



# ACES WEBINAR 2025 INNOVATIONS, CHALLENGES AND REGULATORY DEVELOPMENT 29 & 30 MAY 2025



## Mode of Delivery: Zoom Webinar

Register in advance for this webinar:  
After registering and payment being made, you will receive a confirmation email containing information and unique link to join this Zoom webinar.

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**Approved CPD: 14 PDU / 3 CPD SIA-BOA  
14 STU (M&E) / 7 STU (Structural)**

***Note to all participants: CPD points will be awarded based on the actual duration of the session that they have attended.***

### Registration Link & QR Code

<https://us02web.zoom.us/join/6MK8ZXiqQDC92jH9gObkWw>



Day 1	Day 2	Nett Fee per Person
29 May 2025 (Thu) 9.00 am to 6.00 pm	30 May 2025 (Fri) 9.00 am to 6.00 pm	ACES Member S\$80 RE/RTO/ CIJC Member S\$120 FACE / FIDIC Member S\$120 Others / Non-Member S\$150

## INTRODUCTION

As consultants we face daily challenges of regulatory changes, keeping in pace with technology advancement, continual effort to improve efficiency in our works and ensuring core competency is always maintained as well as continual progression in learning from engineering challenges faced in the industry.

ACES as a representative of practitioners is always looking for ways to keep our members well informed of the industry practices, advancements and changes via these seminars to meet the challenges above.

## OBJECTIVES

Our target audience are Professional Engineers & Practitioners (QPDs QPSs), Engineers and Builders in the industry. The focus of this webinar is to:

1. provide a platform for sharing of innovative experience in line with productivity and digital delivery,
2. share challenges in underground / infrastructure projects and
3. update of regulatory requirements.

## PROGRAM OUTLINES

### DAY 1: 29 May 2025 (Thu)

<b>C&amp;S -1</b>			<b>CONTENT</b>	<b>SPEAKERS</b>
9.00 am			Welcome Address by ACES President	Er. Chuck Kho (ACES)
9.05 to 9.55 am	50 mins	1.	Use of Steel Fibre Reinforced Concrete in Tunnels and Underground Structures	Er. Dr. Goh Kok Hun LTA
9.55 to 10.45 am	50 mins	2.	Build concrete structures faster, more sustainably, and more economically	Ms. Chang Qingyang ConcreteAI
10.45 to 11.00 am			Short break	
11.00 to 11.50 am	50 mins	3.	New BCA Standard Consultancy Agreement	Daryl Larry Sim Rajah & Tann Singapore LLP
11.50 to 12.40 pm	50 mins	4.	Corenet X implementation	Ms. Aye Myint Khine Ronnie & Koh Consultants
12.40 to 1.00 pm	20 mins		Q&A	Moderator: Er. Yong Fen Leong (ACES)
1.00 pm			End of C&S Session 1	

<b>MEP - 1</b>			<b>CONTENT</b>	<b>SPEAKERS</b>
2.00 pm			Welcome Address by ACES Vice President	Er. Choong Choon Guan (ACES)
2.05 to 2.55 pm	50 mins	5.	The WWW of Nuclear Energy Technologies: What we need to know, What we could possibly consider, What we need to observe	Mr. Matthew D Chew Digital Twin System Architect HY M&E Consultancy Pte Ltd
2.55 to 3.45 pm	50 mins	6.	Optimizing Indoor Air Quality and Energy Efficiency: Advances in Variable Air Volume Diffuser Technology and Compliance Strategies	Mr. Thomas Podgurski Royal Service Air- Conditioning
3.45 to 4.00 pm			Short break	
4.00 to 4.50 pm	50 mins	7.	Breaking Barriers in AEC: The Power of BIM-Optimized Workflows	Mr. Pablo Gilabert CYPE Ingenieros, S.A.
4.50 to 5.40 pm	50 mins	8.	Technical explanation of intelligent flood control in response to rising sea levels	Mr. Huang Qifeng Kaiquan
5.40 to 6.00 pm	20 mins		Q&A	Moderator: Er. Ng Han Siong (ACES)
6.00 pm			End of MEP Session 1	

