



# 2020 / INTERNATIONAL CONFERENCE ON CONSTRUCTION & REAL ESTATE MANAGEMENT

Aug 24-25th, 2020 OnLine Conference

## Conference Program

### **Organizers:**

Harbin Institute of Technology, P.R. China  
Luleå University of Technology, Sweden  
Hong Kong Polytechnic University, P.R. China  
Louisiana State University, USA  
University of Alberta, Canada  
Guangzhou University, P.R. China  
Marquette University, USA  
Nottingham Trent University, UK

### **Sponsored by:**

The Construction Institute (CI) of the American Society of Civil Engineers (ASCE), USA  
Modernization of Management Committee of the China Construction Industry Association, P.R. China

## ***FROM THE ICCREM-2020 ORGANIZING COMMITTEE:***

We would like to welcome you to the 2020 International Conference on Construction and Real Estate Management (ICCREM 2020). ICCREM 2020 is jointly organized by Harbin Institute of Technology, Luleå University of Technology, Hong Kong Polytechnic University, Louisiana State University, University of Alberta, Guangzhou University, Marquette University and Nottingham Trent University. The conference will be held by Luleå University of Technology, and will be sponsored by the Construction Institute of the American Society of Civil Engineers (ASCE) and the Modernization of Management Committee (MMC) of the China Construction Industry Association (CCIA). The Conference is a continuation of the ICCREM series, which has been held annually since 2003. Papers of the 2003 to 2012 conferences were included in the ISTP databases or ISSHP databases, and papers of the 2013 to 2019 conference were all included in the EI databases.

The ICCREM 2020 Conference aims to create an international platform for researchers, educators, and practitioners from colleges and universities, research institutes, government agencies, consulting firms, construction companies, financial institutions and other related organizations to exchange ideas, share knowledge, build networks, and explore future potentials in construction and real estate industries.

It was a pleasure and an honor to organize and host ICCREM 2020 and we want to emphasize that the success of the conference would have not been possible without the contributions of members of the Organizing Committee, the International Scientific Committee, and the Conference Secretariat. We also want to express our gratitude to all authors and reviewers for their contributions. We believe that the ICCREM 2020 will be invaluable to construction professionals in advancing their career. In closing, we hope that you enjoy the conference and leave with a wonderful experience and memory at ICCREM 2020.

Professor **Yaowu Wang**  
Harbin Institute of Technology  
P. R. of China

Professor **Thomas Olofsson**  
Luleå University of Technology  
Sweden

Beijing Time	<b>Monday, Aug 24<sup>th</sup>, 2020 (Host: Dr. Kailun Feng, HIT)</b>
2:00 PM-2:15 PM	<b>WELCOME SPEECH:</b> Conference Executive Chair, Prof. <b>Yaowu Wang</b>
2:15 PM-2:30 PM	<b>SPEECH:</b> Dr. Tao YU, Harbin Institute of Technology, P.R. China
2:30 PM-3:00 PM	<b>KEYNOTE SPEECH:</b> Prof. Thomas Olofsson, Luleå University of Technology Title: Exploring the trade-off between the operational energy use and embodied energy use in buildings
3:00 PM-3:30 PM	<b>KEYNOTE SPEECH:</b> Prof. Geoffrey Q.P. Shen, the Hong Kong Polytechnic University Title: RFID-Enabled BIM Platform for Smart Construction of Prefabricated Residential Buildings
3:30 PM-3:45PM	Financial Impact Assessment of Construction Delay in BOT Infrastructure Projects <b>Supattaradech Kasemsukh</b> (Paper ID: 074+L)
3:45 PM-4:00PM	Process Platforms for Onsite Assemblies: A Case Study of Work Break Down Structures in SME's <b>Raafat Hussamadin</b> (Paper ID: 111+X)
4:00 PM-4:15PM	Evaluating the critical failure factors for implementing residential modular integrated construction projects <b>Ibrahim Yahaya WUNI</b> (Paper ID: 091+X)
4:15 PM-4:30PM	Research on Responsive Measurement of Talents Training Mode of Engineering Management Majors in Financial and Economic Universities <b>Bin DU</b> (Paper ID: 098+X)
4:30 PM -4:45PM	Automation in Extraction and Sharing Information between BIM and Project Management Databases <b>Lingzi Wu</b> (Paper ID: 006+A)
4:45 PM -5:00PM	Simulating the Lighting Electricity Consumption of Hotel Building: A Case from China <b>Xingshuo He</b> (Paper ID: 107+X)

Beijing Time	Tuesday, August 25 <sup>th</sup> , 2020 (Host: Dr. Tao Yu, HIT)
2:00 PM-2:15PM	<b>SPEECH:</b> Dr. Kailun Feng, Harbin Institute of Technology, P.R. China
2:15 PM-2:30PM	Critical Factors for Knowledge Sharing in Communities of Practice <b>Meng WEI</b> (Paper ID: 054+G)
2:30 PM-2:45PM	Lifting path planning of mobile cranes based on RRT algorithm <b>Zhou Ying</b> (Paper ID: 011+B)
2:45 PM-3:00PM	A BIM-LCA Integrated Environmental Impact Assessment for Prefabricated Concrete Residential Buildings <b>Jingliang Xu</b> (Paper ID: 108+X)
3:00 PM-3:30 PM	<b>KEYNOTE SPEECH:</b> Associate Prof. Weizhuo LU, Luleå University of Technology Title: Digitalization of built environment: current works and future directions
3:30 PM-4:00PM	<b>KEYNOTE SPEECH:</b> Prof. Ming SUN, the Nottingham Trent University Title: Understanding complexity of megaprojects: a systematic approach
4:00 PM-4:15PM	Investigating the Critical Success Factors for Small Contractors to Implement Sustainable Construction <b>Liu Wen-Que</b> (Paper ID: 029+D)
4:15 PM-4:30PM	Perception and Acceptance of Sponge Campus Renovations: A Survey based Analysis from China <b>Yanfen WANG</b> (Paper ID: 103+X)
4:30 PM-4:45PM	Building Energy Efficiency Related Knowledge Mining Based on Natural Language Processing <b>Dingyuan MA</b> (Paper ID: 019+B)
4:45 PM-5:00PM	<b>BEST PAPER AWARD (ICCREM-2020)</b>