



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





Parallel Sessions X

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

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