

Conference Agenda

Conference Day 1: Tuesday 7 July				
Tuesday, 7 July Session 1	0900-0930	Arrivals & registration		
	0930-0945	Welcome address: <i>Professor Tony Roskilly</i>		
	0945-1030	Keynote: The Dynamics of Energy Demand, <i>Professor Elizabeth Shove</i>		
		Track 1 Building Energy Performance I <i>Chair: Dr Yunting Ge</i>	Track 2 Heat Recovery I <i>Chair: Professor David Reay</i>	Track 3 HVAC <i>Chair: Dr Shuli Liu</i>
	1030-1100	Promoting Behavioural Change to Reduce Thermal Energy Demand in Households <i>Speaker: Rebecca Hafner</i>	Thermodynamic Analysis and Comparison between CO ₂ Transcritical Power Cycles and R245fa Organic Rankine Cycles for Low Grade Heat to Power Energy Conversion <i>Speaker: Liang Li</i>	Reducing Energy Load in a Retail Environment by Pre-Cooling <i>Speaker: Richard Greenough</i>
	1100-1130	Façade Based Investigation towards Lower Cooling Loads in a Typical Low-Rise Dwellings in Egypt <i>Speaker: Ahmad Elshamy</i>	A Comparison of Electric Turbo Assist and Variable Geometry Turbine Technologies for Transient Response Improvement of a Turbocharged Diesel Engine <i>Speaker: Aaron Costall</i>	Thermal Energy Management in Data Centres and its Impact on Power Consumption <i>Speaker: Morgan Tatchell-Evans</i>
		Tea/Coffee break		
	1145-1215	Forecasting the Regional Cost Effectiveness of Energy Efficiency and Decentralized Supply Scenarios for Reducing the Carbon Dioxide Emissions of Dwellings <i>Speaker: Anthony Hargreaves</i>	Modelling Investigation of a New Phase-Change Reciprocating-Piston Heat Engine <i>Speaker: Christos N. Markides</i>	Investigation into Air Distribution Systems and Temperature Control in Chilled Food Manufacturing Facilities <i>Speaker: Demetris A. Parpas</i>
	1215-1245	Managing Thermal Energy in Homes: The Role of Demand Side Response <i>Speaker: Dana Abi Ghanem</i>	An Analysis and Comparison of Pumpless Organic Rankine Cycle and Thermochemical Sorption Power Generation <i>Speaker: Huashan Bao</i>	Application of a Passive Cooling Wind Catcher within the Built Environment: Numerical and Experimental Analysis <i>Speaker: John K. Calautit</i>
	Lunch & poster exhibition			

Tuesday, 7 July Session 2	1400-1445	Keynote: UK Food Chain Energy Consumption and GHG Emissions- Challenges and Opportunities for Energy Demand Reduction, <i>Professor Savvas Tassou</i>		
		Track 1 Building Energy Performance II <i>Chair: Professor Yulong Ding</i>	Track 2 Heat Recovery II <i>Chair: Professor Nik Kapur</i>	Track 3 Cooling <i>Chair: Dr Raya Al-Dadah</i>
	1445-1515	Optimisation of Thermal Energy Storage Integration in a Residential Heating System <i>Speaker: Daniel Friedrich</i>	Working Fluid Selection and Performance Optimisation of a Domestic-Scale Solar Organic Rankine Cycle Combined Heat and Power System for Year-Round Operation in the UK <i>Speaker: James Freeman</i>	Numerical Investigations of Convective Heat Transfer during Microencapsulated Phase Change Slurry Flow in Microchannels <i>Speaker: Rabia Shaukat</i>
	1515-1545	Applications of Economised Vapour Injection Air Source Heat Pump in Residential Building <i>Speaker: Ye Huang</i>	Towards the Computer-Aided Molecular Design of Organic Rankine Cycle Systems with Advanced Fluid Theories <i>Speaker: Christos N. Markides</i>	Enhancement of Cascaded Adsorption Ice-Making System with Mass and Integrated Heat Recovery <i>Speaker: Hassan Dakkama</i>
		Tea/Coffee break & poster exhibition		
	1615-1645	Techno-economic Modelling of Biomass Fuelled Trigeneration Equipped with Energy Storage for Remote Households <i>Speaker: Ye Huang</i>	Novel Organic Rankine Cycle System for Heavy Duty Diesel Engines <i>Speaker: Angad Panesar</i>	Numerical Assessment of Battery Thermal Management System Designs Based on Liquid Cooling Method <i>Speaker: Ahmadou Samba</i>
	1645-1715	Modeling Peak Electric Load Reduction and Change in Energy Consumption for an Integrated Thermal Energy and Rainwater Storage System Coupled With a Hydronic Residential Air Conditioning System <i>Speaker: Charles R. Upshaw</i>	Experimental and Simulated Study of a Small Scale Expander <i>Speaker: Xinjing Zhang</i>	Crystallisation in High Concentrated Systems: A Modelling Approach <i>Speaker: E. Lopez-Quiroga</i>
	1715-1745	Poster exhibition		
	1745-2000	Conference dinner		

