

Supporting Information

Tetraphenylthiophene-Functionalized Poly(N-Isopropylacrylamide): Probing LCST with Aggregation-Induced Emission

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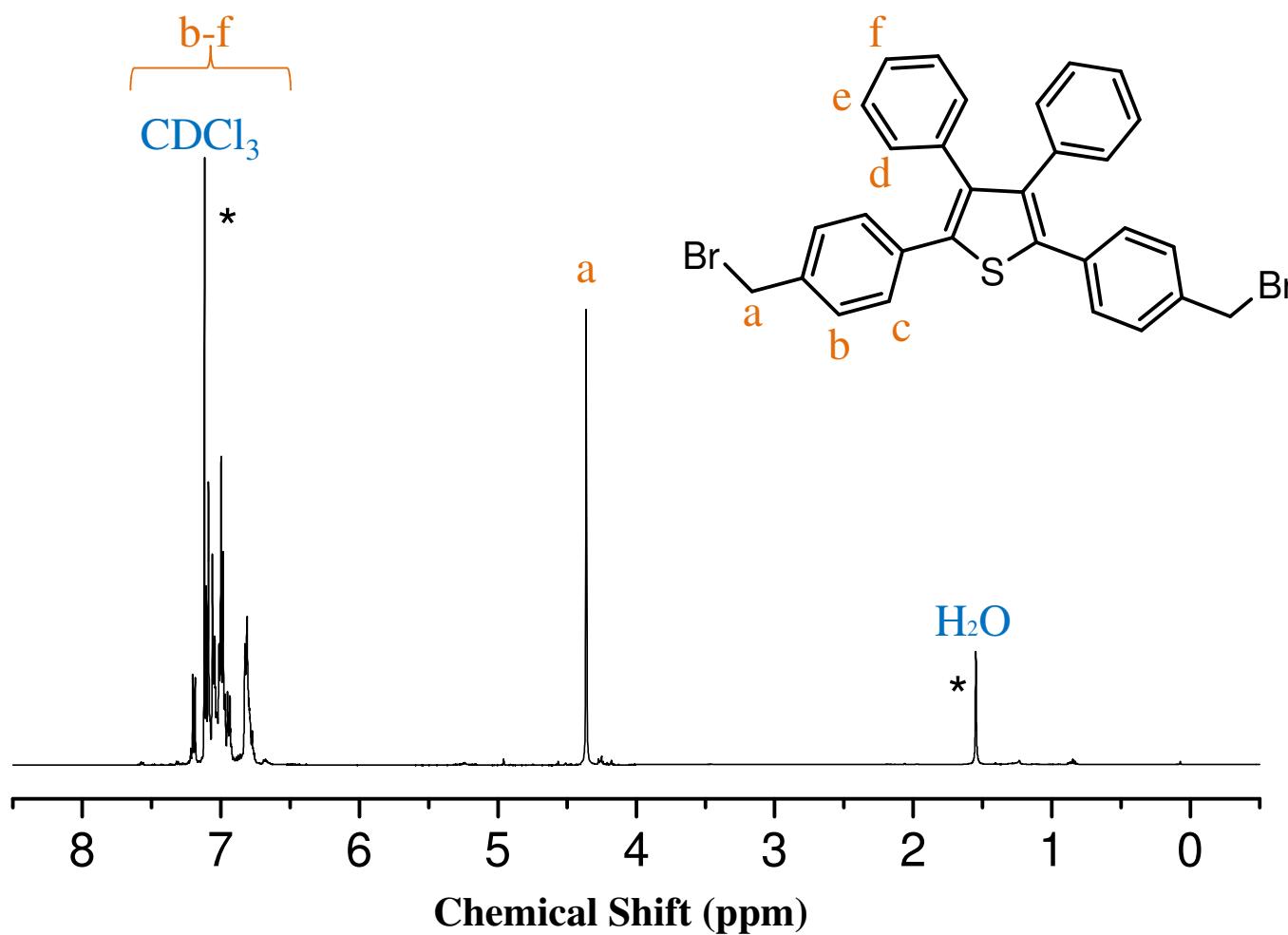


Figure S1. ^1H NMR spectrum of TPBr (CDCl_3).