**DAY 2: 30 May 2025 (Fri)**

<b>C&amp;S – 2</b>			<b>CONTENT</b>	<b>SPEAKERS</b>
9.00 to 9.50 am	50 mins	9.	Geotechnical Challenges	Mr. Bryan Kyaw Thet Oo SPPG, SP Group Ltd.
9.50 to 10.40 am	50 mins	10.	Making Data Meaningful for Built Environment Projects	Ms. Yve Xu JTC Corporation
10.40 to 11.00 am			Short break	
11.00 to 11.50 am	50 mins	11.	Reusing Structural Steel to Reduce Carbon Footprint Using the BC1 Design Framework	Prof. Chew Sing Ping (SIT) Er. Willie Chai (BCA)
11.50 to 12.40 pm	50 mins	12.	Recent Regulatory Changes and Upcoming Development	Er. Willie Chai (BCA) Er. Vicki Wong (BCA)
12.40 to 1.00 pm	20 mins		Q&A	Moderator: Er. Gwee Siong Mong (ACES)
1.00 pm			End of C&S Session 2	

<b>MEP - 2</b>			<b>CONTENT</b>	<b>SPEAKERS</b>
2.00 to 2.50 pm	50 mins	13.	Optimizing Façade Design with BIM HVACTool: Leveraging IFC for ETTV Calculations and Performance-Based SC2 Methods	Dr. Alex Lee BIM HVACTool
2.50 to 3.40 pm	50 mins	14.	Introduction to Large Language Model (LLM) & Practical ChatGPT Usage in Consultancy (Technical and Business)	Ir. Shah Izzni Talif Council Member, ACEM
3.40 to 4.00 pm			Short break	
4.00 to 4.50 pm	50 mins	15.	Discover iNPQS M&E Specification Access with AECport	Mr. Webb Poh AECport
4.50 to 5.40 pm	50 mins	16.	Simplify Data Centre with Prefabricated Modules	Mr. Prathap Suresh Schneider Electric
5.40 to 6.00 pm	20 mins		Q&A	Moderator: Er. Ho See Fong (ACES)
6.00 pm			Closing Remarks End of MEP Session 2	Er. Choong Choon Guan (ACES Vice President)

## THE SPEAKERS

### 1. Use of Steel Fibre Reinforced Concrete in Tunnels and Underground Structures

#### Synopsis

The use of Steel Fibre Reinforced Concrete (SFRC) in tunnels has become more extensive in Singapore over the past two decades. This presentation discusses the journey LTA has taken to mainstream the use of SFRC in our bored tunnels, including commissioning R&D projects to define the parameters for its application and incorporating lessons learnt from earlier implementation to optimise application in SFRC bored tunnels. With the introduction of the new design code for SFRC in Singapore, LTA has also completed a R&D study on the use of SFRC for crackwidth design in underground structures. This presentation will show key findings from the R&D and future opportunities.

#### Speaker:

Goh Kok Hun is currently Group Director Infrastructure Design & Engineering, in the Land Transport Authority of Singapore. He obtained his Bachelor of Engineering and Master of Engineering from the National University of Singapore and received his doctorate from the University of Cambridge. He has about 25 years of geotechnical and tunnel engineering experience and has been involved in various aspects of several road and rail infrastructure projects in Singapore. He conducts technical studies on topics such as deep excavation and tunnelling effects, building impact assessment, pile foundations, etc. and shares his findings regularly in local conferences and seminars. He is registered as a professional engineer in civil engineering as well as a specialist professional engineer in geotechnical engineering in Singapore, and also a chartered professional engineer.



### 2. Build concrete structures faster, more sustainably, and more economically

#### Synopsis

Builders often struggle to accurately determine when freshly poured concrete has gained sufficient strength for subsequent construction activities. Traditional methods using standard-cured samples can underestimate in-situ strength due to variations in volume, curing, and temperature, leading to productivity losses and over-engineered concrete.

This session introduces the method of temperature-matched curing (TMC), as highlighted in the BCA circular (Dec 2024), and the concrete maturity method. These techniques enable accurate in-situ strength assessment, reducing construction cycle times by up to 50% and supporting optimized concrete mixes for a lower carbon footprint.


