

Supporting Information

**pH and Redox Dual Responsive Homopolyptide: Synthesis, Characterization,
and Application in “Smart” Single-Walled Carbon Nanotube Dispersion**

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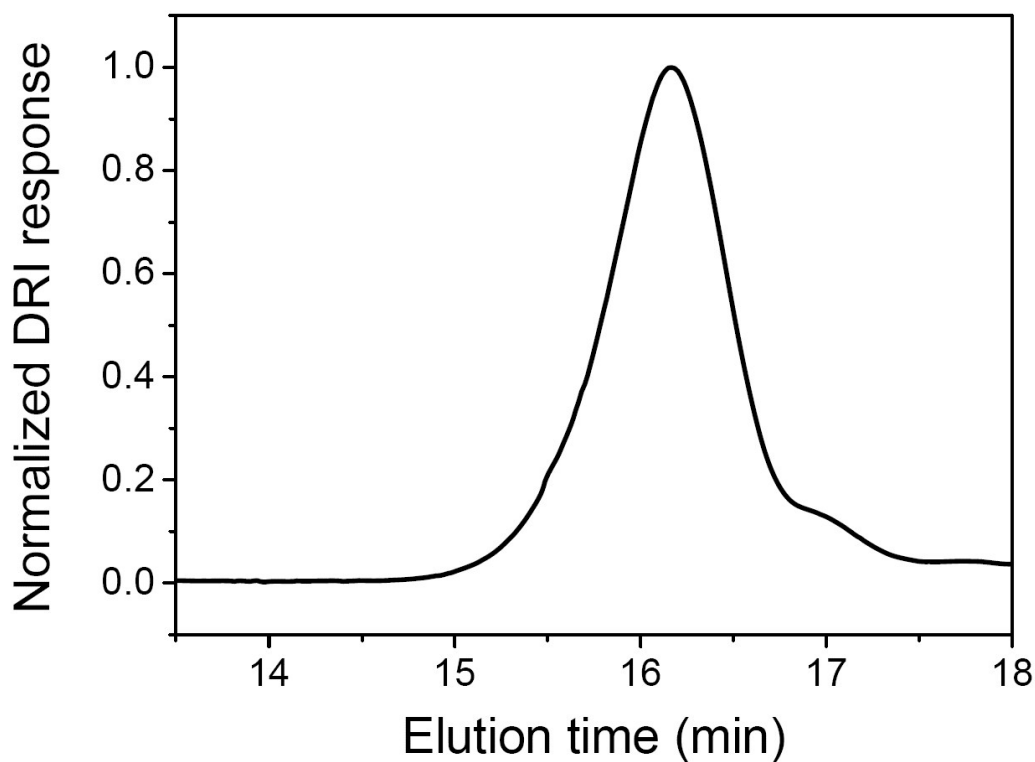


Figure S1. GPC chromatograph of PMCELC prepared from ring-opening polymerization ($[M]_0/[I]_0 = 30$).

