You are cordially invited to a Seminar organized by Centre for Offshore Research and Engineering (CORE) and Department of Civil and Environmental Engineering

“Platform Foundation Installations in Deepwater Calcareous Silt”

by

Peter W Marshall
PE, PhD, Visiting Professor at NUS

Date: Wednesday, 04 April 2012
Time: 4.30 to 6.00 pm
Refreshment will be served at 4.45pm
Venue: EA- 02-11, Faculty of Engineering, National University of Singapore

Abstract

Compliant towers enable conventional drilling in deep water, avoiding the complex well-atop-well situation which led to the Macondo blowout.
The 2011-2012 graduating class in Offshore Specialization was challenged to design compliant towers for Exmouth Plateau, NW Australia. The site is in 900m water depth, and features uncemented calcareous silt, overlain by slide debris. In addition to three different structural designs, there were three different foundation concepts.

- Large diameter, deep, multistage piling
- Multiple suction caisson clusters, penetrating the debris layer
- A huge, shallow suction mudmat raft

Each presented difficult challenges in soil mechanics, design, and installation strategy. The students took advantage of expert advice, and came with novel, technically feasible solutions.

The paper will present a professional-level overview of the work, and suggestions for ongoing investigation.

---

**About the speaker**

B.Eng and MSc Florida 1960 & 61
PhD Kumamoto, Japan 1990
Shell Offshore construction & design, 32 years
Proprietor, MHP Systems Engineering (Texas) since 1993
Prof. Marine Design & Construction, Univ. of Newcastle-upon-Tyne
OTC outstanding achievement award for individuals, 2006
Lloyds Register Professor, NUS (visiting)
44 years volunteer in API standards
Aspiring bridge & dome designer
Contact Person: Prof Andrew Palmer Tel: 6516 4601, Email: ceepalme@nus.edu.sg
General Enquiry/Registration: Ms Norela Tel: 6516 4314, Email: nor@nus.edu.sg

***Seats are limited. Please register early. All are welcome and admission is free***

Location Map