

## Environmental Research, Technology Demonstration and Conference Project

<b>ECF Project:</b>	ECF 2019-101
<b>Project Title:</b>	Monitoring the amount and composition of macro- and microplastic in a biodiversity reservoir – The mangrove forests of Hong Kong
<b>Principal Investigator:</b>	Dr Stefano Cannicci, School of Biological Sciences and Swire Institute for Marine Science, The University of Hong Kong
<b>Total Approved Grant:</b>	\$1,695,200
<b>Duration:</b>	1/7/2020 to 30/10/2022
<b>Project Status/Remarks:</b>	On-going
<b>Project Scope:</b>	<p>Marine debris and plastic pollution affect all coastal habitats, worldwide. As forests located at river mouths, mangroves are often overlooked as potential traps for debris from both terrestrial and marine sources. Hong Kong is not an exception to this rule and, although it has been recognised as a hotspot for marine plastic pollution, the amount of plastic debris in mangroves is unknown.</p> <p>Crabs and gastropods are a dominant component of the mangrove food web and play a critical role to maintain ecosystem functioning and health. Due to their feeding behaviour, they are likely to be impacted by the subtle presence of microplastic in the system. Understanding the amount and composition of microplastic within these key organisms will help assessing the overall impact of plastic pollution at ecosystem scale.</p> <p>The present project aims to estimate the amount and composition of macro- and microplastic found in the mangroves and in the gut of keynote mangrove invertebrates in Hong Kong, respectively. The results will gather information on the impact of plastic on this vulnerable environment, ultimately helping stakeholder and decision makers to adopt specific conservation actions to protect Hong Kong coastal habitats.</p>
<b>Summary of the Findings/Outcomes:</b>	To be available upon completion of the project