

## Special Issue

# Permafrost and Gas Hydrate Response to Ground Temperature Rising

### Message from the Guest Editor

Permafrost and gas hydrates in permafrost regions are known to be the result of prolonged cooling of the upper horizons of the lithosphere during global climate changes that periodically occur on Earth. The existing permafrost, even though it sounds stable and permanent, is not eternal in the course of climate evolution but changes naturally.

Therefore, I would like to invite you to submit articles on your recent work, field, experimental:

- The impact of climatic changes on the degradation of permafrost and gas hydrate dissociation in the permafrost zone;
- Geocryological processes in the warming Arctic permafrost;
- Gas emission from the frozen strata of the Arctic coast and the Arctic shelf;
- Changes in the physical, mechanical, thermal properties of frozen and hydrate-containing sediments with an increase in their temperature;
- The influence of temperature rising of ice and hydrate-containing sediments on their composition and structure;
- Physical, chemical, and mechanical processes in ice and hydrate-containing sediments under conditions of increasing temperature;
- Thermal interaction of geotechnical objects with host frozen and hydrate-containing strata.

### Guest Editor

Dr. Evgeny Chuvilin

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### Deadline for manuscript submissions

closed (31 August 2022)



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## About the Journal

### Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks,  
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