

The 25th ISOPE Conference Anniversary

June 21–27, Kona, Hawaii Big Island, USA

at Hilton Waikoloa Village: www.isopec.org

The Twenty-fifth (2015) International
**Ocean and Polar
Engineering Conference**

Including additional ISOPE symposia:

1st **Materials Reliability & Refinery**

3rd **High Manganese Steel**

4th **Tsunami & Safety**

4th **Asset Integrity**

6th **Arctic Science & Technology**

5th **Arctic Materials**

6th **Renewable Energy & Environment**

7th **Sloshing Dynamics & Design**

7th **Frontier Energy Tech**

9th **Strain-Based Design**

11th **Ocean Mining & Gas Hydrates**

13th **High-Performance Materials**

ISOPE-2015

Kona, Big Island, Hawaii, June 21–26

Technical Program

(Updated **April 25, 2015**)

Refereed papers from **53** countries in **188** technical sessions

9 plenary and keynote presentations

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

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

ISOPE-2015 Conference proceedings

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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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Reception and Registration: ISOPE-2014



Annual Conference Banquet: ISOPE-2014



ISOPE-2015 Hawaii

The 25th Annual International Ocean and Polar Engineering
Conference, Kona, Hawaii Big Island, June 21-26, 2015

Full Program with Paper List: Download from
www.isopec.org or
<http://www.isopec.org/conferences/conferences.htm>

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Papua New Guinea



2014 ISOPE Awards: Jin S Chung Award, CH Kim Award, Session Organizer, Best Student Paper, Scholarship, and Student Forum at the Annual Banquet

Welcome to the ISOPE-2015 Conference

We greatly appreciate the excellent response, with **1765** abstracts, and help we have received from colleagues around the world in the successful organization of the 25th International Ocean and Polar Engineering Conference (**ISOPE-2015**), Kona, Hawaii Big Island, June 21–26, 2015. The Conference features **188** sessions of peer-reviewed papers and **9** plenary and keynote presentations from more than **53** countries, including the ISOPE specialty symposia as a part of the ISOPE-2015 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; 1994 Beijing; 1996 Pusan; 2002 Daejeon; 2004 Vladivostok; 2006 Dalian; 2008 Bangkok; 2010 Busan; 2012 Vladivostok; 2014 Shanghai; 2016 Gold Coast (Brisbane), 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, and Anchorage, Busan. 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**), Tsukuba, 1995; Seoul; Goa; Szczecin; Tsukuba; Changsha; Lisbon; Chennai, Szczecin; 2015 to be in Hawaii.
- 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, Arctic Science & Tech, Arctic-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-2015 Conference in Hawaii Big Island, Korea.

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-2015 Conference

SUNDAY JUNE 21

09:00	ISOPE Board of Directors Meeting II	Waikoloa 3
10:30	ISOPE-2015 Executive Committee Meeting EUROMS and PACOMS Executive Committees	Waikoloa 3
15:00-18:00	CONFERENCE REGISTRATION	Grand Promenade
17:00	WELCOME RECEPTION	Kona Pool
19:00	STUDENT FORUM (advance <i>reservation by May 11</i> to isope-2@isope.org)	TBA
Tour Information	Visit tour desk in Grand Promenade or www.isope.org	
Spouse Program	Join Tour program: see www.isope.org	