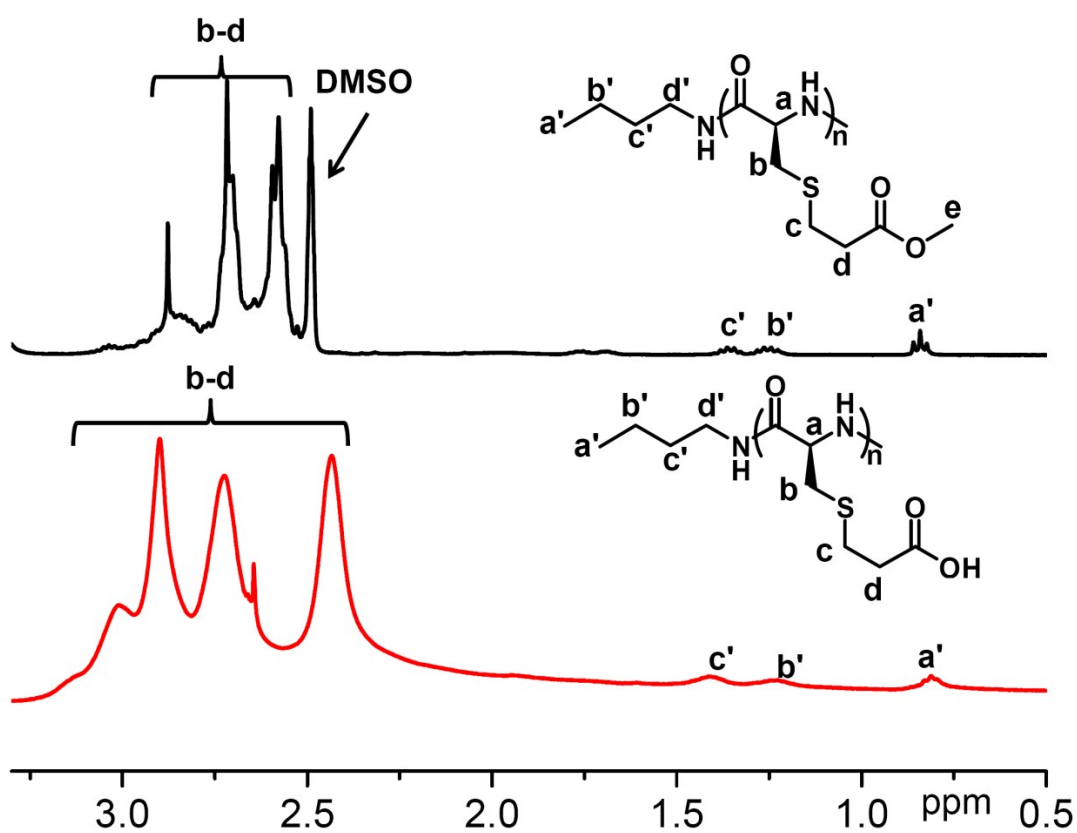


Figure S2. ^1H NMR spectra of PMCELC in $\text{DMSO-}d_6$ and PCELC in D_2O for the calculation of DP_{NMR} .

