WS-1: IIR-IEA Joint Workshop during HFO Conference

Time: 20:00 - 23:00 (Japan Time) on 16th June 2021

Title: Heat Pumps for Low GWP Refrigerants (Annex 54)

Theme:

Annex 54 aims at promoting the low GWP refrigerant application to accelerate phase down of high GWP HFCs via 1) a comprehensive review of recent R&D progress on component optimization using low-GWP refrigerants, 2) in-depth case studies of component optimization, which can provide design guidelines and real-world experiences.

Organizer: Prof. Yunho Hwang University of Maryland



Program:

- 1. "Introduction of IEA HPT's Annex 54 for Heat Pumps for Low-GWP Refrigerants" by Yunho Hwang (University of Maryland, USA)
- 2. *"HFO for residential HPWH applications: Opportunities and challenges"* by Kashif Nawaz (ORNL, USA)
- 3. *"Theoretical Investigation of HFOs and Their Mixtures in Heat Pump Applications"* by Christian Vering (RWTH Aachen University, Germany)
- "Drop-in Analysis of the Use of R450A and R513A as Alternatives to R134a in a Small Water-to-water Heat Pump" by Luca Molinaro (Polytechnic University of Milan , Italy)
- 5. "System performance of low GWP refrigerants and blends" by Bjorn Palm (KTH, Royal Inistitute of Technology, Sweden)