

EU-CHINA-RSEET-HULL2018



Dear Sir/Madam,

On behalf of the Organizing Committee, I warmly welcome you to attend the '1st EU-China Symposium on Sustainable Energy Technologies', the '2nd 'Belt and Road Initiative' International Symposium on Sustainable Refrigeration and Air Conditioning', and the '2nd UK-China Workshop for Renewable Energy and Phase Change Energy Storage Technologies in Buildings', at University of Hull, UK. These three events are combined and jointly organised by around 30 organisations from EU and China and sponsored by the European Commission, British Council, UK EPSRC, Innovate-UK, Natural Science Foundation of China (NSFC) and Ministry of Science and Technology of China (MOST).

The joint event will address the scientific advances and trends of development in renewable energy, energy efficiency, phase change materials, sustainable refrigeration and air conditioning technologies, as well as potential applications of these technologies in data centres and other buildings. The programme will include: 1 - a dedicated inauguration session which has invited a number of important sectoral and governmental leaders from both China and Europe; 2 - a number of keynote and specific parallel sessions which enable communication and reporting of the latest scientific achievements in the addressed topics; 3 - a few selected industrial talks which allow the world-class business leaders to present the real world developments; and 4 - dedicated international collaboration and youth-talents training sessions which help promote wide range of EU-China collaboration and foster the next generation world class researchers. All these arrangements together will facilitate the collaboration between the industrial and academic organisations and personnel, and thus, speed up the conversion from new initiatives to business in both China and EU. You can also find more information of our conference on the website: https://www.eu-china-rseest-hull2018.com/

Welcome again and hope you enjoy the time in Hull, UK.

Prof. Xudong Zhao

Conference Chair University of Hull, UK

Co-Chairs:

Professor Saffa Riffat / World Society of Sustainable Energy Technologies Mr. Zhaohui Zhang / China Refrigeration and Air Conditioning Industry Associatio Mr. Jiawei Jin / Chinese Association of Refrigeration Professor Xiang Huang / Xi'an Polytechnic University, China Professor Yanping Yuan / Southwest Jiaotong University, China



















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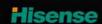
























British Engineering

EVENT SPONSORS/SUPPORTERS























University of

Hull has a long-established

reputation as a research-engaged institution

and is internationally recognised for the quality and impact of

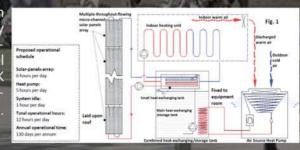
its research across many areas.

The University of Hull was established in 1927 and opened its doors one year later to an initial cohort of just 39 students and 14 departments, all operating out of a single building. Originally an outpost of the University of London, the then University College Hull offered courses in the arts and pure sciences, before becoming an independent institution (and Yorkshire's third university) in 1954.

Today, it offers over 2,000 courses to 18,000 students across six faculties, with its academic portfolio comprising 50 disciplines in the arts and humanities, business, education, health, the sciences and the social sciences. The University of Hull has been the birthplace of many notable discoveries, including the scientific research that led to the development of LCD screens and the first ever bone density scanner.

We are a global research-focused community with more than 100 different countries represented at the University.

A low carbon heating system for existing public buildings employing a highly innovative multiple-throughout-flowing micro-channel solar-panels-array and a novel mixed indoor/outdoor air source heat pump (UK UK Department for Business, Energy & Industrial Strategy: €2.0 m).



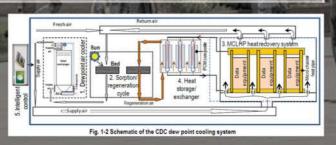
AND RESEARCH

Our Energy Technologies Laboratory and Research Unit, as part of our Faculty of Science and Engineering, is dedicated towards researching sustainable, renewable and energy-efficient building service technologies, as well as sustainable design and city planning.

Headed by Prof. Xudong Zhao and with 17 postdoctoral research fellows and 27 PhD supervised, our Research Unit has produced:

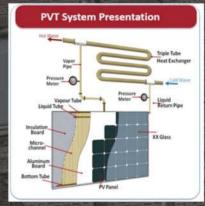
- 57 research projects in excess of £18 million
- 190 scientific papers
- 11 patents and 7 books published (as co-author)
- 40 engineering design and construction projects completed
- The European Dragon-STAR Innovation Silver Award (2015, Brussels)
- The World Society of Sustainable Energy Technology Innovation Award (2016 Singapore, 2017 Italy)

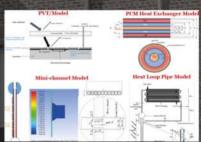
Low Energy Dew Point Cooling for Computing Data Centres (EU H2020 - MS-CA-RISE-2016: €1.156 m)



Major Projects

A High Efficiency, Low Cost and Building Integrate-able Solar Photovoltaic/Thermal (PV/T) System for Space Heating, Hot Water and Power Supply (UK EPSRC/Innovate-UK, £2m)





Key Technologies for Enhancing Energy Efficiency of the Dew Point Air Cooler and its Manufacturing (UK EPSRC/Innovate-UK, £1.165 m)





CONFERENCE CHAIR

Prof. Xudong Zhao /// University of Hull, UK

CO-CHAIRS

Professor Saffa Riffat /// World Society of Sustainable Energy Technologies
Mr. Zhaohui Zhang /// China Refrigeration and Air Conditioning Industry Association
Mr. Jiawei Jin /// Chinese Association of Refrigeration
Professor Xiang Huang /// Xi'an Polytechnic University, China
Professor Yanping Yuan /// Southwest Jiaotong University, China

SCIENTIFIC COMMITTEE

Angui Li /// Xi'an University of Architecture and Technology, China **Changhong Zhan** /// Harbin Institute of Technology, China David M. Christopher /// Tsinghua University, China David Reay /// David Reay & Associates, UK Guigiang Li /// University of Hull, UK Guohui Jin /// Inner Mongolia University of Science and Technology, China Hongbing Chen /// Beijing University of Civil Engineering and Architecture, China Honggi Li /// Beijing University of Technology, China Jie Ji /// University of Science and Technology of China Jinqing Peng /// Hunan University, China Junming Li /// Tsinghua University, China Kevin Kendall /// University of Birmingham, UK Lingai Luo /// CNRS France Manyi Cristofoli /// Queen Mary University of London, UK Danae Manika /// Queen Mary University of London, UK Peng Xu /// Beijing University of Civil Engineering and Architecture, China Qingqin Wang /// China Academy of Building Research Ruzhu Wang /// Shanghai Jiaotong University, China Saffa B. Riffat /// The University of Nottingham, UK Shuli Liu /// Coventry University, UK Suilin Wang /// Beijing University of Civil Engineering and Architecture, China Tao Wu /// The University of Nottingham Ningbo China Tariq Muneer /// Edinburgh Napier University, UK Wansheng Yang /// Guangdong University of Technology, China Xiang Huang /// Xi'an Polytechnic University, China Xianting Li /// Tsinghua University, China Xiaoqiang Zhai /// Shanghai Jiatong University, China Xingxing Zhang /// Dalarna University, Sweden Xudong Zhao /// University of Hull, UK Yanfeng Liu /// Xi'an University of Architecture and Technology, China Yangping Yuan /// Southwest Jiaotong University, China **Yulong Ding** /// University of Birmingham, UK Yuying Yan /// University of Nottingham, UK **Zhenyu Du** /// Taiyuan University of Technology, China

