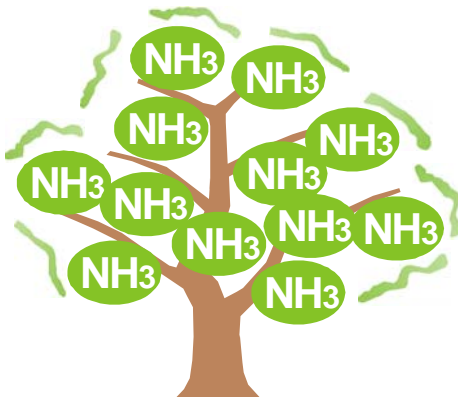


FIRST ANNOUNCEMENT AND CALL FOR PAPERS

5th INTERNATIONAL CONFERENCE



Ammonia Refrigeration Technology

IIR Commissions: B2 with B1, D1

May 9-11, 2013, Ohrid, Republic of Macedonia



Organized by
Faculty of Mechanical Engineering, University "Ss. Cyril & Methodius" - Skopje
www.mf.edu.mk

Programme Sponsors: **eurammon**, and **iifar** (International Institute of Ammonia Refrigeration)

ABOUT THE CONFERENCE

In many reports, there are alarming projections of GHG emissions including HFCs. More than 100 countries support the proposal for phase-down of HFCs within the Montreal Protocol. During the latest UN Climate Conferences, the negotiations were unsuccessful. In the meantime, new HFC refrigerants (named HFOs) with low GWPs are announced.

In the refrigeration and air-conditioning industry, confusion and uncertainties related to working fluids in many applications are continuing. In addition, there are many groups with diverging interests.

Acceleration of HCFC phase-out through new commitments within the framework of the Montreal Protocol depends on the replacement technologies available on the market and also depends on the scientific community. Technology transfer enabling climate friendly technologies to be introduced is required, especially in developing countries.

The global trend towards using natural refrigerants is intensifying. There are very positive signals in some parts in Europe where expanding use of ammonia, carbon dioxide and hydrocarbons. We will eliminate all uncertainties in the future regarding both Protocols and environmental regulations applying to natural refrigerants. Ammonia is the oldest and unique refrigerant that has been used continuously since the 19th century.

The topics of the conference are: design of modern ammonia systems and technological innovation, improving energy efficiency, various applications, technical guidelines and safety regulations.

The previous four conferences were very successful, so we look forward to the 5th Conference on Ammonia Refrigeration Technology. You are welcome in the beautiful city of Ohrid and Ohrid Lake!

MAIN TOPICS

Design of modern ammonia systems and technological innovation

Current and future use of natural refrigerants; the Kyoto Protocol and beyond
Low charge NH₃ technology, factory-made units, systems at a new level of quality improvement
Plate type heat exchangers; Direct expansion of ammonia systems
Expansion in applications with lower size capacity; Testing of components
Compatibility of ammonia and metals; Ammonia and (miscible) oils for small DX systems

Energy efficiency of ammonia refrigeration

Comparison: ammonia and fluorocarbon-based systems
Ammonia - indirect cooling compared with direct evaporation of HCFCs and HFCs
NH₃/CO₂ and other cascade systems

Applications of ammonia refrigeration

Cold stores, Agro-food industries, Supermarkets, Air-conditioning systems, Heat Pumps

Absorption machines

Ammonia systems in developing countries

Renewal and improvements, technical assistance

Technical and safety standards

Regulations on the construction and operation of ammonia refrigerating systems

Guidelines, instructions and training materials

Education and training for: best practices, operating procedures, handling of ammonia and safe operation

Public awareness of the image and benefits of natural refrigerants

Crucial and sustainable contributions to a better environment; Barriers to market penetration

International Scientific/Technical Committee

President: Andy Pearson (President of IoR; Member of IIR Commission E1), UK
Jocelyn Bonjour (Vice-President of IIR Commission B1), France
Risto Ciconkov (Member of IIR Commissions B2 and E2), Macedonia
Herman Halozan (Former President of IIR Commission E2), Austria
Predrag Hrnjak (Member of IIR Commission E2), USA
Kuniaki Kawamura (Vice-president of JSRAE, Vice-President of IIR Comm. D1), Japan
Anders Lindborg (Honorary member of IIR Commission D1), Sweden
Natalia Mednikova, VNIHI, Russia
Bjorn Palm (Member of IIR Commission B1), Sweden
Joachim Paul (President of IIR Executive and Management Committees), Denmark
Branimir Pavkovic (Member of IIR Commission E1), Croatia
Fabio Polonara (Vice-President of IIR Commission A2), Italy
Sietze van der Sluis (Former President of IIR Section D), Netherlands
Thomas Spanich (eurammon executive board), Germany
David Tanner (Former President of IIR Science and Technology Council), New Zealand
Branislav Todorovic (Member of IIR Commission E2), Serbia
Representative of IIAR, USA

