

Welcome and Introduction to the Workshop

7th PVPMC Workshop on
Energy Rating and Module
Performance Modeling
Lugano, Switzerland
March 30-31, 2017

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PVPerformance SAND2017-3089C
MODELING COLLABORATIVE

Workshop on Energy Rating and
Module Performance Modeling

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Module Performance Modeling



SAND2016-10603 C

Background

- Welcome to the 7th PVPMC Workshop!
- Aim is to bring together international experts on PV performance modeling and monitoring to discuss new trends and present research results to the community.
 - Focus on technical issues. Information transfer between researchers and industry
 - Support discussion, networking, and partnerships
 - Identify gaps and opportunities for improving models (and technology)



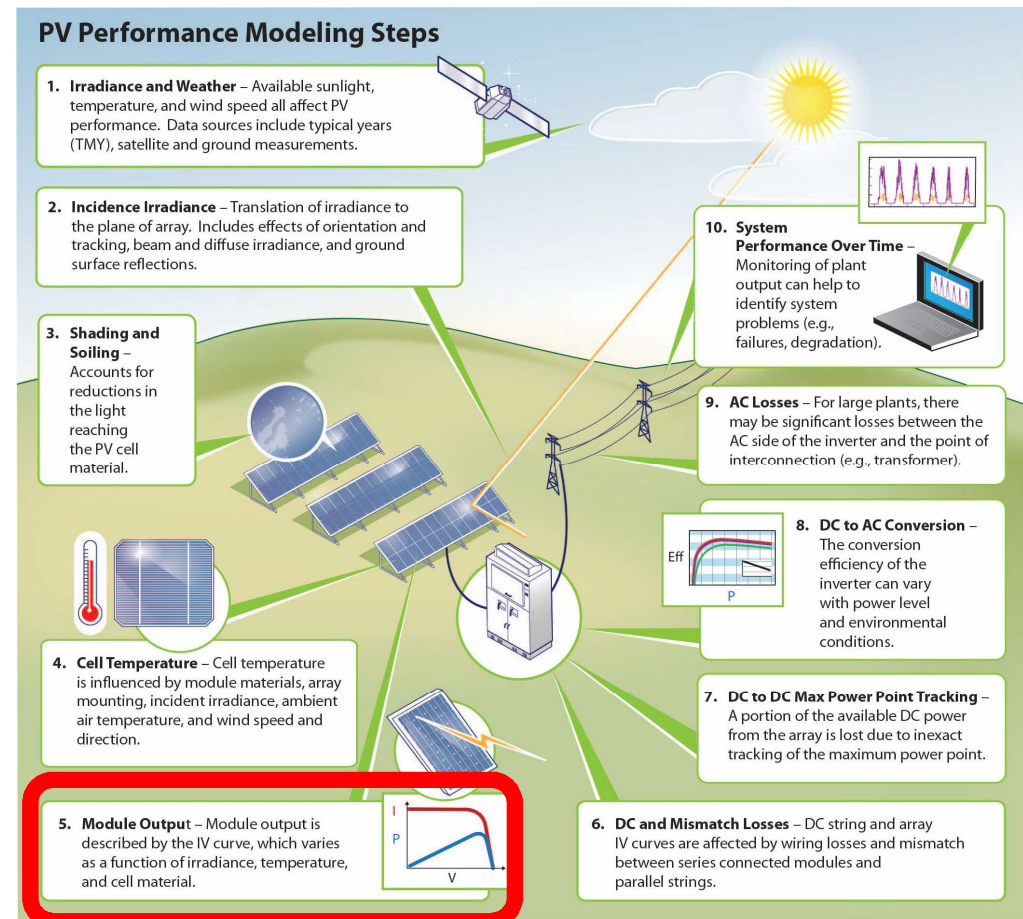
Previous and Future Workshops

2010	Albuquerque, NM
2013	Santa Clara, CA
2014	Santa Clara, CA
2015	Cologne, Germany
2016	Santa Clara, CA
2016	Freiburg, Germany
2017	Lugano, Switzerland
<i>2017 (9-10 May)</i>	<i>Albuquerque, NM</i>

PV Performance Modeling Landscape

PV performance is modeled by following the flow of energy from the sun to the meter.

- Each step in the journey is represented with a model.
- This workshop is focused on PV **Module** Performance and Modeling
 - Module IV curve as a function of:
 - Irradiance
 - Temperature
 - and other factors....



Stein, J. S. and B. H. King (2013). Modeling for PV plant optimization. *Photovoltaics International*, Solar Media Ltd. 19th: 101-109.

Topics for this workshop

Day 1

- Energy Rating
 - IEC 61853 parts 1-4
- PV Module Modeling
 - Model updates and comparisons
- Poster Presentations
- Energy Rating survey results
- Conference Dinner

Day 2

- Cell and Module Calibration Methods and Uncertainties
 - Measurement method uncertainties
- Energy prediction of new technologies or features
 - BIPV
 - MLPE / shading
 - Bifacial

Protocols

■ Speakers

- Time limits will be enforced!
- Ensure presentations are uploaded well before your scheduled session.
- We would like to be able to post/share presentation materials after the workshop. If there are restrictions, please notify organizers.

■ Audience

- Silence cell phones
- Return from breaks on time
- Ask questions
- Participate in discussion sessions
- Meet colleagues and network during breaks



Thank You and Enjoy the Workshop!



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