

SOLAR-TRAIN is an innovative project focused on durability and life time assessment of photovoltaic modules. As part of the H2020 Marie Skłodowska-Curie Actions (MSCA) Innovative Training Networks (ITN) SOLAR-TRAIN invites applications for 14 Marie Skłodowska 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 write a PhD thesis.

The Polymer Competence Center Leoben GmbH (PCCL) is the leading Austrian “Center of Excellence” for cooperative research in the area of polymer engineering and sciences. In close cooperation with its scientific partners at four universities 100 highly qualified employees are active in a wide field of applications for plastics ranging from automotive and aircraft, to packaging and photovoltaic industries. By linking scientific knowledge to the industrial need for innovation PCCL contributes to the competitiveness of its industrial partners who cooperate on the basis of medium- and long-term R&D-projects with the PCCL.

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

Characterization of Degradation Behavior and Material Interactions in PV Modules

Project description

This project will advance the state of the art in understanding PV module degradation and material interactions by developing and optimizing new characterization and assessment methods. This detailed characterization is aimed to result in the knowledge of the occurrence of specific degradation processes for the individual materials. Special focus will be given to the analysis of additives and stabilizers as well as their role in material degradation. The type and rate of degradation for a specific material/component will of course be strongly dependent on the environmental and climatic conditions, the module faced in the course of its outdoor use. The main objectives are:

- ✓ Implementation and assessment of advanced, application relevant characterization methods and evaluation concepts to describe chemical and physical aging processes within PV modules
- ✓ Detailed description of degradation behaviour and material interactions of polymers and other materials in PV modules establish correlations between material structure, permeation behavior and PV module degradation modes

Your profile

- ✓ 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
- ✓ Willingness to move countries for ESR placement and temporary secondments
- ✓ Completed degree (Mag., Dipl.-Ing. or MSc.) in the field of natural science or engineering
- ✓ Profound knowledge in chemistry of materials, especially polymers
- ✓ Experienced in chemical analysis of materials
- ✓ Fluent in English and willingness to travel
- ✓ Advanced knowledge of ORIGIN- and MS Office
- ✓ Personal initiative, reliable, responsibility, teamwork and communication skills

We provide

- ✓ Advanced research in a multi-disciplinary team
- ✓ Excellent contacts to industry as well as to national and international research organizations
- ✓ Gross income app. € 2.045,- p.m. (14 times per year)
- ✓ Flexible working hours, 40h per week
- ✓ Possibility to perform a PhD at the Montanuniversitaet Leoben

Application

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

