

Welcome to ISOPE-2005

We greatly appreciate the excellent responses and help we have received from colleagues around the world in the successful organization of the 15th International Offshore and Polar Engineering Conference (ISOPE-2005), Seoul, June 19–24, 2005. The Conference features **93 sessions of refereed papers** and **5 plenary sessions** from more than 47 countries, including the *ISOPE Third High-Performance Materials (HPM) Symposium: Advanced Welding* and *ISOPE First Advanced Natural Gas Transport (ANGT) Symposium*.

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 (in both originality and significance) papers 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 Offshore and Polar Engineers (ISOPE) has already held **30 successful international meetings**:

- The 1st (1990) European Offshore Mechanics Symposium (ISOPE **EUROMS-90**) Trondheim, 1990; EUROMS-99 Moscow.
- The 1st (1990) Pacific/Asia Offshore Mechanics Symposium (ISOPE **PACOMS-90**) Seoul; PACOMS-94 Beijing; PACOMS-96 Pusan, PACOMS-2002 Daejeon and PACOMS-2004 Vladivostok.
- The **Annual ISOPE** conferences, starting in Edinburgh, 1991 were held in San Francisco, Singapore, Osaka, The Hague, Los Angeles, Honolulu, Montréal, Brest, Seattle, Stavanger, Kitakyushu, Honolulu and Toulon. Since 1992, the annual ISOPE Conference has been held with the world's largest technical program of its kind with refereed papers;
- The 1st (1995) ISOPE Ocean Mining Symposium (**OMS-95**), Tsukuba, 1995, ISOPE OMS-97 Seoul, OMS-99 Goa, OMS-2001 Szczecin and OMS-2003 Tsukuba;
- The 1st (1996) International Deep-Ocean Technology (**IDOT-96**) Symposium and Workshop, Los Angeles; and IDOT-2001 Stavanger.
- HPM Symposium: Honolulu, 2003, Toulon, 2004
- ANGT Symposium to be held in 2005

On behalf of the Technical Program Committee, it is our pleasure to welcome participants from all over the world to the ISOPE-2005 Conference in Seoul.

Jin S Chung, USA	Ro-sik Park, Korea	Guy Herrouin, France
Ronald H Knapp, USA	Wataru Koterayama, Japan	Ivar Langen, Norway

Co-chairmen of the ISOPE-2005 Conference

SUNDAY JUNE 19

09:00 ISOPE Board of Directors Meeting 309, 3F
 12:00 ISOPE-2005 Executive Committee Meeting 309, 3F
 EUROMS and PACOMS Executive Committees

15:00-18:00
CONFERENCE REGISTRATION Foyer, 3F

18:00-19:30
CONFERENCE RECEPTION COEX Intercontinental,
 Harmony Ballroom, 1F

For Tour Information Click on www.isopec.org
 (See ISOPE bulletin board in Registration Area)
 Spouse Program Find inside this program or update on www.isopec.org

All technical events take place at COEX Convention Center.

MONDAY JUNE 20

07:30 **On-Site Registration** starts at Foyer, 3F
 07:30 (Monday only)

07:30 **304, 3F**
Session Chair/Co-chair Briefing

08:30
Conference Opening Grand Conference Room, 4F
Opening Addresses: ISOPE President
Welcome Address: Mr. Ku Taek Lee, Chairman, POSCO, Seoul, Korea

09:15
1. OCEAN INDUSTRY REVIEW (V. 1) Grand Conference Room, 4F

13:30
PLENARY I (Methane Hydrates Program MH21, V. 1) **310BC**
PLENARY II (Earthquake-Geotechnical Eng, V. 2) **320BC**

14:30
2. ADV NATURAL GAS TRANSPORT I: 310BC
 Pipeline & Gas-to-Liquids (V. 1)
3. HYDRO I: Extreme Waves (V. 3) 311BC
4. GEOTECH I: Foundations (V. 3) 320BC
5. HYDRO II: BEM & Seakeeping (V. 3) 310A
6. DEEP-OCEAN VEHICLES & NAVIGATION I (V. 2) 311A
7. TUBULAR STRUCTURES: STATIC (V. 4) 320A
8. COMPOSITES & SMART STRUCTURES I (V. 4) 321C
9. OCEAN ENERGY I: Offshore Wind (V. 1) 304A
10. TANKERS: Design & Construction (V. 4) 304B

