

**RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems**

**US-UK WORKSHOP ON  
BIOSENSING-ENABLED, WELLBEING-CENTRIC SUSTAINABLE BUILT ENVIRONMENT ECOSYSTEMS**

*October 27-28, 2022. Nottingham Trent University, Nottingham, UK  
Hooley Room, Newton Building, City Campus*

**Tentative Program (subject to change)**

**Program At Glance**

Time	Topic
<b>October 27 (Thursday)</b>	
8:30 AM – 10:45 AM	City Tour (US delegates. Assemble at the hotel lobby by 8.30am. Will not return to hotel but go directly to NTU)
10:30 AM – 11:00 AM	Arrival
11:00 AM – 11:10 AM	Welcome Remark by Dr. Ming Sun and Dr. Yong Tao
11:10 AM – 12:30 PM	Presentations Part 1 (4 Presentations)
12:30 AM – 1:30 PM	Lunch
1:30 PM – 3:10 PM	Presentations Part 2 (5 Presentations)
3:10 PM – 3:30 PM	Break
3:30 PM – 4:30 PM	Breakout Session 1 – Topic 1
4:30 PM – 5:00 PM	Discussions
6:00 PM – Late	Networking Dinner (Cosy Club – US delegates)
<b>October 28 (Friday)</b>	
9:00 AM – 9:10 AM	Welcome by Dr. Ming Sun
9:10 AM – 10:30 AM	Presentation Part 3 (4 Presentations)
10:30 AM – 10:50 AM	Break
10:50 AM – 12:10 PM	Presentations Part 4 (4 Presentations)
12:10 PM – 1:10 PM	Lunch
1:10 PM – 2:30 PM	Presentation Part 5 (4 Presentations)
2.30 PM - 2.40 PM	Break
2:40 PM – 3:40 PM	Breakout Session 2 – Topic 2
3:40 PM – 4:00 PM	Summary Session
4:00 PM	End of Day 2

## Technical Program:

Time Slot	Presentation	Presenter	Affiliation
<b>October 27 (Thursday)</b>			
<b>Presentation Part 1 (Facilitator: Juan C. Ordonez)</b>			
11:10 to 11:30 AM	Wellbeing-Centric Sustainable Built Environment Ecosystems	Yong Tao	Cleveland State Univ.
11:30 AM - 11:50 PM	The Use of Wearables for Post-Occupancy Evaluation	Derek Clement-Croome	University of Reading
11:50 to 12:10 PM	Coastal Cities in a Warming Climate	Jorge E. González	The City College of New York
12:10 to 12:30 PM	Housing retrofits and impact on occupants' quality of life	Anton Ianakiev	Nottingham Trent University
12.30-1.30 PM	Lunch		
<b>Presentation Part 2 (Facilitator: Nina Sharifi)</b>			
1:30 to 1:50 PM	Data-driven Methods to Evaluate Human-Infrastructure Interdependencies	Hiba Baroud	Vanderbilt University
1:50 to 2:10 PM	The autonomous analysis of movement in infants for early detection of neurological disorders	Alex Turner	University of Nottingham
2:10 to 2:30 PM	Understanding energy hogs: The role of magnitude and variability in electricity use	Stephen Bird	Clarkson University
2:30 to 2:50 PM	Bring biophilic art to intelligent buildings	Anthony Adole	AllSee Technologies/NTU
2:50 to 3:10 PM	SOBA: Sustainability-Oriented Building Automation	Sez Atamturktur-Russcher	Penn State University
3:10 to 3:30 PM	Break		
3:30 to 4:30 PM	<b>Breakout Session 1</b> <b>Research focuses on human and building interactions in the context of human well-being and future work environment</b>		
4:30 to 5:00 PM	<b>Discussions &amp; Adjourn (Ming Sun/Yong Tao)</b>		

<b>October 28 (Friday)</b>			
<b>Presentation Part 3 (Facilitator: Hiba Baroud)</b>			
9:10 – 9:30 AM	Investigating relationships between retrofit building systems and occupant well-being	Nina Sharifi	Syracuse University
9:30 to 9:50 AM	Biophilic design of buildings	Yangang Xing	Nottingham Trent University
9:50 to 10:10 AM	Multi-Fidelity Modeling Approach Enabling Fast Characterization of Building Thermal Responses	Juan C. Ordonez	Florida State University
10:10 – 10:30 AM	Occupant Preference-Aware Load Scheduling for Resilient Communities	Wangda Zuo	Penn State University
10:30- 10:50 AM	Break		
<b>Presentation Part 4 (Facilitator: David Fannon)</b>			
10:50 to 11:10 AM	Strategies for resolving the participation gap in buildings and cities	Richard Bull	Nottingham Trent University
11:10 to 11:30 AM	Standalone Stretchable Device Platform for Human Health Monitoring	Huanyu Larry Cheng	Penn State University
11:30 to 11:50 AM	Embedded intelligence and computer vision for robot situation understanding	Qinggang Meng/Baihua Li	University of Loughborough

11:50 to 12:10 PM	Visual Analytics Approach for Wellbeing Centric Sustainable Built Environment Ecosystems	Isaac Cho	Utah State University
12.10 to 12.30 PM	Introduction to the Smart Wireless Innovation Facility (SWIFt) Lab and Testbed	Ivan Marjanovic	Smart Wireless Innovation Facility (SWIFt)/NTU
12:30 to 1:10 PM	Lunch		
<b>Presentation 5 (Facilitator: Wangda Zuo)</b>			
1:10 to 1:30 PM	AI-assisted Digital Twin Thermal Comfort Analysis and Optimisations in Miami	Thomas Spiegelhalter	Florida International University
1:30 to 1:50 AM	Human-In-The-Loop Thermostat	David Fannon	Northeastern University
1:50 to 2:10 PM	Fusing Virtual Experimental Data on Human Experiences into Building Performance Analysis	Yimin Zhu	Louisiana State University
2:10 to 2:30 PM	Measuring wellbeing of building occupants	Ming Sun	Nottingham Trent University
2:30 to 2:30 PM	Break		
2:40 to 3:40 PM	<b>Breakout Session 2 International multidisciplinary research collaboration infrastructure</b>		
3:40 to 4:00 PM	<b>Summary &amp; Adjourn (Ming Sun/Yong Tao)</b>		

- Each presentation is 20 minutes, including questions.
- Please plan a 15-minute presentation and a 5-minutes transition or short question.