Zhongzhu Qiu /// Shanghai University of Electric Power, China

ORGANISING COMMITTEE

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Samson Shittu /// University of Hull, UK

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Lingai Luo /// CNRS, France

Feifei Sun /// NPS Humber Limited, UK

Zhongzhu Qiu /// Shanghai University of Electric Power, China

Alessandro Provaggi /// Euroheat & Power Association/European District Heating

and Cooling Platform, Belgium

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Steve Hone /// The EU Data Centre Trade Association, UK

Qingqin Wang /// China Academy of Building Research, China

Zafer Ure /// Environmental Process System Ltd, UK

Shengyao Zhang /// Five-Star Solar Energy Ltd, China

Hua Liu /// Gree Electric Appliance, Inc. of Zhuhai, China

Nikos Sakkas /// Applied Industrial Technologies Ltd, Greece

Ariel Oleksiak /// PSNC, Poland

Zhigang Wang /// Hisense Europe, Germany

Geoff Lockwood /// ebm-papst UK Ltd, UK

KEYNOTE SPEAKERS



Professor Saffa Riffat /// Fellow of the European Academy of Sciences, President of WSSET, University of Nottingham (UK)

Title: Sustainable Technologies & Low Carbon Buildings

Professor Riffat holds the posts of Chair of Sustainable Energy and Head of Architecture, Climate and Environment Research Group at the University of Nottingham, UK. He is also the Fellow of the European Academy of Sciences and the President of the World Society of Sustainable Energy (WSSET). Professor Riffat has a wide range of experience in renewable energy/sustainable technologies, eco-cities/sustainable buildings, heat pumps/ cooling systems, energy storage and heat powered power cycles. He has obtained grants in excess of £120 million from the EPSRC, EU, and industry and published over 650 refereed papers. According to the 2011 analysis, Professor Riffat is named as the author of one of the top 1% most highly cited papers in his field worldwide. Professor Riffat has been awarded the degree of Doctor of Science (DSc) from the University of Oxford for his research contribution in the field of heat pumps and ventilation technology. He is named as the inventor on 30 International Patents. He is the Editor-in-Chief for the International Journal of Low Carbon Technologies and Renewable Bioresources Journal, International Journal of Future Cities and Environment, and Founder/previous Editor-in-Chief of the International Journal of Sustainable Cities and Society. He is also a member of the Editorial Board of several journals including the Journal of Applied Thermal Engineering, Journal of Green Energy, Journal of Ambient Energy, Journal of Mechanical and Industrial Engineering, Journal of the Energy Institute, and Journal in Architectural Engineering and Design Management.



Professor Kevin Kendall /// Fellow of the Royal Society (UK), University of Birmingham (UK)

Title: China Progress: Fuel Cells, Hydrogen and Battery Hybrids

Kevin Kendall developed the theory of cracks so as to apply it to a very wide range of problems of great industrial significance. Through a series of experiments, Kevin has shown that the thermodynamic theory of cracking can be used to explain and predict such varied phenomena as adhesion, some types of friction, colloidal behaviour and the internal structure of complex solids. Solutions have been obtained for the adhesion of elastic spheres, failure of lap joints, interfacial dislocations, delamination of a composite, failure in compression, crack arrest at an interface, rolling friction of cylinders, crushing of particles and the strength of porous solids, as well as the behaviour of powder compacts. He has also used the theory synthetically to design polymer latex coatings and to devise new processes for making strong cements besides suggesting the optimum interfacial adhesion in composites. His work has also greatly illuminated a number of older problems such as Galileo's argument on flaw statistics and Newton's supposition on the attraction between spheres.



Professor Xianting Li /// Director of Institute of the Built Environment, Tsinghua University (China)

Title: Contributions of Pipe-Embedded Envelope on Building Energy Efficiency

Xianting Li is a full professor at Dept. of Building Science, School of Architecture, Tsinghua University (Beijing, China), and Director of Institute of Built Environment. He got his PhD degree in 1995 at Tsinghua University. He is now the President of E1 Commission, International Institute of Refrigeration (IIR), the Vice-President of Chinese Association of Refrigeration, Administrator of CAR-ASHRAE Beijing Group; editorial board member of Indoor and Built Environment, International Journal of Ventilation, Journal of Building Engineering etc.; a Fellow of International Society of Indoor Air Quality and Climate (ISIAQ) and Fellow of International Building Performance Simulation Association (IBPSA). Since 1995, Prof. Li has been the PI or Co-PI for more than 90 sponsored research projects. Dr Li's research interest includes: (1) Demand-oriented non-uniform indoor environment; (2) Energy-efficient air-conditioning and heat pump system; (3) Thermal storage and domestic hot water. Up to now, Dr. Li has published 6 books or chapters in book, 120 journal papers in English, 100 journal papers in Chinese, 60 conference papers in English, and 50 Chinese patents.



Professor Yulong Ding /// Director of the Birmingham Centre for Energy Storage, University of Birmingham (UK)

Title: Composite Phase Change Materials for Thermal Energy Storage – from Materials to System Integration

Professor Yulong Ding holds the founding Chamberlain Chair of Chemical Engineering and RAEng- Highview Chair of Cryogenic Energy Storage. He is the founding Director of the Birmingham Centre for Energy Storage at the University of Birmingham (UoB) and founding Co-Director of Joint UoB – GEIRIEU Lab for Energy Storage Research. He joined Birmingham in October 2013. Prior to his appointment at the University, he was Professor and Director of Institute of Particle Science & Engineering at the University of Leeds. He was the founding Director (2010 – 2014) of the Joint Institute for Energy Storage between University of Leeds and Institute of Process Engineering of Chinese Academy of Sciences. His research has been multidisciplinary, across energy engineering, chemical & process engineering, materials, and physics. His current research interests cover both fundamental and applied aspects, with the fundamental research focusing on multiphase transport phenomena across the length scales, and the applied research concentrating on new energy storage technologies, and micro-structured materials for heat transfer intensification and energy harvesting and storage applications. He has filed over 40 patents and published over 450 papers with \sim 250 in peer-reviewed journals (H-Index of \sim 54) and was listed as top 1% highly cited researchers in the engineering category by Thomson Reuters in 2014. Professor Ding invented the liquid air energy storage technology and led the initial stage of development of the technology.