17:00
ISOPE Technical Committee Meetings **304**

Sunday - Thursday		
Author Practice		316, 3F
On-site Registration		Foyer, 3F
Conference Headquarters		306, 3F
Proceedings Pickup/Sales	Registration Desk,	Foyer, 3F

TUESDAY JUNE 21

07:30	Session Chair/Co-chair Briefing	304, 3F
08:00		
11.	ADV NATURAL GAS TRANSPORT II: CNG and LNG (V. 1)	310BC
12.	HYDRO III: Design Waves (V. 3)	311BC
13.	GEOTECH II: Centrifuge & Modeling (V. 2)	320BC
14.	MetOcean (V. 3)	310A
15.	DEEP-OCEAN VEHICLES & NAVIGATION II (V. 2))	311A
16.	TUBULAR STRUCTURES: Fatigue (V. 4)	320A
17.	COMPOSITES & SMART STRUCTURES II (V. 4)	321C
18.	OCEAN ENERGY II: Waves (V. 1)	304A
19.	MECHANICS & MEASUREMENTS (V. 4)	304B
10:45		
20.	ADV NATURAL GAS TRANSPORT III: Pressurized LNG (V. 1)	310BC
21.	HYDRO IV: Nonlinear Waves (V. 3)	311BC
22.	GEOTECH III: Soil Properties I (V. 1))	320BC
23.	COASTAL I: Sediment (V. 3)	310A
24.	DEEP-OCEAN VEHICLES & NAVIGATION III (V. 2)	311A
25.	ADVANCES IN TUBULAR STRUCTURES (V. 4)	320A
26.	COMPOSITES & SMART STRUCTURES III (V. 4)	321C
27.	OCEAN ENERGY III: Turbines (V. 1)	304A
28.	SHIP STRUCTURAL MECHANICS (V. 4)	304B
13:30		
	PLENARY III (Siberia–Far East Pipeline Project)	310, 3F
	Student Forum	TBA
14:30		
29.	NEW PORT DEVELOPMENTS IN KOREA (V. 3)	310BC
30.	HYDRO V: CFD 1 (V. 3)	311BC
31.	GEOTECH IV: Soil Properties 2 (V. 2)	320BC
32.	COASTAL II: Breakwater 1 (V. 3)	310A
33.	BIOMECHANICS & CONTROL (V. 4)	311A
34.	HPM I: Friction Stir Welding of Steel (V. 4)	320A
35.	OFFSHORE PIPELINES, RISERS, MOORING I (V. 2)	321C
36.	OCEAN ENERGY IV: Waves & OTEC (V. 1)	304A
37.	LNG & TERMINAL (V. 1)	304B
38.	DEEP-OCEAN VEHICLES & NAVIGATION IV (V. 2)	307AB
16:30	Board of Editors Meeting	309
19:00	ISOPE-2005/ISOPE-2006 San Francisco TPC Meeting	See bulletin board

Sunday - Thursday		
Projector Practice		316, 3F
On-site Registration		Foyer, 3F
Conference Headquarters		306, 3F
Proceedings Pickup/Sales	Registration Desk,	Foyer, 3F

WEDNESDAY JUNE 22

07:30 Session Chair/Co-chair Briefing	304, 3F
08:00	
39. SAKHALIN II & ULTRA DEEPWATER (V. 1)	310BC
40. HYDRO VI: CFD 2 (V. 3)	311BC
41. GEOTECH V: Piles & Caissons 1 (V. 2)	320BC
42. COASTAL III: Breakwater 2 (V. 3)	310A
43. SHIP PROPULSION (V. 4)	311A
44. HPM II: Friction Stir Welding of Aluminum (V. 4)	320A
45. OFFSHORE PIPELINES, RISERS, MOORING II (V. 2))	321C
46. GEOTECH VI: Special Projects (V. 3)	304A
47. SHIP CAD & FAST SHIPS, (V. 4)	304B
10:45	
48. FPSO & LNG (V. 1)	310BC
49. HYDRO VII: LNG, Sloshing & Impact I (V. 3)	311BC
50. GEOTECH VII: Dynamic Phenomena (V. 2)	320BC
51. COASTAL IV: Breakwater 3 (V. 3)	310A
52. SUBSEA SYSTEMS (V. 1)	311A
53. HPM III: Welding 1 (V. 4)	320A
54. OFFSHORE PIPELINES, RISERS, MOORING III (V. 2)	321C
55. GAS HYDRATES I (V. 1)	304A
56. RELIABILITY, RISK & SAFETY I (V. 4)	304B
13:30	
PLENARY IV(New Tokyo International Airport, V. 1)	310, 3F
PLENARY V (Freak, Tsunami Waves, V. 3)	320, 3F
14:30	
57. VLFS (V. 1)	310BC
58. HYDRO VIII: LNG, Sloshing & Impact 2 (V. 3)	311BC
59. GEOTECH VIII: Piles & Caissons 2 (V. 2)	320BC
60. COASTAL V: Typhoon & Storm Surge (V. 3)	310A
61. GEOTECH IX: Liquefaction (V. 1)	311A
62. HPM IV: Welding 2 (V. 4)	320A
63. FLOW-INDUCED VIBRATIONS (V. 2)	321C
64. GAS HYDRATES II (V. 1)	304A
65. RELIABILITY, RISK & SAFETY II (V. 4)	304B

