez
(aperezr@irec.cat)