Professor David Reay /// David Reay & Associates (UK)

Title: The Development of Heat Pipe Technology in Renewable and Sustainable Energy

Professor David Reay graduated from Bristol University in Aeronautical Engineering in 1965. He currently works part-time as a Senior Research Associate as PI on a Carbon Capture project funded by EPSRC at Newcastle University and is an Honorary Professor at Nottingham University and a Visiting Professor at Northumbria University, Newcastle. He has about 50 years of experience of process energy efficiency activities, covering heat recovery, heat pumps, heat pipes, and process intensification. He co-ordinates both HEXAG (Heat Exchanger Action Group) and PIN (Process Intensification Network) — networks respectively running for 20 and 12 years. He is Founding Editor of Applied Thermal Engineering and is Editor of a new Elsevier Journal — Thermal Science and Engineering Progress. Professor Reay has advised the UK Energy Efficiency Programmes and the EC Energy R&D and Demonstration programmes over many years, with an emphasis on thermal processes. His main task is as Principal Consultant of David Reay & Associates (DRA), which has been active in consulting engineering since 1987. Prior to that, he worked in aerospace and at International Research and Development Company in Newcastle on heat transfer and fluid flow problems in nuclear reactors. Professor Reay has completed via his Consulting Engineering business, with Professor Colin Ramshaw, studies for Alstom Power on (i) heat exchanger technology trends for carbon capture, and (ii) preliminary sizing and costing of an intensified absorber for a post-combustion carbon capture plant.



Professor Yuying Yan /// Head of Fluids and Thermal Engineering Research Group, University of Nottingham (UK)

Title: Can Nature-Inspired Technology be Helpful for Developing Sustainable Energy?

Professor Yuying Yan is Chair in Thermofluids Engineering and Head of the Fluids and Thermal Engineering research group, which is a new cross-Department group building up from previous groups of HVACR & Heat Transfer, Thermo Fluid Mechanics, and Particles & two-phase flow. He also acts as the Director of Joint Laboratory of Thermal Management & Heat Transfer for Low Carbon Vehicles; Coordinator of UK-China Joint Laboratory of Biomimetic Functional Surfaces & Fluids. He received BSc in Thermal Mechanical Engineering (Internal Combustion Engine) in January 1982 at Jilin University of Technology (now Jilin University); MSc in Thermal Energy/Physics Engineering at Shanghai Institute of Technology in 1986; PhD in Mechanical Engineering at City University (London, UK) in 1996. He was a research fellow in two-phase flow at Department of Chemical & Process Engineering, University of Surrey (UK) from 1996-1998, and was appointed to an academic position in the UK (senior lecturer from 1998, Readership from 2003) in Mechanical Engineering at Nottingham Trent University. He joined the University of Nottingham since 2004 (as Senior Lecturer/Associate Professor in 2004, then was promoted to Reader in 2009, and to Full Professor (Chair) position in 2011). Professor Yan is a member of EPSRC Peer Review College; Editorial Board member of Nature Publishing Group's multidisciplinary Journal: Scientific Reports; Editorial Board member of Journal of Bionic Engineering; Fellow and Deputy General Secretary of International Society of Bionic Engineering.



Professor Jie Ji /// Director of Research Centre of Solar Thermal Conversion of Chinese Academy of Sciences, University of Science and Technology of China

Title: Research and Application of the Advanced Solar Thermal and Power Technologies

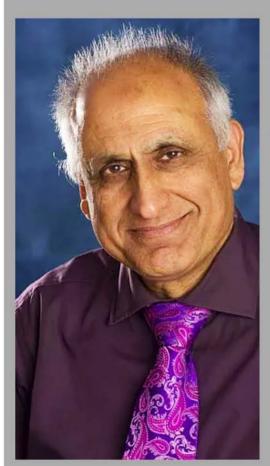
Professor Jie Ji is a top expert on renewable energy technologies in Ministry of Science and Technology of the People's Republic of China. He is a Special Contribution Professor of Chinese Academy of Sciences. He is an executive member of Chinese Renewable Energy Society, Vice Chairman of Chinese Solar Thermal Utilization Committee, Director of Research Centre of Solar Thermal Conversion of Chinese Academy of Sciences. He was listed as one of the Most Cited Chinese Researchers by Elsevier in 2014, 2015 and 2016. Professor Jie Ji has a wide range of experience in solar energy, heat pumps, sustainable technologies, heat transfer, and HVAC. He leads a large international research team on solar energy and has trained four European Union Marie Curie Fellows. He has been involved in a number of projects funded by the National "973" and "863" Hi-Tech Development Programs of China, "Solar Action Plan" of the Chinese Academy of Sciences, and the National Natural Science Foundation of China etc. and has obtained grants in excess of 60 million RMB. He is the named inventors on more than 50 patents and has published over 200 refereed papers. Two articles published in APPLIED ENERGY (ranking 1st in Energy category in Scopus) were in citation rankings top 10. He has also published the first Chinese PV/T monograph 'Research Progress on Solar Photovoltaic/ Thermal System Utilization' and the monograph 'Research and Application of the Novel Solar Thermal Technologies Based on Flat-plate Solar Collectors'.



Professor Xudong Zhao /// Drector of Research, School of Engineering and Computer Science, University of Hull (UK)

Title: Key Technologies for the Novel Solar Driven Heating and Cooling Systems

Professor Xudong Zhao is the Director of Research and Professor at the School of Engineering and Computer Science, University of Hull (UK), and has enjoyed a global reputation as a distinguished academia in the areas of sustainable building services, renewable energy and energy efficiency technologies, and mechanical engineering. Over more than 30 years of professional career, he has led or participated in 57 research projects with accumulated fund value of approximately £18 million, 40 engineering consultancy projects worth £5 million, and claimed 11 patents. Up to date, he has supervised 28 PhD students and 17 postdoctoral research fellows, published 190 peer-reviewed papers in high impact journals and referred conferences, involved authorization of 8 books, chaired, organized and gave keynote (invited) speeches in 25 international conferences. His researches in solar PV, solar thermal, solar PV/T (photovoltaic/thermal), heat pump, and sustainable heating & cooling have achieved world-leading standards, being placed at the '2017 world highly cited researchers list (i.e. top 1% highly cited researchers in the engineering category compiled by Clarivate Analytics)', receiving the 'European Dragon-STAR Innovation Silver Award (2nd place)', 'World Society of Sustainable Energy Technology 1st and 2th Round Innovation Awards' in consecutive years of 2016 and 2017, and being nominated as a candidate for '2018 World Eni-awards'.



Professor Tariq Muneer /// Edinburgh Napier University (UK)

Title: Solar Energy - The Ultimate Resource

Over the last 26 years at Edinburgh Napier University, Professor Tariq Muneer has led the developments related to research and teaching of Energy Engineering with a great deal of imagination, vigour and sincerity. The following are a few examples of his personal interest that has led to hardware and software developments that have directly been used in undergraduate, postgraduate and doctoral teaching and research: (i) installation of a (£155k) 16kWp photovoltaic façade at Merchiston, (ii) erection of hydrogen laboratory with electrolyser, six cylinders containing compressed hydrogen and fuel-cell, (iii) three roof-mounted wind turbines, and (iv) four electric vehicle charging facilities that facilitate drivers at all ENU campuses.



Professor David M. Christopher /// Tsinghua University (China)

Title: Safety Issues Related to High-Pressure Hydrogen Storage in Vehicles and Fueling Stations

David M. Christopher received his Ph.D. from Purdue University in Mechanical Engineering in 1982. He has been teaching and conducting research in the Thermal Engineering Department, Tsinghua University in Beijing, China since 1991 where he is currently a full professor and supervises master's and Ph.D. students. He teaches courses on Technical English Writing and Numerical Heat Transfer Methods for both undergraduate and graduate students. His research interests include flows in porous media, nucleate boiling heat transfer mechanisms, modelling of high pressure under expanded jet flows related to the safety of hydrogen storage facilities for fuel cell vehicles and numerical methods in heat transfer. He has conducted numerous projects in these areas and has published nearly 200 journal and conference papers.



