# **Special Issue**

# Global Warming and Microbial Diversity, and the Challenge of Using Microbes to Go Carbon Neutral

# Message from the Guest Editor

If global warming continues to progress without effective action, the average temperature is expected increase by up to 4.8°C compared to the year 2000. Since microbes are the final decomposers of organic materials and support the ecosystem, even the slightest change in microbial diversity can have a significant impact on the ecosystem. This understanding of microbial diversity in the past and present may allow us to predict the nature of future ecosystems. Understanding how microbes adapt to climate changes will also enable us to understand the resilience of ecosystems. Furthermore, if microbes can contribute to carbon emission neutrality via the utilization of their abilities, they are expected to aid in the prevention of global warming. This Special Issue welcomes the submission of papers presenting original research and mini-reviews on microbial diversity, its relationship to climate change, and the use of microbes to achieve carbon neutrality.

#### **Guest Editor**

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## Deadline for manuscript submissions

closed (15 May 2025)



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## Editor-in-Chief

#### Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G OC5, Canada

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