Experiences from Early Adopters in EOSC RELIANCE Open challenge for Sustainable Development

Microplastics in the NW Portuguese Coast From Research to Public Awareness

6th December 2022 – online https://webinar22.eoscfuture.eu/registration/



Microplastics in NW Portuguese Coast

From Research to Public Awareness

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Main activities carried out with the RELIANCE Services

Research object management platform (ROHub)



- Research Object; Figures; Maps; Results
- Applied Sciences, Ecology, Environmental Research
- Long-term collaborative research (from field to society)
- Linked to the "Marine Litter and Plastics Pollution" (existing) and Marine Litter and Microplastics: Rethinking the Present, Projecting the Future (created) Communities

Luis R. Vieira, Daniela Padilha, Olatz Ortega, and Claudia Pezzilli. "Microplastics in the NW Portuguese Coast: From Research to Public Awareness." ROHub. Nov 08,2022. https://w3id.org/ro-id/3b1ad0bd-a71a-474e-84a1-d48e3e924b21.



Overview Content Completeness Life cycle Marine debris are composed of a wide variety of materials from various sources, however, plastics are by far the ☆ 5.00/5 most abundant material. These are mostly discharged into aquatic ecosystems and transported by currents to diverse areas, first through the rivers, which channel the waste generated in terrestrial sources, into the estuaries, and finally into the oceans. Plastic marine debris are exposed to physical, chemical, and biological stressors, Downloads Views resulting in smaller fragments, known as microplastics. This reality results in severe impacts on global ecosystems, human health, and marine life. There... Resources 14 83 Annotations 101 위 Forks Snapshots Archives Size 6738.19 KB **AGENTS** bioluis@ciimar.up.pt HYDROGRAPHY ENVIRONMENTAL ciimar MAELSTROM SCIENCE AND TECHNOLOGY | ECOSY ENVIRONMENT LIFE SCIENCES



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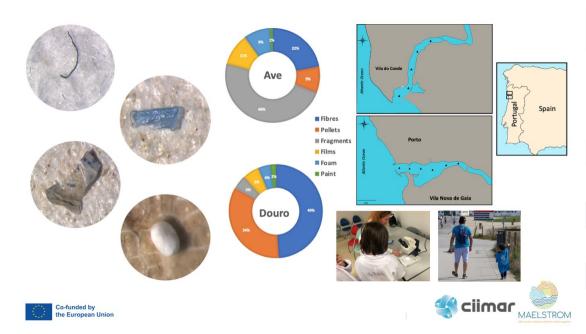


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Marine debris are composed of a wide variety of materials from various sources, however, plastics are by far the most abundant material. These are mostly discharged into aquatic ecosystems and transported by currents to diverse areas, first through the rivers, which channel the waste generated in terrestrial sources, into the estuaries, and finally into the oceans. Plastic marine debris are exposed to physical, chemical, and biological stressors, resulting in smaller fragments, known as microplastics. This reality results in severe impacts on global ecosystems, human health, and marine life. There is still a considerable lack of scientific knowledge on both marine litter and microplastics characterization, distribution and sources. It is, therefore, urgent to increase the efforts, especially on transitional ecosystems. Two estuaries from the NW coast of Portugal were considered for the present research. This study aims to evaluate and characterize microplastics in the water column, as well as identify the main sources of such debris, as a long-term research collaborative research. At the same time, awareness-raising activities were organized on the subject through the direct involvement of citizens. This multidisciplinary research object represents a contribution to the urgent need for temporal and spatial monitoring of plastic pollution in estuaries and other coastal ecosystems. This scientific knowledge is essential for the adequate management of litter, to increase strategic networking and also to support and contribute to the development of Marine Litter removal technologies.

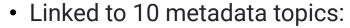
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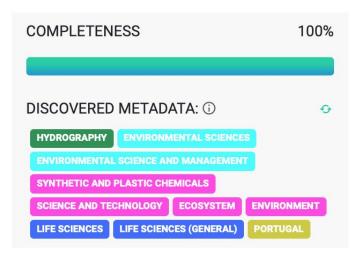


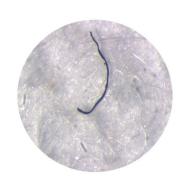


RESEARCH OUTCOMES

- Main Objectives:
 - ✓ Long-term research
 - ✔ Community involvement
 - ✓ Strategic Networking
 - ✓ Support/Contribute to Removal Technologies

