



7<sup>th</sup> IIR Conference on Thermophysical Properties  
and Transfer Processes of Refrigerants

# TPTPR 2025

College Park, Maryland USA

## JUNE 15-18

International experts from academia, industry and government will meet in the outskirts of Washington, D.C., to share the latest information on the development of eco-friendly refrigerants. Presentations will cover a wide scope of research on thermophysical properties and transfer processes of refrigerants and provide an opportunity to analyze the state-of-the-art developments in the sector. With current refrigeration and air-conditioning products contributing to climate change, this conference aims to outline the future perspectives and challenges of the field as we move toward solutions that minimize the impact of refrigerants on the global environment.

Organized every four years, the conference is being held in person for the first time since 2017, and will offer exciting opportunities for collaboration and sharing, as well as the opportunity to tour University of Maryland facilities. The University of Maryland is home to the Center for Environmental Energy Engineering and the state-of-the-art Daikin Energy Innovation Lab.

### Who Should Attend

- Senior representatives of engineering, marketing and product development companies
- Innovation leaders
- Professors, researchers, teachers and students
- Material and system designers
- Professional engineers
- Production and operation managers
- Policymakers



CENTER FOR  
ENVIRONMENTAL  
ENERGY ENGINEERING

Register at [cee.umd.edu/tptpr2025](http://cee.umd.edu/tptpr2025) | Questions? Contact us at [tptpr2025@umd.edu](mailto:tptpr2025@umd.edu)

## Conference Format

Welcome reception, conference banquet, closing ceremony

Plenary sessions with distinguished speakers

Oral presentations and posters

Panel discussions

Technical tours

## Important Dates

NOVEMBER 1, 2024 | Abstracts Open

DECEMBER 31, 2024 | Abstracts Due

JANUARY 15, 2025 | Early Bird Registration Opens

MARCH 7, 2025 | Manuscripts Due

MARCH 31, 2025 | Regular Registration Opens

MAY 1, 2025 | Final Manuscripts Due

MAY 15, 2025 | Preliminary Program Published

JUNE 6, 2025 | Registration Closes

JUNE 15, 2025 | Welcome Reception

JUNE 17, 2025 | Conference Banquet

JUNE 18, 2025 | Conference Closing

JUNE 18, 2025 | Technical Tours

### Organizing Committee

Dr. Vikrant Aute, Co-Director,  
Center for Environmental Energy Engineering, University of Maryland

Dr. Yunho Hwang, Co-Director,  
Center for Environmental Energy Engineering, University of Maryland

Dr. Reinhard Radermacher, Director,  
Center for Environmental Energy Engineering, University of Maryland

Leanne Poteet, Program Secretariat, Center for Environmental Energy Engineering, University of Maryland,  
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## Themes

Thermophysical property measurements and data analysis

Heat and mass transfer enhancements

Boiling and condensation of refrigerants

Two-phase flow and distribution issues

Refrigerant charge measurement and reduction

Low GWP refrigerants for vapor compression cycles

Novel heat exchanger geometry designs and manufacturing processes

Secondary heat transfer fluids

Refrigerant oil properties and transport behaviors

Absorption/adsorption processes

New sorption fluids

Frosting and defrosting processes in heat pumps

Thermal energy storage processes

## Accommodations

**The Hotel at The University of Maryland**  
7777 Baltimore Ave, College Park, MD 20740 USA  
Tel.: +1 (301) 277-7777

**Cambria in College Park**  
8321 Baltimore Ave, College Park, MD 20740 USA  
Tel.: +1 (301) 615-9889

Room blocks for these two hotels nearest to campus will open when registration opens. For information on other area hotels, visit the **University of Maryland Visitor Website**.

## Transportation

**By plane:** The closest airports are Baltimore/Washington International (25 miles/40 km), Reagan National (16 miles/26 km) and Dulles International Airport (37 miles/60 km).

**By train:** Amtrak has service to Union Station in Washington, DC (8 miles/14 km) and New Carrollton, MD (6 miles/9 km).

**By Metro:** The Metrorail rapid transit system has a stop in College Park, with access from Union Station train station and Reagan National airport. Shuttle service is provided from the College Park Metro station to campus.