



# OTC.08



## Monday Morning

Monday, 5 May, 0930 to 1200

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### PANEL: LOW PRODUCTION COSTS FOR HIGH-COST RESOURCES

**Moderators:** Chris Ross, CRA International  
Sandeep Khurana, Devon Energy Corporation

**Panelists:**

Chuck Pierce, VP Indonesia Deepwater, Chevron  
David Bairrington, Heavy Oil Technology Manager, ConocoPhillips  
Jim Farnsworth, COO, Cobalt  
Andrew Slaughter, Senior Economics Advisor, Shell  
Brad Boswell, Vice President, CRA  
Tim Parker, CEO, Loews

**0930 19163 Toward Low Costs for High-Cost Resources**  
C. Ross, CRA International

Monday, 5 May, 0930 to 1200

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### PETROTECHNICAL VISUALIZATION: VISUALIZE THE OPPORTUNITY FROM PROSPECT TO PROJECT

**Session Chairperson:** Frank Love, Shell International E&P Company

**0930 19596 Visualize the Opportunity From Prospect to Project**  
F.R. Love, Shell International E&P Company

Monday, 05 May, 0930 to 1200

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### ADVANCES IN DEEPWATER STEEL CATENARY RISER TECHNOLOGY

**Session Chairpersons:** Carlos Moreira, Technip  
Ruxin Song, Technip

**0930 19401 Steel Catenary Riser Design Based on Prescribed Motions From Coupled Analysis Methodology**  
M.V. Rodrigues, V.L. Hansen, R.A. Bahiense, C.V. Raposo, Det Norske Veritas

**0952 19438 Steel Catenary Umbilical Stability Analysis**  
M.K. Hossain, K. Tjok, A. Nobahar, Fugro-McClelland Marine Geoscience

**1014 19256 An Effort Toward SCR Receptacles Standardization**  
M.M. Mourelle, C.C. Moreira, J.T. Lima, Petrobras

**1036 19495 Model Tests for Steel Catenary Riser in Marine Clay**  
C.P. Aubeny, Texas A&M University; T. Langford, Norwegian Geotechnical Institute

**1058 19454 Spectral and Cycle-Counting Fatigue Damage Estimation Methods for Steel Catenary Risers**  
T.L. Power, D.L. Garrett, D.R. Maniar, Stress Engineering Services; E.H. Phifer, J.P. Vogiatzis, Shell International E&P

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**Monday, 5 May, 0930 to 1200**

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**MALEO MOPU: FAST JACK-UP CONVERSION FOR SEISMICALLY ACTIVE SOFT-SOIL SITE**

**Session Chairpersons:** Mike Ooley, Global Process Systems  
William Stewart, Stewart Technology Associates

- 0930 19581 The Maleo MOPU Project: Overview and Keynote Introduction to Session**  
M. Ooley, Global Process Systems; W.P. Stewart, Stewart Technology Associates
- 0952 19583 Seismic Design Criteria Maleo Producer, Madura Straits**  
A. Nisar, MMI Engineering
- 1014 19480 Seismic Time History Response Analysis of Maleo Producer**  
P. Jacob, MMI Engineering; W. Stewart, Stewart Technology Associates
- 1036 19553 Overturning Analysis of Maleo Jack-Up Mat Foundation on Soft Clay**  
J.D. Murff, Texas A&M University; A.G. Young, Geoscience Earth & Marine Service
- 1058 19582 Soft-Clay Dynamic Characteristics for Madura Straits From Advanced Geotechnical Tests**  
D.R. Spikula, Geoscience Earth & Marine Service; S. Garmon, Marsco
- 1120 19645 Time Domain FE Seismic Analysis of Mat-Supported Jack-Up Structure on Soft Clay**  
J.S. Templeton, Sage USA
- 1142 19580 Detailed Geotechnical Investigation Around In-Place Mat Foundation Including T-Bar and CPT Comparisons**  
S. Neubecker, Advanced Geomechanics; W.P. Stewart, Stewart Technology Associates; J. Audibert, Quest Geo-Technics

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**Monday, 5 May, 0930 to 1200**

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**ACTIVE ARENA: ANGOLA 2020**

**Moderator:** Pierre-Alain Delaittre, Consultant

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**Monday, 5 May, 0930 to 1200**

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**EAST COAST OF CANADA: LEADING EDGE R&D INITIATIVES**

**Session Chairpersons:** Paul Barnes, CAPP  
Paul Harvey, Nova Scotia Department of Energy

- 0930 19273 Atlantic Canada Petroleum Industry: Regional Overview**  
P. Barnes, CAPP
- 0952 19271 Produced-Water Discharge Monitoring**  
T. Husain, H. Niu, S. Adams, B.J. Veitch, K. Hawboldt, Memorial University of Newfoundland
- 1014 19234 Using MRI To Measure Capillary Pressure in Petroleum Reservoir Test Core**  
B.J. Balcom, University of New Brunswick
- 1036 19269 Compressed-Air Breathing Apparatus for Helicopter Underwater Evacuation**  
P.N. Gibbs, Survival Systems
- 1058 19272 Mitigation of Ice Risk to Subsea Infrastructure**  
V. Morgan, C. Randell, R.D. Phillips, F. Ralph, C-Core
- 1120 19270 Small-Field Development and Subsea Tieback Technologies**  
G.D. Dillabough, D.W. Hawkins, M. Ruelokke, F. Way, C-NLOPB; W.I. Chipman, Canada Newfoundland Offshore Petroleum
- 1142 19233 Evacuation Training Using Immersive Simulators**  
B.J. Veitch, Memorial University of Newfoundland; R.J. Billard, Virtual Marine Technology

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**Monday, 5 May, 0930 to 1200**

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## ADVANCES IN THE CONTROL OF SAND PRODUCTION

**Session Chairpersons:** Chip Claiborne, Chevron Corporation  
Mark Kalman, Halliburton Energy Services Group

- 0930 19130 Orientated Perforating as a Sand Prevention Measure: Case Studies From a Decade of Field Experience Validating the Method Offshore Norway**  
J.S. Andrews, Statoil; H. Joranson, StatoilHydro; A.M. Raaen, Statoil
- 0952 19172 Case Histories of Improved Horizontal Well Cleanup and Sweep Efficiency With Nozzle-Based Inflow Control Devices in Sandstone and Carbonate Reservoirs**  
A.G. Raffn, J.E. Lauritzen, Reslink; A.H. Sunbul, D.E. Hembling, Saudi Aramco; T. Moen, Reslink; M. Zeybek, Schlumberger
- 1014 19185 A Generic Model for the Prediction of Sand Production in Oil and Gas Well Systems**  
K.E. Abhulimen, University of Lagos
- 1036 19341 Expandable Screens: Optimized Horizontal Gas Production Through Collaboration**  
A. Lopez Lara, Pemex; G.A. Garcia, Baker Oil Tools; J. Aguirre Montalvo, A. Salas Zapata, Pemex; E.G. Bowen, Baker Oil Tools
- 1058 19484 Kikeh Development: Sand Control Selection, Design, and Implementation of ESS**  
M.K. McFadyen, Murphy Sabah Oil Company
- 1120 19622 Case Histories of Unique Multizone Intelligent Deepwater Sand-Control Completions: How Successes Were Achieved and the Associated Lessons Learned**  
R.C. Jannise, Halliburton Energy Services Group; S.J. Jeu, Thunderbyrd Energy Services; J.B. Salies, Petrobras America; G.S. Arnold, Well Dynamics
- 1142 19465 New Approach to Sand Removal**  
S.D. Coffee, Enerscope Systems

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# OTC.08



## Monday Afternoon

Monday, 5 May, 1400 to 1630

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### PANEL: MANAGING RISK IN THE OFFSHORE ENERGY INDUSTRY

**Moderator:** Buford Pollett, Technip

Based on the earlier work of pioneers in risk management in the offshore industry, this panel will discuss and provide an overview of how people and entities now evaluate risk/opportunities surrounding the various aspects of the offshore industry (e.g., geological and engineering evaluations, insurance coverages, weather risks, and contract terms) so that the decision-makers can better appreciate the true value of projects in the offshore industry.

