

## Resolution date January 31st 2020

## PROPOSAL FOR THE ASSIGNMENT OF R1 FIRST STAGE RESEARCHER PROJECT ENGINEER - MASTERPV PROJECT (N°Ref.3/2020)

Publish date January 10th 2020 NoRef. 3/2020

**Code:** MasterPV-02 **Project:** MasterPV

**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, belonging to the Advanced Materials for Energy area, is announcing an early stage researcher position, in the framework of the MasterPV Project, in the research line of:

## DEVELOPMENT OF THIN FILM CHALCOGENIDE SOLAR CELLS ON TRANSPARENT CONTACTS

The candidate will carry out a multidisciplinary scientific activity centred on the development and characterization of chacogenide (CIGS, kesterite) absorbers and photovoltaic devices on transparent back contacts. The candidate will work in the frame of the MasterPV project, and will be at the forefront of the photovoltaic device fabrication/characterization, with a strong interaction with the partners involved in the project, and supporting the experimented researcher which will be in charge of the development of high quality chalcogenide absorbers on optimized transparent back contacts. Previous experience on the topics (reactive annealings for bandgap tuning of the absorbers, thin film PV devices synthesis, transparent contacts, characterization techniques) will be highly valuated for the proposed mission, and in particular to work also in other related projects (kesterite, wide band gap, etc) of the group.

**Requisites:** the candidates must have Bachelor and Master degree in Physics, Chemistry, Electronic Engineering, Materials Engineering or equivalent, before the incorporation date, and demonstrable previous research experience in thin film chalcogenide technologies, with a strong focus on the fabrication/characterization of solar devices, and knowledge on the use of different processing equipment (sputtering, evaporator, tubular furnaces) and characterization tools (XRF, XRD, SEM, solar simulator, spectral response). Previous experience on the development of chalcogenide solar cells (including kesterite based devices) on transparent back contacts will be highly valuated.

**Candidacy:** send the CV, Bachelor and Master degrees/records to Dr. marcel Placidi (<a href="mailto:mplacidi@irec.cat">mplacidi@irec.cat</a>) indicating MasterPV-01 in the subject of the e-mail.

**Deadline:** 31st January 2020

Starting date: February 2020

Contract duration: 12 months

For additional information please contact Dr. Marcel Placidi (mplacidi@irec.cat)