
A summary of five years of German (micro)plastics research – key messages from the research focus ”Plastics in the Environment”

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Abstract

Between 2017 and 2022, the German research focus ”Plastics in the Environment – Sources Sinks Solutions” brought together more than 100 institutions from the fields of science, industry, and practice to conduct research on various dimensions of the plastics issue, including green economy, consumption and consumer behaviour, recycling, freshwater and marine ecosystems. The main goal was to initiate a systemic assessment and to gain a better understanding of the environmental consequences associated with plastic waste. Overall, the research focus has contributed to the (further) development of scientific procedures, methods, and instruments for the investigation of plastics in the environment. The proposed presentation at MICRO 2022 will summarize the key messages from all 20 joint research projects and present recommendations for different target groups. The key messages cover a broad range of topics, including sources and pathways of plastics into the environment, microplastics analytics, the ecotoxicological assessment of microplastics, plastics in wastewater and in soil, the role of companies, consumers, and municipalities in particular, as well as legal recommendations for reducing plastic emissions.

Keywords: plastic pollution, pathways, wastewater, soil, microplastics analytics, plastic prevention, legal recommendations

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