Chapters Regional Conference (crc) 2018

6- 9 September 2018

Loughborough, United Kingdom

PROGRAMME AT A GLANCE

Venue: West Park Teaching Hub (WPT), Loughborough University

6 SEP	08:00 – 18:00	Technical Conference & Exhibition
	18:00 – 20:00	Sports, Social and Wine Tasting
7 SEP	08:00 – 18:30	Technical Conference & Exhibition
	13:00 – 18:30	CRC Meetings
	19:30 – 22:00	Welcome Reception at Beaumanor Hall
8 SEP	08:00 – 18:00	CRC Meetings and Training Workshops
	13:00 – 15:00	Presidential Awards Lunch at WPT
	19:00 – 21:00	Conference Dinner at Burleigh Court
9 SEP	08:00 – 13:00	CRC Meetings and Training Workshops
	13:00 – 14:00	Packed Lunch and Departure

TECHNICAL CONFERENCE & EXHIBITION

Build Our New Energy Future

6 - 7 September
West Park Teaching Hub, Room 1, Loughborough University

THURSDAY, 6 SEPTEMBER

08.00 – 9.00	Registration & refreshments

Conference Keynote – Session Chair: Dr Yi Zhang

09.00 – 10.00	**Build Our New Energy Future**, Sheila Hayter, P.E., Fellow ASHRAE, ASHRAE President, National Renewable Energy Laboratory, Golden, Colorado, USA

Technical 1 - Session Chair: Dr Yi Zhang

10.00 – 10.30	Human error in the management of building projects, Stelios Kiosses, Consultant Psychotherapist/ Lead Psychological Services Dementech Neurosciences, London, UK
10.30 – 11.00	Developments around energy and carbon related regulations for Buildings, Hywel Davies, CIBSE, UK
11.00 – 11:30	Coffee/tea break

Technical 2 - Session Chair: Dr Mahroo Eftekhari

11.30 – 12.00	SIM4BLOCKS - Innovative demand response services for residential and commercial applications, Dr Mattia De Rosa, University College Dublin, Ireland
12.00 – 12.30	Towards a deep building renovation BIM add-on tool, Adélio R. Gaspar, University of Coimbra, Coimbra, Portugal
12.30 – 13.00	Lab tours
12.30 – 14.00	Lunch

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Our Industry 1 – Session Chair: Stephen Gill

14.00 – 14.20	How plastic pipework can be used to reduce energy and carbon footprint within Building Services, Simon Pallant, Georg Fischer AG, Schaffhausen, Switzerland
14.20 – 14.40	Data centre cooling, Jason Kaye & Anuraag Saxena, Ekkosense, Nottingham, UK
14.40 – 15.00	Soft Landing & Key Trends in HVAC Industry, Peter Tse, BSRIA, Bracknell, UK

Research 1 - Session Chair: Eleonora Brembilla

15.00 – 15.15	Multi-objective optimisation of Passivhaus dwellings in a social housing context, Joe Forbe, Loughborough University, Loughborough, UK
15.15 – 15.30	Using water bath modelling to validate CFD, Tom Corbett, Loughborough University, Loughborough, UK
15.30 – 15.45	Natural ventilation: Modelling ventilation effectiveness and IAQ, Ben Simpson, Loughborough University, Loughborough, UK
15.45 – 16.00	Modelling contracted flexibility in electrically heated residences, Rami El-Geneidy, Loughborough University, Loughborough, UK
16:00 – 16:30	Coffee/tea break

Technical 3 - Session Chair: Elli Nikolaidou

16.30 – 17.00	Comfort and IAQ in the Built Environment – A review of policy, standards and technologies, Daniel Coakley, Mitsubishi Electric R&D Centre Europe, Livingston, UK
17.00 – 17:30	Assessment of Chiller Performance Using Expeditious Indirect Methods, José L Alexandre, University of Porto, Porto, Portugal
17.30 – 17:50	Hacking simulations – scripting tools in action, Nishesh Jain, DesignBuilder Software Ltd, Stroud, UK

18:00 – 20:00 Sports, Social and Greek Wine Tasting

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FRIDAY, 7 SEPTEMBER

08.00 – 08.30 Registration & refreshments

Technical 4 - Session Chair: Prof Ljubomir Jankovic

08.30 – 09.00 ASHRAE Advanced Energy Design Guides intermediate, Mick Schwedler, P.E., Fellow ASHRAE, ASHRAE Vice President/Trane Corporation, La Crosse, WI, USA

