#### **Organiser**





#### **Government Collaborator**



#### **Co-organisers**





# International Conference on Modular Integrated Construction



26 June 2025 (Thursday)



Rayson Huang Lecture Theatre

The University of Hong Kong, Pokfulam, Hong Kong

# International Conference on Modular Integrated Construction: New Paradigm

# Overview

Modular Integrated Construction (MiC) is an innovative approach to transforming the construction industry, and has gained popular recognition in the construction and development sectors of Hong Kong, Greater Bay Area (GBA) and beyond in the past few years. The University of Hong Kong (HKU) developed MiC together with the Development Bureau of the HKSAR Government in 2017. Supported by the systematic research of HKU MiCLab, MiC has made significant impacts on policy, society, and industry development. Remarkably, MiC has been highlighted in the Policy Address of Hong Kong for eight consecutive years since 2017. As of 2024, MiC has been adopted for delivering over 100 capital projects covering public housing, transitional housing, private residential, student hostels, staff quarters, schools, and hospitals, etc., to address urgent social needs. Moreover, the modular construction approach has been promoted internationally. This conference provides a timely occasion for local and international experts from government, industry and academia to share MiC breakthroughs and exchange innovative modular construction knowledge and practices.

# Highlights

- ♦ To promote MiC internationally and share MiC breakthroughs and innovations
- ♦ To share the latest findings of research on MiC 2.0+ advanced structural engineering, innovative building materials and smart project delivery
- ♦ To share modular construction knowledge and practices from experts internationally
- ♦ To launch the International Association for Modular Construction (IAMC) which aspires to champion modular construction technology breakthroughs and knowledge sharing
- ♦ To demonstrate the state-of-the-art MiC research and monitoring facilities at MiCLab

## Technology breakthrough case studies of MiCLab

- Super-tall modular building structural solutions (50 storeys +)
- Disruptive horizontal and vertical connections (minimized site wet trades)
- Sustainable and low-carbon material solutions for MiC (reducing 25% embodied carbon +)
- Large-sized module transportation solutions (12m long module, 22m long vehicle +)
- Heavy module lifting SMART technology and solutions (39t module, 50t overall payload +)
- MiC monitoring and autonomous module lifting crane solutions (collision-free, mm control)



## **Guest of Honour and Opening Address**



Ms Bernadette Linn, JP

Secretary for Development
Development Bureau
The Government of the Hong Kong
Special Administrative Region
(HKSAR)

## **Special Remark**

Ministry of Housing and Urban-Rural Development of the People's Republic of China (MOHURD)

# **Special Guest**



Ir Ricky Lau, JP

Permanent Secretary for Development (Works)

Development Bureau

The Government of the Hong Kong Special Administrative Region

#### **Conference Advisors**



GBS, JP

Vice Chairman

Centre for Innovation in Construction
and Infrastructure Development
The University of Hong Kong

Ir Professor Mak Chai-kwong,



Ir Hon Chi-keung, GBS, JP
Chairman
Building Technology Research
Institute, Hong Kong



Ir Professor Thomas Ho

Chairman

Construction Industry Council, Hong Kong

# **Conference Organising Committee Chairman**

Professor Wei Pan



Head of Department of Civil Engineering
Director of MiCLab
Executive Director, Centre for Innovation in Construction and Infrastructure Development
The University of Hong Kong



### **MoU Representatives**



Mr Michael Fong, JP

Director
Civil Engineering and Development
Department
The Government of the Hong Kong
Special Administrative Region



Mr XIE Huihui

Deputy Director - General
The Authority of Qianhai
Shenzhen-Hong Kong Modern
Service, Industry Cooperation
Zone of Shenzhen Municipality

### **Distinguished Speakers**



Chair Professor Emeritus of Building Realization and Robotics Department of Architecture Technical University of Munich (TUM), Germany

**Professor Thomas Bock** 



Professor of Department of Civil and Environmental Engineering Stanford University, US

**Professor Martin Fischer** 



Professor Mohamed Al-Hussein

Professor of Department of

Professor of Department of Civil and Environmental Engineering University of Alberta, Canada



**Professor Tuan Ngo** 

Professor of Electrical,
Mechanical and Infrastructure
Engineering
The University of Melbourne,
Australia



**Professor Chris Goodier** 

Professor of Construction Engineering and Materials Loughborough University, UK



**Professor Richard Liew** 

Head of Department of Civil and Environmental Engineering National University of Singapore, Singapore



Mr Edward Wong

Project Director Architectural Services Department The Government of the Hong Kong Special Administrative Region



Dr Sherman Yip

Assistant Director (Development & Procurement)
Housing Department
The Government of the Hong Kong
Special Administrative Region



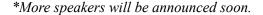
Mr Edmond Lo

Project Director Chinachem Group, Hong Kong



Mr Alan Tan

Founder & Managing Director United Tec Construction Pte. Ltd., Singapore





## **Panel Moderators and Speakers**



Ir Professor Thomas Ho
Chairman
Construction Industry Council,
Hong Kong

Mr XIE Huihui



Principal Assistant Secretary
Development Bureau
The Government of the Hong Kong
Special Administrative Region

