



Shaping Energy for a Sustainable Future

**Publish date July 14th 2020**  
**NºRef. 32/2020**

**Code:** SENSATE-ERC-CoG-01  
**Project:** ERC Consolidator Grant 2019-SENSATE  
**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 predoctoral position in the frame of the European H2020 ERC Consolidator Grant 2019 SENSATE, in the research line of:

### **FUNCTIONALIZED ASYMMETRIC SELECTIVE CONTACTS**

The candidate will carry out a multidisciplinary scientific activity in the frame of the ERC Consolidator Grant-SENSATE with the objective to develop transparent thin film metal oxides to be used as possible asymmetric contacts for advanced Q-1D PV absorbers. This will include the study and implementation of the functionalized asymmetric contacts with dipolar molecules, as well as the full optical and electrical characterization for their integration into PV devices using the techniques available at IREC and UPC.

Requisites: the candidates need to be in position of the Bachelor and Master degrees in Physics, Chemistry, Electronic Engineering, Materials Engineering or equivalent, before the starting date of his/her contract, being able to accede to the corresponding Doctorate Program. Previous experience in thin film photovoltaic technologies, and/or advanced characterization of materials and devices will be very well evaluated.

**Candidacy:** send the CV, and Degree and Master records to Dra. Yudania Sánchez ([ysanchez@irec.cat](mailto:ysanchez@irec.cat)) and Prof. Alejandro Pérez-Rodríguez ([aperezr@irec.cat](mailto:aperezr@irec.cat)) indicating SENSATE-ERC-CoG-01 in the subject of the e-mail

**Deadline:** 1st of September 2020

**Starting date:** October-December 2020

**Duration of contract:** 6 months of trial period (48 months maximum, renewable yearly)

For additional information, please contact with Dr. Yudania Sánchez ([ysanchez@irec.cat](mailto:ysanchez@irec.cat)) and Prof. Alejandro Pérez-Rodríguez ([aperezr@irec.cat](mailto:aperezr@irec.cat))