The speaker will share real-world applications of these methods in Singapore projects, demonstrating improvements in project productivity, reduced testing frequency, and the use of sustainable materials like GGBS concrete. The session will also cover ConcreteAI's typical onboarding process with projects to achieve cost savings and sustainability.

#### Speaker: Ms. Chang Qingyang Concrete AI


Chang Qingyang is the Co-founder and CEO of ConcreteAI, a construction technology company based in Singapore and spun off from the National University of Singapore (NUS). ConcreteAI's solutions empower construction projects and precast facilities to accelerate concreting cycles and optimize concrete mixes, driving down carbon emissions. Drawing on her civil engineering foundation from NUS and her experience in both construction and startups, Qingyang champions data-driven approaches to improve construction efficiency and quality.



### 3. New BCA Standard Consultancy Agreement

<b>Synopsis</b> <p>This session will provide insight from a legal perspective on some of the new and key terms of the BCA SCA, including on the allocation of risk, liabilities, payment and obligations of the Consultant. It will also cover some best practices for the implementation and administration of the SCA.</p>	
<b>Speaker: Daryl Larry Sim</b> Rajah & Tann Singapore LLP <p>Daryl is a partner at Rajah &amp; Tann Singapore LLP in the International Arbitration Construction &amp; Projects practice group.</p> <p>Daryl specialises in construction law and his practice covers both front-end (advisory, drafting and negotiating) and back-end (dispute resolution) work.</p> <p>Daryl has acted in and advised on a wide variety of domestic and international construction, engineering and infrastructure projects.</p> <p>Daryl has also acted for clients in international arbitrations in the SIAC, ICC and LCIA, and in mediations and statutory adjudications (in both Singapore and overseas jurisdictions).</p> <p>Previously, Daryl was part of the Integrated Regulatory Practice group, where he advised government bodies and multi-national corporations on regulatory issues in the Southeast Asia region.</p> <p>Daryl is admitted as a lawyer in Australia and Singapore and holds a degree in Behavioural Neuroscience.</p>	

### 4. Corenet X Implementation

<b>Synopsis</b> <p>BCA and URA issued a joint circular on 23 January 2025 to inform the industry on the revised implementation timeline of Corenet X. From 1 October 2025, submission via CORENET X will be mandatory for all new projects with GFA of 30,000m<sup>2</sup> and above.</p> <p>Projects submitted via CORENET X will undergo the new Gateway process. There are 3 key Gateways, namely Design, Construction and Completion Gateways. Piling Gateway is an optional Gateway, for project teams which are keen to begin piling works earlier prior to the Construction Gateway approval. BIM submission in IFC-SG format will be mandatory for new erections or major addition and alteration (A&amp;A) projects with new Gross Floor Area (GFA) of 5,000m<sup>2</sup> or more.</p> <p>The speaker will share how the project team strategized the process of CORENET X Submission and effective way of preparing BIM submission in IFC-SG format.</p>	
<b>Speaker: Ms. Aye Myint Khine</b> <p>Ms. Khine graduated with Bachelor of Engineering (Civil) from Yangon Technological University, Myanmar and Specialist Diploma in Building Information Modelling from BCA Academy, Singapore.</p> <p>A professional with over 10 years of CAD Drafting and BIM Experience. Ms. Khine has good knowledge about BIM project, strong Practice Documentation Model for BCA Submission including Corenet-X submission, coordination of BIM projects with other disciplines and management of BIM.</p>	

**5. The WWW of Nuclear Energy Technologies: What we need to know, What we could possibly consider, What we need to observe**

**Synopsis**  
Nuclear Energy has become a hot topic within ASEAN and many countries' governments are actively considering Nuclear as an energy option making this not an 'if' but a 'when'. Private industry needs to be ready when governments decide to pull the trigger and this gives engineers and regional engineering consultants and opportunity to engage in a budding field that has the high-value potential.

This presentation will focus on a WWW framework namely: What you need to understand as basics, What are the opportunities and capabilities that you all can consider growing, What are the trends you need to observe to maximise your impact.

