



THE INSTITUTION OF ENGINEERS, MALAYSIA

Bangunan Ingenieur, Lots 60/62, Jalan 52/4, Peti Surat 223, 46720 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-79684001/2 Fax: 03-79577678 E-mail: sec@iem.org.my IEM Homepage: <http://www.myiem.org.my>

Talk On

"AN OVERVIEW OF HEAT EXCHANGERS: THE INDUSTRY EXPERIENCE"

(Organised by Oil, Gas and Mining Technical Division IEM)

BEM Approved CPD/PDP Hours: 2 Ref No: IEM11/HQ/340/T

Date : 12 November 2011 (Saturday)

Time : 9.00am – 11.00am (Refreshment will be served at 8.30am)

Venue : C & S Lecture Room, 2nd Floor Wisma IEM, Petaling Jaya

Speaker: Ir. Alzakri Ekhwan

SYNOPSIS

The subject of Thermodynamics taught in college always refers to Heat Exchanger as the equipment to exchange heat. However, not many engineers post-graduation have the opportunity to work directly with Heat Exchangers. These Heat Exchangers are widely used in the industries, especially in the Oil & Gas facilities. There are various types of heat exchangers which are selected based on specific intended process requirement.

The talk will provide an overview on the types of heat exchangers commonly used in the Oil & Gas industry based on the Codes & Standards used during the design such as the Shell & Tube Heat Exchangers, Air-Cooled Heat Exchangers, Double Pipe Heat Exchangers and the Plate Heat Exchangers. This will be followed by an example of the fabrication processes, the common welding processes such as GTAW, SMAW, SAW and the main forming processes such as plate rolling and tube bending.

Common failures in Heat Exchangers such as tube leaks and tube fouling; and typical maintenance work such as High Pressure Water Jet Cleaning (HPWJ), tube plugging and tube rolling will also be shared based on the Speaker's hands-on experience. The will also covers the type of Non Destructive Tests (NDTs) and Inspection carried out during fabrication and maintenance repair of these Heat Exchangers.

BIODATA OF SPEAKER

Ir. Alzakri Ekhwan is a Principal Engineer for Static-Unfired Equipment at PETRONAS Penapisan (Melaka) Sdn. Bhd. (PP(M)SB), an oil refinery that handles 270,000 bbl per day of crude oil. He graduated from University of Bath, UK in Mechanical Engineering in 1993 and has more than 18 years of experience in the design, fabrication, maintenance, inspection and construction of Static Equipment in the Oil and Gas industry.

Prior to his current position in PP(M)SB in Melaka, he was the Head of Mechanical Section at PETRONAS Methanol (Labuan) Sdn. Bhd. (PM(L)SB) in Labuan, FT. Ir. Alzakri is an Academic Advisor Panel for Mechanical Engineering Masters Programme for Universiti Teknikal Malaysia Melaka (UTeM), an Adjunct Lecturer with University Teknologi Petronas (UTP) and serves as an External Examiner for UTP students' Final Year Project. He is also a certified First Grade Steam Engineer registered with DOSH, Malaysia.

Ir. AL-KHAIRI MOHD DAUD

Chairman

Oil, Gas and Mining Technical Division

ANNOUNCEMENTS TO NOTE:

1. Talk is **STRICTLY** for IEM members only (pre-registration is **NOT** required)
2. Telephone and/or fax reservation will **NOT** be entertained
3. Limited seats available on a "first come first served" basis (maximum 110 participants).
4. IEM members are required to produce their membership cards for confirmation of attendance (CPD purpose).
5. Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.

IEM members who fail to produce their membership cards will be charged a fee of RM20.00.

FUNDS FOR IEM BUILDING FUND (WISMA IEM)

- Kindly be informed that IEM will be charging participants RM10.00 administrative fee for talks organized by IEM.
- The fee would be used for overhead costs, building maintenance expenses as well as to support the purchase of the new building.
- All contributions will be deeply appreciated by IEM
- Students are however exempted.

Your understanding is greatly appreciated.

CPD HOURS CONFIRMATION

Name:

Membership No:

Signature:

Date: 12 November 2011