

Special Issue

Microbial Diversity and Function in Aquatic Environments

Message from the Guest Editors

The aquatic environment harbors countless microorganisms. As hydrochemical factors vary (e.g., temperature, pH, dissolved oxygen, salinity, electron donors and acceptors, redox substances), acidophilic, thermophilic, and salt-tolerant microorganisms aggregate accordingly in response to different survival stress in specific aquatic environments.

Microorganisms widely participate in element migration, transformation, and cycling in aquatic environments.

Through competitive and cooperative interactions, microorganisms connect the cycles of carbon, nitrogen, sulfur, phosphorus, iron, and other elements within aquatic ecosystems. The exploration of the multifunctionality of microorganisms in aquatic systems through metagenomics and other methods can support the study of element cycling and interrelationships between elements. Our exploration of “Microbial Diversity and Function in Aquatic Environments” will be ongoing. In this Special Issue, advances in understanding the biodiversity, distribution, functional groups, and interactions between microorganisms and aquatic environments are welcomed and will be presented.

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