



# HALF DAY SEMINAR ON “APPLICATIONS AND BENEFITS ON USING HIGH STRENGTH STRUCTURAL STEEL”

SPEAKERS ;

**Mr. JEAN CLAUDE GERADY**

**Mr. WILLIAM (BILLY) HOWELL**

Date : 13<sup>TH</sup> NOVEMBER 2019 (Wednesday)  
Venue : Level 2, Pullman Kuala Lumpur Bangsar  
Time : 9.00 a.m. – 2.00 p.m.

BEM Approved CPD/PDP Hours: 4.0  
(IEM19/HQ/479/S)

**LIMITED TO 70 SEATS ONLY**

**'FIRST-COME-FIRST-REGISTRATION BASIS'**

**CLOSING DATE:**

**06<sup>TH</sup> NOVEMBER 2019**

*OR if the Seminar Reach its  
Target Registered Participants*

**NO ONLINE/OFFLINE Registration  
will be allowed after the Closing Date**

**Organized & Hosted by:**

**Civil and Structural Engineering Technical Division (CSETD), IEM**

**In Collaboration with :**

**ARCELORMITTAL International, Singapore**

**Cancellation Policy**

No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with 7 days prior notification and substitute will be charged according to membership status.

**Personal Data Protection Act**

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

**“IEM reserves the right to alter or cancel the programme due to unforeseen circumstances at its discretion”.  
For intending participants who choose to ‘walk in without prior registration’,  
IEM SHALL NOT be responsible for any direct or consequential losses”.**

## SPEAKERS



**Mr Jean-Claude (JC) Gerardy** is a current CTBUH Advisory Group member and was involved in originating two major CTBUH research projects: “A Whole Life Cycle Assessment of the Sustainable Aspects of Structural Systems in Tall Buildings” and “Study on the Constructability and the Engineering Properties of Composite Megacolumns.” A structural engineer from the University of Liege in Belgium, he started his career in ArcelorMittal research department (formerly ARBED research).

During that time, he was involved in the development of Eurocodes on steel and composite structures. He was also representing ArcelorMittal within ASTM (American Society for Testing and Materials), AWS (American Welding Society), AISC (American Institute of Steel Construction) and the SSPC (Steel Shapes Producer Council). He has provided technical expertise and advice on the steel design and construction of various tall buildings in the world, such as New York Freedom Tower, Shanghai Financial Centre, Burj Khalifa and etc.

\*CTBUH- The Council on Tall Buildings and Urban Habitat is the world’s leading resource for professionals focused on the inception, design, construction, and operation of tall buildings and future cities.



**Mr. William (Billy) Howell**, PE, LEED AP, is the country manager for Turner International in Thailand with a combined background in structural engineering and construction management. He is a former Technical Director for Meinhardt Singapore and prior to that, he was an associate at Leslie E. Robertson Associates in New York.

He has designed and constructed projects across the world. William completed the 68-story Bitexco Financial Tower in Saigon, was responsible for the concept design of the Statue of Unity in India (the world’s tallest statue at 182m). In Bangkok, he was the project director for the Nimit Langsuan project and is currently working on the Dusit Thani redevelopment.

## SYNOPSIS

This half-day seminar aims to enrich audience through sharing of information and knowledge on high strength structural steel, their applications and benefits for all stakeholders in the construction industry. Developers, architects and engineers are facing bigger and more complex challenges when resources are limited.

The “in line” Quenching and Self-Tempering (QST) process at the ArcelorMittal heavy sections rolling mill of Differdange in Luxembourg is in industrial operation more than 25 years ago. With QST, it is made possible to combine high minimum yield strength up to 460 MPa, excellent weldability and outstanding toughness at low temperature into HISTAR® grade structural steel. With HISTAR® steel, ArcelorMittal satisfies the needs of the designers for light and economical structures which fulfill both safety and sustainability. HISTAR® steel is excellent for designing gravity columns of high-rise buildings, long span trusses. In addition, HISTAR® steel is recommended in case of stress governed as well as seismic design. Other than HISTAR® steel, WTM product and structural steel up to 500 MPa minimum yield will be shared by speaker at the seminar. All these structural steel innovations are developed to address to the most challenging projects in the world.

As climate condition is becoming more challenging and adverse, most of the design codes have to incorporate stronger wind loads. On top of that, steel structures design has to cater for seismic loadings as well. This seminar will highlight the logistical and structural design challenges of super tall buildings in SEA and Thailand. Projects that involve long span steel structural members, such as king post and trusses, are difficult to be delivered to site and lifted for installation. With the applications of high strength structural steel, the span and weight of structural steel members can be reduced; thus, providing easier and faster fabrication, transportation and installation, ensuring projects completion on time.

