
Microplastics in salts: make science visible

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Abstract

Microplastics are widely studied by researchers, but it is imperative to sensitize the population, especially children and young people. The objective is to create activities in Earth Sciences for teachers of Primary and Secondary Education dealing with microplastics in the everyday life. A visual instruction manual has been designed, through an interdisciplinary collaboration between Geology and Fine Arts university researchers. Work has been done towards goals 3, 4, 6 and 12, ensuring education for Sustainable Development, because awareness is raised about the plastic we generate, and it ends up being ingested by living beings. Four laboratory protocols for the study of microplastics (MP) in table salts, addressed to Primary or High school teachers, were defined according to available facilities, from a regular chemistry lab from primary or high school to home experimentation. These protocols mainly consist of how to dissolve salt in water, filter and observe filters, and control the possible pollution of samples during handling. Later on, such lab procedures have been synthesized and drawn, looking for the most appropriate way to transmit the laboratory protocols. The artistic techniques used are pencil, watercolour, and black ink, to later digitize the illustrations. The design has been done by pursuing a high level of iconicity to clarify its meaning. Finally, illustrations have been accompanied by short texts to make them as synthetic and attractive as possible, facilitating comprehension and circulation, digitally and by printing them on paper. The project can be viewed at <http://www.ub.edu/sedimentary-geology/microplastics-salt> and is freely available since November 2022.

Keywords: Fine Arts, Geology, Earth Sciences, Microplastics in Table Salts, Laboratory Procedures, Sustainable Development Goals

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