Professor Hongqi Li /// Beijing University of Technology (China)

Title: New Refrigerant Applications and Energy Efficiency Improvements

Professor Li, Engineer/Professor Honaai Senior of Refriaeration Department of College of Environmental and Eneray Engineering of Beijing University of Technology since 2000. Senior Engineer on R & D and manufacturing of refrigeration and Air-conditioning compressors in Guangzhou Refrigeration Group from 1994 to 2000.

Membership of SAC/TC145 (China National Standard Committee of Compressors), SAC/TC238 (China National Standard Committee of refrigeration and Air-conditioning), SAC/TC415 (National Technical Committee on Fundamentals and Management for Waste Product Recovery), SAC/TC119(National Refrigeration Standardization Technology Committee)/SC7 (Sub-Committee 7 – Refrigerating Cabinet), SAC/TC20/SC8 (Sub-Committees 8 – Technology & Information of Energy Saving), Tech Committee of Nation Key Lab of Compressor Technology, Tech Committee of Nation Key Lab of High Efficient Operation of Air-conditioning Equipment and System, Tech Committee of Beijing Key Lab of Heating, NG-supplying, Ventilation and Air-conditioning Engineering.

He works now on the energy-saving and environmental protection of refrigeration and air-conditioning equipment such as energy efficiency standards, high efficient technologies, HCFCs phase-out, etc., and the applications of refrigeration equipment in the fields of energy saving and environmental protection such as VOVs recovery and recycling, waste heat recovery, etc.



Professor Xiang Huang /// Xi'an Polytechnic University (China)

Title: Application of Evaporative Cooling Ventilation and Air-conditioning Technology in Hot and Dry Area in Northwest China

Xiang Huang is a professor at Xi'an Polytechnic University. Member of Chinese Association of Refrigeration, member of Association of Heat Pump Major, member of the Technical Committee of China Refrigeration and Air Conditioning Industry Association, deputy director and secretary-general of Evaporative Cooling Committee, standing director of China Textile Engineering Society, director of the Air Conditioning Dust Removal Specialized Committee. His research focus is theory and application of evaporative cooling technology and building renewable energy. He won the first prize of Shaanxi Science and Technology Progress Award 2014, the first prize of Chinese Association of Refrigeration Science and Technology Invention Award 2017 both as the first contributor. Professor Huang was the Chair of the 1st'The Belt and Road Initiative 'International Conference on Sustainable Refrigeration and Air Conditioning. Over the past 19 years, Professor Huang has been authorized more than 150 patents and more than 400 utility model patents and has published more than 500 papers in domestic and foreign journals and academic conferences. He has undertaken more than 30 national key research projects, enterprises, and units commissioned scientific research projects. He has trained almost 100 doctoral and master students.



Professor Yanping Yuan /// Associate Dean Faculty of Mechanical Engineering, Southwest Jiaotong University (China)

Title: Novel PV/T Systems

Yanping Yuan is a Professor at Southwest Jiaotong University and Deputy Dean of School of Mechanical Engineering. He received his PhD degree in Heating, Ventilating, and Air-conditioning from PLA University of Science and Technology in 2005. His research focus is Latent heat thermal energy storage and building renewable energy system, interior hot and humid environment of building, engineering heat & mass transfer. Yuan has led 56 research projects with a total fund value of over ¥10 million, published 191 scientific papers in journals (3 ESI highly cited papers and 1 ESI hot paper). He won the First Prize for the Science and Technology Progress Award of Sichuan Province twice as the first contributor. Yuan is invited to be an Associate Editor of Journal of Thermal Analysis and Calorimetry (2018.01–2020.12) and editorial member of Energies and Sustainable cities and society.



Professor Tao Wu /// Dean of Faculty of Science and Engineering, The University of Nottingham-Ningbo (China)

Title: Solid Waste to Electricity - A Microwave Assisted Biomass Pyrolysis Based Approach

Professor Tao Wu is currently the Dean of Faculty of Science and Engineering (FoSE). Prior to taking up current position, he was the Head of Department of Chemical and Environmental Engineering, Associate Dean for Research and Director of Health, Safety and Estate Matters of the FoSE, Professor Wu received his PhD in Chemical Engineering at the University of Nottingham UK. He joined the University of Nottingham Ningbo China (UNNC) in 2007 as a lecturer, was promoted to an Associate Professor in 2010, an Associate Professor and Reader in 2013, and then a full Professor in 2015. Professor Tao Wu has over 25 years of RD&D experience in the efficient conversion and utilization of fossil fuels/biomass and the development of novel materials for environmental applications. His research programs cover a wide range from blue-sky research to proof of concept and patent development leading to commercial applications. To date, Professor Wu has completed over 40 research projects funded by various funding bodies and has developed patented technologies that have benefit the society through commercialization. As an active researcher, Professor Wu serves as a committee member of a number of national and regional professional bodies. He is a Fellow of Royal Society of Chemistry, is currently leading the Municipal Key Laboratory of Clean Energy Conversion Technologies at UNNC and holds the Director position of University's New Materials Institute (NMI).



PROGRAMME

Sunday 29th July 2018

TIME	PROGRAMME	VENUE	CONTACT
14:00 - 17:00	Registration	Travelodge	Min Yu
18:00 - 20:00	Evening Meal	Wings International	Zhishang Zhu

Monday 30th July 2018

TIME	PROGRAMME	VENUE	CHAIR
08:00 - 08:50	Registration, Tea & Coffee	Middleton Hall Foyer	Min Yu
	Opening Ceremony - Dr. David I Richards, Pro-Vice-Chancellor, University of Hull, UK - Lord Mayor Pete Allen, Lord Mayor of Kingston upon Hull, UK - Cllr. Daren Hale, Deputy leader, Hull City Council, UK		
08:50 - 10:00	 Mr. Sunan Jiang, Minister Counsellor of Science and Technology, Chinese Embassy in the UK Prof. Saffa B. Riffat, President, World Society of Sustainable Energy Technologies Mr. Zhaohui Zhang, Secretary General, China Refrigeration and Air Conditioning Industry Association Ms. Sofia Lettenbichler, Euroheat & Power c/o DHC+ Technology Platform- Dr. Conor Snowden, British Council, Edinburgh, UK Prof. Yanping Yuan, Associate Dean, Southwest Jiaotong University, China Mr. Steve Hone, CEO, Data Centre Alliance Europe Prof. Stephen Gill, President, Institute of Refrigeration, UK Prof. Xiang Huang, Vice President, Xi'an Polytechnic University, China 		Xudong Zhao
10:00 - 10:10	Group Photo	Library	Paul Hartley
10:10 - 10:30	Coffee/Tea Break	Art Cafe	
10:30 - 11:00	Keynote Speaker 1: Prof. Saffa B. Riffat, Fellow of the European Academy of Sciences, University of Nottingham, World Society of Sustainable Energy Technologies Title: Sustainable Technologies & Low Carbon Buildings	Middleton Hall	David Atkinson
11:00 - 11:30	Keynote Speaker 2: Prof. Kevin Kendall, Fellow of the Royal Society, University of Birmingham Title: China Progress: Fuel Cells, Hydrogen and Battery Hybrids	Middleton Hall	Maggie McGowan

