1 DAY SYMPOSIUM ON DIGITAL TRANSFORMATION IN STRUCTURAL DESIGN

Organised by
Civil and Structural Engineering Technical Division, IEM
In Collaboration with CYPE and Taylors Univeristy

Details

Date : 21st April 2026, Tuesday

Time : 8.30am - 5.00pm

Venue : LT 12, Taylor's University
1, Jln Taylors,
47500 Subang Jaya

CPD HOURS : 6.0 HOURS CPD
REF NO.: IEM26/HQ/157/S

Registration Fees
IEM Member : Free Admission
Non Member : RM100

REGISTER NOW

Limit to 150 pax only

Programme

Morning Session	
08:30 – 09:00	**Registration & Welcome Coffee**
09:00 – 09:30	**Opening Remarks** *Taylor's University (10 minutes)* *The Institution of Engineers Malaysia (IEM) (10 minutes)* *CYPE (10 minutes)* • Welcome address and introduction of the symposium objectives • Positioning the event as an academic and industry-focused forum on structural digitalization and BIM-based engineering practice in Malaysia
09:30 – 10:10	**Driving BIM and Digitalisation in Malaysia: Policies, Challenges, and the Road Ahead** *Sr Ahmad Farrin Mokhtar | Senior General Manager, CIDB; Board Member, CIDB Digital*
10:10 – 10:40	**To BIM or Not to BIM? Why Structural Design Workflows Are Changing** *Dr. Afonso Solak | Director of Corporate Development, CYPE* • The shift from isolated calculation to integrated digital delivery • Growing importance of interoperability and coordination • Implications for structural engineers and consultants in a rapidly evolving industry
10:40 – 11:00 Coffee Break	
11:00 – 12:00	**Technical Session 1: Reinforced Concrete Structural Design within Open BIM Workflows** *Dr. Afonso Solak | Director of Corporate Development, CYPE* • Structural analysis and code-based RC design in modern BIM environments • Connection between analytical models and BIM coordination models • IFC-based collaboration with multidisciplinary teams • Generation of consistent documentation and deliverables
12:00 – 12:40	**Roundtable Discussion: Structural BIM Adoption in Malaysia — From Engineering Design to Fabrication Readiness** *Panelists: IEM | CYPE | CIDB* *Moderator: Taylor's University* • State of structural BIM adoption in Malaysia • Barriers to implementation and the link between design workflows and fabrication industry needs • Practical steps to accelerate structural digital transformation
12:40 – 12:45	**Token Appreciation Presentation, Lucky Draw Introduction & Group Photo**
12:45 – 13:30 Networking Lunch & Prayer Break	
Afternoon Session	
13:30 – 14:15	**Anchoring and Connection Technologies for Modern Steel Construction** *Mr. Sergio Rodrigues Pyles | Head of Energy & Industry, Hilti Malaysia* • Industry-focused overview of anchoring and connection technologies • Connecting practical site solutions with structural design considerations • Integration of anchorage components into digital connection workflows
14:15 – 15:15	**Technical Session 2: Steel Structures in BIM — Analysis, Detailing and Constructability** *Dr. Afonso Solak | Director of Corporate Development, CYPE* • BIM-based modelling of steel systems • Preparation of models for detailing and fabrication processes • Coordination of steel structures within multidisciplinary BIM projects • Fabrication-ready digital outputs

15:15 – 15:30 Coffee Break	
15:30 – 16:15	**Live Demonstration: From Hilti Anchors to CYPE Connect — Fabrication-Ready Steel Connection Modelling** *Dr. Afonso Solak | Director of Corporate Development, CYPE* *Ir. Mun Yew Fai | Codes and Approval Manager, Hilti Malaysia* • Real-world steel connection scenario integrating Hilti anchoring components • Modelling within CYPE Connect and engineering logic behind connection verification • BIM-compatible outputs supporting fabrication and constructability
16:15 – 16:30	**Closing Remarks: CYPE in Malaysia — Current Developments and Next Steps** *Mr. Jeason Herfs | Commercial Director, CYPE* • Key takeaways from the symposium • CYPE's ongoing engagement in the Malaysian market • Invitation to the optional hands-on training workshop
16:30 – 17:00 Q&A, Closing remark with Lucky draw	

Synopsis

The symposium focused on the ongoing digital transformation of structural engineering, emphasizing the transition from traditional, isolated design approaches to integrated BIM-based workflows. Discussions highlighted the growing importance of interoperability, multidisciplinary coordination, and the alignment between design and fabrication processes within the Malaysian context. Technical sessions demonstrated the application of reinforced concrete and steel design within Open BIM environments, showcasing how analytical models can be effectively linked to coordination and documentation platforms. Industry perspectives addressed current challenges in BIM adoption and identified practical steps toward accelerating digitalization. The event concluded with a live demonstration integrating anchoring systems into connection design workflows, illustrating the potential of digital tools to deliver fabrication-ready structural solutions.