Conference Day 2: Wednesday 8 July

Wednesday, 8 July Session 3	0900-0930	Arrivals & registration		
	0930-1015	Keynote: Heating and Cooling to 2020 and Beyond, <i>Professor Bob Critoph</i>		
		Track 1 Modelling and Optimisation <i>Chair: Dr Yaodong Wang</i>	Track 2 Thermal Management & Power I <i>Chair: Professor Phil Eames</i>	Track 3 Heat Exchange I <i>Chair: Dr Christos Markides</i>
	1015-1045	Optimal Integrated Energy Systems Design incorporating Variable Renewable Energy Sources <i>Speaker: Oluwamayowa Amusat</i>	Characterisation of CPO-27Ni Metal Organic Framework Material for Water Adsorption <i>Speaker: Raya Al-Dadah</i>	Investigation of Refrigerant Side-Heat Transfer Coefficient of Finned-Tube CO ₂ Gas Coolers Using Computational Fluid Dynamics (CFD) <i>Speaker: IDewa M.C. Santosa</i>
	1045-1115	Thermal Investigation of a Large and High Power Unbalanced Cylindrical Battery Module <i>Speaker: Odile Capron</i>	MIL101Cr MOF – Water Adsorption System for Cooling and Power Generation Using Waste Heat <i>Speaker: Fadhel Al-Mousawi</i>	Optimizing Operations of Crude Refinery Preheat Train and Furnaces: Influence of Preheat Train Management on Furnace Operation <i>Speaker: Edward Ishiyama</i>
		Tea/Coffee break		
	1130-1200	A Unified Framework for Model-Based Multiobjective Process and Energy Optimisation under Uncertainty <i>Speaker: Vasileios Charitopoulos</i>	Toward Efficient Control of Energy Systems: An Application of Proper Generalized Decomposition to Thermal Storage <i>Speaker: Adriano Sciacovelli</i>	Numerical Simulation Study of Vapor-Liquid Two Phase Flow with Dirt Blockage Effect inside Channels <i>Speaker: Xiangyun Liu</i>
	1200-1230	Hybrid, Plug-in Hybrid, and Electric Vehicle Energy Consumption Sensitivity to the Combined Effects of Driving Cycle and Ambient Temperature-induced Thermal Loads <i>Speaker: Richard A. Simmons</i>	Simulation of a Refrigerated Display Cabinet Integrated with Phase Change Materials <i>Speaker: Falah Alzuwaid</i>	Modelling and Experimentation of Thermal Flat Plate Solar Collector Design Parameters <i>Speaker: Iman S. El-Mahallawi</i>
	1230-1400	Lunch and poster exhibition		

Wednesday, 8 July Session 4		Track 1 Thermal Networks <i>Chair: Professor Neil Hewitt</i>	Track 2 Thermal Management & Power II <i>Chair: Dr Jun Peng</i>	Track 3 Heat Exchange II <i>Chair: Dr Nicolas Miche</i>
	1400-1445	A Hybrid Thermo-chemical District Network Technology <i>Speaker: Philipp Geyer</i>	Experimental Investigation of Rheological Characteristics of Phase Change Material Slurries <i>Speaker: Zhiwei Ma</i>	A Study on the Cooling Performance of a Natural Draft Dry Cooling Tower under Crosswind and a Proposed Enclosure to Improve the Cooling Efficiency <i>Speaker: Weiliang Wang</i>
	1445-1515	Spatially Detailed Optimisation Modelling of UK Heat Network Potential <i>Speaker: Francis G. N. Li</i>	Economic Analysis of a Jatropha Biodiesel-fired Power Plant in Nigeria <i>Speaker: Giuseppina Di Lorenzo</i>	Quantifying the 'Implementation Gap' for Antifouling Coatings <i>Speaker: Ole Mathis Magens</i>
	1515-1545	Modelling Industrial Waste Heat Recovery from a Steelworks with Heat Storage to Supply Low-carbon Heat for District Heating <i>Speaker: Rob Raine</i>	Site Utility System Design with Operation Scheduling under Uncertainty <i>Speaker: Li Sun</i>	Experimental Investigation of Gas Cooler/Condenser Designs in a Co2 Booster System <i>Speaker: Konstantinos M. Tsamos</i>
		Tea/Coffee break		
	1600-1630	The Impact of Urban Canyon on the Thermal Performance of Solar Roads <i>Speaker: Diana SNM Nasir</i>	Blowoff Propensity, CRZs and Turbulence using a Range of Syngas Compositions for Gas Turbines <i>Speaker: Hesham Baej</i>	Numerical Investigation of a Cross Flow Air-To-Water Heat Pipe-Based Heat Exchanger used in Waste Heat Recovery <i>Speaker: Joao Ramos</i>
	1630-1640	Closing address		

