Special Issue

Effect, Exposure, and Risk of Macro-, Micro-, and Nanoplastics in the Ocean

Message from the Guest Editors

The presence of plastic in the marine environment is ubiquitous, but in situ concentrations, effects, and risks of macro-, micro-, and nanoplastics are still not well understood. Plastic comes in many forms with a myriad of shapes, sizes, densities, and weathering states. The lack of harmonized sampling strategies and sample processing protocols hampers the comparability of observational macro-, micro-, and nanoplastic studies and concentrations. Furthermore, ecotoxicity studies often focus on single species experiments;, to date, only a limited insight is available for the population or community-level effects of plastic particles. In most cases, the laboratory settings in which the experiments are performed cannot be considered environmentally relevant. The lack of experimental work using realistic particles or fibers and the lack of knowledge on ecosystem impacts present a significant challenge in providing future directions for reliable risk assessments and effective plastic mitigation policies.

Guest Editors

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Editor-in-Chief

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