Supporting Information

Deciphering the plastisphere nexus in wastewater treatment: distinct microbial colonization on biodegradable and conventional microplastics

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Text S1: Composition and preparation of synthetic wastewater

The influent synthetic wastewater was prepared to yield a chemical oxygen demand of approximately 500 ± 50 mg/L, using glucose as the carbon source. Ammonium chloride (191 mg/L) and potassium dihydrogen phosphate (22 mg/L) supplied 50 mg/L NH_4^+-N and 5 mg/L PO_4^{3-}-P, respectively. Magnesium sulphate heptahydrate and calcium chloride dihydrate were each added at 5 mg/L as macronutrients. A trace element mix (1 mL per liter) comprised, in mg/L: ferric chloride hexahydrate (1500 mg/L), boric acid (150 mg/L), copper (II) sulfate pentahydrate (30 mg/L), potassium iodide (30 mg/L), manganese (II) chloride tetrahydrate (120 mg/L), sodium molybdate dihydrate (60 mg/L), zinc sulfate heptahydrate (120 mg/L), and cobalt (II) chloride hexahydrate (150 mg/L). Before reactor feeding, the pH was adjusted to 7.5 ± 0.3 with sodium bicarbonate.

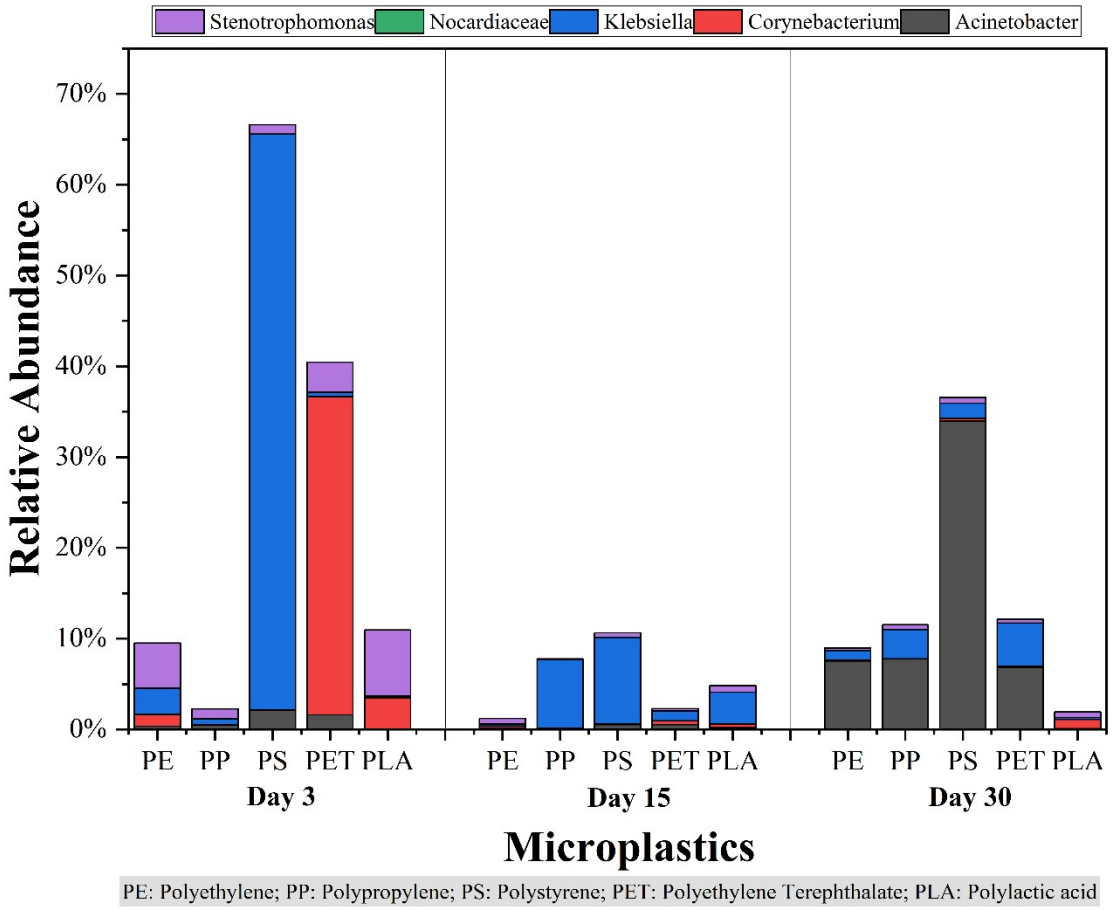

Figure S1: Relative abundance of genera comprising key pathogenic species observed in MPs associated biofilm at different incubation times (3 d, 15 d and 30 d).

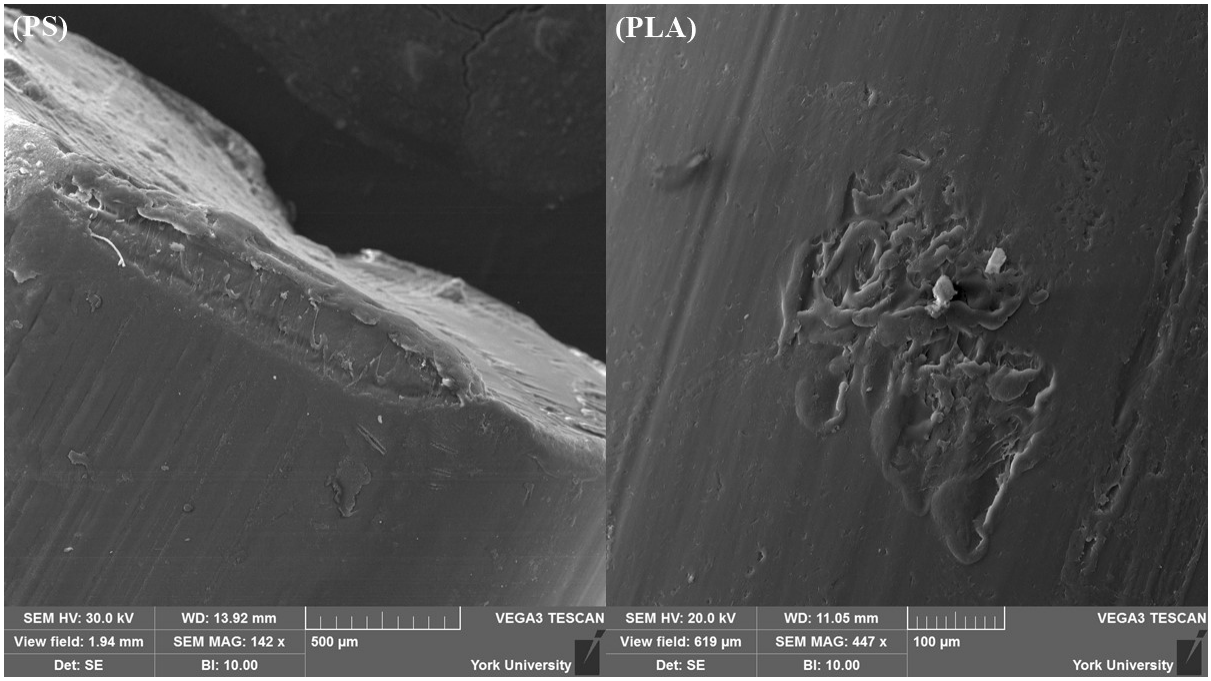

Figure S2: Morphological analysis of MP surfaces via SEM after 30-day exposure in SBRs