09.00 – 09.30 Building & Urban Scale Sustainability Assessment Systems, Costas Balaras, PhD FASHRAE, Institute for Environmental Research & Sustainable Development, NOA, Athens, Greece

09.30 – 10.00 BIPV via Smart Grid, Heat Pumps Thermal Use of Underground and Abandoned Mines Energy Storage for Large-Scale Terrestrial/Space Power Generation and Global Warming Mitigation, Marija S. Todorović, PhD, Fellow-REHVA, -ASHRAE & -WAAS, Academy of Engineering Sciences of Serbia, Guest Prof. Southeast University Nanjing, China, VEA-INVI.Ltd, Belgrade, Serbia

10:00 – 10:30 Coffee/tea break

Technical 5 - Session Chair: Dr Yi Zhang

10.30 – 11.00 Cooling from Thermal Energy, Steve Gill, Region XIV ARC, Stephen Gill Associates, UK

11.00 – 11.30 CO2 reinvented, Dimitris Dalavouras, General Refrigeration S.A., Athens, Greece

11.30 – 12.00 Commissioning (EBCx), giving an Existing Building a second chance, Andres Sepulveda, Spain

12:00 – 12:30 Monitoring the HVAC System for a Passive House - Case Study, Prof. Liviu Drughean, Universitatea Tehnica de Constructii Bucuresti, Romania

12.30 – 13.00 Lab Tours

12.30 – 14.00 Lunch

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Technical 6 - Session Chair: Edward Murphy

14.00 – 14.20	Finite Element Analysis on Wind Turbine Blade using Composite Materials, Aggeliki Zotou, TEISTE Student Branch, Greece
14.20 – 14.40	Closed Loop/Hydronic Water Treatment and its effects to system efficiency and lifecycle, Darren Wilkinson, Vexo International (UK) Ltd
14.40 – 15.00	The role of prudent low cost measures and good quality maintenance in reducing energy consumption - case studies of Singapore non domestic buildings, Prof Ljiljana Marjanovic-Halburd, De Montford University, Leicester, UK

Research 2 - Session Chair: Dr Rob McLeod

15.00 – 15.15	Energy performance and sizing of HVAC network Haoyang Chen, Loughborough University, Loughborough, UK
15.15 – 15.30	Indoor air quality in educational buildings, Melvin Mathew, Loughborough University, Loughborough, UK
15.30 – 15.45	Design parameters that lead to the low cooling demand of a commercial district in UA, Tiru Vengadam, Loughborough University, Loughborough, UK
15.45 – 16.00	Early design using BIM, Sid Ouldja, Loughborough University, Loughborough, UK
16.00 – 16.30	Coffee/tea break

Research 3 - Session Chair: Eleonora Brembilla

16.30 – 16.45	Analysis of desiccant evaporative cooling system for hot and humid climate using TRNSYS, Ismanizam Abd Manaf, Loughborough University, Loughborough, UK
16.45 – 17.00	Energy saving in HVAC system through pipework design, Ryan Wesley, BISPA Loughborough University, Loughborough, UK
17.00 – 17:15	Predicting Thermal Comfort in Mixed-mode Office Building in UK, Xiaoyan Luo, Loughborough University, Loughborough, UK
17.15 – 17.30	HVAC pipework visualisation in VR, Vijay Srikandarajah, Loughborough University, Loughborough, UK