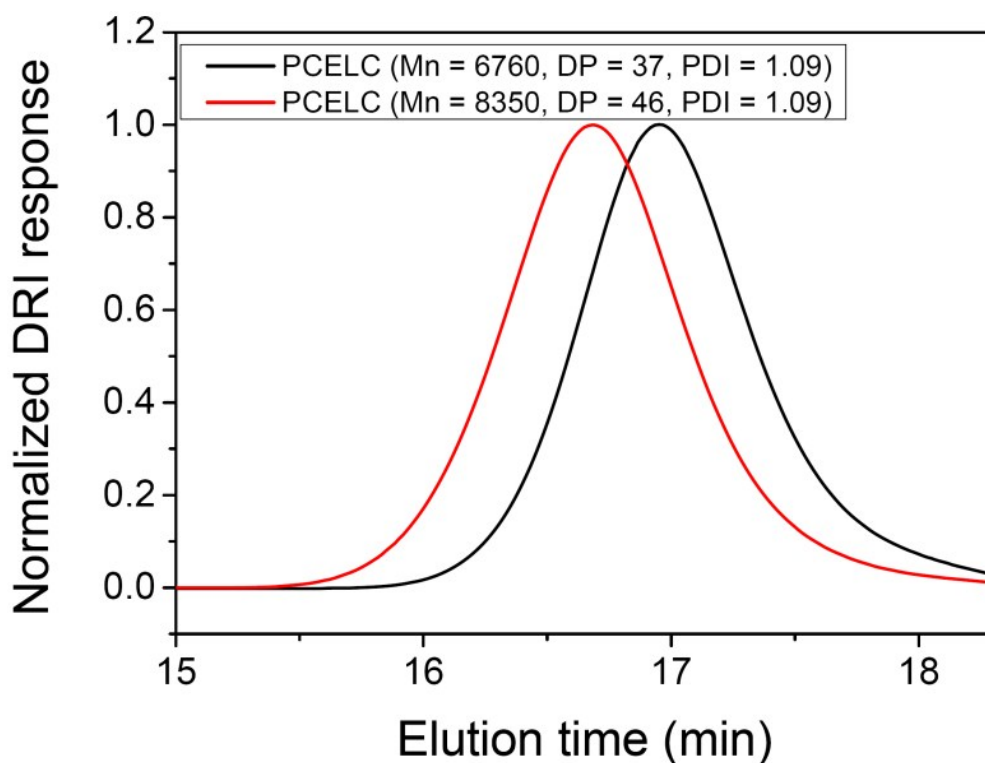


Figure S3. GPC chromatographs of PCELC samples with different M_n prepared from ring-opening polymerization of MCELC-NCA with different initial $[M]_0/[I]_0$ ratios (i.e., 20 and 30) and subsequent hydrolyzation.

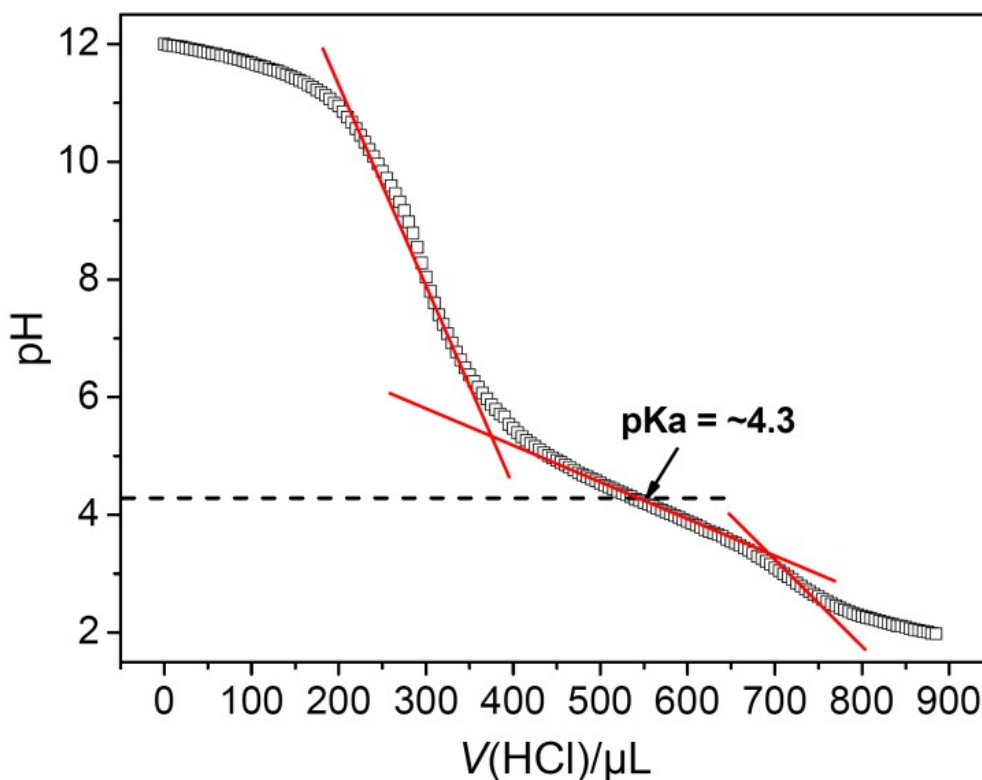


Figure S4. pH titration curve of PCELC (pK_a was determined from the midpoint of the buffering region).