TIME	PROGRAMME	VENUE	CHAIR
11:30 - 12:00	Keynote Speaker 3: Prof. Xianting Li, Tsinghua University, China Title: Contributions of Pipe-embedded En- velope on Building Energy Efficiency	Middleton Hall	Phil Leigh
12:00 - 12:40	EU-China Energy Dialogue: Road & Belt Initiative — Opportunities and Challenges - Martin Budd, Hull City Council, UK - Phil Leigh, University of Hull, UK - Xudong Zhao, University of Hull, UK - Xianting Li, Tsinghua University, China - Sunan Jiang, Chinese Embassy in the UK - Conor Snowden, British Council	Middleton Hall	Maggie McGowan, Manyi Cristofoli
12:40 - 13:30	Buffet Lunch / Break	Art Cafe	
13:30 - 14:00	Keynote Speaker 4: Prof. Yulong Ding, University of Birmingham, UK Title: Composite Phase Change Materials for Thermal Energy Storage – from Materials to System Integration	Middleton Hall	Alfred Bliek
14:00 - 14:30	Keynote Speaker 5: Prof. David Reay, David Reay & Associates Title: The Development of Heat Pipe Tech- nology in Renewable and Sustainable Energy	Middleton Hall	Suilin Wang
14:30 - 15:00	Keynote Speaker 6: Prof. Yuying Yan, University of Nottingham Title: Can Nature-Inspired Technology be Helpful for Developing Sustainable Energy?	Middleton Hall	Enshen Long
15:00 - 15:30	Industrial Talk 1: Hua Liu, Gree Electric Appliance, Inc. of Zhuhai Title: Study on Application of Renewable Energy in Buildings	Middleton Hall	Hongqi Li
15:30 - 15:50	Coffee/Tea Break	Art Cafe	
	Parallel Session 1-1: Renewable Energy and Phase Change Energy Storage Technologies in Buildings	Austen Blake	Yong Wang, Weibo Yang
15:50 - 17:45	Parallel Session 2-1: 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning	Byron	Changhong Zhan, Zishang Zhu
10.00 11.40	Parallel Session 3-1: Energy Efficiency Technologies	Eliot	Hongbing Chen, Guiqiang Li
	Parallel Session 4-1: Energy Saving Technologies in Data Centres and Other Buildings	Hardy	Xiaoli Ma, Zishang Zhu
18:00 - 21:00	Welcome Dinner & Performance Shows	Kingsley Suite	19

Tuesday 31st July 2018

TIME	PROGRAMME	VENUE	CHAIR
09:00 - 09:30	Keynote Speaker 7: Prof. Jie Ji, University of Science and Technology of China Title: Research and Application of the Advanced Solar Thermal and Power Technologies	Austen Blake	Yingde Cui
09:30 - 10:00	Industrial Talk 2: Phil Vozza, NPS Humber Ltd Title: Low Carbon and Environmental Designs For Local Authorities Property Profile	Austen Blake	Nikkos Sakkas
10:00 - 10:20	Coffee/Tea Break	Kingsley Suite	
10:20 - 10:50	Keynote Speaker 8: Prof. Xudong Zhao, University of Hull Title: Key Technologies for the Novel Solar Driven Heating and Cooling Systems	Austen Blake	Xiaoqiang Zhai
10:50 - 11:20	Keynote Speaker 9: Prof. Tariq Muneer, Edinburgh Napier University Title: Solar Energy - the Ultimate Resource	Austen Blake	Zhigang Wang
11:20 - 12:30	Parallel Session 1-2: Renewable Energy and Phase Change Energy Storage Technologies in Buildings	Austen Blake	Shuli Liu, Wan- sheng Yang
	Parallel Session 2-2: 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning	Byron	Peng Xu, Yuanda Cheng
	Parallel Session 3-2: Energy Efficiency Tech- nologies	Eliot	Zhongzhu Qiu, Yiqiang Jiang
	Parallel Session 4-2: Energy Saving Technologies in Data Centres and Other Buildings	Hardy	Songtao Hu, Yong Wang
12:30 - 13:30	Buffet/Lunch Break	Kingsley Suite	
13:30 - 14:00	Industrial Talk 3: Lujun Liang, Nanjing Tica Climate Solutions Co.Ltd	Austen Blake	Feifei Sun
14:00 - 14:30	Keynote Speaker 10: David M. Christo- pher, Tsinghua University Title: Safety Issues Related to High-Pres- sure Hydrogen Storage in Vehicles and Fueling Stations	Austen Blake	Manyi Cristofoli
14:30 - 15:00	Keynote Speaker 11: Hongqi Li, Beijing University of Technology Title: New Refrigerant Applications and Energy Efficiency Improvements	Austen Blake	Songtao Hu

Tuesday 31st July 2018

TIME	PROGRAMME	VENUE	CHAIR
15:00 - 15:30	Industrial Talk 4: Payen Xie, Shanghai Hanbell Precise Machinery Co.,Ltd Title: The Application Introduction of Screw Compressor in High Temperature Heat Pump and Low Ambient Temperature Air Source Heat Pump	Austen Blake	Danae Manika
15:30 - 15:50	Coffee/Tea Break	Kingsley Suite	
15:50 - 16:30	EU-China industrial talks: Globalisation, Trade and Business — Opportunities and Challenges - Feifei Sun, NPS Humber Ltd, UK - Zhigang Wang, Hisense Germany, Germany - Zafer URE, PCM Ltd - Jianguang Su, Trina Solar, China - Zhuang Deng, Shanghai Hanbell Precise Machinery Co.,Ltd, China - Lujun Liang, Nanjing Tica Climate Solutions Co. Ltd, China - Xiongwei Liu, Entrust Microgrid, UK - Nikos Sakkas, Apintech, Greece	Austen Blake	Danae Manika, Phil Leigh
16:30 - 17:45	Parallel Session 1-3: Renewable Energy and Phase Change Energy Storage Technologies in Buildings	Austen Blake	Jinqing Peng, Gui- qiang Li
	Parallel Session 2-3: 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning	Byron	Hongbing Chen, Zishang Zhu
	Parallel Session 3-3: Energy Efficiency Tech- nologies	Eliot	Juan Zhao, Chang- hong Zhan
	Parallel Session 4-3: Energy Saving Technologies in Data Centres and Other Buildings	Hardy	Min Li, Hua Zhong
13:30 - 17:30	Lab Visits (Optional)	Ask the event staf	f for a guided tour
18:00 - 19:30	Dinner	Kingsley Suite	