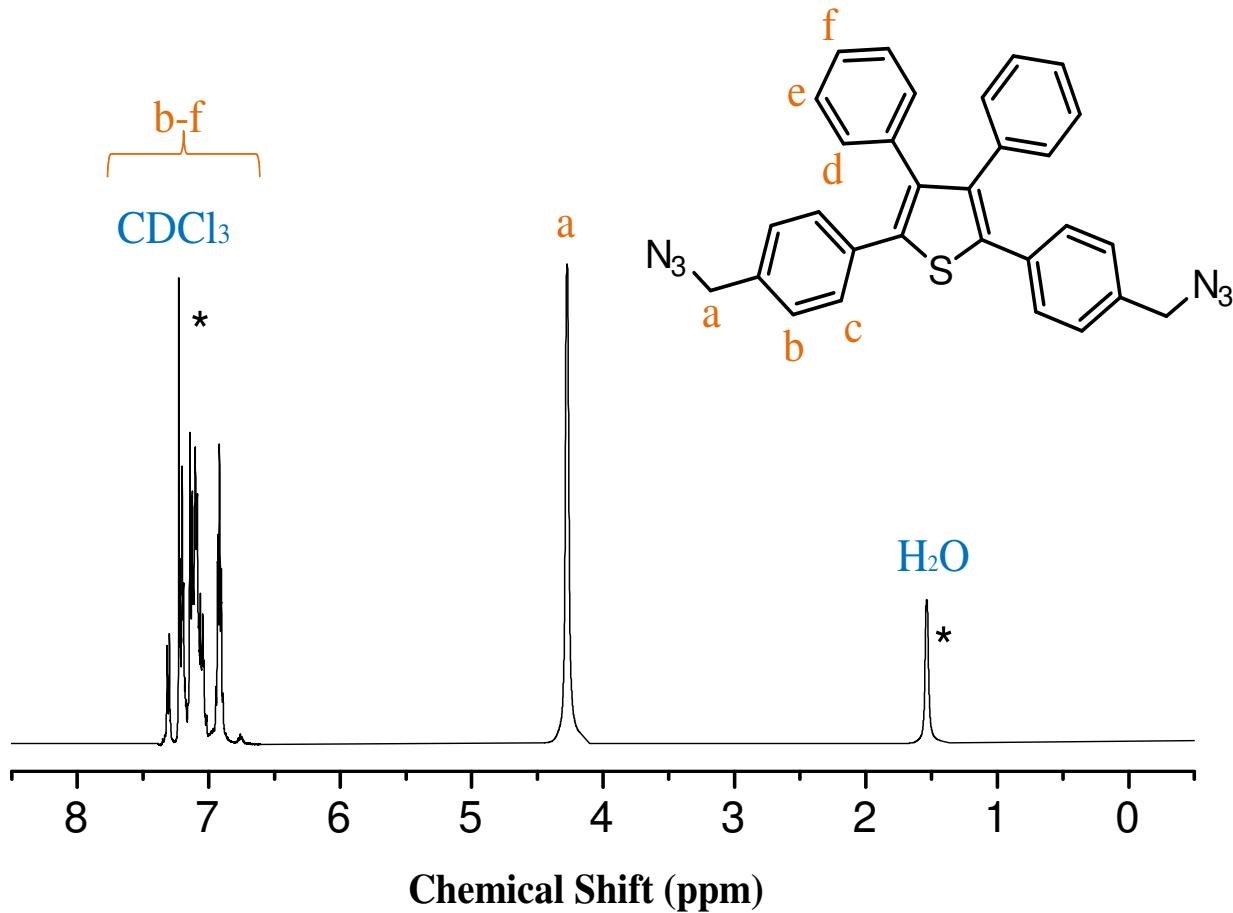


Figure S2. ^1H NMR spectrum of TPN₃ (CDCl_3).