**Panelists:** Tommy Laurendine, Assistant Vice President, Risk Engineering  
 Hugo Diogo, Senior Manager, Fortis Bank  
 Scot Anderson, Partner, Natural Resources Group at Davis Graham & Stubbs  
 Daniel Murphy, President, Systech International  
 Judi Robertson, Legal Manager, Weatherford International

- 1400 19226 **Risk Management in the Offshore Energy Industry**  
B. Pollett, Technip
- 1422 19575 **Thinking About Risk in the Offshore Energy Industry**  
S.W. Anderson, Davis Graham & Stubbs
- 1444 19576 **Gulf of Mexico Offshore Platforms: Risk Engineering**  
T.T. Laurendine, Liberty International Underwriters
- 1506 19644 **International Risk Management**  
D.V. Murphy, Systech International
- 1528 19577 **Financing New Technologies and Managing Financial Risks in the Offshore Industry**  
H. Diogo, B. Martejjn, Fortis Bank

Monday, 5 May, 1400 to 1630

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### OFFSHORE NEEDS ADDRESSING ASIA FPSOs

**Session Chairpersons:** Izabela Gruen, Exmar  
 Sam Ryu, Sofec

- 1400 19282 **SHIs Improve Construction Method for Modern Drillship**  
K. You, P.K. Das, S. Jeong, T. Jeon, W. Lee, Samsung Heavy Industries
- 1422 19304 **The World's Largest AGBAMI FPSO for Deepwater Nigeria: Fast-Track Development and Construction**  
S. Jung, S. Park, D. Smith, Daewoo Shipbuilding & Marine Engineering Company
- 1444 19367 **Structural Design Overview of the Drillships**  
H. Moon, Daewoo Shipbuilding and Marine
- 1506 19390 **Technical Overview of Structural Engineering Works in AGBAMI FPSO Hull and Topside Interface Structure**  
J. Kang, S. Jun, O. Hwang, J. HEO, Daewoo Shipbuilding & Marine Engineering Company
- 1528 19695 **SHI Improved EPC Integration Management for FPSOs**  
J. Kim, Samsung Heavy Industries Company
- 1550 19696 **Collaboration for EPC of Offshore Structures**  
H. Shin, Hyundai Heavy Industries

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**Monday, 5 May, 1400 to 1630**

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**ADVANCES IN FLEXIBLE RISER TECHNOLOGY****Session Chairperson:** Enda O'Sullivan, MCS

- 1400 19437 Free-Standing Flexible Riser: A Novel Riser System for an Optimized-Installation Process**  
J. Remery, Technip; C. Silva, Brasflex Tubos Flexibles
- 1422 19386 Fatigue Design of Flexible Risers With a Nondry Annulus Environment**  
R.J. Smith, V. Stoica, MCS
- 1444 19427 Present and Future Possibilities Within Optical Condition Monitoring of Flexible Risers**  
N. Weppenaar, M. Kristiansen, NKT Flexibles
- 1506 19197 Development of the End-Fitting-Tensile-Wires Fatigue Analysis Model: Sample Tests and Validation in an Unbonded Flexible Pipe**  
Y. Shen, F. Ma, Wellstream International; Z. Tan, Halliburton Company; T. Sheldrake, Wellstream International
- 1528 19250 Flexible Pipe Design Optimization for West Africa Deepwater: Agbami Case Study**  
E. Sas, J. Pere, P. Savy, Technip; A. Omar, Chevron
- 1550 19397 Flow Assurance and Optimal Design of Thermal Characteristics in Flexible Pipes**  
K.G. Nielsen, M. Kristiansen, E. Bendiksen, NKT Flexibles
- 1612 19399 A Systematic Appraisal of Thrulife Integrity Management and Life Extension of Deepwater Subsea Systems**  
C. Saunders, P. O'Brien, B. Dines, MCS

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**Monday, 5 May, 1400 to 1630**

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**WORLDWIDE ADVANCES IN GEOTECHNICS****Session Chairpersons:** Roger Ingersoll, Mobil Research & Development Corporation  
Alan Young, Geoscience Earth & Marine Service

- 1400 19687 Quality Assessment of Marine Sediments Recovered With a Hydraulically Tethered Piston Sampler**  
P.J. Kelleher, Benthic Geotech
- 1422 19149 Characterization of Near-Seabed Surface Sediments**  
M.F. Randolph, H. Low, University of Western Australia; J.M. Brooks, B.B. Bemard, TDI-Brooks International
- 1444 19684 Worldwide Advancements in Deepwater Geotechnics: SEPLAs as Permanent Preset Moorings for Field Development in Congested Fields Offshore West Africa**  
D. Cobb, InterMoor
- 1506 19349 Site Characterization Through Integration of Geophysical and Geotechnical Data**  
C.J. Ehlers, Chevron Corporation; D.R. Spikula, J.R. Brand, Geoscience Earth & Marine Service
- 1528 19290 Design and Testing Out of Deepwater Seabed Sampler**  
T. Lunne, T.I. Tjelta, Statoil; A. Walta, A.P. van den Berg; A. Barwise, Gardline Lankelma
- 1550 19193 Characterization of Soft Deepwater West Africa Clays: SHANSEP Testing is Not Recommended for Sensitive Structured Clays** M.H. Le, J.-F. Nauroy, Institut Français du Pétrol; N. Thanh, E. Flavigny, INPG/L3SR; J. Colliat-Dangus, Total; V. De Gennaro, P. Delage, CERMES/ENPC; A. Puech, J. Meunier, IFREMER
- 1612 19683 Differences in Shear Strength Between Jumbo Piston Core and Conventional Rotary Core Samples**  
P.C. Wong, ExxonMobil Development Company

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**Monday, 5 May, 1400 to 1630**

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**INCREASED OIL RECOVERY**

**Session Chairperson:** Tom Kelly, FMC Energy Systems

- 1400 19407 The StatoilHydro IOR Program**  
S. Strom, A.H. Jorgenvag, A. Torsvoll, Statoil
- 1422 19409 The Future Drilling Scenario**  
A. Torsvoll, Statoil
- 1444 19411 Trend-Breaking Completion/Intervention Methods**  
E. Mathiassen, S. Strom, Statoil
- 1506 19417 Field Experience With Chemical Sand Consolidation as a Remedial Sand-Control Option**  
H.K. Kotlar, S. Strom, A. Moen, F. Haavind, Statoil
- 1528 19418 Technology Contribution to Increased Recovery**  
S. Strom, A.H. Jorgenvag, A. Torsvoll, Statoil
- 1550 19420 Seabed Processing at Tordis: Operational Experiences**  
A. Faanes, S. Strom, J. Kyllø, Statoil
- 1612 19552 Field Experience With Riserless Light-Well Intervention**  
P.K. Munkerud, Statoil; H.B. Skeels, FMC Technologies

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**Monday, 5 May, 1400 to 1630**

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**ISSUES RELATED TO THE SELECTION OF CORROSION-RESISTANT ALLOYS AND ELASTOMERS FOR DEEPWATER COMPLETIONS**

**Session Chairpersons:** Syed Afaq Ali, Schlumberger  
Francois Auzeais, Schlumberger

- 1400 19403 Laboratory Investigation of Oil-Swelling Elastomers for Smart-Well Completions**  
A.S. Al-Yami, H.A. Nasr-El-Din, A.S. Al-Humaidi, S. Al-Saleh, M.K. Al-Arfaj, D.A. Al-Shehri, Saudi Aramco
- 1422 19222 Formate Fluids for Extreme Conditions: Do They Have Limitations?**  
W.J. Benton, J. Downs, Cabot Specialty Fluids
- 1444 19242 An Evaluation of Perforating Techniques and Use of Caesium Formate Kill Pills To Optimize Productivity in HP/HT Gas Wells and Minimize HSE Risks**  
A.M. Roy, A.J. Twynam, J. Parke, BP; J. Downs, Cabot Specialty Fluids; A. Morrison, Schlumberger
- 1506 19210 Understanding the Impact of Completion Brine Packer Fluids on Cracking Susceptibility of CRA Materials for Deepwater Applications**  
P.H. Javora, M. Ke, D. Stevens, BJ Services Company
- 1528 19626 Proper Performance Testing to Maintain Seal Integrity in Deepwater Completions**  
B. Slay, Halliburton
- 1550 19297 Selecting Seal Materials for Deepwater Completions**  
J.E. Goodson, Baker Oil Tools
- 1612 19502 Fracture Mechanics-Based Fatigue Predictions for HP/HT Equipment**  
R. Cordes, R.I. San Pedro, Stress Engineering Services

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**WELL COMPLETIONS: PRODUCTION OPERATIONS AND INTERVENTIONS**

**Session Chairpersons:** Rusty Bayh, Halliburton Energy Services Group  
Riley Goldsmith, Goldsmith Engineering

- 1400 19182 Isolation Valve Contingencies Using Wireline Stroker and Tractor Technologies**  
B.J. Schwanitz, Welltec; J.L. Hupp, BP
- 1422 19657 Collaborative Effort Enables Repair of Prolific Gas Well With Solid-Expandable-Chrome Liner**  
P. York, Weatherford International
- 1444 19302 Downhole Tool Design Challenges for Deepwater Highly-Deviated Wells**  
M. Howell, M. Johnson, G. Roscoe, Halliburton Energy Services



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2008 OFFSHORE TECHNOLOGY CONFERENCE  
**WAVES OF CHANGE**  
 5-8 MAY :: RELIANT CENTER :: HOUSTON, TEXAS

## Tuesday Morning

Tuesday, 6 May, 0930 to 1200

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### PANEL: CHALLENGES TO DELIVERING TOMORROW'S ENERGY: ACHIEVING A BALANCE BETWEEN ENERGY SECURITY AND CLIMATE SECURITY

**Moderators:** Bob Fryklund, IHS  
 Ann Oglesby, ConocoPhillips

**Panelists:** Amy Myers Jaffe, Rice University  
 David Hobbs, CERA  
 Fatih Birol, International Energy Agency  
 Ann Hudson, Climate Control

**1058 19354 Challenges to Delivering Tomorrow's Energy: Achieving a Balance Between Energy Security and Climate**  
 B. Fryklund, HIS; Ann Oglesby, ConocoPhillips

