



**INTERNATIONAL INSTITUTE OF REFRIGERATION
INSTITUT INTERNATIONAL DU FROID**

First announcement and call for papers
Première annonce et appel à communications

tptpr2013.nl

About the Conference

The International Institute of Refrigeration has established a series of Commission B1 (Thermodynamics and Transfer Processes) Conferences, held every 4 years, to discuss refrigerants' thermophysical properties and transfer processes. This conference follows the 2001 Conference in Paderborn, Germany, the 2005 Conference in Vicenza, Italy and the 2009 Conference in Boulder, USA.

Our planet is facing 2 great issues nowadays. The first one is energy consumption. If we continue using energy at the level we do now, commercial energy sources will get depleted after a few decades. In-depth understanding of heat and mass transfer phenomena are essential for the design of refrigeration systems with higher efficiencies. The performance of these systems is directly related with CO₂ emissions from power plants. These emissions are one of the major sources of greenhouse gases.

The second issue is global warming. Most refrigerants are greenhouse gases and their emission contributes significantly to global warming. In response, the search for new refrigerants has regained significant interest and sustainable technological solutions have been under study. The conference covers the areas of research that are prerequisites for advancing refrigeration technology.

Academic and industrial contributors are encouraged to submit papers demonstrating novel experimental techniques, improved data analysis, and modeling approaches to thermophysical properties and transfer processes of refrigerants.

Conference chair

Carlos Infante Ferreira, TU Delft, Delft

Organizing Committee

Didier Coulomb	IIR, Paris
Kees van Heiningen	KNVvK, the Netherlands
Bob van den Hoogen	KNVvK, the Netherlands
Erik Hoogendoorn	KNVvK, the Netherlands
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Yaling He	China
Yun Ho Hwang	USA
Shigeru Koyama	Japan
Davide del Col	Italy

Conference secretariat:

The most up/to/date information is available on-line at

www.tptpr2013.nl

info@tptpr2013.nl



Fourth IIR Conference on

Thermophysical Properties and Transfer Processes of Refrigerants

June 17-19, 2013 Delft, The Netherlands

tptpr2013.nl

Organized by the Delft University of Technology in cooperation with the Royal Dutch Association of Refrigeration (KNVvK) and the Dutch Refrigeration, Air Handling and Airconditioning Sector Association (NVKL).



Conference proceedings

The Conference Proceedings containing the full papers presented will be published in CD-ROM as part of the IIR "Refrigeration Science and Technology" proceedings series distributed worldwide by the IIR. The CD will include papers accepted for presentation, provided at least one author has been pre-registered by the deadline for receipt of the final manuscripts. Authors will have the option to submit their papers, or updated versions, to the International Journal of Refrigeration; these papers will undergo a regular Journal review.

Language

The Conference will be conducted in English. All papers must be written and presented in English.

Conference venue

The conference will be held at the Delft University of Technology, the Netherlands. Delft is one of the world's most beautiful university towns. Close to Amsterdam, Delft's perfectly preserved historical quarter offers visitors spectacular stately mansions, pubs, grand cafes and galleries alongside interconnecting canals. Surrounding the city are flower and bulb fields and the North Sea with long beaches and relaxing locals.



Delft has an extensive program of summer festivals, memorable art and cultural activities, first class restaurants and excellent shopping. Delft's temperate climate makes it an ideal destination whatever the season - the mean summer daily temperature is 25 °C.

Accommodation in Delft

Several hotels are located within walking distance of the conference venue. Hotel information will be posted on the website as the conference draws near.

Travel to Delft

Delft is served by the Amsterdam Airport (Schiphol), which is 45 km from Delft. Delft has a direct train connection to Schiphol.

Scientific and Technical programme

- Absorption/adsorption processes
- Boiling in tubular, minichannel and plate geometries
- Condensation in tubular, minichannel and plate geometries
- Desorption processes
- Enhanced heat and/or mass transfer
- Lubricants / refrigerants issues
- Measurements and modeling of thermophysical and transport properties
- Nanofluids
- New fluids for sorption systems
- Natural and low GWP refrigerants for vapor compression cycles
- Refrigerant charge reduction technologies
- Secondary refrigerants including phase change slurries
- Transfer processes in heat storage systems
- (Two-phase) flow / distribution issues

Important dates

- October 31, 2012 Abstract submission deadline (max 250 words)
- November 15, 2012 Notification to authors of abstract acceptance
- January 15, 2013 Manuscripts submitted for review
- March 15, 2013 Manuscripts reviewed, comments sent to the authors
- April 30, 2013 Final manuscripts submitted
Dead-line for registration of at least one author
- June 16, 2013 Registration opens
- June 17, 2013 Conference opening
- June 19, 2013 Conference closing

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