

SESSION 6

1, Title— Achieving energy efficient buildings through better technology/engineering and management

2, Organizers

Chair:

Shen Wei (UCL, UK), shen.wei@ucl.ac.uk (main contact)

Co-chairs:

Hao Zhou (Tsinghua University, China)

Yanzhe Yu (Nanchang University, China)

Yan Ding (Tianjin University, China)

3, Abstract—With the increasing severity of global warming, reducing the energy consumption of our society has become an urgent task. To achieve the carbon reduction goal of 2050, reducing the energy consumption from buildings has become one of the major measures. For developing low-carbon buildings, efforts are required from both the technology and management sides. The former side aims to develop low-carbon solutions, such as energy-efficient HVAC systems and renewable energy technologies, to reduce the energy needed to run building systems. The latter side aims to develop effective management solutions for construction projects to promote the efficiency of people’s decision-making. This special session aims to bring researchers and practitioners from both the technology/engineering side and the management side to share their experience in delivering energy-efficient buildings. It is believed that this interdisciplinary nature will promote future collaborations between various construction professionals.

4, Topics:

Topic 1: High-performance Envelope

Topic 2: Energy-efficient HVAC

Topic 3: Renewable Energy for Buildings

Topic 4: Energy-efficient Behaviour in Buildings

Topic 5: Building Energy Efficiency Codes and Policy Tools

Topic 6: Project Management for Whole Building Life-Cycle

Topic 7: BIM and Digital Twins

5, Invited Speakers (can be added later):

Speaker 1: Guoying Hou, Heibei University of Technology, China (Confirmed)

Speaker 2: Gang Wang, Three Gauges University, China (intend to invite)

Speaker 3: Pei Liu, Shandong University, China (intend to invite)

Speaker 4: Zujian Huang, South China University of Technology, China (intend to invite)

Speaker 5: Yanan Liu, Chongqing Jiaotong University, China (Confirmed)

Speaker 6: Yan Ding, Tianjin University, China (Confirmed)

Speaker 7: Yanzhe Yu, Nanchang University, China (Confirmed)

Speaker 8: Kehan Ma, University College London (intend to invite)

Speaker 9: Hao Zhou, Tsinghua University, China (intend to invite)