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June 26–July 1, Rhodes (Rodos), Greece

The Twenty-sixth (2016) International
***Ocean and Polar
Engineering Conference***
(Offshore and Polar Engineering Conference)

Including additional ISOPE symposia:

1st Underwater Systems

2nd Materials Reliability & Refinery

4th High Manganese Steel

5th Tsunami & Safety

5th Asset Integrity

7th Arctic Science & Technology

6th Arctic Materials

7th Renewable Energy & Environment

8th Sloshing Dynamics & Design

8th Frontier Energy Tech

10th Strain-Based Design

14th High-Performance Materials

ISOPE-2016

Rhodes, Greece, June 26–July 1

*Updated
Technical Program*

Refereed papers from 50+ countries in 155 technical sessions
4 Plenary and 4 keynote presentations

Full Program with Paper List, General Information, Reservations,
Publications and Updates on

<http://www.isopec.org/publications/publications.htm>

ISOPE-2016 Conference proceedings

ISBN 978-1-880653-88-3; ISSN 1098-6189

Forms for Advance Registration and Venue Hotel:

<http://www.isopec.org/conferences/conferences.htm>

Organized by:

Technical Program Committee, ISOPE

Sponsored by:

International Society of Offshore and Polar Engineers (ISOPE)

With cooperating organizations (listed inside)



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Cupertino, CA 95015-0189, USA

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Reception and Registration: ISOPE-2015



Annual Conference Banquet: ISOPE-2015



ISOPE-2016 Rhodes

The 26th Annual International Ocean and Polar Engineering
Conference, Rhodes (Rodos), June 26-July 1, 2016

**Expanded Session List and Full Program (digital)
with Paper List: Download from**

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**ISOPE Journals and Conference Proceedings and Order
Form:**
<http://www.isopec.org/publications/publications.htm>

**12th ISOPE PACOMS-2016 Symposium, Gold Coast/
Brisbane, Australia, October 4-8, 2016**

**27th Annual ISOPE-2017 Conference, San Francisco,
California, USA, June 25-30**

**12th ISOPE Ocean Mining and Gas Hydrates Symposium
(OMS/ OMGH-2017), Sapporo, Japan, September 13-15, 2017**

2016 Corporate Members and Supporters
 Additional supporters to be added



2015 ISOPE Awards: Session Organizer (Germany), CH Kim (USA), ISOPE (Japan), two 2014 Best Papers (Korea, USA), 2015 Best Student Paper (Russia), and 4 Scholarships at the ISOPE-2015 Conference Annual Banquet

Welcome to the ISOPE-2016 Conference

We greatly appreciate the excellent response, with **1300+** abstracts, and help we have received from colleagues around the world in the successful organization of the 26th International Ocean and Polar Engineering Conference (**ISOPE-2016**), Rhodes, Greece, June 26–July 1, 2016. The Conference features **155** sessions of peer-reviewed papers and 8 plenary and keynote presentations from more than **50+** countries, including the ISOPE specialty symposia as a part of the ISOPE-2016 Conference.

The conference program is issued in 2 versions: Session time and rooms printed and full conference program online (www.isopec.org).

The purposes of the ISOPE conference are to:

- * Promote technological progress and activities, international technological transfer and cooperation, and opportunities for engineers to maintain and improve technical competence; and
- * Provide a timely international forum for technical activities, cooperation, opportunity and fellowship among researchers and engineers by developing focused session topics with high-quality papers (in both originality and significance) accepted through rigorous review, establishing high international standards for publication and worldwide distribution, and promoting interdisciplinary interaction between academia and industry.

The International Society of Ocean and Polar Engineers (ISOPE) has already held 56 successful international meetings with peer-reviewed papers:

- 1st (1990) **European Offshore Mechanics Symposium (EUROMS-90)** Trondheim; EUROMS-99 Moscow; EUROMS-2012 Istanbul.
- 1st (1990) **Pacific/Asia Offshore Mechanics Symposium (PACOMS-90)** Seoul; Beijing; Pusan; Daejeon; Vladivostok; Dalian; Bangkok; Busan; Vladivostok; Shanghai; 2016 Gold Coast, Australia.
- **Annual ISOPE conferences**, starting in Edinburgh, 1991, have been held in San Francisco, Singapore, Osaka, The Hague, Los Angeles, Honolulu, Montréal, Brest, Seattle, Stavanger, Kitakyushu, Honolulu, Toulon, Seoul, San Francisco, Lisbon, Vancouver, Osaka, Beijing, Maui, Rhodes, Anchorage, Busan and Hawaii Kona. Since 1992, the annual ISOPE conference program has been the world's largest of its kind with peer-reviewed papers.
- 1st (1995) **ISOPE Ocean Mining & Gas Hydrates Symposium (OMS-95; OMGH)**, Tsukuba, 1995; Seoul; Goa; Szczecin; Tsukuba; Changsha; Lisbon; Chennai, Szczecin; in Kona Hawaii and Sapporo in 2017.
- 1st (1996) **International Deep-Ocean Technology (IDOT-96) Symposium and Workshop**, 1996 Los Angeles; 2001 Stavanger; 2009 Beijing.
- **ISOPE HPM (High-Performance Materials) Symposium**: Started in Honolulu 2003 and expanded every year with emerging topics.
- **ISOPE Series of specialty symposia**: **ANGT**: Seoul 2005-; Strain-Based Design SBD: Lisbon 2007-; Nanotechnology NANOS: Lisbon 2007; Frontier Energy 2009-; Sloshing & Dynamics 2009-; Renewable Energy/Environment, REES-2010-; Tsunami-2011-, Arctic Sci & Tech-2010; Arctic Materials-2011-; Asset Integrity-2012-; High Manganese Steel-2013-; Additive Manufacturing-2014, Materials Reliability 2015.

On behalf of the Technical Program Committee, it is our pleasure to welcome participants from all over the world to the ISOPE-2016 Conference in Rhodes (Rodos), Greece.

Ronald H Knapp
USA
Raghavan Ayer
USA

Jin S Chung,
USA
Demos Angelides
Greece

Han-il Park
Korea
Weiliang Dong
China

Co-chairs of the ISOPE-2016 Conference

SUNDAY JUNE 26

09:00 ISOPE Board of Directors Meeting	Epsilon
10:30 ISOPE-2010 Executive Committee Meeting EUROMS and PACOMS Executive Committees	Epsilon
15:00-18:00 CONFERENCE REGISTRATION	Lobby
17:00-18:00 WELCOME RECEPTION	Outdoor Pool Garden

Tour Information **Visit tour desk in Lobby or www.isopec.org**
Spouse Program **Join Tour program: see www.isopec.org**

MONDAY JUNE 27

On-Site Registration starts at 07:30	Lobby
07:30 Session Chair/Co-chair Briefing	Lobby
08:30 Conference Opening	Jupiter
08:30	
1. OCEAN AND ENERGY REVIEW—2016	Jupiter
10:30	
2. HYDRODYNAMICS I: Comparative Water Entry 1	Athena
3. SLOSHING I: Numerical Simulation	Salon A
4. RENEWABLE ENERGY I: Offshore Wind 1: Foundations	Salon B
5. MECHANICS & ANALYSIS I: Strength & Design 1	Nafsika A
6. SBD I: Pipeline Strain Capacity	Nafsika B
7. COASTAL I: Lagrangian Particle Methods	Nefeli B
8. SUBSEA, PIPELINES, RISERS I: Subsea Umbilicals 1	Nefeli A
9. FRONTIER ENERGY I: Hydrates-Minerals-EOR 1	Exec. A
10. VORTEX-INDUCED VIBRATIONS I	Delphi
11. ARCTIC I: Environment 1	Exec. C
13:15	
Plenary 1 Deep and Ultra-Deep ... (Subsea 7, Norway)	Nefeli A
Keynote 1: Nonlinear Wave-body ... (ECM, France)	Athena
14:00	
12. HYDRODYNAMICS II : Comparative Water Entry 2	Athena
13. SLOSHING II: Physics & Assessment	Salon A
14. RENEWABLE ENERGY II: Offshore Wind 2: Foundation	Salon B
15. MECHANICS & ANALYSIS II: Strength & Design 2	Nafsika A
16. SBD II: Pipeline Material Properties	Nafsika B
17. COASTAL II: Sediment Transport in Coastal & Deepsea 1	Nefeli B
18. SUBSEA, PIPELINES, RISERS II: Subsea Umbilicals 2	Nefeli A
19. FRONTIER ENERGY II: Hydrates-Minerals-EOR 2	Exec. A
20. VORTEX-INDUCED VIBRATIONS II	Delphi
21. ARCTIC II: Environment 2	Exec. C
16:20	
22. HYDRODYNAMICS III: Wave-Structure Interactions 1	Athena
23. SLOSHING III: LNG Sloshing Reduction	Salon A
24. RENEWABLE ENERGY III: Offshore Wind 3: Support A	Salon B
25. MECHANICS & ANALYSIS III: Strength & Design 3	Nafsika A
26. ASSET INTEGRITY I (V. 4)	Nafsika B
27. COASTAL III: Sediment Transp. in Coastal & Deepsea 2	Nefeli B
28. SUBSEA, PIPELINES, RISERS III: Risers & Flexibles1	Nefeli A
29. FRONTIER ENERGY III: Hydrates-Minerals-EOR 3	Exec. A
30. VORTEX-INDUCED VIBRATIONS III	Delphi
31. ARCTIC III: Arctic Mechanics	Exec. C
18:30 ISOPE Technical Committee Meetings	Notice on bulletin board

