#### Chairman

Special Committee on IEM Structured Training c/o The Institution of Engineers, Malaysia P O Box 223 (Jalan Sultan), 46720 Petaling Jaya

This Structured Training programme meets the six (6) months design experience for the Professional Interview (PI)

Fax No.: 03 – 7957 7678

## REGISTRATION FORM – "PROCESS AND ENGINEERING DESIGN OF A CRUDE OIL REFINERY AND TANK FARM - PREMISED ON PROCESS SAFETY & ENVIRONMENTAL SUSTAINABILITY"

No	Name (s)	M'ship No	Grade	Fees (RM)	
			Total Payable		
Enclosed herewith a cheque No. : issued in favour of "The Institution of Engineers, Mala"			for the sum of RM ysia" and crossed 'A/C Payee Only'. I/We		
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### **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.



BEM APPROVED PDP Hours: IEM16/PDP/030/C PDP:144

# PROCESS AND ENGINEERING DESIGN OF A CRUDE OIL REFINERY AND TANK FARM - PREMISED ON PROCESS SAFETY & ENVIRONMENTAL SUSTAINABILITY

(Benchmarked Project No.01 of the Chemical Engineering Design series - organized by the Special Committee on IEM Structured Training)

**DATE**: 24 Saturdays from 5 May 2018 onwards **VENUE**: Bangunan Ingenieur, Petaling Jaya, Selangor

**TIME**: 9.00 am-5.00pm

#### **FACILITATORS/TRAINERS:**

Ir. Wong Kuek Keong FIEM, PEng, Ir. Razmahwata Razali, FIEM, PEng Ir. Rusman bin Abu Samah, PEng, Ir. Mohd Nor Ab Basar, FIEM, PEng and Ir. Juares R Abd Hamid, FIEM, PEng

#### **PROGRAM SYNOPSIS**

The program aims to realize the experiential learning of industry-typical knowledge, skills, and practices in process and engineering design – herein of an integrated facility consisting of a simple Crude Oil Refinery and a Tank Farm. A participant Trainee will be involved in a collaborative exercise with respective Facilitators/Trainers to be mentored/coached to complete the Design Work for the above captioned benchmarked project, defined as one that has actually been proven, previously and in principle, as good for completing a detailed engineering.

Design Work will envisage execution of a set of inter-related task activities of a typical but simulated engineering design office exercises to complete the Project, all within 48 modulated Half-Day Sessions – and whilst having attended at least 80%, including the last two of them. Upon assessed completion, participant Trainees will have had been exposed to and acquired the basic, and including key, competencies needful toward delivering due industry-typical Design document and reports developed based on prepared data sheets, calculations, diagrams, drawings, specifications, preliminary cost estimates, economic analysis, and project life cycle analysis – all to be achieved within the specified timelines and quality. [A PDF image of the program session details, and the standard FAQs can be viewed on the IEM website]

The program has been endorsed by IEM as meeting, in principle, an equivalent six(6) month experiential exposure in Design – the minimum Design exposure required to qualify as a graduate Chemical Engineer candidate for the IEM's Professional Interview(PI).

#### **REGISTRATION & FEE: (Limited to 25 Participants only)**

- Normal Rate for IEM Corporate Member / IEM Graduate Member is RM 9,600.00 (inclusive of GST), payable in a maximum of two (2) instalments, as follows:
  - i) 80% for the first instalment (due 2 weeks before program commencement)
  - ii) 20% for the second instalment (due on the 1st week of the 3rd month).
- 2. **Online Rate** (at no provision of instalment payments, and payable 2 weeks before program commencement) is as follows:
  - i) RM 8160 (inclusive of GST) for IEM Graduate Member
  - ii) RM 8640 (inclusive of GST) for IEM Corporate Member

Applicable to both the **Normal Rate** and **Online Rate** payment modes, a group of 3 or more registrants from the same organization will be entitled to a 20% discount for each Graduate Member and a 15% for each Corporate Member.

- 3. **Program Fee** for IEM Non-Member (at no provision of instalment payments, and payable 2 weeks before program commencement) as follows:
  - i) Normal Rate Fee of RM10,560.00 (inclusive of GST),
  - ii) Online Rate Fee of RM10,032.00 (inclusive of GST)

Applicable to both the **Normal Rate Fee** and **Online Rate Fee** payment modes, a group of 3 participants or more from the same organization will be entitled to a 10% discount for each registrant

CLOSING DATE FOR REGISTRATION: 30 APRIL 2018.

