

2nd IIR Workshop on Refrigerant Charge Reduction in Refrigerating Systems 2012

(RCR 2010)

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REFRIGERANT CHARGE REDUCTION session 1					
13.20	Welcome and opening of Workshop on Charge Reduction				
13.40	RCR Keynote 1: Developments on charge reduction and microchannel technology - Mass flux as a way to affect void fraction – charge	P. Hrnjak	U. Illinois, USA	KL RCR 1	3
14.20	Recent developments in CO ₂ cascade condensers	A. Jokar	Thermofluids Tech	RCR1-1	33
14:40	Modelling of performance and charge in minichannel heat exchangers	E. Da Riva	U. Padova	RCR1-2	3;
15:00	Experimental investigation of two-phase pressure drops in return bends using R410A	M. Padilla	U. Lyon, INSA-Lyon	RCR1-3	49
15:20	Coffee				
REFRIGERANT CHARGE REDUCTION session 2					
15:40	Effect of refrigerant charge on global performances of a Transcritical CO ₂ heat pump	S. Colasson	CEA Grenoble	RCR2-1	64
16:00	Two-phase flow distribution in the header of a compact heat exchanger	P. Leblay	Cemagref	RCR2-2	6;
16:20	Heat transfer performance of a mini-channel evaporator for heat pump application	S. Mortada	Mines-ParisTech	RCR2-3	7:
16:40	Effect of refrigerant charge on performance of room air-conditioning system	M. Kikuchi	Waseda U	RCR2-4	88
17:00	Presentation of the IIR Working Party on Mitigation of Direct Emissions of Greenhouse Gases				
19.30	RCR Workshop dinner				
REFRIGERANT CHARGE REDUCTION session 3					
8.20	RCR Keynote 2: Direct and indirect emissions: comparison of Commercial refrigeration and Mobile air conditioning emission impacts	D. Clodic	Mines-ParisTech	KL RCR 2	PIC
9:00	Low charge flooded ammonia evaporator with separator vessel	R. Christensen	Alfa Laval	RCR3-1	96
9:20	Design and experimental analysis of a water chiller using ammonia as refrigerant	L. Cecchinato	U. Padova	RCR3-2	: 3
9:40	Using ice slurry as secondary refrigerant for charge reduction in industrial facilities	F. Illan	UP Cartagena	RCR3-3	: 3
10.00	Coffee				
REFRIGERANT CHARGE REDUCTION session 4					
10:20	RCR Keynote 3: Reducing refrigerant emissions and leakage - an overview and feedback from two EU projects	D. Cowan	UK Institute of Refrig.	KL RCR 3	322
11:00	Refrigerants logging and reporting	P. Tomlein	SZ CHKT	RCR4-1	338
11:20	SPACE FOR COMPANIES <ul style="list-style-type: none"> Introduction to brazed aluminum heat exchangers, C. Martin-Callizo, Sapa Group A new heat exchanger geometry for next condenser generation with ultra low refrigerant charge, S. Filippini, LU-VE. Limited charge shell-and-tube ammonia spray evaporator with enhanced tubes, Zahid Ayub, Isotherm 			RCR4-2 RCR4-3 RCR4-4	
12.20	Lunch				
REFRIGERANT CHARGE REDUCTION session 5					
13.20	LATEST PROGRESS ON MICROCHANNEL TECHNOLOGY AT KTH: <ul style="list-style-type: none"> Flow boiling heat transfer and visualization in circular microchannels, R. Ali Heat Transfer in microchannel heat exchangers, C. Martin-Callizo 			RCR5-1 RCR5-2	
14:00	Low charge system behavior - Interaction of heat exchanger volumes and charge	G. Mader	Danfoss	RCR5-3	346
14:20	Experimental investigation of charge distribution in a vapor compression refrigeration cycle	B.Ozyurt	Arcelik A.S., R&D Center Turkey	RCR5-4	354
14:40	RCR Keynote 4: Role, sizing and influence of the liquid receiver	J.M. Corberan	UP Valencia,	KL RCR 4	363
15.20	Closing ceremony				
16.00	Meeting of the IIR Working Party on Refrigerant Charge Reduction				