

FINAL PROGRAMME

May 6, 2009 (Wednesday)

17:00 Registration
20:00 Welcome drink

May 7, 2009 (Thursday)

Time	Authors	Paper
10:00	Opening ceremony	
Plenary lectures, Chairman: Anders Lindborg		
10:30	Anders Lindborg Ammonia Partnership AB (Sweden)	Ammonia refrigeration risk assessment, probability and frequency
11:00	Gert Koster GEA Grasso International (Netherlands)	Modernization of ammonia refrigerating systems in view of reliability, safety, energy consumption and environmental issues
11:30	Lambert Kuijpers Technical University of Eindhoven (Netherlands)	2010-2020: a new decade of changes in refrigeration and air conditioning
12:00	Lunch break	
Efficient and safe use of ammonia refrigerating systems, Chairman: Ray Clarke		
13:00	Alexander Pachai Johnson Controls Denmark	Ammonia safety by design and maintenance
13:20	Klaas Visser KAV Consulting (Australia)	The separate and combined use of NH ₃ and CO ₂ in refrigeration systems, Part 1: Ammonia and CO ₂ /NH ₃ cascade systems
13:40	Klaas Visser KAV Consulting (Australia)	The separate and combined use of NH ₃ and CO ₂ in refrigeration systems, Part 2: Sub - and trans-critical CO ₂ systems
14:00	Bernhard Schrempf TÜV Sud Industrie Service GmbH (Germany)	European Safety Standard en 378-2008 in combination with the German national Standard VDMA 24020-1 – operating requirements on ammonia refrigeration systems
14:20	Coffee break	
Ammonia blends; new secondary coolants based on ammonia, Chairman: Stefano Filippini		
14:50	Anders Bache, Claes Stenhede (Italy) SB Kylteknik AB (Sweden); Alfa Laval (Italy)	Ammonia-Water solutions in ice rinks. The ultimate brine?
15:10	Ake Melinder Royal Institute of Technology, KTH (Sweden)	Properties and other aspects of aqueous ammonia solutions for indirect refrigeration systems
15:30	N. Cox, V. Mazur, D. Colbourne Earthcare (UK); Academy of Refrigeration (Ukraine)	The development of azeotropic ammonia refrigerant blends for industrial process applications
15:50	J. Germanus, S. Römer, D. Krauss ILK GmbH Dresden; Schick GmbH (Germany)	Applications of schickR723® blend in commercial refrigeration systems
16:10	Coffee break	
Absorption technology, Chairman: Fabio Polonara		
16:40	A. Arteconi, C. Brandoni, S. Colasanto, G. Santori Universita Politecnica delle Marche, Ancona, Italy	Design and simulation of an ammonia absorption chiller for the precooling of natural gas in a small-scale liquefaction plant
17:00	A. Hilligweg, Nuremberg University of Applied Sciences (Germany)	Potentials and limitations of trigeneration
17:20	Mihail-Dan Staicovici S.C. Varia Energia s.r.l. (Romania)	Further results in ammonia/water coabsorbent technology district trigeneration

May 8, 2009 (Friday)

Time	Authors	Paper
Plenary lectures, Chairman: Klaas Visser		
9:00	Nelson Mugabi Mayekawa Mfg Co.,Ltd. (Japan)	Semi-hermetic and hermetic ammonia compressor packages
9:30	Predrag Hrnjak University of Illinois at Urbana-Ch. (USA)	Charge minimization in small systems – opportunity for expanding use of ammonia as refrigerant
10:00	Andy Pearson Star Refrigeration Ltd (UK)	Making the case for heat pumps with Ammonia and Carbon Dioxide
10:30	Coffee break	
Improvement of ammonia refrigerating systems, Chairman: Alexander Pachai		
11:00	Stefano Filippini, Umberto Merlo LU-VE SpA (Italy)	A new generation of ammonia unit coolers
11:20	Rob Vandenoer Evapco Europe (Belgium)	Selecting evaporative condensers for optimum system efficiency
11:40	Klaas Visser KAV Consulting (Australia)	A design procedure for energy efficient meat carton freezing systems
12:00	G. Eggen, T. Nilsen, O. Sletthjell, E. Steen, G. Svendsen; COWI AS; Fosenkraft AS (Norway)	Ammonia heat pump for district heating and cooling of an ice rink
12:20	Lunch break	
Power and Cooling, Chairman: Trygve Eikevik		
13:20	V. Popa, L. Costiuc University of Galati; University of Brasov (Romania)	Study of cooling production with a combined power and cooling thermodynamic cycle
Poster session		
13:40	Dieter Krauss, Markus Gehres Schick GmbH (Germany)	Ammonia plant engineering and construction – Safe handling of NH3 by guaranteed maximum efficiency and plant safety
	Sava Porneala, Cristian Iosifescu University of Galati (Romania)	Performance optimization for the resorbition heat pump with two useful heating effects
	Cristian Iosifescu, Sava Porneala University of Galati (Romania)	Heating load optimization for the absorber of an absorption heat transformer

15:00 Excursion in the complex "Sv. Naum" (18 km far from Hotel Metropol along the lake)

20:00 Gala dinner

May 9, 2009 (Saturday)

Safety and regulations, Chairman: Andrew Gigiel		
9:00	Mark Roxburgh Mercury Technologies Ltd (UK)	Ammonia refrigeration safety management
9:20	Jonathan Fryer ISECO Consulting Services (Australia)	The use of strain gauge stress monitoring systems on ammonia refrigeration pipework affected by underground mining surface subsidence
9:40	Gratiela-Maria Tarlea Technical University of Bucharest	EU refrigeration and air conditioning legislation implementation in Romania - Ammonia as a very eco-efficient refrigerant alternative
10:00	Andy Pearson Star Refrigeration Ltd (UK)	Presentation the book "Ammonia as a Refrigerant", IIR 3rd edition (new)
10:20	Closing ceremony - Resume	
10:45	Informal coffee	

Accompanying Persons Programme

Presence at all social events of the conference: welcome drink, conference gala dinner, Excursion in the complex "Sv. Naum"

May 7, 13:30: Excursion in the Monastery complex of Kalishta near Struga, along the lake

May 8, 10:00: Visit at the Ohrid old bazaar with special jewels, filigree and Ohrid pearls