Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting Information

Chiroptical phenolic resins grown on chiral silica bonding amine residues

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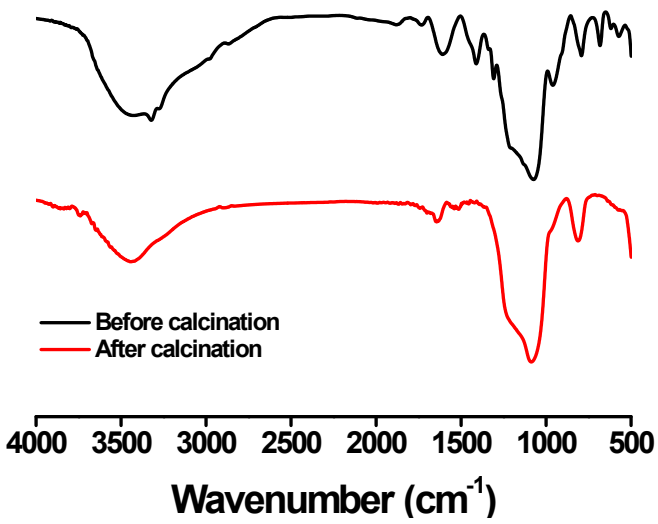

Fig. S1 FT-IR spectra of before (black line) and after (red line) calcination samples of SiO_2@D-PEI/tart

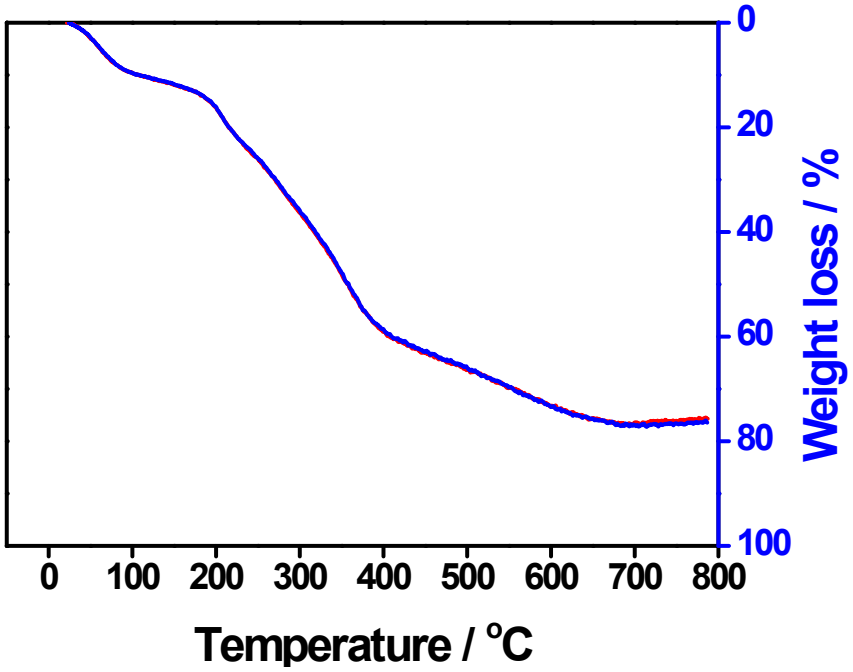

Fig. S2 TGA curves of D- (red line) and L- (blue line) SiO_2@PEI/tart.

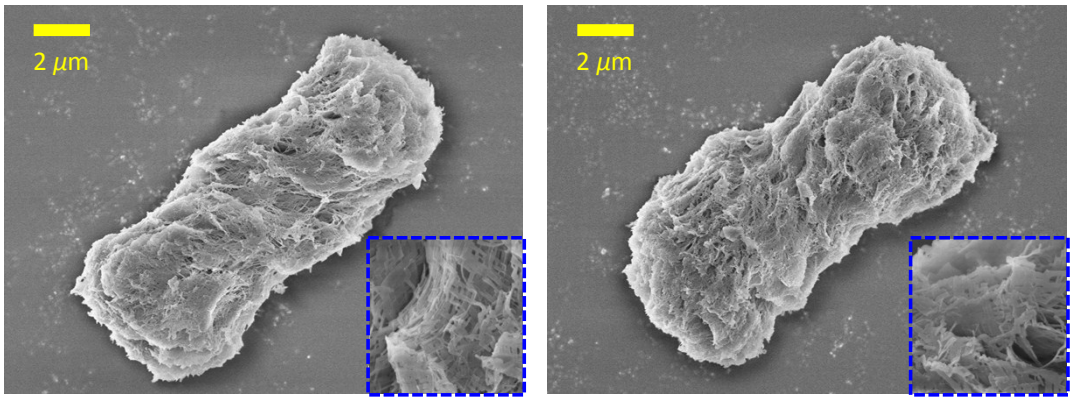

Fig. S3 SEM images of L- (left) and D-(right) SiO_2@PEI/tart.