MONDAY JUNE 22

On-Site Registration starts at 07:30	Grand Promenade
07:30 Session Chair/Co-chair Briefing	Grand Promenade
08:30 CONFERENCE OPENING CEREMONY	Monarchy Ballroom
08:30	
1. OCEAN AND ENERGY REVIEW—2015	Monarchy Ballroom
10:40	
2. SAEFTY & RELIABILITY I: Slamming & Hydroelasticity	Kohal 1
3. HYDRODYNAMICS I: Resistance, Drift & Wind 1	Kohal 2
4. REES WIND TURBINE I: Foundations 1	Kohal 3
5. RULES AND CODES	Kohal 4
6. ASSET INTEGRITY I: Structural Integrity	Kings 1
7. COASTAL HYDRODYNAMICS I: Storm surge	Kings 2
8. SBD I: Strain Capacity & Demand	Kings 3
9. GEOTECH I: Computational Geomechanics 1	Queen4
10. TSUNAMI & SAFETY I: Generation to Inundation 1	Queen5
11. MATERIAL RELIABILITY IN PETROCHEMICALS	Queens 6
13:15 Keynote 1: Strain-Based Design	Queens 6
14:00	
12. SAEFTY & RELIABILITY II: Product Reliability	Kohal 1
13. HYDRODYNAMICS II: Resistance, Drift & Wind 2	Kohal 2
14. REES WIND TURBINE II: Foundations 2	Kohal 3
15. OCEAN TECHNOLOGY I: Subsea 1	Kohal 4
16. ASSET INTEGRITY II: Condition-based Maintenance	Kings 1
17. COASTAL HYDRODYNAMICS II: Waves I	Kings 2
18. SBD II: Pipeline Material Properties	Kings 3
19. GEOTECH II: Computational Geomechanics 2	Queen4
20. TSUNAMI & SAFETY II: Generation to Inundation 2	Queen5
21. UNDERWATER SYSTEMS I: Acoustics & Imaging.1	Queens 6
16:20	
22. SAEFTY & RELIABILITY III: Risk Analysis	Kohal 1
23. HYDRODYNAMICS III: Hydroelasticity, Whipping 1	Kohal 2
24. REES WIND TURBINE III: Support Structures 1	Kohal 3
25. OCEAN TECHNOLOGY II: Subsea 2	Kohal 4
26. ASSET INTEGRITY III: Corrosion Management	Kings 1
27. COASTAL HYDRODY III: Lagrangian Particle Methods	Kings 2
28. SBD III: Strain-Based Design and Assessment	Kings 3
29. GEOTECH III: Geohazards	Queen4
30. TSUNAMI & SAFETY III: Generation to Inundation 3	Queen5
31. UNDERWATER SYSTEMS II: ROV Design & Navigat	Queens 6
18:30 ISOPE Technical Committee Meetings	Notice on bulletin board
19:00 Reunion Meeting(s)	Notice on bulletin board

