

Keynote and Paper Sessions - Thursday, October 4, 2018 - Masri Institute

Time	ASHRAE Paper/Keynote Talk Number	Title	Presenting Author	Room Number
Keynote Talk 1 Chair: Prof. Fadl Moukalled				
10:15 - 11:15		Inverse design of indoor environment by CFD-based optimal methods	Qingyan "Yan" Chen	Jassim Al-Qatami Engineering Lecture Hall
Session 1 – Alternative Energy Use in Buildings Chair: Dr. Samir Traboulsi; Co-Chair: Mr. Ahmad El-Bitar				
11:15 - 11:45	<u>36</u>	Establishment of a Sustainable Energy Action Plan: Case Study of Union of Municipalities	Sabine Saad	Jassim Al-Qatami Engineering Lecture Hall
11:45 - 12:15	<u>57</u>	Energy Comparison of Air Conditioning Split System VS. Solar Absorption Systems with Optimization for a Prototype Educational Building	Hesham Safwat	
12:15 - 12:45	<u>55</u>	Contributing Algorithms of Energy Efficiency and Renewable Energy in the Residential, Commercial, and Industrial Sectors	Georges El-Jamal	
12:45- 13:15	<u>19</u>	Benefits from Combination of Centralized Ventilation System and Decentralized Conditioning Units	Maciej Danielak	
Session 2 – Energy Efficiency, Comfort, and Climate Chair: Dr. Issam Srour; Co-Chair: Fouad Azizi				
11:15 - 11:45	<u>48</u>	Holistic Approach to Energy Performance of Green Built Environment	Essam E. Khalil	M207
11:45 - 12:15	<u>32</u>	Transition Engineering the Water-Electricity Nexus Operating in Building Services and Urban Heat Islands - Concept Design - Is Air-Conditioning Really Necessary?	Eric Peterson	
12:15 - 12:45	<u>25</u>	Design Optimization for Maintaining Occupants' Outdoor Thermal Comfort	Haneen Hamdan	
12:45- 13:15	<u>15</u>	Prediction and Control of Noise and Vibration within a Sport Facility	Ghina Annan	
Keynote Talk 2 Chair: Prof. Kamel Ghali				
14:45 - 15:45		Design of Indoor Environment by Creating Shared Values	Arsen Melikov	Jassim Al-Qatami Engineering Lecture Hall
3- Energy Conservation Strategies I Chair: Dr. Aram Yerezian; Co-Chair: Dr. Ghassan Chehab				
15:45 - 16:15	<u>24</u>	A Four Step Approach for Energy Conservation and Retrofitting Interventions for Residential Buildings	Mohamad Hajj Hassan	Jassim Al-Qatami Engineering Lecture Hall
16:15- 16:45	<u>37</u>	Investigation of Thermal Comfort in a Space Conditioned by Liquid Desiccant Membrane Chilled Ceiling/ Displacement Ventilation System	Racha Seblany	
16:45- 17:15	<u>53</u>	Interrelationship Between Architectural and Mechanical Aspects of the Building Envelope Design	Hadi Maamoun	
17:15- 17:45	<u>14</u>	Hygrothermal engineering Analysis of Walls and Roofs in Hot and Humid Climates	Ghina Annan	
4- Indoor Air Quality and Thermal Comfort Chair: Dr. Nesreen Ghaddar; Co-Chair: Carine Habchi				
15:45 - 16:15	<u>35</u>	Mathematical Modeling of Hybrid Cooling Vest Integrated with Bio-Heat Model for Assessing Cooling Effect on Humans in Hot Conditions	Ragheb Raad	M207
16:15- 16:45	<u>64</u>	Effect of Inter-Segmental Ventilation on the Segmental Heat Losses by Means of Electric Circuit Analogy	Naghham Ismail	
16:45- 17:15	<u>5</u>	Numerical Study on PCM-Desiccant Cooling Vest to Improve Cooling and Performance of Workers in Hot Humid Conditions	Mariam Itani	
17:15- 17:45	<u>62</u>	Quantifying Losses Due to Thermal Discomfort: An Agent Based Modeling Approach	Mohamad Awada	