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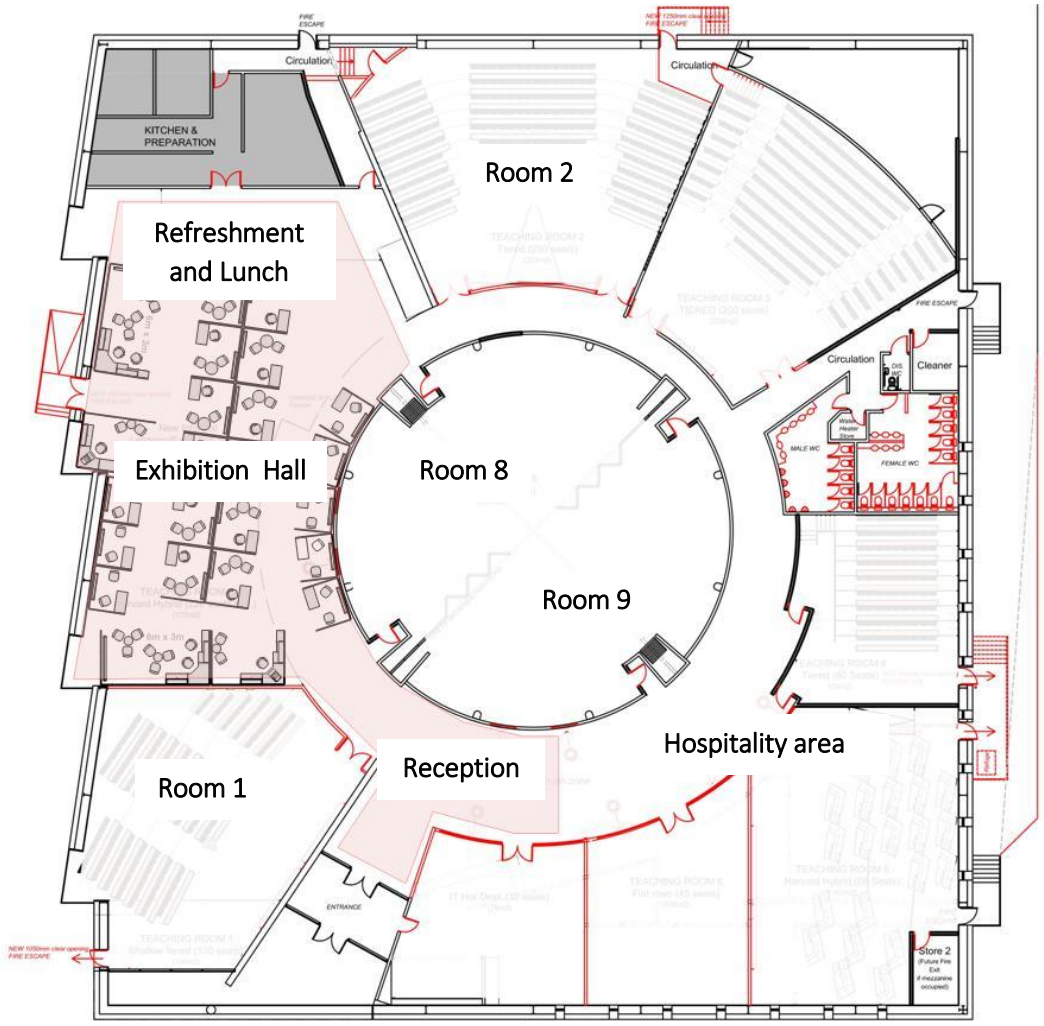
CRC Orientation – Session Chair: Dr Costas Balaras	
17.30 – 18:30	Introduction of the ASHRAE Region XIV CRC Programme - Business Meetings, Training Workshops
19:00 – 22:30	**WELCOME PARTY at Beaumanor Hall** Coach departs at 19:00 from outside of WPT, and returns to campus at around 23:00

