

International RIAM Symposium in Kyushu University

Analysis on marine renewable energy dynamics and marine environment dynamics

Date : December 16 (Friday) & 17 (Saturday), 2011

Place: Large-Meeting Room, 2nd Floor of RIAM, Kyushu University

6-1 Kasuga-koen, Kasuga, Fukuoka 816-8580, Japan

December 16 (Friday)

13:00 - 13:10 **Opening Address by Masashi Kashiwagi (Osaka University)**

Chair: Changhong Hu (Kyushu University)

13:10 - 13:40 Coupled Problem of Dam-Break Flows

Alexander Korobkin (University of East Anglia, UK)

13:40 - 14:10 Simulation of 3D Fully Nonlinear Water Waves based on GN Theory

Wenyang Duan (Harbin Engineering University, China)

14:10 - 14:30 Added Resistance Computation by Using Far- and Near-Field Approaches

M.G. Seo, D.M. Park, K.H. Kim, Y. Kim (Seoul National University, Korea)

14:30 - 14:50 Large-Scale GPU Tsunami Simulation on a Multi-Level Mesh

Marlon Arce Acuna (Tokyo Institute of Technology)

14:50 - 15:10 Application of Lattice Boltzmann Method for Environmental Flow Simulation

Fei Jiang, Changhong Hu (Kyushu University)

15:10 - 15:30 (Coffee Break)

Chair: Masashi Kashiwagi (Osaka University)

15:30 - 16:00 Development of Tidal and Ocean Current Generator System Suitable for the Sea around Japan

Yoshimasa Minami (National Maritime Research Institute)

16:00 - 16:20 Model Testing and Performance Evaluation of a Shrouded Horizontal Axis Tidal Turbine

Huihui Sun, Yusaku Kyojuka (Kyushu University)

16:20 - 16:50 Experimental Study on a Flapping Wing Hydroelectric Power Generator

Hisanori Abiru (Fukuoka Institute of Technology)

16:50 - 17:10 Fundamental Research on the Energy Transmission Efficiency of a Rotating Pendulum-type Wave-power Generator

Saki Nishimatsu (Osaka University)

17:10 - 17:30 Tank Tests about TLP Type Offshore Wind Turbine Using an Elastic Model
Minori Kozen, Yasunori Nihei, Kazuhiro Yijima (Osaka Prefecture University)

17:30 - 17:50 Coupled Horizontal and Torsional Response of a Floating Structure by an Advanced
Torsional Beam Theory
Nao Kameyama (Osaka University)

18:00 - Dinner Party at Medium-Meeting Room, 2nd Floor of RIAM

December 17 (Saturday)

Chair: Yonghwan Kim (Seoul National University)

9:00 - 9:30 Fluid/Structure Impact: Water Entry
Guo Xiong Wu (University College London, UK)

9:30 - 9:50 Fluid Impact on a Corrugated Plate with Trapped Gas Cavity
Tatyana Ivanovna Khabakhpasheva (Lavrentyev Institute of Hydrodynamics, Russia)

9:50 - 10:10 Comparative Study on Sloshing Model Tests
S.Y. Kim, K.H. Kim, Y.Kim (Seoul National University, Korea)

10:10 - 10:30 Experimental Study on Water Entry of Horizontal Cylinder
Changhong Hu, Zhaoyu Wei (Kyushu University)

10:30 - 10:40 (Coffee Break)

Chair: Guo Xiong Wu (University College London)

10:40 - 11:00 Analyses and Comparison on Ship Hydroelasticity by Using Different Levels of
Numerical Approach
J.H. Kim, K.H. Kim, Y. Kim (Seoul National University)

11:00 - 11:20 An Experimental Study on Dynamic Collapse Behavior of a Floating Structure Subjected
to Extreme Loads
Hiroki Hotta (Osaka University)

11:20 - 11:40 Numerical Simulation of a Damaged Floating Body by the MPS Method
Hirotada Hashimoto (Osaka University)

11:40 - 12:00 Statistical Model of Ship Propulsion Plant for Performance Assessment in Actual Seas
Oleksiy Bondarenko (Osaka University)

12:00 - 12:10 **Closing Address by Changhong Hu (Kyushu University)**