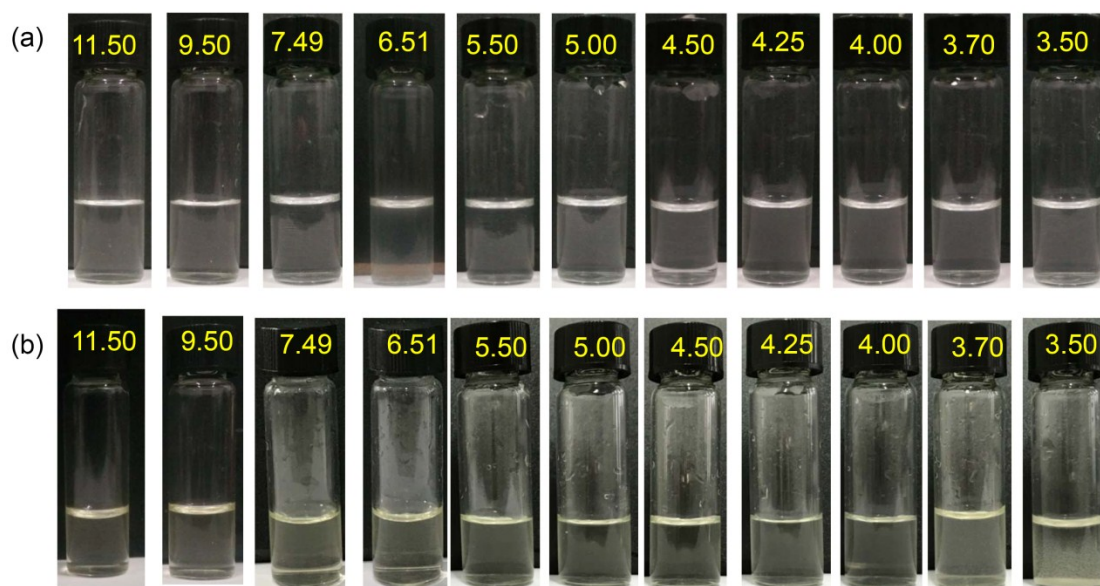


Figure S5. Optical images of PCELC^{ox} and PCELC^{re} aqueous solutions with different pH values (polymer concentration = 10 mg·mL⁻¹).

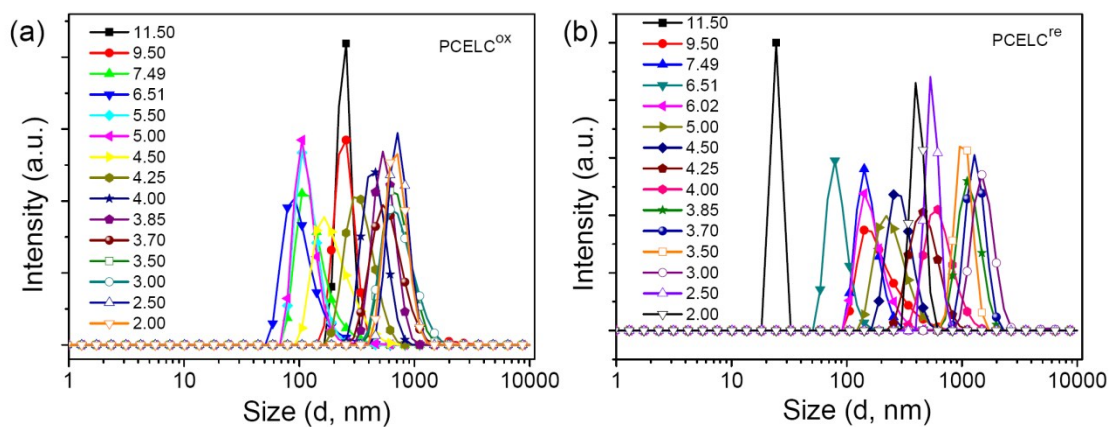


Figure S6. DLS size distribution plots of PCELC^{ox} and PCELC^{re} aqueous solutions with different pH values at 25 °C (polymer concentration = 1 mg·mL⁻¹).