**Speaker: Matthew Dominic Chew**

Matthew Chew brings a broad engineering foundation, with BEng and MEng degrees from NUS, complemented by an MBA and MSc in Nuclear Science and Engineering from MIT. His career spans practical experience in radiation detection & imaging and enterprise systems at the Home Team Science & Technology Agency, alongside strategic consulting for microreactor deployment with clients like Caterpillar. This combination of technical and business expertise offers a unique perspective for speaking engagements.



**6. Optimizing Indoor Air Quality and Energy Efficiency: Advances in Variable Air Volume Diffuser Technology and Compliance Strategies**

**Synopsis**  
Tom will deliver a presentation highlighting the application and design of variable air volume diffusers, the advantages of low-turndown VAV systems, and innovations in Smart diffuser controls. His talk will also cover compliance with ASHRAE Standard 62.1 for outdoor air make-up systems in low- and high-rise office buildings, along with insights into ASHRAE 90.1 recommendations for optimizing VAV applications.

**Speaker: Mr. Thomas Podgurski**  
Technical Director, Royal Service Air Conditioning  
– USA & Asian Division

With over 30 years of experience, Tom brings a wealth of knowledge in various areas of HVAC and refrigeration, manufacturing, and airside systems. His expertise spans airside volume control, humidity and dehumidification management, clean air technologies, and waterside/airside systems operating at high, low, hot, and cold pressures and temperatures. He is also skilled in variable and constant flow systems and Direct Digital Control (DDC) technologies.



## 7. Breaking Barriers in AEC: The Power of BIM-Optimized Workflows

### Synopsis

This presentation will summarize CYPE's experience in developing cutting-edge technology for the Architecture, Engineering, and Construction (AEC) sector. Additionally, it will showcase a preview of the latest ACES solutions aimed at optimizing new workflows based on BIM Technology.

**Speaker: Pablo Gilabert**  
Innovation Director  
CYPE

Architect by the Polytechnic University of Valencia (UPV) and Master BIM Manager by Zigurat E-Learning. Since 2011 he has been working in the CYPE Company, where he has been in charge of the technical development of BIM applications. In recent years, he has actively participated in research projects related to foster the technological development of the AEC sector, including Digital Twins, Digital Building Permits, AR/VR, CFD, AI, etc. He currently holds the position of Innovation Director, boosting R&D investment in the various business units.



## 8. Technical explanation of intelligent flood control in response to rising sea levels

### Synopsis

Kaiquan's drainage system has provided a solid guarantee for flood control safety in China. Its product is mainly used in urban industrial and mining water supply and drainage, municipal engineering, sewerage treatment, steel, metallurgy, power plants shipbuilding and water plants for circulation and water improvement, as well as in water conservancy projects such as river treatment, farmland irrigation, aquaculture, salt fields and other scenarios.

**Speaker: Mr. Huang Qifeng**  
Technical Manager  
Shanghai Kaiquan Pump Co., Ltd

- Technical import, involved in China's first pump gate project in Fuzhou (24 unit)
- Support KaiQuan's biggest pump gate project in ZhongShan
- Support KaiQuan's first pump gate project in Thailand
- Involved in first LPPS in Fuzhou
- Involved in biggest LPPS in inner Mongolia



## 9. Geotechnical Challenges

### Synopsis

The multibillion-dollar Underground Transmission Cable Tunnels Project, also one of the world's deepest electricity supply project, is built at 60m average depth to replace Singapore's aging power cables for operational reliability and to meet future energy needs. This project brings numerous and intricate geological, geotechnical and construction challenges during deep shaft excavation, adit mining and bored tunnelling works, most of which are never experienced before in the past Singapore's underground history. By and large, this presentation covers the rare and interesting geological findings and challenges which would create a good platform for technical discussions among professionals, as well as contribute for the betterment of future Singapore's underground development works.

### Speaker: Bryan Kyaw Thet Oo

Senior Principal Engineer & Head of Unit  
SPPG, SP Group Ltd.

