



Plastics in the environment

CONFERENCE PROGRAMME

15 March	
08.55	Virtual Lobby /Sign In
09.00	Welcome Address Dr Gordon Inglis, conference convener
09.10	KEYNOTE The challenge of understanding plastic fate and transport in a global context Alice Horton, <i>National Oceanography Centre</i>
Session 1: Plastics and their interaction with organisms	
09.40	Ocean acidification alters bacterial communities on marine plastic debris Jason Hall-Spencer, <i>Universities of Plymouth (UK) and Tsukuba (Japan)</i>
09.55	Fate of microplastics in terrestrial ecosystems: egestion and potential toxicity to earthworms Miranda Prendergast-Miller, <i>Northumbria University</i>
10.05	Mineral formation on plastics: implication for plastic transport, degradation and persistence Kelsey Rogers, <i>University of Copenhagen</i>
10.25	Poster Flash Talks <ul style="list-style-type: none">• Investigating seasonality in microplastic behaviour in coarse-grained fluvial sediments of the River Thames Catchment (UK) Karolina Skalska, <i>University of Brighton</i>• Microplastic in the Antarctic marine food web: a first assessment Julian Blumenroeder, <i>University of Hull</i>• Understanding marine microplastic dynamics using macroplastics as a proxy Nicole Allison, <i>Scottish Association for Marine Science</i>• The hidden microbial world of environmental plastic: an initial examination of the interactions between plastic and aquatic microbial communities in a freshwater environment. Katey Valentine, <i>The University of York</i>• Sources, transfer and fate of microplastics in the Arctic marine environment Hollie Ball, <i>Lancaster University</i>
10.40	Break
Session 2: Plastics along the terrestrial-aquatic continuum	
11.00	KEYNOTE River corridors as hotspots of global plastic pollution Stefan Krause, <i>University of Birmingham</i>
11.30	Role of saltmarsh systems in estuarine trapping of microplastics Chiedozie C. Ogbuagu, <i>NOCS</i>

11.45	High accumulation rates of small and low-density microplastics in river bed sediments Jennifer Drummond, <i>University of Birmingham</i>
12.00	Distribution and concentration of microplastics in an estuarine to shallow marine transition zone: the Mersey Estuary and Liverpool Bay. Edward Keavney, <i>The University of Leeds</i>
12.15	Seasonal Trends in Microplastic Abundance in the Southampton Water estuarine complex, U.K. Jessica Stead, <i>University of Southampton</i>
12.30	Lunch
Session 3: Plastics in the marine realm	
13.30	Deep-sea circulation creates seafloor microplastic hotspots Mike Clare, <i>NOCS</i>
13.45	The influence of depositional environment on the abundance of microplastic pollution on beaches in the Bristol Channel, UK Daniel Wilson, <i>University of Exeter</i>
14.00	Microplastic in marine, nearshore waters of South Georgia: a study of background environmental levels of microplastic contamination Jack Buckingham, <i>University of Hull</i>
14.15	Fishmeal as a source of environmental microplastics Chloe Way, <i>University of Southampton</i>
14.30	Microplastics in the environment - a sedimentological challenge Ian Kane, <i>University of Manchester</i>
14.45	Flash Poster Talks <ul style="list-style-type: none"> • Coastal accumulation zones in NW Scotland, implications for the circulation of plastic in the environment Julien Moreau, <i>Plastica Bay</i> • Characterising and Modelling the Transfer of Macroplastic Debris in Rivers Robert Newbould, <i>University of Leicester</i> • TBC Michel Kaiser, <i>Herriot Watt</i> • Seabird breeding islands as sinks for marine plastic debris Megan Grant, <i>Institute for Marine and Antarctic Studies, Tasmania</i> • The impact of bio-modulated flocculation on the fate and ecological risk of microplastics in river-estuary transition zones Freija Mendrik, <i>University of Hull</i>
15.00	Break
15.15	Multiple digestion cycles' method with Fenton reagent for microplastic detection in waste water and sludge samples Serena Cunsolo, <i>University of Portsmouth</i>

15.30	<p>Flume studies help to uncover the transport of polyamide microplastics at the sediment-water interface. Uwe Schneidewind, <i>University of Birmingham</i></p>
15.45	<p>Color-quantitation of microplastic particles using multispectral imaging flow cytometry Julia Sophie Boeke, <i>Leibniz IPHT</i></p>
16.00	<p>Collaboration and infrastructure are needed to develop an African perspective on micro(nano)plastic pollution Holly Nel, <i>University of Birmingham</i></p>
16.15	<p>Flash Poster Talks</p> <ul style="list-style-type: none"> • The effect of the use of different starches in the physico-chemical characteristics of thermoset bioplastics Jane Stanley, <i>Institute of Technology Carlow</i> • Sources and concentration of micro and macro plastics in the water column and coastal sand in Jangamo Bay, Mozambique Francesca Trotman, <i>Love the Oceans</i> • Quantitative identification of microplastic using an automated mineralogical and infrared approach David Gold, <i>CGG</i> • Controls on microplastic deposits in stratigraphy non-cohesive sediments Lucrecia Alvarez, <i>University of Hull</i> • Microplastics in the ocean: Accumulation in marine sediments and vertical transfer through intertidal food webs Felicitas Ten Brink, <i>University of Hull</i> • The effects of microplastics on chemical toxicity to aquatic organisms: a review Danielle Marchant, <i>Queen Mary University of London</i>
16.30	Poster Session
17.45	Close