Organizing Committee

President: Risto Ciconkov, (Skopje University), Member of IIR Commission B2 and E2
Didier Coulomb, Director of the IIR
Karin Jahn, (Eurammon Management)
Atanas Kocov, Dean of the FME, Skopje University, Macedonia
Slave Lasovski, Primatehna doo, Macedonia
Vasil Ciconkov, Energija doo, Macedonia
Samoil Ciconkov, Energija doo, Macedonia
IIR Conference Manager: Mrs. Susan Phalippou

INFORMATION FOR AUTHORS

Abstracts are to be written in English, submitted electronically. Author of the accepted abstracts will be invited to submit a full paper. At least one author of each paper must attend the conference to present the paper.

The abstract should be no longer than 250 words, on A4 paper. It should include:

- Title of the paper
- Up to five keywords
- Name(s), address, e-mail address, phone & fax numbers

Please indicate the preferred mode of presentation (oral or poster).

Submit the abstract or paper in electronic form by e-mail to: ristoci@ukim.edu.mk , or info@energija.com.mk

Timetable

Deadline for submission of abstracts	September 30, 2012
Notification of acceptance	October 31, 2012
Deadline for submission of full paper	January 15, 2013
Notification of acceptance	February 15, 2013

Instructions for manuscript preparation and all information are available on the conference web site

www.mf.edu.mk

Accepted papers presented at the conference will be available as registered separate papers during the conference.

All papers will be published on CD-ROM in the final proceedings.

REGISTRATION AND FEES

Full conference fee includes: participation at the conference, supply of the separate printed papers, final proceedings during the conference, coffee breaks, conference dinner and sightseeing in the old town of Ohrid (or another tour).

Registration fee

Full registration	
by March 30, 2013	350 EUR
after March 30, 2013	400 EUR
Accompanying persons	120 EUR

ACCOMMODATION

Accommodation is not included in the conference fee. Accommodation is available at the conference facility, in a four-star hotel and in three-star hotel.

Venue:

Metropol Lake Resort

Hotel Metropol ****

www.metropol-ohrid.com

sales@metropol-ohrid.com

Metropol Lake Resort is sited in the most beautiful part of the east coast of the Lake Ohrid, with the lake view from one side, and mountain view from the other side. The resort consists of three hotels on the same location: "Metropol", "Bellevue" and "Tourist".

Room rates, EUR (per person)

Hotel	Occupancy	BB	HB
METROPOL ****	1/1	54	59
	1/2	42	47
BELLEVUE****	1/1	50	55
	1/2	39	44
TOURIST***	1/1	35	40
	1/2	25	30



OTHER INFORMATION

Ohrid: www.ohrid.com.mk, www.ohrid.org.mk

Macedonia: www.travel-macedonia.com.mk; www.exploringmacedonia.com

Flights: www.airports.com.mk

Visa information: www.mfa.gov.mk

(Visa is not necessary for most of the countries.)

OHRID

Ohrid is a city-museum with numerous archaeological treasures, with a number of early Christian basilicas, a great number of churches, luxurious mosaics, valuable archaeological sites and an antique theatre, which confirm that Ohrid was a cultural centre of the ancient era.

Lake Ohrid, the blue Macedonian pearl, is one of the oldest and best-preserved lakes in the world. It lies at an altitude of 695 m, has an area of 358 km² and maximum depth of 289 m. The crystal-clear lake water and the unpolluted environment afford a breath of untouched nature.

Ohrid and Lake Ohrid have been named a world cultural and natural heritage listed city under the protection of UNESCO since 1980.

Over the centuries, an enormous and colourful heritage of beautiful architecture, crafts and traditions has evolved. Combined with its scenic lake and mountainscape, interesting town and village architecture, local hospitality, climate and delicious fresh food, a visit to the Ohrid area will be deeply rewarding.



IIR

The International Institute of Refrigeration (IIR) is the only independent intergovernmental science and technology based organization which promotes knowledge of refrigeration and associated technologies that improve quality of life in a cost-effective and environmentally sustainable manner including: Food quality and safety from farm to consumer ; Comfort in homes and commercial buildings ; Health products and services; Low temperature technology and liquefied gas technology ; Energy efficiency; Use of non-ozone depleting and low global warming refrigerants in a safe manner.

The IIR has 60 member countries representing 80% of the global population, and corporate and individual members in all refrigeration spheres; it is rigorously neutral and aims to express balanced, constructive viewpoints. The head office of the IIR and its entire staff are located in Paris.

The conference is a joint conference of Commission B2 (Refrigerating equipment) with Commission B1 (Thermodynamics and transfer processes) and Commission D1 (Refrigerated storage)

Find out more about the IIR on: www.iifir.org.

More information:

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