TUESDAY JUNE 28

07:30 Session Chair/Co-chair Briefing	Lobby
08:00	
32. HYDRODYNAMICS IV: Wave-Structure Interactions 2	Athena
33. SLOSHING IV: Experiment	Salon A
34. RENEWABLE ENERGY IV: Offshore Wind 4-Support B	Salon B
35. MECHANICS & ANALYSIS IV: Impact & Collision	Nafsika A
36. ASSET INTEGRITY II	Nafsika B
37. COASTAL IV: Storm Surge & Tides 1	Nefeli B
38. SUBSEA, PIPELINES, RISERS IV: Risers & Flexibles2	Nefeli A
39. ENVIRONMENT I: Oil Spill and Emission	Exec. A
40. OCEAN TECHNOLOGY I: LNG Bunkering	Delphi
41. ARCTIC IV: Operations	Exec. C
10:30	
42. HYDRODYNAMICS V: DP Control	Athena
43. SLOSHING V: Coupled Dynamics	Salon A
44. RENEWABLE ENERGY V: Offshore Wind 5: Turbine A	Salon B
45. MECHANICS & ANALYSIS V: Safety & Reliability 1	Nafsika A
46. ASSET INTEGRITY III: Corrosion Management	Nafsika B
47. COASTAL V: Waves 1	Nefeli B
48. SUBSEA, PIPELINES, RISERS V: Risers & Flexibles3	Nefeli A
49. ENVIRONMENT II: Climate & Sea Level Change	Exec. A
50. OCEAN TECHNOLOGY II: Comparative 1–Floater	Delphi
51. ARCTIC V: Ship Technology	Exec. C
13:15	
Prof. Jin S Chung Award and Lecture (M Kashiwagi)	Athena
14:00	
52. HYDRODYNAMICS VI: Lagrangian & Meshless	Athena
53. SLOSHING VI: Structures and Loads	Salon A
54. RENEWABLE ENERGY VI: Offshore Wind 6: TurbineB	Salon B
55. MECHANICS & ANALYSIS VI: Safety & Reliability2	Nafsika A
56. HPM I: Advance in Materials & Structures 1	Nafsika B
57. COASTAL VI: Waves 2	Nefeli B
58. SUBSEA, PIPELINES, RISERS VI: Subsea 1	Nefeli A
59. ENVIRONMENT III: Pollutant & Carbon Capture Syst 1	Exec. A
60. OCEAN TECHNOLOGY III: Comparative 2–Launch	Delphi
61. ARCTIC VI: Structures	Exec. C
16:20	
62. HYDRODYNAMICS VII:	Athena
63. HYDRODYNAMICS XVI: MetOcean 1	Salon A
64. RENEWABLE ENERGY VII: Offshore Wind 7: Simulat	Salon B
65. MECHANICS & ANALYSIS VII: Safety & Reliab. 3	Nafsika A
66. HPM II: Advance in Materials & Structures 2	Nafsika B
67. COASTAL VII: Wave Propagation Over Uneven Topogr	Nefeli B
68. SUBSEA, PIPELINES, RISERS VII: Subsea 2	Nefeli A
69. SLOSHING VII: Panel 1 Aerospace and Defense	Exec. A
70. OCEAN TECHNOLOGY IV: Subsea Design	Delphi
71. ARCTIC VII: Test Methods	Exec. C
15:30 Awards Committee Meeting	Epsilon
16:30 Board of Editors Meeting	Epsilon
19:30 ISOPE-2016/2017 TPC Meeting	TBA at registration desk

Find Digital Conference Program Updates in
<http://www.isopec.org/conferences/conferences.htm>

