#### **Conferences Venue**

Vicenza is a town (population 110,000) 30 km west of Padua; both conferences will be held at the Vicenza Campus of the Padua University School of Engineering. The considerable cultural interest of Vicenza is linked mainly to the name of the architect Andrea Palladio, responsible for numerous famous historical buildings in Vicenza, inspired by the classical art of the Greeks and Romans, revisited to suit the Veneto culture. Palladian architecture is considered a universal value that had an enormous influence all over the world and that is why Vicenza is included in UNESCO's World Heritage List (www.vicenzae.org). The Conference venue is just 200 m from the Teatro Olimpico (which will probably be the site of one of the social events) and close to the pedestrian area in the town center. The choice of Vicenza instead of Padua gives participants the chance to see another place instead of that used in 1994 for the meeting CFCs, The Day After, since we hope that many 1994 attendees will be with us again in 2005.

#### **Accommodation in Vicenza**

The Organizing Committee will select a few hotels in Vicenza willing to apply special rates for Conferences participants. Courtesy buses will be arranged from these hotels to the Conferences venue. Further information will be posted in the Conferences official website in due course.

#### **Travel and Trasportation to Vicenza**

By plane:

The airports nearest to Vicenza are Venice Marco Polo (60 km from Vicenza) and Verona Catullo (50 km from Vicenza); both airports are served by many frequent international flights.

By train:

Vicenza station is on the main Milan-Venice railway link, served by numerous international trains. Intercity and Eurostar trains stop at Vicenza.

By car:

Vicenza is on the A4 (Milan-Venice) motorway, which is linked to the European motorway network.



# INTERNATIONAL INSTITUTE OF REFRIGERATION AICARR UNIVERSITY OF PADUA ITALIAN NATIONAL RESEARCH COUNCIL

#### **Scientific Committees**

Robert Heap, President of the IIR Science and Technology Council Koichi Watanabe. Head of IIR Section B

# Thermophysical Properties and Transfer Processes

Commercial Refrigeration

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#### **Organizing Committee**

Antonella Barizza Sung-Ae Bettenzoli Sanzio Boldrini Pierfrancesco Brunello Giuseppe Censi Giovanni Cortella Davide Del Col Luca Doretti Laura Fedele Renato Lazzarin Giovanni A. Longo Girolamo Panozzo Stefano Pelloso Luisa Rossetto Roberto Zecchin Claudio Zilio

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#### **Conferences Website**

http://www.aicarr.it/vicenza2005









IIR International Conferences

# Thermophysical Properties and Transfer Processes of Refrigerants

Vicenza Italy, 31 Aug - 2 Sept, 2005
IIR Commission B1 with Commission B2

### **Commercial Refrigeration**

Vicenza Italy, 30-31 Aug, 2005
IIR Commissions B2 and D1



Announcement and Call for Papers

#### Objectives of the Conferences

On behalf of the International Institute of Refrigeration, recurring periodic Conferences are organized around the world on both subjects of Thermophysical Properties and Transfer Processes of Refrigerants and on Commercial Refrigeration.

## Thermophysical Properties and Transfer Processes of Refrigerants

#### **Commission B1 with Commission B2**

The search for the *best* refrigerant in any particular application, in the light of the ozone depletion and the global warming impact issues, requires updated and accurate knowledge of the thermophysical properties of the candidate fluids and mixtures, and of their heat transfer characteristics with phase change in conventional, innovative, enhanced and compact heat transfer surfaces and equipment, even in the presence of compatible lubricants. Research on the properties and heat transfer performance of secondary refrigerants (brines, ice slurry ...) is also important.

After the previous Conference held in Padua in 1994 (*CFCs, The Day After*), and following the successful event on the same topic at the University of Paderborn DE in 2001, it is now time to provide again an international forum to all researchers and practitioners to exchange updated information, present new developments and discuss the future directions and priorities in this important technological challenge.

### Commercial Refrigeration Commissions B2 and D1

After the successful edition of the first Conference on the topic of Commercial Refrigeration held at the University of Illinois at Urbana Champaign US in July 2002, this area will become the subject of recurring IIR Conferences. It seems opportune to hold the second edition at a European venue, namely in north-east Italy, home to quite a number of major manufacturers of commercial refrigeration equipment

All those involved in Commercial Refrigeration are particularly interested nowadays in thermophysical properties and transfer processes with the new substitute refrigerants.

To hold the two Conferences at the same time and at the same site will give overseas participants the opportunity to attend both events during the same trip. Besides, the two Conferences will overlap on Wednesday, August 31, 2005: this will give the opportunity to have common social events for those attendees and accompanying persons not attending both events.

Keynote lectures will be presented by renowned international experts on related topical issues.