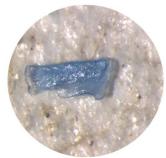




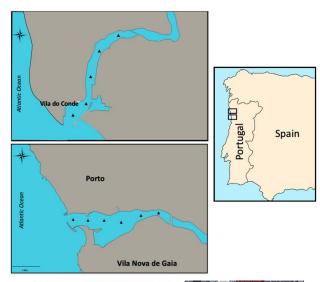


















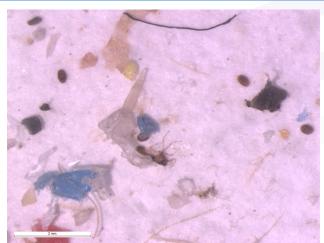


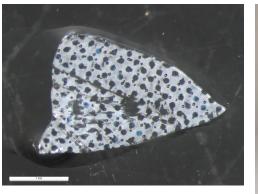


RESEARCH OUTCOMES

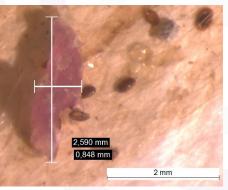
Home Name Microplastics Previous_Studies **Protocols** Public_Awareness Results Graphical abstract





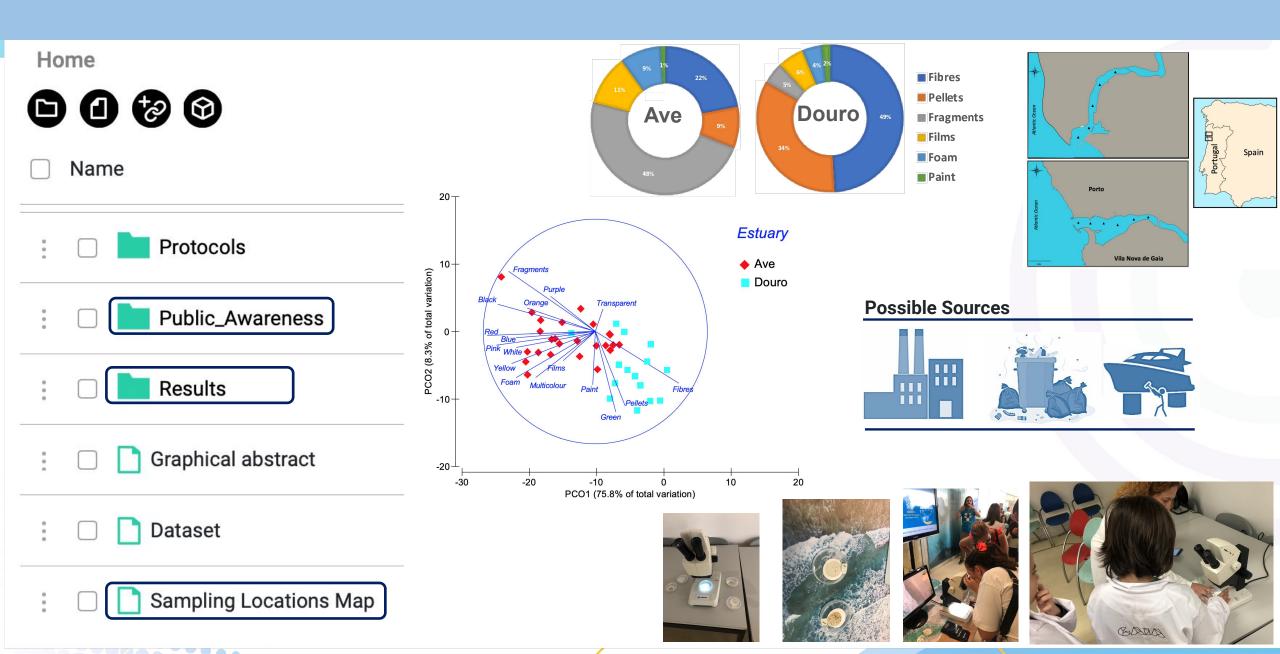








RESEARCH OUTCOMES



FINAL CONSIDERATIONS AND REMARKS



- ✓ User-Friendly Platform
- ✓ Link to other ROS
- ✔ Collaborative Work in an open Science Concept
- ✓ Multidisciplinary environment to work with scientific data through accessible tools and services for research
- ✓ Different access modes (open data and/or collaborative work groups)
- Compatible with ISI publications
- ✓ Dedicated reference (increasing citation scores)







Thank you for your attention!

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