Special Issue

Fatigue and Fracture Mechanics of Marine Structures

Message from the Guest Editors

Fatigue and fracture are important design criteria for marine structures subjected to static and cyclic loading. In particular, the ability to ensure structural integrity under all design conditions is of utmost importance due to the risk towards humans and the environment. Over the years, significant efforts have been allocated to the development of fatique and fracture mechanics methods; however, for a number of reasons, discrepancies between predicted and actual strength remain. The focus of this Special Issue is descriptions of the fatique and fracture mechanics behaviour of marine structures. We seek studies aimed at novel methods (either analytical, empirical or numerical), as well as presentations of case studies or innovative test studies. Discussions of parameters which influence the fatigue and fracture behaviour of materials, welded joints, or structural components, such as loading conditions, scale effects, etc., will also be considered. Finally, methods of improving the fatigue and fracture mechanics prediction of marine structures, either during design, fabrication or service may be addressed. Both original and review papers are welcome.

Guest Editors

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Deadline for manuscript submissions

closed (20 February 2023)



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Message from the Editor-in-Chief

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.

Editor-in-Chief

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