Supporting Information

Ultra-selective Ferric Ion-complexed Membranes Composed of Water-based Zwitterionic Comb Copolymers

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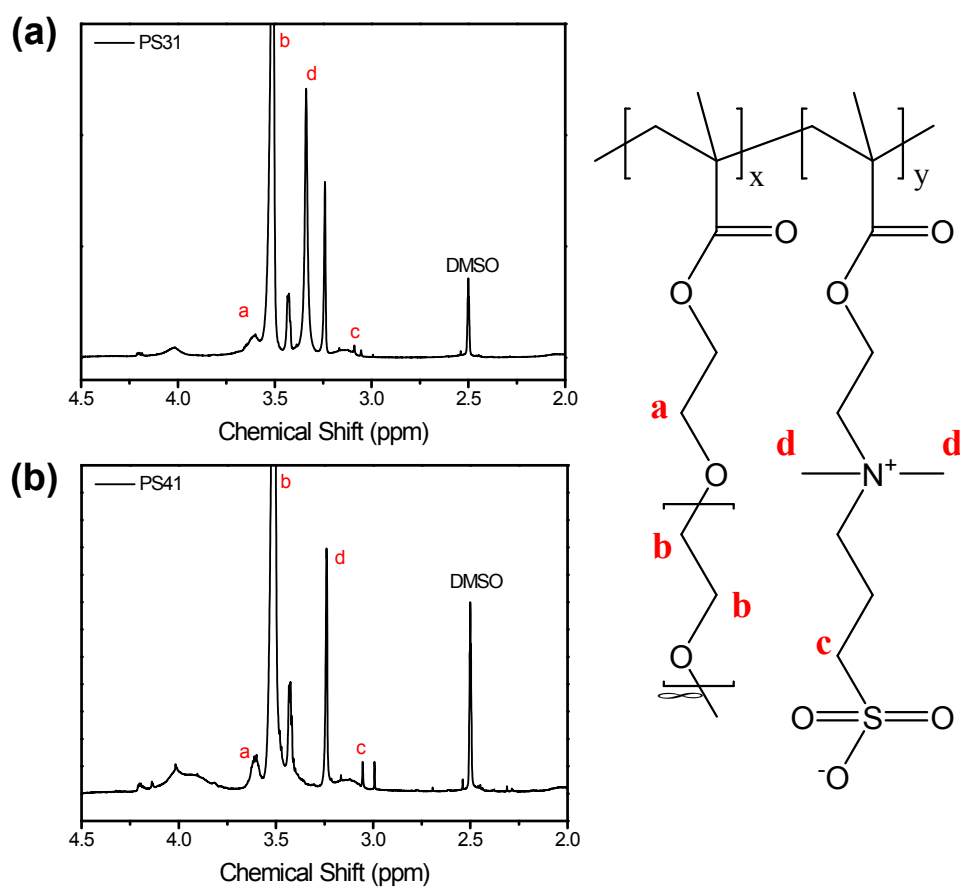
E-mail: jonghak@yonsei.ac.kr

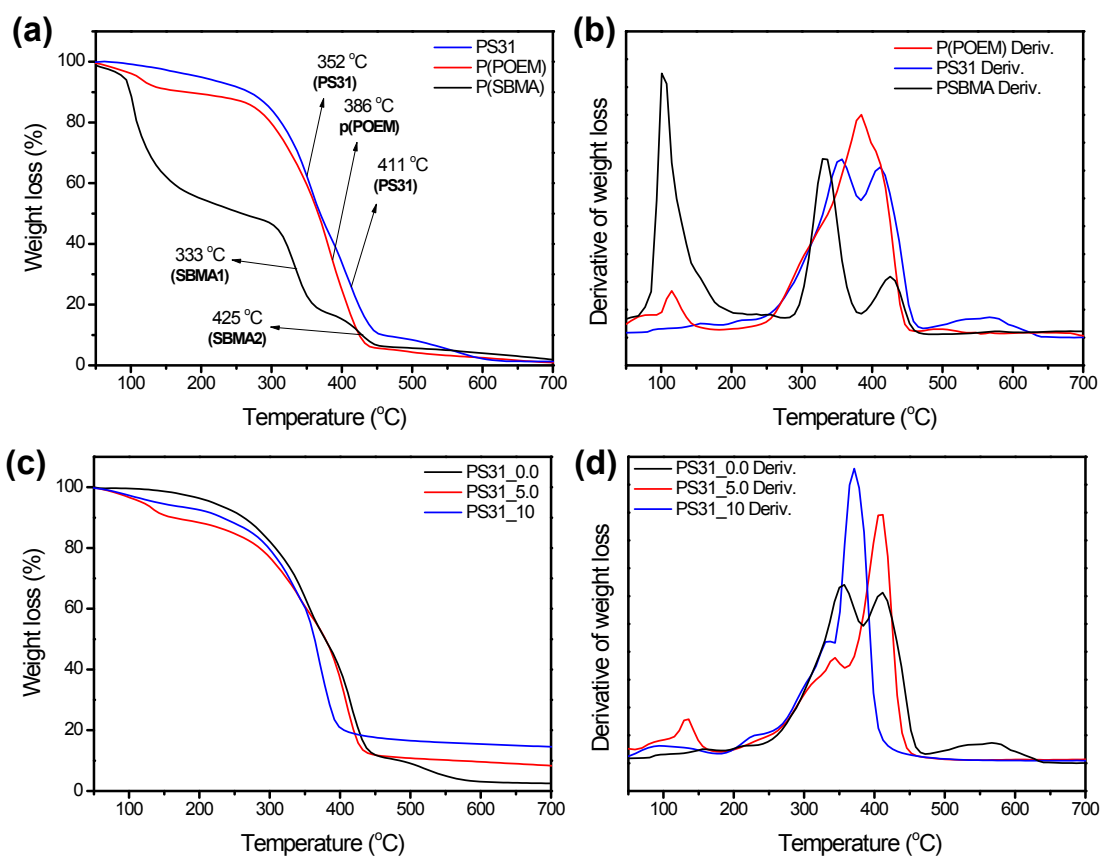**Fig. S1.** H^1- NMR spectra of PS31 and PS41 comb copolymers.