#### **BIODATA OF FACILITATORS/TRAINERS:**



**Ir. K.K. Wong,** a registered Professional Engineer (PE) with Practicing Certificate, is a Fellow Member of the IEM. He has more than 20 years of hands-on working experience with Technip in the offshore oil and gas production, and in gas treatment & processing and liquefaction. The experience has covered all phases of process and engineering design including Conceptual, Basic, and Front-End Detailed Engineering designs - from project development through start-up and performance runs.

Ir. Wong has held several positions in engineering services including in process engineering, precommissioning, commissioning and start-up, and process management for several international projects including the Pluto LNG, Qatar LNG, Hanas LNG, etc. In 2009, Ir. Wong was appointed as the Deputy Process Manager within TECHNIP Malaysia. After years of contributions in Process engineering department, he has extended his portfolio into Onshore Sale & Technology in 2011.

From 2013 onwards, he is Asia Pacific (APAC) Business Development Manager at Technip, is responsible for business development within APAC region and Gas & LNG Business segment development, technology improvement and Research & Development within APAC

He is a graduate in Chemical and Process Engineering (National University of Malaysia, 1996)



**Ir. Razmahwata Mohd Razalli (Wata)**, a registered Professional Engineer with Practicing Certificate, is a Fellow Member of the IEM. He has 20 years of experience in the oil and gas industry, in both design and operations. He has upstream and downstream experience in process safety, measurement and allocation, process engineering, offshore technical support, and is also a training provider. He has conducted all Formal Safety Assessment (FSA) and HSE Case workshops, for example HAZID, HAZOP, Hazards & Effects Register (HER), BowTie, safety critical element (SCE) / performance standard (PS) reviews.

Wata joined ExxonMobil Exploration and Production Malaysia Inc shortly after graduation in 1995 as a process engineer in the design department. In 1998, he was reassigned to EMEPMI's operations department. His responsibility was to provide technical support to an offshore production facility, eventually accepting responsibility as lead facilities engineer. His tasks were varied, included troubleshooting day to day challenges, managing retrofit projects, and leading safety cases. He was made the Company's custody metering engineer in 2001, charged with leading the exercise to ensure the Company compliance with industry and company specifications was enhanced. During his tenure, a number of continuous improvements were initiated. He was involved in a number of management level committees.

Whilst in Poyry, Wata has been a Senior Process Engineer and General Manager. He provided technical leadership and business development functions. Wata was a Director of Synergy Oil & Gas Engineering Sdn. Bhd., a PETRONAS licensed company. In addition to business development, he provided leadership roles for technical safety, measurement and allocation, and operations support.

Wata is currently a Director of IGL Services Sdn. Bhd. His current technical roles involve leading technical safety assessments and workshops, measurement and allocation reviews, and providing training on HAZOP, SIL and SIL LOPA methods.

He is a graduate in Chemical Engineering (B.A., Masters Engineering) (Cambridge Univ., 1995)



**Ir. Rusman Abu Samah**, a registered Professional Engineer with Practicing Certificate, has over 25 years of experience in the oil and gas industry. He is knowledgeable and prominent in API 14E, 14C, 520, 521, 526 and API RP 2000. His expertise and wide experience in computer simulation and Thermodynamic Package, include PRO-II/PROVISION by Sim Sci, HYSYS/HYSIM by Hyprotech Ltd. and PIPESIM Pipeline Simulation. Generate PFDs, UFDs, P&IDs, U&IDs and Cause and Effect Matrices for the oil and gas industry, Design Basis Memorandum (DBM) and report writing

Ir. Rusman has simulated the thermal design and rating for the Shell and Tube Heat Exchangers and Air Coolers using HTFS and Hextran/HTRI Heat Exchanger Thermal design software. He is well verse in Blowdown and Low Temperature study calculation. Ir. Rusman has good sound knowledge in NACE MR 0175, sour service environment and corrosion and material selection.

Ir. Rusman has modelled the Gas Processing Unit for recovery of LPG, Propane, Butane and NGL using HYSYS process simulation. He has also performed equipment sizing and selection on Gas Processing Unit. He was involved in Technical Bid Evaluation (TBE) for evaluating the bidders according to the functional specification set by the client. Ir. Rusman has good sound knowledge in Exxon International Practices (IPs), Shell DEP, Petronas PTS and EPMI DIM. Ir. Rusman is also a HAZOP and HAZID Leader for offshore and onshore installation facilities. He is a graduate in Chemical Engineering (B.Eng Hons-Chem.Eng) (UMIST, 1991)



**Ir. Mohd Nor Abd Basar** is a registered Professional Engineer with Practicing Certificate, and also a registered ASEAN Eng. under the AFEO and a certified ASEAN Chartered Professional Engineer (ACPE). A Fellow Member of the IEM, and is also a Member of the Institute Of Materials Malaysia, and a Member of the Malaysian Institute of Management.

