#### **Organiser**





#### **Government Collaborator**



中華人民共和國香港特別行政區政府 發展局

Development Bureau
The Government of the Hong Kong Special Administrative Region
of the People's Republic of China



#### **Co-Organisers**



香港大學建造及基建創新研究中心 CENTRE FOR INNOVATION IN CONSTRUCTION AND INFRASTRUCTURE DEVELOPMENT



# 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 Remarks**



Mr Wei Wang

Level I Bureau Rank Official

Department of Standards and Norms

Ministry of Housing and UrbanRural Development of the People's

Republic of China (MOHURD)

#### Welcome Remarks



Professor Y.C. Richard Wong, SBS, JP Provost and Deputy Vice-Chancellor The University of Hong Kong

**Conference Advisors** 



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

Ir Ricky Lau, JP



GBS, JP

Vice Chairman

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

Ir Professor Chai-kwong Mak,



JP

Chairman

Building Technology Research

Institute, Hong Kong

Ir Chi-keung Hon, GBS,



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 Huihui Xie

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



### **Distinguished Speakers**



**Professor Thomas Bock** 

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



**Professor Martin Fischer** 

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



Professor Mohamed Al-Hussein

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



Ms Linfeng Wen

Party Secretary Centre of Science and Technology Industrial Development, MOHURD



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 Allan Tan

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



Er. Seng Wong

Managing Director TW-Asia Consultants Pte Ltd. Singapore



#### **Panel Moderators**



Ir Professor Thomas Ho
Chairman
Construction Industry Council,
Hong Kong



Ir Frankie Fung

Principal Assistant Secretary

Development Bureau

The Government of the Hong Kong

Special Administrative Region

**Panel Speakers** 



Ms Linfeng Wen

Party Secretary

Centre of Science and Technology

Industrial Development

MOHURD



Mrs Foo-Leoh Chay Hong

Director
Construction Productivity and
Quality Group
Building and Construction Authority
Singapore



Ir John Kwong, BBS

Director
Building Technology Research
Institute
Hong Kong



Ir 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 Baojun Zhao

General Manager
China State Construction Hailong
Technology Co., Ltd.



Mr Allan Tan

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



Er. Seng Wong

Managing Director

TW-Asia Consultants Pte Ltd.

Singapore



#### **Programme Rundown**

25 June 2025, Wednesday (By invitation)	
16:00 – 17:20	Preparatory Meeting of IAMC
17:20 – 17:50	MiCLab Visit
18:00 - 20:30	Pre-Conference Reception Dinner

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

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

#### ■ WELCOME REMARKS

Prof Y.C. Richard Wong, SBS, JP, Provost and Deputy Vice-Chancellor, The University of Hong Kong

#### OPENING ADDRESS

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

#### SPECIAL REMARKS

Mr Wei Wang, Level I Bureau Rank Official, Department of Standards and Norms, MOHURD

#### SPEECH

#### MiC Research and Development New Paradigm

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

#### ■ MoUs Signing Ceremony & Launch of International Association for Modular Construction

#### SPEECHES

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

Prof Martin Fischer, Stanford University, US

#### **Prefabricated Prefinished Volumetric Construction - Engineering Innovations in Singapore**

Prof Richard Liew, National University of Singapore, Singapore

#### Automated Technologies for Modular Construction, from Lab to Commercialization

Prof Mohamed Al-Hussein, University of Albert, Canada

#### **Modular Construction Empowers the Development of Quality Homes**

Ms Linfeng Wen, Party Secretary, Centre of Science and Technology Industrial Development, MOHURD

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

Moderated by Ir Prof Thomas Ho, Chairman, Construction Industry Council

Ms Linfeng Wen, Party Secretary, Centre of Science and Technology Industrial Development, MOHURD

Mrs Foo-Leoh Chay Hong, Director, Construction Productivity and Quality Group, Building and Construction Authority, Singapore

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

Ir Franco Cheung, Director (Projects), Hong Kong Housing Society



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

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

#### SPEECHES

#### 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

#### **Modular Industrialized Customized Construction by Robotics**

Prof Thomas Bock, Emeritus Chair Professor, Technical University of Munich, Germany

#### **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

#### Case Study of the Avenue South Residence, World's Tallest PPVC Building

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

# Structural Challenges and Design Innovations for Super-tall Concrete Modular Integrated Construction (MiC) Buildings

Er. Seng Wong, Managing Director, TW-Asia Consultants 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, The Government of HKSAR

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

Dr Louis Chu, Associate Director, Estates Office, HKU

Mr Baojun Zhao, General Manager, China State Construction Hailong Technology Co., Ltd.

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

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

#### CLOSING REMARKS

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

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

27 June 2025, Friday (By invitation)	
8:30 – 12:30	MiC Site Visits
12:30 – 14:00	Lunch

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

<sup>\*</sup> For more information, please visit <a href="https://www.miclab.hk/micconference2025">https://www.miclab.hk/micconference2025</a>



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