

Developing environmentally relevant micro- and nanoplastics to assess removal efficiencies in wastewater treatment processes

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ELECTRONIC SUPPLEMENTARY INFORMATION

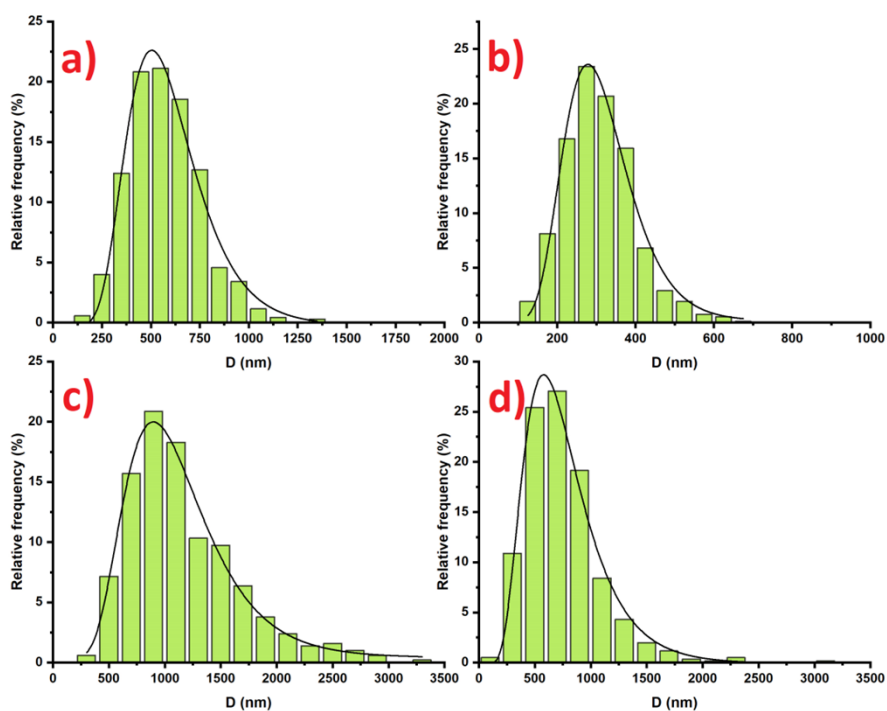


Figure SM1 – Particle size distributions for experiments PE1 (a), PE2 (b), PE3 (c) and PE4 (d)

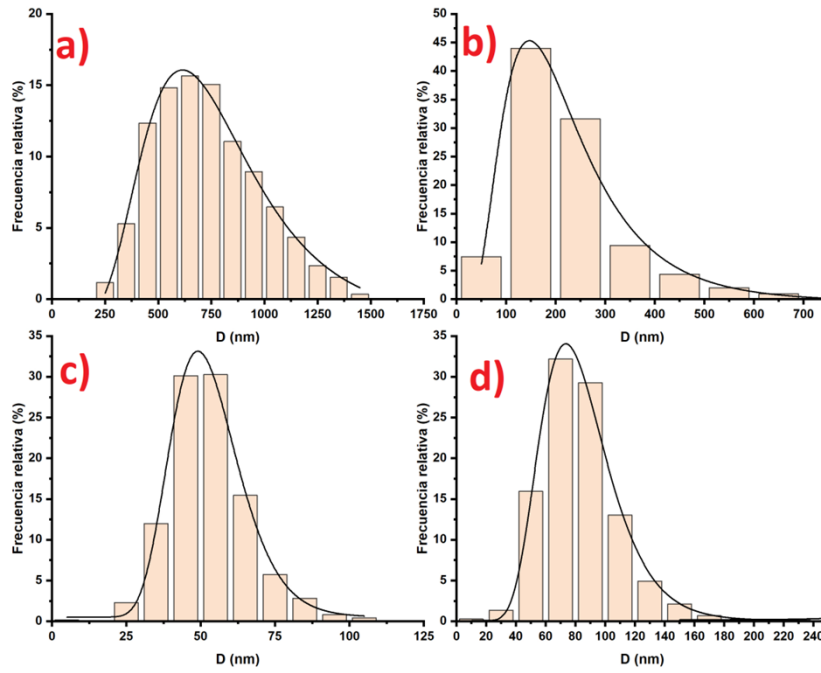


Figure SM2 – Particle size distributions for experiments PP1 (a), PS1 (b), PVC1 (c) and PET1 (d)

