

# The Institution of Engineers, Malaysia

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# Half-Day Seminar on "Engineering Excellence in High-Strength Cold-Formed Steel"

(Co-organised with NS BlueScope Malaysia Sdn. Bhd.)

Date : Saturday, 20 September 2025

Time : 9:00 a.m. – 1:00 p.m.

Venue : IEM (Southern Branch) Training Centre, Johor Bahru

Speaker : (1) Mr. Ng Cheah Haur – Technical Solution Manager, NS BlueScope Malaysia Sdn. Bhd.

(2) Assoc. Prof. Dr. Tan Cher Siang – Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM)

#### **Synopsis**

As modern structures demand greater strength, efficiency, and sustainability, high-strength cold-formed steel and coated steel play a crucial role in optimising design, durability, and performance. This seminar offers an in-depth exploration of constructional steelworks, focusing on the material properties and structural design of cold-formed steel, as well as the impact of coated steel on long-term performance. Attendees will gain technical insights into the distinctions between hot-rolled and cold-formed steel, key factors influencing structural analysis and design, and engineering principles for member and connection detailing in compliance with Malaysian Standards (MS EN 1993 – Eurocodes). The seminar will also cover the role of coated steel in enhancing corrosion resistance, material longevity, and adaptability to various environmental conditions.

Designed for structural engineers, manufacturers, installers, and academicians, this seminar provides essential knowledge to enhance design efficiency, structural integrity, and long-term resilience in modern construction.

Time	Tentative Programme
8:30 a.m. – 9:00 a.m.	Registration
9:00 a.m. – 9:05 a.m.	Welcome Speech by IEM (SB) Organizing Committee and Lysaght
9:05 a.m. – 10.30 a.m.	Performance and Durability of Coated Steel by Mr. Ng Cheah Haur  Impact of coated steel quality on structural performance and service life.  Durability of coated steel solutions in different environments.  Performance validation through case studies and real-world applications.
10:30 a.m. – 10:45 a.m.	Coffee Break
10:45 a.m. – 12:30 p.m.	Cold-Formed Steel Structures to MS EN1993 by Assoc. Prof. Dr. Tan Cher Siang  The role of cold-formed steel in modern construction.  Structural design principles and compliance with Malaysian Standards (MS EN1993)  Key considerations and design calculations.
	Case studies on design, local compatibility, challenges, and recommendations.
12:30 p.m. – 1:00 p.m.	<ul> <li>Case studies on design, local compatibility, challenges, and recommendations.</li> <li>Question &amp; Answer Session</li> </ul>

#### **About the Speakers:**



Mr. Ng Cheah Haur graduated from the University of Malaya in 2005 with a Degree in Civil Engineering and obtained a Master of Science in Management of Technology from the National University of Singapore in 2010. He has 20 years of solid experience in the building and construction industry, covering civil and structural engineering design, project management, product development, and testing. Notable projects he has been involved in include the Putrajaya Mosque, a car showroom at Loke Yew, the Sunway Pyramid Extension, Bartley to Airport Road Flyover Bridges, a food factory at Admiralty Road, SIM Campus, and a car showroom at Leng Kee Road. In his current role with NS BlueScope Malaysia, he is responsible for providing technical support to users, product development, and hosting CPD-accredited seminars and webinars with professional bodies

such as Pertubuhan Akitek Malaysia (PAM), the Royal Institution of Surveyors Malaysia (RISM), The Institution of Engineers, Malaysia (IEM), and government bodies such as Jabatan Kerja Raya (JKR) on coated steel, roofing solutions, and steel applications.

**Dr. Tan Cher Siang** is an accomplished Associate Professor in the Faculty of Civil Engineering at Universiti Teknologi Malaysia (UTM). His expertise spans structural steel works, with a strong focus on cold-formed steel applications. He holds a Bachelor of Civil Engineering, a Master of Engineering (Structures), and a PhD in Civil Engineering from UTM. Before joining UTM, Dr. Tan gained valuable experience as an academic staff member at Universiti Tunku Abdul Rahman (UTAR) and as a post-doctoral scientist at the Swiss Federal Institute of Technology Lausanne (EPFL) in Switzerland. He has over 15 years of teaching experience, reflected in his 90 publications and his supervision of numerous undergraduate, master's, and PhD students. His research contributions have significantly advanced the understanding of steelwork design and applications. He actively serves



as a technical committee and working group member in the Department of Standards Malaysia, focusing on cold-formed steel and steel production for construction. Dr. Tan has also conducted numerous training sessions for the Department of Public Works (JKR) on Eurocode 3 design principles for structural steel works.bHe is a certified HRDF trainer (TTT certificate no: 17289) and a dedicated member of the Malaysia Cold-Formed Steel Institution (MyCSI) and the IEM-CSETD, actively contributing to the advancement of the field.

#### **Participant Fees:**

Grade	Fee
IEM Members	RM 80.00
IEM Members (age > 60 years old)	RM 60.00
Non-IEM Member	RM 150.00

**Closing Date: 17 September 2025** 

Registration will be on a first-come-first-serve basis. Kindly return the reply slip to the IEM (SB) office before 17 September 2025 together with a non-refundable cheque for the participant fees made payable to The Institution of Engineers, Malaysia (Southern Branch). Alternatively, you could bank-in the participant fees into the Institution's Maybank Current Account (No. 5-013920-15708), and to facsimile both the Bank-in and Reply Slips to the Institution. The Institution requests all members co-operation in ensuring fees are paid in advance for the seminar. Please also be reminded that fees will not be refunded to absent participants who have paid, and to also note that all reservations must be paid despite participant cancellations. Thank you for your continuous support of the Institution.

Chairman, Sub-Committee on Seminar and Technical Talk, IEM (SB)



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To: Hon. Secretary, The Institution of Engineers, Malaysia (Southern Branch) Fax: 07 – 3363406

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Saturday, 20 September 2025, 9:00 a.m. – 1:00 p.m. at IEM (Southern Branch) Training Centre, Johor Bahru.

I wish to attend the above talk. I encl RMas payment for the particip	osed herewith a cheque no for the amount of ant fee.	of
Name of Member:	I/C No:I/C No:	
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: Attendance by representative will not be issued with the Certificate of Attendance.

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