

Geomicrobiological and Geochemical Colloquium seminar series

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The microplastic microbiome

Dr. Sonja Oberbeckmann,
Federal Institute for Materials Research and Testing (BAM)
Berlin, Germany

In person: A71 seminar room 513/515

Abstract

Microplastics represent man-made and newly emerging surfaces in our ecosystems, where they interact with microorganisms. The ecosystem in focus of this presentation will be the aquatic environment. It will be portrayed, which microorganisms use microplastics as a habitat, how environmental factors shape this colonization, and why the biodegradation of plastics in the ocean is an overall unlikely process. We will also discuss whether potentially pathogenic microorganisms use microplastics as a raft.

Finally, possible adaptation mechanisms of plastic-colonizing microorganisms will be presented, such as the production of photoreactive molecules. The microplastic microbiome has a large potential to harbour so far unknown species with curious traits, representing an exciting research topic for the future.



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