



WG 3: PV simulation

Program for WG3 Workshop

Scheduled from 26 February (13:30-17:00h) to 27 February (9:30-17:00h)

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Description

The WG3 workshops planned for the forthcoming PEARL-PV meeting in Lisbon (February 2019) will combine discussions on WG3 activities, together with a targeted session on the state of the art of simulation of bifacial PV modules and systems.

The programme is as follows:

Tuesday 26 February, 13:30 – 14:30h (Room: C6.2.56)

Plenary meeting – all Working Groups (followed by a Coffee Break)

Tuesday 26 February, 15:00 – 17:00h (Room: C6.1.25)

This session will review the objectives and progress of WG3 to date, with particular emphasis on the software survey results and their implication for future consultations.

15:00h Welcome to WG3 workshops and introduction of participants: Nicola Pearsall, WG3 Chair

15:15h Summary of Task 1 (software inventory): Tihomir Betti, Task 1 leader

15:25h Summary of Task 2 (software survey): Jesus Robledo Bueno, Task 2 leader, and Nicola Pearsall

15:45h Summary of Task 3 (round robin software assessment): Nicholas Riedel, Task 3 leader

15:55h Group discussion of survey results and future consultations.

Wednesday 27 February, 9:30-12:30h (Room: C4.2.07)

This session will target the modelling of bifacial modules and systems. This session will include presentations on model development and validation against field data, followed by a discussion focused on the modelling needs and opportunities for WG3 contribution in this area.

09:30h Welcome to the session: Nicholas Riedel

09:40h "New approach for PV bifacial simulations using videogames GPU technics" Jesus Robledo Bueno

10:10h "Bifacial PV module testing at DTU and use of data in bifacial modelling" Nicholas Reidel

10:40h Discussion of bifacial modelling data needs

11:00 – 11:30h Coffee break

11:30h Discussion of bifacial modelling software and potential for development and publications within WG3

12:30 - 13:30h Lunch

Wednesday 27 February 13:30-15:00h (Room: C4.2.07)

The WG3 workplan includes round-robin software tests to allow comparison of currently available models and the preparation of advice to the community. In this session, WG3 will discuss the selection of round robin tests for the first exercise and draw up the test programme.

13:30h “Comparison of PV modelling approaches for assessment of PV module performance” Steve Ransome

13:55h “Comparing PVSYST, SAM and PVLIB-Python for PV simulation” Neel Patel

14:15h Discussion of options for round-robin testing and agreement on next activities

15:00 – 15:30h Coffee break

Wednesday 27 February 15:30-17:00h (Room: C6.2.56)

Plenary meeting with wrap up

Thursday 28 February 2019 (9:00-17:00h)

Excursion

09:00 – 12:00h Visit to CIS PV plant

12:00 – 14:00h Lunch

14:00 – 17:00h Visit to CPV plant

Workshop results

The Workshop will result in an overview of modelling of bifacial modules and systems and a draft plan for round robin tests.