Bryan is a motivated and results-driven manager who possessed more than 25 years of professional experience in handling mega scale projects, complex assignments and project management with the wide spectrum of Civil & Geotechnical knowledge. Currently, he leads in managing Gas Transmission Line diversion/customer connection projects and geotechnical works of Gas Transmission and Distribution projects.

One of his completed iconic projects in SP Group was the island wide development of Transmission Cable Tunnels at about 60m depth of Singapore where he delivered successfully his geological & geotechnical scope of works. Besides, he thrivingly managed a challenging project which required a connection of a mined tunnel to a live cable tunnel at 54m depth of Singapore Underground. Bryan obtained his Bachelor of Civil Engineering degree from YTU (Yangon) and further specialized his Geotechnical Engineering knowledge with a MSc Degree from NTU, Singapore. Later, he additionally sharpened his engineering management skills with an Executive MBA degree from NUS, Singapore. He is also a past President of Society of Myanmar Civil Engineers (Singapore) – SMCES, too.



## 10. Making Data Meaningful for Built Environment Projects

### Synopsis

Data is all around us and is being generated constantly across the lifecycle of Built Environment (BE) projects. However, data alone is not enough. The real value lies in knowing what data we need, how to harness it, and how to use it meaningfully. This presentation explores the importance of data literacy within the BE sector, highlighting the need for all stakeholders to understand not just the data itself, but also their role in leveraging it to improve project outcomes. We will discuss strategies to move beyond simply collecting data, toward deriving actionable insights that support planning, execution, and long-term asset management. Ultimately, meaningful data use requires more than just technology — it calls for a shift in mindset, skills, and collaboration across the ecosystem.

### Speaker: Ms Yve Xu



Deputy Director for Digital Built Environment  
JTC Corporation

**Ms Yve Xu** has over 10 years of experience in the Built Environment and specialises in IDD. She has been actively involved in project implementations of technology tools such as Building Information Modelling (BIM) and Common Data Environment (CDE). She also drives the digital transformation and change management of Building and Infrastructure Construction (BIC) sector for a more productive way of delivering projects. Prior to joining JTC, she was with the Land Transport Authority, where she was spearheading the implementation and development of corporate BIM, developing the competency framework and setting up of the IT infrastructure for BIM. She is currently a Deputy Director in JTC's Digital Built Environment Department, championing digital transformation and IDD implementation in JTC and engagement with industry stakeholders. She graduated from the National University of Singapore with a Bachelor of Engineering (Mechanical) with Honours.






## 11. Reusing Structural Steel to Reduce Carbon Footprint Using the BC1 Design Framework

<b>Synopsis</b> <p>The Building and Construction Authority (BCA) of Singapore introduced the design guide 'BC1: Design Guide for the Use of Alternative Structural Steel' in 2008, enabling the application of non-BS EN structural steel materials in British Standard (and later, Eurocode) design. Subsequent updates in 2012 expanded its scope to include a framework on quality assurance regimes for structural steel reuse. This presentation will refresh industry awareness of the BC1 framework for reused structural steel and share our upcoming and future developments in this area, with a focus on safety, sustainability and future readiness.</p>	
<b>Speaker:</b> <b>Er. Prof. Chiew Sing Ping (SIT)</b> <p>Er. Prof. Chiew Sing Ping is Professor of Civil Engineering and Programme Leader of Civil Engineering as well as Head of the Construction Technology Innovation Laboratory (CTIL) at Singapore Institute of Technology (SIT). He was previously Head of the Division of Structural Engineering and Mechanics at Nanyang Technological University (NTU), Singapore from 2008 to 2014. He is also a Member of the Panel of Expert Advisors of the Land Transport Authority (LTA), Past President and Honorary Fellow of the Singapore Structural Steel Society (SSSS). His research and expertise are related to structural steel and composite steel-concrete construction, and he has delivered many industry and keynote lectures, written 5 books, and published more than 200 refereed technical papers in international refereed journals and conference proceedings.</p> <b>Er. Willie Chai Wei Shung (BCA)</b> <p>Er. Willie Chai is a Senior Engineer at the Building and Construction Authority (BCA), with 15 years of engineering experience in the built environment sector. His expertise encompasses building and infrastructure design, construction supervision, and in BCA, he is involved in different aspect of regulatory work. He was involved in implementing various industry guidance such the 2023 edition of BC1, the use of reinforced autoclaved aerated concrete, and more recently, guidance on post-installed reinforcement and reused structural steel.</p>	 

