# **AUSTRALIA CHINA**

# MODULAR CONSTRUCTION TECHNOLOGY FORUM

24-25 January 2019 Melbourne, Australia

# Program



**Australia China Modular Construction Technology Forum** 

24-25 Jan 2019, Melbourne, Australia

# **Program Summary**

#### **DAY 1: 24 January 2019**

#### Room 3.31 Learning & Teaching Building, Monash University, Clayton

08:00 AM - 09:00 AM	Registration
09:00 AM - 09:10 AM	Opening Address
09:10 AM - 10:25 AM	Session 1
10:25 AM - 10:55 AM	Tea break
10:55 AM -12:35 PM	Session 2
12:35 PM - 13:35 PM	Lunch break
13:35 PM - 14:50 PM	Session 3
14:50 PM - 15:20 PM	Tea break
15:20 PM - 17:00 PM	Session 4

#### **DAY 2: 25 January 2019**

#### Room 3.31 Learning & Teaching Building, Monash University, Clayton

09:00 AM - 10:15 AM	Session 5
10:15 AM - 10:45 AM	Tea break
10:45 AM - 12:25 PM	Session 6
12:25 PM - 13:25 PM	Lunch breal
13:25 PM - 14:40 PM	Session 7
14:40 PM - 15:10 PM	Tea break
15:10 PM - 16:25 PM	Session 8

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### 24 January, Thursday:

Room 3.31, Learning & Teaching Building, Monash University, Clayton

08:00 AM - 09:00 AM Registration

09:00 AM - 09:10 AM Opening Address

Time	Topic	Speaker	Affiliation
09:00 - 09:10	Opening Address	Prof. Aibing Yu	Pro Vice-Chancellor and President of Monash Suzhou, Monash University; Fellow of Australian Academy of Science (AAS); Fellow of Australian Academy of Technological Sciences and Engineering (ATSE); Foreign member of the Chinese Academy of Engineering

#### 09:10 AM - 10:25 AM Session 1

Time	Topic	Speaker	Affiliation
9:10 - 9:35	BIM and AI for Modular Construction: Best Practice and Lessons Learned	Prof. Xiangyu Wang	Curtin-Woodside Chair Professor, Curtin University Fellow of EU Academy of Sciences (EUAS)
9:35 - 10:00	Experimental and Numerical Study on the Multi-Story Fully Prefabricated Steel Frame with Flexible Braces	Prof. Gang Shi	Department of Civil Engineering, Tsinghua University
10:00 - 10:25	Water Efficiency Labelling and Standards (WELS) requirements for plumbing products in modular construction in Australia	Dr. Carol Grossman	Department of Agriculture and Water Resources, Australia Government
10:25 - 10:55	Tea break		

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#### 10:55 AM - 12:35 PM Session 2

Time	Topic	Speaker	Affiliation
10:55 - 11:20	To be determined	Prof. James Murray-Parkes	Director of Science & Engineering, Brookfield Scientific Solutions Group
11:20 - 11:45	Innovation in modular connections to increase on site productivity and safety	A/Prof. Andrew Lian	Director of Alda Consultant; School of Design, the University of Western Australia
11:45 - 12:10	Offsite construction solutions for the Victorian Government	Mr. Nick Strongman	CEO, Sensum Group, Australia
12:10 - 12:35	Prefabricated Prefinished Volumetric Construction (PPVC): Modelling and Design Considerations	Dr. Chua Yie Sue	Department of Civil and Environmental Engineering, National University of Singapore
12:35 - 13:35	Lunch break		

#### 13:35 PM - 14:50 PM Session 3

Time	Topic	Speaker	Affiliation
13:35 - 14:00	Progress of studies and applications of precast concrete structures in China	Prof. Weichen Xue	Department of Structural Engineering, Tongji University, China
14:00 - 14:25	System-level innovation and seismic performance of prefabricated mid-rise CFS composite shear wall structural system	Prof. Jihong Ye	Dean, School of Mechanics and Civil Engineering, China University of Mining and Technology, China
14:25 - 14:50	Research and Development of 3D Light- weight Steel Modular Buildings in China	Prof. Yuanqi Li	Department of Structural Engineering, Tongji University, China
14:50 - 15:20	Tea break		

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#### 15:20 PM - 17:00 PM Session 4

Time	Topic	Speaker	Affiliation
15:20 - 15:45	Numerical investigations on cold-formed steel connections in modular house systems	Prof. Jian Yang	Department of Civil Engineering, Shanghai Jiao Tong University, China
15:45 - 16:10	Electrical Wiring Systems Designed for Modular Constructions	Mr. Michael Zeng	Director of iBuild Building Solutions, Australia
16:10 - 16:35	Design method and seismic behavior of terminal stirrup-confined concrete-filled steel tubular columns	Prof. Faxing Ding	School of Civil Engineering, Central South University, China
16:35 - 17:00	Thermal and mechanical performance of cold-formed steel composite assemblies under fire conditions	A/Prof. Wei Chen	School of Mechanics and Civil Engineering, China University of Mining and Technology, China

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#### 25 January, Friday:

Room 3.31, Learning & Teaching Building, Monash University, Clayton

9:00 AM - 10:15 AM Session 5

Time	Topic	Speaker	Affiliation
09:00 - 09:25	Designing high-performance and light- weight structures and connections	Prof. Yi Min (Mike) Xie	Distinguished Professor, Department of Civil and Infrastructure Engineering, RMIT; Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE)
09:25 - 09:50	Modular Tall Buildings	Prof. Priyan Mendis	Director, ARC Centre for Advanced Manufacturing of Prefabricated Housing, the University of Melbourne
09:50 - 10:15	Innovations in connection and system design for modular construction	Prof. Emad Gad	Dean, School of Engineering, Swinburne University of Technology
10:15 - 10:45	Tea break		

#### 10:45 AM - 12:25 PM Session 6

Time	Торіс	Speaker	Affiliation
10:45 - 11:10	Design and Construction of Resilient Prefabricated Modular Buildings against Natural Disasters and Extreme Events	Prof. Tuan Ngo	Research Director, ARC Centre for Advanced Manufacturing of Prefabricated Housing, the University of Melbourne
11:10 - 11:35	Evaluation of acceleration responses of building modules during transportation in Australia	Prof. Yu Bai	Department of Civil Engineering, Monash University, Australia
11:35 - 12:00	Replication of the Yungang Grottoes No. 18 cave through modular steel frames	Prof. Lei Zhu	School of Civil and Transportation Engineering, Beijing University of Civil Engineering and Architecture
12:00 - 12:25	Seismic behavior and design of cruciform bolted module-to-module Connection	A/Prof. Liang Zong	School of Civil Engineering, Tianjin University, China; Key Laboratory of Coast Civil Structure Safety, China
12:25 - 13:25	Lunch break		

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#### 13:25 PM - 14:40 PM Session 7

Time	Topic	Speaker	Affiliation
13:25 - 13:50	Hot and cold composite forming products and steel structure technology application	Prof. Jingtao Han	School of Materials Science and Engineering, University of Science and Technology Beijing, China
13:50 - 14:15	To be determined	Mr. Yan Jin	Deirector of KingBuilt Modular Building
14:15 - 14:40	Carbon Emission Evaluation for recycled concrete	A/Prof. Yun Liu	Department of Structural Engineering, Tongji University, China
14:40 - 15:10	Tea break		

#### 15:10 PM - 16:25 PM Session 8

Time	Торіс	Speaker	Affiliation
15:10 - 15:35	Investigation over seismic isolation for modular steel buildings	Mr. Xu Zhong	Department of Civil Engineering, Tianjin University, China
15:35 - 16:00	Discussion over design method of an innovative modular connection	Mr. Yang Liu	Department of Civil Engineering, Tianjin University, China
16:00 - 16:25	Numerical modelling of precast posttensioning concrete walls under cyclic loading	Mr. Xinghua Li	School of Civil Engineering, Southeast University, China

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#### **Chairs:**

Prof. Yu Bai.

Monash University, Australia

Mr. Michael Zeng,

Director of iBuild Building Solutions,

Australia

Prof. Yuanqi Li,

Tongji University, China

Mr. Yan Jin,

Director of KingBuilt Modular Building,

Australia

#### **Monash Emergency Number**

for emergencies on Campus

333 from any Internal Phone

9905 3333 from your Mobile Phone

**Victorian Emergency Number** 

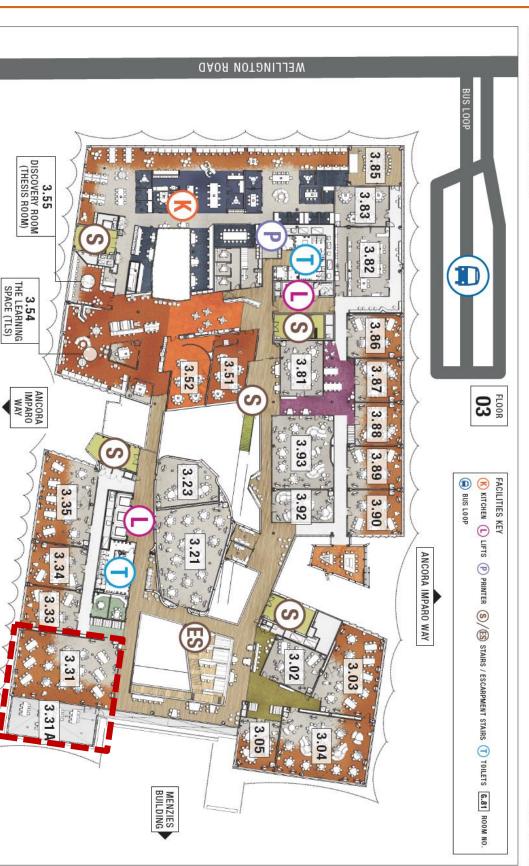
000 for Police, Fire Brigade or Ambulance

# Map for Clayton Campus, Monash University



# **Australia China Modular Construction Technology Forum**

19 Ancora Imparo Way of Clayton Campus, Monash University 24-25 Jan 2019, Melbourne, Australia



MAP NOT TO SCALE

19 Ancora Imparo Way of Clayton Campus, Monash University 24-25 Jan 2019, Melbourne, Australia

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