

## Special Issue

# Modeling of the Flow Field Around and Tension Force on Porous Structures

### Message from the Guest Editors

Porous structures are widely employed in practical applications, and the understanding of the fluid flow in porous structures is beneficial for the design of porous structures. Many attempts have been made over the years to analyze the fluid flow and hydrodynamic loads on porous structures. The Special Issue reports research on the flow field around porous structures (such as artificial reef, porous breakwater, kelp vegetation, and fish cage, etc.) by numerical simulation. The specific areas presented in this issue include, but are not limited to: Hydrodynamics, Structures and materials, Stability and safety, Ocean environmental engineering, Renewable energy, Digital twin technology.

- numerical simulation
- porous structure
- flow field
- hydrodynamics

---

### Guest Editors

Dr. Tiaojian Xu

State Key Laboratory of Coastal and Offshore Engineering, Dalian University of Technology, Dalian 116024, China

Dr. Mi-An Xue

College of Harbor Coastal and Offshore Engineering, Hohai University, Nanjing, China

---

### Deadline for manuscript submissions

closed (31 July 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/138687](https://mdpi.com/si/138687)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

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

[applsci](https://doi.org/10.3390/applsci)





# 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, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

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