Fig. S2. TGA curves of coating materials according to (e) SBMA contents in synthesized copolymers and (f) derivatives of their curves, and according to (g) FeCl₃ contents in the coated composites and (h) derivatives of their curves.
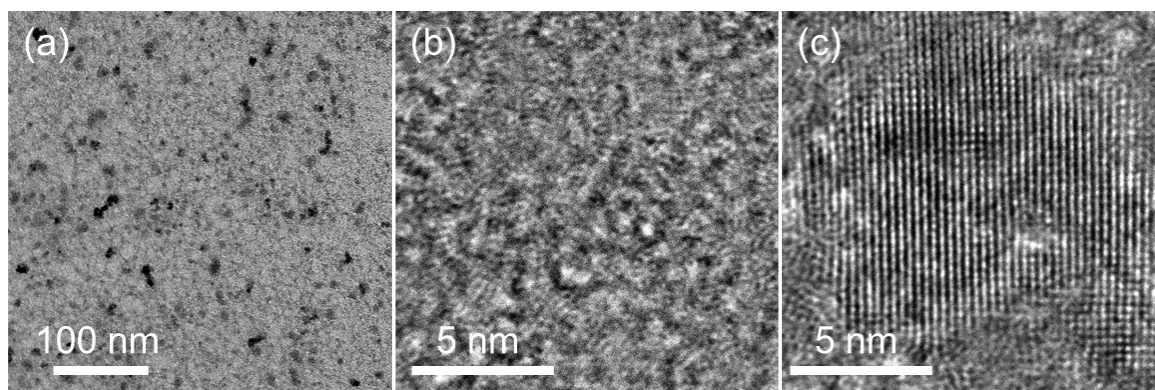
Fig. S3. (a) TEM image of PS31_10 complex with 10% iron loading. (b) magnified image of bright