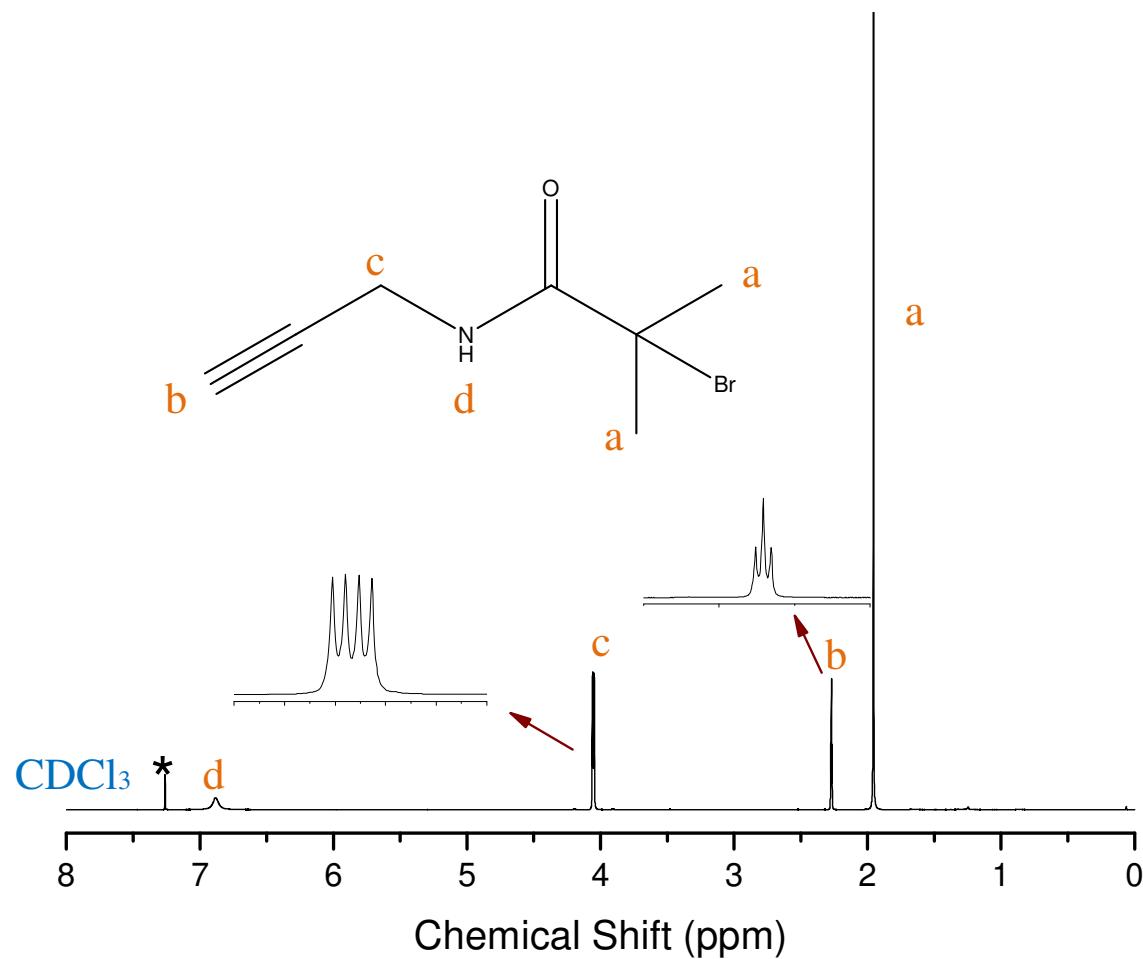


Figure S3. ^1H NMR spectrum of initiator BMP (CDCl_3).

