

## Special Issue

# Recent Advances in Greenhouse Gases' Emission Processes and Potential in Natural and Artificial Anaerobic Systems

### Message from the Guest Editors

Global warming caused by the annual increase of greenhouse gases in the atmosphere has aroused great concern worldwide. Carbon dioxide (CO<sub>2</sub>) is the major contributor; methane (CH<sub>4</sub>) is also problematic, contributing 15% to global warming. Natural and artificial anaerobic systems, including but not limited to wetlands and landfill, are the primary sources of CO<sub>2</sub> and CH<sub>4</sub> emission to the atmosphere, and contribute significantly to the global greenhouse effect. This Special Issue invites research papers addressing one or more aspects of CO<sub>2</sub> and CH<sub>4</sub> emission from natural and artificial anaerobic systems. Topics of interest for the Special Issue include but are not limited to:

- The adaptation mechanisms of CO<sub>2</sub> and CH<sub>4</sub> emissions to environmental changes.
- New technologies to reduce CO<sub>2</sub> and CH<sub>4</sub> emissions from natural and artificial anaerobic systems.
- CO<sub>2</sub> and CH<sub>4</sub> emissions affected by artificial sources.
- Interspecies electron exchange during CO<sub>2</sub> and CH<sub>4</sub> emission process.

### Guest Editors

Dr. Peng Zhang

Dr. Chuancheng Fu

Dr. Jian Liu

### Deadline for manuscript submissions

closed (31 March 2023)



## Atmosphere

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## About the Journal

### Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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### Editor-in-Chief

Dr. Daniele Contini

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