Tuesday, 6 May, 1400 to 1630

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### CO2 CHALLENGE: MONITORING, MINIMIZATION, REMOVAL TECHNOLOGY AND DETECTION

**Session Chairpersons:** Klaas Koster, Shell International E&P  
 Joseph Reilly, ExxonMobil Upstream Research Company

**1400 19244 Multiphase Flow and Trapping of Carbon Dioxide in Deep Saline Aquifers**  
 S.M. Benson, F.M. Orr, Stanford University

**1422 19229 Draft Contribution to Future Guidelines for Licensing of CO2 Storage in Saline Formations and Depleted Hydrocarbon Reservoirs**  
 H. Groenenberg, ECN Policy Studies; B. Beck, IEA Greenhouse Gas R&D Programme; A. Chatwick, British Geological Survey; C. Bernstone, Vattenfall

**1444 19202 Integrated Monitoring Strategy for CO2 Sequestration Regulatory Management**  
 K.J. Dodds, J. Underschultz, Csiro Petroleum; S. Sharma, Schlumberger; M. Urosevich, Curtin University of Technology; D. Etheridge, Csiro Marine and Atmospheric Research; A. Kepic, Curtin University of Technology; D.H. Sherlock, Csiro Petroleum

**1506 19515 Carbon Storage in Deepsea Sediments: An Important Part of the CCS Portfolio**  
 D.P. Schrag, Harvard University

**1528 19558 Spatiotemporal Imaging for Continuous Monitoring of CO2 Storage in Geological Formations**  
 J. Harris, Stanford University

**1550 19532 Time-Lapse Seismic Modeling and Inversion of CO2 Saturation for Sequestration and Enhanced Oil Recovery**  
 M.A. Meadows, 4th Wave Imaging; D. Markus, Ikon Science; D.C. Adams, S.P. Cole, 4th Wave Imaging

**1612 19309 A General Standard for Subsurface CO2 Storage Capacity Calculations**  
 L. Van der Meer, TNO Institute Application Geosciences

Tuesday, 6 May, 0930 to 1200

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### KIKEH DEVELOPMENT

**Session Chairperson:** Michael McFadyen, Murphy Sabah Oil Company

- 0930 19481 Kikeh Development: Project Overview**  
M.K. McFadyen, S. Dechant, J.D. Weber, R.W. Jenkins, T.S. Shahrudin, Murphy Sabah Oil Company
- 0952 19482 Kikeh Development: Project Execution Model**  
S. Dechant, T. Stensgaard, Murphy Sabah Oil Company
- 1014 19639 Kikeh Development: Spar Topside Floatover Installation, Naval**  
D. Smiley, Murphy Sabah Oil Company; D. Edelson, M.Y. Luo, J. Halkyard, Technip
- 1036 19471 Kikeh Development: Design of the World's First Gravity Actuated Pipe Fluid Transfer System**  
P. Brown, E. Rooduijn, Single Buoy Moorings; G. Stone, Murphy Sabah Oil Company
- 1058 19637 Subsea Equipment Installation Challenges for Malaysia's First Deepwater Development**  
G. Murray, Technip; A. Ledingham, T. Stensgaard, I. Robertson, Murphy Sabah Oil Company; D. Lowther, Technip
- 1120 19469 Kikeh Development: Challenges in Implementing a Smart Field**  
A.J. Terry, R. Chan, Murphy Sabah Oil Company; D.R. Dixon, F. Gard, NSI
- 1142 19467 Kikeh Development: Delivering World-Class Completion Performance**  
T. Webb, N.F. Omar, K. Selamat, R.A. Desormeaux, P.M. Moran, Murphy Sabah Oil Company

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**Tuesday, 6 May, 0930 to 1200**

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**LNG INDUSTRY OVERVIEW AND NEW DESIGNS**

**Session Chairpersons:** Rebecca Maitland, Consultant  
Tere Sonne, Moffatt & Nichol

- 0930 19510 LNG Imports Into North America and Implications**  
M. Juden, T. Inglesby, S. Bodden, McKinsey & Company
- 0952 19636 LNG Terminal Expansions: Working Successfully Within a Live Plant**  
D. Tennison, Southern Natural Gas
- 1014 19658 Critical Parameters for LNG Marine Terminal Site Selection**  
T.R. Sonne, Moffatt & Nichol; J.G. Bomba, Technip
- 1036 19439 Engineering Considerations for Offshore FSRU LNG Receiving Terminals**  
R. Ho, Moffatt & Nichol
- 1058 19306 Update on LNG Facility Construction**  
J. Scotti, T. Phalen, Fluor Corporation
- 1120 19662 Overview of the LNG World Industry**  
W.R. True, *Oil and Gas Journal*
- 1142 19339 Trends and Technologies in LNG Carriers and Offshore LNG Facilities**  
Y.M. Lee, T. Cho, O.Y. Kwon, Daewoo Shipbuilding & Marine Engineering Company

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**Tuesday, 6 May, 0930 to 1200**

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**ADVANCES IN DEEPWATER DRILLING TECHNOLOGY**

**Session Chairpersons:** Tom Gee, Weatherford International  
Kieran Kavanagh, MCS

- 0930 19251 Fatigue Life Assessment of a Drilling Riser Containing Corrosion Pits**  
A.C. Benjamin, D.S. Cunha, G.C. Campello, F.E. Roveri, Petrobras; R.C. Silva, J.N. Guerreiro, LNCC
- 0952 19656 Solid Expandable Monobore-Openhole Liner Extends 13 3/8-in. Casing Shoe Without Hole Size Reduction for Deepwater Applications**  
P. York, Weatherford International
- 1014 19159 Steering Response for Directional Wells in Soft Formations in Deepwater Developments**  
R. Nygaard, Missouri S&T; R.A. Hartmann, Norske Shell; G. Hareland, University of Calgary; S. Hellvik, AGR-DPT

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**Tuesday, 6 May, 0930 to 1200**

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**ADVANCE FIELD DEVELOPMENT TECHNOLOGY: DRILLING, MODELING, SIMULATION, DESIGN, AND OPTIMIZATION**
**Session Chairperson:** Daniel Georgi, Baker Hughes

- 0930 19307 Drilling Through Bitumen in the Gulf of Mexico: The Shallower vs. the Deeper**  
G. Han, K.C. Hunter, J. Osmond, M.J. Zambonini, Hess Corporation
- 0952 19550 Overcoming Weight Transfer Challenges in Complex, Shallow, Extended-Reach Wells on Alaska's North Slope**  
S.O. McKeever, R.L. Thomas, D.D. Hartwig, ConocoPhillips; K. Holtzman, J. Patton, Halliburton Energy Services; L. Smith, Alaskan Energy Resources; D.B. Egedahl, ASRC Energy E&P Technology
- 1014 19455 Mature Offshore Fields Rejuvenation Through Long-Reach Wells and Massive Hydraulic Fracturing: Kitina Case History**  
L. Tealdi, D. Baldini, A. Casero, D. Isella, L. Riccobon, G. Obondoko, F. Itoua Konga, F. Pounga, F. Okassa, H. Malonga, M. Rampoldi, A. Baioni, Eni Congo
- 1036 19680 Deepwater Gas Fields Development Offshore Egypt: Concept Selection and Installation Aspects**  
W.F. El-Laithy, Agiba Petroleum Company; M. Gaber, Burullus Gas Company
- 1058 19451 Multilateral Wells To Improve Production Performance in Heavy-Oil Reservoirs: The Challenges of the ZAM-408ML Well**  
L. Tealdi, D. Baldini, A. Baioni, L. Riccobon, G. Obondoko, H. Malonga, F. Itoua Konga, D. Isella, F. Okassa, M. Rampoldi, Eni Congo
- 1120 19316 Modeling Overburden Stress Change Due to Compaction of Stacked Reservoirs, and Application of Model Results in 4D-Seismic and Infill Drilling**  
P.M. Schutjens, K.O. Hindriks, J. Van der Horst, C. Collins, Shell
- 1142 19320 Changing Reservoir Drill-In Fluids and Completion Strategies To Drill Sensitive Shale Reservoirs in High-Angle Wells in Bohai Bay**  
M.A. Dick, M-I Swaco; J.D. McRae, Kerr-McGee China Petroleum; D.M. Bump, Anadarko Petroleum Corporation; E.J. Van Dike, Kerr-McGee Oil & Gas Corporation; G.B. Phillips, M-I Swaco; C. Aldea, Smith
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**Tuesday, 6 May, 0930 to 1200**

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**MARINE GEOHAZARDS**
**Session Chairpersons:** Craig Scherschel, BP  
Rick Burrell, ExxonMobil

