

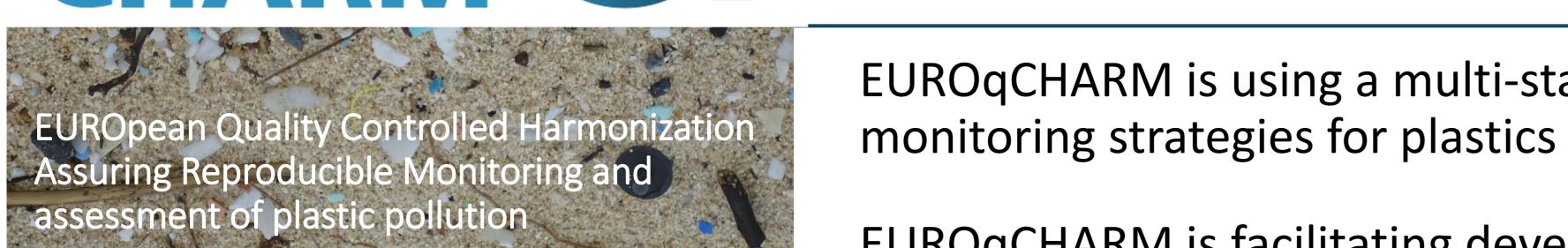
Standardization of methods to measure plastic pollution by 2024?

EUROqCHARM faces up to the challenge

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EUROqCHARM is using a multi-stakeholder approach to identify and develop cost-effective monitoring strategies for plastics (nano-, micro-, macro-) in all environmental matrices.

EUROqCHARM is facilitating developments for European plastic monitoring programmes and the realization of international best-practices.

Goals:

- Provide a platform to discuss and validate methods for monitoring of plastics in environmental samples.
- Develop blueprints for standardization.
- Recommend revision of current EU policies and instruments.

How?

- EUROqCHARM will evaluate existing methods for the assessment of plastic pollution.
- Harmonize these methods on a European level - with rigorous quality control - and reinforce European monitoring capacities.

Why?

- Major actions to evaluate, optimize and harmonize monitoring and assessment of plastic pollution are urgently needed.
 - This will support substantial improvements in international environmental sustainability and socio-economic development

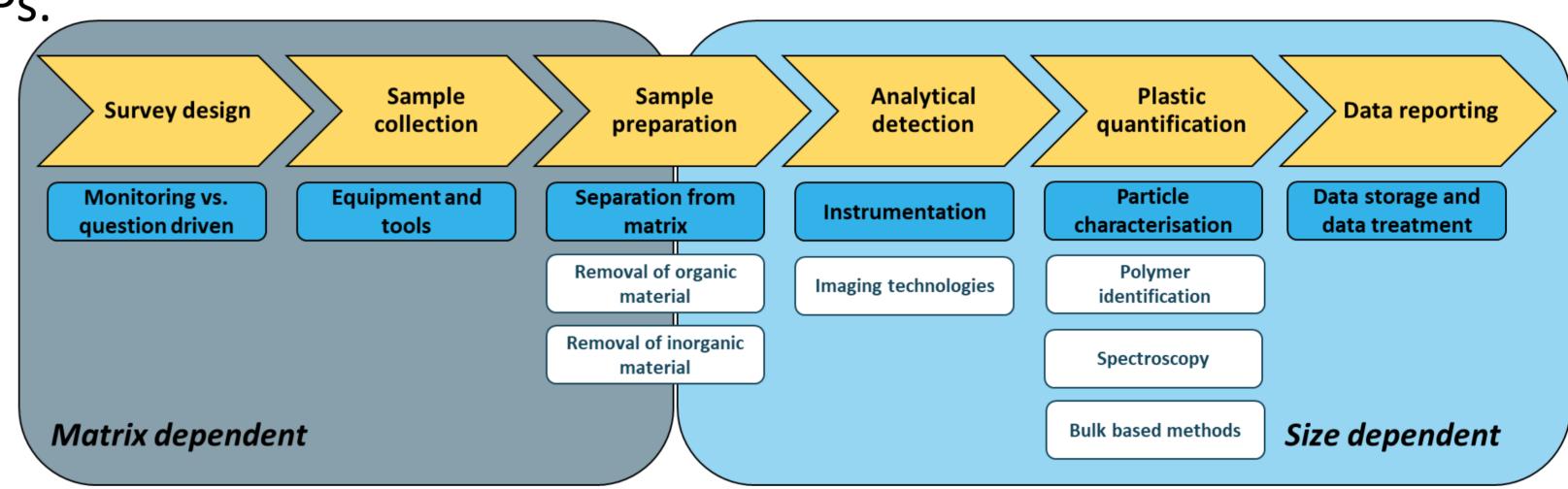
EUROqCHARM will deliver the necessary methodological harmonization to successfully implement long-term strategies for combating plastic pollution.