## 12. Recent Regulatory Changes and Upcoming Development

<b>Synopsis</b> <p>The built environment sector continues to evolve rapidly, driven by technological advancements and innovative construction methods. To ensure a regulatory framework that is robust, effective and progressive, BCA regularly reviews its building control policies and guidelines. This presentation will highlight key regulatory changes that were recently implemented and give details of upcoming policy development, with a focus on enhancing building safety.</p>	
<b>Speaker:</b> <b>Er. Willie Chai Wei Shung (BCA) and Er. Vicki Wong (BCA)</b> <p>Er. Vicki Wong is a Senior Engineer at the Building and Construction Authority (BCA), with over 10 years of engineering experience in the built environment sector. Prior to joining BCA, she gained valuable experience in design and construction of structures while working in consultancy firms. Currently in the Policy and Regulations Department at BCA, she focuses on formulating policies and overseeing the regulatory framework to ensure structural safety in the built environment sector.</p>	

### 13. Optimizing Façade Design with BIM HVACTool: Leveraging IFC for ETTV Calculations and Performance-Based SC2 Methods

#### Synopsis

Singapore's **BCA Green Mark** standards emphasize energy-efficient and sustainable building design, with the Envelope Thermal Transfer Value (ETTV) serving as a key compliance metric. This presentation by Dr. Alex Lee, Managing Director and Co-Founder of BIM HVACTool, will explore how cutting-edge simulation technology, combined with **Industry Foundation Classes (IFC)**, can streamline ETTV computation and enhance performance-based façade design.

In this 45-minute session, attendees will learn:

- **ETTV Calculation Using IFC Models:** How BIM HVACTool extracts façade data from IFC files, ensuring seamless integration with BIM workflows and delivering precise ETTV evaluations.
- **Performance-Based SC2 Method:** Utilizing simulation to assess solar control measures and optimize façade design beyond prescriptive standards.
- **Practical Applications:** Real-world case studies demonstrating how architects can leverage IFC-based ETTV calculations and SC2 simulations to achieve energy-efficient and compliant designs.

By emphasizing the use of IFC for ETTV calculations, this session highlights the advantages of interoperability and efficiency in design workflows. Participants will leave with actionable insights on integrating simulation tools into their practice to meet Green Mark standards and create innovative, sustainable designs.

#### Speaker: Dr. Alex Lee

Dr. Alex Lee is the Managing Director and Co-Founder of BIM HVACTool, a leading software platform designed to empower architects, engineers, and sustainability consultants with advanced building performance analysis capabilities. With over 25 years of experience in the field, Dr. Lee is a pioneer in integrating simulation technologies into design workflows to achieve energy efficiency and environmental sustainability.

Dr. Lee has been instrumental in developing solutions tailored for **BCA Green Mark** compliance, including innovations in ETTV computation and performance-based simulation methods. His expertise spans computational fluid dynamics (CFD), digital twin technologies, and urban climatic mapping. Under his leadership, BIM HVACTool has been widely adopted by institutions such as the National University of Singapore and global industry leaders like Surbana Jurong and Atelier Ten. Dr. Lee's contributions have significantly advanced the application of simulation tools for sustainable building design, making him a sought-after speaker and thought leader in the architectural and engineering communities



### 14. Case Study on Usage of ChatGPT in Technical Design

#### Synopsis

Artificial Intelligence (AI) has quickly become a buzzword, celebrated across industries as a revolutionary solution to numerous challenges. Breakthroughs like ChatGPT and advanced image recognition have popularized AI, making it accessible to the general public and driving immense interest and investment.

Some believe that AI advancements may replace professionals like engineers, as AI systems become capable of performing complex calculations, design tasks, and data analysis. They argue that as AI continues to improve in accuracy and efficiency, it could handle many routine engineering tasks autonomously, reducing the need for human engineers.

