

2018 PV Systems Symposium

Agenda

Start	End	
Monday, April 30, 2018		
16:00	17:00	CFV lab tour Jim Crimmins, CFV Solar Test Laboratory
Tuesday, May 1, 2018		
7:00	8:00	Breakfast (Alvarado A & B)
7:00	8:00	Registration (North Atrium)
8:00	8:20	Welcoming Address: Joshua S. Stein (Sandia) "The Disruption of Future PV Developments" (Alvarado D)
VPPMC/PV Performance Track – PV Measurements and Standards (Alvarado D)		
8:20	8:30	Jim Crimmins (CFV Solar) "Overview of Module Characterization and Measurement Standards as Inputs to Performance Models"
8:30	8:50	Dean Levi (NREL) "Improvements in Module Calibration and Their Impact on World-Wide Intercomparisons"
8:50	9:10	Bruce King (Sandia) "PV System Analysis for Tracking System Losses and Technology Comparisons"
9:10	9:30	Govindasamy Tamizhmani (Arizona State University) "Indoor Soil Deposition Chamber: Validation of Anti-Soiling Coating Claims"
9:30	9:50	Daniel Zirzow (CFV Solar) "Improvements in CFV's Outdoor IAM Measurement Method"
9:50	10:20	Morning Break and Group A Posters (North Atrium)
10:20	10:40	Kyumin Lee (CFV Solar) "Creating PAN Files from IEC 61853-1 Test Data: Why Using Datasheet I-V Values is a Bad Idea"
10:40	11:00	Markus Schweiger (TUV Rheinland) "IEC 61853 Energy Rating of PV Modules - Measurement Methods and Lessons Learned"
11:00	11:20	Peter Johnson (AWS Truepower/UL) "Consideration of Test Lab Reports to Support Bankable Energy Estimates"

11:20	12:00	Roundtable Discussion
12:00	13:00	Lunch (Alvarado A & B)

PVPMC/PV Performance Track – Solar Resource Assessment for PV (Alvarado D)

13:00	13:20	Kees van den Bos (Hukseflux) “Latest Developments in Solar Measurements”
13:20	13:40	Patrick Keelin (Clean Power Research) “Detailed Analysis Using DNI and DHI Ground-Based Measurements to Tune Satellite Model”
13:40	14:00	Manajit Sengupta (NREL) “Update of the National Solar Radiation Database (1998-2016): Version 3”
14:00	14:20	Josh Peterson (University of Oregon) “Calibration Methodology of the University of Oregon Solar Radiation Monitoring Laboratory”
14:20	14:40	Anton Driesse (PV Performance Labs) "Irradiance. What is Your Sensor Really Telling You?"
14:40	15:20	Afternoon Break and Group B Posters (North Atrium)

PVPMC/PV Performance Track – Improving PV Performance (Alvarado D)

15:20	15:40	Jim Augustyn (Augustyn & Co./Solar Cat Industries) “Measuring Maximum Plane-of-Array Irradiance”
15:40	16:00	Marios Theristis (University of Cyprus) “Advanced Failure Diagnostic Approach for Grid-Connected Photovoltaic Systems”
16:00	16:20	Joe Walters (University of Central Florida) “LCOE Reduction through Proactively Optimized PV System Monitoring”
16:20	16:40	Jaewon Oh (Arizona State University) “Decreasing PV Module Temperature with Thermally Conductive Backsheets”
16:40	17:00	Roundtable Discussion
17:30	18:30	PVPMC/PV Performance Track only -- Networking Reception (Pavilion)
18:30		Dinner on your own

Wednesday, May 2, 2018

7:00	8:00	Breakfast (Alvarado A & B)
7:00	8:00	Registration (North Atrium)
PVPMC/PV Performance Track – PV Performance Models (Alvarado D)		
8:00	8:20	Ben Bourne (SunPower) “A 10-Year Retrospective on PV Performance Modeling”
8:20	8:40	Janine Freeman (NREL) “System Advisor Model Updates”
8:40	9:00	Mark Mikofski (DNV-GL) “SolarFarmer – Accurate Modeling of Real World PV Systems”
9:00	9:20	Bruno Wittmer (PVsyst) “Horizontal Axis Trackers with Bifacial Modules in PVsyst”
9:20	9:40	Stephen Kaplan (First Solar) “PlantPredict Update and SDK Development for API”
9:40	10:00	Defne Gun (SunPower) “Dynamic Snow Loss Model in PVSIM: Modeling Impact of Snow on PV Production”
10:00	10:40	Morning Break and Group C Posters (North Atrium)
10:40	11:00	Amir Asgharzadeh Shishavan (University of Iowa) “Bifacial PV System Performance: Investigation of Diffuse Shading Conditions”
11:00	11:20	Steve Ransome (Gantner/SRCL) “Using Similar Mathematical Modelling with Both Single Module IV Curve Measurements and Array Inverter Data”
11:20	11:40	Didier Thevenard (Canadian Solar) “Reconciling a Simulation Model with Measurements”
11:40	12:00	Peter Johnson (AWS Truepower/UL) “Do Preconstruction Estimates Align with Operational Performance?”
12:00	12:20	Roundtable Discussion
12:20	13:20	Lunch (Alvarado A & B)
PVPMC/PV Performance Track – Open Source Tools for PV Modeling and Monitoring (Alvarado D)		
13:20	13:40	Dana Olson (DOE) “Accelerating PV Cost Reduction through an Open-Source Software Ecosystem for Performance Modeling and Data Standardization”
13:40	13:50	Will Holmgren (University of Arizona) “Review of Open Source Tools for PV Modeling”
13:50	14:00	Michael Deceglie (NREL) “RdTools: An Open Source Python Library for PV Degradation Analysis”
14:00	14:10	Cliff Hansen (Sandia) “SunSpec Orange Button: Open Source Data Taxonomy and Software for PV”
14:10	14:20	Janine Freeman (NREL) “Open-Sourcing of NREL’s System Advisor Model”
14:20	14:30	Kate Klise (Sandia) “Pecos – Open Source Software for PV System Monitoring”
14:30	14:40	Cliff Hansen (Sandia) “PVLIB Update”
14:40	15:20	Afternoon Break and Posters (North Atrium)
15:20	16:45	Guided Discussion on Open Source Tools for PV Modeling – Strategies and Future Directions
16:45	17:00	Joshua Stein (Sandia) “Summary and Overview of PVPMC Workshop and Future Needs”
17:30	18:30	Networking Reception (Tablao)
18:30		<i>Dinner on your own</i>