WEDNESDAY JUNE 29

07:30 Session Chair/Co-chair Briefing	Lobby
08:00	
72. HYDRODYNAMICS VIII: CFD & Applications	Athena
73. HYDRODYNAMICS XVII: MetOcean 2	Salon A
74. RENEWABLE ENERGY VIII: Offshore Wind 8: Aerody	Salon B
75. ADVANCED SHIP TECH I: Powering & Perform. 1	Nafsika A
76. HPM III: Advance in Materials & Structures 3	Nafsika B
77. COASTAL VIII: Structures 1	Nefeli B
78. SUBSEA, PIPELINES, RISERS VIII: Pipeline Install.	Nefeli A
79. GEOTECH I: Anchors & Pipelines	Exec. A
80. OCEAN TECHNOLOGY V: Jacket and Jack-up 1	Delphi
81. ARCTIC VII: Panel	Exec. C
10:30	
82. HYDRODYNAMICS IX: Hydroelasticity, Impact and .. 1	Athena
83. HYDRODYNAMICS XVIII: Wave-Structure Interact 3	Salon A
84. RENEWABLE ENERGY IX: Offshore Wind 9: Product.	Salon B
85. ADVANCED SHIP TECH II: Powering & Perform. 2	Nafsika A
86. HPM IV: ARCTIC Material Development	Nafsika B
87. COASTAL IX: Structures 2	Nefeli B
88. SUBSEA, PIPELINES, RISERS IX: Pipeline 1	Nefeli A
89. GEOTECH II: Bucket Foundation & Spudcan	Exec. A
90. OCEAN TECHNOLOGY VI: Jacket and Jack-up 2	Delphi
91. UNDERSEA I: Systems	Exec. C
12:00 ISOPE Board of Directors Meeting III	Epsilon
13:15	
Keynote 3: U.S. Offshore Wind Energy (NREL, USA)	Salon B
Keynote 4: Integrity by Design (ExxonMobil Production, USA)	Nafsika B
Keynote 5: Umbilicals-Fatigue, Extreme Stress (NTNU, Norway)	Nefeli A
14:00	
92. HYDRODYNAMICS X: Hydroelasticity, Impact and .. 2	Athena
93. TSUNAMI I: Generation to Inundation 1	Salon A
94. RENEWABLE ENERGY X: Ocean, Wind & Resources	Salon B
95. ADVANCED SHIP TECH III: Optimization	Nafsika A
96. HPM V: ARCTIC Materials Properties 1	Nafsika B
97. COASTAL X: Structures 3	Nefeli B
98. SUBSEA, PIPELINES, RISERS X: Pipeline 2	Nefeli A
99. GEOTECH III: Offshore & Pile Foundation 1	Exec. A
100. OCEAN TECHNOLOGY VII: FPSO, FLNG, TLP 1	Delphi
101. UNDERSEA II: Sensing	Exec. C
16:20	
102. HYDRODYNAMICS XI: Ship Resistance & Drag	Athena
103. TSUNAMI II: Generation to Inundation 2	Salon A
104. RENEWABLE ENERGY XI: Wind & Wave Energy	Salon B
105. ADVANCED SHIP TECH IV: Green Ship	Nafsika A
106. HPM VI: ARCTIC Materials Properties 2	Nafsika B
107. COASTAL XI: Structures 4	Nefeli B
108. SUBSEA, PIPELINES, RISERS XI: Pipeline 3	Nefeli A
109. GEOTECH IV: Offshore & Pile Foundation 2	Exec. A
110. OCEAN TECHNOLOGY VIII: FPSO, FLNG, .. TLP 2	Delphi
111. UNDERSEA III: Navigation & Communication	Exec. C



19:00	Super Dome Pool
Annual Conference Banquet	
26th ISOPE Cultural Event, Best Paper, Best Student Paper, Outstanding Student Scholarships, Best Organizer(s) and ISOPE Awards	
<i>Don't forget the banquet ticket.</i>	

THURSDAY JUNE 30

07:30 Session Chair/Co-chair Briefing **Lobby**

08:00

112. HYDRODYNAMICS XII: Roll & Stability	Athena
113. TSUNAMI III: Generation to Inundation 3	Salon A
114. RENEWABLE ENERGY XII: Wave Energy 1	Salon B
115. ADVANCED SHIP TECH V: Design & Analysis 1	Nafsika A
116. HPM VII: Hi Mn Steel	Nafsika B
117. COASTAL XII: Morphodynam. & Cohesive Estuaries	Nefeli B
118. SUBSEA, PIPELINES, RISERS XII: Pipeline 4	Nefeli A
119. GEOTECH V: Offshore & Pile Foundation 3	Exec. A
120. OCEAN TECHNOLOGY VIX: FPSO, FLNG, .. TLP 3	Delphi
121. UNDERSEA IV: Design & Development 1	Exec. C

