Poster Heat & Mass Transfer

P09 L. Elmlinger/ Karlsruher Institut für Technologie (KIT):
Experimental investigation of mixed convection in a vertical tube flow of liquid metal and of water

P10 K. Keller/ Karlsruher Institut für Technologie (KIT):
Influence of the Strut Cross-Sectional Geometry of Periodic Open Cellular Structures (POCS) on Convective Heat

P11 S. Gietl/ Karlsruher Institut für Technologie (KIT):
Phase-Field Modelling for Two-Phase Flow Prediction with Physics-Informed Neural Networks

P12 L. Janning/ Karlsruher Institut für Technologie (KIT):
Coupled Mass Transport in Multi-Polymer Materials During Drying

P13 P. Barbig/ Karlsruher Institut für Technologie (KIT):
Humidity Management, Mass Transfer and Sorption Kinetics in Porous Battery Electrodes

P14 L. Brandler/ Technische Universität Darmstadt:
Toward Sustainable Working Fluids for Space Applications: Pool Boiling with Water under Reduced Gravity

P15 J. Dörr/ Karlsruher Institut für Technologie (KIT):
Unique Experimental Setup for Advanced Investigations on Mass Transport in Battery Recycling and Production

P16 T. Gambaryan-Roisman/ Technische Universität Darmstadt:
Numerical simulations of Marangoni convection in an evaporating water-ethanol mixture film on a structured substrate

P17 L. Hanimann/ Lucerne University of Applied Sciences Engineering and Architecture:
Advanced Modeling of Bio-Reactor Processes

P18 F. Wermelinger/ Lucerne University of Applied Science and Arts:
Robust Fluid-Structure-Contact Interaction for the Prediction of Cavitation in Fluid Devices

P19 N. Staubli/ Lucerne University of Applied Science and Arts:
Horizontal Borehole Thermal Energy Storage: Design Parameters and Thermal Performance

P20 Q. Li/ University of Stuttgart:
System-Level Optimization of a Facade-Integrated Adsorption-Based Solar Cooling System for High-Rise Buildings

P21 L. Janning/ Karlsruher Institut für Technologie (KIT):
Mass Transport During Production of Catalyst Coated Membranes with Multiple Solvents for Hydrogen Applications

P22 P. Barbig/ Karlsruher Institut für Technologie (KIT):
Guiding Mass Transport Mechanisms in Post-Drying Processes of Lithium-Ion Battery Manufacturing

P23 E. Liu/ Otto von Guericke University:
Mechanistic insights into single particle calcination via adaptive pore network modeling

P24 P. Chittem/ Friedrich-Alexander-Universität Erlangen-Nürnberg:
Characterization of Particle Diffusion Under Confined Conditions by Using Dynamic Light Scattering (DLS)

P25 X. Zhang/ RPTU Kaiserslautern:
Multiscale Modeling of Molecular Thermodynamics and Continuum-Scale Simulations for describing Fluid Flow

P26 X. Zhang/ RPTU Kaiserslautern:
Entropy scaling for modeling the thermal conductivity and diffusion coefficients

P27 S. Schäfer/ TU Hamburg, Inst. für Thermodyn.:
Experimentelle Untersuchung der ein- und zweiphasigen Wärmeübergänge und Druckverluste in parallelen Minikanälen

P28 M. Deeb/ Univ. Kassel:
Übersicht zu Berechnungsmethoden zum Wärmeübergang beim Sieden

P29 H. Margraf/ Univ. Kassel:
Wärmeübergang bei der Verdampfung von Methanol und n-Pentan in Kapillarstrukturen

P30 F. Meral/ Univ. Kassel:
Analyse des Wärmeübergangs von Kohlenstoffdioxid (R744) beim Sieden

P31 C. Berger/ Univ. Bayreuth:
Experimental investigation of heat transfer during boiling of R1233zd(E) on a tube bundle

P32 B. Fumey/Lucerne University of Applied Sciences and Arts:
Sorption Storage Heat Pump: Operating Results of a Demonstrator System

P33 S. Benkert/ Fraunhofer Institut fuer solare Energiesysteme:
Investigation of Condensing/Evaporating Heat Transfer in a High-Temperature Heat Pump generating Steam

Poster Fluid Separations

P01	D. Appelhaus/ TU Braunschweig: YoungFluidSeps - Early Career Fluid Dynamics and Separation Engineers
P02	Ö. Boz/ Paderborn University: Integration of Direct Electric Heating with 3D-Printed Packings in Separation Columns
P03	S. Wurmannstätter/ Technical University of Munich, TUM School of Engineering and Design: Numerical and Experimental Investigation of Liquid Distribution and Wetting Behavior of Innovative Structured
P04	F. Engel/ Technical University of Munich: Hydraulic Investigations on Push Valves in a DN1200 Tray Column
P05	C. Maier/ Technical University of Munich, TUM School of Engineering and Design: The Influence of Column Tilting on the Hydraulic Performance of Tray Columns
P06	L. Arzner/ Ulm University: Overcoming fouling in randomly packed columns for ammonia distillation from wastewater
P07	P. Franke/ Paderborn University: Identification of multiple steady states in reactive absorption columns equipped with structured packings
P08	S. Brinkmann/TH Bingen: A Novel 3D-Printed Absorption Column for CO_2 Capture and Syngas Purification Studies