solartrain

SOLAR-TRAIN is an innovative project focused on durability and life time assessment of photovoltaic modules. As part of the H2020 Marie Sklodowska-Curie Actions (MSCA) Innovative Training Networks (ITN) SOLAR-TRAIN invites applications for 14 Marie Sklodowska Curie fellowships starting in March 2017. The successful candidates will join the project as early stage researchers (ESRs) for three years with the possibility to enroll a PhD programme and finish with a PhD thesis.

The University of Ljubljana is the largest university in Slovenia (6.000 staff, 50.000 students). The Laboratory of Photovoltaics and Optoelectronics (LPVO) at the Faculty of Electrical Engineering is the central research group for photovoltaics in Slovenia with expertise from wafer-based c-Si and thin-film materials, technologies and device physics, both on cell and module level. Current research interests are devoted to optical and electrical modelling and simulations of record cells incorporating advanced photonic structures for improved light harvesting. Intensive work is also conducted in upscaling effects from cells to modules and reliability aspects.

As of **March 1st** the following Marie Sklodowska Curie fellowship will be assigned:

Evaluation of PV Module Degradation Based on Analysis of Outdoor Monitoring Data

Project description

The project will establish a profound understanding of degradation processes of different PV module technologies based on outdoor performance monitoring. As results, specific degradation models of energy yield and performance ratio throughout life-time and uncertainties parameters of outdoor performance monitoring data are expected. Specific objectives are:

- ✓ To review degradation data for different types of PV modules from available data sources
- ✓ To evaluate different data analysis and statistical methods for the above mentioned data sets and identify best methods and elaborate the relevant parameters
- ✓ To identify critical degradation factors of energy yield and performance ratio for different PV technologies and correlate them with degradation effects under different operational conditions for selected module types, locations and installation types
- ✓ To model degradation of energy yield and performance ratio for different PV module types throughout life-time

Your profile

- ✓ Higher degree (MSc, Diploma) in physics, electrical engineering or mathematics that qualifies for enrollment to a doctoral programme at the Univerisity of Ljubljana
- ✓ Compliance with the mobility rules laid out in the MSCA ITN guidelines: At the time of recruitment, candidates **must not have legally resided or have had their main activity** in the country of their host organization for more than 12 months in the last 3 years
- ✓ Experienced in modelling and simulation of physical phenomena and big data processing
- ✓ Openness for interdisciplinary collaboration and topics
- ✓ Willingness to move to countries within EU for ESR placement and temporary secondments
- ✓ Fluent in English

Application

Please apply till **11 December 2016** according to the instructions on project website www.solar-train.eu

University *of Ljubljana*
Faculty *of Electrical Engineering*