Join Ir. Shah as he explores today's understanding of Artificial Intelligence and shares an experiment using ChatGPT for engineering design and calculations. This head-to-head comparison will feature a Practicing Professional Engineer, a final year AI Engineering student, a Mechatronics Engineering graduate, and a non-engineer Gen-Z tackling engineering challenges with ChatGPT to assess whether AI could realistically replace professionals in the future.

**Speaker: Ir. Shah Izzni Talif b Mohd Adnan**

Council Member, ACEM

Ir. Shah Izzni Talif graduated with a Bachelor's Degree in Civil Engineering with Honours from The University of Queensland, Australia in 2007. He began his professional career working as an Engineering Consultant in Australia, developing experience in the planning and execution of soil investigation works for tunnel and mining works, slope stability, rock and soil stabilization, piling, geological mapping, liquefaction, land reclamation works as well as the design of compacted earth filled dam embankments.

In 2012, he returned to Malaysia where he continued his professional Consultancy career in detailed design and studies project such as large-scale agricultural irrigation and drainage projects, flood mitigation, water distribution replacement and upgrade works, water resources development, integrated river basin management studies, as well as design impact and effectiveness studies. He had also provided specialist services such as contract claims assessment, geotechnical forensic works, design reviews and alternative remediation designs.

He is currently serving as the Chief Executive Officer at RPM Engineers Sdn Bhd, and is growing his passion in the development of sustainable and carbon conscious paddy cultivation techniques linking together new technologies with traditional wisdoms.

Ir. Shah is a trained humanitarian response technical specialist through RedR Malaysia and RedR Australia, a certified BEM PAE examiner, an active member of ACEM as well as FIDIC, and keenly promotes the engineering profession through talks, lectures and sharing session at national and international professional platforms.



**15. Discover iNPQS M&E Specification Access with AECport**

**Synopsis**

AECport is an online digital platform for accessing standardized Mechanical & Electrical (M&E) specifications based on the iNPQS (Intelligent National Productivity and Quality Specifications) standards. Whether you're an architect, engineer, consultant, or contractor, our platform allows you to conveniently view iNPQS M&E specifications online—anytime, anywhere. Save time, ensure consistency, and streamline your project documentation with this essential resource for the built environment.

**Speaker: Mr. Webb Poh**

Founder, BIMLife Pte Ltd

Co-Founder, AECC Basestation Pte Ltd

Webb Poh is a seasoned architectural and BIM professional with over 10 years of experience in Singapore's built environment. As BIM/VDC/IDD Director, he has led multidisciplinary teams across commercial, residential, healthcare, and institutional projects, delivering innovative and practical BIM solutions tailored to client needs.

At AECport, Webb brings this deep industry insight to drive the digital transformation of the AEC sector. By integrating tools like the iNPQS M&E specification viewer, this empowers professionals with accessible, standardized, and intelligent project resources—setting a new benchmark for smart construction and collaborative design.



## 16. Simplify Data Centre with Prefabricated Modules

### Synopsis

Prefabricated data center modules are pre-engineered, pre-assembled / integrated, and pre-tested data center physical infrastructure systems (i.e., power and cooling) that are delivered as standardized “plug-in” modules to a data center site. This contrasts with the traditional approach of provisioning physical infrastructure for a data center with unique one-time engineering, and all assembly, installation, and integration occurring at the construction site. The benefits of prefabricated modules include cost savings, time savings, simplified planning, improved reliability, improved agility, higher efficiency, and a higher level of vendor accountability. More information about this can be found in [Schneider Electric white paper #163 “Containerized Power and Cooling Modules for Data Centers”](#), which can be downloaded freely from the company’s website.

**Speaker: Mr. Prathap Suresh**  
**Solution Sales, Prefabricated Modular Data Centers**  
**Schneider Electric**

Seasoned professional with 14+ years of experience in the data center industry, leveraging expertise in consultative selling, stakeholder management, solution design, cost optimization, and risk mitigation. A Mechanical Graduate with an MBA from IIM, bringing a unique blend of technical expertise and business acumen to support clients throughout the entire solution lifecycle.