Find Updates in Program on Website:
<http://www.isopec.org>

19:00 *COEX Intercontinental Hotel, Harmony Ballroom, 1F*

Annual (ISOPE-POSCO) Conference Banquet
Cultural Program, Best Paper, Scholarships and Awards

THURSDAY JUNE 23

07:30 Session Chair/Co-chair Briefing	304, 3F
08:00	
66. OFFSHORE SYSTEMS (V. 1)	310BC
67. HYDRO IX: Remote Sensing (V. 3)	311BC
68. GEOTECH X: Pile & Caissons 3 (V. 2)	320BC
69. COASTAL ENG VI: Waves 1 (V. 3)	310A
70. ENVIRONMENT I: Remote Sensing (V. 1)	311A
71. HPM V: Steel, Fabrication & NDE (Vol. 4)	320A
72. OFFSHORE PIPELINES, RISERS, MOORING IV (V. 2)	321C
73. ARCTIC & ICE I: Environment (V. 1)	304A
74. IMPACT, COLLISION, DAMAGE I (V. 4)	304B
75. GEOTECH XI: Seismic Phenomena (V. 2)	307AB
10:45	
76. SPAR & TLP (V. 1)	310BC
77. HYDRO X: Dynamics & Forces 1 (V. 3)	311BC
78. GEOTECH XII: Piles & Caissons 4 (V. 2)	320BC
79. COASTAL VII: Tsunami & Waves 2 (V. 3)	310A
80. ENVIRONMENT II: Pollutant Transport (V. 1)	311A
81. HPM VI: Steel, Fabrication & NDE II (V. 4)	320A
82. OCEAN MINING I (V. 1)	321C
83. ARCTIC & ICE II: Ice Breaking (V. 1)	304A
84. WAVE IMPACT I (V. 4)	304B
13:30	
OMWG Meeting	309
14:30	
85. Jack-up and Jacket Structures (V. 1)	310BC
86. HYDRO XI: Dynamics & Forces 2 (V. 3)	311BC
87. GEOTECH XIII: Seabed and Slope (V. 2)	320BC
88. COASTAL ENG VIII: Current & Tide (V. 3)	310A
89. ENVIRONMENT III: Numerical Modeling (V. 1)	311A
90. HPM VII: Steel, Fabrication & NDE III (V. 4)	320A
91. OCEAN MINING II (V. 1)	321C
92. ARCTIC & ICE III: Mechanics & Forecasting (V. 1)	304A
93. WAVE IMPACT II (V. 4)	304B

FRIDAY JUNE 24

- **Conference Tour:** Korea (Yong-In) Folk Village
- **Technical Tour:** KOGAS Incheon LNG facilities
- **Cultural & Technical Tour:** Gyeongju Temples & Ulsan Hyundai Heavy Industries (June 24 and 25)

Find further details inside the program.

ISOPE-2005 Seoul

The Conference features **93** technical and opening sessions and **5** plenary sessions with top experts from industry, academia and government. About **500** papers after peer review will be presented and discussed by researchers, engineers and managers from more than **47** countries.

The Conference Proceedings will be available in a set of 4 volumes on CD-ROM (3,200 pp. est.) — paginated within each volume — during the conference and later for worldwide post-conference mail order from ISOPE.

