



## Advances in Gas Hydrate Development: Phase Transition, Multiphase Flow and Heat-Mass Transfer

Guest Editors:

**Prof. Dr. Bo Li**

School of Resources and Safety  
Engineering, Chongqing  
University, Chongqing 400044,  
China

**Prof. Dr. Jing-Chun Feng**

Institute of Environmental and  
Ecological Engineering,  
Guangdong University of  
Technology, Guangzhou 510006,  
China

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### Message from the Guest Editors

Dear Colleagues,

To eliminate the global threat of energy shortage and climate change, considerable interest has been drawn on the exploitation of gas hydrate, due to its enormous energy reserves around the world. Many countries have devoted great efforts in gas hydrate-related research areas, and several field-scale production trials have been conducted in the USA, Canada, Japan, and China. Hydrate dissociation is a kinetics-controlled chemical reaction which is associated with various complex processes such as phase transition, heat-mass transfer, and multiphase fluid flow in porous media. The dissociation of hydrate particles will also cause the possibility of reservoir deformation due to the decrease in strength in porous media. Although considerable research has been conducted and substantial progress has been made in gas hydrate areas, knowledge gaps still remain with respect to these fundamental issues. The purpose of this Special Issue is to provide a comprehensive summary of the progress in the field of gas hydrate development. Other relevant topics with gas hydrate are also encouraged to be presented in this collection.





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## Editor-in-Chief

**Prof. Dr. Charitha Pattiaratchi**  
School of Engineering, The UWA  
Oceans Institute, The University  
of Western Australia, Perth, WA  
6009, Australia

## Message from the Editor-in-Chief

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*Journal of Marine Science and  
Engineering* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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