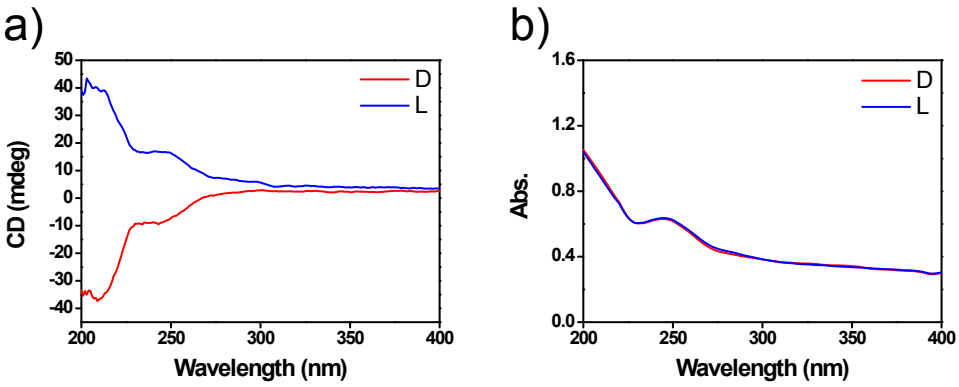

Fig. S4 a) DRCD and b) UV-Vis spectra of D- and L-SiO_2@PEI/tart.

Table S1. Nitrogen contents* of SCA-SiO_2

SCA-SiO_2 (L-form)	Weight loss (%)	Nitrogen content (10^{-6} mol/g)
1^oP-SiO_2	16.4	2.77
2^oP-SiO_2	13.7	1.87
3^oP-SiO_2	14.2	1.63
Im-SiO_2	21.1	3.76

*Calculated from TGA curves

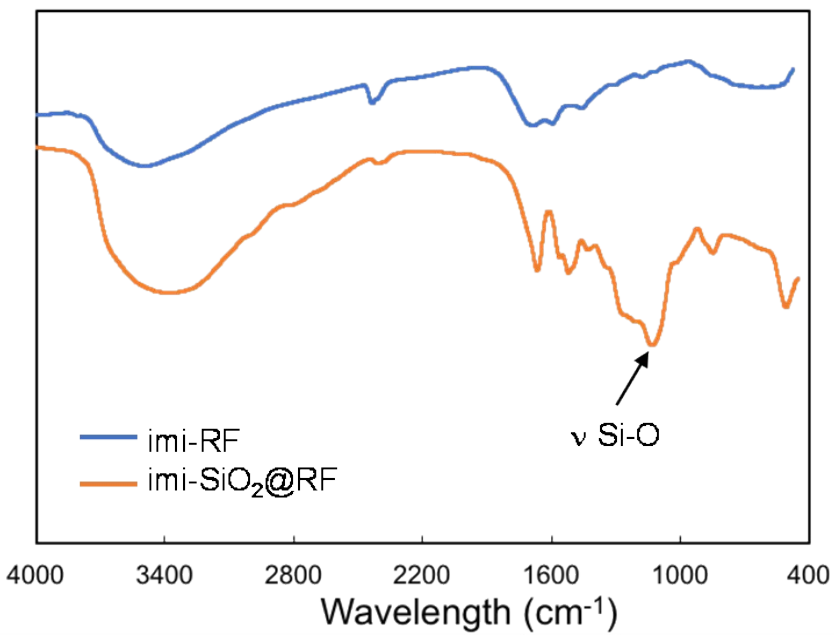

Fig. S5 FT-IR spectra of Im-SiO_2@RF (orange line) and after HF treatment of Im@RF (blue line).

Table S2. Mass ratio of organic and inorganic components in SCA@RF

SCA@RF	Mass ratio %	
(L-form)	Inorganics	Organics
1^{o}P@RF	5.5	94.5
2^{o}P@RF	4.2	95.8
3^{o}P@RF	3.7	96.3
Im@RF	8.8	91.2

*Calculated from TGA curves

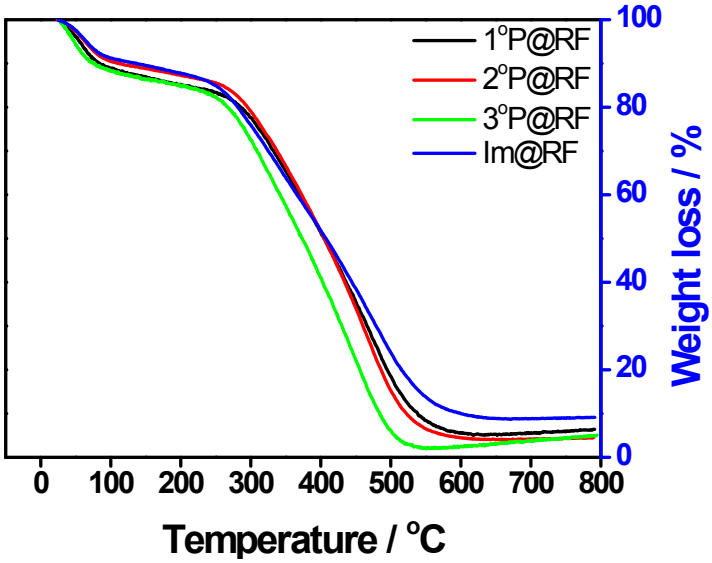

Fig. S6 TGA curves of 1°P@RF (black line), 2°P@RF (red line), 3°P@RF (green line) and Im@RF (blue line).

