Special Issue

Damage Stability of Ships

Message from the Guest Editors

Ensuring sufficient damage stability of ships and, thus, their safety in case of flooding of watertight spaces is essential for ship survivability and for the safety of life at sea. During the past century, modeling and calculation methods have been developed, as well as assessment criteria, ranging from simple floodable length analyses to extensive probabilistic damage stability assessments, such as in the frame of the current international SOLAS regulations. More recently, novel numerical simulations methods have been also developed, with focus on the modeling of the physics of the ensuing physical phenomena, namely, the flooding process of damaged ships, employing both simple hydraulic models and advanced CFD, while also considering the effects of the surrounding sea state. In addition, improvements to the damage stability assessment framework and accident statistics, as well as decision support in flooding emergency, are being developed.

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The Journal of Marine Science and Engineering (JMSE, ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

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