Special Issue

Hydraulic Characteristics of Hydrate-Bearing Sediment

Message from the Guest Editors

Natural gas hydrate is a promising energy resource, predominantly found in marine sediments and permafrost regions. Hydrate deposits within sediments often exhibit a heterogeneous and complex morphology. The formation, dissociation, and migration of gas within these sediments further complicate their hydraulic properties, affecting fluid flow, permeability, and sediment stability. Therefore, a thorough understanding of the hydraulic characteristics of hydrate-bearing sediments is crucial for efficient resource extraction and mitigating potential geohazards.

This Special Issue aims to provide an international platform for advancing research and engineering applications related to the hydraulic characteristics of hydrate-bearing sediments. We invite submissions on all topics related to this field. Areas of interest include, but are not limited to, fluid flow, permeability, gas production, and sand production, with implications for both engineering and environmental science.

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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