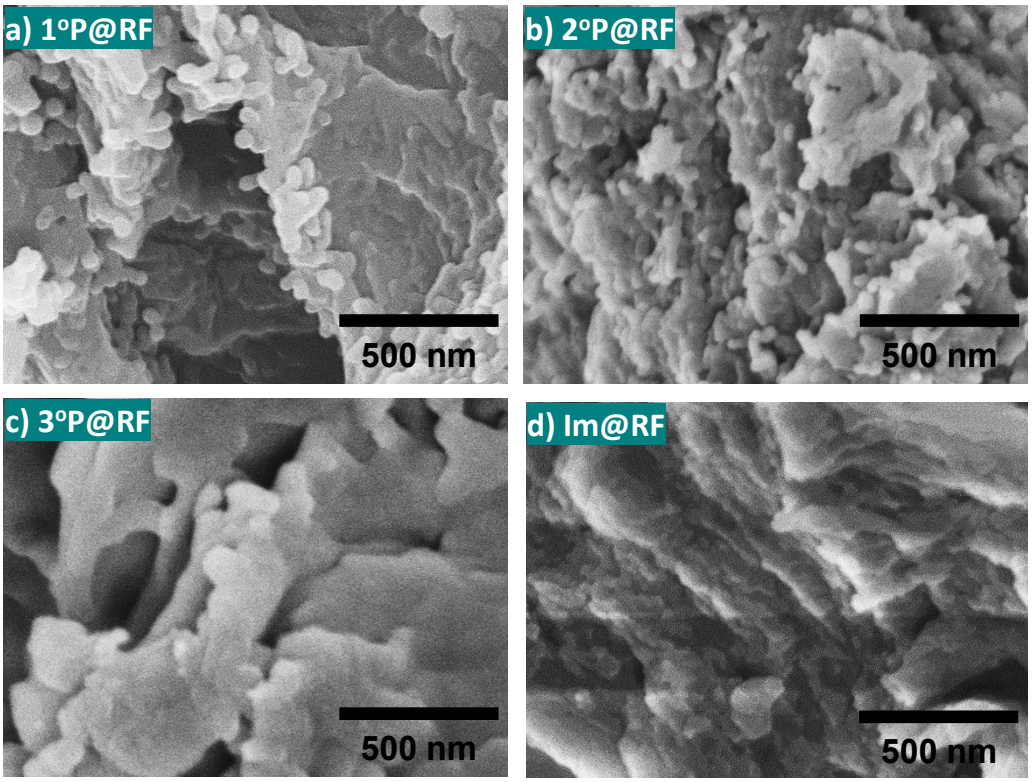

Fig. S7 SEM images of a) 1ºP@RF, b) 2ºP@RF, c) 3ºP@RF and d) Im@RF (all the samples were L-form).

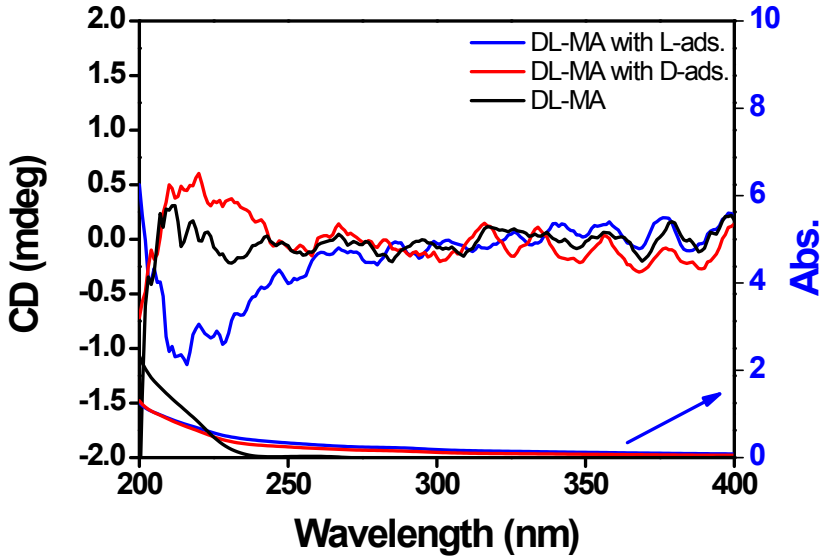

Fig. S8 CD spectra of supernatants prepared by a) DL-mandelic acid with chiral adsorbents and 24 h stirring: blue line, DL-mandelic acid with L-1^{o}P-SiO_2@R4F; red line, D-1^{o}P-SiO_2@R4F; black line, DL-mandelic acid without adsorbent.