- 0930 19173 Reducing the Impact of Submarine Debris Flow on Pipelines**  
A. Zakeri, International Centre for Geohazards; K. Hoeg, F. Nadim, Norwegian Geotechnical Institute
- 0952 19280 Measured Swabbing Pressures and Implications for Shallow Gas Blowout**  
S. Kortekaas, J. Peuchen, Fugro
- 1014 19319 Geohazard Assessment and Avoidance on the GAZA Marine Subsea Development**  
N. Willis, Inetc Engineering (UK); E.J. Parker, D'Appolonia; I. Howard, BG BG
- 1036 19563 Geohazard Challenges of the Woodside OceanWay LNG Development, Offshore Southern California**  
P.J. Hogan, Fugro; A. Lane, Woodside Energy; J. Hooper, Fugro-McClelland Marine Geosciences; A. Broughton, Fugro; B. Romans, Stanford University
- 1058 19600 North Falkland Basin Palaeo Mega Furrows: Preliminary Investigations and Geohazard Potential**  
J.E. Gale, K.A. Day, RPS Energy
- 1120 19535 Modern Deepwater Site Investigation: Getting It Right the First Time**  
K.J. Campbell, G.D. Humphrey, R.L. Little, Fugro-McClelland Marine Geosciences
- 1142 19496 Impact on Wellsite Selection and Facilities Location/Fluid and Gas Expulsion: Impacts on Seafloor Geology and Biology**  
H.H. Roberts, Louisiana State University; W.W. Shedd, J.L. Hunt, Minerals Management Service



OTC.08



## Tuesday Afternoon

Tuesday, 6 May, 1400 to 1630

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### GENERAL SESSION: PETROLEUM—ENERGY OF THE FUTURE

**Moderators:** Mohamed Hamel, OPEC  
Hasan Qabazard, OPEC

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### ARCTIC OFFSHORE PROJECTS AND TECHNOLOGIES

**Session Chairpersons:** Nina Rach, *Oil and Gas Journal*  
Chandler Wilhelm, Shell E&P Company

- 1400 19526 Oooguruk Project Field Development Concept and Execution**  
J.D. Hall, Pioneer Natural Resources USA
- 1422 19343 Alaskan Beaufort Sea Exploration and Production Islands: Civil Design and Construction**  
J. Lucas, Sandwell; D.M. Masterson, Chevron Canada Resources; J.D. Hall, Pioneer Natural Resources Alaska; C.J. Perry, Perry Group
- 1444 19353 Oooguruk Offshore Arctic Flowline Design and Construction**  
G.A. Lanan, Intec Engineering; D.H. Maguire, B. Hazen, Northern Construction Engineering; J.D. Hall, Pioneer Natural Resources Alaska; C.J. Perry, Perry Group
- 1506 19359 Specialized AC Drilling Rig for Arctic Offshore Drilling Applications**  
J.R. Neason, Nabors Alaska Drilling
- 1528 19369 Waves, Ice, and River Discharge: Coastal Engineering Design of Arctic Offshore Production Facilities**  
C. Leidersdorf, P.E. Gadd, G.E. Hearon, Coastal Frontiers Corporation
- 1550 19275 Ice Management With Icebreakers in Support of Floating Platforms**  
A.J. Keinonen, E.H. Martin, AKAC
- 1612 19131 Safe and Environment Friendly Offshore Loading Systems for Arctic Conditions**  
R. Grindheim, K. Grenlee, J. Hovik, J.M. Grindheim, Aker Kvaerner Pusnes

Tuesday, 6 May, 1400 to 1630

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### RONCADOR FIELD DEVELOPMENT OVERVIEW: A CASE IN DEEP WATER

**Session Chairpersons:** Sandeep Khurana, Devon Energy Corporation  
Jacques Braile Salies, Petrobras America

- 1400 19254 An Overview of the Roncador Field Development: A Case in Deepwater Production**  
V.C. Barbosa, R. Dias, Petrobras
- 1422 19296 Reservoir Aspects and Well Development Strategy**  
P.P. Neves, M.K. Mihaguti, Petrobras
- 1444 19291 Challenges of Flow Assurance in the Roncador Field**  
G. Noe, R.F. Nascimento, S.G. Silva, P.F. Silveira, F.F. Rodrigues, Petrobras
- 1506 19274 Development of Subsea Facilities in the Roncador Field (P-52)**  
J.T. Lima, M.L. Kuppens, P.F. Stock, P.F. Silveira, Petrobras

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**Tuesday, 6 May, 1400 to 1630**

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**INVITED ORGANIZATION: SOCIETY FOR UNDERWATER TECHNOLOGY (SUT)****Session Chairperson:** Enda O'Sullivan, MCS

- 1400 19703 High-Integrity Pressure Protection Systems Development for the Gulf of Mexico: Update on DeepStar, API 170, and Industry Developments**  
C.J. Lindsey-Curran, BP
- 1422 19704 Sandwich Pipes for Ultradeepwater Applications**  
X. Castello, S.F. Estefen, University Federal Rio de Janeiro
- 1444 19705 Disconnectable FPSOs: Management and Experience From Australia Applied to Other Locations**  
E. O'Sullivan, MCS; M. Witton, Bentonic Consulting; J. Winkle, BHP Billiton
- 1506 19706 Subsea Challenges in Australia**  
C. Lawlor, Woodside Energy
- 1528 19707 Diverless Maintained Cluster Subsea Architecture: 14 Years of Experience**  
P.M. Roberts, J. White, R. Tucker, VerdErg
- 1550 19708 Developments in Underwater Technology and the Role of the Learned Society**  
I.N. Gallett, Society for Underwater Technology
- 1612 19709 Installing Disconnectable Turrets and Offloading Buoys**  
B.K. Green, BSW; K. McClure, Nexen Petroleum UK

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**Tuesday, 6 May, 1400 to 1630**

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**PANEL: CO2 SEQUESTRATION IN THE OFFSHORE ENVIRONMENT: CHALLENGES, OPPORTUNITIES, AND SOLUTIONS****Moderators:** Joseph Reilly, ExxonMobil Upstream Research Company  
Klaas Koster, Shell International E&P**Panelists:** Daniel P. Schrag, Harvard University  
Daniel R. Burns, Massachusetts Institute of Technology  
Kevin J. Dodds, CO2CRC/BP  
Heleen Groenenberg, ECN Policy Studies  
Sally M. Benson, Stanford University

- 1400 19710 Discussion on CO2 Sequestration**  
J.M. Reilly, ExxonMobil Upstream Research Company

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**Tuesday, 6 May, 1400 to 1630**

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**NEW APPROACHES TO MANAGING PRODUCTION FLOW****Session Chairpersons:** Tom Danielson, ConocoPhillips  
Joel Olener, PSR Group

- 1400 19525 Virtual-Metering Technology Field Experience Examples**  
P. Haldipur, G.D. Metcalf, Multiphase Solutions
- 1422 19140 Oilwell Testing by Injection of Miscible Fluid**  
J.J. Voelker, Chevron Corporation; N.C. Last, Sigma Oilfield Consulting
- 1444 19152 Evaluation of PhaseWatcher MPFM Performance in Sour Environments**  
M.N. Al-Khamis, A.F. Al Bassam, Saudi Aramco; M.N. Aftab, Z. Bakhteyar, Schlumberger
- 1506 19347 Leak Detection in Subsea Pipeline: A Mechanistic Modeling Approach With Fixed-Pressure Boundaries**  
S.I. Kam, Louisiana State University; R.N. Gajbhiye

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**Tuesday, 6 May, 1400 to 1630**

**600**

**WELL-COMPLETION TECHNOLOGY: HP/HT**

**Session Chairpersons:** Riley Goldsmith, Goldsmith Engineering  
Himanshu Gupta, BP

- 1400 19621 Development of a High-Temperature Rechargeable Battery for Downhole Use in Petroleum Industry**  
M.L. Fripp, D. Kyle, S. Hamid, D.W. Moore, Halliburton; J. Caja, Electrochemical Systems
- 1422 19264 Diagnosis of Well Performance Degradation on Elgin-Franklin HP/HT Fields Using Only Wellhead Temperature Measurements**  
G. Joffroy, Total E&P UK
- 1444 19201 Titanium Alloy Tubing for HP/HT Applications**  
M.E. Gonzalez, Chevron ETC; J.W. Skogsberg, Consultant; J.L. Kuberry, D.E. Reeves, Hunting Energy Service
- 1506 19366 Effects of Startup and Shutdown of HP/HT Wells on Wellbore Hydraulic Control-Line Design**  
C. Zhao, P.K. Notz, Technip Offshore
- 1528 19544 Structural Optimization of Subsea Pressure Vessel Equipment for HP/HT Application With a Design by Analysis: Case Study of a Typical BOP**  
S.I. Khandoker, P. Huff, G. Landthrip, Hydril Company
- 1550 19286 Real-Time Casing Annulus Pressure Monitoring in a Subsea HP/HT Exploration Well**  
J.P. Faget, N.W. Sultan, J. Sinet, Total; D.G. Fyfe, Metrol Technology; M. Fjeldheim, Total
- 1612 19632 Lessons Learned on the Openhole Completions for the Two HP/HT Retrograde Gas-Condensate Fields Using Expandable Liner Hangers, External Sleeve Inflatable Packer Collars, and Swell Packers for Zonal Isolation**  
J.W. Williford, Halliburton; I. Nizam, KNOC Vietnam; D.C. Lim, Halliburton; Y. Kim, K. Kwang, B. Murugappan, Korea National Oil Corporation; A.T. Jackson, Halliburton