TUESDAY JUNE 23

07:30 Session Chair/Co-chair Briefing	Grand Promenade	
08:00		
32. SAEFTY & RELIABILITY IV: Collision & Impact	Kohala 1	
33. HYDRODYNAMICS IV: Hydroelasticity, Whipping 2	Kohala 2	
34. REES WIND TURBINE IV: Support Structures 2	Kohala 3	
35. OCEAN TECHNOLOGY VI: Subsea 3	Kohala 4	
36. ASSET INTEGRITY IV: Marine Integrity	Kings 1	
37. COASTAL HYDRODYNAMICS IV: Waves 2	Kings 2	
38. SBD IV: Full-Scale Testing	Kings 3	
39. GEOTECH IV: Soil Properties	Queens 4	
40. TSUNAMI & SAFETY IV: Tsunami Power	Queens 5	
41. UNDERWATER SYSTEMS III: Robotics & Control 1	Queens 6	
10:30		
42. SAEFTY & RELIABILITY V: System Design	Kohala 1	
43. HYDRODYNAMICS V: Stability & Roll Motion	Kohala 2	
44. REES WIND TURBINE V: Floating Turbines 1	Kohala 3	
45. OCEAN TECHNOLOGY IV: Installation 1	Kohala 4	
46. ASSET INTEGRITY V: Pipeline & Riser Integrity	Kings 1	
47. COASTAL HYDRODYNAMICS V: Beach & Estuary 1	Kings 2	
48. SBD V: Pipeline Collapse & Fatigue	Kings 3	
49. GEOTECH V: Soil Dynamics	Queens 4	
50. TSUNAMI & SAFETY V: Monitoring & Warning	Queens 5	
51. UNDERWATER SYSTEMS IV: Robotics & Control 2	Queens 6	
13:00		
Jin S Chung Award Lecture (M Triantafyllou)	Kohala 2	
14:00		
52. SLOSHING & SHIP DYNAMICS I: Coupled Dynam I	Kohala 1	
53. HYDRODYNAMICS VI: Fluid-Structure Interactions	Kohala 2	
54. REES WIND TURBINE VI: Floating Turbines 2	Kohala 3	
55. OCEAN TECHNOLOGY V: Installation 2	Kohala 4	
56. HPM I: Advanced Materials & Offshore Structures 1	Kings 1	
57. COASTAL HYDRODYNAMICS VI: Beach & Estuary 2	Kings 2	
58. SUBSEA-SUPR I: Pipeline Design 1	Kings 3	
59. GEOTECH VI: Ground Improvement	Queens 4	
60. TSUNAMI & SAFETY VI: Panel	Queens 5	
61. UNDERWATER SYSTEMS V: Navigation & Control	Queens 6	
16:20		
62. SLOSHING & SHIP DYNAMICS II: Liquefaction	Kohala 1	
63. HYDRODYNAMICS VII: DP Control 1	Kohala 2	
64. REES WIND TURBINE VII: Floating Turbines 3	Kohala 3	
65. OCEAN TECHNOLOGY VI: Installation 3	Kohala 4	
66. HPM II: Advanced Materials & Offshore Structures 2	Kings 1	
67. COASTAL HYDRODYNAMICS VII: Beach & Estuary 3	Kings 2	
68. SUBSEA-SUPR II: Pipeline Design 2	Kings 3	
69. GEOTECH VII: Soil-Structure Interactions	Queens 4	
70. ADVANCED SHIP TECH I: Green Ship	Queens 5	
71. UNDERWATER SYSTEMS VI: Oil Spill Tracking &	Queens 6	
15:30 Awards Committee Meeting		Waikoloa 3
16:30 Board of Editors Meeting (LJOPE and JOWE)		Waikoloa 3
19:30 ISOPE-2015/2016 TPC (S.O.) Meeting		Place TBA

WEDNESDAY JUNE 24

07:30 Session Chair/Co-chair Briefing Grand Promenade

08:00

72. SLOSHING & SHIP DYNAMICS III: Damping	Kohala 1
73. HYDRODYNAMICS VIII: DP Control 2	Kohala 2
74. REES WIND TURBINE VIII: Analysis & Testing	Kohala 3
75. OCEAN TECHNOLOGY VII: Decommissioning &	Kohala 4
76. HPM III: Advanced Materials & Offshore Structures 3	Kings 1
77. COASTAL HYDRODYNAMICS VIII: Structures 1	Kings 2
78. SUBSEA- SUPR III: Pipeline Analysis 1	Kings 3
79. GEOTECH VIII: Suction Piles	Queens 4
80. ADVANCED SHIP TECH II: Hull Form Optimization	Queens 5
81. ENVIRONMENT I: Carbon Capture Sequestration	Queens 6

10:30

82. SLOSHING & SHIP DYNAMICS IV: Fluid-Structure	Kohala 1
83. HYDRODYNAMICS IX: NWT	Kohala 2
84. REES WIND TURBINE IX: Wind & Wave Loading	Kohala 3
85. OCEAN TECHNOLOGY VIII: Jackup & Fixed Structur	Kohala 4
86. HPM IV: Advanced Materials & Offshore Structr 4	Kings 1
87. COASTAL HYDRODYNAMICS IX: Structures 2	Kings 2
88. SUBSEA- SUPR IV: Pipeline Analysis 2	Kings 3
89. GEOTECH IX: Offshore Pile Foundation	Queens 4
90. ADVANCED SHIP TECH III: Ship Powering 1	Queens 5
91. ENVIRONMENT II: Environ Impact & Monitor 1	Queens 6

