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# **Energy Resource Potential of Gas Hydrates**

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Deadline for manuscript submissions:

closed (31 December 2020)

## **Message from the Guest Editors**

Dear Colleagues,

Natural gas hydrates mostly located on the sea bed constitute the largest reservoir of natural gas on the planet and represent an important solution for the transition from the actual energy scenario to a renewable one. Methane, contained in hydrates' crystalline structure, can be replaced by carbon dioxide, and therefore equivalent to renewable energy sources. Authors are invited to submit papers in the field of gas hydrates as an energy resource by focusing on the following topics:

- Chemical and physical aspects for a deeper comprehension of the kinetics and thermodynamics of methane delivery and CO<sub>2</sub> hydrate formation and stability
- Geological aspects, in particular the mechanical properties of CO<sub>2</sub> and CH<sub>4</sub> hydrate sediments as well as the mechanical properties of gas hydrates during the CH<sub>4</sub>– CO<sub>2</sub> exchange process; prospection and detection aspects.
- Engineering aspects related to: natural gas extraction, CO 2 injection and replacement process, drilling problems.
- Environmental sustainability evaluations.
- Economic and political aspects of gas hydrate exploitation; effects on energy scenarios and markets.

Thank you very much!











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## **Editor-in-Chief**

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## **Message from the Editor-in-Chief**

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