



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

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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 (CO₂) is the major contributor; methane (CH₄) 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 CO₂ and CH₄ emission to the atmosphere, and contribute significantly to the global greenhouse effect.

This Special Issue invites research papers addressing one or more aspects of CO₂ and CH₄ emission from natural and artificial anaerobic systems. Topics of interest for the Special Issue include but are not limited to:

- The adaptation mechanisms of CO₂ and CH₄ emissions to environmental changes.
- New technologies to reduce CO₂ and CH₄ emissions from natural and artificial anaerobic systems.
- CO₂ and CH₄ emissions affected by artificial sources.
- Interspecies electron exchange during CO₂ and CH₄ emission process.





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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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