OFFSHORE DRILLING AND PRODUCTION ESSENTIALS
Date: 28-30 April, 2014 Shanghai China

Benefits of Attending
Upon completion of the course participants should understand:
• Types and Functions of Drilling Rigs
• How Drilling Rigs Operate
• How Wells are Drilled from Platforms and Subsea
• Latest Advances in Deepwater Drilling
• Shallow and Deepwater Floating Production Systems
• The FPSO Equipment and How it Operates
• Subsea Production Equipment
• The Requirements of the full Shallow and Deepwater Field Development
• Safety and Environmental Issues

Overview
This 3 days training course will cover the details of Drilling Rigs and how they operate, for Shallow and Deepwater activities. Current Drilling Rigs are highly automated and efficient. These advances will be illustrated with animations and videos. The relationship between Drilling and Production will be explored with examples of current Field Developments.

The course also outlines Offshore Production System including Floating Production Vessels for both Shallow and Deepwater Fields. Their Technical components and systems will be described together with examples of the Floater as part of the Field development Concept.

Current Safety and Environmental Issues will be addressed.
Numerous Case Studies are presented throughout the course to provide the participants with a full view of the Total Field Development activity in Shallow and Deepwater.

The course is delivered in a clear English. While the course is intensive, and with many areas to cover, the presentation include many animations and videos illustrating the technical issues. Such combination of presentations plus videos make the course accessible a wide range of participants, and in particular those from China.
Dr John Preedy worked for BP for 28 years as a Research Associate and Team Leader, working on Feasibility Studies and acting as a “trouble shooter” covering all aspects of BP’s businesses. These covered field Development Project in the North Sea and several novel resource recovery techniques which were taken from Concept to Field Pilot trials in Canada. His specific work in the offshore area covered Subsea Robotics / Automation, Seabed Production Concepts, FPSO Turret Technologies, Seabed Excavation Methods, Underwater Repair Techniques, Flexible Riser Studies and Maintenance Cost Reductions.

After leaving BP in 1992, he has continued working in the offshore oil industry through Azur Offshore Ltd, including activities in the assessment of Emerging and Novel Technologies, Technical and Economic Audits, Deepwater Studies, Production Sharing Agreement Evaluations, Safety and Environmental Issues, Floating Production Systems and Offshore Installation Vessels. Clients have included Chevron UK, BP Exploration, British Gas, Technomare, Trident Consultants, Fina UK and Cameron France. Most recently, through Azur Offshore Ltd, he completed the preparation of a Training / Operations CDROM for BP on their Deepwater GREATER PLUTONIO Field in Angola and a study of Extended Well Testing Jack-Ups for the Middle East.

Since 1996 he has been conducting a range of Industry standard courses to Professional Engineers in Europe, USA, S E Asia, Australia and Africa. He is a regular University lecturer in the UK and Europe and is a Visiting Professor at the Technical University of Malaysia. He is a member of the UK Society for Underwater Technology (SUT) and serves on their Subsea Engineering and Operations Committee.

Who Should Attend?

The course is also suitable for all persons wishing to learn more about Offshore Drilling and Production Technologies. This could include:

- Senior Engineers and Management newly moved into Field Development areas
- Production Engineers less familiar with Offshore activities
- New graduates to the Industry
- Production Operating Staff
- Suppliers
- Government Regulators
- Safety and Environments Engineers
- Training Managers
- Project Management and Finance Department Representatives

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Day 1

Introduction

INTRODUCTION TO OFFSHORE DRILLING RIGS, MARINE DRILLING ACTIVITIES AND FLOATING PRODUCTION

Introduction and Background. Background and General Trends in Offshore Drilling and Production. General arrangement, operational capability and drilling equipment facilities on typical fixed platforms, jackups, barges, drillships and semi-submersibles; Review of Fields developed with Floaters and Subsea Production Systems.

GLOBAL ENERGY REVIEW


Part A - Drilling Technologies

Offshore Drilling Rigs. Jack-Up Rigs. Background, jacking mechanism, spud cans, moveable cantilever, drill derrick and several examples of jackup drilling rigs including general layout and storage capacity and rig regulations.

Semi-Submersible Drilling Rigs

Background, vessel details and semisubmersible examples including general layout for equipment and storages, vessel motions and motion compensation devices and rig regulations. Examples.

Drill Ships

Background, vessel details and drill ship examples including general layout for equipment and storages, vessel motions and motion compensation devices and rig regulations. Examples.

Drilling Barges & Tender Assisted Drilling

Background, vessel design and drill barge examples. Tender assisted Drilling vessels. Self erecting tender assisted Drilling vessels.

Position & Station Keeping for Floating Drilling Rigs

Part A - Mooring: mooring requirements, mooring regulations for drilling vessels, mooring system design, setting and moving the mooring pattern.

Part B - Dynamic positioning: background, dynamic position concept, basic feed back and control, position measurement, thrusters and dynamic position rig design.