Floor plan of WPT



Ground Floor Plan

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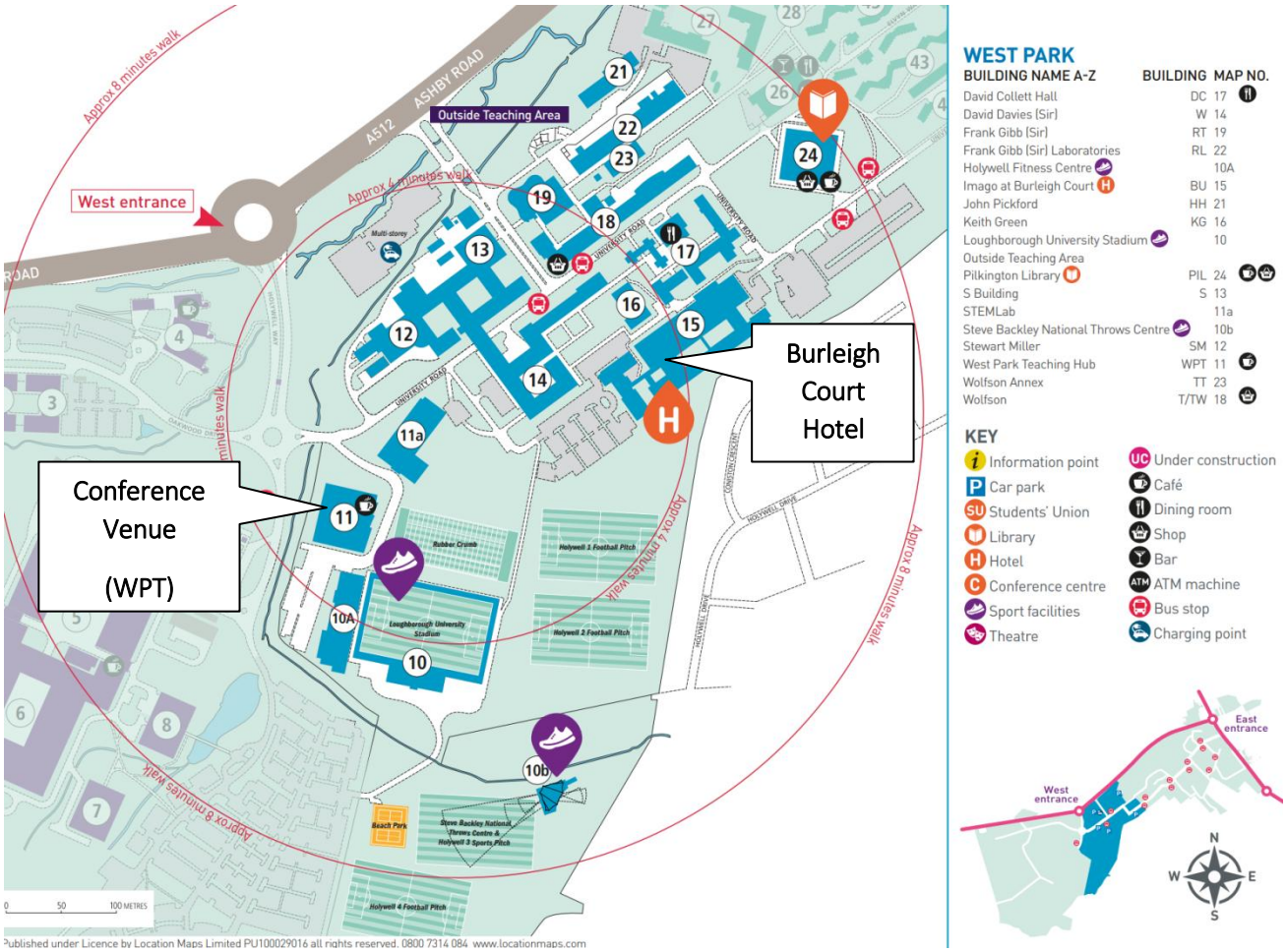
CRC Programme

Business Meetings, Training Workshops

7 - 9 September

West Park Teaching Hub (WPT, map 11)
Loughborough University



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FRIDAY, 7 SEPTEMBER

Time	Meeting	Room
13:00 – 16:00	Nominating Committee (Chapter Delegates / Alternates)	WPT Room 8
15:30 – 17:30	Regional Planning Meeting (Regional Leadership)	WPT Room 9
17:30 – 18:30	Orientation (All)	WPT Room 1
19:00 – 22:00	Welcome Reception (All) (Coaches depart outside WPT)	Beaumanor Hall

SATURDAY, 8 SEPTEMBER

Time	Meeting	Room
08:00 – 10:30	Training Workshops (Chapter Committee Chairs, also open to registered members)	
	Membership Promotion (MPC)	WPT Room 8A
	Research Promotion (RPC)	WPT Room 8B
	Student Activities (SAC)	WPT Room 9A
	Chapter Technology Transfer (CTTC)	WPT Room 9B
	Government Affairs (GAC) (formally Grassroots Government Advocacy, GGAC)	WPT Room 1
	Young Engineers In ASHRAE (YEAC)	WPT Room 2
10:30 – 11:00	Coffee Break	
11:00 – 13:00	Business Meeting (All)	WPT Room 8 & 9
13:00 – 15:00	**Presidential Lunch & Awards (All)**	**WPT Hall**
15:00 – 18:00	Business Meeting (All)	WPT Room 8 & 9
19:00 – 21:00	**Conference Dinner (All)**	**Burleigh Court (map 15)**

SUNDAY, 9 SEPTEMBER

Time	Meeting	Room
08:00 – 10:00	Training Workshop	
	Chapter Operations inc. GDPR (All)	WPT Room 8 & 9
10:00 – 10:30	Coffee Break	
10:30 – 13:00	Business Meeting (All)	WPT Room 8 & 9
13:00 – 14:00	Packed Lunch and Departure	