Special Issue

Particle Capture, Bioenergetics, and Ecological Role of Filter-Feeding Marine Invertebrates

Message from the Guest Editors

Filter feeding animals are necessary links between suspended food particles and higher trophic levels in marine food webs. Particularly in shallow coastal waters and fjords, dense populations of filter feeders may exert a pronounced grazing impact, which may keep the water clear (but not clean) in eutrophicated areas. On the contrary, dense populations of filter-feeding jellyfish and ctenophores in such areas may exert a pronounced predation impact on grazing zooplankton, resulting in phytoplankton blooms and making the water green. In addition, blooms of open-ocean filter-feeding pelagic tunicates can control the populations of primary and secondary producers. This Special Issue focuses on several related topics: particle capture mechanisms and retention efficiency, bioenergetics and energy budgets, filter pumps and energy costs, grazing impact of mussels, ascidians, sponges, bryozoans, and other benthic filter-feeding invertebrates, predation impact of jellyfish and ctenophores, grazing impact of pelagic tunicates, and interactions between jellyfish and zooplankton.

Guest Editors

Prof. Dr. Hans Ulrik Riisgård

Marine Biological Research Centre, University of Southern Denmark, Hindsholmvej 11, 5300 Kerteminde, Denmark

Dr. Florian Lüskow

Department of Earth Sciences, Uppsala University, Campus Gotland, Cramérgatan 3, 621 57 Visby, Sweden

Deadline for manuscript submissions

30 March 2026

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/225148

Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

mdpi.com/journal/jmse

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/journal/jmse

MDPI

About the Journal

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

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).