Keynote and Paper Sessions - Friday, October 5, 2018 - Masri Institute				
Time	ASHRAE Paper/Keynote Talk Number	Title	Presenting Author	Room Number
Keynote Talk 3 Chair: Prof. Walid Chakroun				
9:30 - 10:30		Overview of Low GWP Refrigerant Options and the Current State of Global Regulation	William F. McQuade	Jassim Al-Qatami Engineering Lecture Hall
5- Modeling, Simulation, and Standards Chair: Dr. Nesreen Ghaddar; Co-Chair: Mr. Youssef Ghoussoub				
11:00 - 11:30	<u>10</u>	A Comparative Assessment of the Performance of Cooling Systems for Large Scale High-Density Data Centers using CFD Simulations	Khaled Abu Howeij	M207
11:30 - 12:00	<u>12</u>	A Full Three-Dimensional Simulation of an Industrial Baking Oven	Mohamad Al Nasser	
12:00 - 12:30	<u>54</u>	CFD-Optimized Radiant Cooling with Dedicated Outdoor Air System (DOAS) for High Ceiled Spaces in Hot and Dry Climates	Youssef Ghoussoub	
6 - Industrial Sessions Chair: Mr. Mazen Hussien; Co-Chair: Mr. Bassam El Assaad				
11:00 - 11:20		Interlinkage between the HPMP and Energy Efficiency in the RAC and Domestic Refrigeration Sectors	Mazen Hussein	Jassim Al-Qatami Engineering Lecture Hall
11:20 - 11:40		International Developments Towards Integrating Refrigerant Management and Energy Efficiency Programmes	UNDP Representative	
11:40 - 12:00		How Countries Begin Preparing to Implement the Kigali Amendment	Walid Chakroun	
12:00 - 12:20		Impact of Energy Efficiency of AC Equipment on Rating Green Buildings	Samir Traboulsi	
12:20 - 12:40		Enhancing Energy Efficiency in the RACHP Sectors: Decision XXIX/10 of the Montreal Protocol	Bassam Al Assaad	
12:40 - 13:00		Q&A		
Keynote Talk 4 Chair: Prof. Nesreen Ghaddar				
14:15 - 15:15		How to Maximize the Historical Opportunity to Improve Cooling Efficiency	Dan Hamza-Goodacre	Jassim Al-Qatami Engineering Lecture Hall
7 - Heat Recovery and Applications Chair: Dr. Mohamad Ahmad; Co-Chair: Dr. Mariam Itani				
15:30 - 16:00	<u>26</u>	High Solar Combi-Plus System using PCM Storage: KSA Case Study	Mohamad Hmadi	Jassim Al-Qatami Engineering Lecture Hall
16:00 - 16:30	<u>50</u>	Sustainable Design in Metro Stations	Anne Beh	
16:30 - 17:00	<u>16</u>	Energy Performance and Occupant Comfort in an Office Building: Co-Simulation of an Agent-Based Behavior Model with EnergyPlus	Mohamad Awada	
17:00 - 17:30	<u>33</u>	Principles of Split Mass Flow and Heat Shifting Psychrometrics Toward Efficient Comfort Management	Peter Phillips	
8- Energy Conservation Strategies II Chair: Dr. Kamel Ghali; Co-Chair: Mr. Mahmoud Al-Hindi				
15:30 - 16:00	<u>20</u>	World Class Energy Efficient HVAC System for New 'Twisty Tower' in South Africa	Pieter de Bod	M207
16:00 - 16:30	<u>3</u>	Energy Conservation for an Office Building in a Hot Climate	Hari Dalal	
16:30 - 17:00	<u>8</u>	A Simplified Personalized and Displacement Ventilation Model for Predicting Passive Contaminant Spread in Office Spaces	Douaa Al-Assaad	
17:00 - 17:30	<u>7</u>	Feasibility Assessment for Retrofitting an Energy-Efficient Hospital Building through Energy Modelling and Field Investigation	Fu Jen Wang	