# International RIAM Symposium in Kyushu University Analyses of Strongly Nonlinear Fluid-Structure Interactions

Date : December 21 (Tuesday) & 22 (Wednesday), 2010 Place: Multi-purpose Meeting Room (W601), 6th Floor of RIAM, Kyushu University

December 21 (Tuesday)

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

#### Chair: Changhong Hu (Kyushu University)

- 13:10 13:40 Springing Analysis on 10,000TEU Containership J.H. Kim, B.C. Kang, Y. Kim (Seoul National University)
- 13:40 14:10 A System for Loads and Load Effects of Ships Subjected to External and Internal Fluid Actions in Waves Kosuke Seki (Osaka University)
- 14:10 14:40 Nonlinear Evolution of Rogue Waves on Currents: Numerical Simulation Based on the NLS Equation
  Hanhong Hu and Ning Ma (Shanghai Jiao Tong University)
- 14:40 15:10 Development of Partitioned FSI Analysis Method Kangping Liao, Changhong Hu (Kyushu University)

15:10 - 15:30 (Coffee Break)

#### Chair: Masashi Kashiwagi (Osaka University)

- 15:30 16:00 Motion Analysis by Using a CIP-Based Numerical Method K.K. Yang, Y. Kim (Seoul National University)
- 16:00 16:30 Effects of Varying Bathymetry on Floating Body Motion T.Y. Kim, K.H. Kim, Y. Kim (Seoul National University)
- 16:30 17:00 Aerodynamic Effects on the Motion of Offshore Wind Turbine in Waves Yasunori Nihei (Osaka Prefecture University)
- 17:00 17:30 Wave Elevation around a 3D Floating Breakwater Faisal Mahmuddin, Masashi Kashiwagi (Osaka University)
- 17:30 18:00 Introduction of Recent Underwater Vehicle Development in China Bin Fu (Shanghai Jiao Tong University)

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

#### December 22 (Wednesday)

#### Chair: Ning Ma (Shanghai Jiao Tong University)

9:00 - 9:20	Sloshing Model Tests for LNG Carrier
	K.H. Kim, S.Y. Kim, Y. Kim (Seoul National University)

- 9:20 9:40 Research and Development of TLP Type Offshore Wind Turbines Yasunori Nihei, Midori Matsuura (Osaka Prefecture University)
- 9:40 10:00 Experimental Observation on Green-water Impact and Slamming Sunbum Kim, Tomohiko Isshiki, Masashi Kashiwagi (Osaka University)

10:00 - 10:20 Calculation of Impact Load and Structural Response in Water-Elastic Body Impact Utilizing General-Purpose FE Software Masakazu Nakashima (Kyushu University)

10:20 - 10:30 (Coffee Break)

### Chair: Yonghwan Kim (Seoul National University)

- 10:30 10:50 Hydro-Elastoplasticity Approach for Dynamic Collapse Behavior of Hull Girder in Waves Yasuyuki Goto (Osaka University)
- 10:50 11:10 Application of the MPS Method for Ships' Dynamic Stability Problems Tomohiro Sugimoto (Osaka University)
- 11:10 11:30 Comparison of Numerical Simulation and Experiment for Floating Fish Cage Systems Motoki Misaka, Makoto Sueyoshi (Kyushu University)
- 11:30 11:50 Numerical Simulation of Liquid-Gas Two-Phase Flow Driven by a Rotating Body Naruhiko Tan (Tokyo Institute of Technology)

## 11:50 - 12:00 Closing Address by Changhong Hu (Kyushu University)