Wednesday 1st August 2018

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TIME	PROGRAMME	VENUE	CHAIR
09:00 - 09:30	Keynote Speaker 12: Xiang Huang, Xi'an Polytechnic University Title: Application of Evaporative Cooling Ventilation and Air Conditioning Technology in Hot and Dry Area in Northwest China	Austen Blake	Shuli Liu
09:30 — 10:00	Keynote Speaker 13 : Yanping Yuan, Southwest Jiaotong University Title : Novel PV/T Systems	Austen Blake	Zhongzhu Qiu
10:00 - 10:30	Keynote Speaker 14: Tao Wu, The University of Nottingham Ningbo, China Title: Solid Waste to Electricity - A Microwave Assisted Biomass Pyrolysis Based Approach	Austen Blake	Xiaoli Ma
10:30 - 11:00	Industrial Talk 5: Jianguang Su, Trina Solar	Austen Blake	Zafer URE
10:50 - 11:20	Industrial Talk 6: Zafer URE, PCM Ltd, UK	Austen Blake	Yijun Yuan
11:20 - 12:00	Youth Training and Career Devel- opment Experience Sharing	Austen Blake	Yanping Yuan, Sofia Lettenbichler
12:00 - 13:00	International Collaboration Experi- ence Sharing	Austen Blake	Tao Wu, Xingxing Zhang
13:00 - 13:30	Closing Ceremony	Austen Blake	
13:30 - 14:00	Buffet Lunch	Kingsley Suite	

PARALLEL SESSIONS

Parallel Session 1 -1: Renewable Energy and Phase Change Energy Storage Technologies in Buildings

Time: Monday 30th July 15:50 – 17:45 Venue: Austen Blake, Canham Turner Chairs: Yong Wang, Weibo Yang

Keynote speakers: Yong Wang, Nikos Sakkas

Speakers: Juan Zhao, Blaise Mempouo, Zhiyin Duan, Nan Zhang, Daili Feng

TIME	SPEAKER	TOPIC	ORGANISATION
15:50 - 16:10	Yong Wang	Numerical Simulation and Experimental Investigation of the Phase Change Energy Storage Device in the Heat Pump Assisted Solar Heating System	Chongqing University
16:10 – 16:30	Nikos Sakkas	Why Behaviour? Modeling, Monitoring and Controlling User Behaviour as regards Ener- gy Use	Applied Industry Technologies LTD
16:30 - 16:45	Juan Zhao	Simulation Models of Solar Heating System with PCM Storage Tank	Southwest Jiaotong University
16:45 – 17:00	Blaise Mempouo	Heat Pump Technology for Low Energy/ Carbon (New or Retrofit) Buildings or for District Heating/Cooling	University of Nottingham
17:00 – 17:15	Zhiyin Duan	Investigation of the Dynamic Performance of a Hybrid Dew Point Regenerative Evap- orative and Vapour Compression Cooling System	Beijing University of Civil Engineering and Architecture
17:15 – 17:30	Nan Zhang	Thermo-Physical Properties Enhancement of a Solid-Solid Phase Change Material for Thermal Energy Storage	China Aerodynamics Research and Development Center
17:30 - 17:45	Daili Feng	Surface Modification Driven Phase Change Properties of Organics Confined in Nanopo- res Matrix for Shape Stabled Phase Change Materials	University of Science and Technology Bei- jing

Parallel Session 2 -1: 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning

Time: Monday 30th July 15:50 - 17:45

Venue: Byron, Canham Turner

Chairs: Changhong Zhan, Zishang Zhu Keynote speakers: Hua Zhong, Jianfeng Cui

Speakers: Yugang Wang, Yongcai Li, Jiying Liu, Atta Ajayebi, Naici Bing

TIME	SPEAKER	TOPIC	ORGANISATION
15:50 - 16:10	Hua Zhong	Historic Building Sustainability	Nottingham Trent University
16:10 - 16:30	Jianfeng Cui	Case study: China Conservation and Re- search Centre for Giant Panda in Wolong	China Academy of Building Research
16:30 - 16:45	Yugang Wang	Comparison Study of the Cross-flow Indirect Evaporative Heat Exchangers with Numeri- cal Methods	Jimei University
16:45 - 17:00	Yongcai Li	Experimental Study on the Thermal Perfor- mance of a Solar Chimney Combined with PCMs	Chongqing University
17:00 - 17:15	Jiying Liu	Performance Analysis of a Ductless Per- sonalized Ventilation (DPV) combined with Radiant Floor Cooling System (RFCS) and Displacement Ventilation (DV)	Shandong Jianzhu University
17:15 – 17:30	Atta Ajayebi	Associating Life Cycle Assessment (LCA) and Ecosystem Services(ES): from Regional- isation of Life Cycle Inventories to ES Values	University of Exeter
17:30 - 17:45	Naici Bing	Enhancement of solar energy absorption using nanofluids based on bimetallic Ag-Au alloys in nitrogen-doped graphitic carbon	Shanghai Polytechnic University

Parallel Session 3 -1: Energy Efficient Technologies

Time: Monday 30th July 15:50 - 17:45

Venue: Eliot, Canham Turner

Chairs: Hongbing Chen, Guiqiang Li

Keynote speakers: Zhongzhu Qiu, Yiqiang Jiang

Speakers: Miaomiao Wu, Hui Cao, Zhuang Deng, Xiangkui Gao, Essam Hussein

TIME	SPEAKER	ТОРІС	ORGANISATION
15:50 - 16:10	Zhongzhu Qiu	Rheological Property and Heat Transfer Enhancement of MPCM Suspensions	Shanghai University of Electric Power
16:10 - 16:30	Yiqiang Jiang	Heat Pump Technology Based Clean Heat- ing in Northern China and its Typical Cases	Harbin Institute of Technology
16:30 - 16:45	Miaomiao Wu	Technology of Building Energy Efficiency in Lingnan Area	Foshan University of Technology
16:45 - 17:00	Hui Cao	An Integrated Thermal to Electrical Energy Conversion System	University of Birmingham
17:00 – 17:15	Zhuang Deng	The Analysis of Compound Two Stage Screw Compressor Used in Low-Ambient Temp. Air-Source Heat Pump	Shanghai Hanbell Precise Machinery Co. Ltd
17:15 – 17:30	Xiangkui Gao	Coupled Cooling System of Latent Heat Thermal Energy Storage Combined with Pre-Cooling of Envelope in Mine Refuge Chamber	Southwest Jiaotong University
17:30 - 17:45	Essam Hussein	Improving Power Quality of an Island Microgrid Using Flywheels	University of Exeter

Parallel Session 4 -1: Energy Saving Technologies in Data Centres and Other Buildings

Time: Monday 30th July 15:50 – 17:30 Venue: Hardy, Canham Turner Chairs: Xiaoli Ma, Zishang Zhu Keynote speakers: Songtao Hu, Guohui Jin Speakers: Ye Zhang, Kailiang Huang, Peng Xu, Yaxuan Xiong