SESSION LIST BY TOPICS

OFFSHORE INDUSTRY REVIEW

1. OFFSHORE INDUSTRY REVIEW (V. 1) **Grand Conference, 4F**

ADVANCED NATURAL GAS TRANSPORT SYMPOSIUM

- | | |
|---|-------|
| 2. ADV NATURAL GAS TRANSPORT I:
Pipeline & Gas-to-Liquids (V. 1) | 310BC |
| 11. ADV NATURAL GAS TRANSPORT II:
CNG and LNG (V. 1) | 310BC |
| 20. ADV NATURAL GAS TRANSPORT III:
Pressurized LNG (V. 1) | 310BC |

OFFSHORE MECHANICS AND TECHNOLOGY

- | | |
|--|-------|
| 39. SAKHALIN II & ULTRA DEEPWATER (V. 1) | 310BC |
| 48. FPSO & LNG (V. 1) | 310BC |
| 57. VLFS (V. 1) | 310BC |
| 66. OFFSHORE SYSTEMS (V. 1) | 310BC |
| 76. SPAR & TLP (V. 1) | 310BC |
| 85. Jack-up and Jacket Structures (V. 1) | 310BC |

GAS HYDRATES AND OCEAN MINING

- | | |
|----------------------------|------|
| 55. GAS HYDRATES I (V. 1) | 304A |
| 64. GAS HYDRATES II (V. 1) | 304A |
| 82. OCEAN MINING I (V. 1) | 321C |
| 91. OCEAN MINING II (V. 1) | 321C |

OCEAN & OFFSHORE WIND ENERGY

- | | |
|--|------|
| 9. OCEAN ENERGY I: Offshore Wind (V. 1) | 304A |
| 18. OCEAN ENERGY II: Waves (V. 1) | 304A |
| 27. OCEAN ENERGY III: Turbines (V. 1) | 304A |
| 36. OCEAN ENERGY IV: Waves & OTEC (V. 1) | 304A |

OCEAN AND POLAR ENVIRONMENT

- | | |
|--|------|
| 70. ENVIRONMENT I: Remote Sensing (V. 1) | 311A |
| 80. ENVIRONMENT II: Pollutant Transport (V. 1) | 311A |
| 89. ENVIRONMENT III: Numerical Modeling (V. 1) | 311A |

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERING

- | | |
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| 4. GEOTECH I: Foundations (V. 2) | 320BC |
| 13. GEOTECH II: Centrifuge & Modeling (V. 2) | 320BC |
| 22. GEOTECH III: Soil Properties I (V. 2) | 320BC |
| 31. GEOTECH IV: Soil Properties 2 (V. 2) | 320BC |
| 41. GEOTECH V: Piles & Caissons 1 (V. 2) | 320BC |
| 46. GEOTECH VI: Special Projects (V. 2) | 304A |

50. GEOTECH VII: Dynamic Phenomena (V. 2)	320BC
59. GEOTECH VIII: Piles & Caissons 2 (V. 2)	320BC
61. GEOTECH IX: Liquefaction (V. 2)	311A
68. GEOTECH X: Pile & Caissons 3 (V. 2)	320BC
75. GEOTECH XI: Seismic Phenomena (V. 2)	307AB
78. GEOTECH XII: Piles & Caissons 4 (V. 2)	320BC
87. GEOTECH XIII: Seabed and Slope (V. 2)	320BC

OFFSHORE AND ARCTIC PIPELINES, RISERS AND MOORING

35. OFFSHORE PIPELINES, RISERS, MOORING I (V. 2)	321C
45. OFFSHORE PIPELINES, RISERS, MOORING II (V. 2)	321C
54. OFFSHORE PIPELINES, RISERS, MOORING III (V. 2)	321C
72. OFFSHORE PIPELINES, RISERS, MOORING IV (V. 2)	321C

DEEP OCEAN ROV, AUV AND COMMUNICATION

6. DEEP-OCEAN VEHICLES & NAVIGATION I (V. 2)	311A
15. DEEP-OCEAN VEHICLES & NAVIGATION II (V. 2)	311A
24. DEEP-OCEAN VEHICLES & NAVIGATION III (V. 2)	311A
38. DEEP-OCEAN VEHICLES & NAVIGATION IV (V. 2)	307AB

ICE SCIENCE AND ENGINEERING

73. ARCTIC & ICE I: Environment (V. 1)	304A
83. ARCTIC & ICE II: Ice Breaking (V. 1)	304A
92. ARCTIC & ICE III: Mechanics & Forecasting (V. 1)	304A