and less dark regions of (a), and (c) magnified image of small darker dots.
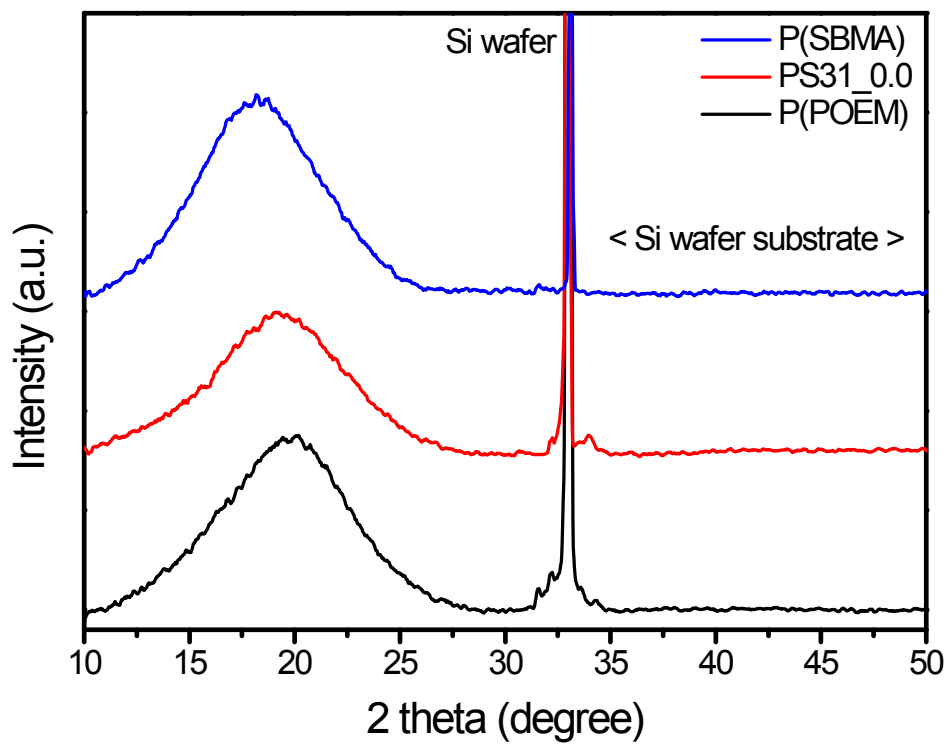
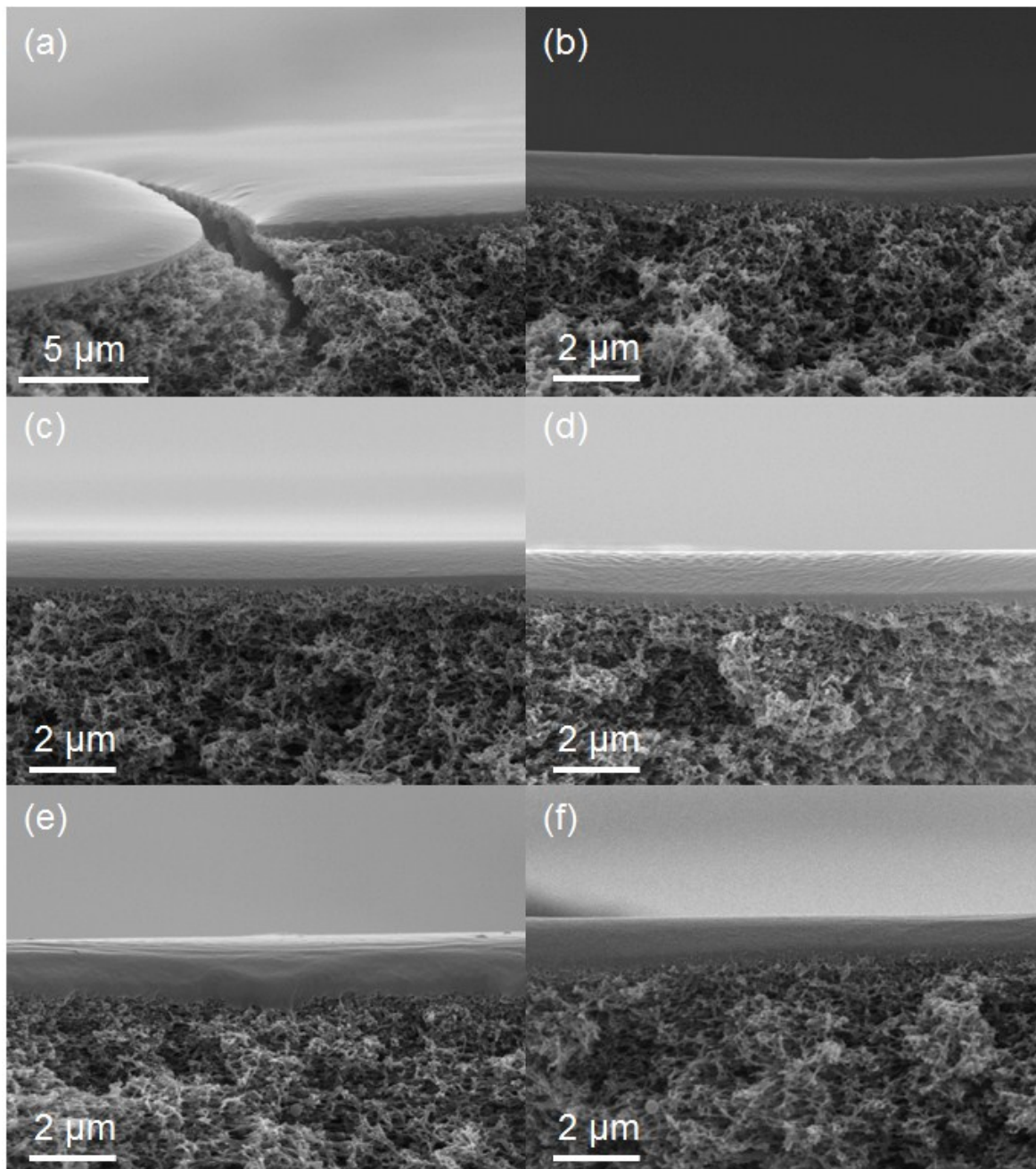**Fig. S4.** XRD patterns of P(SBMA), P(POEM) and PS31 comb copolymers.

Fig. S5. Cross-sectional SEM images of membranes (a) PS31_5.0, (b) PS31_0.0, (c) PS31_2.5, (d) PS31_5.0, (e) PS31_7.5 and (f) PS31_10.