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Editorial

Communicating Threats and Potential Opportunities to Reduce Microplastic Pollution with Key Stakeholders

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Plastic pollution has attracted considerable media attention from the public, governments, and industry in the past decade resulting in increased awareness of the direct environmental, economic and human health impacts [1–3]. Popular documentaries such as the BBC Blue Planet II triggered the "Blue Planet Effect" and campaigns such as the National Geographic "Planet or Plastic?" sparked huge public awareness [4]. However, most stakeholders (outside of academia) are unaware of the connections between their use and mismanagement of plastics and the threats posed by microplastic pollution [5,6].

Whilst there has been some progress to reduce the use of certain single-use plastics in some jurisdictions through legislative actions based on empirical evidence from citizen scientists of the different types and sources of plastic pollution [4,7–9], there are few mitigative strategies to reduce sources of microplastic pollution [10,11]. The lack of mitigative strategies to address microplastic pollution may be due in part due to the lack of appropriate technologies, but also due to our poor understanding of the science behind the sources, fate, and transport of microplastics [12]. Therefore, this presents barriers to public behavioural change combined with industry or government inaction [6,13,14].

There has been a dramatic increase in studies on microplastics in the scientific literature documenting impacts on aquatic and terrestrial biota and most ecosystems on earth, including atmospheric microplastics [12,15,16]. This has resulted in the widespread scientific consensus that action needs to be taken immediately to reduce plastic use and plastic waste mismanagement to avoid increased microplastic pollution in the future [17–20]. Urgent action is even more pressing when there remains uncertainty about the risk to human health posed by microplastics [2,21,22]. Thus, engaging citizen scientists in monitoring microplastic hotspots [23,24] and effective scientific communication with all stakeholders (e.g., civil society, NGOs, government decision-makers, and industry) [25] related to the threats from microplastics and potential opportunities to reduce sources of microplastics is required to improve our understanding of microplastic pollution [22]. Improved communication will help all stakeholders develop effective solutions to mitigating plastic waste and indirect sources of microplastic pollution [11].

Microplastics is a new, open-access, peer-reviewed journal by MDPI that will publish critical reviews, regular research articles, and short communications, and will host Special Issues on areas of increased importance and relevance to primary and secondary microplastics, including nanoplastics [26]. Although *Microplastics* aims to publish original articles related to microplastics including: their sources, sinks, and environmental fate; potential effects on ecosystem services and human life; and mitigation measures to reduce their adverse effects, it is also vital to ensure that *Microplastics* also publishes articles that raise public awareness and builds effective science communication with all stakeholders (e.g., civil society, NGOs, government decision-makers, and industry) to convey specific messages related to threats and potential opportunities to reduce impacts from plastics and microplastics [9,27–32].

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