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**Code:**

**Project:** SUNRISE

**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 (SEMS) announces a project engineer position in the following technological line:*

## **Development Of Artificial Intelligence Assisted Systems For Autonomous Research and Industrial Process Monitoring**

**Position description:** Engineer position (R1.5) to give support in the electro-mechanical design, implementation, and AI-software development of an innovative optical multi-sensor-based system for PVB glass laminated sorting. This position will be performed in the frame of the European project SUNRISE.

The candidate will be incorporated in an interdisciplinary team with access to optical, mechanical, and electronic workshops with the possibility to participate in high level research, development of research and industrial systems and collaborate with cutting-edge international research centres and industries.

Additionally, there will exist the possibility of carrying out a PhD thesis in the frame of the position.

**Tasks to develop:** The candidates will work on the electrical-mechanical design of optical-based inspection systems and on the development of AI-based algorithms and software for autonomous data acquisition, processing and results presentation.

**Candidate requirements:** The candidate needs to be in possession of a Master's degree (MSc, MEng) in fields related to: electronics, electrical/mechanical engineering, programming, metrology, instrumentation, data science, statistics, mathematics, physics, or optics. In addition, the candidate will need to have demonstrable knowledge in programming languages (such as LabVIEW, Python, MATLAB, C...), demonstrable English language (written and spoken), and high motivation with balanced team work and autonomy skills.

Additionally, the following skills/knowledge will be well evaluated: software development, applied Electronics, metrology, statistical data processing and treatment, artificial intelligence algorithms for data processing, mechanical design software (Autocad, Solidworks, Inventor...), photovoltaics, optics, spectroscopic characterization techniques, and laboratory and research experience.

**Candidacy**

Send the CV, Degree and Master Diplomas, and Degree and Master records to Dr Victor Izquierdo-Roca (vizquierdo@irec.cat) indicating "SUNRISE Position" in the subject of the e-mail.

**Deadline:** 14<sup>th</sup> January 2022

**Starting date:** February 2022

**Duration of contract:** 12 months contract with possibility of extension based on candidate performance.

For additional information please contact with Dr. Victor Izquierdo-Roca ([vizquierdo@irec.cat](mailto:vizquierdo@irec.cat))