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Ecological and Human Health Risk Assessment of Micro- and Nanoplastics

Guest Editors:

Dr. Thava Palanisami
Global Innovative Centre for Advanced Nanomaterials, The University of Newcastle, NSW, Australia

thava.palanisami@newcastle.edu.au

Dr. Scott P. Wilson
Department of Earth and Environmental Sciences, Macquarie University: Sydney, NSW, Australia

scott.p.wilson@mq.edu.au

Dr. Bhavani Narayanaswamy
The Scottish Association for Marine Science, Scottish Marine Institute, Oban, United Kingdom

bhavani.narayanaswamy@sams.ac.uk

Deadline for manuscript submissions:
closed (31 March 2021)

Message from the Guest Editors

Global plastic production has increased exponentially over the past decades. Plastic products can be slowly degraded into smaller pieces (micro- or even nanoplastics). Micro- and nanoplastics are a potential planetary boundary threat, either purposefully made or forming through ageing and weathering effects.

Human exposure to microplastics is via both dietary sources and by inhalation. Microplastics can be small enough to be engulfed by cells and be transported by the lymphatic and blood systems, with the potential to bioaccumulate.

humans are exposed to micro- and nanoplastics through their diet, drinking water or inhalation. However, our understanding of the fate and toxicity of these plastic particles in humans constitutes a major knowledge gap, rendering it difficult to carry out proper science-based risk assessment and management. This Special Issue welcomes any submissions focusing on the latest findings, evidence on the exposure and risk assessment of micro- and nanoplastics to better understand the threat. Studies examining new sources of microplastics, improved detection methods and in vitro tools are welcome.

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Special Issue