



The 13th International Workshop on Ship and Marine Hydrodynamics (IWSH 2025)

Conference Handbook



日本船舶海洋工学会 西部支部
Western Branch of The Japan Society of Naval Architects and Ocean Engineers





The 13th International Workshop on Ship and Marine Hydrodynamics Fukuoka, Japan, August 25th - 28th, 2025

Parallel Sessions X

13:40 -15:00 Aug. 28	S10-A (Room A) Marine Craft Design and Optimization Chair: Ermina Begovic	S10-B (Room B) Data-Driven Method Chair: Seiya Watanabe	S10-C (Room C) Ocean Engineering IV Chair: Yingyi Liu
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S10-A (Room A) 13:40 -15:00, Aug. 28

Marine Craft Design and Optimization (Chair: Ermina Begovic)

Research on AI-Aided Design Methodology for Planing Craft

Zhicheng Zhang*, Jianglong Sun, Ying Liu, Jianfeng Qi, Zhengyi Zhang

Dihedral Bows: A New Type of Bulbous Bow for Small Vessels

Francisco Perez-Arribas*, Hector Diaz-Ojeda, Yifu Zhang, Stephen Turnock

Overall Design and Vertical Plane Mobility Optimization of a Hybrid-Wing Unmanned Aerial Underwater Vehicle

Zhaoyu Wei*, Hangyu Zhou, Weiqiang Hu

Hydrodynamic Response Analysis and Structural Optimization Design of TLP Floating Offshore Wind Turbine

Zongyuan Lai, Ronghua Zhu*, Huaqi Yuan

S10-B (Room B) 13:40 -15:00, Aug. 28

Data-Driven Method (Chair: Seiya Watanabe)

Forecasting Ship Motion Responses in Irregular Waves by a Data-Driven Model

Yu Yang*, Shijie Qin

Enhancing the Accuracy and Efficiency of the Volume of Fluid Method Using a Data-Driven Approach

Mohamed M. Kamra*, Abdulrahman E Salem, Tarek Dief, Changhong Hu, Shigeo Yoshida, Mostafa A Rushdi

A Data-Driven Model for Surface Vessels Using a Combined Physics-Based and Neural Network Approaches

Hongzhong Zhu*, Changhong Hu, Lei Tan

S10-C (Room C) 13:40 -15:00, Aug. 28

Ocean Engineering IV (Chair: Yingyi Liu)

Study on Transient Nonlinear Gap Resonance between a Fixed Box and a Vertical Wall