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Screening and analysis of methods used for plastic analysis (WP1)

- A Systematic Review was carried out to analyse the matrix- and size- adapted methods reported in the literature. Methodological steps were arranged in Reproducible Analytical Pipelines (RAPs) and assessed for the Technological Readiness Level, which may eventually (if not already) be incorporated into plastic monitoring programmes. A SWOT analysis was carried out for every matrix and compartment focusing on the subRAPs.
- This work is intended to define the most used methods and protocols for analysis, and aims to identify the properties of the fundamental steps of the analytical process and the methods and protocols that are more widely used for monitoring as from scientific literature.



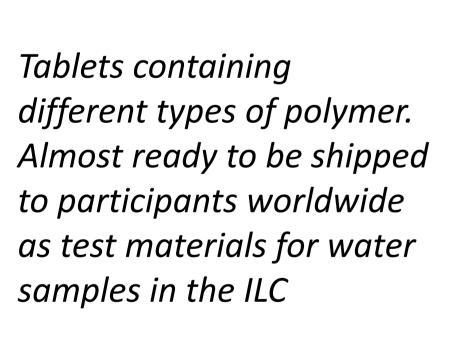
• For more information, listen to the presentation by S. Aliani during Session 3.09.



Testing sediments for their suitability as test material for the ILC

Validation of methods (WP2)

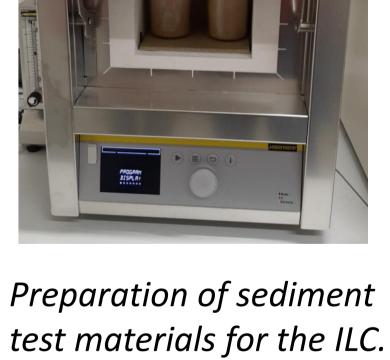
Aim: Harmonizing sample preparation, analysis and data reporting formats as recommendations for standards





Main tasks: Organizing a worldwide interlaboratory comparison (ILC) study on the analyses of microplastics participants have been invited, test materials are prepared and will be distributed in the first week of May 2022.

- Organising a workshop to discuss the results of the ILC.
- Preparing candidate certified reference materials for microplastics



Cleaned in an oven, and ready to be spiked with polymers.

Harmonisation (WP3)

- Aim: to internationally harmonise monitoring methods and data reporting so that they can be used by stakeholders to formulate and implement policy and legislation.
- Key outputs: Recommend most appropriate protocols and methods for monitoring programmes; Identify appropriate monitoring strategies in terms of indicators; Recommend procedures for policy and legislation; Align European procedures with global strategies for data management and reporting.
- Key methods: Technical guidelines, Indicator assessment

Capacity building (WP4)

- WP4 has been specifically designed to facilitate the acceleration and adoption of developed standards and guidelines in Member States by bring together a critical of actors to draw synergies between mass environmental monitoring.
- Main tasks: 1) Establish an Operational Network for plastic monitoring; 2) Workshop facilitation; 3) Transnational Joint Actions.
- Key methods: Workshops, Outreach activities.















