



Heat Pumps with natural Refrigerants investigated in the “Urban Energy Lab 4.0 - Refrigerant Lab”

Location: Virtual Meeting

Time: 17:00-19:00 (Japan Time) on 8th December 2020

Organizer: Christian Vering (Project Leader Urban Energy Lab 4.0 –
Refrigerant Lab, IEA HPT’s ANNEX 54 Research Associate)

Agenda

Chairmen: Prof. Dr. Dirk Müller and Mr. Philipp Mehrfeld

1. “Introduction to Urban Energy Lab 4.0” by Prof. Dr. Rita Streblow
2. “Refrigerant Lab – An innovative infrastructure to demonstrate the potential of natural refrigerants” by Mr. Christian Vering
3. “Thermodynamic investigation of natural refrigerants and their mixtures in heat pump applications” by Mr. Christoph Höges
4. “Usage of hydrocarbons and their mixtures in a heat pump for floor heating application: Experimental results” by Dr. Valerius Venzik
5. “Real-time energy and exergetic related refrigerant evaluation of an air-to-water heat pump using the FIWARE open source cloud platform” by Mr. Stephan Göbel
6. “Experimental investigation and energetic evaluation of defrosting methods for air coolers” by Mr. Jonas Klingebiel
7. “Quo vadis? – Refrigerants in Heat Pumps” Panel Discussion