

12th SOPHIA PV-Module Reliability Workshop, June 30th – July 1st, 2022

Venue: EPFL Neuchâtel

Thu, June 30 th	Topic	Speaker (Institution)
8:30 - 9:00	Registration + Coffee	
09:00 - 10:30	Welcome + Introduction: Reliability in HIGH-TECH industries	
	a) Welcome	Virtuani, Alessandro (EPFL/CSEM) Weiß, Karl-Anders (ISE)
	b) Recent progress in PV technologies, and future reliability challenges	Ballif, Christophe (EPFL/CSEM)
	c) Design for Reliability in high-tech products	Annigoni, Eleonora (Holland Innovation)
10:15 - 10:45	Coffee Break	
11:00 - 12:30	Block I "Reliability of polymeric materials in PV-modules"	
	a) Reliability testing of new polyolefinic encapsulants and backsheets	Eder, Gabriele (OFI)
	b) Latest generation of eco-designed PV module packaging materials and highly accelerated testing methods	Mofakhami, Eeva (INES/CEA)
	c) Biopolymers for photovoltaics? General framework, suitability and challenges	Feldbacher, Sonja (PCCL)
12:30-13:30	Lunch Break + Poster Session	
13:30 - 15:00	Block II "Integrated-PV and special applications of PV"	
	a) Enhanced stress tests for integrated and floating PV	Pravettoni, Mauro (SERIS)
	b) The techno-economic potential of floating photovoltaics and the impact of its operating temperature	Micheli, Leo (Sapienza University of Rome)
	c) Agrovoltaics: Understanding the impact of soiling based on field data	Chudy, Dominika (CSEM)
15:00 - 15:30	Coffee Break	
15:30 - 16:30	Block II "Integrated-PV and special applications of PV"	
	d) Evaluation of moisture ingress through edge sealants for floating PV applications	Roosloot, Nathan (IFE)
	e) Reliability of BIPV modules/systems	Ozkalay, Ebrar (SUPSI)
16:30 - 17:00	Coffee Break	
17:00 - 18:30	Block III "Reliability and Sustainability"	
	a) PV sustainability and circular model in the PV value chain	Agraffeil, Claire (CEA)
	b) Recycling and Repair of PV modules – requirements and testing	Lenck, Norbert (VDE)
	c) How to regulate the durability of PV modules and inverters with Ecodesign requirements	Polverini, Davide (EC - DG Growth)
18:30	End of Day 1	
19:30	Conference Dinner	

Fri, July 1st	Topic	Speaker (Company)
8:00 - 8:30	Registration	
8:30 - 10:00	Block IV "Reliability of PV-Materials and BOS Components"	
	a) Electrically Conductive Adhesives in PV Module: A Perspective on Reliability and Sustainability	Miller, Peter (Henkel)
	b) Power Converters for Renewables – Reliability Design for novel Applications	Clemens, Daniel (SMA)
	c) Degradation Mechanisms of Fluorinated and Non-Fluorinated Anti-Soiling Coatings	Jones, Luke (CREST)
10:00 - 10:30	Coffee Break	
10:30 - 12:00	Block V "Reliability of new cell-technologies"	
	a) Extended reliability of Si Heterojunction solar modules	Gnocchi, Luca; Arriaga-Arruti, Olatz (EPFL)
	b) Measurement challenges of PSK devices and their mitigation	Mihailov, Blago (JRC)
	c) Patterns of Degradation in Perovskite Solar Cells	Jacobs, Daniel (EPFL)
12:00 - 13:00	Block VI "Service-life prediction and standardization"	
	a) Modelling the effects of polymer thermal and moisture diffusion properties on lifetime energy yield prediction	Kaaya, Ismail (IMEC)
	b) IEC standards for PV modules, current status and ongoing developments	Sample, Tony (JRC)
	Open Discussion & Sum up	
13:00 - 14:00	Lunch + Poster	
14:00 - 15:30	Optional: LAB tours (MC and Innoparc)	
	End of Workshop (or after lunch for people not taking the tour)	