



The Royal Institution of Naval Architects

ICSOT Korea: Safety of Offshore and Subsea Structures in Extreme and Accidental Conditions

15-16 September 2015, Nongshim Hotel, Busan, Korea

Supported by:



선박해양플랜트기술연구원
THE KOREA SHIP AND OFFSHORE RESEARCH INSTITUTE

| Tuesday 15 th September 2015 | | |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 08.30-08.55 | Coffee and Registration. | |
| 08.55-09.00 | Welcome Address- Trevor Blakeley, The Royal Institution of Naval Architects, UK | |
| 09.00-09.30 | Keynote- NOVEL MATERIALS FOR OFFSHORE AND SUBSEA STRUCTURES: SAFETY IMPLICATIONS, by Prof Igor Guz, University of Aberdeen, UK | |
| 09.30-10.00 | REDUCING PROJECT RISKS AND DELAYS IN INTERNATIONAL OFFSHORE PROJECTS, Petter Ellingsen, DNV GL, Korea | I Guz |
| 10.00-10.30 | THE TRANSITION OF ADVANCED RISK AND SAFETY CAPABILITY TO THE OFFSHORE INDUSTRY, John Waltham-Sajdak, Alion Science and Technology, USA | |
| 10.30-11.00 | TEST FACILITIES FOR SAFETY STUDIES OF SHIPS AND OFFSHORE STRUCTURES ASSOCIATED WITH EXTREME AND ACCIDENTAL CONDITIONS, Jeom Kee Paik, Jung Kwan Seo, KOSORI, Korea | |
| 11.00-11.30 | Coffee | |
| 11.30-12.00 | THE CHIRP AND MARS CONFIDENTIAL REPORTING SCHEMES, Alan Loynd, Branscombe Marine Consultants, Hong Kong | K W Yang |
| 12.00-12.30 | THE NEW METHODOLOGY OF FMEA FOR PROCESS INDUSTRY Jinhyung Park, Yokogawa Electric Korea, South Korea | |
| 12.30-13.00 | PHYSIOLOGICAL COMPUTING FOR MARITIME ERGONOMICS APPLICATIONS, Yanbin Wu, T. Miwa, M. Uchida, Kobe University, Japan | |
| 13.00-14.00 | Lunch | |
| 14.00-14.30 | THE INTEGRATION ON HUMAN FACTORS PRINCIPLES WITH THE DEVELOPMENT AND QUALITY ASSURANCE PROCESS OF INTEGRATED SOFTWARE DEPENDENT SYSTEMS, Saara Keränen, DNV GL, Korea | J H Park |
| 14.30-15.00 | IMPLEMENTATION OF RISK AND WORKING ENVIRONMENT ANALYSES FOR OFFSHORE INSTALLATIONS ON THE NORWEGIAN CONTINENTAL SHELF, Kyung Won Yang, DNV GL Oil & Gas, Korea | |
| 15.00-15.30 | STUDY ON WORKLOAD MEASUREMENTS AT THE MARINE ENGINEERING EDUCATION UNDER THE MARINE ENGINE SIMULATOR ENVIRONMENT, Takashi Miwa, K. Shimamoto, Y. Wu, M. Uchida, Kobe University, Japan; M. Nakamura, Yuge National College of Maritime Technology, Japan | |
| 15.30-16.00 | Coffee | |
| 16.00-16.30 | ULTIMATE STRENGTH PERFORMANCE OF COMMERCIAL SHIPS ON ARCTIC OCEAN Dae Kyeom Park ¹ , Y.C. Ha ¹ , B.J. Kim ¹ , J.K. Seo ¹ and J.K. Paik ^{1,2} , 1The Korea Ship and Offshore Research Institute (The Lloyd's Register Foundation Research Centre of Excellence), Pusan National University, Busan, Korea. 2Department of Mechanical Engineering, University College London, London, UK. | Session 4 |
| 16.30-17.00 | PREDICTING OF ICE SCOUR LOADS AND RATE EFFECT EVALUATION FROM SMALL SCALE 1G TESTS, S. Arnau, Ana Ivanović, University of Aberdeen, UK | |
| 17.00-17.30 | PRESSURE-IMPULSE DIAGRAM FOR PREDICTION OF STRUCTURAL DAMAGE TO LNG FPSO TANKS UNDER SLOSHING IMPACT LOADS, Sang Eui Lee, B.J. Kim, J.K. Seo, Y.C. Ha, J.K. Paik, KOSORI, Korea; T. Matsumoto, ClassNK, Japan; S. H. Byeon, STX Offshore and Shipbuilding, Korea | |
| 17.30- | General Discussion & Evening Drinks Reception | |



