



International
Institute of Refrigeration

INTERNATIONAL CONFERENCE
Ammonia and CO2 Refrigeration Technologies
May 11-13, 2017, Ohrid, Republic of Macedonia



Faculty of Mechanical
Engineering - Skopje

LIST OF AUTHORS AND PAPERS (preliminary)

AMMONIA REFRIGERATION	
Andy Pearson, - <i>Keynote speaker</i> Former President of IoR of UK	Mega-trends in industrial refrigeration
Predrag Hrnjak, - <i>Keynote speaker</i> University of Illinois, USA	Efficient very low charged ammonia refrigerating systems
Robert Lamb, - <i>Keynote speaker</i> Star Refrigeration, UK	Low charge packaged ammonia refrigeration systems
Stefan Jensen, Scantec Refrigeration Technologies, Australia	Energy performances of low charge NH3 systems in practice
J. Kristofersson, N. Vestergaard, M. Skovrup, Danfoss; L. Reinholdt, DTI, Denmark	Ammonia charge reduction potential in recirculating systems - Calculations
J. Kristofersson, N. Vestergaard, M. Skovrup, Danfoss; L. Reinholdt, DTI, Denmark	Ammonia charge reduction potential in recirculating systems - System benefits
M. Skovrup, J. Wronski, N. Vestergaard, J. Kristofersson, L. Reinholdt, A. Pachai, Denmark	Energy savings comparing pressure controlled and liquid drain controlled hot gas defrost
N. Vestergaard, J. Kristofersson, M. Skovrup, L. Reinholdt, J. Wronski, A. Pachai, Denmark	Design requirements for effective ammonia defrost systems
S. Christensen, B. Elmegaard, W. Markussen, C. Madsen, DTU, Denmark	Modeling of split condenser heat pump: optimization and exergy analysis
Dermot Cotter, Star Refrigeration, UK	Mechanical integrity inspection protocols for ammonia refrigeration systems
Anil Gulanikar, Dag-Tech Services, India	Improving energy efficiency & safety of cold storages in India
Christian Hanzelmann and Steffen Feja, ILK Dresden, Germany	Experimental investigations of the influence of dissolved ammonia on the low temperature-cold-flow properties of refrigeration oils
B. Ates, K. Widell, A. Cojocaruc, T. Nordtvedt, SINTEF, Norway	Energy consumption for salmon slaughtering processes

CO2 REFRIGERATION	
Armin Hafner, - <i>Keynote speaker</i> NTNU, Norway	Integrated CO2 system for refrigeration, air conditioning and sanitary hot water
Sergio Giroto, - <i>Keynote speaker</i> ENEX srl, Italy	Improved transcritical CO2 refrigeration systems for warm climate
Alexander Pachai, - <i>Keynote speaker</i> JCI – Sabroe, Denmark	Freezing systems for high ambient temperatures
Klaas Visser, KAV Consulting, Australia	Moving the CO2 'equator' from the northern Mediterranean to Malaysia without ejectors
Oliver Javerschek, Julian Pfaffl, Julian Karbner, "Bitzer", Germany	Reduction of the energy consumption by applying a new generation of CO2 compressors
Stefano Filippini, U. Merlo, G. Mariani, L. Perrotta, LU-VE Group, Italy	EMERITUS: the new condenser/CO2 gas cooler/liquid cooler that minimize energy consumption
Karoline Kvalsvik, K. Banasiak, A. Hafner, SINTEF/NTNU, Norway	Integrated CO2 refrigeration and AC unit for hot climates
I. Manescu, A. Hafner, N. Fidorra, S. Försterling, J. Köhler, Norway//Germany	A new approach for cold thermal energy storages in supermarket refrigeration systems
Angel Pardinias, Armin Hafner, Krzysztof Banasiak, NTNU/SINTEF, Norway	Integrated R744 ejector supported parallel compression racks for supermarkets. Concept & steady state simulations of configurations

