

# THE PROBLEM WITH MICROPLASTICS



**Plastic pollution is globally recognised as a planetary boundary threat to humans and our environment.**

Our beaches and marine sediments are contaminated, organisms have plastic particles in their stomachs, microplastics are found in our drinking water and food, and this year, for the first time ever, microplastics have been detected in human blood.

There is a clear desire, at an international level, to implement effective mitigation strategies to reduce inputs into the environment and lessen the impact of those plastics already there.

## **EUROqCHARM: Producing microplastic to reduce microplastic**

**The goal of EUROqCHARM is to develop optimised, validated and harmonised methods for monitoring and the assessment of plastics in the environment, as well as blueprints for standards and recommendations for policy and legislation.**

The urgent challenge is to accurately quantify the true scale of the problem and to measure the impact of any mitigations to reduce plastic pollution. To develop long-term solutions to reduce plastic pollution, we must establish harmonised methodologies.

EUROqCHARM will address this by critically reviewing state-of-the-art analytical methods and, taking harmonisation one step further, validating them through an interlaboratory comparison (ILC) study.

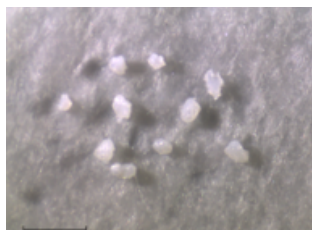
EUROqCHARM will improve the understanding of the methods needed for monitoring plastic pollution, and will contribute to the establishment of national, EU and global monitoring reference materials that will be applicable for future policies for mitigation of plastic pollution.



## Our work so far

The development and production of analytical microplastic reference materials is already underway in a partnership between Chiron AS and NIVA (Norwegian Institute for Water Research). We have installed new equipment to produce particles of desired shapes and sizes.

Whilst a final product is not yet ready, the first batches of different polymers look very promising, and have now been submitted to EUROqCHARM's strict quality control and quality assurance criteria.



## The plastics we are creating reference materials for:

Below is a list of 6 of the most common microplastics found in the environment.

- Polyethylene (PE)
- Polyethylene terephthalate (PET)
- Polystyrene (PS)
- Polypropylene (PP)
- Polyvinyl Chloride (PVC)
- Polycarbonate (PC)

The finished references materials are intended to support researchers in establishing the following parameters:

- Identity of the polymer type present
- Particle size and distribution
- Quantity of particles present
- Mass of polymers present

## Interested in availability of the reference materials?

We are interested in hearing your questions and comments, and recording interest in our project.

Scan the QR code to keep informed of the latest product availability.



## Want to keep up with the latest EUROqCHARM developments?

Subscribe to the **EUROqCHARM** newsletter to receive the latest project updates, outputs, and other news. Visit the website to sign up.

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