

29th International Workshop on Water Waves and Floating Bodies Suita, Osaka: March 30 – April 2, 2014

Technical Program

SUNDAY, MARCH 30, 2014

09:00 – 12:00	Registration Free Tour to EXPO Park with prepared ticket	
12:00 – 13:15	Lunch	
13:20 – 13:35	Welcome – Opening Remarks	Masashi Kashiwagi
Session 1	CHAIR: J.N. NEWMAN	
13:35 – 14:00	A Semi-analytic Formulation for the Hydrodynamic Diffraction by Submerged Ellipsoids	Chatjigeorgiou I.K., Dassios G., Mavrakos S.A., Miloh T.
14:00 – 14:25	Wave Trapping and Radiation by Semi-immersed Circular Cylinders	Chaplin J.R., Porter R.
14:25 – 14:50	Transparency of Structures in Water Waves	Evans D.V., McIver M., Porter R.
14:50 – 15:15	Hypersingular Integral-Equation Method for Wave Diffraction about Arbitrary, Shell-Like Vertical Cylinders in Finite-Depth Waters	Hariri Nokob M., Yeung R.W.
15:15 – 15:30	Coffee Break	
Session 2	CHAIR: R. EATOCK TAYLOR	
15:30 – 15:55	Second Order Wave Loads Based on Second Order TEBEM	Duan W., Chen J., Zhao B.
15:55 – 16:20	A Novel Approach of QTFs for Floating Body	Teng B., Cong P.
16:20 – 16:45	Hydroelastic Behavior of a Vertical Plate Subjected to Third-order Wave Interactions	Katifeoglou S.A., Molin B., Chatjigeorgiou I.K.
16:45 – 17:10	Nonlinear Simulation of Wave Resonances in a Narrow Gap between Two Barges	Feng X., Bai W., Ang K.K.
17:10 – 17:25	Coffee Break	
Session 3	CHAIR: R.F. BECK	
17:25 – 17:50	The Application of Velocity Decomposition to Fully-Submerged Free-Surface Problems	Rosemurgy W.J., Maki K.J., Beck R.F.
17:50 – 18:15	Interference Effects on Farfield Ship Waves at High Froude Numbers	Noblesse F., Zhu R., Hong L., Zhang C., He J., Zhu Y.
18:15 – 18:40	On the Interfacial Viscous Ship Waves Pattern	Dai Y.Z.
18:40 – 19:05	Towards Real Time Simulation of Ship-Ship Interaction -Part III: Immersed Body Boundary Condition and Double Body Ship-Ship Interaction -	Lindberg O., Bingham H.B., Engsig-Karup A.P.
19:30 – 20:00	Welcome Party	
20:00 – 21:30	Dinner	

MONDAY, MARCH 31, 2014

- Session 4 CHAIR: O.M. FALTINSEN
- 08:15 – 08:40 Impact of Liquids of Different Densities Semenov Y.A., Wu G.X., Korobkin A.A.
- 08:40 – 09:05 Water-exit Problem with Prescribed Motion of a Symmetric Body Korobkin A.A., Khabakhpasheva T. I., Maki K.J.
- 09:05 – 09:30 Study on Slamming and Whipping Response of Ship Structure Kim J.H., Kim Y., Korobkin A.A., Lee D.Y.
- 09:30 – 09:55 Numerical and Experimental Study of the Wave Response of a Floating Support with Partially Filled Tank Su Y., Kimmoun O., Molin B.
- 09:55 – 10:15 **Coffee Break**
- Session 5 CHAIR: Y. KIM
- 10:15 – 10:40 Highly Nonlinear Wave in Tank with Small Density Ratio Scolan Y.M., Karimi M.R., Dias F., Ghidaglia J.M., Costes J.
- 10:40 – 11:05 Global and Local Effects of Gas-Liquid Density Ratio on Shape and Kinematics of Sloshing Waves and Scaling Considerations Karimi M.R., Brosset L.
- 11:05 – 11:30 Recent Progress on the GN Model for a Two-layer Flow Zhao B.B., Duan W.Y., Ertekin R.C. Webster W.C.
- 11:30 – 11:55 Hydroelastic Response of a Submerged Structure to an Underwater Explosion Colicchio G., Greco M., Faltinsen O.M.
- 12:15 – 13:15 **Lunch**
- Session 6 CHAIR: A.A. KOROBKIN
- 13:30 – 13:55 Modified Shallow Water Equations for Mild-slope Seabeds Dutykh D., Clamond D.
- 13:55 – 14:20 Development of a Highly Nonlinear Model for Wave Propagation over a Variable Bathymetry Gouin M., Ducrozet G., Ferrant P.
- 14:20 – 14:45 A New Set of Focused Wave Linear Combinations to Extract Non-linear Wave Harmonics Hann M., Greaves D., Raby A.
- 14:45 – 15:10 The Limiting Effect of Breaking in Strongly Nonlinear Waves on Intermediate Water Depth, with Emphasis on the Kinematics Grue J., Kolaas J., Jensen A.
- 15:10 – 15:30 **Coffee Break**
- Session 7 CHAIR: A. HERMANS
- 15:30 – 15:55 The Latest Trends and Future Outlook of Floating Offshore Wind Turbine (Invited Presentation) Yamaguchi Y. (Class-NK)
- 15:55 – 16:20 Mean Drift Loads on Arrays of Free Floating OWC Devices Consisting of Concentric Cylinders Konispoliatis D.N., Mavrakos S.A.
- 16:20 – 16:45 Multi-resonant Compressible Wave Energy Devices Kurniawan A., Greaves D., Hann M., Chaplin J.
- 16:45 – 17:10 Latching Control Theory for Wave Energy Conversion Sheng W., Alcorn R., Lewis A.
- 17:10 – 17:35 Effects of Wave Spreading on Performance of a Wave Energy Converter Sun L., Zang J., Eatock Taylor R., Taylor P.H.
- 18:00 – 19:00 **IWWF Steering Committee Meeting**
- 19:30 – 21:30 **Dinner**