Ir Frankie Fung



Deputy Director - General The Authority of Qianhai Shenzhen-Hong Kong Modern Service, Industry Cooperation Zone of Shenzhen Municipality



**Building and Construction Authority**Singapore



Ir John Kwong, BBS

Director

Building Technology Research
Institute
Hong Kong



Mr Edward Wong

Project Director
Architectural Services Department
The Government of the Hong Kong
Special Administrative Region



Mr Franco Cheung

Director (Projects)

Hong Kong Housing Society



Ir Dr Conrad Wong, BBS, JP

Chairman

Hong Kong Modular Integrated

Construction Manufacturer

Association (HKMiCMA)



Dr Louis Chu

Associate Director
Estates Office
The University of Hong Kong



Mr ZHANG Zongjun

Chairman

China State Construction Hailong
Technology Co., Ltd.



Executive Director
TW-Asia Consultants Pte Ltd.
Singapore



Mr Alan Tan

Founder & Managing Director
United Tec Construction Pte Ltd.
Singapore

<sup>\*</sup>More speakers will be announced soon.

## **Programme Rundown**

#### 26 June 2025, Thursday, CONFERENCE DAY

#### **9:00-12:30 Morning Session**

- WELCOME ADDRESS, The University of Hong Kong
- OPENING ADDRESS

Guest of Honour Ms Bernadette Linn, JP, Secretary for Development, The Government of HKSAR

- SPECIAL REMARKS
  - Ministry of Housing and Urban-Rural Development of the People's Republic of China
- MoUs Signing Ceremony & Launch of International Association for Modular Construction
- SPEECHES
  - MiC R&D New Paradigm

Prof Wei Pan, Head of Department of Civil Engineering, Director of MiCLab, HKU

#### Modular Buildings Empowered by Virtual Design and Construction

Prof Martin Fischer, Department of Civil and Environmental Engineering, Stanford University, US

Prefabricated Prefinished Volumetric Construction: Engineering Innovations in Singapore

Prof Richard Liew, Head of Department of Civil and Environmental Engineering, NUS, Singapore

Automated Technologies for Modular Construction: from Lab to Commercialization

Prof Mohamed Al-Hussein, University of Albert, Canada

#### ■ PANEL SESSION – MiC Policy and Strategic Development

Moderated by Ir Prof Thomas Ho, Chairman, Construction Industry Council
Ministry of Housing and Urban-Rural Development of the People's Republic of China
Mr XIE Huihui, Deputy Director General, The Authority of Qianhai of Shenzhen Municipality
Building and Construction Authority, Singapore

Ir John Kwong, BBS, Director, Building Technology Research Institute

Mr Edward Wong, Project Director, Architectural Services Department, The Government of HKSAR Mr Franco Cheung, Director (Projects), Hong Kong Housing Society



#### 26 June 2025, Thursday, CONFERENCE DAY

#### 14:00-17:30 Afternoon Session

#### SPEECHES

#### Modular Buildings Augmented by Automation and Robotics

Prof Thomas Bock, Chair Professor Emeritus of Building Realization and Robotics, TUM, Germany

#### Modular Construction Research and Development in the UK

Prof Chris Goodier, Loughborough University, UK

#### Modular Construction Breakthroughs in Australia

Prof Tuan Ngo, The University of Melbourne, Australia

#### **MiC for Government Buildings**

Mr Edward Wong, Project Director, Architectural Services Department, The Government of HKSAR

#### **MiC for Public Housing Development**

Dr Sherman Yip, Assistant Director (Development & Procurement), Housing Department

#### MiC for Super-Tall Building Development

Mr Edmond Lo, Project Director, Chinachem Group, Hong Kong

#### A 56-storey PPVC Case Study

Mr Alan Tan, Founder & Managing Director, United Tec Construction Pte. Ltd., Singapore

#### ■ PANEL SESSION – MiC Technology Breakthrough and Project Delivery

Moderated by Ir Frankie Fung, Principal Assistant Secretary (Project Capability and Strategy), Development Bureau, HKSAR Gov

Ir Dr Conrad Wong, BBS, JP, Chairman, HKMiCMA

Dr Louis Chu, Associate Director, Estates Office, HKU

Mr ZHANG Zongjun, Chairman, China State Construction Hailong Technology Co., Ltd.

Er. Wong Seng, Executive Director, TW-Asia Consultants Pte Ltd., Singapore

Mr Alan Tan, Founder & Managing Director, United Tec Construction Pte Ltd., Singapore

#### CLOSING REMARKS

Ir Prof Mak Chai-kwong, GBS, JP, Vice Chairman, CICID of HKU

#### **Conference Luncheon & Dinner (by invitation)**



<sup>\*</sup> The programme is subject to changes.

<sup>\*</sup> Registration link: https://hkuems1.hku.hk/hkuems/ec\_hdetail.aspx?guest=Y&ueid=100199

<sup>\*</sup> For more information and registration, please visit MiCLab website: <a href="https://www.miclab.hk/">https://www.miclab.hk/</a>