Speaker Line Up!

SR. Ahmad Farrin bin Mokhtar is the Senior General Manager for the Contractor and Construction Personnel Development Sector at CIDB Malaysia, with over 20 years of experience in the construction industry. He is currently responsible for strategic and policy development to enhance the knowledge, skills, and professionalism of contractors and workers in the construction industry. A registered surveyor with RISM since 2021, he also serves on the Board of five CIDB subsidiaries, namely CIDB Holdings Sdn. Bhd., CIDB E-Construct Services Sdn. Bhd., and three Akademi Binaan Malaysia (ABM). In addition, he has published articles related to construction technology and policy. He is a six-time recipient of the CIDB Excellent Service Award.

Afonso Miguel Solak is a Civil Engineer based in Spain, where he has developed his professional career for more than twelve years, serving as Corporate Development Director at CYPE Software. Throughout his career, he has been actively involved in the digital transformation of the AEC sector, delivering lectures and training sessions across America, Europe, Asia, and Africa on the application of BIM technology. His academic background includes a PhD in Civil Engineering from the University of Alicante, with research on lightweight concrete and construction materials. He also studied at universities in Brazil and Italy, consolidating an international academic background. He is currently engaged in the scientific dissemination of this area, and his research results can be consulted on his ORCID profile: https://orcid.org/0000-0003-1327-3625362

Sergio Rodrigues Pyles holds a Bachelor's degree in Mechanical Engineering and an MBA from Oxford Brookes University, and has accumulated over a decade of international professional experience across engineering, construction, and energy sectors. He began his career in the Engineering, Procurement and Construction (EPC) industry, working on large-scale oil & gas and power infrastructure projects, where he gained hands-on experience in project execution, technical specifications, and collaboration with contractors, consultants, and asset owners. He later joined Hilti, where he has held several commercial and leadership roles across Latin America, Australia and Asia, developing strong expertise in technical solution selling and strategic project engagement. Sergio currently serves as Head of Energy & Industry at Hilti Malaysia and is a member of the Executive Management Team, responsible for driving growth in key segments including data centers, offshore energy, power, and heavy industry. In this role, he leads the strategic development of large projects, systematic account development, and high-value engineering solutions, working closely with multinational EPCs, global technology companies, and industrial asset owners. Known for combining engineering expertise with strategic commercial leadership, Sergio focuses on developing high-performing teams, strengthening long-term customer partnerships, and supporting the delivery of complex infrastructure projects across Southeast Asia.

Speaker Line Up!

Ir. Mun Yew Fai graduated from University Malaya in 2008 with a Bachelor of Civil Engineering and brings over 17 years of expertise in the construction industry. He is a registered ASEAN Chartered Professional Engineer (ACPE), Professional Engineer with BEM, Corporate Member of IEM, Associate Member of IFE Malaysia Branch, and Individual Member of MFPA.

He currently serves as Secretary/Treasurer of the IEM Civil and Structural Engineering Technical Division (2025/26) and contributes to fire protection topics as a committee member of the IEM Fire Advisory Board. He is also active in MBAM's Technical and IBS committees, and participates in working groups and technical committees drafting standards and guidelines with the Department of Standards Malaysia, CIDB, and other agencies.

Mun Yew Fai began his career at T.Y. Lin International Sdn. Bhd., focusing on design and execution of mixed-use, residential, and commercial projects for over nine years. Since 2018, he has been with Hilti Malaysia, specializing in fastening technology. Promoted to Field Engineer Manager in 2022, he now serves as Codes and Approval Manager, collaborating with industry stakeholders to develop standards and specifications in fastening technology and passive fire protection.

Ir. Ng Beng Hooi graduated with a Bachelor of Engineering (Civil Engineering) from Universiti Teknologi Malaysia (UTM) in 2005 and has accumulated over 20 years of professional experience across consultancy, manufacturing, and international engineering organizations, with a specialization in fastening, passive fire protection – firestop, and geosynthetics. He is currently with Hilti, serving as the Regional Codes & Approvals (C&A) Manager for Southeast Asia. In addition, he serves as Chairman of the Civil & Structural Engineering Technical Division (CSETD) for 2025/2026 and as Fire Advisory Board Member (2023–2026) under The Institution of Engineers, Malaysia (IEM). He also contributes to national and industry standards bodies, including serving as a Working Group Member for EC2-4 under Standards Malaysia, a Committee Member for NSC 13 Fire Protection Standards (2023–2026), and an M&E Technical Committee Member with the Master Builders Association Malaysia (MBAM). He is a Professional Engineer (Ir.), ASEAN Engineer, APEC Engineer, and International Professional Engineer, reflecting his commitment to advancing engineering standards, safety, and professional practice in Malaysia and the region.