12:00 ISOPE Board of Directors Meeting III Waikoloa 3
13:15 Keynote 2: Lufeng 7-2, South China Sea Kings 3

14:00

92. SLOSHING & SHIP DYNAMICS V: Fluid-Structure	Kohala 1
93. HYDRODYNAMICS X: CFD	Kohala 2
94. REES WIND TURBINE X: Aerodynamics & Blades	Kohala 3
95. OCEAN TECHNOLOGY IX: TLP, SPAR & Mooring 1	Kohala 4
96. HPM V: Arctic Materials 1: Matls Challenges in Arctic	Kings 1
97. COASTAL HYDRODYNAMICS X: Structures 3	Kings 2
98. SUBSEA- SUPR V: Installation & Commission 1	Kings 3
99. GEOTECH X: Anchors	Queens 4
100. ADVANCED SHIP TECH IV: Ship Powering 2	Queens 5
101. ENVIRONMENT III: Environ Impact & Monitor 2	Queens 6

16:20

102. REES OCEAN & WIND ENERGY XI: OWC 3	Kohala 1
103. HYDRODYNAMICS XI: Shallow Water	Kohala 2
104. REES WIND TURBINE XII: Installation & Maintenanc	Kohala 3
105. OCEAN TECHNOLOGY X: TLP, SPAR & Mooring 2	Kohala 4
106. HPM VI: Arctic Materials 2 Steel Testing & Charact	Kings 1
107. COASTAL HYDRODYNAMICS XI: Port Development	Kings 2
108. SUBSEA- SUPR VI: Riser Design	Kings 3
109. GEOTECH XI: Site Characterization	Queens 4
110. ADVANCED SHIP TECH V: Ship Hydrodynamics 1	Queens 5
111. ENVIRONMENT IV: Environ Impact & Monitor 3	Queens 6



19:00	Grand Ballroom
ANNUAL CONFERENCE BANQUET	
25th ISOPE Conference: Cultural Event, Best Paper, Best Student Paper, Outstanding Students and Awards	
<i>Don't forget the banquet ticket.</i>	

THURSDAY JUNE 25

07:30 Session Chair/Co-chair Briefing Grand Promenade

08:00
 112. REES OCEAN & WIND ENERGY XIII; OWC 4 Kohal 1
 113. HYDRODYNAMICS XII: MetOcean 1 Kohal 2
 114. REES WIND TURBINE XIV: Ocean, Wind&Resource 1 Kohal 3
 115. OCEAN TECHNOLOGY XI: TLP, SPAR & Mooring 3 Kohal 4
 116. HPM VII Arctic Materials 3 Steel Properties & Applic Kings 1
 117. VORTEX-INDUCED VIBRATION I: Single Body 1 Kings 2
 118. SUBSEA- SUPR VII: SCR & TTRs Kings 3
 119. FERT I: EOR & Drilling I Queens 4
 120. ADVANCED SHIP TECH VI: Ship Hydrodynamics 2 Queens 5
 121. ARCTIC SCI & TECH I: Arctic Environment Queens 6

10:30
 122. REES OCEAN & WIND ENERGY XV: OWC 5 Kohala 1
 123. HYDRODYNAMICS XIII: MetOcean 2 Kohala 2
 124. REES OCEAN & WIND XVI: Ocean, Wind&Resource 2 Kohal 3
 125. OCEAN ECHNOLOGY XII: Offshore Systems Kohala 4
 126. HPM VIII: Fatigue & Fracture 1 Kings 1
 127. VORTEX-INDUCED VIBRATION II: Single Body 2 Kings 2
 128. SUBSEA- SUPR VIII: Flow Assurance Kings 3
 129. FERT II: EOR & Drilling 2 Queens 4
 130. ADVANCED SHIP TECH VII: Hydrodynamic loading Queens 5
 131. ARCTIC SCI & TECH II: Arctic Mechanics 1 Queens 6

