

TECHNOLOGY BRIEFING

Photovoltaics – Technologies, Integration and Implications

Thursday, 1 December 2022

Empa, Überlandstrasse 129, 8600 Dübendorf

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Photovoltaics – Technologies, Integration and Implications

Sustainable and renewable energy sources such as solar power aim to provide industry and society with a long-term affordable energy future. Next-generation photovoltaic systems are therefore indispensable to meet our ever-increasing energy needs while achieving our climate goals.

The Technology Briefing, jointly organized by the research institutes CSEM, Empa and PSI, will highlight the potential of photovoltaics, present next-generation PV technologies, and explore questions about how the technical system integration of the devices can succeed and what impact a greater reliance on PV will have on our CO₂ emissions, material consumption and economy.

Program

Presentation language is either English (EN) or German (DE)
Host: Claudia Gonzalez, Head Empa-Akademie

13:30 Welcome coffee

14:00 Introduction

Dr Peter Richner, Deputy Director, Empa

- 14:15 From new generation mainstream Photovoltaic technologies to optimized integration for buildings, agriculture and transport (EN)
Matthieu Despeisse, Group Leader Solar Modules, CSEM
- 14:40 Bringing back Photovoltaic cells and modules manufacturing to Europe with high quality products (EN)
Madlen Apel, Head of Product Management, Meyer Burger Technology AG
- 15:05 Flexibility assessment of multi-energy districts (EN)
Dr Binod Koirala, Urban Energy Systems Lab, Empa
Wege und Strategien in die Energie- und Klimazukunft der Schweiz (DE)
Dr Martin Rüdisüli, Urban Energy System Lab, Empa
- 15:25 Coffee Break
- 15:55 **Elektronen und Moleküle im Gleichklang: Rolle der Gasversorgung in einem künftigen resilienten Energiesystem (DE)**
Daniela Decurtins,
Director Verband der Schweizerischen Gasindustrie
- 16:20 **Strom aus Photovoltaik-Anlagen – ein Kernbestandteil der zukünftigen Energieversorgung (DE)**
Christian Bauer, Laboratory for Energy Systems Analysis, Technology Assessment group, PSI
- 16:45 **Saisonale Speicherung von Photovoltaikstrom (DE)**
Luca Schmidlin, CTO AlphaSYNT GmbH
- 17:05 Wrap-up
Dr Peter Richner, Deputy Director, Empa
- 17:15 Aperitif