

NAMI SYMPOSIUM

New Materials & Designs for MiC Innovation in HK – Demands & Opportunities

 16 Dec 2021

 14:00-16:30

 Charles K. Kao Auditorium
Hong Kong Science Park

 Cantonese
& Mandarin

Modular Integrated Construction (MiC), an innovative construction method to ease some of the challenges currently faced by the industry, has been widely advocated in recent years. There have also been thrusts of development across various disciplines, from materials, design, construction to maintenance. Nevertheless, in view of the specific conditions in Hong Kong, there is a need for continuous innovation to further promote the effective applications of these emerging construction technologies.

This seminar will focus on the new construction materials and technologies which drive the design and construction of the innovative MiC, as well as its advantages and applications in Hong Kong. Our industry leaders will also share their views on the demands and opportunities of the innovative MiC technologies.

CPD CERTIFICATE will be issued 

Register Now!



PRESENTATIONS

- Innovative Concrete MiC Wall Connection System
- Key Issues on Design & Construction of MiC Buildings for Enhanced Productivity
- Structural Integrity and First-in-HK Experimental Testing on Full-scale Lightweight Steel-Concrete MiC
- Development of Lightweight Concrete for Lightweight Steel-Concrete MiC
- The Challenges of Practicing Steel-Concrete Hybrid MiC in Hong Kong

PANEL DISCUSSION

- How to Promote New Low-carbon Materials in Hong Kong

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Organizer:



Co-organizer:



Supporting Organizations:





13:30 – 14:00	Registration
14:00 – 14:15	Welcome Speech Dr. Ivan SHAM Director of Research & Development (Construction) NAMI
	Opening Remarks Mr. Dennis WAN Principal Assistant Secretary Development Bureau, HKSAR
14:15 – 14:35	Innovative Concrete MiC Wall Connection System Mr. Stephen LEE Chairman Chun Wo Construction Holdings Co., Ltd.
14:35 – 14:55	Key Issues on Design & Construction of MiC Buildings for Enhanced Productivity Prof. Kwok Fai CHUNG Professor, Department of Civil and Environmental Engineering, PolyU Founding Director, Chinese National Engineering Research Centre for Steel Construction (Hong Kong Branch)
14:55 – 15:15	Structural Integrity and First-in-HK Experimental Testing on Full-scale Lightweight Steel-Concrete MiC Dr. Yanmin WU Technical Manager NAMI
15:15 – 15:30	Break
15:30 – 15:50	Development of Lightweight Concrete for Lightweight Steel-Concrete MiC Dr. Honggang ZHU Technical Manager NAMI
15:50 – 16:10	The Challenges of Practicing Steel-Concrete Hybrid MiC in Hong Kong Mr. John CHOW Technical Director, CPC Construction Hong Kong Assistant General Manager, Chevalier Construction Company Ltd.
16:10 – 16:30	Panel Discussion: How to Promote New Low-carbon Materials in Hong Kong Moderator Ir. Thomas TONG, General Manager (Innovation), Construction Industry Council
	Panelists <ul style="list-style-type: none">▪ Mr. Stephen LEE, Chun Wo Construction Holdings Co., Ltd.▪ Prof. Kwok Fai CHUNG, PolyU▪ Mr. John CHOW, Chevalier Construction Company Ltd.▪ Prof. Joseph MAK, HKIE Materials Division▪ Dr. Ivan SHAM, NAMI

SPEAKERS & MODERATOR



Mr. Stephen LEE

Chairman, Chun Wo Construction Holdings Co., Ltd.

Mr. Lee graduated from The University of Hong Kong with a Bachelor of Arts (Architectural Studies) degree in 1980 and a Bachelor of Building degree in 1982. He is a Registered Professional Surveyor (QS) with fellow membership of the Royal Institution of Chartered Surveyors and The Hong Kong Institute of Surveyors and membership of the Chartered Institute of Arbitrators. He is on the List of Arbitrators of Hong Kong International Arbitration Centre and is a member of the Joint Panel of Arbitrators of The Hong Kong Institute of Surveyors and The Hong Kong Institute of Architects. Mr. Lee has 40 years' experience in quantity surveying and commercial management in Hong Kong, the Mainland China, Taiwan, Macau, Singapore, Malaysia and the Philippines.