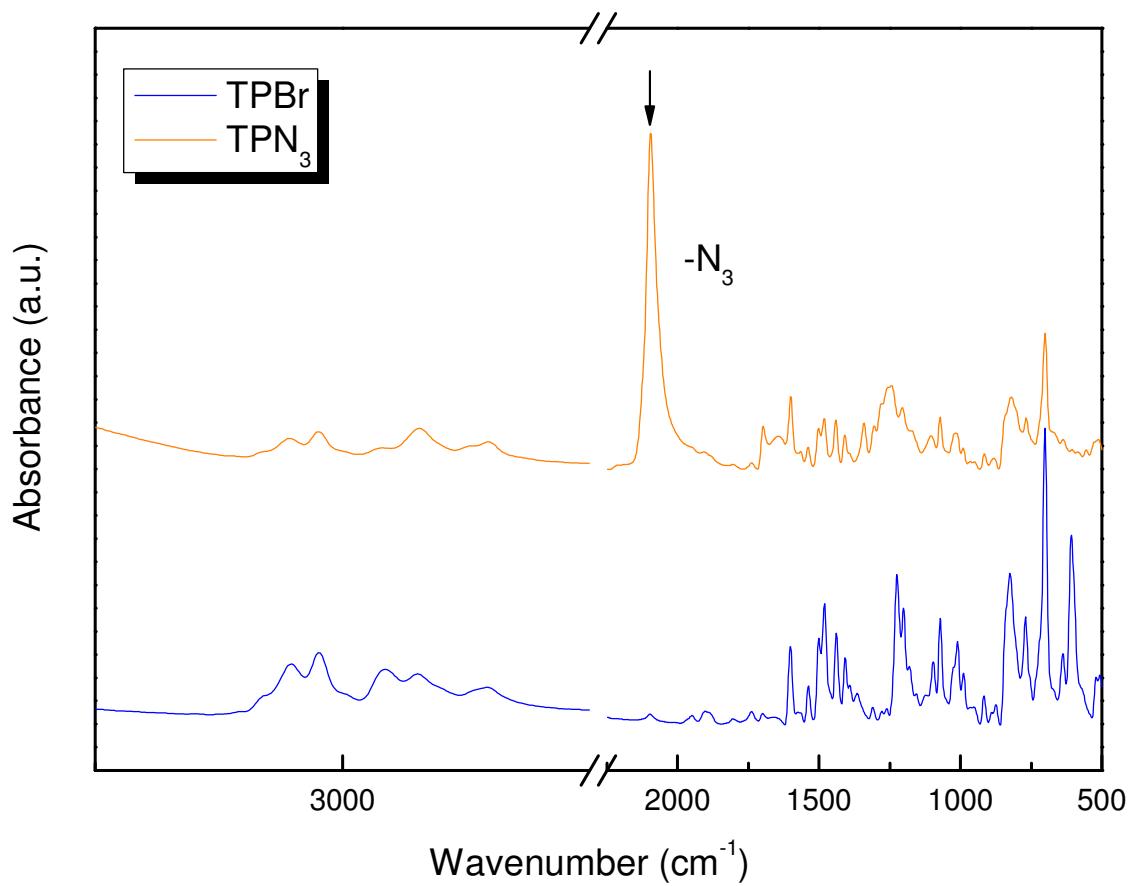


Figure S4. FT-IR spectra of TPBr and TPN₃.