HYDRODYNAMICS

3. HYDRO I: Extreme Waves (V. 3)	311BC
5. HYDRO II: BEM & Seakeeping (V. 3)	310A
12. HYDRO III: Design Waves (V. 3)	311BC
21. HYDRO IV: Nonlinear Waves (V. 3)	311BC
30. HYDRO V: CFD 1 (V. 3)	311BC
40. HYDRO VI: CFD 2 (V. 3)	311BC
49. HYDRO VII: LNG, Sloshing & Impact 1 (V. 3)	311BC
58. HYDRO VIII: LNG, Sloshing & Impact 2 (V. 3)	311BC
67. HYDRO IX: Remote Sensing (V. 3)	311BC
77. HYDRO X: Dynamics & Forces 1 (V. 3)	311BC
86. HYDRO XI: Dynamics & Forces 2 (V. 3)	311BC

COASTAL ENGINEERING

23. COASTAL I: Sediment (V. 3)	310A
29. NEW PORT DEVELOPMENTS IN KOREA (V. 3)	310BC
32. COASTAL II: Breakwater 1 (V. 3)	310A
42. COASTAL III: Breakwater 2 (V. 3)	310A
51. COASTAL IV: Breakwater 3 (V. 3)	310A
60. COASTAL V: Typhoon & Storm Surge (V. 3)	310A
69. COASTAL ENG VI: Waves 1 (V. 3)	310A
79. COASTAL VII: Tsunami & Waves 2 (V. 3)	310A
88. COASTAL ENG VIII: Current & Tide (V. 3)	310A

FLOW-INDUCED VIBRATIONS

63. FLOW-INDUCED VIBRATIONS (V. 2)	321C
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METOCEAN

14. MetOcean (V. 3)	310A
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HIGH-PERFORMANCE MATERIALS SYMPOSIUM: ADVANCED WELDING

34. HPM I: Friction Stir Welding of Steel (V. 4)	320A
44. HPM II: Friction Stir Welding of Aluminum (V. 4)	320A
53. HPM III: Welding 1 (V. 4)	320A
62. HPM IV: Welding 2 (V. 4)	320A
71. HPM V: Steel, Fabrication & NDE (Vol. 4)	320A
81. HPM VI: Steel, Fabrication & NDE II (V. 4)	320A
90. HPM VII: Steel, Fabrication & NDE III (V. 4)	320A

TUBULAR STRUCTURES

7. TUBULAR STRUCTURES: STATIC (V. 4)	320A
16. TUBULAR STRUCTURES: Fatigue (V. 4)	320A
25. ADVANCES IN TUBULAR STRUCTURES (V. 4)	320A

MECHANICS, RELIABILITY, RISK & SAFETY

19. MECHANICS & MEASUREMENTS (V. 4)	304B
56. RELIABILITY, RISK & SAFETY I (V. 4)	304B
65. RELIABILITY, RISK & SAFETY II (V. 4)	304B

COMPOSITES & SMART STRUCTURES

8. COMPOSITES & SMART STRUCTURES I (V. 4)	321C
17. COMPOSITES & SMART STRUCTURES II (V. 4)	321C
26. COMPOSITES & SMART STRUCTURES III (V. 4)	321C

BIOMECHANICS & CONTROL

33. BIOMECHANICS & CONTROL (V. 4)	311A
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SUPERCONDUCTING & OTHER PROPULSION

43. SHIP PROPULSION (V. 4)	311A
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WAVE IMPACT, IMPACT, COLLISION,

74. IMPACT, COLLISION, DAMAGE I (V. 4)	304B
84. WAVE IMPACT I (V. 4)	304B
93. WAVE IMPACT II (V. 4)	304B

ADVANCED LNG, TANKERS, CAD & CONSTRUCTION

10. TANKERS: Design & Construction (V. 4)	304B
28. SHIP STRUCTURAL MECHANICS (V. 4)	304B
37. LNG & TERMINAL (V. 1)	304B
47. SHIP CAD & FAST SHIPS, (V. 4)	304B

Conference Reception	COEX Intercontinental Hotel
18:00-19:30 SUNDAY June 19	Harmony Ballroom

Conference Opening Address	COEX Convention Center
08:30 Monday June 19	Grand Conference Room

Annual Conference Banquet	COEX Intercontinental Hotel
19:00 Wednesday June 22	Harmony Ballroom

Plenary Presentation I (V.1)		
Monday	June 20	13:30
310BC		
MH21 National Project: Progress in Methane Hydrate R&D		
Komai, T., National Inst of AIST, Japan		

Plenary Presentation II (V.2)