TIME	SPEAKER	TOPIC	ORGANISATION
15:50 - 16:10	Songtao Hu	Principle and Application of Energy Cloud Technology	Qingdao University of Technology
16:10 – 16:30	Guohui Jin	Research on Heating Mode for Ultra-low Energy Consumption Building of Grass- land Residence in Western Inner Mongolia Based on Efficient Utilization of Renewa- ble Energy	Inner Mongolia Uni- versity of Science and Technology
16:30 - 16:45	Ye Zhang	Thermal Performance of Solar Energy-phase Change Storage-floor Radiant Heating System	Jia Xin University
16:45 – 17:00	Kailiang Huang	Using Waste Heat of Photovoltaic Curtain Wall in the Double Source Heat Pump System with Heat Storage	Chanyana Hanzhii
17:00 - 17:15	Peng Xu	Opportunities for the Development of the Dew Point Air Cooler: A Brief Review	Beijing University of Civil Engineering and Architecture
17:15 – 17:30	Yaxuan Xiong	Comparative Analysis of the Compressed Air and the Natural Gas for Energy Storage	Beijing University of Civil Engineering and Architecture

Parallel Session 1-2: Renewable Energy and Phase Change Energy Storage Technologies in Buildings

Time: Tuesday 31st July 11:20 – 12:30 Venue: Austen Blake, Canham Turner Chairs: Shuli Liu, Wansheng Yang Keynote speakers: Shuli Liu, Weibo Yang Speakers: Zhangyuan Wang, Haoshu Ling

TIME	SPEAKER	TOPIC	ORGANISATION
11:20 - 11:40	Shuli Liu	Creating Customer Behaviour Change through Smarter Households	Coventry University
11:40 – 12:00	Weibo Yang	Experimental and Numerical Investiga- tions on Thermal Performance of a Bore- hole Ground Heat Exchanger with PCM Backfill	Yangzhou University
12:00 - 12:15	Zhangyuan Wang	Applications of Heat Pipe Technologies in Solar Systems	Guangdong University of Technology
12:15 – 12:30	Haoshu Ling	Thermal Performance of an Active/Passive Ventilation Wall with PCMs in an Agricultural Building	Chinese Academy of Sciences

Parallel Session 2-2: 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning

Time: Tuesday 31st July 11:20 - 12:30

Venue: Byron, Canham Turner Chairs: Peng Xu, Yuanda Cheng

Keynote speakers: Xiongwei Liu, Changhong Zhan

Speakers: Xiaohui She, Yousef Golizadeh

TIME	SPEAKER	TOPIC	ORGANISATION
11:20 - 11:40	Xiongwei Liu	Smart Microgrid Based on Hybrid DC/AC Network for Built Environment	Entrust Microgrid Ltd
11:40 – 12:00	Changhong Zhan	Numerical Simulation of a Cross-Flow M-Cycle Heat and Mass Exchanger Using Various Nanofluids	Harbin Institute of Technology
12:00 - 12:15	Xiaohui She	Feasibility Study of Integrating Liquid Air Energy Storage with LNG Cold Recovery	University of Birming- ham
12:15 – 12:30	Yousef Golizadeh	Analytical Investigation of an Innovative Counter Flow Dew Point Cooler Employ- ing a Polynomial Regression Analysis	University of Hull

Parallel Session 3-2: Energy Efficiency Technologies

Time: Tuesday 31st July 11:20 - 12:30

Venue: Eliot, Canham Turner

Chairs: Zhongzhu Qiu, Yiqiang Jiang **Keynote speakers:** Min Li, Jinqing Peng

Speakers: Yi Fan, Min Yu

TIME	SPEAKER	TOPIC	ORGANISATION
11:20 - 11:40	Min Li	Design Method and Characteristic Analyses of PCM Heat Exchanger Suitable for Heat Pump Water Heater	South China Polytechnic University
11:40 - 12:00	Jinqing Peng	Energy Saving Potential of Semi-transparent PV Windows	Hunan University
12:00 - 12:15	Yi Fan	Analytical and Experimental Investigation of a Solar-powered, Zero-bill Rural House Space Heating System Employing an Innovative Multiple-throughout-flowing Micro-channel Solar-panels-array and a PVs-array	University of Hull
12:15 – 12:30	Min Yu	A Novel Solar PVT Loop Heat Pipe Employing a Micro-channel Heat Pipe Evaporator and A PCM Triple Heat Exchanger	University of Hull

Parallel Session 4-2: Energy Saving Technologies in Data Centres and Other Buildings

Time: Tuesday 31st July 11:20 - 12:30

Venue: Hardy, Canham Turner Chairs: Songtao Hu, Yong Wang

Keynote speakers: Xiaoli Ma, Steve Hone

Speakers: Jing Li, Jinzhi Zhou

TIME	SPEAKER	TOPIC	ORGANISATION
11:20 - 11:40	Xiaoli Ma	A Novel Super Performance Dew Point Air Conditioner	University of Hull
11:40 - 12:00	Steve Hone	Data Centres Profile in Europe	Data Centre Alliance Limited
12:00 - 12:15	Jing Li	Numerical and Experimental Study on A Novel PV/T System Using Amorphous Sili- con Cells Deposited on Stainless Steel	University of Notting- ham
12:15 - 12:30	Jinzhi Zhou	The Experimental Performance of Mi- ni-channel Solar Thermal & PV/T Panels in Summer Season	University of Hull

Parallel Session 1-3: Renewable Energy and Phase Change Energy Storage Technologies in Buildings

Time: Tuesday 31st July 16:30 – 17:50 Venue: Austen Blake, Canham Turner Chairs: Jinqing Peng, Guiqiang Li

Keynote speakers: Xingxing Zhang, Wansheng Yang, Geng Qiao, Haiying Wang

TIME	SPEAKER	TOPIC	ORGANISATION
16:30 - 16:50	Xingxing Zhang	A Review of Renewable Energy Source (RES) Envelop Solutions Based Urban Energy Sys- tems at Building Cluster Level	Dalarna University, Sweden
16:50 - 17:10	Wansheng Yang	Study of the Properties of Solid Dehumidi- fication and Regeneration	Guangdong University of Technology
17:10 - 17:30	Geng Qiao	Advanced Phase Change Materials (PCMs) for Energy Applications	Global Energy Interconnection Research Institute Europe (GEIRI)
17:30 – 17:50	Haiying Wang	Energy Cloud: Sketch of Renewable Energy Application	Qingdao University of Technology

Parallel Session 2-3: : 'Belt and Road Initiative' on Sustainable Refrigeration and Air Conditioning

Time: Tuesday 31st July 16:30 - 17:50

Venue: Byron, Canham Turner

Chairs: Hongbing Chen, Zishang Zhu

Keynote speakers: Guigiang Li, Zishang Zhu, Hongbing Chen, Li Li

TIME	SPEAKER	TOPIC	ORGANISATION
16:30 - 16:50	Guiqiang Li	A Review on the Lens-walled Compound Parabolic Concentrator	University of Hull
16:50 -117:10	Zishang Zhu	Life-cycle Environment Impact Assess- ment for Office Building	University of Hull
17:10 - 17:30	Hongbing Chen	Study on the Performance of a Slurry PCM-based Heat Pipe Solar PVT Cogeneration System	Beijing University of Civil Engineering and Architecture
17:30 – 17:50	Li Li	Thermal Environment of High Humidity Season and Air-Conditioning Energy Saving in Xiamen	Jimei University

