

Special Issue

Advanced Research and Analysis of Environmental Microbiomes

Message from the Guest Editors

Microbial communities play a crucial role in maintaining ecological balance and driving biogeochemical processes across diverse environments. However, many ecosystems, particularly extreme and underexplored habitats, remain poorly understood. Additionally, contaminated environments pose significant challenges but also offer unique opportunities to study microbial adaptation, resilience, and bioremediation potential. This Special Issue of Applied Sciences aims to showcase cutting-edge research on the diversity, function, and interactions of microbial communities in these complex environments. We invite contributions exploring microbial ecology in extreme habitats and anthropogenically impacted sites. Studies utilizing advanced molecular, bioinformatics, and biotechnological tools to unravel microbial dynamics, pollutant degradation mechanisms, and innovative remediation strategies are particularly welcome. By highlighting novel insights into microbial processes in underexplored and contaminated environments, this Special Issue seeks to advance our understanding of microbial diversity, adaptation, and their potential applications in environmental restoration.

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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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