

Seminar

Thermophysikalische Eigenschaften / Thermophysical Properties

– Winter Term 2020/2021 –

Updated November 13, 2020

3rd November, 2020

Nikolaos Malliaros (Bachelor thesis)

Solubility of gases in long-chained alkanes and alcohols at temperatures up to 573 K using molecular dynamics simulations

17th November, 2020

Simon Wrana (Master thesis)

Condensation heat transfer of natural refrigerants and their mixtures in tube bundle heat exchangers and promotion of dropwise condensation by surface modifications

24th November, 2020

Wenchang Wu/Matthias Knoll

Characterization of diffusive processes in particulate systems using photon correlation spectroscopy

1st December, 2020

Monika Stadelmaier (Bachelor thesis)

Interfacial tension of liquid organic hydrogen carrier systems based on diphenylmethane and its partially and fully hydrogenated derivatives with dissolved hydrogen by the pendant drop method

8th December, 2020

Michael Zikeli (Bachelor thesis)

Viscosity and interfacial tension of binary mixtures of long alkanes and alcohols by molecular dynamics simulations

15th December, 2020

Ziwen Zhai (Master thesis)

Liquid viscosity and interfacial tension of long linear and branched alkanes and alcohols with dissolved gases

22nd December, 2020

Julius Kühl (Project thesis)

Literature review of studies of the evaporation heat transfer coefficient of natural refrigerants and hydrofluoroolefins as well as their mixtures with refrigeration lubricants at smooth and finned surfaces

12th January, 2021

Lukas Friedl (Master thesis)

Fick and thermal diffusivities in mixtures consisting of alkanes or alkane-based acids and carbon dioxide by dynamic light scattering

19th January, 2021

Julius Jander/Patrick Schmidt

Design of experiments for the investigation of the interfacial tension, density, and solubility for LOHC systems at process-relevant conditions

26th January, 2021

Tobias Klein

Thermophysical properties of working fluids from chemical and energy engineering with dissolved gases

2nd February, 2021

Presentations within the Seminar “Thermophysical Properties of Working Materials in Energy Technology”

Cosima Güttler

Application fields of nanofluids in energy technology

Tobias Berg

Thermodynamic background for the condensation of mixtures in tube bundle heat exchangers

9th February, 2021

Florian Bertleff (Bachelor thesis)

Viscosity and surface tension of liquid metals

Time: Tuesday at 4:00 p.m.

Place: Zoom Meeting

Erlangen, November 13, 2020

Dr.-Ing. Michael Rausch

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