

SATURDAY, AUGUST 24, 2019										
13:00 - 16:00	Retirement Management Committee Meeting (MC) - Room 525									
16:15 - 19:00	Retiring Science and Technology Council (STC) - Room 525									
SUNDAY, AUGUST 25, 2019										
09:30 - 12:30	General Conference (GC) - Room: 519a									
13:30 - 15:45	Incoming Science and Technology Council (STC) - Room 525									
16:00 - 19:00	Executive Committee (EC) - Room: 519a									
18:30 - 20:00	WELCOME RECEPTION - Room 517cd									
MONDAY, AUGUST 26, 2019										
09:00 - 09:30	OPENING CEREMONY - Room 517a									
09:30 - 10:00	PLENARY: GAÉTAN LANTAGNE AND CHRISTIAN BÉLANGER, HYDRO QUEBEC - Room 517a									
10:00 - 10:30	Coffee Break in Exhibit Hall									
Room #	518ab	518c	519a	519b	524a	524b	524c	520ad	520be	520cf
10:30 - 12:10	B1:TS-103 Thermodynamic and Transport Properties of Refrigerants (1)	D1:TS-104 Commercial Refrigeration and Supermarket Display Cabinets (1)	E2:TS-107 Heat Pump-Based Energy Recovery Systems (1)	A2:TS-100 Gas Liquefaction (1)	E1:TS-105 HVAC Optimal Control	E2:TS-106 Sorption Systems (Absorption, Adsorption) KEYNOTE	B1:TS-108 Aqua-Ammonia, Ammonia and CO2 in Refrigeration and Heat Pump Applications	WS-1.A Heat Pump Systems with Low-GWP Refrigerants (A)	B1:TS-102 Efficient Heat and Mass Transfer Processes (1)	B1:TS-101 Next Generation of Low-GWP Refrigerants (1)
12:10 - 13:40	Lunch Break - Exhibits									
13:40 - 17:00	Workshop: Heat Pump Integration in High-Performance Buildings at Concordia University. Pre-registration required.									
13:40 - 15:00	B1:TS-109 Flow Pattern & Visualization (1)	S:TS-115 Sustainable & High Performance Buildings - Miscellaneous	-	-	C2:TS-113 Food Engineering: Heat and Mass Transfer, Refrigeration Process, Design and Modelling (1)	E2:TS-114 Residential and Commercial Heat Pump Systems (1)	B2:TS-112 Refrigerating Equipment Dynamics and Controls (1)	WS-1.B Heat Pump Systems with Low-GWP Refrigerants (B)	B2:TS-110 Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (1)	B2:TS-111 Compressor Design, Analysis and Performance (1)
15:00 - 15:30	Coffee Break in Exhibit Hall									
15:30 - 17:10	B1:TS-119 Absorption and Adsorption Thermodynamic Processes (1)	D1:TS-121 Cold-Chain Conformity & Performance Certification KEYNOTE	-	A1:TS-116 Cryogenic Fluids	E1:TS-123 Air Conditioning - Miscellaneous (1)	E2:TS-124 Ground-Source Heat Pump Systems (1)	B1:TS-120 Performance of Vapor-Compression, Recompression and Absorption Refrigeration & Heat Pump Cycles (1)	B2:TS-122 Absorption, Adsorption and Ejector Systems (1)	B1:TS-118 Efficient Heat and Mass Transfer Processes (2)	B1:TS-117 Next Generation of Low-GWP Refrigerants (2) KEYNOTE
17:30 - 19:30	Working Group Meeting	Sponsored Symposium	Working Group Meeting - ROOM: 525 -	Working Group Meeting	Sponsored Symposium	Working Group Meeting	Working Group Meeting	Working Group Meeting		
	Cold Chain in Hot Countries	17:15 - 18:00 Danfoss	Sub-Commission D1 on Refrigerated Display Cabinets	Whole-Body Cryotherapy or Cryostimulation	17:15 - 18:00 globalFACT	Demand-Oriented Non-Uniform Indoor Environment & Dehumidification in Air Conditioning	Cold Chain for Pharmaceutical Products	Refrigeration Safety		
TUESDAY, AUGUST 27, 2019										
Room #	518ab	518c	519a	519b	524a	524b	524c	520ad	520be	520cf
08:30 - 10:10	D2:TS-208 Refrigerated Transport - Miscellaneous (1)	C2:TS-208 Chilling and Freezing Preservation Applications (1)	D1:TS-204 Cold Energy Storage	A1:TS-206 Cryogenic Systems and Applications	E2:TS-207 Dessicant Heat Pumps KEYNOTE	E1:TS-206 Air Conditioning Equipment and Energy Efficiency Systems (1)	B1:TS-202 Performance of Vapor-Compression, Recompression and Absorption Refrigeration & Heat Pump Cycles (2)	WS-2.A Heat Pump Water Heaters: A challenging future(A)	B2:TS-203 Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (2)	B1:TS-201 Elasto- and magnetocaloric Refrigeration (1) KEYNOTE

