





an Open Access Journal by MDPI

# Recent Advances on Safe Maritime Operations under Extreme Conditions

Guest Editors:

#### Prof. Dr. Pentti Kuiala

1. School of Engineering, Aalto University, Espoo, Finland 2. School of Naval Architecture, Ocean and Civil Engineering, Shanghai Jiao Tong University, Shanghai, China

### Prof. Dr. Spyros Hirdaris

Department of Mechanical Engineering (Maritime technology), Aalto University, Espoo, Finland

#### Dr. Martin Bergström

Department of Mechanical Engineering, Aalto University, 02150 Espoo, Finland

Deadline for manuscript submissions:

closed (10 April 2021)

# **Message from the Guest Editors**

Dear Colleagues,

The increased activity in the Arctic involves hazards such as a harsh environment, especially the ice cover and cold temperature among others. This effect on Arctic operations is a complicated task to solve. The focus of this Special Issue will be research related to the recommended practice on scenario-based risk management for Polar shipping and risk-based guidelines considering holistically the impact of risks on ice infested waters. These can include: (a) Definition of ice conditions, (b) ship-ice contact, (c) numerical models/idealizations, (d) definition of limit states for ice-strengthened structures, and (e) holistic riskreward analysis for Polar navigation. Articles submitted to this Special Issue can also deal with the most significant recent developments in the abovementioned areas. We invite researchers to contribute original research articles as well as review articles that will stimulate the continuing research effort on the future needs to guarantee safe shipping in ice waters.

Prof. Dr. Pentti Kujala Prof. Dr. Spyros Hirdaris Dr. Osiris Valdez Banda *Guest Editors* 



Specialsue







an Open Access Journal by MDPI

# **Editor-in-Chief**

# **Prof. Dr. Giulio Nicola Cerullo**Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

# **Message from the Editor-in-Chief**

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

#### **Contact Us**