

Supplementary Information

Substrate-Directed Formation of Calcium Carbonate Fibres

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Characterisation details for (a) the PEO₄₅-PGMA₄₈ diblock copolymer precursor and (b) the corresponding PEO₄₅-2SA:PGMA₄₈ diblock copolymer obtained by esterification using excess succinic anhydride.

¹H NMR spectroscopy. All ¹H NMR spectra were recorded using a 300 MHz Bruker Avance DPX300 spectrometer in either D₂O or CD₃OD.

Gel Permeation Chromatography (DMF eluent). Molecular weights and molecular weight distributions of the diblock copolymer precursor were assessed using a GPC set-up comprising three Polymer Laboratories PL gel 5 µm mixed 'B' columns. Calibration was carried out using a series of near-monodisperse poly(methyl methacrylate) standards. The GPC eluent was HPLC grade DMF containing 0.01 M LiBr at a flow rate of 1.0 mL min⁻¹. The column temperature was set at 70°C.

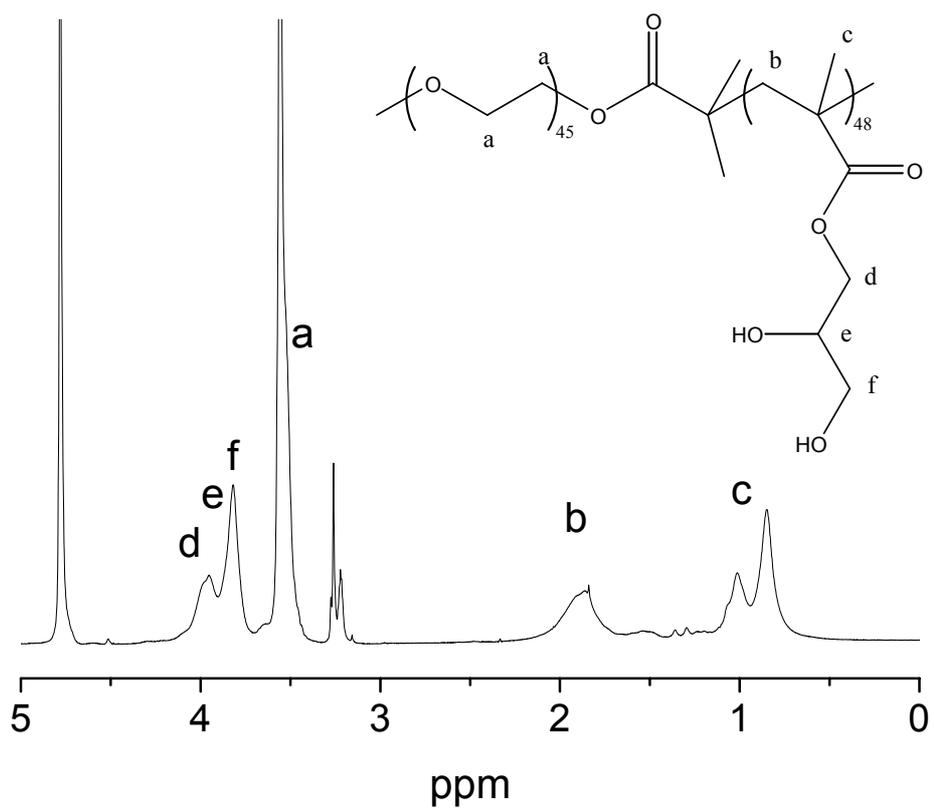


Figure S1: ¹H NMR spectrum (CD₃OD) of the PEO₄₅-PGMA₄₈ diblock copolymer precursor

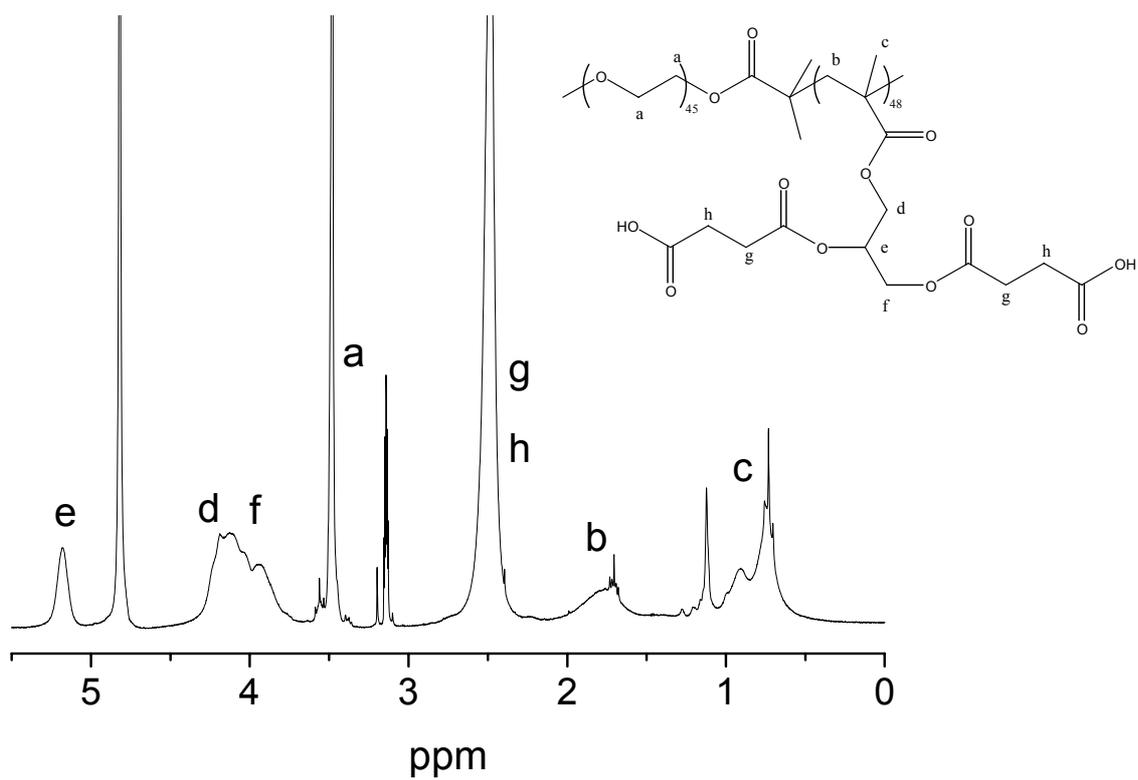


Figure S2: Typical ¹H NMR spectrum of PEO₄₅-2SA:PGMA₄₈ in D₂O.