Special Issue

Air-Water Gas Exchange in Coastal Ocean

Message from the Guest Editor

Quantifying the air-sea exchanges of reactive trace gases and factors that control them is critical to understanding of climate-related processes and regional to global biogeochemical cycles. For trace gases estuaries and coastal seas are “hot spots”, characterised by high rates of biogeochemical cycling, and large emissions to air. High spatial and temporal variability are characteristic features, reflecting strong gradients in biology, biogeochemistry, and the environmental controls of air-sea gas exchange rates. There remains considerable uncertainty over the scales of these variabilities and how they are mediated. This should be urgently addressed because the biogeochemical models and largescale climate models that crucially depend on this information are central to developing the predictive capacity needed for quantifying regional and global scale trace gas fluxes and feedbacks. The broad remit of the special issue thus includes observational and modelling studies that improve estimates of fluxes and clarify the underlying biogeochemical and physical drivers.

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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