

**Mechanical Engineering Technical Division**

The Institution of Engineers, Malaysia

Bangunan Ingenieur, Lot 60/62, Jalan 52/4

P.O. Box 223 (Jalan Sultan), 46720 Petaling Jaya, Selangor

Tel: 03-7968 4003

Fax: 03-7957 7678

Email: [ezzaty@iem.org.my](mailto:ezzaty@iem.org.my) Website: [www.myiem.org.my](http://www.myiem.org.my)**REGISTRATION FOR TWO-DAY COURSE ON STRATEGIES IN SUSTAINING  
BOILER RELIABILITY – DESIGN, ERECTION & MAINTENANCE**

Name(s)	IEM M'ship No. /Grade	Fees (RM)
SUB TOTAL		
ADD GST @ 6%		
<b>TOTAL PAYABLE</b>		

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Mobile: \_\_\_\_\_ Tel(O): \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

(Please write clearly as the "Confirmation Notification" will be sent via email)

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**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'.
**Terms & Conditions:**

- For ONLINE REGISTRATIONS, only ONLINE PAYMENT is applicable [via Credit Card]
- Payment via CASH / CHEQUE / BANK-IN TRANSMISSION / BANK DRAFT / MONEY ORDER / POSTAL ORDER / LO / WALK-IN will be considered as NORMAL REGISTRATION
- For online registrations, please note that **payment MUST be made on registration.**
- FULL PAYMENT** must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail 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. Registration fee includes lecture notes, refreshment and lunches.
- 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.



Organised by:  
 Mechanical Engineering Technical Division,  
 The Institution of Engineers, Malaysia

## Two-Day Course on "STRATEGIES in sustaining BOILER RELIABILITY – design, erection & maintenance"

**Speaker****Ir. Luk Chau Beng, Ir. Chia Chee Weng & Ir. Chong Thiam Heng****Date**

**26 & 27 October 2017 (Thursday & Friday)**  
**9.00am – 5.30pm**

**Venue**

**C&S Lecture Room, 2<sup>nd</sup> Floor,**  
**Wisma IEM, Petaling Jaya, Selangor Darul Ehsan**

**REGISTRATION FEES (SUBJECT TO 6% GST)**

Grade	Online Fee	Normal Fee
IEM Student Member	RM 250.00	RM 280.00
IEM Graduate Member	RM 500.00	RM 600.00
Corporate Member	RM 800.00	RM 900.00
Non IEM Member	RM 1600.00	RM 1800.00

**Closing Date: 20<sup>th</sup> October 2017**

**BEM Approved CPD/PDP Hours: 14**  
**Ref. No: IEM17/HQ/395/C**

**GST is implemented**  
**effective 1 April 2015**

**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.

## SYNOPSIS

Steam is considered as one of the most critical source in today's industries. It is widely used in various industries ranging from the power plants, paper & wood products, food & beverage processing plants, cooling & heating of large buildings and powering ships. A boiler (aka steam generator) is mechanical equipment that generates hot water, saturated steam or superheated steam at the desired steaming rate, pressure and temperature. The boiler system is a complex integration of boiler tubes, furnace, superheater, reheater, evaporator, economizer and air preheater along with various auxiliaries such as fuel handling system, burners, pumps, fans, stokers, air pollution control equipments, ash-handling equipments & stack etc. Boilers are designed to various sizes to meet the demand ranging from small package boiler producing just under five tons of steam per hour used in industrial boilers to several hundred tons of steam per hour in the utility boilers. A good design, engineering, erection, installation, inspection and maintenance are essential to ensure the boiler produces steam safely. A reliable boiler is also important to avoid breakdown. Generally the performance of a boiler deteriorate over time due to various reasons such as deterioration in combustion, heat transfer, lower quality fuel, and water, operation and maintenance. With increasing cost of fuel, operators and maintenance personnel have to put in greater effort in maintaining high efficiency, safety and reliability of the steam system. Any observed abnormal deviation should be investigated to pin point the problem area for necessary corrective action. To the operator of any boiler systems, the issue of reliable, safe, and efficient operation remains the utmost important factor to be considered.

## COURSE OBJECTIVE

The main objective of this course is to provide strategies to ensure the reliability of the boiler from the initial stage i.e. design, engineering, erection & installation up to inspection and maintenance stages. These strategies are the lesson learned from the perspectives of boiler design, project management and inspection actual boiler experiences. This course will introduce the basic guidelines to specify the key technical specifications of the boiler and avoiding the common boiler design failures during the initial equipment purchase stage. Subsequently, the key requirements to supervise the boiler erection & installation particularly on the execution of the inspection & testing plan (ITP) shall be covered in this course. In addition, this course will also expose the participants on the topics such as boiler inspection codes, risk mitigation plan and damage mechanism for the boiler system. At the end of this course, the participants are able to appreciate some of the major causes of unreliability, and apply in their daily works to improve the reliability of the boiler and reducing downtime.

## CANCELLATION POLICY

IEM reserves the right to postpone, reschedule, allocate or cancel the course. Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event. No cancellation will be accepted prior to the date of the event. However, replacement or substitute may be made at any time with prior notification and substitute will be charged according to membership status.

## BIODATA OF SPEAKER

**Ir. Luk Chau Beng** is Professional Engineer and holds a Masters Degree in Engineering Management, a Bachelor degree in Mechanical Engineering, a First Grade Steam Certificate and a First Grade Internal Combustion Engineers Competent Certificate issued by Department of Safety & Occupational Health, Malaysia. He had previously completed many turnaround in large power industries successfully and possess vast experience in boilers and pressure vessels. Apart from it, Ir. Luk was the past Chairman of the Mechanical Engineering Technical Division and past Council Member of IEM. Currently he is also the Chairman for Boiler & Pressure Vessel Standards Committee in Malaysia.

**Ir. Chia Chee Weng** is a Mechanical Engineer graduated from University of Malaya (UM) in 2004, He is a certified Professional Engineer under BEM and also a corporate member with the IEM. He had more than 10 years working with renewable energy sector. His experiences cover engineering, design consultancy, installation, testing, commissioning, maintenance and project management services for waste (biomass and incinerator) and coal power plants. Currently, Ir. Chia owns a project management and engineering consultancy firm provides the complete range consultancy services from feasibility studies to testing and commissioning for biomass boiler and power plant development projects.

**Ir. Chong Thiam Heng** is a Mechanical Engineer graduated from The University of Leeds with BEng (Hons). He is a certified Professional Engineer under BEM and also a corporate member with the IEM. Ir. Chong spent more than 12 years in boiler design, fabrication, commission up to rehabilitation evaluation and proposal of boilers. Currently he is the Engineering Manager in one of the local boiler manufacturer involved in designing, manufacturing and commissioning industrial boilers.

## TENTATIVE PROGRAMME

TIME	DAY 1	DAY 2
08:30 – 09:00	<b>Registration</b>	
09:00– 10:30	Design & Engineering Aspects	Failure Mechanism & Analysis
10:30 – 11:15	<b>Tea Break</b>	
11:15 – 13:00	Design & Engineering Aspects	Inspection as per Code
13:00 – 14:00	<b>Lunch</b>	
14:00 – 15:30	Erection & Installation Aspects	Inspection as per Code
15:30 – 15:45	<b>Tea Break</b>	
15:45 – 17:00	Erection & Installation Aspects	Maintenance
17:00 – 1730	Questions & Discussions	Questions & Discussions
1730	<b>End of Day 1</b>	<b>End of Course</b>