

PRIORITY stands for 'Plastics monitoRIng detectiOn RemedlaTion recovery'. PRIORITY is a science and technology research network focused on developing, implementing, and consolidating strategies to tackle the global challenges of micro- and nanoplastics in the environment.

This COST Action combines expertise in chemistry, physics, life science, engineering, standards, economy, and law. The network creates a robust infrastructure for scientific communication, exchange, and collaboration to foster new research activities and citizen science.

PRIORITY aims to enhance the technical standards for sampling and analysis of micro- and nanoplastics in the environment, to develop a more reliable assessment of exposure and biological effects, and to advance activities in terms of environmental remediation and recovery.

The Action will support the harmonization of European regulation associated with microplastics. It will assist the European Commission in critical aspects of environmental and ecosystems protection, food safety, and life science.



The overarching aim of PRIORITY is to create and coordinate a transnational and multidisciplinary team of scientists and experts to address the challenges in the field of environmental nano- and microplastic pollution. This aim will be achieved through collaboration, sharing of know-how, discussions and training activities.

The Action has a total of 17 specific objectives divided into 10 objectives on research coordination and 7 objectives on capacity building.

# **Action Leaders**



Dr **Stefania FEDERICI**Action Chair



Dr **Aleksandra TUBIĆ** Action Vice Chair





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**PRIORITY • COST ACTION CA20101** 

Plastics Monitoring
Detection Remediation
Recovery

PRIORITY

# Description of **Working Groups**

PRIORITY is organised in seven specific while highly interconnected WGs, with clear objectives and activities, namely:



#### **WG1** – Impacts and risks on human health and environment related to N/MPs

Objectives: To identify, develop and hence increase the capability of European and other countries to have standardized hazard testing methods N/MPs for different environmental matrices.





Dr Gabriela Kalčikova WG1 co-leader



#### **WG2** - Monitoring and sampling MPs

Objectives: To help European and developing Countries to assess harmonized monitoring methods and sampling procedures for the different compartments and environmental matrices.







### WG3 - Instrumentation, modelling, data evaluation, software, & analytical procedures

Objectives: To understand the potentiality of the tools available for the analysis, to help European and developing Countries to assess harmonized methods, to facilitate and encourage access to the EU research infrastructures and facilities.



Prof Wolfgang Fritzsche WG3 leader



Prof Moritz Bigalke WG3 co-leader



#### **WG4** - Nanoplastics

Objectives: To define suitable and validated analytical methods for detection and auantification of NPs: To produce hazard and fate data accounting for toxicity aspects and interaction of NPs with biomes.



Dr Denise Mitrano WG4 leader



Dr Nanna Bloch Hartmann WG4 co-leader



## **WG5** - Remediation, recovery & development of sustainable alternative to plastic materials

Objectives: To identify reuse, recycling, and recovery alternatives for environmental plastics; To define technological approaches for new recycling and recovery alternatives.



Dr Mariacristina Cocca WG5 leader



Mr Jean-Marie Raquez WG5 co-leader



#### **WG6** - Metrology and standardization

Objectives: To validate protocols for sample preparation, both in the range of N/MPs, by means of interlaboratory studies and comparison with different independent techniques.



Dr Thomas Meisel WG6 leader



Dr Denise Mitrano WG6 co-leader



Prof Joydeep Dutta WG6 co-leader



### **WG7** - Develop new strategies to increase the synergies with society and education

Objectives: To develop tools to increase awareness in society and education about the environmental issues in particular related to N/MPs



Dr Milica Velimirovic Fanfani



Dr Nanna Bloch Hartmann WG7 co-leader

# Are you Interested in Taking Part?

The COST Action **PRIORITY** welcomes research-active scientists working in the field. There are many ways to aet involved.

