

9th SOPHIA PV-Module Reliability Workshop, May 28 - 29th, 2019

Venue: Hotel Weitzer, Grieskai 12 - 14, 8020 Graz, Austria

| Tue, May 28 th | Topic | Speaker (Company) |
|---------------------------|---|--|
| 08:30-09:30 | Registration | |
| 09:30-10:00 | Welcome | |
| | a) Welcome | Gernot Oreski, PCCL Karl-Anders Weiß, ISE |
| 10:00-11:00 | Block I "Interconnection" | Chairman: Gernot Oreski |
| | a) Endurance of Smart wires | Andreas Waltinger, Meyer Burger |
| | b) Reliability of ECA | Gernot Oreski, PCCL |
| 11:00-11:30 | Coffee Break | |
| 11:30-13:00 | Block II "Standardization & Test development" | Chairman: Daniel Philipp |
| | a) LeTID | Bengt Jäckel, CSP |
| | b) Combined-Accelerated Stress Testing | Michael Owen-Bellini, NREL |
| | c) Testing Experience from IEC 61215 and IEC 61730 2016th Versions | Daniel Philipp, ISE |
| 13:00-14:00 | Lunch | |
| 14:00-15:30 | Block III "SOLARTRAIN" | Chairman: Karl-Anders Weiß |
| | a) Using reanalysis data to evaluate the PV degradation regarding the KGPV climate zones in Europe | Julian Ascencio-Vásquez, University of Ljubljana |
| | b) Moisture ingress in PV encapsulants and glass-encapsulant-backsheet laminates | Stefan Mitterhofer, University of Ljubljana |
| | c) Effect of micro-climate and aging condition on polymer degradation | Djamel Eddine Mansour, ISE |
| | d) Degradation Modelling and Evaluation of Data Quality for Service Lifetime Prediction and Yield Estimation of PV Modules and Systems | Ismail Kaaya, ISE |
| 15:30-16:00 | Coffee Break | |
| 16:00-17:00 | Block IV "Advancements in lifetime modelling" | Chairman: Karl-Anders Weiß |
| | a) Modelling and simulation of EVA degradation: Accelerated ageing tests vs. long-term outdoor exposure | Mariacristina Gagliardi, IMT |
| | b) Machine Learning Approaches for PV reliability assessment | Abdulkerim Gok, GYTE |
| 19:00 | End of Day 1 & WORKSHOP DINNER (at Hotel Weitzer) | |
| Wed, May 29 th | Topic | Speaker (Company) |
| 08:30-09:00 | Registration | |
| 09:00-10:30 | Block V "Encapsulants & Backsheets" | Chairman: Gernot Oreski |
| | a) Robust backsheet solutions for Aggressive climates: not necessarily Glass! | François Rummens, Renolit |
| | b) Backsheet-failures in the field | Luciana Pitta Bauermann, ISE |
| | c) 35 years of PV The Tiso-10 kW Solar Plant: Lessons learnt in Safety and Performance | Alessandro Virtuani, EPFL |
| 10:30-11:00 | Coffee Break | |
| 11:00-12:00 | Block VI: "Thin film/organic/perovskite" | Chairman: Harry Wirth |
| | a) Stability of organic and perovskite solar cells | Gregor Trimmel, TU Graz |
| | b) Reliability of CIGS PV Modules | Peter Lechner, ZSW |
| 12:00-13:00 | Lunch Break | |
| 13:00-14:30 | Block VII: "Ecodesign & Recycability vs. Reliability" | Chairman: Karl-Anders Weiß |
| | a) Effects of reliability on sustainability | Karl-Anders Weiß, ISE |
| | b) Possible repair strategies for PV-modules with cracked backsheets | Gabriele Eder, OFI |
| | c) Sustainability requirements: French tendering process, its evolution, and the impact on the market | Françoise Burgun, CEA/INES |
| 14:30-15:30 | Plenary Discussion & Sum up | |
| | How to include reliability metrics in sustainability assessment/Eco-labelling? How to increase the visibility of/awareness for quality and reliability aspects? | |
| 15:30 | End of Workshop | |