

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.

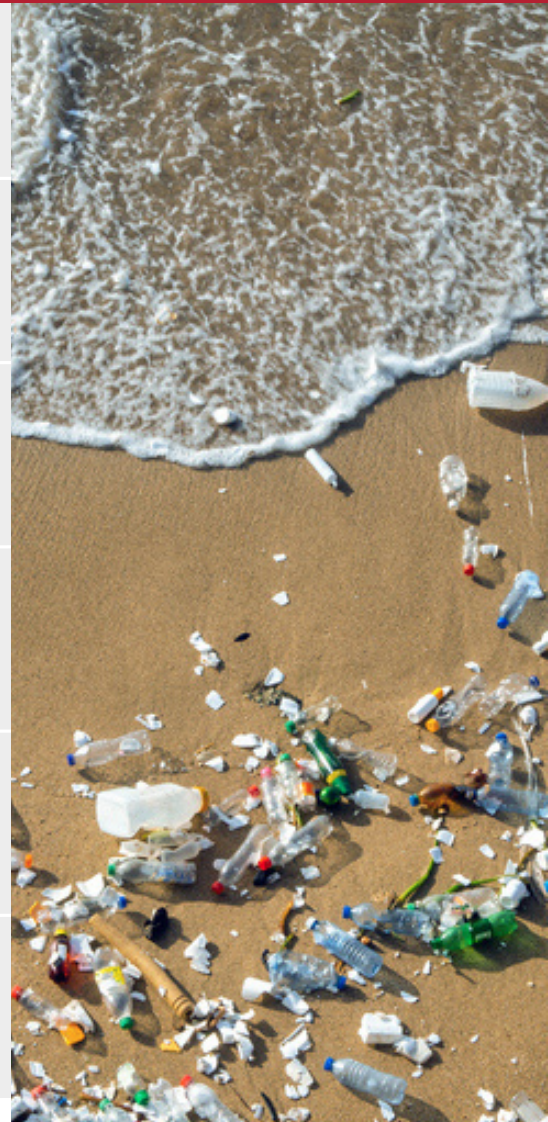
EUROqCHARM: Producing microplastic to reduce microplastic

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.

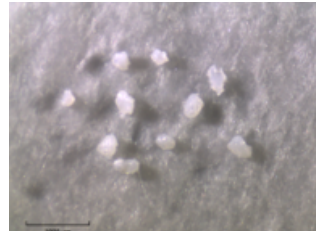
EUROqCHARM will improve the understanding of the methods needed for monitoring plastic pollution, and will contribute to the establishment of national, EU and global monitoring reference materials that will be applicable for future policies for mitigation of plastic pollution.



Our work so far

In the EUROqCHARM project, NIVA (the Norwegian Institute for Water Research) and Chiron AS have produced candidates for analytical microplastic reference materials.

The reference materials come in the form of effervescent tablets containing particles of desired shapes and sizes in trace values. The tablets are looking promising and are currently undergoing strict quality control and quality assurance measures at Chiron AS. We are in the process of investigating other potential candidates.



The plastics we are creating reference materials for:

The six 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 certification parameters

- Chemical identity of the polymer type(s) present
- Particle size and distribution
- Quantity of particles 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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