A1: Cryophysics/engineering A2: Liquefaction+Gas Separation B1: Thermodynamics+Transfer B2: Equipment
C1: Cryobiology/medicine C2: Food D1: Storage D2: Transport E1: AC E2: Heat Pumps, Energy Recovery S:
Sustainable Buildings

10:10 - 10:40	Coffee Break in Exhibit Hall									
10:40 - 12:00	B1:TS-212	D1:TS-215	S:TS-217	A1:TS-218	B2:TS-213	C2:TS-216	B2:TS-214	WS-2.B	B2:TS-209	B1:TS-211
	Absorption and Adsorption Thermodynamic Processes (2)	Commercial Refrigeration and Supermarket Display Cabinets (2)	Components for Sustainable Buildings	Small-Scale Refrigeration (Cryocoolers) and Applications (1)	Energy Efficiency of Refrigerating Systems – TEWI – LCCP (1)	Industrial Heat Pumps (1)	Refrigerating Equipment Dynamics and Controls (2)	Heat Pump Water Heaters: A challenging future (B)	Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (3)	Efficient Heat and Mass Transfer Processes (3)
12:00 - 13:30	Lunch Break - Exhibits - Poster Session Topics: Cryophysics & Cryoengineering / Liquefaction & Separation of Gases / Refrigerating Equipment / Food Science & Engineering / Refrigerated Storage / Refrigerated Transport									
13:30 - 15:10	B1:TS-219	B2:TS-223	D1:TS-226	C2:TS-222	E1:TS-224	C2:TS-228	A1:TS-215	-	B2:TS-221	B2:TS-220
	Thermodynamic and Transport Properties of Refrigerants (2)	Refrigerated Land, Air and Marine Transport (1)	Refrigeration Equipment	Carbon Footprint and Sustainability of Chilled Food KEYNOTE	Air Conditioning - Miscellaneous (2)	Ground-Source Heat Pump Systems (2)	Heat Transfer and Thermal Insulation		Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (4)	Two-Phase Ejectors KEYNOTE
15:10 - 15:40	Coffee Break in Exhibit Hall									
15:40 - 17:00	B1:TS-227	-	D1:TS-231	-	B2:TS-229	C2:TS-230	C2:TS-233	WS-3	B1:TS-233	B2:TS-228
	Flow Pattern & Visualization (2)	-	Refrigerated Storage - Miscellaneous	-	Energy Efficiency of Refrigerating Systems – TEWI – LCCP (2)	Food Engineering: Heat and Mass Transfer, Refrigeration Process, Design and Modelling (2)	Heat Pumps, Energy Recovery - Miscellaneous (1)	Data and Models for Food Refrigeration and the Cold Chain - FRISBEE International	Efficient Heat and Mass Transfer Processes (4)	Compressor Design, Analysis and Performance (2)