Angel Pardinias, Armin Hafner, Krzysztof Banasiak, NTNU/SINTEF, Norway	Integrated R744 ejector supported parallel compression racks for supermarkets. Operation conditions.
U. Sinar, D. Yilmaz, A. Ozyurt, B. Yilmaz, FrigoBlock/Marmara University/..., Turkey	Performance evaluation of CO2 transcritical booster & R290/R744 cascade refrigeration systems for different cities in Turkey
A. Rossetti, S. Marinetti, S. Minetto, CNR-CTI, Italy	Multi-physic simulation of CO2 gas cooler
M. Sokucu, M. Can Unal, A. Olcay, H. Onbasioğlu, Friterm, Turkey	Numerical investigation on two-phase fluid flow characteristics of evaporator distributor with R404a and R744 refrigerants
Manuel Alonso, L. Dixon, C. Seeton, J. Karnaz, Shrieve Products International Ltd, UK	The role of the lubricant chemistry in a R-744 refrigeration plant oil - return and lubricity. Comparison between two chemistries ...
Trygve Eikevik, Jon-B. Dieseth, Ignat Tolstorebrov, NTNU, Norway	CO2 refrigeration system for ice production in snow making generators at ambient temperatures above 0°C
A. Pardinias, A. Hafner, K. Banasiak, L. Larsen, NTNU/SINTEF/Danfoss, Norway/Denmark	Performance test procedures for LCCP supermarket analysis
Armin Hafner, Krzysztof Banasiak, Lutz Boeck, NTNU/SINTEF, Norway	R744 HVAC for public transport
Joachim Germanus and Peter Röllig, ILK Dresden. Germany	Carbon dioxide as a possible low temperature refrigerant
Ignat Tolstorebrov, T. Eikevik, A. Hafner, M. Bantle, NTNU, Norway	Performance simulation of a refrigerated sea water system for Salmon chilling with R744 as refrigerant

AMMONIA + CO2 REFRIGERATION + ...

Lambert Kuijpers, A/genT Environmental Consultancy, Netherlands	HFC phase-down schedules under the "Kigali" Montreal Protocol; Which alternatives to choose now?
Alvaro de Ona, A. Gkizelis, K. Skačanova, Shecco, Belgium	Global market and policy trends for CO2 and Ammonia as natural refrigerants
G. Tarlea, A. Tarlea, M. Vinceriu, Technical University Bucharest, Romania	Ammonia and CO2 Romanian study cases - Refrigeration applications
Karoline Kvalsvik, SINTEF, Norway	Efficient energy systems for the dry-cured meat industry

HEAT PUMPS

Hanne Kauko, S. Nordtvedt, P. Neksa and M. Bantle, SINTEF, Norway	High-temperature heat pumps based on natural working fluids to produce district heating from industrial waste heat
O. Bamigbetan, T. Eikevik, P. Neksa, M. Bantle, NTNU/SINTEF, Norway	Extending ammonia high temperature heat pump using butane in a cascade system
M. Jokiel, H. Kauko, Ch. Schlemminger, A. Hafner, I. Claussen, Germany/Norway	Phase change material thermal energy storage for a large ammonium chiller/heat pump system

ABSORPTION REFRIGERATION

Maria Wersland, Karoline Kvalsvik, Michael Bantle, SINTEF, Norway	Off-design of high temperature compression-absorption heat pump
Mihail-Dan Staicovici, SC Varia Energia, Romania	Further research concerning the hybrid compression heat pumps
O. Ziegler, U. Hesse, C. Thomas, M. Grund, T. Weimer, TU Dresden // Resotec, Germany	Influence of the recirculation of the solution on the performance of a resorption refrigeration system
Oleksandr Titlov, Mykyta Ozolin, Odessa National Academy of Food Technologies, Ukr.	Thermodynamic analysis of periodic operation ammonia-water absorption refriger. unit in atmospheric water generation system