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## Wednesday Morning

Wednesday, 7 May, 0930 to 1200

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### PANEL: NEW WAVES IN THE GULF OF MEXICO

**Moderators:** Sandeep Khurana, Devon Energy Corporation  
Thomas Miller, Chevron Corporation

**Panelists:**

Russ Ford, Vice President Technical, EP Americas, Shell  
Darrell Hollek, Vice President, GOM Operations, Anadarko  
Chris Oynes, Associate Director, MMS  
Brian Smith, General Manager, Major Capital Projects, Chevron  
Niel Shaw, Senior Vice President, Exploration and Production, BP

**0930 19259 New Waves in the Gulf of Mexico**  
S. Khurana, Devon Energy Corporation; T. Miller, Chevron Corporation

Wednesday, 7 May, 0930 to 1200

604

### IMPACT OF FATIGUE ON DEEPWATER DEVELOPMENT

**Session Chairpersons:** Robert McCavitt, Chevron Corporation  
Jean-Francois Saint-Marcoux, Acergy

**0930 19192 Improvement of Fatigue Life of Steel Catenary Risers and Oil Offloading Lines in West Africa**  
D. Bertaso, G. Hutt, P. Tews, Acergy

**0952 19240 Structural Integrity of Girth Welds in Deepwater Pipelines and SCRs**  
M. Cheaitani, TWI

**1014 19249 Influence of Fatigue Issues on the Design of SCRs for Deepwater Offshore Brazil**  
A.F. Torres, M.M. Mourelle, S.F. Senra, E.C. Gonzalez, J.T. Lima, Petrobras

**1036 19298 Enhanced Fatigue Methodologies for Flexible Risers and Applications for Brazilian Offshore Conditions**  
O. Serta, MCS; C.D. Lemos, A.G. Vaillant, Petrobras; C.R. Neves, C.T. Sanches, R.J. Smith, MCS

**1058 19425 Fatigue in Deepwater Steel Catenary Risers: A Probabilistic Approach for Assessment of Risk**  
T.K. Sen, Kellogg Brown & Root

**1120 19443 Managing Fatigue in Deepwater Flexible Risers**  
N.R. Nielsen, N. Weppenaar, D. De la Cour, C. Kristensen, NKT Flexibles

**1142 19198 Polyester Moorings: Is Insert Recovery and Testing the Best Way To Determine Rope Integrity?**  
R.R. Ayers, Stress Engineering Services; N. O'Hear, Tension Technology International

Wednesday, 7 May, 0930 to 1200

602

### FLOW ASSURANCE: IMPACT ON FIELD DEVELOPMENT

**Session Chairpersons:** Matthew Lamey, Anadarko Petroleum Corporation  
Wade Schoppa, Shell Global Solutions

**0930 19624 Design and Initial Results of EOR and Flow-Assurance Laboratory Tests for K2 Field Development**

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**Wednesday, 7 May, 0930 to 1200**

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**TOWARD THE INSTRUMENTED OILFIELD: EMERGING GEOPHYSICAL TECHNOLOGIES**

**Session Chairpersons:** Rocco Detomo, Shell International E&P Company  
Shuki Ronen, Chevron Corporation

- 0930 19391 Fiber-Optic Reservoir Monitoring: Field Trials and Results**  
J. Langhammer, H. Nakstad, M. Eriksrud, A. Berg, E. Ronnekleiv, O. Waagaard, Optoplan; M. Thompson, Statoil
- 0952 19383 Focused Seismic Monitoring on the Snorre Field**  
M. Thompson, M. Andersen, O. Lyse, Statoil
- 1014 19445 4C Fiber-Optic Permanently-Installed Sensor Cable for Seismic Reservoir Monitoring**  
S. Maas, B. Bunn, Petroleum Geo-Services
- 1036 19691 Emerging Geophysical Technologies: Is Planting and Replanting of Nodes in a 4C-4D Scenario the Optimum and Most Cost-Effective Solution for Field Reservoir Monitoring?**  
E. Berg, Seabed Geophysical; C. Vuillermoz, CGG Integrated Studies; G. Woje, Seabed Geophysical; G. Ekmann, Seabed
- 1058 19678 Optimum Optical Architectures for Seismic Reservoir Monitoring**  
A. Strudley, Stingray Geophysical
- 1120 19693 Emerging Geophysical Technologies: Downhole Microseismic Reservoir Monitoring—A New Instrumentation Technology for Monitoring the Digital Oil Field**  
S. Wilson, G. Le Floch, R. Jones, Schlumberger
- 1142 19213 Acoustic Signatures of Crossflow Behind Casing for Monitoring Production in Commingled Reservoirs**  
A. Bakulin, Shell International E&P; V. Korneev, Lawrence Berkeley Laboratory
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**Wednesday, 7 May, 0930 to 1200**

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**PANEL: ALTERNATIVE ENERGY—WHAT DOES THE FUTURE OFFER?**

**Session Chairpersons:** David Kanagy, Executive Director, SME  
George Luxbacher, President Elect, SME

The panel will examine the future of selected alternative energy sources such as natural gas, tar sands, nuclear energy, wind, and tidal. The participants will highlight the relative advantages and disadvantages of each as well as the economic, political, and environmental issues associated with them.

**Panelists:** Mike Ashar, SunCor  
Ahmed Hashmi, BP-UK  
David Eppinger, Fluor Corporation

- 1058 19491 Alternative Energy Sources**  
G.L. Richardson, Consultant
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**Wednesday, 7 May, 0930 to 1200**

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**HYDRATES: GEOLOGY AND RESOURCE ASSEMENT**

**Session Chairpersons:** George J. Moridis, Lawrence Berkeley Laboratory  
Hideo Narita, National Institute of Advanced Industrial Science and Technology

- 0930 19241 Geology of Marine Gas Hydrates and Their Global Distribution**  
T.S. Collett, US Geological Survey
- 0952 19519 Four Critical Needs to Change the Hydrate Energy Paradigm From Assessment to Production: The 2007 Report to Congress by the US Federal Methane Hydrate Advisory Committee**  
E.D. Sloan, Colorado School of Mines
- 1014 19414 The Research Path to Determining the Resource Potential of Marine Gas Hydrates**  
R. Boswell, US Department of Energy

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**Wednesday, 7 May, 0930 to 1200**

**600**

**ENVIRONMENTAL CONSTRAINTS ON DEEPWATER WELLS AND FACILITIES SITTING**

**Session Chairpersons:** Adam Jackson, Chevron  
Herlinde Mannaerts, BP America

- 0930 19355 Impact on Well Site Selection and Facilities Location: Developing a Better Bio-Geology Overview and Information Needs for Effective Assessment of the Environmental Risks of Deepwater Oil and Gas Development**  
R.S. Carney, LSU
- 0952 19360 Impact on Wellsite Selection and Facilities Location: Puma, a Cornucopia of Deepwater Geohazards**  
R.J. Weiland, G.P. Adams, R.D. McDonald, L.M. Wills, BP
- 1014 19358 AUV and ROV Data Integration To Identify Environmentally Sensitive Areas in Deep Water**  
A.T. Hewitt, J. Smith, Fugro; R.J. Weiland, BP
- 1036 19356 Impact on Wellsite Selection and Facilities Location: Integrated Site Investigation of Seafloor Features and Associated Fauna, Shenzi Field, Deepwater Gulf of Mexico**  
S.C. Williamson, N. Zois, BHP Billiton Petroleum; A.T. Hewitt, Fugro Geoservices
- 1058 19348 Geophysical and Visual Identification of Chemosynthetic Communities Near Perdido Canyon**  
T.W. Neurauter, Geoscience Earth & Marine Service
- 1120 19352 Environmental Constraints on Deepwater Wells and Facilities Sitting**  
E.C. Cauquil, Total; J. Adamy, Sage Geodia
- 1142 19461 Improved Assessment of Chemosynthetic Community Presence in Areas of Potential Deepwater Oil and Gas Development by Modification of Routine Sampling Methods**  
D.R. McConnell, J.J. Gharib, AOA Geophysics; D.L. Orange, Black Gold Energy; J. Henderson, H. Danque, AOA Geophysics; A.J. Digby, Fugro

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## Wednesday Afternoon

Wednesday, 7 May, 1400 to 1630

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### GENERAL SESSION: GLOBAL ENERGY OUTLOOK—WHAT ARE THE CHALLENGES?

**Moderators:** Ahmed Atif Hashmi, OPEC  
Melanie Kenderdine, Massachusetts Institute of Technology

To meet today's and tomorrow's energy needs, all available energy sources must be accessed, enhanced, and utilized in both the developed and developing world. The questions that have captured many news headlines worldwide are: Why are oil and gas prices at their current level, and what are the challenges ahead to provide sustainable and affordable supplies of oil and natural gas? Some of the challenges ahead include new technological developments that increase exploration, enhance oil recovery, and reduce costs; uncertainty of future supply and future investments; tightness in the downstream refining sector; access to resource; rising project costs; environmental concerns such as CO<sub>2</sub>; and government energy policy and its role in protecting companies' assets and providing skilled labor resources.