12:00 Ocean Mining & Gas Hydrates Executive Waikoloa 3
13:15 Keynote 3: Methane Hydrates in Japan; Status Kings 3

14:00
 132. REES OCEAN & WIND ENERGY XVII: OWC 6 Kohala 1
 133. HYDRODYNAMICS XIV: MetOcean 3 Kohala 2
 134. REES OCEAN ENERGY XVIII: Hybrid Installation Kohala 3
 135. OCEAN TECHNOLOGY XIII: VLFS & Floating Struct Kohal 4
 136. HPM IX: Fatigue & Fracture 2 Kings 1
 137. VORTEX-INDUCED VIBRATION III: Multi-Bodies Kings 2
 138. SUBSEA- SUPR IX: Lateral Buckling & Walking 1 Kings 3
 139. OMGH I: Gas Hysrates 1 (OMS-2015) Queens 4
 140. ADVANCED SHIP TECH VIII: Shipbldg Simulation Queens 5
 141. ARCTIC SCI & TECH III: Arctic Mechanics 2 Queens 6

16:20
 142. REES OCEAN & WIND ENERGY XIX: OWC 7 Kohala 1
 143. HYDRODYNAMICS XV: Multi-structure Kohala 2
 144. REES OCEAN & WIND XX: Wind Panel Kohala 3
 145. OCEAN TECHNOLOGY XIII: VLFS & Floating Struct Kohal 4
 146. HPM X: Fatigue & Fracture 3 Kings 1
 147. VORTEX-INDUCED VIBRATION IV: Suppression Kings 2
 148. SUBSEA- SUPR IX: Lateral Buckling & Walking 2 Kings 3
 149. OMGH II: Gas Hysrates 2 (OMS-2015) Queens 4
 150. ADVANCED SHIP TECH IX: Ultimate Strength 1 Queens 5
 151. ARCTIC SCI & TECH IV: Arctic Test Methods Queens 6



Sunday – Thursday	
Author Practice On-site Registration ISOPE Headquarters Proceedings Pickup	Individual session rooms Grand Promenade Lobby Waikoloa 1 Registration Desk , Grand Promenade

FRIDAY JUNE 26

07:30 Session Chair/Co-chair Briefing

Grand Promenade

08:00

152. REES OCEAN & WIND ENERGY XXI: OTEC	Kohala 1
153. HYDRODYNAMICS XVI: Reliability 1	Kohala 2
154. REES OCEAN & WIND XXII: Tidal & Current Energ 1	Kohal 3
155. OCEAN TECHNOLOGY XIV: FLNG, & FPSO 1	Kohala 4
156. HPM XI (V. 4): Advances in Welding Technology 1	Kings 1
157. REES WIND XXVI: IEA Wind OC5 Workshop 1	Kings 2
158. SUBSEA- SUPR X: Flexibles & Umbilicals	Kings 3
159. OMGH III: Gas Hydrates 3 (OMS-2015)	Queens 4
160. ADVANCED SHIP TECH X: Ultimate Strength 2	Queens 5
161. ARCTIC SCI & TECH V: Arctic Operations 1	Queens 6

10:30

162. HMS I: JIP	Kohala 1
163. HYDRODYNAMICS XVII: Reliability 2	Kohala 2
164. REES OCEAN ENERGY XXIII: Tidal & Current Ene 2	Kohal 3
165. OCEAN TECHNOLOGY XV: FLNG, & FPSO 2	Kohala 4
166. HPM XII (V. 4): Advances in Welding Technology 2	Kings 1
167. REES WIND XXVI: IEA Wind OC5 Workshop 2	Kings 2
168. SUBSEA- SUPR XI: Integrity Management	Kings 3
169. OMGH IV: Deep Ocean Mining 1 (OMS-2015) Invited	Queen4
170. ADVANCED SHIP TECH XI: Structures & Strength	Queen5
171. ARCTIC SCI & TECH VI: Arctic Operations 2	Queens 6

