

Special Issue

Application of Fluid Mechanics in Ocean Engineering

Message from the Guest Editor

Fluid mechanics is a fundamental discipline that underpins numerous aspects of ocean engineering and provides essential tools and principles to understand and manipulate the behavior of fluids in marine and offshore environments. This Special Issue aims to compile cutting-edge research that showcases the application of fluid mechanics to address complex challenges within ocean engineering. By highlighting the latest advancements and innovations, this collection seeks to demonstrate how fluid mechanics can drive technological progress and enhance our understanding of marine systems. Contributions to this collection will cover a broad spectrum of topics centered around the application of fluid mechanics. These include the following:

- Hydrodynamic Design and Optimization
- Wave and Current Interactions
- Turbulence and Flow Control
- Environmental Fluid Mechanics
- Advanced Simulation Techniques
- Marine Environmental Prediction

Guest Editor

Dr. Hang Xu

State Key Lab of Ocean Engineering, School of Naval Architecture, Ocean and Civil Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Deadline for manuscript submissions

20 September 2025



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/232971

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls-ci@mdpi.com

mdpi.com/journal/

appls-ci





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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.

Editor-in-Chief

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

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)