**Panelists:** Martin Craighead, Group President, Baker Hughes  
William Davie, CFO, Schlumberger  
James A. Slutz, Deputy Assistant Secretary for Oil and Gas, US Department of Energy  
Nick Lampson, Chair of the Energy Committee, US Congressman

Wednesday, 7 May, 1400 to 1630

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### ACG PROJECT IN CASPIAN SEA

**Session Chairpersons:** John Bomba, Technip  
Sandeep Khurana, Devon Energy Corporation

**1400 19235 ACG Program: Performance Enabled Through a Production Line of Standardized Concepts and Components Delivered at Scale**  
B. Luberski, N. Shaw, M. Brown, A. Luckins, G. Withers, BP Exploration Caspian Sea

**1422 19236 ACG Topside Design and Fabrication**  
C.L. Kearney, M. James, BP Exploration Caspian Sea; G. Tate, T. Nethercott, KBR

**1444 19218 ACG Jacket Design and Fabrication**  
R. Ciezarek, KBR; A.D. Penman, A. Cormack, BP Exploration Caspian Sea; R. Mackie, BOS Shelf; G. Tate, KRB

**1506 19238 ACG Phase-3 Subsea Water-Injection Scheme**  
A. Richmond, P. Barralet, BP Exploration Caspian Sea

**1528 19447 ACG Onshore Terminal Expansion**  
N. Ingram, J. Sutcliffe, J. Lilley, BP Exploration Caspian Sea; D. Ellis, KBR

**1550 19237 ACG Marine Delivery**  
F. Wilson, A. Munro-Kidd, BP Exploration Caspian Sea

**1612 19217 ACG Offshore Platforms Temporary Pin-Pile Foundations**  
N. Kitney, A.D. Penman, BP

Wednesday, 7 May, 1400 to 1630

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### FLOW ASSURANCE: SOLIDS MANAGEMENT

**Session Chairpersons:** Tom Sifferman, ETPP Consulting  
Aditya Singh, Total E&P

- 1400 19690 Mechanism and Simulation of Asphaltene Deposition**  
J.L. Creek, Chevron ETC
- 1422 19247 Developing Hydrate Monitoring and Early-Warning Systems**  
B. Tohidi, A. Chapoy, J. Yang, F. Ahmadloo, I. Valko, Heriot-Watt University; Z.M. Zain, Petronas
- 1444 19160 Design Challenges Due to Wax on a Fast-Track Deepwater Project**  
A.T. Alwazzan, AMEC Paragon; M.W. Utgard, Paragon Engineering Companies; D. Barros, Petrobras
- 1506 19514 Predicting When and Where Hydrate Plugs Form in Oil-Dominated Flowlines**  
E.D. Sloan, C.A. Koh, J. Boxall, S. Davies, D. Greaves, J. Lachance, Colorado School of Mines
- 1528 19505 Two Field Case Studies Demonstrate That New LDHI Chemistry Performs Even at High Water Cuts Without Impacting Oil/Water Quality**  
R.R. Alapati, J. Lee, D. Beard, Champion Technologies
- 1550 19634 Hydrates Blockage Experience in a Deepwater Subsea Dry-Gas Pipeline: Lessons Learned**  
M. Kane, A.P. Singh, Total E&P
- 1612 19154 Application of Paraffin Inhibitor Treatment Programs in Offshore Developments**  
M.E. Newberry, Baker Petrolite Corporation; D.W. Jennings, Welchem

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### Wednesday, 7 May, 1400 to 1630

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## ELECTROMAGNETICS: OUT OF THE LABORATORY AND INTO THE BOARDROOM

**Session Chairpersons:** David Ridyard, emgs  
Larry Scott, Global Geophysical Services  
Daniel Orange, Black Gold Energy

- 1400 19370 High Grading Prospect Portfolios Using EM Data**  
J. Willoughby, Shell International E&P
- 1422 19295 On the Use of EM Technology in the Exploration Decision-Making Process**  
J. Mohr, C. Guargena, W. Svellingen, S. Sorensen, Aker Exploration
- 1444 19702 Application of Electromagnetic Scanning to an Australian Frontier Basin With Complex Bathymetry**  
D.J. Monk, J. Ross, Apache; F. Roth, emgs
- 1506 19541 Marine Transient Controlled-Source Electromagnetics: A Novel Marine Electromagnetic Technique—Results From BP's Egypt Field Trial**  
D. Meaux, S. Li, L. Thomsen, A. Sharma, BP
- 1528 19188 Reservoir Characterization Through Joint Interpretation of EM, Seismic, and Well-Log Data**  
L. MacGregor, OHM; P. Harris, Rock Solid Images; D. Andreis, OHM
- 1550 19659 Marine Magnetotelluric Data Interpretation in the Gulf of Mexico for Subsalt Imaging**  
S.K. Sandberg, T. Roper, T. Campbell, WesternGeco Electromagnetics
- 1612 19421 Seabed Logging Survey Design Optimization Using Grid Modeling**  
J.E. Danielsen, A.H. Bhuiyan, emgs

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### Wednesday, 7 May, 1400 to 1630

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## DEEPWATER MARGINAL FIELDS: OVERCOMING THE CHALLENGES

**Session Chairpersons:** Greg Carter, Nautilus Offshore Company  
Mauricio Werneck, Petrobras

- 1400 19517 Installation-Driven Field Developments for Deepwater Subsea Projects**  
M.A. Dixon, DeepSea Engineering & Management
- 1422 19642 The Next Major Challenge for Deep Water: Developing Marginal Fields**  
K.K. Millheim, Global Drilling Fluids
- 1444 19511 Deepwater Horizontal ESP Pumping Station Development**  
L. Farestvedt, FMC Technologies; M. Neto, Petrobras

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**Wednesday, 7 May, 1400 to 1630**

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**HYDRATES: LABORATORY STUDIES FOR HYDRATE PROPERTY DETERMINATION**

**Session Chairpersons:** Masanori Kurihara, Japan Oil Engineering Company  
E. Dendy Sloan, Colorado School of Mines

- 1400 19284 Estimation of the In-Situ Permeability of Nankai Trough Hydrate Bearing Sediments From PTCS Core Measurements**  
T. Ebinuma, K. Suzuki, H. Narita, National Institute of Advanced Industrial Science and Technology
- 1422 19536 Hydrate Relative Permeability of Methane-Hydrate-Bearing Sand**  
T.J. Kneafsey, Y. Seol, Lawrence Berkeley National Laboratory; A. Gupta, Shell; L. Tomutsa, Lawrence Berkeley Laboratory
- 1444 19305 Relation Between Permeability and Pore-Size Distribution of Methane-Hydrate-Bearing Sediments**  
H. Minagawa, Y. Nishikawa, I. Ikeda, K. Miyazaki, N. Takahara, Y. Sakamoto, T. Komai, H. Narita, National Institute of Advanced Industrial Science and Technology
- 1506 19379 Estimation of Thermal Properties of Methane-Hydrate Sediment**  
Y. Yamamoto, M. Ohtake, T. Kawamura, National Institute of Advanced Industrial Science and Technology; T. Tsuji, College of Industrial Technology, Nihon University; Y. Tsukada, National Institute of Advanced Industrial Science and Technology
- 1528 19601 Borehole Pressure Coring and Laboratory Pressure-Core Analysis for Gas Hydrate Investigations**  
G.D. Humphrey, Fugro-McClelland Marine Geosciences
- 1550 19376 Dissociation Rate Analysis From Methane-Hydrate-Bearing Core Samples by Using Depressurization or Depressurization With Well-Wall Heating Method**  
H. Oyama, T. Ebinuma, J. Nagao, K. Suzuki, H. Narita, National Institute of Advanced Industrial Science and Technology; Y. Konno, Y. Masuda, University of Tokyo
- 1612 19326 Thermodynamic Conditions and Kinetics of Integrated Methane Recovery and Carbon Dioxide Sequestration**  
B. Tohidi, J. Yang, A. Chapoy, Heriot Watt University; P.S. Jadhawar, University of Adelaide
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**Wednesday, 7 May, 14:00 to 16:40**

600

**OFFSHORE ENVIRONMENT AND STRUCTURAL RESPONSE**

**Session Chairpersons:** Ian Chu, Kellogg Brown & Root  
Jason Newlin, Shell Oil Company

- 1400 19565 Monitoring of Floating Offshore Installations' Wave Frequency Motions**  
P. Liagre, H. Gupta, H. Banon, BP
- 1422 19618 The Case Against Severe Cold Eddies**  
C.K. Cooper, Chevron ETC
- 1444 19413 Life and Times of Eddy Zorro: A Review of the 2007 Gulf of Mexico Loop Current Activity**  
S.P. Anderson, P.D. Coholan, Horizon Marine; S. Frolov, Accurate Environmental Forecasting
- 1506 19477 A Methodology for Derivation of Motions of Offshore Platforms From Accelerometers and GPS Field Measurements**  
V. Gkaras, H. Gupta, H. Banon, BP; P.D. Spanos, Rice University
- 1528 19180 A Riser and Mooring-Monitoring System for Floating-Production Systems**  
T.J. Brown, BP; A. Smith, SRD
- 1550 19534 Analyses and Measurements of Conductor Response for Jack-Up Drilled Wells in 110 m Water Depth in Harsh Environments**  
A. North, Noble Denton Consultants; M. Baerheim, Statoil; O. Steinkjer, Det Norske Veritas
- 1612 19429 A Coupled FE-SPH Approach for Simulation of Structural Response to Extreme Wave and Green-Water Loading**  
J. Campbell, R. Vignjevic, M.H. Patel, Cranfield University