12:00 Ocean Mining & Gas Hydrates Luncheon

Place TBA

13:00 Keynote 4: Deep-Ocean Mining, 1970-2014

Queens 4

13:13:30 Keynote 5: Environ Baseline Survey, Japan

Queens 4

14:00

172. HYDRODYNAMICS XVIII: Comparative Study 1	Kohala 2
173. REES OCEAN ENERGY XXIV: OWC 1	Kohala 3
174. OCEAN TECHNOLOGY XVI: FLNG, & FPSO 3	Kohala 4
175. HMS II: Phase Transform & Mechanical Properties	Kings 1
176. REES WIND XXVI: IEA Wind OC5 Workshop 3	Kings 2
177. SUBSEA- SUPR XII: Field Test Experiments	Kings 3
178. OMGH V: Deep Ocean Mining 2 (OMS-2015)	Queens 4
179. ADVANCED SHIP TECH XII: Transport & Navigation	Queen5
180. ARCTIC SCI & TECH VII: Arctic Ship Technology	Queens 6

16:20

181. HYDRODYNAMICS XIX: Comparative Study 2	Kohala 2
182. REES OCEAN ENERGY XXVI: OWC 2	Kohala 3
183. OCEAN TECHNOLOGY XVII: FLNG, & FPSO 4	Kohala 4
184. HMS III: Cryogenic Properties & Welding	Kings 1
185. REES WIND XXV: IEA Wind OC5 Workshop 4	Kings 2
186. OMGH VI: Deep Ocean Mining 3 (OMS-2015)	Queens 4
187. ADVANCED SHIP TECH XIII: Design and Analyses	Queens 5
188. ARCTIC SCI & TECH VIII: Arctic Structures	Queens 6

09:00-17:00

157-167-176-185. IEA Wind OC5 Workshop

Kings 2

SATURDAY June 27

Sightseeing Tours: Click www.isopec.org and visit tour desk near ISOPE registration desk in Grand Promenade

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

TECHNICAL PROGRAM

ISOPE-2015 Hawaii
The Twenty-fifth (2015) International
Ocean and Polar Engineering Conference
Kona, Hawaii Big Island, USA, June 21–27, 2015



This 25th annual conference features **188** technical and opening general sessions, **9** plenary presentation and keynote presentations from top experts from industry, academia and government. After peer review of the manuscripts selected from 1,750+ abstracts, some **864** peer-reviewed-papers will be presented and discussed by researchers, engineers and managers from more than **53** 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 (**5,800** pp. est.) — paginated within each volume — during the conference and later for worldwide post-conference mail order from ISOPE: ISBN 978-1-880653-89-0; 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 25**, 2015 are reflected in this program. Final corrections will be updated in the Conference Proceedings of peer-reviewed papers and the Final Program.

Papers in the 11th Ocean Mining & Gas Hydrates Symposium (OMS-2015, OMGH-2015) are part of the ISOPE-2015 conference Proceedings.

