

## Presentations

Status: January 2025

### Oral Talks

- [21] Melanie Gschweng; Julia L. Heidingsfeld; Olaf Böckmann; Micha Schäfer; Michael Böhm; Oliver Sawodny: „Evaporator Temperature Control of a Solar-Powered Adsorption Façade System“, CCTA, 2024
- [20] Olaf Böckmann, David Borschewski, Simon Weber, Micha Schäfer: „Simulation-based determination of system size and energy savings for a life cycle assessment of a facade-integrated adsorption system for solar cooling of buildings“, BauSim, 2024
- [19] Qiwei Li, Olaf Böckmann, Micha Schäfer: „Operation Optimization of a Facade Integrated Adsorption Based Solar Cooling System for Lightweight High-rise Buildings“, Eurosun, 2024
- [18] D. Haeuslein, R. Schmidt-Vollus, M. Popp and M. Schaefer. “Modeling and Simulation of a Thermal Pumped Piston Storage within a Renewable Energy Supply System”, 18th International Renewable Energy Storage Conference (IRES), Aachen (2023)
- [17] Tim Dubies, Olaf Böckmann, Micha Schäfer: „Material Study for a Facade-Integrated Adsorption System for Solar Cooling of Buildings“, IRES, 2023
- [16] Q. Li, O. Boeckmann and M. Schaefer. “Systematic Screening and Evaluation of Optimal Adsorbents for Façade-Integrated Adsorption-based Solar Cooling Systems of Building”, 14th International Conference on Computational Heat, Mass and Momentum Transfer (ICCHMT), Düsseldorf (2023)
- [15] O. Boeckmann and M. Schaefer. “Alternating operation of a facade-integrated adsorption chiller for continuous cooling of lightweight buildings”, Heat Powered Cycles Conference 2023, Edinburgh (2023)
- [14] Andreas Greiner, Olaf Böckmann, Simon Weber, Martin Ostermann, Micha Schaefer: „CoolSkin - A novel facade design for sustainable solar cooling by adsorption“, POWERSKIN, 2022
- [13] Simon Weber, Olaf Böckmann, Andreas Greiner, Sumeer Park, Micha Schäfer, Martin Ostermann, Philip Leistner: „Optimal operation and conceptual design of a novel facade-integrated adsorption cooling system“, Eurosun, 2022
- [12] Heidingsfeld, J.; Boeckmann, O.; Schaefer, M.; Boehm, M.; Sawodny, O.: „Low Order Hybrid Model for Control Design of an Adsorption Façade System for Solar Cooling“, CCTA, 2022
- [11] M. Schaefer. “Null-Energie Sauna: Schwitzen fürs Klima - in Deutschland und an jedem Ort der Welt”, 18. Internationaler Sauna Kongress, Messe Stuttgart (2022), (**invited speaker**)
- [10] O. Boeckmann, M. Schaefer. “Modeling and simulation of a façade integrated adsorption system for solar cooling of lightweight buildings.”, 17th International Renewable Energy Storage Conference (IRES), Düsseldorf (2022)
- [10] Schaefer, M.: *Development and Demonstration of a Zero Energy Sauna*, 15th International Conference on Energy Storage (ENERSTOCK), Ljubljana, 2021
- [9] Boeckmann, O.; Schaefer, M.: “Modellierung und Simulation eines fassadenintegrierten Adsorptionssystems zur solaren Gebäudekühlung”, Dechema Thermodynamik Kolloquium, 2021
- [8] Schaefer, M; Marmullaku, D.; Boeckmann, O.: *Facade-integrated adsorption system for solar cooling of lightweight buildings*. 13<sup>th</sup> International Conference on Computational Heat Mass and Momentum Transfer, Paris, 2021
- [7] Schaefer, M.: *Modeling and simulation of closed low-pressure adsorbents for thermal energy storage*, 12th International Conference on Computational Heat Mass and Momentum Transfer (ICCHMT), Rom, 2019

- [6] Schaefer, M.: *Modellierung und Simulation von geschlossenen Niederdruck-Adsorbern zur thermischen Energiespeicherung*. DECHEMA -Jahrestreffen ProcessNet-Fachgruppe Wärme- und Stoffübertragung, Essen, 2019
- [5] Schaefer, M.: *Modelling and simulation of a closed low-pressure honeycomb adsorber for thermal energy storage*. 3rd Thermal and Fluids Engineering Conference, Fort Lauderdale, 2018
- [4] Schaefer, M.: *Speicherung von Windenergie*. 9. Rheiner Windenergie-Forum, KCE GmbH, Rheine, 2017 (**invited speaker**)
- [3] Schaefer, M.; Reinert, A.: *Modelling and simulation of the heat and mass transfer in an adsorber of a closed low-pressure adsorption system for thermal energy storage*. 12th International Conference on the Fundamentals of Adsorption, Friedrichshafen, 2016
- [2] Schaefer, M.; Thess, A.: *Thermal energy storage research at the German Aerospace Center (DLR) and the University of Stuttgart (IES)*. JST International Workshop, Tokio, 2015
- [1] Schaefer, M. et al.: [Transversal vibrations of beams with boundary damping in the context of animal vibrissae](#). 56th International Scientific Colloquium, Ilmenau, 2011

## Posters

- [5] Olaf Böckmann, Magdalena Baumann, Micha Schäfer: „Modeling and simulation of a facade-integrated thermochemical energy storage system for solar cooling of buildings“, Poster, Eurosun, 2024
- [4] Olaf Böckmann, Simon Weber, Andreas Schedler, Micha Schäfer: „First experimental investigations of a facade-integrated adsorption system for solar cooling“, Poster, Eurosun, 2024
- [3] Schaefer, M.: *One-dimensional model of a closed low-pressure adsorber for thermal energy storage*. 9th International Conference on Porous Media & Annual Meeting, Rotterdam, 2017 (Kurzpräsentation und Poster)
- [2] Schaefer, M.; Seifeddine, A.: *Modellierung und Ähnlichkeitsanalyse eines geschlossenen Niederdruck-Adsorptionssystems zur Skalierung von thermochemischen Energiespeichern*. Jahrestreffen der ProcessNet-Fachgruppe Wärme- und Stoffübertragung, Kassel, 2016 (Poster)
- [1] Schaefer, M.: *Modelling and simulation of a closed adsorption system for thermal energy storage applications*. Sustainable Thermal Energy Management Network Conference, Newcastle upon Tyne, 2015 (Poster)