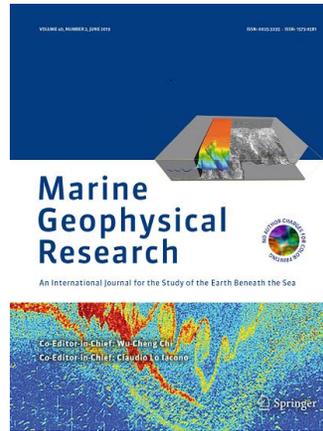


# CALL FOR PAPERS

## Marine Geophysical Research Special Issue:



## Recent Advances in Characterizing Marine Gas Hydrate Systems

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### Scope

The possibility of gas hydrates becoming a viable energy resource has continued to gain momentum since the announcement in 2013 of the first successful offshore gas hydrate production test in Japan. Gas hydrates are also known to play a key role in modulating the flow of methane through the seafloor and into the oceans, with implications for seafloor biodiversity and ocean chemistry. Likewise, hydrates influence the mechanical, hydrological and thermal properties of the sediments in which they form, and therefore have implications for the stability of the seafloor and sub-seafloor, and associated offshore infrastructure.

With the continuing development of geoscientific experiments and methodologies, our understanding of gas hydrate systems is improving. For example, high-resolution 3D seismic surveys, ocean-bottom seismometer deployments and controlled-source electromagnetic surveys are all helping to better image and quantify free gas and gas hydrate occurrences. Laboratory-based experiments are providing new insight into the evolution of gas hydrate habit during formation, and the influence of gas hydrate on sediment properties. Numerical modelling studies are deciphering, for example, the key processes that underlie gas hydrate formation from both short-range and long-range methane migration and the

complex thermo-hydro-mechanical-chemical couplings that occur during hydrate formation/dissociation.

In this Special Issue we are seeking new and informative research contributions surrounding a broad range of themes in marine gas hydrate research:

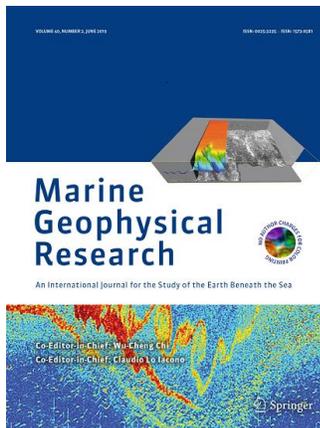
- Technological developments in field-based research for imaging and quantifying gas hydrate deposits;
- Data processing and interpretation of marine gas hydrate systems;
- Laboratory and macro to micro scale modeling developments and studies;
- Global and/or case studies into any theme of marine gas hydrate research, including energy resources, marine geohazards, and marine ecology/biogeochemistry.

Feel free to **contact the Guest Editors** providing title and brief outline of the paper content, to assess whether it would fit within the scope of this special issue.

The submission/publication process will be led by the Guest Editors and the MGR editorial team. **Importantly, manuscripts will be published online immediately after the acceptance for publication.**

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