

RESPONSE

Towards a Risk-Based Assessment of Microplastic Pollution in Marine Ecosystems

RESPONSE is a European research project developing a model to support the EU Marine Strategy Framework Directive in monitoring marine plastic pollution.

www.response-jpioceans.eu

 [Response_JPIO](https://twitter.com/Response_JPIO)

Image by UVigo

Our Consortium



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+ About RESPONSE

The RESPONSE project brings together 14 partner institutions from across Europe with expertise in oceanography, environmental chemistry, ecotoxicology, experimental ecology and modelling to answer key research questions about the fate and biological effects of microplastics and nanoplastics in marine ecosystems.

+ Our Research Objectives

- **Identify** possible accumulation zones in European coastal ecosystems by studying hydrological transport dynamics
- **Analyse** the abundance and type of micro- and nanoplastics found in marine species by sampling representative marine animals
- **Identify** how plastic particles, along with other environmental stressors, affect the health of species and food webs
- **Synthesise** this research into a quantitative model for assessing the potential impact of microplastics in the marine environment, considering the environmental impact of multiple stressors
- **Set up** an analytical Smart Hub that will share innovative technologies and application expertise for analytical needs, along with contributing to methodological improvement and training
- **Increase** public understanding of the ecological risk of microplastics and nanoplastics and increase public action



Response researcher Anna Rotander sampling for microplastics in Sweden.

+ Funding

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**JPI
OCEANS**

Left: Image showing the larvae of a marine crustacean with fluorescent nanoplastics (polystyrene) highlighted in the gut. Image by CNR IAS.