

# THE INSTITUTION OF ENGINEERS, MALAYSIA

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# TALK ON "MANAGING RISK THROUGH ENGINEERING SOLUTIONS IN DELIVERING MALAYSIA FIRST TENSION LEG PLATFORM - MALIKAI"

Organised by the Civil and Structural Engineering Technical Division (CSETD) BEM Approved CPD/PDP: 2 Hours Ref No: IEM18/HQ/059/T

Date	:	28 March 2018 (Wednesday)
Time	:	5.30 p.m. – 7.30 p.m.
Venue	:	Auditorium Tan Sri Prof. Chin Fung Kee, 3 <sup>rd</sup> Floor, Wisma IEM,
		Petaling Jaya, Selangor
Speaker	:	Ir. Chow Wan Han, Mr John TC Lim

### **SYNOPSIS**

Malikai is Malaysia's first Tension Leg Platform (TLP) located in deepwater offshore Sabah. It is also Shell's first TLP project outside of the Gulf of Mexico. This floating platform is designed, installed and anchored in 500m depth of water by 8 numbers of steel tendons with driven piles. Designing and operating a deepwater platform like Malikai in a remote and hazardous environment presents a different level of challenge compared to the conventional shallow water fixed offshore platforms.

The talk will begin with an overview of the Malikai project and its functional requirements. The speakers will then discuss the risks associated with offshore platforms and the risks specific to the Malikai project. They will elaborate on how the process of understanding the risks, defining and designing of Safety Critical Elements and Performance Standards were critical to developing ingenious and innovative engineering solutions to tackle the engineering challenges faced in the Malikai project. The talk will continue with more in-depth discussions on the technical risks involving Steel Catenary Riser (SCR)s, Tendon Porch Design and Drilling Derrick Fire Risk. At the end of the talk, participants will be able to get the essence of the Hardware Barriers implemented in order to manage risks to As Low As Reasonably Practicable (ALARP).

### **SPEAKERs BIODATA**

*Ir. Chow Wan Han* graduated as a Civil Engineer from University Tenaga Nasional. She also holds a Masters degree from University Putra Malaysia majoring in Structural Engineering & Construction. In addition, she also bears the responsibility as Sarawak Shell Berhad's Subject Matter Expert in Advanced Structural Analysis and holds Technical Authority Level 3 for Offshore Structures.

## ANNOUNCEMENT TO NOTE

## **FEES**

(Effective 1<sup>st</sup> October 2017)

#### Members

Registration Fee : FOC Administrative Fee: <u>Online</u> RM 15 <u>Walk In</u> RM 20

#### Non-Members

Registration Fee: RM 50 Administrative Fee: RM 20

- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- To secure your seat, kindly register online at www.myiem.org.my

#### PERSONAL DATA PROTECTION ACT

I have read and understood IEM's Personal Data Protection Notice published on IEM's website at www.myiem.org.my and I agree to IEM's use and processing of my personal data

Ir. Chow has 14 years of working experience in the field of offshore engineering design. Currently she is the Structural Engineer for Sarawak Shell Berhad. She was previously attached to Technip Malaysia and PT Technip Indonesia. During her attachment with Technip, she won the prestigious Jacques Franquelin Award in 2009 and was invited to receive the award from Technip in Paris, France. Through her working career she had been involved in various mega projects such as Malaysia's first Spar Platform – Kikeh Project, Malaysia's first Semi-Submersible Platform – Gumusut-Kakap Project and Malaysia's first Tension Leg Platform – Malikai Project. Her experience spans across various phases of the projects where she coordinated structural activities for the purpose of concept evaluation studies, FEED, detailed design, fabrication/ installations and operations for both green and brown field opportunities.

*Mr John TC Lim* is the Delivery Manager of Civil, Structures and Offshore (CSO) Engineering at Shell Project & Technology. He is also the Regional Discipline Lead and CSO Technical Authority 1 for Shell Malaysia and the Philippines with the accountabilities to lead the Discipline for the organisation, sets local discipline rules, and to approve deviation/derogation as required from function or discipline standards. He received both his B.Sc and M.Sc degrees in Civil Engineering with emphasis on structural steel design and displacement-induced-fatigue from the University of Kansas, USA. His 20 years of engineering experience spans across Industrial buildings, Arena and Stadium, Onshore Petrochemical and Offshore Fixed & Floating structure design, construction and offshore installation. In Shell, he was involved in front end support, project delivery of fixed and floating offshore structures and platform life extensions prior to his current role. Before joining Shell, John worked with several EPC consulting companies.