

Einladung zum 7. Workshop „Energiespeichersysteme“ am 23.01.2024 (als Online-Veranstaltung)

Der 7. Workshop der Professur für Energiespeichersysteme an der Technischen Universität Dresden widmet sich aktuellen Fragen des Einsatzes von Energiespeichern im Kontext der Energiewende. In der Vormittagssession werden systemanalytische Hintergründe diskutiert, wichtige Energiespeichertechnologien und Kopplungsmöglichkeiten beleuchtet und auf Konzepte zur Zustandsüberwachung eingegangen. Die Nachmittagssession widmet sich Problemstellungen und innovativen Lösungsansätzen zur optimierenden Betriebsführung einfacher und hybrider Energiespeichersysteme in verschiedenen Multi-Use-Anwendungen und präsentiert Ergebnisse aus aktuellen Projekten und Forschungsvorhaben.

Programm:

9:00 – 13:00 Uhr		Vormittagssession
Begrüßung und Einführung		Prof. Thilo Bocklisch, Technische Universität Dresden
Improving Energy Resilience in Deep Decarbonization of Energy Systems through Storage Coupling		Prof. Peter Lund, Aalto University, Helsinki
The Role of Storage in the Power-to-X Economy		Prof. Christian Breyer, LUT University, Lappeenranta
Investigation of Multi-use Applications of a PV Park with Hybridized Large-scale Battery Storage and Power-to-gas Plant		Dipl.-Ing. Tim Biermann, Technische Universität Dresden
Cloud-based Diagnostic to Enhance Battery Storage Safety and Performance		Dr. Georg Angenendt, ACCURE Battery Intelligence, Aachen
13:00 – 14:00 Uhr		Mittagspause
14:00 – 17:00 Uhr		Nachmittagssession
Leveraging the Potential of Battery Storage: New Trends in System Design, Applications and Energy Management		Prof. Holger Hesse, Hochschule Kempten
Efficient Estimation of Upper Bounds on Arbitrage Values for Energy Storage Devices		Dr. Robert James Barthorpe, The University of Sheffield
The Impact of Forecast Uncertainties on the Model Predictive Control of a Domestic PV Battery Heat Pump Heat Storage System		Dipl.-Ing. Ronny Gelleschus, Technische Universität Dresden
Performancevergleich von Energiemanagement-Konzepten für Multi-Use Batteriespeicher-Anwendungen		Dr. Michael Böttiger, Technische Universität Dresden
17:00 Uhr		Zusammenfassung und Abschlussdiskussion

Anmeldung:

Die Teilnahme am Workshop „Energiespeichersysteme“ ist kostenlos.

Ihre Anmeldung senden Sie bitte bis zum 22.01.2024 an E-Mail: thilo.bocklisch@tu-dresden.de

Invitation to the 7th Energy Storage Systems Workshop on 23 January 2024 (online event)

The 7th Workshop of the Chair of Energy Storage Systems at the Dresden University of Technology is dedicated to current issues relating to the use of energy storage systems in the context of the energy transition. In the morning session, system analytical backgrounds will be discussed, important energy storage technologies and coupling options will be highlighted and concepts for condition monitoring will be addressed. The afternoon session is dedicated to problems and innovative solutions for optimising the operation of single and hybrid energy storage systems in various multi-use applications. Results from current research projects are presented.

Programme:

9:00 – 13:00	Morning session
Welcome and introduction	Prof. Thilo Bocklisch, Dresden University of Technology
Improving Energy Resilience in Deep Decarbonization of Energy Systems through Storage Coupling	Prof. Peter Lund, Aalto University, Helsinki
The Role of Storage in the Power-to-X Economy	Prof. Christian Breyer, LUT University, Lappeenranta
Investigation of Multi-use Applications of a PV Park with Hybridized Large-scale Battery Storage and Power-to-gas Plant	Dipl.-Ing. Tim Biermann, Dresden University of Technology
Cloud-based Diagnostic to Enhance Battery Storage Safety and Performance	Dr. Georg Angenendt, ACCURE Battery Intelligence, Aachen
13:00 – 14:00	Lunch break
14:00 – 17:00	Afternoon session
Leveraging the Potential of Battery Storage: New Trends in System Design, Applications and Energy Management	Prof. Holger Hesse, Hochschule Kempten
Efficient Estimation of Upper Bounds on Arbitrage Values for Energy Storage Devices	Dr. Robert James Barthorpe, The University of Sheffield
The Impact of Forecast Uncertainties on the Model Predictive Control of a Domestic PV Battery Heat Pump Heat Storage System	Dipl.-Ing. Ronny Gelleschus, Dresden University of Technology
Performance Comparison of Energy Management Concepts for Multi-use Battery Storage Applications	Dr. Michael Böttiger, Dresden University of Technology
17:00	Summary and final discussion

Registration:

Participation in the Energy Storage Systems Workshop is free of charge.

Please send your registration by 22.01.2024 to e-mail: thilo.bocklisch@tu-dresden.de