

Registration

for the 9th workshop of the Network Power Plant Technology North-Rhine Westphalia/Workgroup Solar Thermal Power Plants:

“Dispatchable solar power below 6 €ct/kWh:
Current market and technology trends.”

http://www.energieagentur.nrw/netzwerk/kraftwerkstechnik/9_workshop_solarthermische_kraftwerke

Closing date for registration: 11th of March 2018

Attendance fee

75 € plus 19 % VAT

50 € plus 19 % VAT for member of the Network Power Plant Technology North-Rhine Westphalia.

Free for students, pensioners, members FH Aachen, employees of authority and organiser.

Fee includes snack, coffee, tea, beverages and the workshop material.

Location

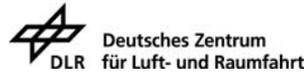
Technologiezentrum Juelich
Karl-Heinz-Beckurts-Str. 13
52428 Juelich
Germany

How to get there



An event of the EnergyAgency.NRW/Network Power Plant Technology North-Rhine Westphalia part of Cluster Energy-Region.NRW.

In cooperation with:



Contact

EnergyAgency.NRW
Network Power Plant Technology NRW
part of Cluster EnergyRegion.NRW
Dr. Dirk Bergmann
Munscheidstr. 14
D - 45886 Gelsenkirchen
Tel.: +49 (0) 209 167-2818
Fax: +49 (0) 209 167-2822
E-Mail: bergmann@energieagentur.nrw
www.energieagentur.nrw/netzwerk-kraftwerkstechnik

cover picture: Kraftanlagen München GmbH

© EnergieAgentur.NRW 2018



**Dispatchable solar power below 6 €ct/kWh:
Current market and technology trends**

9th workshop of the Network Power Plant Technology North-Rhine Westphalia/
Workgroup Solar Thermal Power Plants
20th of March 2018, Technologiezentrum Juelich



Invitation

The market price for solar thermal electricity nearly halved within the past twelve months. Industry and research experts expect that this price development will lever commercial applications of solar thermal power plants to a global breakthrough.

Several new projects around the world have already offered to provide predictable and dispatchable power at competitive prices in a near future, partially as a combination of concentrated solar power (CSP) and photovoltaic (PV). The new price situation will most probably influence the energy strategy of countries in the world's sunbelt. Today, China is spearheading the countries which are aiming to expand their CSP capacities.

The 9th workshop of the workgroup Solar Thermal Power Plants within the Network Power Plant Technology North-Rhine Westphalia takes place in parallel to a SolarPACES Executive Committee Meeting, representing 19 nations that are collaborating in the field of CSP under the umbrella of the International Energy Agency (IEA). This offers the chance to experience high-level executives presenting on CSP, PV, and wind energy in their countries or regions. Their perspectives will be supplemented by presentations from representatives of the German CSP branch.

The conference language will be English. Following the presentations there will be the opportunity to visit the premises of the Juelich Solar Tower plant and the new high-flux solar simulator Synlight. Details are shown in the following program overview.

Margit Thomeczek

Network Power Plant Technology North-Rhine Westphalia

Prof. Dr. Bernhard Hoffschmidt, Director

Prof. Dr. Robert Pitz-Paal, Director

German Aerospace Centre (DLR)

Institute of Solar Research

Heads of the workgroup Solar Thermal Power Plants within the Network Power Plant Technology North-Rhine Westphalia

Program overview

- 1:00 pm** **Registration and lunch snack**
- 1:30 pm** **Welcome and introduction**
Prof. Dr. Robert Pitz-Paal, DLR
- 1:50 pm** **CSP cost reduction in Abu Dhabi – Creating the right framework**
Abdulaziz Alobaidli, Shams Power Company
- 2:10 pm** **CSP-PV hybrid power plants – A pathway to full competitiveness in Morocco**
Hicham Bouzekri, Masen
- 2:30 pm** **CSP in China: Industry built-up and project implementation**
Z. Wang, Chinese Academy of Science
- 2:50 pm** **Coffee break**
- 3:10 pm** **The surge of cheap solar and wind and the role of wind and solar in Europe**
Cédric Philibert, International Energy Agency
- 3:30 pm** **Cost reduction of large scale implementation of wind and solar in Europe**
Stefan Petermann, Innogy SE
- 3:50 pm** **e-TES - An Electrical Energy Storage System with Molten Salt**
Dr. Rainer Faatz, TSK Flagsol
- 4:10 pm** **German industry active in CSP**
Dr. Joachim Krüger, German Association for CSP
- 4:30 pm** **Summary**
Prof. Dr. Bernhard Hoffschmidt, DLR
- 4:50 pm** **End of presentations**
- 4:50 pm** **Afterglow/Networking**
- 4:50 pm** **Visit of the premises of the Juelich Solar Tower plant (about 45 min)**
- 4:50 pm** **Visit of Synlight facility (about 30 min)**

Please note that a separate registration for the visit of the facilities is required.

Visit

Juelich Solar Tower Plant

In Juelich the German Aerospace Centre (DLR) operates an experimental solar thermal power plant with 2,153 adjustable mirrors redirecting the solar radiation to the top of the 60-meter-high solar tower. A solar receiver made of porous ceramic transfers the solar energy to the ambient air, which is heated up to about 700 degrees Celsius.

The energy of the air is used to heat up steam that runs a turbine generator. This is how the solar power plant creates 1.5 MW of power. To decouple the energy production from the energy demand, the power plant contains a high-temperature heat storage.

Synlight Facility

The operation at the Synlight facility started on 23rd of March in 2017. The facility is a globally unique system which contains 149 Xenon short-arc lamps. They produce a light intensity that corresponds to more than 10,000 times the incident solar radiation on earth's surface.

Synlight is used for the development of solar-chemical processes and the research of solar fuel production.

Furthermore, due to its height of five metres, the test chambers can be used to test full-size components from the solar or aerospace industries.