10:30

122. HYDRODYNAMICS XIII: Green Water & Wave Runup	Athena
123. TSUNAMI IV: Tsunami Force & Impact	Salon A
124. RENEWABLE ENERGY XIII: Wave Energy 2	Salon B
125. ADVANCED SHIP TECH VI: Design & Analysis 2	Nafsika A
126. HPM VIII: Advance in Welding Technologies 1	Nafsika B
127. COASTAL XIII: Dredging & Environment	Nefeli B
128. RENEWABLE ENERGY XVI: Offshore Wind Panel	Nefeli A
129. GEOTECH VI: Geohazards	Exec. A
130. OCEAN TECHNOLOGY X: FPSO, FLNG, .. TLP 4	Delphi
131. UNDERSEA V: Design & Development 2	Exec. C

12:00 Ocean Mining & Gas Hydrates Executive Epsilon

13:00 Student Forum: adv. reservation req'd., www.isopec.org Exec. C

14:00

132. HYDRODYNAMICS XIV: Nonlinear Waves 1: Freak	Athena
133. TSUNAMI V: Risk Analysis & Monitoring	Salon A
134. RENEWABLE ENERGY XIV: Wave Energy 3	Salon B
135. ADVANCED SHIP TECH VII: Structural Analysis 1	Nafsika A
136. HPM IX: Advance in Welding Technologies 2	Nafsika B
137. COASTAL XIV: Beach & Estuary	Nefeli B
138. RFCS project SBD-SPipe Workshop I (new)	Nefeli A
139. GEOTECH VII: Soil Characterization	Exec. A
140. OCEAN TECHNOLOGY XI: Offshore Systems	Delphi
141. UNDERSEA VI: Motion Control	Exec. C

16:20

142. HYDRODYNAMICS XV: Nonlinear Waves 2: Freak	Athena
143. TSUNAMI VI: Panel	Salon A
144. RENEWABLE ENERGY XV: Tidal & Current Energy	Salon B
145. ADVANCED SHIP TECH VIII: Structural Analysis 2	Nafsika A
146. HPM X: Composite & Nano Materials	Nafsika B
147. COASTAL XV: Panel	Nefeli B
138. RFCS project SBD-SPipe Workshop II (new)	Nefeli A
148. GEOTECH VIII: Soil Improvement & Seepage	Exec. A
149. OCEAN TECHNOLOGY XII: Offshore Panel	Delphi
150. UNDERSEA VII: Panel	Exec. C

FRIDAY July 1

151-154. IEA OC5 Workshop VIP Lounge

<p>Sunday – Thursday</p> <p>Author Practice</p> <p>On-site Registration</p> <p>ISOPE Headquarters</p> <p>Proceedings Pickup</p> <p>Committee Meetings</p>	<p>Individual session rooms</p> <p>Lobby</p> <p>VIP Lounge</p> <p>Registration Desk, Lobby</p> <p>Epsilon, Mezzanine</p>
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Tours: Click on [General Information](#)

TECHNICAL PROGRAM

ISOPE-2016 Rhodes, Greece The Twenty-sixth (2016) International Ocean and Polar Engineering Conference Rhodes (Rodos), Greece, June 26–July 1, 2016



This 25th annual conference features **155** technical and opening general sessions, **8** plenary presentation and keynote presentations from top experts from industry, academia and government. After peer review of the manuscripts selected from 1,320+ abstracts, **711** peer-reviewed-papers will be presented and discussed by researchers, engineers and managers from more than **50+** countries.

The ISOPE-2015 Conference Proceedings with peer-reviewed papers in PDF files will be available in a set of 4 volumes on CD-ROM (**4,917** pp. est.) — paginated within each volume — during the conference and later for worldwide post-conference mail order from ISOPE: ISBN 978-1-880653-88-3; ISSN 1098-6189.

The number at end of the session title indicates the tentative number of the proceedings volume. Only the changes in titles or authors the Technical Program Committee received in writing before **April 10, 2016** are reflected in this program. Final corrections will be updated in the Conference Proceedings of peer-reviewed papers and the Final Program.

All ISOPE publications are indexed by Engineering Index (EI), SCOPUS and others.