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>

2015 Jin S Chung Award & Lecture
Tuesday 13:00

Plenary and Keynote Presentations
Monday – Friday 13:00

SATURDAY, June 21

Board of Directors: Annual Meeting I
16:00

Waikoloa 3

SUNDAY, June 22

Board of Directors: Annual Meeting II

09:00 Waikoloa 3

Welcome Reception

17:00 Kona Pool

Student Forum

19:00 Room TBA

MONDAY, June 22

Monday Session Chair Briefing

07:30 Grand Promenade

Conference Opening Ceremony

08:30 Monarchy Ballroom

Plenary and Keynote

Arctic and Energy Industry Materials

Safety in the Arctic Floating Offshore

Strain Based Design of Pipelines - Fracture Assessments

Focus Sessions

Lagrangian Particle Methods Monday

South China Sea Field Developments, Monday

Asset Integrity: Condition-Based Maintenance (CBS) , Monday

13:00 Room TBA

ISOPE Technical Committee (TC) Meetings

19:30 Room notice on bulletin board

TUESDAY, June 23

Tuesday Session Chair Briefing

07:30 Grand Promenade

2015 Jin S Chung Award & Lecture:

Vortex Dynamics Michael Triantafyllou, MIT, USA

Focus Sessions

Green Ship, Tuesday

Oil Spill Tracking with Autonomous Vehicle, Tuesday

Coupled Sloshing and Ship Dynamics, Tuesday and Wednesday

13:00 Kohala 2

Awards Committee Meeting

15:30 Waikoloa 3

Board of Editors: IJOPE and JOWE

16:30 Waikoloa 3

ISOPE-2015/2016 TPC (S.O.) Meeting

19:30 Room TBA

WEDNESDAY, June 24

Wednesday Session Chair Briefing

07:30 Grand Promenade

Keynote

Lufeng 7-2 Project in South China Sea

Focus Sessions

Arctic Materials, Wednesday and Thursday

13:00

25th Annual ISOPE Conference Banquet

19:00

Grand Ballroom

THURSDAY, June 25

Thursday Session Chair Briefing

07:30

Grand Promenade

Ocean Mining and PACOMS Executive Committee

12:00

Waikoloa 3

Keynote

Recent Status of Japan's Methane Hydrate R&D Program

Focus Sessions

Shipbuilding Simulation, Thursday Korea

Methane Hydrates

13:00

Queens 6

FRIDAY, June 26

Friday Session Chair Briefing

07:30

Grand Promenade

Keynote

Deep Ocean Mining Systems and Technology, 1970 – 2014

Environmental Baseline Survey for on Deep Seamount

Focus Sessions

Reliability of Offshore Structure Hydrodynamics, Friday

Comparative Study on multi-body Hydrodynamics, Friday

High Manganese Steel, Friday

Deep-Ocean Mining Technology, Friday

13:00

TOURS and OTHERS. See Updated Full Program on
<http://www.isopec.org/conferences/conferences.htm> :

Advance reservation required.

SESSION LIST BY TOPICS

1. OCEAN AND ARCTIC REVIEW

Monarchy Ballroom

FRONTIER ENERGY RESOURCES TECHNOLOGY (VOL. 1)

119. FERT I: EOR & Drilling I Queens 4
129. FERT II: EOR & Drilling 2 Queens 4

11th OCEAN MINING & GAS HYDRATES SYMPOSIUM: OMS-2015 (OMGH-2015) (VOL. 1)

Keynote

139. OMGH I: Gas Hydrates 1 (OMS-2015) Queens 4
149. OMGH II: Gas Hydrates 2 (OMS-2015) Queens 4
159. OMGH III: Gas Hydrates 3 (OMS-2015) Queens 4
169. OMGH IV: Deep Ocean Mining 1 (OMS-2015) Invited Queens 4
178. OMGH V: Deep Ocean Mining 2 (OMS-2015) Queens 4
186. OMGH VI: Deep Ocean Mining 3 (OMS-2015) Queens 4

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

4. REES WIND TURBINE I: Foundations 1 Kohala 3
14. REES WIND TURBINE II: Foundations 2 Kohala 3
24. REES WIND TURBINE III: Support Structures 1 Kohala 3
34. REES WIND TURBINE IV: Support Structures 2 Kohala 3
44. REES WIND TURBINE V: Floating Turbines 1 Kohala 3
54. REES WIND TURBINE VI: Floating Turbines 2 Kohala 3
64. REES WIND TURBINE VII: Floating Turbines 3 Kohala 3
74. REES WIND TURBINE VIII: Analysis & Testing Kohala 3
84. REES WIND TURBINE IX: Wind & Wave Loading Kohala 3
94. REES WIND TURBINE X: Aerodynamics & Blades Kohala 3
104. REES WIND TURBINE XII: Installation & Maintenance Kohala 3
114. REES WIND TURBINE XVI: Ocean, Wind & Resource 1 Kohala 3
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