Drilling Rig Components (Rig Equipment / Drill Strings / Muds)


Day 2

Drill Vessel Operations

OFFSHORE DRILLING COMPONENTS

Drilling template, temporary and permanent guide bases, guide wire and guide line less systems, subsea wellheads including subsea BOPs, marine riser, LRP, motion compensation and drilling control system.

Drilling Offshore Wells

DRILLING REQUIREMENTS FOR PLATFORMS & PRODUCTION HOSTS (SPARS & TLPs)

General requirements, drilling guides and templates, well Control and well completion.

DRILLING A SUBSEA WELL

Sequence of drilling a Subsea Well.

DRILLING COSTS, PREPARATION OF CONTRACTS (DRILLING RIGS), NEGOTIATION AND IMPLEMENTATION

Classification, analysis and evaluation of drilling contracts; detailed development of the drilling job, selecting drilling rig equipment capability, development of the contract and the presentation and adjustment of each party’s own position; management system of supervising and implementation of drilling contracts; and dispute case resolution by international law. Drill Rig Costs – Capital Cost Examples and Rental Rates.

Part B - Offshore Production Technologies

Bottom Founded Platforms


Floating Production System

FPSO Monohull, Semi-Submersible, Deep Draught Semi-Sub, SPAR and TLP.

Floating Production - Mooring System / Turret Design


Oil and Gas Export Options

Export by Pipelines. FLNG for Gas Export. Oil export by Shuttle Tankers or Trading Tankers.

Day 3

Summary of Subsea Production

Building Blocks – Part A - Subsea Production Systems (SPS)

Wellheads and Xmas Trees, Manifolds and Templates, Subsea Control Systems.

Summary of Subsea Production

Building Blocks – Part B - Umbilicals, Flowlines and Risers (URF)

Flowlines, Rigid Risers, Flexible Dynamic Risers, Riser Towers, Umbilicals.

Introduction topsides Processing Systems

Function of process and utility plant (Reservoir Interaction, Typical Reservoir Fluids, Product Specifications, Environmental Constraints), Processing Facilities (Separation, Compression, Produced Water, Injection, Utilities), Process Equipment Examples.

Field developments in South East Asia

China, Vietnam, Malaysia, Thailand and Indonesia.

Part C - Deepwater Technologies

Case Study A - Deepwater Gas Fields

Deepwater developments. Deepwater well to shallow water hosts. Well to Beach developments.

Case Study B - Deepwater Oil Fields

Deepwater issues and Range of Production Systems. Current Worldwide Status – Brazil, Gulf of Mexico, North Sea, Western Africa, South East Asia and Australia.

Part D - Safety and Environmental Issues

Drilling and Production Safety and Environmental Requirements

Safety Requirements for drilling and production. Review of past incidents involving loss of lives. Environmental requirements of offshore Drilling and Production, environmental impact assessments, use and discharge of drilling muds and fluids and cleaning and disposal of drill cuttings.
## UP COMING OIL AND GAS COURSES YOU AND YOUR COMPANY MIGHT BE INTERESTED IN

Click on the title of training you are interested in to get the training brochure directly.

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<thead>
<tr>
<th>Course Title</th>
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<td>Petrochemical Economics</td>
<td>14-15 Apr, 2014</td>
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<td>Oil and Gas Supply Chain</td>
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<td>Law, Commercial Contracts and Negotiations Skills in Oil and Gas</td>
<td>24-25 Apr, 2014</td>
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<td>Development &amp; Economics of Unconventional Gas Resources</td>
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<td>Mastering Global LNG</td>
<td>4-6 June, 2014</td>
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<td>Project Finance in Oil &amp; Gas Exploration and Production</td>
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<td>Oil and Gas Finance for Non-Financial Managers</td>
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<td>Best practices for Oil marketing</td>
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1. Yes, I/we will attend the event.

2. I’m unable to attend, but would like to purchase the documentation at USD900/CNY5490.

### Important Notes

- 50% of registration fee shall be charged for cancellation. Cancellation note shall be received in written format 4 weeks before the training to be held. Otherwise, full amount of registration is requested to be paid. Alternatively, you may choose a credit note for the full value of the registration price which may be put towards another CDMC training or event. CDMC regrets that no cancellations will be accepted within four weeks of the training event start date. Prepayments will not be refunded and invoiced sums will be payable in full, except in cases where it has been possible to mitigate loss. Course documentation will, however, be sent to the delegate.
- Should you be unable to attend, a substitute delegate is welcome at no extra charge.
- Special offer is not changeable and not allowed to be canceled.
- If the training is cancelled due to the operational reason at the organizer, CDMC will provide a full refund.
- CDMC reserves the right to change the event dates, sites or location or omit event features, or merge the event with another event, as it deems necessary without penalty and in such situations no refunds, part refunds or alternative offers shall be made.

### Registration details

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### Payment Method

- **By Credit Card**
  - All credit card bookings will be charged in CNY.
  - Visa Card  Master Card  American Express
  - Number:
  - Expiry Date:

Please attach a copy of your credit card (both front and back sides). We require the cardholder’s signed authorization below to process this payment.

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#### Organizer Contact

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