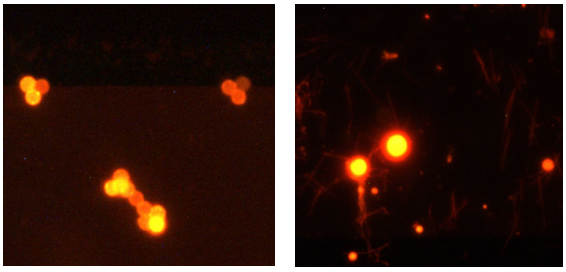
MonPlas

Introduction

The widespread use and mismanagement of plastics has led to a significant environmental burden of growing concern. Plastic from consumer goods can break down into micro- and nanoplastics complicating their detection and characterization. Plastic is commonly used in food packaging and increasingly detected in our food supply. Microplastics identified as poly-ethylene and poly-ethylene terephthalate were detected in table salt. Several studies report the presence of microplastics in fish while others have shown that mussels can contain microplastics at the time of consumption. Recent studies reported finding plastic microparticles and fibers in tap water and in bottled water sold around the world. A recent study estimates that the annual consumption of microplastics ranges between 39000 and 52000 particles.



Measurement of microplastic particles (stained with Nile-red) in a 5µm PS standard (left) and in bottled water (right)

The MONPLAS project

The Initial Training Network MONPLAS "The training of early stage researchers for the development of technologies to MONitor concentrations of micro- and nanoPLAStics in water for their presence, uptake and threat to animal and human life" is a highly multi/inter-disciplinary doctoral-level training network bringing together expertise from different sectors to enhance detection methods for micro- and nanoplastics in water (and beyond) and therefore to map their origins and potential public health threat. The breadth of technology coupled with the innovative training package, where ESRs will be exposed to industrial R&D environments, will enable the next generation of scientists to drive research of micro- and nanoplastics into the wider environment. Consisting of some of Europe's greatest experts in their fields MONPLAS will provide tomorrows talent with the skills and knowledge to tackle possibly one of mankinds greatest threats to its existence whilst they jointly develop the technologies for the industrial instrument in collaboration with end-users and equipment manufacturers. The ITN MONPLAS programme has 14 Individual Research Projects.

Please check the website for more information https://www.monplas.eu/