

1st SOPHIA PV-Module Reliability Webinar, May 28 - 29th, 2020

Webinar hosted by École Polytechnique Fédérale de Lausanne, Switzerland

| Thu, May 28 th | Topic | Speaker (Company) |
|---------------------------|--|--|
| 14:00-14:10 | Welcome & Introduction | Alessandro Virtuani, EPFL Karl-Anders Weiß, ISE |
| 14:10-15:25 | Block I | |
| | a) Insurability, Bankability, and Investability – How Reliability Matters in the Underwriting Decisions | Edward Hsi, SwissRE |
| | b) Degradation patterns of module packaging materials across length scales: global, local, sub-module | Andrew Fairbrother, EPFL |
| | c) Performance testing of bifacial PV modules according to IEC TS 60904-1-2: a route towards bifacial reliability | Juan Lopez-Garcia, JRC/European Commission |
| 15:25-15:30 | Wrap-Up | Alessandro Virtuani, EPFL Karl-Anders Weiß, ISE |
| 15:30 | End of Day 1 | |
| Fri, May 29 th | Topic | Speaker (Company) |
| 14:00-14:05 | Introduction to SolarTrain-Project | Karl-Anders Weiß, ISE |
| 14:05-15:20 | Block II "SolarTrain – Climate, Materials and Performance" | |
| | "Understanding climate related operation conditions of PV systems" | |
| | a) Main climate degradation factors | Julian Ascencio Vasquez, University of Ljubljana |
| | b) Is Henry's law appropriate for real polymers (absorption under equilibrium)? | Nikoleta Kyranaki, University of Loughborough CREST |
| | c) Moisture diffusion in different encapsulants and backsheets | Stefan Mitterhofer, University of Ljubljana |
| | "Advanced characterization of PV materials: natural and artificial ageing" | |
| | a) DH/UV of different encapsulants | Chiara Barretta, PCCL |
| | b) Accelerating testing of backsheets | Luis Castillon, PCCL |
| | c) Effect of different backsheet on encapsulant degradation | Djamel Eddine Mansour, ISE |
| | "PV module performance evolution" | |
| | a) Ismail Kaaya, ISE: PV degradation modelling | Ismail Kaaya, ISE |
| | b) Electrical parameter evolution | Nikola Hrelja, EDF |
| | "Field Performance Losses and Service Lifetime Prediction" | |
| | a) Nonlinear Multi-step Performance Loss Rate | Sascha Lindig, EURAC |
| | b) Modelling applied to O&M activities | Guillermo Oviedo Hernandez, BayWa |
| 15:20-15:30 | Wrap-Up & Information on 2021 Workshop | Alessandro Virtuani, EPFL Karl-Anders Weiß, ISE |
| 15:30 | End of Webinar | |