

# 1 Day Course on Sustainable Construction : Industrialised Building System

Organised by :

Civil & Structural Engineering Technical Division

## EVENT DETAILS



### DATE

28TH MAY 2025  
(WEDNESDAY)



### TIME

9.00AM - 5.00PM



### VENUE

EASTERN PRETECH BERANANG,  
LOT 2, JALAN PERUSAHAAN 5  
KAWASAN PERINDUSTRIAN BERANANG  
BERANANG 43700  
SELANGOR DARUL EHSAN



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### REMINDER

Participants are required to bring their own  
Personal Protection Equipment (PPE)

- Safety shoes
- Safety helmet



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Eastern Pretech Beranang

# Speaker Synopsis and Biodata



Mr. Matti Mikkola is an accomplished engineer and industry leader with over 30 years of cross-continental experience in construction, precast concrete, and prefabrication. Holding a Bachelor of Science in Civil Engineering (Institute of Technology, Tampere, 1987), an MBA (Australian Institute of Business, 2001), and a Bachelor of Laws (University of London, 2013), he combines technical expertise, business acumen, and legal insight to drive innovation. Beginning his career at Finland's Partek Concrete, where he pioneered 3D concrete component research, he later spearheaded the growth of Southeast Asia's precast concrete and prefabricated bathroom sectors across Malaysia, Taiwan, and Singapore. After a decade of expanding Middle Eastern precast markets, he returned to Kuala Lumpur in 2016 to lead a Malaysian business unit, delivering transformative strategies. Currently, Mr. Mikkola is spearheading the Eastern Industries Group of Companies, championing the Industrialised Building System initiatives and sustainable advancement in the construction industry.



Ng Ming Kwong is passionate about building materials, with a strong interest in material science, particularly in concrete and cement. He holds a bachelor's degree in civil engineering and a master's in construction management from Universiti Teknologi Malaysia. He began his career as a graduate engineer in the precast industry, gaining hands-on experience over three years before transitioning into technical sales. With over 15 years in the cement industry, he has developed strong expertise in techno-commercial sales, market trends, and customer-centric solutions.

Now serving as Senior General Manager at YTL Cement, he is committed to driving innovation, understanding evolving industry needs, and delivering sustainable construction solutions. His contributions have played a significant role in advancing eco products and practices to contribute in shaping the future of the construction industry.



Encik Mohammad Faizal Abdul Hamid is a seasoned professional with over 22 years of experience in civil engineering and management. He is currently the General Manager of the Technology Development Division at CIDB Malaysia. He holds a Bachelor's Degree in Civil Engineering from Universiti Putra Malaysia and a Master's Degree in Business Administration from the International University of Malaya-Wales. Throughout his career, he has held significant positions at CIDB Penang, the Levy Division, the Enforcement Division, and the Technology Development Division. He is a certified trainer and assessor for QCLASSIC and SHASSIC programs and serves as the Lead Auditor for Quality Management Systems, Occupational Health & Safety Management Systems, and Environmental Management Systems. Encik Faizal actively contributes to the growth of the construction industry by participating in task forces for contractor development and registration requirements. He is also involved in the development of standards at CIDB Malaysia and the Department of Standards Malaysia. Encik Faizal has been invited as a keynote speaker for various programs organized by JKR, KPKT, JSM, PBN, and professional organizations such as IEM, PAM, MBAM, REHDA, and SHARED.A.



Tan Pei Yih is a Senior Technical Manager with over 25 years of expertise in quality control, product development, and optimisation of cementitious, epoxy, and emulsion-based solutions. She excels in leading technical teams, developing innovative materials, and launching market-driven products. A strong advocate for sustainable construction, she has driven eco-friendly initiatives in material development and quality assurance. Tan has conducted numerous technical seminars and product demonstrations, effectively translating complex technical information for contractors, engineers, and key stakeholders. Her industry insights and hands-on experience have earned her recognition for advancing best practices in construction material applications. Currently, she serves as Senior Technical Manager at QuickMix Solutions Sdn Bhd, leading the development of high-performance building solutions and providing on-site training and technical support. Tan holds a BSc in Chemistry from Indiana University, USA, and has been a keynote speaker at events such as "Innovations in Cementitious Materials" (YTL Group, 2022) and "Optimizing Mortar Performance in Construction" (HDB Contractor Training, Singapore, 2021).

## **Sustainable Construction with Precast Concrete System**

### Synopsis:

Malaysia's construction industry faces challenges such as high carbon emissions, labor shortages, and rising costs. Precast concrete systems, a key Industrialised Building System (IBS) method, offer sustainable solutions through reduced waste, faster construction, and improved quality.

### **Key Benefits:**

Environmental: Lower carbon footprint, energy-efficient production

Economic: Faster project completion, cost savings

Social: Safer sites, better building quality

**Challenges & Solutions:** High initial costs and workforce limitations can be addressed through government incentives, training programs, and supply chain improvements.

**Future Trends:** Green concrete, digital construction (BIM, IoT), and policy-driven adoption will shape Malaysia's sustainable building landscape. Precast solutions are crucial for achieving long-term sustainability goals.