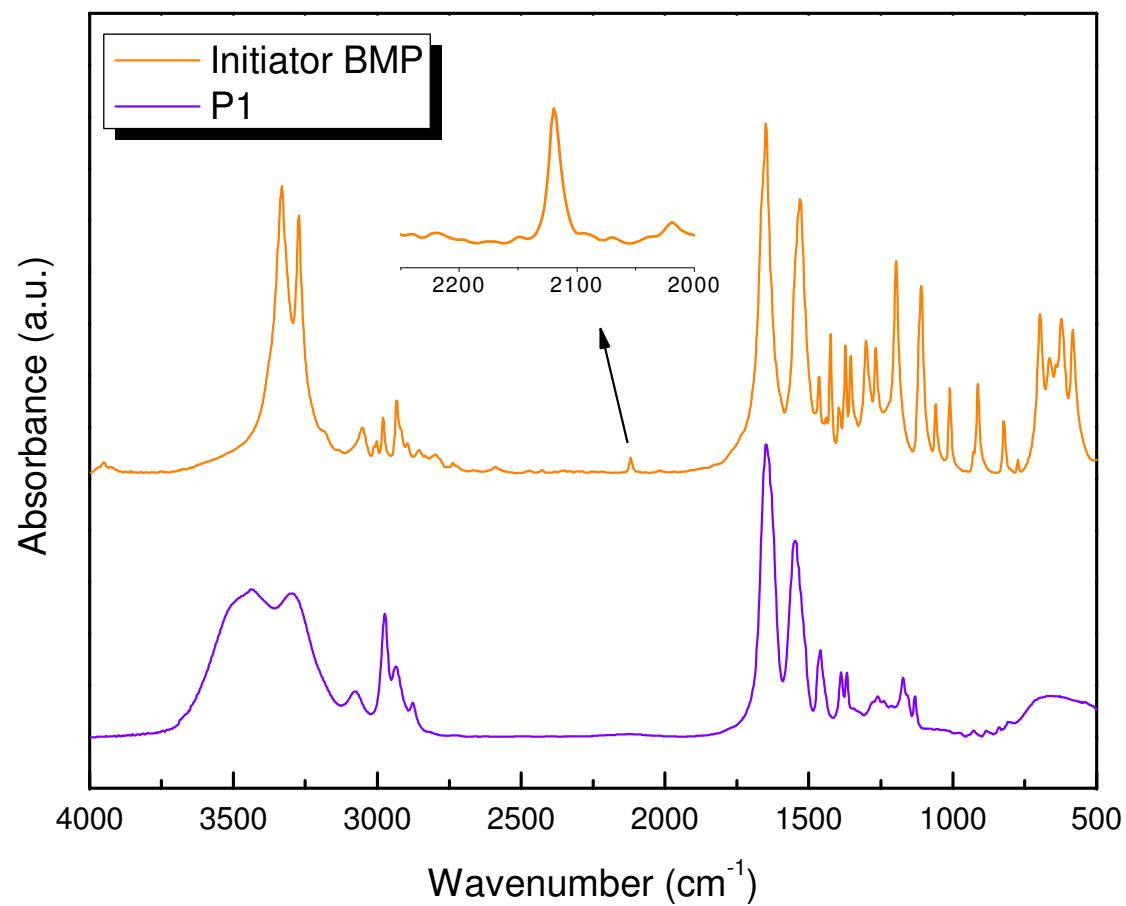


Figure S5. FT-IR spectra of initiator BMP and P1.

