

# Special Issue

## Ecology of Sea Ice Algae

### Message from the Guest Editor

Sea ice algae play a significant and important role in polar regions. They are the only carbon source in the food chain during the ice-covered spring period in which light increases, though also regulated by the snow cover. The question is: how can low-light-adapted ice algae cope with the foreseen decrease in snow cover thickness and increased light transmittances? What are the effects of these factors on the ecology of sea ice algae and their trophic importance regarding decreasing sea ice extent? What is the importance of sea ice algae in the exchange of CO<sub>2</sub> between atmosphere, sea ice, and water? There is a need for ice algae-sympagic biota interactions and more detailed studies of sympagic-pelagic-benthic couplings. The purpose of the invited Special Issue is to publish new research with a focus on the ecological role of sea ice algae and their ecology. The Special Issue will publish high-quality papers on the following topics from both the Arctic and Antarctica:

- Trophic relations;
- Adaptation strategies;
- Modelling;
- New techniques;
- Seeding by ice algae;
- Ice algae and bacteria;
- Extreme environment.

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### Guest Editor

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### Deadline for manuscript submissions

closed (1 June 2021)



## Journal of Marine Science and Engineering

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Impact Factor 2.8  
CiteScore 5.0



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Engineering*  
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## 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.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi  
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