	Medium	Initial turbidity (NTU)	Final turbidity (NTU)	Initial pH	Final pH	η_R (%)
Non-aged PE	FWW	62.2 (3.9)	2.89 (0.70)	8.23 (0.08)	7.11 (0.03)	95.4 ^a (1.1)
	DW	9.0 (2.3)	-	6.10 (0.05)	-	-
	Peptone 10g/L – 120 mg/L alum	54.45 (0.95)	51.3 (1.1)	7.60 (0.14)	7.16 (0.04)	5.8 ^b (1.3)
	Peptone 10 g/L – 360 mg/L alum	54.45 (0.95)	10.4 (1.0)	7.60 (0.14)	5.13 (0.07)	80.9 ^c (1.5)
	Peptone 10g/L + NaCl 0.1 M	53.8 (1.3)	25.3 (2.6)	7.47 (0.05)	7.22 (0.02)	52.9 ^d (3.7)
Aged PE	FWW	60.5 (2.3)	2.60 (0.70)	8.18 (0.12)	7.11 (0.03)	95.7 ^a (1.1)
	DW	53.9 (4.1)	26.9 (2.0)	6.00 (0.06)	4.17 (0.06)	46.7 ^e (3.4)
	Peptone 10g/L – 120 mg/L alum	53.32 (0.48)	50.5 (1.0)	7.67 (0.04)	7.26 (0.07)	5.4 ^b (1.0)
	Peptone 10 g/L – 360 mg/L alum	53.32 (0.48)	9.53 (0.80)	7.67 (0.04)	5.20 (0.02)	82.1 ^c (1.3)
	Peptone 10g/L + NaCl 0.1 M	50.6 (3.1)	23.73 (0.51)	7.47 (0.02)	7.25 (0.06)	53.1 ^d (1.8)
Non-aged PP	FWW	51.6 (3.8)	5.35 (0.89)	8.22 (0.07)	7.34 (0.24)	89.6 ^k (2.1)
	DW	14.1 (1.6)	-	8.17 (0.10)	-	-
	Peptone 10g/L – 120 mg/L alum	50.4 (1.2)	49.6 (1.4)	7.63 (0.01)	7.22 (0.01)	1.7 ^m (0.7)
	Peptone 10 g/L – 360 mg/L alum	50.4 (1.2)	17.2 (3.7)	7.63 (0.01)	5.09 (0.06)	66.3 ⁿ (6.4)
	Peptone 10g/L + NaCl 0.1 M	56.2 (1.1)	29.2 (5.1)	7.41 (0.01)	7.08 (0.06)	47.9 ^p (9.8)
Aged PP	FWW	56.2 (1.0)	8.0 (1.4)	8.05 (0.03)	7.15 (0.06)	85.9 ^k (2.2)
	DW	55.9 (1.3)	37.4 (3.3)	6.05 (0.12)	4.21 (0.01)	33.3 ^r (5.8)
	Peptone 10g/L – 120 mg/L alum	52.36 (0.4)	50.8 (1.7)	7.58 (0.01)	7.43 (0.05)	3.1 ^m (3.9)
	Peptone 10 g/L – 360 mg/L alum	52.36 (0.4)	15.6 (2.6)	7.58 (0.01)	5.40 (0.07)	70.2 ⁿ (5.1)
	Peptone 10g/L + NaCl 0.1 M	54.58 (0.35)	26.26 (0.75)	7.30 (0.02)	7.07 (0.01)	51.9 ^p (1.6)

Table SM1 – Mean (SD) turbidities, pH and removal efficiencies for the coagulation/flocculation tests.

Mean efficiencies with the same letter are not significantly different.