

## 12<sup>th</sup> Energy Colloquium of the Munich Institute of Integrated Materials, Energy and Process Engineering (MEP)

# Turning points in the energy transition: Setting the course for the next decades

28<sup>th</sup> July 2022

TUM Entrepreneurship Research  
Institute, Garching-Forschungszentrum

## Program

Register until  
20<sup>th</sup> July 2022

**08:30 – 09:00 Registration & Poster hang-up**

**09:00 – 09:15 Opening**

**Prof. Dr. Thomas Hamacher**  
Munich Institute of Integrated Materials, Energy and Process Engineering, TUM

**09:15 – 09:45 Keynote**

**Destination: Climate Neutrality – Navigating Theory and Practice**  
**Moritz Limbacher**  
Dena (Deutsche Energie-Agentur)

**09:45 – 10:45 Cross-Scale - Energy Management and Grids**

**Chair: Prof. Dr.-Ing. Andreas Jossen, Institute for Electrical Energy Storage Technology, TUM**

**Techno-Economic Analysis of Intercontinental Electricity Grids with Future European Energy System**  
Thushara Addanki, Chair of Renewable and Sustainable Energy Systems, TUM

**A Simplified Microgrid Architecture with Reduced Number of Measurement Units**  
Prashant Pant, Chair of Renewable and Sustainable Energy Systems, TUM

**Energy Management in Neighborhoods – A digital Platform Solution**  
Thomas Lickleder, Munich Institute of Integrated Materials, Energy and Process Engineering, TUM

**10:45 – 10:55 Coffee Break**

**10:55 – 12:25 Poster Session 1**

**12:25 – 13:30 Lunch Break**



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More details:  
[www.mep.tum.de](http://www.mep.tum.de)

Registration:



Queries:  
[colloquium@mep.tum.de](mailto:colloquium@mep.tum.de)

**13:30 – 14:00 Keynote**

**The Potential of Waste Heat Recovery from Industry in Europe – an ORC Perspective**  
**Dr.-Ing. Christoph Wieland**  
Chair of Energy Systems, TUM

**14:00 – 15:00 Innovative Materials and Methods for Energy Solutions**

**Chair: Prof. Dr. Peter Müller-Buschbaum, Chair of Functional Materials, TUM**

**In Situ Investigation of Thermoelectric Thin Films Based on Ionic Liquid Post-Treated PEDOT:PSS**  
Anna Lena Oechsle, Chair of Functional Materials, TUM

**Non-Uniform Lithium Distribution in 18650-Type Lithium-Ion Battery During Dis-/Charging**  
Dominik Petz, Chair of Functional Materials, TUM

**Manufacturing of New Uranium Fuel for FRM II Conversion**  
Kevin Buducan, Research Neutron Source FRM II, TUM

**15:00 – 16:30 Poster Session 2**

**16:30 – 16:40 Coffee Break**

**16:40 – 17:10 Keynote**

**Hydrogen as an important factor to support the energy transition**  
**Dr. Stefan Spindler**  
CEO Industrial Schaeffler AG

**17:10 – 17:50 Analytical Insights on Future Fuels**

**Chair: Prof. Dr.-Ing. Hartmut Spliethoff, Chair of Energy Systems, TUM**

**Insights into Current and Future Experimental Investigation of Conventional and Plasma-Assisted Solid Fuel Entrained Flow Gasification**  
Tobias Netter, Chair of Energy Systems, TUM

**In-Situ Identification of Electrocatalytically Active Areas on Palladium Using Electrochemical Scanning Tunneling Microscopy**  
Thorsten O. Schmidt, Professorship of Physics of Energy Conversion & Storage, TUM

**17:50 – 18:10 Award & Closing Ceremony**

**18:10 – 19:00 Socializing**