FULL CONFERENCE PROGRAM WITH SESSION / PAPER LIST:

Updated at

<http://www.isope.org/conferences/conferences.htm>
<http://www.isope.org/publications/publications.htm>

SESSION LIST BY TOPICS

1. OCEAN AND ARCTIC REVIEW Jupiter

FRONTIER ENERGY: HYDRATES, MINERALS & EOR (VOL. 1)

- 9. FRONTIER ENERGY I: Hydrates-Minerals-EOR 1
- 19. FRONTIER ENERGY II: Hydrates-Minerals-EOR 2
- 29. FRONTIER ENERGY III: Hydrates-Minerals-EOR 3

**RENEWABLE ENERGY (OFFSHORE WIND AND OCEAN)
AND ENVIRONMENT (VOL. 1)**

- 4. RENEWABLE ENERGY I: Offshore Wind 1: Foundations
- 14. RENEWABLE ENERGY II: Offshore Wind 2: Foundation
- 24. RENEWABLE ENERGY III: Offshore Wind 3: Support A
- 34. RENEWABLE ENERGY IV: Offshore Wind 4: Support B
- 44. RENEWABLE ENERGY V: Offshore Wind 5: Turbine A
- 54. RENEWABLE ENERGY VI: Offshore Wind 6: Turbine B
- 64. RENEWABLE ENERGY VII: Offshore Wind 7: Simulation

- 74. RENEWABLE ENERGY VIII: Offshore Wind 8: Aerodynamics
- 84. RENEWABLE ENERGY IX: Offshore Wind 9: Production
- 94. RENEWABLE ENERGY X: Ocean, Wind Resources
- 104. RENEWABLE ENERGY XI: Wind & Wave Energy
- 114. RENEWABLE ENERGY XII: Wave Energy1
- 124. RENEWABLE ENERGY XIII: Wave Energy 2
- 134. RENEWABLE ENERGY XIV: Wave Energy 3
- 144. RENEWABLE ENERGY XV: Tidal & Current Energy
- 128. RENEWABLE ENERGY XVI: Offshore Wind Panel (10:30)

IEA Wind OC5 Workshop

- 152. RENEWABLE ENERGY XVII: IEA Wind OC5 Workshop
- 153. RENEWABLE ENERGY XVIII: IEA Wind OC5 Workshop
- 154. RENEWABLE ENERGY XIX: IEA Wind OC5 Workshop
- 155. RENEWABLE ENERGY XX: IEA Wind OC5 Workshop

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- 39. ENVIRONMENT I: Oil Spill and Emission
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- 59. ENVIRONMENT III: Pollutant & Carbon Capture System 1

OFFSHORE MECHANICS AND OCEAN TECHNOLOGY (VOL. 1)

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- 60. OCEAN TECHNOLOGY III: Comparative Study 2 – Launch & Measur
- 70. OCEAN TECHNOLOGY IV: Subsea Design
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- 100. OCEAN TECHNOLOGY VII: FPSO, FLNG, TLP 1
- 110. OCEAN TECHNOLOGY VIII: FPSO, FLNG, FSRU, TLP 2
- 120. OCEAN TECHNOLOGY VIX: FPSO, FLNG, FSRU, TLP 3
- 130. OCEAN TECHNOLOGY X: FPSO, FLNG, FSRU, TLP 4
- 140. OCEAN TECHNOLOGY XI: Offshore Systems
- 149. OCEAN TECHNOLOGY XII: Offshore Panel



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- 79. GEOTECH I: Anchors & Pipelines
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- 119. GEOTECH V: Offshore & Pile Foundation 3
- 129. GEOTECH VI: Geohazards
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- 8. SUBSEA, PIPELINES, RISERS I: Subsea Umbilicals 1
- 18. SUBSEA, PIPELINES, RISERS II: Subsea Umbilicals 2
- 28. SUBSEA, PIPELINES, RISERS III: Risers & Flexibles 1
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- 58. SUBSEA, PIPELINES, RISERS VI: Subsea 1

- 68. SUBSEA, PIPELINES, RISERS VII: Subsea 2
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- 118. SUBSEA, PIPELINES, RISERS XII: Pipeline 4
- 138. RFCS project SBD-SPipe Workshop I (new)
- 138. RFCS project SBD-SPipe Workshop II (new)

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- 81. ARCTIC VII: Panel

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- 2. HYDRODYNAMICS I: Comparative Study - Water Entry 1
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- 22. HYDRODYNAMICS III: Wave-Structure Interactions 1
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