Raman Spectroscopy application for Microplastics

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The assessment of microplastics in marine environment is a multi-step process (sampling, extraction, detection and quantification of microplastics), in which each step is time consuming.

Analyzing the chemical composition and morphology of microplastics represents a real challenge for answering crucial questions about the sources and fate of microplastics in aquatic environments. In this contribution, we present a reproducible and time effective method for fast and thorough morphological and chemical characterization of microplastics using a semi-automated scanning of particles coupled to micro-Raman spectroscopy. The rapid analysis of large number of collected particles allows for an exhaustive assessment of large sample sizes and not only small subsamples.



Figure 1. ParticleFinderTM workflow