17:30 - 19:30	Sponsored Symposium		Commission Meeting	Commission Meeting		Commission Meeting	Commission Meeting			
		17:15 - 18:00 EPEE	A1, A2, C1 Joint Meeting	D1, D2, C2 Joint Meeting		E1, E2 Joint Meeting	19:30 - 21:10 B1,B2 - IEA Annex 54 Joint Meeting			
WEDNESDAY, AUGUST 28, 2019										
Room #	518ab	518c	519a	519b	524a	524b	524c	520ad	520be	520cf
08:30 - 10:10	B1:TS-301	-	B2:TS-302	C2:TS-303	-	E1:TS-304	C2:TS-306	WS-4.A	B2:TS-302	B1:TS-300
	Advanced Cooling Technologies (1)	-	Refrigerant Charge Reduction KEYNOTE	Food Quality Monitoring and Safety (1)	-	Air Conditioning Equipment and Energy Efficiency Systems (2)	System Energy Efficiency Improvements	Successful Applications of Industrial Heat Pumps (A)	Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (5)	Special Applications of Refrigeration and Air-Conditioning Systems KEYNOTE
10:10 - 10:40	Coffee Break in Exhibit Hall									
10:40 - 12:00	-	C2:TS-312	D1:TS-313	-	B2:TS-310	C2:TS-314	B1:TS-309	WS-4.B	B1:TS-308	B2:TS-311
	-	Chilling and Freezing Preservation Applications (2)	Commercial Refrigeration and Supermarket Display Cabinets (3)	-	Energy Efficiency of Refrigerating Systems – TEWI – LCCP (3)	Heat Pumps, Energy Recovery - Miscellaneous (2)	Performance of Vapor-Compression, Recompression and Absorption Refrigeration & Heat Pump Cycles (3)	Successful Applications of Industrial Heat Pumps (B)	Efficient Heat and Mass Transfer Processes (5)	Refrigerating Equipment - Miscellaneous (1)
12:00 - 13:30	Lunch Break - Exhibits - Poster Session Topics: Thermodynamics & Transfer Processes									
13:30 - 15:10	B1:TS-317	D2:TS-320	B2:TS-323	C2:TS-324	E1:TS-322	E1:TS-321	B2:TS-319	B1:TS-318	B1:TS-315	B1:TS-316
	Advanced Cooling Technologies (2)	Refrigerated Land, Air and Marine Transport (2)	Heat Pump-Based Energy Recovery Systems (2)	Food Thermal Properties & Losses KEYNOTE	Air Conditioning - Miscellaneous (3)	Using Renewable Energy in Air Conditioning KEYNOTE	Refrigerating Equipment Dynamics and Controls (3)	Properties of Lubricants & Refrigerant-Lubricant Blends	Efficient Heat and Mass Transfer Processes (6)	Next Generation of Low-GWP Refrigerants (3)
15:10 - 15:40	Coffee Break in Exhibit Hall									
	B1:TS-325	-	E1:TS-331	B2:TS-329	C2:TS-316	C2:TS-328	B2:TS-327	WS-5	B2:TS-330	B2:TS-326

