Special Issue

Microbial Cycling of Organic Compounds in Aquatic Environments

Message from the Guest Editors

Dissolved organic compounds in aquatic systems represent one of Earth's largest exchangeable reservoirs of carbon. This pool also contains a range of dissolved organic nutrients containing N, P and S compounds, which often can be quickly utilised by microbes. The sources, sinks and controls of these dissolved organic compounds remain, more often than not, poorly understood in aquatic environments. A subsection of the dissolved organic pool is often referred to as biogenic volatile organic compounds (BVOCs), which are those thought to be produced via biological mechanisms. Some of these BVOCs (and others like acetone) are also oxygenated and referred to as oxygenated volatile organic compounds (OVOCs). These volatile species have high vapor pressures that facilitate transfer into the atmosphere where they are considered climate active. Hence it is critical to understand the controls on the production and consumption of these dissolved organic compounds in aquatic environments.

The Special Issue will focus on the biological control and cycling of a range of dissolved organic compounds in freshwater, estuarine and marine environments.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2022)



Microorganisms

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Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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