TUESDAY, APRIL 1, 2014

Session 8	CHAIR: B. MOLIN	
08:15 – 08:40	The Interaction of a Submerged Object with a Very Large Floating Platform	Hermans A.J.
08:40 – 09:05	Wave Induced Hydroelastic Behavior of the Vertical Circular Cylinder with Liquid Filled Tank at the Top	Malenica S., Choi Y.M., Vladimir N., Kwon S.H., Chen X.B.
09:05 – 09:30	Transient Flexural Gravity Wave Motion in the Presence of Floating and Submerged Plate System	Mohanty S.K., Sahoo T.
09:30 – 09:55	Radiation of Waves by a Cylinder Submerged in the Fluid Beneath an Elastic Ice Sheet with a Partially Frozen Crack	Sturova I.V.
09:55 – 10:15	Coffee Break	
Session 9	CHAIR: F. NOBLESSE	
10:15 – 10:40	Determination of the Wave Resistance of a Towed Body by the Parameters of Generated Waves	Maklakov D.V., Petrov A.G.
10:40 – 11:05	A High-order Finite-difference Solver for the Linearised Potential Flow Wave Resistance Problem on Curvilinear Overset Grids	Afshar M.A., Bingham H.B., Read R.
11:05 – 11:30	Experimental Study of High Speed Plate Ditching	Iafrazi A., Siemann M.H., Benítez Montañés L.
11:30 – 11:55	A Study on the Aerodynamic Properties of a Canard-Configuration WISES	Ito Y., Iwashita H.
12:15 – 13:15	Lunch	
Session 10	CHAIR: R.W. YEUNG	
13:30 – 13:55	Analytical and Numerical Approaches to Optimizing Fluid-Structure Interactions in Wave Energy Parks	Götteman M., Engström J., Eriksson M., Isberg J., Leijon M.
13:55 – 14:20	Wave Scattering by Dual Surface-Piercing Porous and Flexible Barriers	Mandal S., Behera H., Sahoo T.
14:20 – 14:45	A New Method for the Integration of the Transient Green Function over a Panel	van Walree F.
14:45 – 15:10	Time-Domain Hydroacoustic Green Function for Surface Pressure Disturbance	Renzi E., Dias F.
15:10 – 15:30	Coffee Break	
Session 11	CHAIR: J. GRUE	
15:30 – 15:55	Roll-yaw Coupling Effects on Parametric Resonance for a Ship in Regular Waves	Greco M., Lugni C., Faltinsen O.M.
15:55 – 16:20	Study on Roll Damping around a Circular Cylinder	Kwon S.H., Kim B.J., Han S.Y., Kim Y.J., Ahn K.S., Ren D., Lu L., Jiang S.C., Chen X.B.
16:20 – 16:45	Numerical Simulation of Wave-induced Roll of a 2-D Rectangular Barge Using OpenFOAM	Chen L.F., Sun L., Zang J., Hillis A.
16:45 – 17:10	Comparisons of MPS and SPH methods: Forced Roll Test of a Two-dimensional Damaged Car Deck	Le Touzé D., Hashimoto H., Grenier N., Sueyoshi M.
17:10 – 17:30	Coffee Break	
Session 12	CHAIR: H. BINGHAM	
17:30 – 17:55	Coupled MPS-FEM Model for Violent Flows-Structures Interaction	Hashimoto H., Le Touzé D.
17:55 – 18:20	Numerical Simulation of Fluid-Structure Interaction by an Adaptive Cartesian-Grid CIP Method	He G., Kashiwagi M.
18:20 – 18:45	Numerical Simulation of Free Surface Flow Impacting on an Elastic Plate	Liao K., Hu C., Sueyoshi M.
19:30 – 21:30	Banquet Dinner	

WEDNESDAY, APRIL 2, 2014

Session 13	CHAIR: W.Y. DUAN	
08:30 – 08:55	Prediction of Added Resistance in Short Waves by CFD Simulation	Hu C., Mikami T., Yamamoto K.
08:55 – 09:20	Numerical and Experimental Analyses of Added Resistance in Waves	Kim Y., Seo M.G., Park D.M., Kim J.H., Yang K. K.
09:20 – 09:45	Improvement of Rankine Panel Method by Theoretical Consideration of Panel Forces on Ship Hull	Sasa K., Kashiwagi M.
09:45 – 10:10	Stable Finite Difference Discretizations of the Forward Speed Seakeeping Problem	Bingham H.B., Afshar M.A., Read R., Engsig-Karup A.P.
10:10 – 10:30	Coffee Break	
Session 14	CHAIR: R. PORTER	
10:30 – 10:55	Hydrodynamic Analysis of the Piston Mode Resonance Inside a Large FLNG Turret	Molin B, de Vries I., Cinello A.
10:55 – 11:20	Experimental and Analytical Study of the Piston Mode Resonance Inside WIRs (Water Intake Risers)	Remy F., Molin B.
11:20 – 11:45	Second-order Resonance among an Array of Two Rows of Vertical Circular Cylinders - Comparisons of Theoretical Calculations and Reality -	Kagemoto H., Murai M., Fujii T.
11:45 – 12:10	The Dynamics and Statistics of Wave Crest Elevations and 2nd Order near Trapping for a Semi-submersible Platform	Taylor P.H., Eatock Taylor R., Grice J., Gibson R.
12:20 –	Lunch	