Monday June 20 13:30 **320BC**

Stability of Waterfront Ground during Earthquakes

Ishihara, Kenji, Chuo Univ/Tokyo Univ of Science, Japan

Plenary Presentation III

Tuesday June 21 13:30 **310BC**

Siberia–Far East Pipeline Project

Speaker (to be announced), Russia

Plenary Presentation IV (V.1)

Wednesday June 22 13:30 **310BC**

New Expansion of Tokyo International Airport in Tokyo Bay: Necessity and Accountability

Kikuchi, M, Sasa, K, Miyata, M, Ministry of Land Infrastructure and Transport; Hiraishi, T, Port and Airport Research Inst, Japan

Plenary Presentation V (V.3)

Wednesday June 22 13:30 **311BC**

Modeling of Strongly Nonlinear Ocean Waves: Application to Freak Waves

Grilli, S T, Univ of Rhode Island, USA

ISOPE-2005 Technical Program Committee (TPC)

Dr. H. Allersma, Delft Univ. of Technology, Delft, The Netherlands
Mr. N. Ames, EWI, Columbus, OH, USA
Dr. Taro Aoki, JAMSTEC, Yokosuka, Japan
Dr. H. Asahi, Nippon Steel Co., Futtsu, Chiba-ken, Japan
Dr. R. Ayer, ExxonMobil Research & Engineering Co., Annandale, NJ, USA
Prof. S.C. Bang, South Dakota School of Mines and Technology, Rapid City, SD, USA
Prof. A.T. Bekker, Far Eastern State Tech. Univ., Vladivostok, Russia
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Prof. J.-W. Chen, National Cheng Kung Univ., Taiwan, China
Prof. L.-K. Chien, National Taiwan Ocean Univ., Keelung, Taiwan, China
Prof. H. S. Choi, Seoul National University, Seoul, Korea
Dr. Y.S. Choo, National University of Singapore, Singapore
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Mr. G. Ersdal, Petroleum Safety Authority, Stavanger, Norway
Dr. A. Ewida, PetroCanada, Calgary, Canada
Dr. D. Fairchild, ExxonMobil Upstream Research Co., Houston, TX, USA
Dr. K. Fakharian, Amirkabir University of Technology, Tehran, Iran
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 Dr. Marie-France Gauthier, Environment Canada, Ottawa, Canada
 Prof. A.M. Gresnigt, Delft Univ. of Technology, Delft, The Netherlands
 Prof. S.T. Grilli, University of Rhode Island, Narragansett, RI, USA
 Dr. Mark Grosenbaugh, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
 Dr. A.R. Henderson, Ceasa, Stroud, UK
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 Dr. T. Hiraishi, Port and Airport Research Inst., Yokosuka, Japan
 Dr. S.W. Hong, Korea Research Inst. of Ship and Ocean Engineering, Daejeon, Korea
 Dr. S.Y. Hong, Korea Research Inst. of Ship and Ocean Engineering, Daejeon, Korea
 Prof. W.P. Hong, ChungAng University, Seoul, Korea
 Dr. S. Huang, University of Glasgow and Strathclyde, Glasgow, UK
 Prof. T. Huang, Univ. of Texas, Arlington, TX, USA
 Prof. Y. Ikeda, Univ. of Osaka Prefecture, Osaka, Japan
 Prof. Y. Inoue, Yokohama National Univ., Yokohama, Japan
 Dr. K. Izumiyama, National Maritime Research Institute, Tokyo, Japan
 Dr. A. D. Jenkins, University of Bergen, Bergen, Norway
 Dr. C. Jo, Inha Univesity, Incheon, Korea
 Dr. J. Kajaska-Rudnitski, Helsinki University of Technology, Espoo, Finland
 Dr. H. Kanegaonkar, Samsung Heavy Industries Co., Geoje, Korea
 Dr. C G Kang, Korea Research Inst. of Ship and Ocean Engineering, Daejeon, Korea
 Dr. K B Kang, POSCO, Pohang, Korea
 Dr. H. Karadeniz, Delft Univ. of Technology, Delft, The Netherlands
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 Dr. K Kato, Kinki Univ., Wakayama, Japan
 Dr. N. Kato, Osaka University, Japan
 Prof. K Kawano, Kagoshima Univ., Kagoshima, Japan
 Dr. S.T. Kee, Seoul Natinal University of Technology, Seoul, Korea
 Prof. C.H. Kim, Texas A & M Univ., College Station, TX, USA
 Prof. D S Kim, Korea Advanced Inst of Science and Technology, Daejeon, Korea
 Dr. M.H. Kim, Texas A & M Univ., College Station, TX, USA
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