#### **Topics**

## Thermophysical Properties and Transfer Processes of Refrigerants (TP)

- Measurements and modeling of the p,v,T,x behavior, phase equilibrium and transport properties;
- Lubricants and refrigerants;

- Heat and mass transfer with boiling, condensation and absorption in traditional and minichannel geometries;
- Experiments and modeling of two-phase flow, heat transfer enhancement, heat exchangers;
- Performance of refrigerants in cycles;
- Brines; ice-slurry;
- Carbon dioxide and hydrocarbons as a refrigerant;
- Legislation; European legislation: effects and responses;
- Other related topics.

#### **Commercial Refrigeration (CR)**

- New technologies and methods for energy saving and efficient cold generation;
- New and modified refrigeration cycles and systems;
- System performance as determined by working fluids (refrigerants, brines...) and lubricants; new refrigerants (CO<sub>2</sub>, HCs, ...) and brines;
- New components, new approaches to onsite energy generation, new illumination options;
- Frosting and air curtain experiments and modeling, CFD (Computational Fluid Dynamics), novel strategies, etc.;
- Air conditioning and performance of display cabinets;
- System and component reliability issues:
- Life cycle climate performance; TEWI;
- Field experiences;
- Legislation and standardization;
- Other related topics.

#### Dates

The Conference on *Commercial Refrigeration* will take place August 30-31, 2005.

The Conference on *Thermophysical Properties and Transfer Processes of Refrigerants* will take place August 31-September 02, 2005.

#### Language

The sessions will be conducted in English.

Papers must be presented in English.

#### **Deadlines**

The authors of papers are requested to strictly adhere to the following deadlines (either TP or CR):

**January 15, 2005.** Abstracts (maximum 250 words) as informative as possible, with the indication of the relevant Conference and the corresponding author (please provide full postal and e-mail addresses) must be e-mailed as an attached doc file to the Scientific Conferences Secretariat conference.iir2005@unipd.it

**One month from receipt,** the corresponding author will be notified about acceptance of the abstract.

**June 10, 2005.** Receipt of full papers (maximum 8 pages, presented in full compliance with the instructions posted in due time in the Conference official website). Manuscripts must be e-mailed as attached files to the Scientific Conferences Secretariat both as a doc and a pdf file (conference.iir2005@unipd.it). Please indicate the name of the presenter.

**One month from receipt,** the corresponding author will be notified about acceptance of the paper for presentation at the Conference.

Acceptance of the manuscript for inclusion in the final Conferences Proceedings will be decided upon by the relevant Scientific Committee after the Conferences, even on the basis of the presentation and discussion at the Conference. At this stage, compulsory amendments may be asked for by the reviewers. At any rate, papers not presented by one of its authors at the Conferences will not be included in the final Proceedings.

At least one of the authors for each paper must be registered by July 31, 2005, in order for the paper to be included in the official final program and be considered for inclusion in the final Proceedings. One registered author cannot support more than two multi-authored papers for presentation at the two Conferences.

#### **Conference Proceedings**

The final Conferences Proceedings CD will be made available to all registered members after the Conferences. Hardcopies of papers will be made available to participants during the Conferences.

#### Registration Fees

Participants may register for anyone of the two Conferences (TP or CR) or jointly for the two Conferences (TP+CR).

Until July 31, 2005	TP	CR	TP+CR
Participants	€ 380	€ 250	€ 450
IIR Commission, Corporate and	€ 340	€ 220	€ 410
Private Members; AiCARR Members			
Authors who send the full text of an	€ 300	€ 200	€ 380
accepted abstract by June 10, 05			
Students, less than 27 years of age	€ 160	€ 120	€ 200
	Participants IIR Commission, Corporate and Private Members; AiCARR Members Authors who send the full text of an accepted abstract by June 10, 05	Participants € 380  IIR Commission, Corporate and Private Members; AiCARR Members  Authors who send the full text of an accepted abstract by June 10, 05	Participants       € 380       € 250         IIR Commission, Corporate and Private Members; AiCARR Members       € 340       € 220         Authors who send the full text of an accepted abstract by June 10, 05       € 300       € 200

After July 31, 2005 (on site only)	TP	CR	TP+CR
Participants	€ 410	€ 280	€ 500
IIR Commission, Corporate and Private Members; AiCARR Members	€ 370	€ 250	€ 450
Authors	€ 370	€ 250	€ 450
Students	NA	NA	NA

The registration fee includes the Conferences Proceedings, hard copies of papers at the Conference, official social events, business lunches and coffee breaks during the relevant Conference.

Accompanying persons may register at a fee of € 120 (€150 after July 31, 2005), which includes a dedicated program and official social events.

Fees paid in advance but not used will be refunded, with a deduction of € 20 for handling costs, upon written request if received before August 26, 2005. No refund will be given for fees supporting papers included in the final programs.

#### Additional and updated information

For additional and updated information please visit the official Conferences website: http://www.aicarr.it/vicenza2005