This seminar will also showcase the comparison between reinforced concrete structures and composite structures. Composite structures with high strength structural steel members can be designed in smaller sizes while achieving equivalent or better performance than reinforced concrete structures in much bigger sizes. With more compact composite structure sizes, developers, architects, engineers, and end users can make better use of the extra space made available to them. In addition, the overall weight transferred to the foundations to the foundations are reduced as well; thus, reducing size or depth of foundations required during the design stage.

Last, but not the least important, this seminar will share good practices on connection design, fabrication and erection with references to a portfolio of projects which are both challenging and interesting to expand your engineering and construction knowledge horizon.

## PROGRAMME OUTLINED

TIME	PROGRAMME
08:30 – 09:00	<i>Registration and Welcome Coffee / Tea</i>
09:00 – 09:10	<i>Welcome Address &amp; Introduction of Speakers</i>
09:10 – 10:45	<p><b>SESSION 1 : Mr. JEAN CLAUDE GERADY (ArcelorMittal)</b></p> <ul style="list-style-type: none"> <li>✦ An Overview of S460 Structural Steel</li> <li>✦ Evolution of structural steel yield strength</li> <li>✦ Code and standard for HISTAR, ETA, BC1</li> <li>✦ Features of HISTAR 460 and benefits of using it</li> <li>✦ Applications of HISTAR 460, 500MPa, WTM product</li> <li>✦ Project references and case studies</li> <li>✦ Design for welded and bolted connections according to EN standard comparison of welded and bolted connections</li> <li>✦ Comparison between RC and Composite Structure</li> </ul>
10:45 – 11:00	<i>Morning Tea Break</i>
11:00 – 12:30	<p><b>SESSION 2 : Mr. William (Billy) Howell (Turner Consulting, USA &amp; Thailand)</b></p> <ul style="list-style-type: none"> <li>✦ An overview of logistical and structural design challenges of tall and super tall buildings</li> <li>✦ Applications of high strength structural steel on increasing spans and reducing structural member weight</li> <li>✦ Benefits of using and procuring high strength structural steel for faster and construction allowing for earlier ROI</li> <li>✦ Comparison among RC structures, composite structures and steel structures in terms of foundations savings to holistic building and construction cost</li> </ul>
12:30 – 13:00	<i>Feedback / Q &amp; A Session End of Seminar</i>
13:00 – 14.00	<i>Lunch</i>

\* IEM reserves the right to postpone, reschedule, allocate or cancel the course.

## REGISTRATION FORMS

### HALF DAY SEMINAR ON "APPLICATIONS AND BENEFITS ON USING HIGH STRENGTH STRUCTURAL STEEL" 13<sup>TH</sup> NOVEMBER 2019

Fax: 03-7957 7678

Email: [shahrul@iem.org.my](mailto:shahrul@iem.org.my)

REGISTRATION FEE : 6% GST EFFECTIVE 01<sup>ST</sup> MARCH 2019

	ONLINE	NORMAL FEE (RM)
IEM Student Member	50.00	70.00
IEM Graduate Member	80.00	100.00
IEM Corporate Member	100.00	120.00
Non-IEM Member	150.00	180.00

No	Name(s)	Membership No.	Grade	Fee (RM)*
SUB TOTAL				
+ 6% SST				
TOTAL PAYABLE				

#### PAYMENT DETAILS :

Cash RM \_\_\_\_\_

Cheque no. \_\_\_\_\_ for the amount of RM \_\_\_\_\_ (non refundable) and made payable to  
**"THE INSTITUTION OF ENGINEERS, MALAYSIA" and crossed 'A/C Payee Only'.** Bank Account No. : 640320010020215,  
Bank Name: Alliance Bank Malaysia Berhad. (SHOULD PAYMENT IS MADE, KINDLY EMAIL THE 'BANK-IN-SLIP' TO IEM FOR VERIFICATION BEFORE THE EVENT FOR EASY REGISTRATION)

**FULL PAYMENT must be settled before commencement of the seminar**, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable. The Registration Fee includes lecture notes, refreshment and lunch.

For **ONLINE REGISTRATIONS**, please note that payment **MUST** be made **BEFORE** the closing date. If payment is not received within the stipulated time, the registration fee will be reverted to the normal registration fee.

Contact Person : \_\_\_\_\_ Designation : \_\_\_\_\_

Name of Organization : \_\_\_\_\_

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Telephone No. : \_\_\_\_\_ (O) Fax No : \_\_\_\_\_ (O)

Handphone : \_\_\_\_\_ (HP) Email: \_\_\_\_\_

Signature & Stamp \_\_\_\_\_

Date \_\_\_\_\_

#### TERMS & CONDITIONS:

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via RHB and Maybank2u – Personal Saving & Personal Current ; Credit Card - Visa/Master.
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK -IN will be considered as NORMAL REGISTRATION
- The Organising Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

#### For further details, kindly contact:

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