

Publish date: March 6th, 2024 Deadline for application: March 26th, 2024 Ref. 2024/48 Project: FOTO-CER Area: Advanced Materials for Energy applications Group: Solar Energy Materials and Systems, SEMS Group leader: Prof. Alejandro Pérez Rodríguez PI: Prof. Alejandro Pérez Rodríguez

'R1.1 – Part time pre-doctoral researcher position'

The Solar Energy Materials and Systems Group (SEMS), belonging to the Advanced Materials for Energy Area, announces a part time pre-doctoral researcher position (R1.1) in the research line of DEVELOPMENT AND OPTIMISATION OF UV SELECTIVE SOLAR CELLS WITH VERY HIGH TRASPARENCY AND OPTICAL QUALITY

Description:

The candidate will collaborate within a multidisciplinary team on the development and optimisation of UV selective solar cells for transparent photovoltaic applications, developing and optimising device architectures based in the use of wide band gap Zn(O,S) absorbers and a-Si/ZnO heterostructures. The position corresponds to a part-time (6 hours/week) contract, with a gross monthly amount of $300.- \in$. The contract will be for 12 months, with possible extension to 12 additional months.

Tasks: The candidate will support technological activities for the development and fabrication of a-Si based device prototypes for the optimisation of the device architecture. Activities will also include supporting the development and optimisation of novel UV selective layers based on Zn(OS) compounds. Previous experience on the development and advanced characterisation on inorganic semi-transparent solar cells will be very well evaluated.

Qualifications and experience required:

Essential:

- The candidates must have Bachelor and Master degree in Physics, Electronic Engineering, Materials Science or equivalent.
- Ability for fast incorporation in the research team is required.

Preferred:

 Previous experience on UV selective based solar cells for transparent PV applications and advanced thin film process techniques and semiconductor advanced characterisation techniques will be very well evaluated.



Required documents:

Applicants must submit the following documents by email to *irecjobs@irec.cat* and *aperezr@irec.cat*

Reference:

- Curriculum Vitae, specifying the completed degree and any relevant professional experience.
- Motivation letter.

Offer of job position:

We offer a R1.1 position for 12 months on the frame of FOTO-CER industrial project (with possible extension to 12 additional months).

Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience.