

Water Consumption Management in CSP Plant

03. 10. 2018, CASABLANCA SolarPACES2018

Room Anfa, Hyatt Regency Casablanca, Place des Nations Unies,
Casablanca, Morocco, 20000

Moderators: Sahar Bouaddi (Masen) & Delphine Bourdon (CEA)

8:30-9:00

Welcome coffee

9:00 – 9:05

Welcome speech

Delphine Bourdon (WASCOP Coordinator)

9:05– 9:15

Block 1: Introduction to the Water Consumption Management in CSP Plant:

R&D Projects in Europe
Piero De Bonis (CSP Policy Officer, EU Commission)

9:15 – 10:15

Block 2: Cooling Solutions for the Water Management in CSP Plants

- Kumar Patchigolla, Cranfield University (WASCOP), Development of a consolidated toolbox to assess the performance of novel cooling technologies integrated to a CSP plant.
- Kumar Patchigolla, Cranfield University (WASCOP), Development of a prototype Air-rock thermocline (ART) Cold Thermal Energy Storage (CTES) for water saving in CSP.
- Kumar Patchigolla, Cranfield University, (WASCOP), Rapid CSP performance evaluation using an iterative technique to evaluate condenser temperature by interpolation from data tables.
- Arnaud Bruch, CEA (WASCOP), cold Thermal Energy Storage cTES for optimized cooling of CSP power plant power block
- Shahab Rohani, Fraunhofer ISE (MinWaterCSP), Modelling and Simulation of Water Use and Treatment in CSP Plants
- Shahab Rohani, Fraunhofer ISE (MinWaterCSP), Strategies for Water Saving and Influence of Water Treatment Concepts in CSP-Plants

10:15 – 10:45

Discussion

10:45 – 11:00

Coffee break

11:00 – 12:30

Block 3: Cleaning Solutions for the Water Management in CSP Plants

- Fabian Wolfertstetter, DLR (WASCOP), Modelling the soiling rate: dependencies on meteorological parameters
- Sahar Bouaddi, MASEN (WASCOP), Dynamic modelling approaches of Soiled CSP mirrors.
- David Arguelles-Arizcun, CIEMAT (WASCOP), Durability testing of a newly developed hydrophilic anti-soiling coating for solar reflectors
- Jon Ander Sarasua, IK4-TEKNIKER (WASCOP), Integration of a non-immersion ultrasonic cleaning system in a solar concentrating field
- Cristobal Villasante, IK4-TEKNIKER (WASCOP), Innovative low-cost sensor for continuous soiling monitoring of CSP plants.
- Estíbaliz Aranzabe, IK4-TEKNIKER (WASCOP), Innovative solutions to save water in the cleaning activities of CSP plants
- Ahmed Alami Merrouni, IRESEN (MinWaterCSP), Solar mirrors Soiling detection using night time image processing method

Block 4: Upscaling Plan for the proposed solutions

- Arnaud Bruch, CEA (SOLWATT), Solving Water Issues for CSP Plants

12:30 – 13:00

Discussion

Registration is required: it can be done through e-mail to **Wascop_WS_SP2018@solarpaces.org** or, in alternative, on WASCOP website. If places are available, registration can be made on the same day of the event.

www.wascop.eu

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