



Advances in Gas Hydrate Development: Experimental and Numerical Simulation

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Message from the Guest Editors

Dear Colleagues,

Gas hydrate is a kind of clean energy resource of great importance worldwide. The objective of this Special Issue is to publish ten or more papers on advances in gas hydrate development, such as exploitation methods and corresponding forecast and prevention of geological hazards and environmental effects. This Special Issue aims to collect contributions from different disciplines, including fundamental research of mechanics, physics, geology and applied research of ocean engineering, etc. Contributions and discoveries in experiments, numerical simulations, and monitoring are welcomed.

This Special Issue aims to cover, without being limited to, the following topics:

- Modeling on thermal–chemical–mechanical coupling processes and evolution of the moving boundaries
- Physical modeling and numerical simulation of geotechnical problems
- Interaction between soil and structures under various methods of gas hydrate development
- Multiphase flow with gas hydrate phase transition (dissociation or formation)
- Geological hazards, environmental effects, and monitoring techniques relative to gas hydrate development
- New exploitation methods





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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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