Electronic Supplementary Material (ESI) for Polymer Chemistry.

Porous Hollow TiO_2 Microparticles for Photocatalysis: Exploiting Novel ABC Triblock Terpolymer Templates synthesised in Supercritical CO_2

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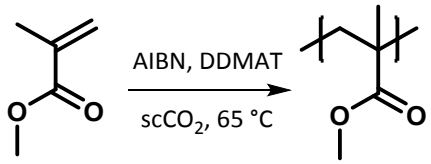
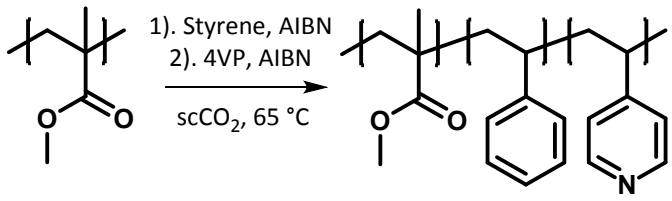
Supporting Information



Scheme S1: Reaction scheme for synthesis of the PMMA macro-RAFT agent.



Scheme S2: Reaction scheme for synthesis of the ABC triblock copolymer.

Table S1: Summary of microparticle size data

Sample	Average particle size (μm)	Standard deviation (μm)	Coefficient of variation (%)
Triblock terpolymer	3.28	0.86	26
Polymer-TiO_2 Composite	3.44	0.92	27
Calcined TiO_2	1.60	0.38	24

Measurements taken from 100 measured particles visible in SEM images (ImageJ processing software).

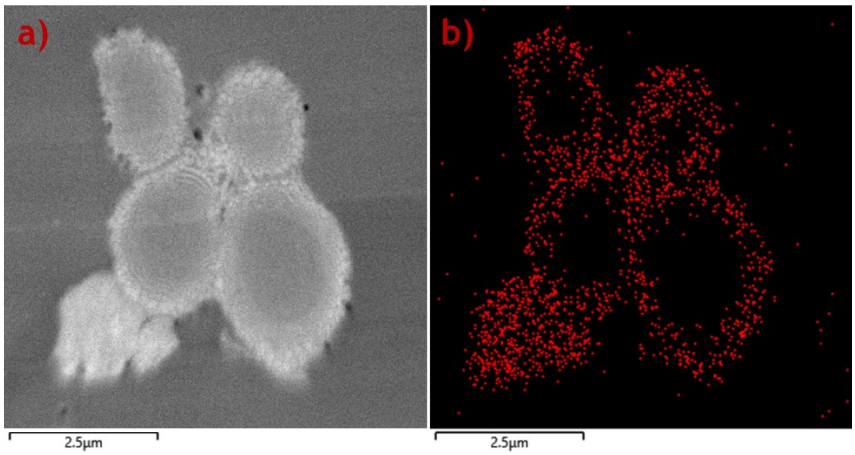


Figure S1: Elemental mapping of the polymer-TiO_2 composite material. (a) dark-field STEM micrograph and (b) corresponding elemental map with high concentration of elemental titanium highlighted as red pixels.

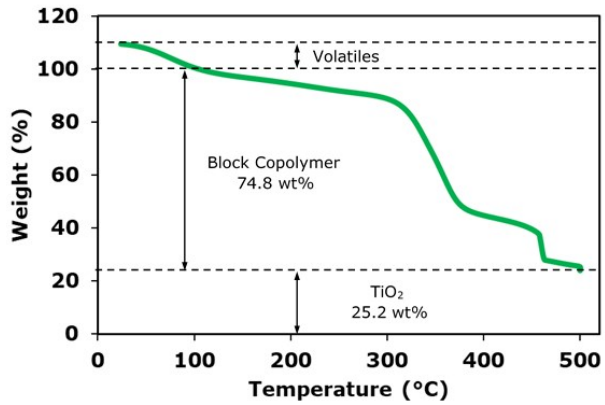


Figure S2: TGA data for the calcination of the polymer-TiO_2 composite material. Weight percentage is scaled to exclude volatiles. The mass loss at 450 °C is attributed to degradation of the remaining PDMS-MA stabiliser.