Supporting Information

Optically active helical polyacetylene/Fe_3O_4 composite microspheres: prepared by precipitation polymerization and used for enantioselective crystallization

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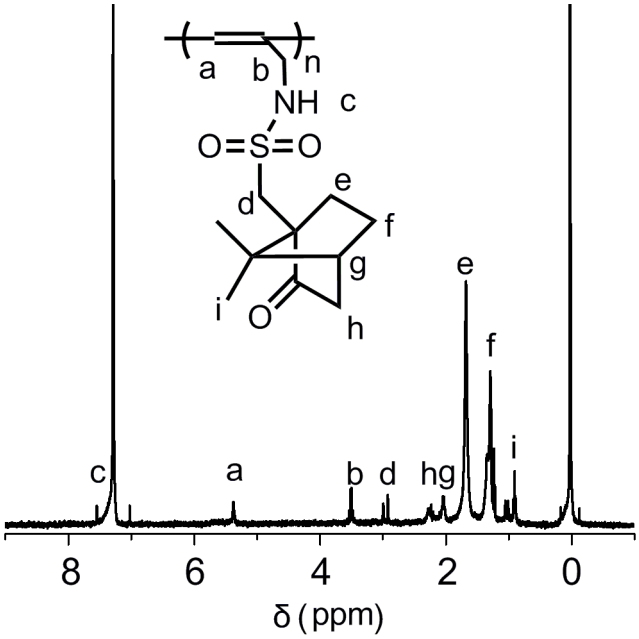

Figure S1. ^{1}H NMR spectra of the pure PSA ($CDCl_3$).

The microspheres were dissolved in tetrahydrofuran, the Fe_3O_4 NPs were excluded with a magnet, and then the residual tetrahydrofuran solution was added into n-hexane to obtain the pure PSA. Finally the pure PSA was dissolved in $CDCl_3$ to obtaine the solution for NMR measurement.

^{1}H NMR ($CDCl_3$, 400MHz): δ 0.91–0.98 (C=OCC(CH_3)$_2$), 1.43–1.45 (CCH_2CH_2CH), 1.91–2.13 (CCH$_2$CH$_2$*CH*), 2.38–2.42 (C=OCH_2), 3.02–3.05 (O=S=OCH_2), 3.70–3.72 (CH=CCH_2), 5.58–5.70 (*CH*=C).

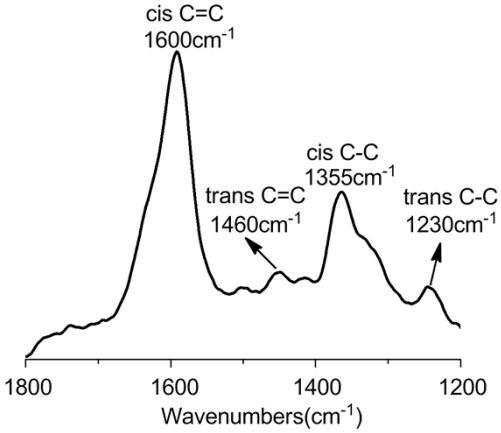

Figure S2. Typical Raman spectrum of pure PSA.

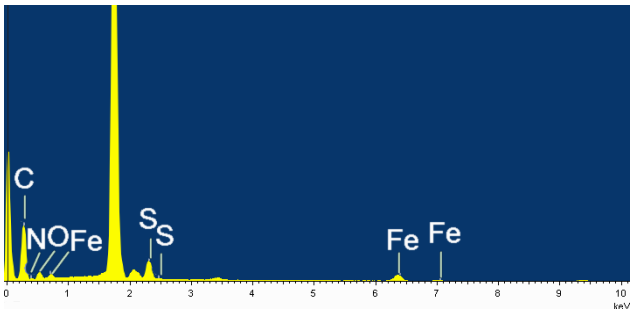

Figure S3. Energy dispersive X-ray (EDX) spectrum data of CMMSs-1.

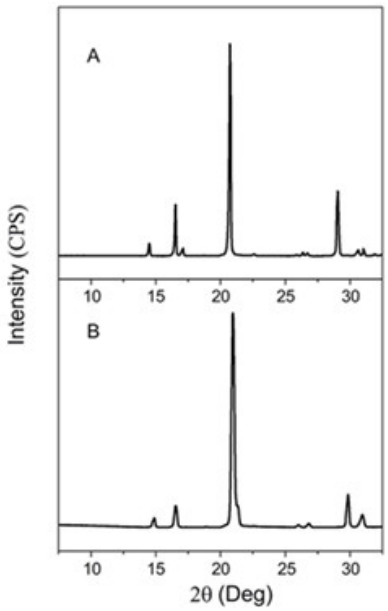

Figure S4. XRD patterns of pure L-alanine (A) and L-alanine obtained via enantioselective crystallization by using S-PSA microspheres (CMMSs-1).