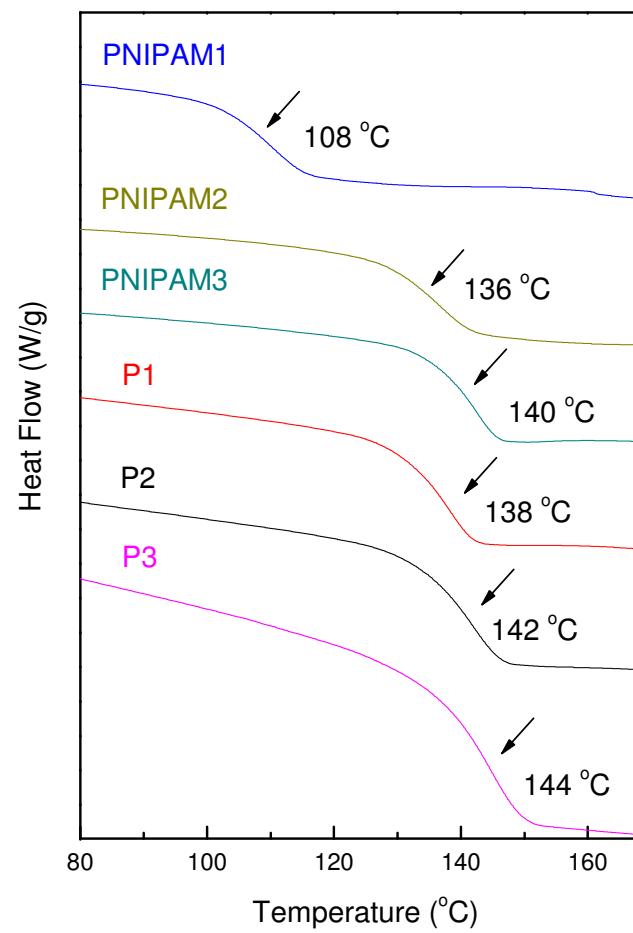


Figure S6. DSC thermograms of PNIPAM1, PNIPAM2, PNIPAM3, P1, P2 and P3 (heating rate = 20 $^{\circ}\text{C}/\text{min}$).