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## Thursday morning

Thursday, 8 May, 0930 to 1200

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### OFFSHORE STRUCTURES STANDARDS: A NEW ERA

**Session Chairpersons:** Subir Bhattacharjee, ExxonMobil Upstream Research Company  
Robert Spong, Energo Engineering

- 0930 19605 ISO 19900 Series: Offshore Structures Standards**  
R.O. Snell, BP Exploration; D.J. Wisch, Chevron ETC
- 0952 19604 ISO 19901-xx, General Standards: The Why and How**  
D.J. Wisch, Chevron ETC
- 1014 19608 ISO Floating and Fixed Standards ISO 19902, ISO 19903, and ISO 19904**  
D.N. Galbraith, D.J. Wisch, Chevron ETC
- 1036 19606 Changing Times**  
D.J. Wisch, Chevron ETC; A. Mangiavacchi, Experia Consulting
- 1058 19602 Development of API RP2 Met: The New Path for Metocean**  
J.B. Stear, Chevron
- 1120 19603 API RP 2T and RP 2 FPS: Moving Forward**  
S.J. Leverette, Atlantia Offshore; D.J. Wisch, Chevron ETC
- 1142 19607 API RP 2 SK: Station Keeping—An Emerging Practice**  
D.J. Petruska, BP; D.J. Wisch, Chevron ETC

Thursday, 8 May, 0930 to 1200

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### GEOTECHNICAL ISSUES FOR RISERS AND FLOWLINES

**Session Chairpersons:** Robert Gilbert, University of Texas at Austin  
James Murff, Texas A&M University

- 0930 19589 Pipe/Soil Interaction With Flowlines During Lateral Buckling and Pipeline Walking: The Safebuck JIP**  
D.A. Bruton, Boreas Consultants; M. Bolton, Cambridge University; D. White, M. Carr, Boreas Consultants
- 0952 19493 Interaction Model for Steel Compliant Riser on Soft Seabed**  
C.P. Aubeny, G. Biscontin, Texas A&M University
- 1014 19432 Riser Seafloor Interaction Using Explicit Finite Element Methods**  
P. Jacob, MMI Engineering; P.P. Sharma, DnV Energy
- 1036 19261 Flowline and Riser: Soil Interaction in Plastic Clays**  
H. Dendani, Total
- 1058 19219 Reassessment of P-Y Curves for Soft Clays From Centrifuge Testing and Finite Element Modeling**  
P. Jeanjean, BP; J.S. Templeton, Sage USA; E. Clukey, E.A. Liedtke, BP
- 1120 19128 Pipeline Embedment in Deep Water: Processes and Quantitative Assessment**  
M.F. Randolph, D. White, University of Western Australia
- 1142 19303 Long-Term Soil Stiffness for Assessment of Fatigue for Steel Catenary Risers at Touch-Down Point**  
E.C. Clukey, BP Exploration; A.G. Young, Geoscience Earth & Marine Service

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**Thursday, 8 May, 0930 to 1200**

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**MEETING THE CHALLENGES OF ULTRADEEPWATER PIPELINE INSTALLATIONS**

**Session Chairpersons:** Robert McCavitt, Chevron Corporation  
Skipper Strong, J. Ray McDermott Engineering

- 0930 19329 Strain Criteria for Deepwater Pipe Laying Operations**  
I. Frazer, D. Perinet, Acergy
- 0952 19372 Investigation Into the Limit State Design of XHP/HT PIP Flowlines Using Local and Global Finite Element Analysis Methods**  
P. Jukes, J. Sun, A. Eltaher, J P Kenny
- 1014 19400 Advancements in Response Prediction Methods for Deepwater Pipe-In-Pipe Flowline Installation**  
D. Lang, R. O'Grady, MCS; H. Bakkenes, Heerema Marine Contractors; A. Connaire, MCS
- 1036 19441 Jet-Induced Trenching Operations: Mechanisms Involved**  
J. Vanden Berghe, Fugro Engineers; H. Capart, National University of Taiwan
- 1058 19459 Evaluation of Landslide Impact on Deepwater Submarine Pipelines**  
C. Traverso, E.J. Parker, D'Appolonia; R. Moore, Halcrow Group; T. Evans, BP
- 1120 19498 A Novel Method for Coiled-Tubing Installation**  
P. Simpson, S. Hatton, 2H Offshore
- 1142 19513 3D Modeling Improves Deepwater Umbilical Design Dependability**  
M.A. Dixon, DeepSea Engineering & Management
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**Thursday, 8 May, 0930 to 1200**

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**SUBSEA PROCESSING**

**Session Chairpersons:** Peter Metcalf, J P Kenny  
Sandeep Khurana, Devon Energy Corporation

- 0930 19328 Functional Verification of the World's First Full-Field Subsea Separation System, TIORA**  
G. Mogseth, FMC Technologies
- 0952 19492 Technical Challenges and Production Forecast for Subsea-Compression System**  
B. Oiungen, F. Gustavsson, R. Morgan, J. Solvik, DNV
- 1014 19287 Electric/Hydraulic vs. All-Electric Subsea Control: A Risk-Based Comparison From the Ormen Lange Subsea-Compression Development**  
K.A. Joergensen, Det Norske Veritas; K. Haram, Hydro; F. Gustavsson, A. Stokke, Det Norske Veritas
- 1036 19334 Extending the Use of Conventional Construction Technology for the Installation of Subsea Production Facilities in Deep Water**  
O. Vennemann, Acergy; R. Tornqvist, DNV
- 1058 19531 Compact Electrostatic Separation Process**  
D.L. Taggart, G.W. Sams, H.G. Wallace, D. Manen, Natco
- 1120 19389 The Pipe Separator: Simulations and Experimental Results**  
S. Sagatun, P. Gramme, G.H. Lie, StatoilHydro; T. Gilhuus, Norsk Hydro; T. Ruud, O.J. Horgen, M. Storvik, FMC Technologies
- 1142 19539 Improving Reliability and Reducing Intervention Costs of Ultradeep Subsea Technology at the Design Stage**  
P. Fanailoo, G. Andreassen, Det Norske Veritas
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**Thursday, 8 May, 0930 to 1200**

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**MODERN LNG MARINE TERMINALS**

**Session Chairpersons:** George Montgomery, J. Ray McDermott Engineering  
Karl Gerdes, Chevron

- 0930 19267 Preparing the Way for Future Offshore LNG Marine Terminals**  
P.J. Cox, Technip
- 0952 19405 Qualification of a New Flexible-Hose-Based LNG Transfer System at the Gaz de France Montoir-de-Bretagne LNG Terminal**  
G. Rombaut, A. Peigne, Gaz de France
- 1014 19396 Lightening the Load, LNG**  
Y. Mason, FenderCare Marine
- 1036 19337 Marine Support to Offshore LNG Terminals**  
J. Gourmelon, Tidewater Marine
- 1058 19239 Innovative Pipe System for Offshore LNG Transfer**  
C. Frohne, F. Harten, Nexans Deutschland Industries
- 1120 19551 Onshore vs. Offshore LNG Import Facilities: Commercial Advantages and Limitations**  
H.K. Danielsen, G. Andreassen, Det Norske Veritas
- 1142 19351 Industry Experience Strengthens Guidance for Offshore LNG Terminals**  
I. Simpson, H.N. Patel, P.G. Rynn, ABS

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### Thursday, 8 May, 0930 to 1200

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## HYDRATES: GAS PRODUCTION STRATEGIES AND PROCESSES

**Session Chairpersons:** Ray Boswell, US Department of Energy  
E. Dendy Sloan, Colorado School of Mines

- 0930 19382 Prediction of Gas Productivity From Eastern Nankai Trough Methane-Hydrate Reservoirs**  
M. Kurihara, A. Sato, H. Ouchi, Japan Oil Engineering Company; H. Narita, National Institute of Advanced Industrial Science and Technology; Y. Masuda, University of Tokyo; T. Saeki, T. Fujii, Jgmecc
- 0952 19554 Sensitivity Analysis of Gas Production From Class 2 and Class 3 Hydrate Deposits**  
M.T. Reagan, G.J. Moridis, K. Zhang, Lawrence Berkeley National Laboratory
- 1014 19283 Field-Scale Simulation for Compaction and Gas Production Behavior During Depressurization Process of Methane Hydrate in Marine Sediments**  
Y. Sakamoto, T. Komai, N. Tenma, T. Yamaguchi, National Institute of Advanced Industrial Science and Technology
- 1036 19435 Field-Scale Studies on the Enhanced Performance of Class 2 and Class 3 Hydrate Deposits Through Coproduction With Conventional Gas**  
G.J. Moridis, M.T. Reagan, K. Zhang, Lawrence Berkeley National Laboratory
- 1058 19433 Improvement of Near-Wellbore Permeability by Methanol Stimulation in a Methane Hydrate Production Well**  
Y. Masuda, Y. Konno, University of Tokyo; T. Kawamura, National Institute of Advanced Industrial Science and Technology; M. Kurihara, H. Ouchi, Japan Oil Engineering Company
- 1120 19458 Numerical Simulation of Methane-Hydrate Production From Geologic Formations by Carbon Dioxide Injection**  
M.D. White, B.P. McGrail, Pacific NW National Laboratory
- 1142 19568 Use of Analytical Models and Monte Carlo Simulation for Quantification of Uncertainties Associated With Gas Production From Type I Hydrate Reservoirs**  
M. Pooladi-Darvish, S. Gerami, Fekete Associates