## **Eco Cem – A Solution for Precast Concrete**

### Synopsis

The demand for precast concrete in Malaysia and Singapore is rising, driven by government policies, labour shortages, sustainability goals, and large-scale infrastructure projects that require faster, more efficient, and eco-friendly construction solutions. However, with increasing emphasis on carbon reduction, is CEM I Portland Cement still the only viable option for early-strength precast applications?

This presentation introduces Eco Cem (CEM II/B-V), a sustainable cement alternative produced through inter-grinding fly ash at cement plants to enhance performance while significantly lowering carbon emissions. We will explore its role in sustainable construction, key manufacturing insights, and challenges in tunnel lining and PPVC production, while showcasing its technical and environmental benefits in precast applications.

By adopting lower-carbon cement solutions like CEM II/B-V, engineers can drive sustainable construction practices, improve structural durability, and proactively address climate change challenges in the built environment.

## **Policies, Strategies, and Statutory requirements for the Implementation of Industrialised Building System (IBS) an adoption of CIDB Malaysia**

### Synopsis

The "Policies, Strategies, and Statutory requirements for the Implementation of Industrialised Building System (IBS)" outlines a strategic approach to enhancing the use of industrialized building technology in Malaysia. This document covers government policies encouraging the adoption of CIDB Malaysia on IBS, as well as regulations and statutory requirements that stakeholders in the construction industry must adhere to.

### **Key aspects discussed include:**

**IBS Policies and Strategies:** Government initiatives aimed at accelerating the adoption of IBS to improve efficiency, quality, and sustainability in the construction sector.

**Legal and Statutory Requirements:** Guidelines and regulations that developers, contractors, and stakeholders must comply with in the implementation of IBS.

**Benefits and Challenges of IBS:** The advantages of IBS in terms of durability, cost, and sustainability, as well as the challenges in its implementation and market acceptance.

**Implementation Strategies:** Recommended approaches to increase IBS adoption, including government incentives, research, and human capital development.

Overall, this document outlines the strategic steps that need to be taken to position IBS as a key driver in transforming Malaysia's construction sector, with a focus on more efficient, modern, and sustainable building practices.

## **Title: Grout for Industrialised Building System (IBS)**

### Synopsis

This presentation provides engineers and consultants with an in-depth understanding of grout's function, applications, and benefits in IBS construction. The session begins with a definition of grout, followed by its key purposes—preventing voids, acting as a binding agent, and enhancing quality assurance. It then explores grout's applications in IBS, including anchoring, levelling, and jointing, each tailored to meet specific structural needs. The discussion further highlights the benefits of grouting, such as enhanced structural stability, secure connection joints, and crack repair, reinforcing its importance in modern construction. In conclusion, the presentation underscores the role of grout in IBS, advocating for the selection of appropriate materials to ensure long-lasting, safe, and environmentally responsible construction practices. By mastering grouting techniques, professionals can enhance the quality, performance, and sustainability of their projects.

<b>Time</b>	<b>Programme</b>
9:15am - 10:00am	Registration and morning coffee
10:00am - 10:05am	Welcome by CSETD (Civil & Structural Engineering Technical Division) by Ms. Wong Ai Ming, Committee of CSETD, IEM
10:05am- 10:10am	Opening Note from The Institution of Engineers Malaysia, IEM by Ir. Lo Seng Lim, Chairman of CSETD, IEM
10:10am- 10:15am	Welcome to Eastern Pretech, Beranang Plant by Mr. Lee Mun Sam, CEO of Eastern Pretech Solutions Sdn Bhd
10:15am - 10:45am	Session 1: Sustainable Construction with Precast Concrete System, by Mr.Matti Mikkola. CEO of Eastern Industries
10:45am - 12:05pm	Eastern Pretech Plant Tour
12:05pm - 12:25pm	Morning Coffee Break
12:25pm - 12:30pm	Video by YTL Cement
12:30pm - 1:00pm	Session 2: Eco Cem, A Solution for Precast Concrete, by Mr. Ng Ming Kwong, Senior General Manager, YTL Cement
1:00pm - 1:30pm	Q&A session for Session 1 and 2
1:30pm - 2:15pm	Lunch Break
2:15pm - 2:55pm	Session 3: Policy and Statutory Requirements for IBS Implementation, by En. Mohammad Faisal Bin Abdul Hamid, General Manager, Technology Development Division, CIDB Malaysia
2.:55pm - 3:15pm	Session 4 - Grout for Industrialised Building System by Ms. Tan Pei Yih, Senior Technical Manager, QuickMix Solutions Sdn Bhd
3.:15pm - 3:45pm	Q&A session for Session 3 and 4
3:45pm - 3:55pm	Presentation of Token of Appreciation and Group Photo
3:55pm - 4:00pm	Closing Remark by Ms. Ong Ping Ping, Director of Communications, YTL Cement
4:00pm	End of session

**REGISTRATION FEES (subject to 8% SST)**

	<b>Online Fees (RM)</b>	<b>Normal Fees (RM)</b>
<b>Student Member</b>	50.00	60.00
<b>Graduate Member</b>	50.00	60.00
<b>Corporate Member</b>	50.00	60.00
<b>Non Member</b>	100.00	120.00