Renoval of cellulose from wastewater samples: An improvement for the analysis of microplastics

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Abstract

Knowing the amount of microplastics that currently reach wastewater is extremely important today. Furthermore, carrying out a good quantification and detection of the type of plastic provides valuable information. However, the wastewater is loaded with a high concentration of cellulose at the entrance to the treatment plant, which seriously hinders

the detection, quantification and classification of microplastics. This study offers a method to reduce the amount of cellulose in the input samples of conventional wastewater treatment plants, reducing almost completely the cellulose residues of the input samples by 97.6% in a second treatment and 98.2% in a third treatment.

Keywords: Cellulose, detection, microplastics, quantification, wastewater.