Prof. Kwok Fai CHUNG

**Professor, Department of Civil and Environmental Engineering, PolyU
Founding Director, Chinese National Engineering Research Centre for
Steel Construction (Hong Kong Branch)**

Prof. Chung is an internationally renowned academic, researcher and structural engineer with established expertise in steel construction. Prof. Chung's research interests include materials and behavior of high strength steels, structural behavior, limit state analyses and performance-based design of structural systems, structural fire engineering and fire protection in buildings and tunnels, and design codification. In recent years, with strong supports from the construction industry and various government departments and agents, Prof. Chung has extended his applied research interests into effective use of high performance materials, sustainable infrastructure development, corrosion protection of structural steelwork. Prof. Chung was Vice President of the Institution of Structural Engineers in the UK from 2017 to 2020. Currently, he is a member of the Construction Industry Council in Hong Kong, and President of Hong Kong Constructional Metal Structures Association.

SPEAKERS & MODERATOR



Dr. Yanmin WU

Technical Manager, NAMI

Dr. Wu has 14 years of working experience in the construction industry prior to joining NAMI, including MiC building design in Beijing and modular offshore platform design in Singapore. He is the leader of the structural design team in NAMI and has completed the first hybrid steel-concrete MiC design and implementation in Hong Kong. Dr. Wu is a Chartered Structural Engineer in China with Project Management Professional certification (PMP) and received his PhD (Civil) at Tsinghua University.



Dr. Honggang ZHU

Technical Manager, NAMI

Dr. Zhu is the key enabler for various concrete technologies development in NAMI, from lightweight foamed concrete, rapid repair mortar material (R²M²) to engineered cementitious concrete (ECC). He is the inventor and key engineer in-charged for technologies of one Hong Kong Green Innovations Award, two Gold Medals of International Exhibition of Inventions Geneva, and two CIC Innovation Awards. Dr. Zhu is a registered member of BEAM Pro of HKGBC, board member of Hong Kong Concrete Institute and received his PhD (Civil) at The Hong Kong University of Science and Technology.



Mr. John CHOW

Technical Director, CPC Construction Hong Kong

Assistant General Manager, Chevalier Construction Company Ltd.

Mr. Chow is currently an Authorized Signatory of Registered General Building Contractor, the Council Member and Vice Chairman of SME Committee of Hong Kong Construction Association and an NEC3 ECC Accredited Project Manager. Mr. Chow was chartered as a professional structural engineer in 2000. He has over 26-year experience in construction industry where over 20 years in main contractor field.

SPEAKERS & MODERATOR



Ir. Thomas TONG

General Manager (Innovation), Construction Industry Council

Ir. Tong has extensive experience in design of various projects from conception to completion in the United Kingdom and Hong Kong, as well as research and development of various modular integrated construction (MiC) systems which adopt advanced construction materials. He has applied MiC/DfMA and innovative construction design approach in his UK and Hong Kong projects. Before joining the Construction Industry Council, Ir. Tong was Technical Director of a world's leading engineering professional services firm and the lead engineer for the first hybrid MiC high-rise project in Hong Kong, and assisted MiC vendors to obtain MiC pre-acceptance application approved by the Buildings Department.



Prof. Joseph MAK

Chairman, HKIE Materials Division

Prof. Mak had been the Chief Structural Engineer of Hong Kong Housing Department before his retirement in 2014. He was also the Adjunct Professor at The Hong Kong Polytechnic University from 2008 to 2018. He is currently the professor in Chu Hai College of Higher Education. Prof. Mak specialized in standard block structural designs and prefabrication, which have been widely adopted in Housing Authority projects since early 90's. He was in charge of the structural section of the Independent Checking Unit from 2006 to 2013. He also looked after the Housing Laboratory, managing all the directly appointed commercial testing laboratories, and compiling structural specification and standards. Prof. Mak is currently the Chairman of Materials Division in HKIE. He was also the Past Council member and Past Chairman of the Structural Division.