TS-000 = Technical Session

WS-000 = Workshop

KEYNOTE = Invited Keynote Speaker in this session

15:40 - 17:00	Flow Pattern & Visualization (3)	-	HVAC&R Systems and Components	Sorption Refrigeration Systems (Absorption, Adsorption)	Industrial Heat Pumps (2)	Food Engineering: Heat and Mass Transfer, Refrigeration Process, Design and Modelling (3)	Absorption, Adsorption and Ejector Systems (2)	Smart Energy Systems: an international opportunity	Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (6)	Compressor Design, Analysis and Performance (3)
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17:00 - 20:30 Student Networking Event - Room 517b

THURSDAY, AUGUST 29, 2019

Room #	518ab	518c	519a	519b	524a	524b	524c	520ad	520be	520cf
	B1:TS-401	-	E2:TS-406	C1:TS-404	E3:TS-407	E1:TS-405	B1:TS-402	WS-6	B2:TS-403	B1:TS-400
08:30 - 10:10	Thermodynamic and Transport Properties of Refrigerants (3)	-	Solar Cooling & Solar-Assisted Heat Pump Systems	Cryopreservation of Cells and Tissues KEYNOTE	Heat Pumps, Energy Recovery - Miscellaneous (3)	Air Conditioning Equipment and Energy Efficiency Systems (3)	Thermodynamics & Transfer Processes - Miscellaneous (1)	Acoustics of Heat Pumps	Refrigeration Equipment - Miscellaneous (2)	Next Generation of Low-GWP Refrigerants (4) KEYNOTE
10:10 - 10:40	Coffee Break in Exhibit Hall									
	B1:TS-409	-	D1:TS-414	C2:TS-412	B2:TS-411	E2:TS-413	-	WS-7	B1:TS-408	B2:TS-410
10:40 - 12:00	Thermodynamic and Transport Properties of Refrigerants (4)	-	Commercial Refrigeration and Supermarket Display Cabinets (4)	Food Quality Monitoring and Safety (2)	Energy Efficiency of Refrigerating Systems – TEWI – LCCP (4)	Industrial Heat Pumps (3)	-	Real Alternatives 4 LIFE - Low GWP Alternative Refrigerants for Cooling - Skills Needs and Solutions	Efficient Heat and Mass Transfer Processes (7)	Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (7)
12:00 - 13:30	Lunch Break - Exhibits - Poster Session Topics: Air Conditioning / Heat Pumps, Energy Recovery / Sustainable And High Performance Buildings									
	B1:TS-419	B2:TS-420	-	A1:TS-419	C2:TS-421	E2:TS-422	B1:TS-416	WS-8	B1:TS-417	B1:TS-418
13:30 - 15:10	Flow Pattern & Visualization (4)	Absorption, Adsorption and Ejector Systems (3)	-	Small-Scale Refrigeration (Cryocoolers) and Applications (2)	Heat Pumps with Refrigerant Mixtures KEYNOTE	Residential and Commercial Heat Pump Systems (2)	Phase-change materials KEYNOTE	Water as refrigerant for energy efficiency: debate and initiatives	Efficient Heat and Mass Transfer Processes (8)	Next Generation of Low-GWP Refrigerants (5)
15:10 - 15:40	Coffee Break in Exhibit Hall									
	B2:TS-423	C2:TS-426	D2:TS-427	-	-	E2:TS-428	-	B2:TS-425	B1:TS-429	B2:TS-424
15:40 - 17:00	Indirect Cooling Systems: Liquid and Phase-Change Secondary Refrigerants	Chilling and Freezing Preservation Applications (3)	Refrigerated Transport - Miscellaneous (2)	-	-	Sorption Heat Pump Systems (Absorption, Adsorption)	-	Refrigeration Equipment - Miscellaneous (3)	Efficient Heat and Mass Transfer Processes (9)	Compressor Design, Analysis and Performance (4)

18:30 - 22:30 Gala Dinner & Awards - Room 710

FRIDAY, AUGUST 30, 2019

Room #	518ab	518c	519a	519b	524a	524b	524c	520ad	520be	520cf
	B1:TS-503	D2:TS-506	-	A2:TS-500	E2:TS-508	E2:TS-507	B1:TS-504	B1:TS-505	B1:TS-501	B1:TS-502
08:30 - 10:10	Lubricants for Future Refrigerants & Measurement Techniques	Equipment for Refrigerated Transport	-	Gas Liquefaction (2)	Efficient Heat Pump and Refrigeration Systems	Industrial Heat Pumps (4) KEYNOTE	Refrigerant Charge Reduction & Leaks Control	Thermodynamics & Transfer Processes - Miscellaneous (2)	Elasto- and magnetocaloric Refrigeration (2) KEYNOTE	Next Generation of Low-GWP Refrigerants (6)
10:10 - 10:40	Coffee Break in Exhibit Hall									
	B1:TS-510	C1:TS-512	S:TS-515	A1:TS-517	C2:TS-513	E2:TS-514	B1:TS-509	WS-9	B2:TS-516	B2:TS-511
10:40 - 12:00	Thermodynamic and Transport Properties of Refrigerants (5)	Cryomedicine – Cryosurgery and Cryotherapy/Cryostimulation	Data Centers and Low Energy Buildings	Small-Scale Refrigeration (Cryocoolers) and Applications (3)	Food Engineering: Heat and Mass Transfer, Refrigeration Process, Design and Modelling (4)	Industrial Heat Pumps (5)	Refrigerant Pressure Drop	Cryogenic Energy Storage for Renewable Refrigeration and Power Supply	Evaporators, Condensers and other Heat Exchangers: Design, Analysis and Performance (8)	Energy Efficiency of Refrigerating Systems – TEWI – LCCP (5)
12:00 - 12:30	Closing Ceremony - Room 518ab									
13:30 - 15:00	Incoming Management Committee Meeting - Room 525									