Parallel Session 3-3: Energy Efficiency Technologies

Time: Tuesday 31st July 16:30 - 17:45

Venue: Eliot, Canham Turner

Chairs: Juan Zhao, Changhong Zhan

Keynote speakers: Na Zhu, Xiangning Meng, Xianglei Liu

Speakers: Samson Shittu

TIME	SPEAKER	TOPIC	ORGANISATION
16:30 - 16:50	Na Zhu	Performance of Shape Stabilized Phase Change Material Wallboard in Buildings	Huazhong University of Science and Technology
16:50 - 17:10	Xiangning Meng	Conversion Efficiency of Thermoelectric Module Using Different Configurations	Northeastern University
17:10 - 17:30	Xianglei Liu	Spectral Absorption Characteristics of Suspended Particles	Nanjing University of Aeronautics and Astronautics
17:30 - 17:45	Samson Shittu	Detailed Comparison and Optimization of Thermoelectric Element Geometry for Photovoltaic-thermoelectric	University of Hull

Parallel Session 4-3: : Energy Saving Technologies in Data Centres and Other Buildings

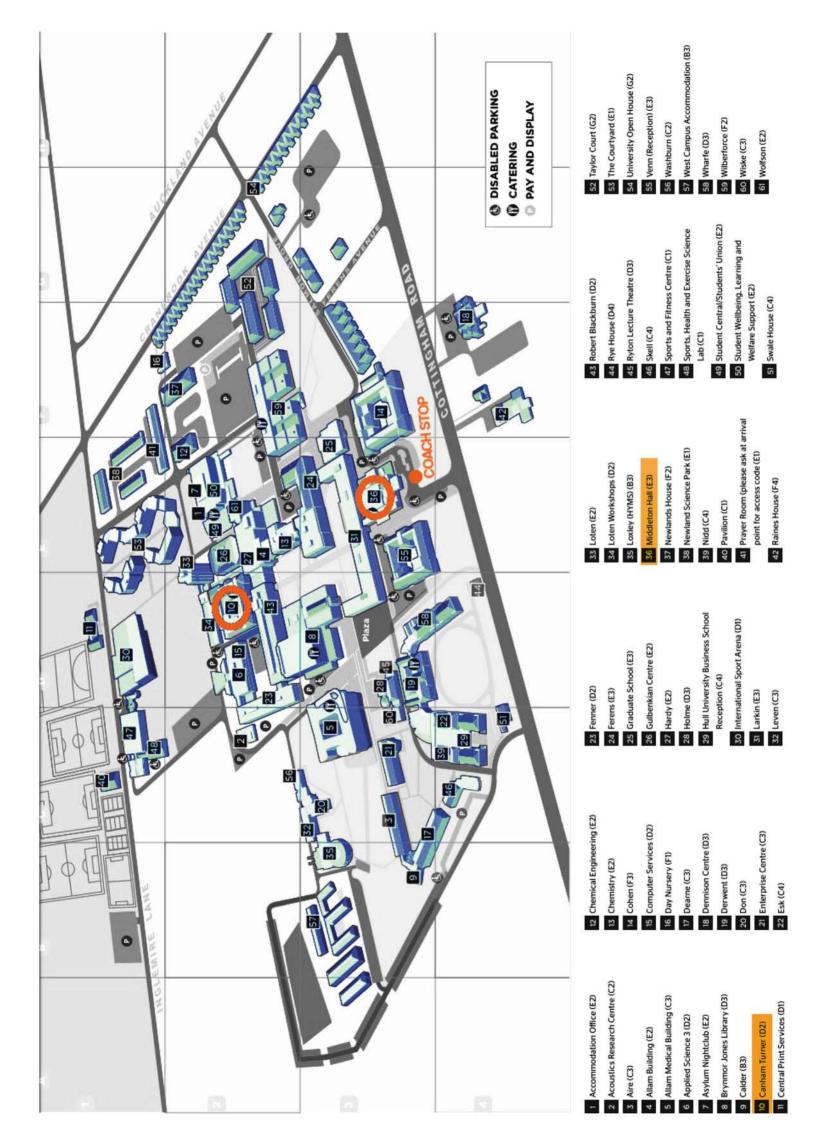
Time: Tuesday 31st July 16:30 - 17:30

Venue: Hardy, Canham Turner Chairs: Min Li, Hua Zhong

Keynote speakers: Yijun Yuan, Xiaoling Cao, Wenke Zhang

TIME	SPEAKER	TOPIC	ORGANISATION
16:30 - 16:50	Yijun Yuan	Water Application for Humidification, Cool- ing, Dehumidification and Drying	University of Nottingham
16:50 – 17:10	Xiaoling Cao	Study on the Parametrical Optimization Design of the Shell and Tube LHTES Systems	Southwest Jiaotong University
17:10 - 17:30	Wenke Zhang	Investigation on Heat Transfer of Energy Pile for Ground-coupled Heat Pump Technology	Shandong Jianzhu University





VENUE INFORMATION

The symposiums will be held at Canham Turner and Middleton Hall, as circled on the map.

The Austen Blake, Eilot, Hardy and Byron conference halls and the Kingsley Suite are all located inside the Canham Turner Building.

COACH TIMETABLES



Day 2-30th July

07:30 Hull City Centre — The University of Hull 21:00 The University of Hull — Hull City Centre

Day 3-31st July

08:30 Hull City Centre — The University of Hull 19:30 The University of Hull — Hull City Centre

Day 4-1st August

08:30 Hull City Centre — The University of Hull 14:00 The University of Hull — Hull City Centre

PRACTICAL GUIDE

General Information

Kingston upon Hull, usually abbreviated to Hull, is a city and unitary authority in the East Riding of Yorkshire, England. It lies upon the River Hull at its confluence with the Humber Estuary, 25 miles (40 km) inland from the North Sea, with a population of 260,700 (mid-2017 est.). Hull is 154 miles (248 km) north of London, 50 miles (80 km) east of Leeds and 108 miles (174 km) northeast of Birmingham. In 2017, Hull becomes the UK's City of Culture when a year-long programme of festivities takes place.

Climate and Clothing

July-August is the warmest period averaging at around 25 degrees Celsius, but weather and temperature change often and rapidly in UK. It is good to have emergency waterproof clothing at all times.

Currency and Banking

The British Pound is the currency of United Kingdom. ATMs and credit cards are widely accepted.

Electricity

Power is supplied from UK wall sockets at about 220 volts. The alternating current cycle is rated at speed of 50Hz. UK adapters will be required.

Time Difference

GMT (UTC), Summer (DST) BST (UTC+1)

Travel Guide

Hull has an airport (Humberside Airport) and a train station (Hull Paragon Interchange). It takes 30 minutes (19.2 miles) by taxi to University of Hull from Humberside Airport, and 8 minutes (2.3 miles) by taxi from Hull Paragon Interchange; It takes about 1 hour by train to York/Leeds.

For tourist information about Hull, visit http://www.hull.gov.uk/visitor/culture/tourist-information For tourist information about the UK, visit https://www.visitbritain.com/gb/en

Contact us if you have any enquiries:

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