

## Seminar

# Thermophysikalische Eigenschaften / Thermophysical Properties

– Winter Term 2024/2025 –

- 15<sup>th</sup> October 2024    **Nicolas Kulig** (Bachelor thesis)  
*Volume Swelling and Densities of Polymer Melts with Dissolved Blowing Agents by Optical Techniques*
- 22<sup>nd</sup> October 2024    **Zhongwen Zhang** (Master thesis)  
*Condensation Heat Transfer Coefficients of Propane and n-Butane Mixtures on Horizontal Single Tubes and in Tube Bundles*
- 29<sup>th</sup> October 2024    **Fabricia Müller** (Bachelor thesis)  
*Measurement of the Effective Thermal Conductivity of Water-based Nanofluids with Multimodal Silica Nanoparticles*
- 5<sup>th</sup> November 2024    **JianJie Chen** (Master thesis)  
*Characterization of Particle Diffusion by Differential Dynamic Microscopy*
- 12<sup>th</sup> November 2024    **Yongzhen Sun** (Master thesis)  
*Viscosity, Interfacial Tension, Density, and Liquid Phase Composition in Binary Mixtures of Hydrocarbons with Dissolved Hydrogen by Light Scattering and Conventional Techniques*
- 19<sup>th</sup> November 2024    **Saad Idrees**  
*Physically Based Modeling of Heat Transfer During Hot Stamping*
- 26<sup>th</sup> November 2024    **Sophie Bernhardt** (Bachelor thesis)  
*Importance of Thermophysical Properties of Liquid Organic Hydrogen Carriers in Hydrogenation and Dehydrogenation Processes*
- 3<sup>rd</sup> December 2024    **Chathura Hewa Kankanamge**  
*Characterization of Diffusive Mass Transport in Electrolyte Systems by Light Scattering Techniques and Molecular Dynamic Simulations*

- 10<sup>th</sup> December 2024 **Ziwen Zhai**  
*Influence of Molecular Catalysts on the Dynamics of Surface Fluctuations for Ionic Liquids*
- 12<sup>th</sup> December 2024 within the CBI Colloquium, 4.15 p.m., KS I in Cauerstraße 4  
**Prof. Dr. Ioannis G. Economou**  
*From Atoms and Molecules to Materials: Design of Novel Membranes for Gas Separation*
- 17<sup>th</sup> December 2024 **Andrea Diaz Zosel** (Bachelor thesis)  
*Development of a Prediction Model for the Fick Diffusion Coefficient in Electrolyte Systems*
- 14<sup>th</sup> January 2025 **Fabian Lorig**  
*Liquid Viscosity and Interfacial Tension of Oil-Refrigerant Mixtures by Surface Light Scattering*
- 21<sup>st</sup> January 2025 **Paul Damp**  
*Thermophysical Properties of n-Hexane under the Influence of Dissolved Hydrogen by Experiments and MD Simulation*
- 28<sup>th</sup> January 2025 **Presentations within the Seminar “Thermophysical Properties of Working Materials in Energy Technology”**
- 4<sup>th</sup> February 2025 **Julius Kühl**  
*Hydrocarbon Mixture Condensation on Single Tubes and in Tube Bundles*

Time: Tuesdays at 4:00 p.m.

Place: AOT lecture room, Paul-Gordan-Straße 8, 91052 Erlangen

Erlangen, October 7, 2024

Dr.-Ing. Michael Rausch

Prof. Dr.-Ing. habil. Andreas Paul Fröba