OVERVIEW OF DEEPWATER FLOATING PRODUCTION SYSTEMS DESIGN AND ANALYSIS

Instructors:
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Grand Zurich hotel, Jogjakarta

OBJECTIVE OF THE SHORT COURSE

Floating Production Systems are becoming popular for deeper water oil and gas exploration and production. The objective of this Workshop is to provide participants an overview of the selection of suitable floaters with consideration of appreciative methodology used in design and analysis of these structures.

The program begins with the review of deep-water field development from the aspects of planning, processing, concept selection and project execution. The application of structural and naval architectural principles and design codes to the sizing and analysis on performance of moored platforms and risers will be emphasized. The subjects of discussion will include Spars, Tension Leg Platforms, Semi-Submersibles and FPSOs.

After the course the participants will appreciate better the requirement for the design and analysis of floating platforms in deeper water application. The concept of floater stability, types of mooring systems and risers, and design and analysis methodology will be understood.
WHY THIS COURSE IS VERY IMPORTANT?

By fully participating in this short course, participants with solid background in conventional offshore oil field development, planning, processing and technology application will gain ground understanding on the greater risk of deepwater oil field development, which in short it needs higher commitment, higher & world complex technology and much higher cost involvement.

In the initial part of the course for some introduction way of addressed economic magnitude, technology services and major specific equipment and source required on each stage of deepwater field from the exploration development to the production stage this short course will be beneficial for deepwater oil field engineers, planners as well as the regulator (the authorities) and oil field contractor and services companies.

WHO SHOULD ATTEND?

1. Executive Engineers and Managers who are involved and interested in:
   - Feasibility studies of deep water field development
   - Information on new technology for deep water exploration and production
   - Application of various floating system concepts in worldwide projects

2. Civil or Mechanical Engineers and Naval Architects with basic background in structural engineering and hydrodynamics, but not familiar with floating structure design.

COURSE PROGRAMME

Day 1
Session 1: Introduction to Deepwater Development Systems (Dr. Iwan R Soedigdo)
Session 2: Drilling in Deepwater Working Environment (Dr. Iwan R Soedigdo)
Session 3: Conceptual and Functionality of Floating Production Systems (Dr. Gho Wie Min)
Session 4: Strength Consideration of Floating Structures (Dr. Gho Wie Min)

Day 2
Session 5: Fatigue Assessment of Floating Structures (Dr. Gho Wie Min)
Session 6: Hydrodynamics and Global Response of Floaters (Dr. Gho Wie Min)
Session 7: Hydrostatic and Stability of Floaters (Dr. Iwan R Soedigdo)
Session 8: Mooring Design and Analysis (Dr. Iwan R Soedigdo)

Day 3
Session 9: Overview of FPSO Design (Dr. Iwan R Soedigdo)
Session 10: Overview of Semi-submersible Design (Dr. Gho Wie Min)
COURSE INSTRUCTORS

Dr. Iwan Renadi Soedigdo  
Ir., MSCE, Ph.D.

Dr. Iwan received his Ph.D. from Texas A&M University, USA, in Ocean Engineering with specialization in deepwater technology. He has experiences in all phases of offshore engineering design and analysis specifically in the areas of Floating Production Systems, Riser and Mooring Systems in deepwater working environment and totally has more than 29 years of working experience, particularly on the FEED and EPCI projects, in the offshore oil and gas industry.

Dr. Iwan was the Research Associates at Ocean Drilling Program at Texas A&M University, Texas, 1994-1996. He was the team member for Texaco Deep Star Project responsible for the conceptual design of several deepwater floating structures at the Gulf of Mexico. Thereafter, Dr. Iwan joined Fluor Corporation, Houston, 1997-2000 to work on various offshore oil and gas field development projects worldwide responsible for the offshore structural and subsea pipeline design. In the period of 2001-2003 and 2005-2007, Dr. Iwan taking up the position of Deepwater Technology Specialist for Deepwater Department, PETRONAS Carigali in Kuala Lumpur, Malaysia, and also worked as a team leader for the Joint Industry Project on Flexible Pipe and Riser Technology for deepwater application. In 2008-2009, Dr. Iwan set up Archipelago Offshore Engineering, Inc (AOE) in Jakarta, and serves as the Chairman. AOE is an engineering consulting firm specializing in deepwater technology solutions, which is currently operated by a group of professional consultants in Jakarta, Indonesia. Dr. Iwan’s latest professional assignment was the Chief of Indonesia Deepwater Development Project at the Executive Agency for Upstream Oil and Gas Regulator, BPMIGAS, 2009-2011.

Dr. Gho Wie Min  
BEng (Hons) MSc DIC Ph.D.

Dr. Gho has more than 25 years comprehensive experience in classification, engineering design, fabrication and installation, research and technology development combined with knowledge of project management and quality assurance in offshore oil and gas. He graduated with BEng (First Class) in Civil and Structural Engineering from The University of Sheffield, UK (1990), and MSc DIC in Earthquake Engineering and Structural Dynamics from Imperial College London (1991). He worked as Production Engineer at Batam fabrication yard, PT McDermott Indonesia, on construction of offshore steel structures and subsequently Structural, Pipeline and Project Engineer at J Ray McDermott on several EPCI projects, 1992-98. He also involved on technology development of jack-up barge and served as coordinator for Technical Quality Assurance in the company. Dr Gho obtained the scholarship of Nanyang Technological University (NTU) and National Science and Technology Board to pursue a PhD program on tubular joint research for economic design of offshore steel jackets under recommendation of McDermott Engineering, 1997.

Dr. Gho was the subcommittee member in proposing the offshore and marine technology roadmap for R&D advisory panel, Maritime and Port Authority, Singapore. He was previously the assistant professor and the director for MSc program in offshore engineering, NTU, 2001-06. After leaving NTU in 2006, Dr. Gho worked as senior engineer at ABS Pacific to perform plan approval and guide development of offshore floating structures, specifically semisubmersibles and jack-up rigs, and then senior consultant at Marine Engineering Services after acquired by IMC Corp responsible for business and technology development, 2006-09. He is currently Director at Maritime Production Research, Guest lecturer at Maritime Research Centre, NTU and Principal Consultant at Archipelago Offshore Engineering Inc Indonesia.
ENROLLMENT
In order to allow sufficient time for arranging travel plans, early enrollment is recommended. Registration will be closed on October 13, 2014. Late enrollment may result in course cancellation.

CANCELLATION, SUBSTITUTION & REFUND
The course fee will be refunded (less US$ 100 registration fee) only if notification of cancellation is received at least 10 days prior to the commencement.

Non payment of tuition fee does not constitute automatic cancellation of participation. Substitution may be made at any time for those enrolled.

CERTIFICATE
A certificate of participation will be awarded to each person completing the course.

COURSE FEE
The course fee is USD 1,800.00 + 10% VAT per delegate and is payable upon confirmation of enrollment. The fee excludes accommodation and transportation. Payment should be settled by October 13, 2014. Any bank charges in connection with payment in US Dollars must be added to payment. The course fee includes the course materials, refreshments and lunch.

Payment can be made to PT. Geoservices

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