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### Thursday, 8 May, 0930 to 1200

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## WELL COMPLETION EQUIPMENT AND METHODS

**Session Chairpersons:** Riley Goldsmith, Goldsmith Engineering  
Ryan Dornak, Weatherford International

- 0930 19623 New Reservoir Testing/Sampling System Reduces Costs and Improves Real-Time Data Acquisition in Deepwater and Environmentally Sensitive Wells: Gulf of Mexico Case Histories**  
E.A. Almanza, H. Kool, M.A. Salguero, Halliburton



# OTC.08

2008 OFFSHORE TECHNOLOGY CONFERENCE  
**WAVES OF CHANGE**  
 5-8 MAY :: RELIANT CENTER :: HOUSTON, TEXAS

## Thursday afternoon

Thursday, 8 May, 1400 to 1630

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### VIV

**Session Chairperson:** Dan Smith, Mustang Engineering

**1400 19670 Full-Scale VIV Response Measurements of a Drillpipe in Gulf of Mexico Loop Currents**

P.A. Beynet, M. Campbell, R.B. Shilling, BP; E. Tellier, 2H Offshore

**1422 19373 Fairings vs. Helical Strakes for Suppression of Vortex-Induced Vibration: Technical Comparisons**

D.W. Allen, L. Lee, D. Henning, Shell

**1444 19374 Fairings vs. Helical Strakes for Suppression of Vortex-Induced Vibration: Installation, Maintenance, and Economic Considerations**

D.W. Allen, C. West, L. Lee, D. Henning, Shell

**1506 19289 Effectiveness of Polyethylene Helical Strakes in Suppressing VIV Responses After Sustaining High Roller-oad Damage During S-Lay Installation**

R. Boubenider, Stress Engineering Services; K. Alptunaer, Eni Petroleum Company; P.J. Fourchy, Murphy E&P Company; J. De Wilde, Marin

**1528 19161 Tests With a Flexible Pseudofairing To Reduce Riser Drag, Suppress VIV, and Limit Drilling Downtime**

R. King, RKconsulting; A. Brown, Allbrown Universal Components

**1550 19591 Vortex-Induced Vibrations of Marine Risers**

A.E. Spiller, Texas A&M University at Galveston

Thursday, 8 May, 1400 to 1630

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### PROJECT EXPERIENCE ON FLOATOVER DECKS

**Session Chairperson:** Sandeep Khurana, Devon Energy Corporation

**1400 19230 Floatover of Arthit APP Deck**

A. Kocaman, D. Kim, J. Seto, J. Ray McDermott

**1422 19227 Topside and Jacket Modeling for Floatover Installation Design**

J. Hamilton, R. French, KBR; A.D. Penman, BP; P. Rawstron, KBR

**1444 19300 Arthit Field Development: Floatover Hardware Design and Issues**

B. Tan, J.A. Haney, B. Leow, S. Sahasrabudhe, J Ray McDermott

**1506 19231 New Floatover Hardware**

D. Kim, A. Kocaman, J. Seto, J. Ray McDermott

Thursday, 8 May, 1400 to 1630

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### FROM DRILLING TO PRODUCTION: ALL OF THE ABOVE

**Session Chairperson:** Gamal Hassan, Baker Hughes

**1400 19650 Imaging Downed Platforms**

J.P. Davis, BP; R. Butcher, Fugro Chance; M. Taylor, R.D. Lynch, BP; R. Simpson, Fugro Chance; T. Philips, BP; G. Openshaw, PanGeo Subsea

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**Thursday, 8 May, 1400 to 1630**

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**LNG TECHNOLOGY 2008**

**Session Chairpersons:** Tom Rodkey, Hydrocarbon Processing Solutions  
Jack Smart, John Smart Consulting Engineers

- 1400 19393 Heavy Production Platform for Offshore LNG Development**  
J. Cholley, P.A. Thomas, G. Lebois, P. Maniere, Technip
- 1422 19450 The Impact of the Use of the Full QTF on LNG Moored in Shallow Water**  
C. Brun, F.C. Rezende, Bureau Veritas; M. Naciri, Single Buoy Moorings; J. Mombaerts, Bureau Veritas
- 1444 19516 Energy-Based Methodology for Collision Protection for LNG Carriers**  
C.J. Deetjen, R. Pitblado, E. Skramstad, H.K. Danielsen, Det Norske Veritas
- 1506 19561 A New Experimental Study on the Spreading of Liquid Nitrogen Over Water**  
F. Gavelli, M.K. Chernovsky, H.K. Kytomaa, Exponent
- 1528 19630 LNG Terminals: Towards Advanced LNG Offshore Design and Operations**  
M. Zalar, L. Diebold, F.C. Rezende, Bureau Veritas
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**Thursday, 08 May, 1400 to 1630**

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**HYDRATES: PRODUCTION-RELATED GEOMECHANICAL AND GEOPHYSICAL PROCESSES**

**Session Chairpersons:** Masanori Kurihara, Japan Oil Engineering Company  
George Moridis, Lawrence Berkeley Laboratory

- 1400 19559 Mechanical Strength and Seismic Property Measurements of HBS During Hydrate Formation and Loading Tests**  
S. Nakagawa, T.J. Kneafsey, G.J. Moridis, Lawrence Berkeley Laboratory
- 1422 19277 Mechanical Properties of Natural Gas Hydrate-Bearing Sediments Retrieved From Eastern Nankai Trough**  
A. Masui, K. Miyazaki, H. Haneda, Y. Ogata, K. Aoki, National Institute of Advanced Industrial Science and Technology
- 1444 19324 Laboratory Study of Hydraulic Fracturing Behavior in Unconsolidated Sands for Methane Hydrate Production**  
T. Ito, Tohoku University; A. Igarashi, K. Suzuki, National Institute of Advanced Industrial Science and Technology; S. Nagakubo, M. Matsuzawa, Japan Drilling Company; K. Yamamoto, Japan Oil, Gas & Metals National Company
- 1506 19572 Coupled Hydrologic, Thermal, and Geomechanical Analysis of Wellbore Stability in Hydrate-Bearing Sediments**  
J. Rutqvist, G.J. Moridis, Lawrence Berkeley Laboratory
- 1528 19364 Coupled Soil Deformation-Flow-Thermal Analysis of Methane Production in Layered Methane Hydrate Soils**  
K. Soga, A. Ng, University of Cambridge; A. Klar, Technion-Israel Institute of Technology
- 1550 19260 Ultrasonic Wave Velocities Associated With Formation and Dissociation of Methane Hydrate in Artificial Sandy Sediments**  
T. Ebinuma, K. Suzuki, J. Nagao, H. Oyama, H. Narita, National Institute of Advanced Industrial Science and Technology
- 1612 19489 Feasibility of Monitoring Gas Hydrate Production With Geophysical Methods**  
M.B. Kowalsky, G.J. Moridis, Lawrence Berkeley Laboratory
- .....

**Thursday, 8 May, 1400 to 1630**

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**PIPELINES**

**Session Chairpersons:** John Bomba, Technip

- 1400 19573 Experimental Modeling of the Unburial Behavior of Pipelines**  
B.W. Byrne, University of Oxford; A. Maconochie, J. Oliphant, Technip; D. Cathie, Cathie Associates
- 1422 19653 Methodology To Establish the Fitness for Continued Service of a Hurricane-Damaged Export Pipeline in 1000 m of Water**  
D. Raghu, Shell Global Solutions US; R.C. Swanson, RCS Engineering; C.R. Alexander, Stress Engineering Services; M.H. Dupre, M. Zhang, Shell
- 1444 19668 Pipeline Floatation Assessment in Partially Liquefied Seabed**  
D. Bonjean, C. Erbrich, Advanced Geomechanics; J. Carter, University of Newcastle; G. Zhang, Advanced Geomechanics
- 1506 19688 Design, Fabrication, and Installation of the Neptune Export Lateral PLETs**  
J. Antani, Enbridge Offshore Pipelines
- 1528 19207 DW RUPE: A New Deepwater Pipeline Repair Capability for the Gulf of Mexico and Other Deepwater Regions**  
R.R. Ayers, Stress Engineering Services; M. Stark, Enterprise Products Partners; A. Rebello, Stress Subsea
- 1550 19521 Optimized Pipeline Routing**  
L.C. McClure, Global Industries; M.A. Dixon, DeepSea Engineering & Management
- 1612 19504 Solving Pipeline Technology Challenges in the Gulf of Mexico by Innovation, Advanced Analysis Tools, and Engineering Competency**  
P. Jukes, J. Wang, B. Duron, J P Kenny

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