He is a Director of MECIP (M) Sdn Bhd and MECIP Global Engineers Sdn Bhd, and the Principal Process Engineer at the latter. He had previously served as a Principal Consultant (Process and Engineering coordination) at the Plant and Process Sector of KTA Tenaga Sdn Bhd, Engineering Manager at Ancom Energy & Services Sdn. Bhd, and General Manager of MPE Lindung Sdn.Bhd.

He has over 36 years of experience in the Oil, Gas and Petrochemical industry, covering plant engineering in the downstream sector – including managing Plant Changes (Project Engineering) in a Petroleum Refinery and Technical Services in an Ethylene Plant – at Kerteh in Terengganu. He has been engaged as a Master Coach (2007-2009), and to date continued to be re-engaged, by a multinational company to manage Technical Coaching in process and engineering design for the young engineers across several executive engineering skill groups. He has also been a HAZOP Leader for several plant modifications in the Oil & Gas industry. In service to continual professional development, he is currently a registered Mentor (Chemical Engineering) with the IEM's Log Book Training Scheme as well as a Principal Interviewer and an Assessor for the IEM's Professional Interview and BEM's Professional Assessment Examination.

He has a MBA (University of Malaya, 2003) and a Bachelor of Engineering (Chemical) (Hons) degree (University of Malaya, 1980)



Ir Juares R Abd Hamid, a registered Professional Engineer with Practicing Certificate, is a Fellow Member of the IEM. He has held roles and responsibilities of line and managerial executive engineer, project manager, consultant engineer, and company director – all while in and through salaried employment (22+ years, PETRONAS) and self-employment (15+ years) in the oil, gas, and petrochemical industry. In self-employment, he has been a freelance consultant, an associated principal on Process/Project Management to an engineering design consultancy (MECIP Global Engineers), and a Director of a process safety management consultancy (Winmore Engineering).

Experiential competencies acquired since have been in business management, project management, chemical and process engineering design, process operations, project engineering, process safety management, health/safety/environmental system management, plant and facility auditing, as well as engineer training and development including mentoring and coaching.

He had been a registered Subject Consultant with the Department of Environment (DOE), a trained Environmental Management System (ISO 14001) Auditor, and a certified Business/Executive Coach (UMCCed). He has since 2004 also been serving on several advisory appointments and academic engagements by invitation at, in all, six (6) Malaysian universities.

He is a graduate in Chemical Engineering (Pennsylvania State University,1979) and Industrial Chemistry (UiTM, 1975)

#### **Frequently Asked Questions (FAQs)**

Q:- If I withdraw from the course upon paying the fee, will I be entitled for a refund?

A:- Full refund less 30% if cancellation is received in writing more than 7 days before start date of the event.

Q:- Apart from attendance, how will the participating engineers be evaluated?

**A:**- A minimum attendance of 80%, including at the last two, of the 48 Half-Day Sessions is required to enable initial qualification for a participant to be assessed for Project-related assignment(s) and the Session Quizzes. [Note: Assessment will be based on performance in, both, individual and group Project-related assignments, including presentations, and Session Quizzes]

**Q:**- Upon registration and payment of fee and if I am unable to attend, can someone else replace me?

A:- Yes, you can assign an *equivalently qualified* replacement, and such replacement must be prior approved by IEM and be effected not later than the third (3<sup>rd</sup>) of the forty eight (48) Half-Day Sessions of the program. However, <u>only one</u> of you will be allowed to sit for the Session Quizzes and/or be accordingly assessed under the program as specified above.

#### **Information on Registration**

Registration fees covers one set of session program notes, refreshments and lunch. Reservation/Booking by fax or email of intending participants are acceptable with partial payment being forwarded before the closing date. If a place is reserved and the intended participants failed to attend the course on the date of the event, the fee is to be settled in full. However substitution of participants(s) will be conditionally permitted (see FAQs above) with approval by IEM. In view of the limited places available, intending participants are advised to send their registration as early as possible so as to avoid disappointment.

The Special Committee reserves the right to alter or change the programme schedule if due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes.

#### **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.

If you require further details or clarifications kindly contract the IEM Secretariat at:

The Institution of Engineers, Malaysia Lot 60/62, Jalan 52/4 46720 Petaling Jaya Selangor Darul Ehsan

Tel: 03-7968 4001/02 (Fax): 03-7957 7678 (Email): sec@iem.org.my