Special Issue

Air–Sea Gas Exchange in Polar Regions

Message from the Guest Editor

Air–sea gas exchange has a profound implication for the Earth's climate and environment. Concentration of climate- and pollution-relevant gases is mediated by the interplay among physical, chemical, and biological processes at the ocean/atmosphere interface. While there are advances in understanding of these processes in accessible ocean regions, there is a lack of information about air–sea gas exchange in polar regions, which are changing most rapidly and at the same time are difficult to access and study. In this Special Issue, we would like to focus on new data related to air–sea gas exchange processes from polar regions, and have a special focus on factors affecting air–sea gas exchange in polar regions that are non-existent in other ocean areas. Aspects of climate change in polar regions that serve as additional forces to processes affecting air–sea gas exchange, such as increasing frequency and magnitude of under ice phytoplankton blooms and ice algal blooms, elevated activity of sea ice microbial assemblages, storms, and changes in sea ice dynamics, are also interesting to consider.

Guest Editor

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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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