



ANDROMEDA

Developing analysis techniques for quantifying nanoplastics + microplastics and their degradation in the marine environment.

www.andromedaproject.net  [Andromeda_EU](https://twitter.com/Andromeda_EU)

materials

ANDROMEDA is analysing challenging types of microplastics, including:



Tyre Wear Particles



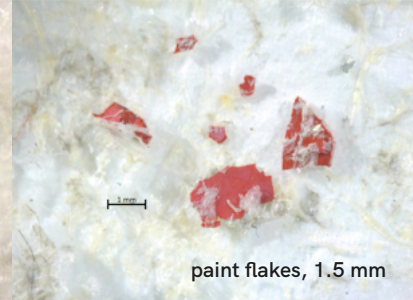
Microfibers



Paint Particles



tyre particle, 0.5 mm



paint flakes, 1.5 mm

about

ANDROMEDA is a JPI Oceans funded research project examining efficient and cost-effective techniques to analyse and quantify microplastics and their degradation in the marine environment.

The project will develop new sampling and advanced analysis methodologies that focus on smaller microplastic (<10 μm) and nanoplastic (<0.2 μm) particles to enable improved risk assessment of plastic pollution, along with in situ techniques and cost-effective measurement methods for improving the efficacy and efficiency of microplastic monitoring.

funding

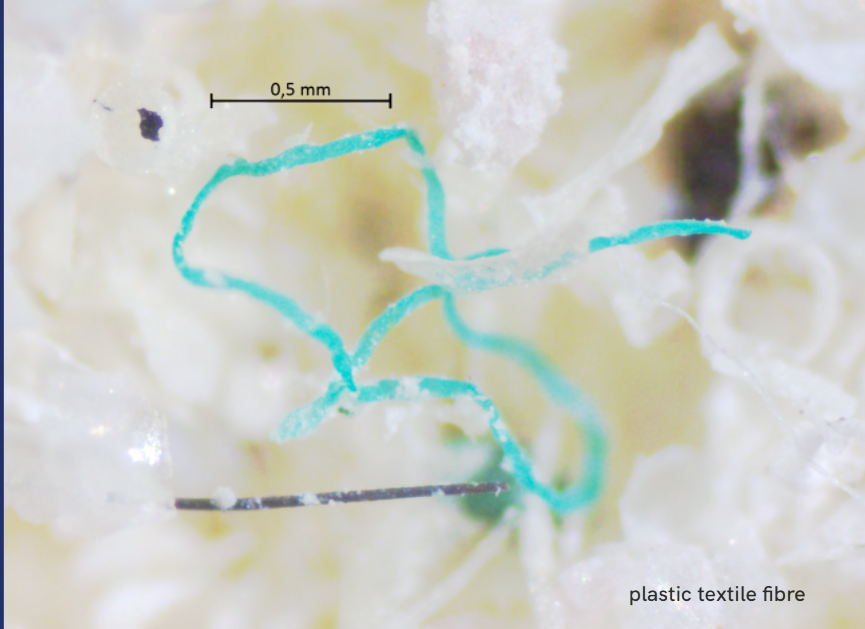
ANDROMEDA is supported through the Joint Programming Initiative: Healthy and Productive Seas and Oceans (JPI Oceans).

objectives

- **Achieve** cost-effective analysis of microplastics by in situ-methods and low-cost laboratory analysis, including efficient sampling
- **Develop and optimise** advanced techniques to measure and quantify small and challenging types of microplastic particles
- **Investigate** the degradation and fragmentation mechanisms of plastic into micro- and nanoplastic particles
- **Study** the release of additive chemicals during the fragmentation and degradation processes
- **Disseminate** project results and developed protocols to a range of audiences, including public authorities, the private sector, academia and the general public.

consortium

The ANDROMEDA project brings together a multidisciplinary consortium of 15 international partners to improve the quantification of nanoplastics and microplastics in our oceans and seas. Our partner institutions can be seen below.



plastic textile fibre

aims & outputs

- **DEVELOP** an instrument platform for in situ and cost-effective analysis of microplastics
- **ADVANCE** characterisation of nanoplastics and microplastic materials and for accelerated microplastic degradation, and
- **CHARACTERISE** microplastic degradation.