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| Wednesday 16 th September 2015 | |
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| 08.30-09.00 | Coffee and Registration. |
| 09.00-09.30 | DETERMINATION OF FIRE ACCIDENTAL LOADS FOR ALUMINIUM SAFETY HELIDECKS , J.K. Seo, Sang Jin Kim, B.J. Kim, J.K. Paik, KOSORI, Korea; W.H. Shin, NK Co. Ltd, Korea; J.S. Park, Samsung Heavy Industries, Korea |
| 09.30-10.00 | WINTERIZATION DESIGN OF ALUMINIUM HELIDECK IN ARCTIC ENVIRONMENT , So Young Bae, G.H. Kang, KOMERI, Korea; J.S. Park, Samsung Heavy Industries, Korea; W.H. Shin, NK Co. Ltd, Korea; J.K. Seo, KOSORI, Korea |
| 10.00-10.30 | ALUMINIUM HELIDECK DESIGN FOR EUROCODE9 WITH DEFORMATION BASED DESIGN , Joo Shin Park, Y.S. Ha, C.W. Lee, K.B. Jang, Samsung Heavy Industries, Korea |
| 10.30-11.00 | A METHOD TO CALCULATE LEVEL ICE LOADS ON MULTI LEGGED CONICAL STRUCTURES , Jose M. Cabrera and J.K. Paik, Department of Naval Architecture and Ocean Engineering; The Korea Ship and Offshore Research Institute (Lloyd's Register Foundation Research Centre of Excellence), Pusan National University, Busan |
| 11.00-11.30 | Coffee |
| 11.30-12.00 | AN INVESTIGATION ON OFFSHORE HELIDECK TURBULENCE ASSESSMENT METHODS , Sang In Park, M.H. Kim, H.R. Chi, J.B. Lee, S.M. Kwon and Y.S. Hwang, Daewoo Shipbuilding & Marine Engineering, Co. Ltd., Korea |
| 12.00-12.30 | NONLINEAR STRUCTURAL RESPONSE ANALYSIS OF BLAST WALLS OF OFFSHORE INSTALLATIONS IN EXPLOSIONS , Jung Min Sohn, Pukyeong National University, Korea |
| 12.30-13.00 | COLLAPSE MODES OF FLEXIBLE PIPES UNDER EXTERNAL PRESSURE , Y. Bai, Shuai Yuan, P. Cheng, Zhejiang University, China |
| 13.00-14.00 | Lunch |
| 14.00-14.30 | PRESCREENING OF OCEAN ENVIRONMENT FOR THE PREDICTION OF EXTREME TENSION LOADS ON OFFSHORE STRUCTURES , Dong Hyum Lim, T. Y. Kim, Y.H. Kim, Seoul National University, Korea |
| 14.30-15.00 | SHOCK RESPONSE ANALYSIS OF BLAST HARDENED BULKHEAD IN NAVAL SHIP UNDER INTERNAL BLAST , Sang Gap Lee, Korea Maritime and Ocean University, Korea |
| 15.00-15.30 | SENSITIVITY ANALYSIS OF WTIV LEG DESIGN CONSIDERING SOIL CHARACTERISTICS FOR KOREA WEST-SOUTH OFFSHORE WIND ZONE , Tae Min Cho, J.S. Park, Y.S. Ha, J.H. Jeon, K.B. Jang, Samsung Heavy Industries, Korea |
| 15.30-16.00 | Coffee |
| 16.00-16.30 | BETTER DESIGN OF HIGH INTEGRITY PRESSURE PROTECTION SYSTEMS (HIPPS) , Jinhung Park, Yokogawa Electric Korea, Korea |
| 16.30-17.00 | M & S SYSTEM FOR MARINE ACCIDENT CAUSE INVESTIGATION USING FSI ANALYSIS TECHNIQUE , Sang Gap Lee, Korea Maritime and Ocean University, Korea |
| 17.00-17.30 | General Discussion |

J K Seo

J K Seo

Session 7

Session 8