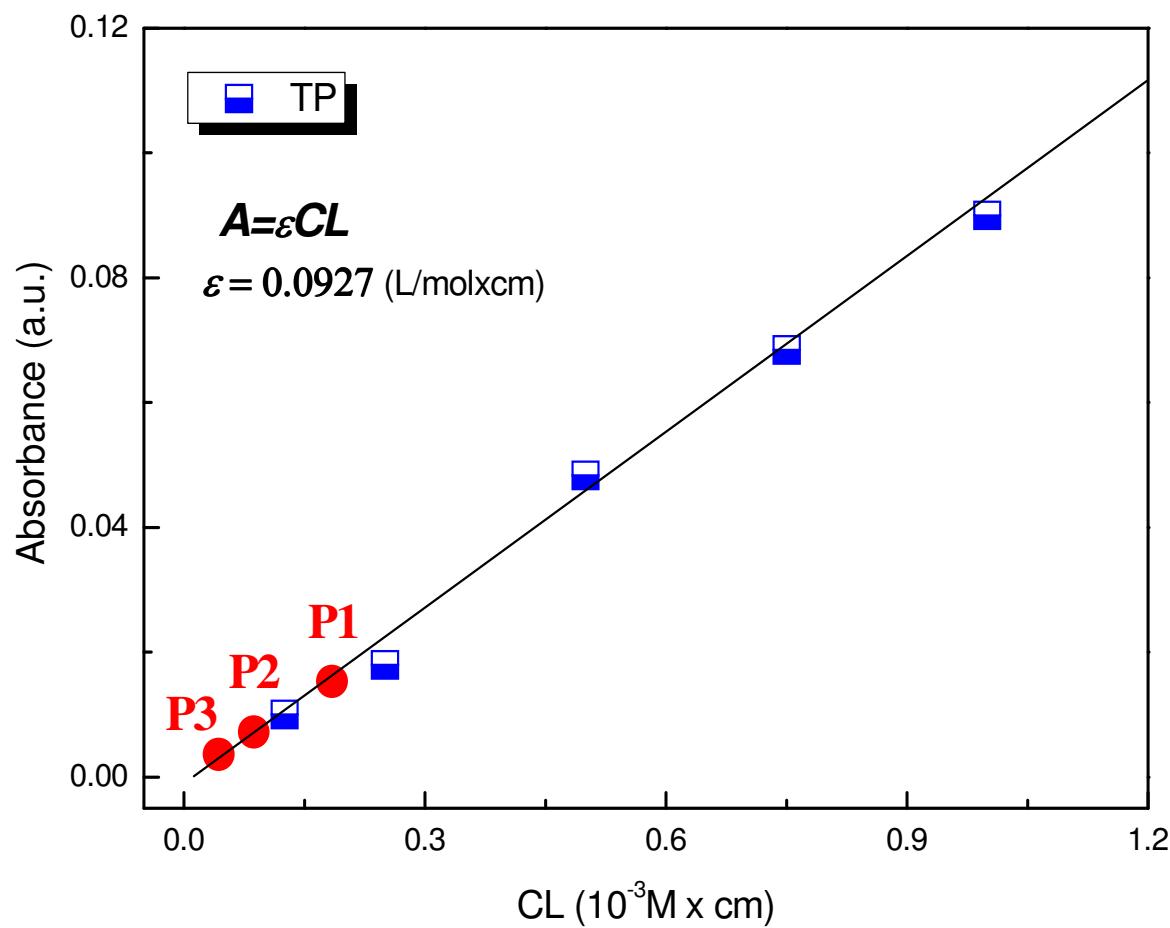


Figure S7. Calibration curve for determination of TP content in Px, using TP as external standard. The absorbance of TP at 320 nm was recorded in the presence of PNIPAM1 in THF. Concentrations of TP and Px are 0.125×10^{-3} – 10^{-3} M and 1 mg/mL, respectively.

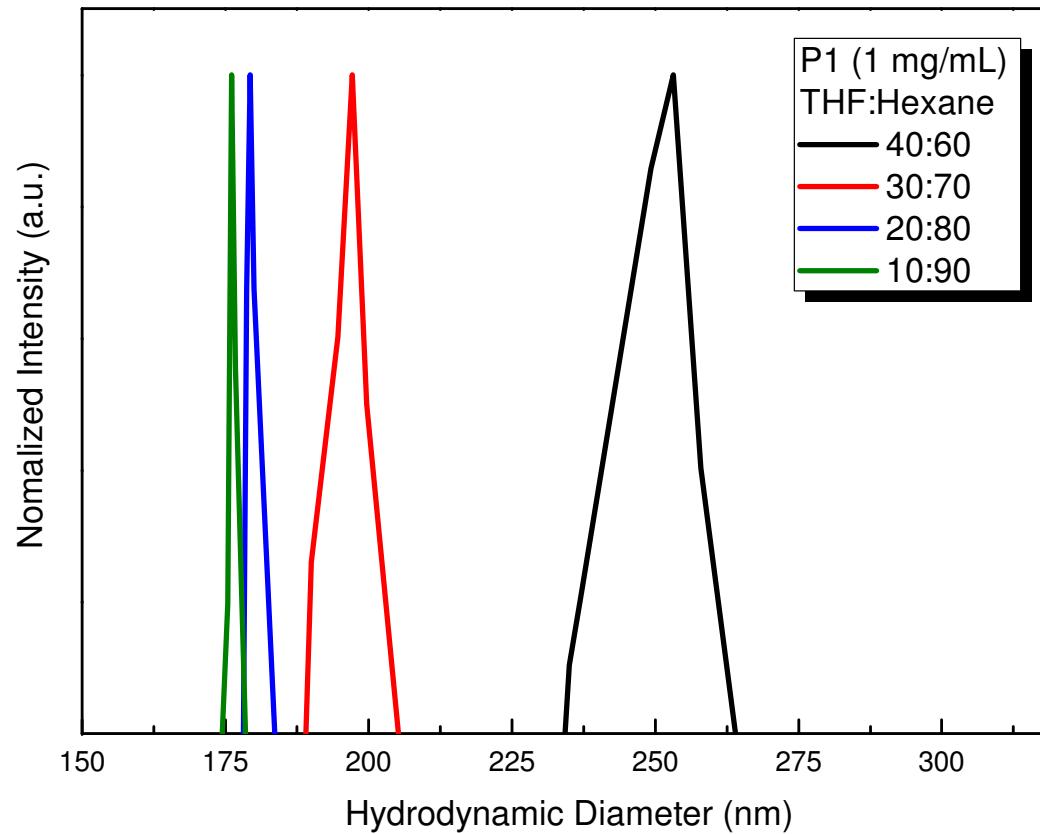


Figure S8. Hydrodynamic diameter of P1 (1 mg/mL) in THF/hexane mixture solvent with different ratios (v/v %).

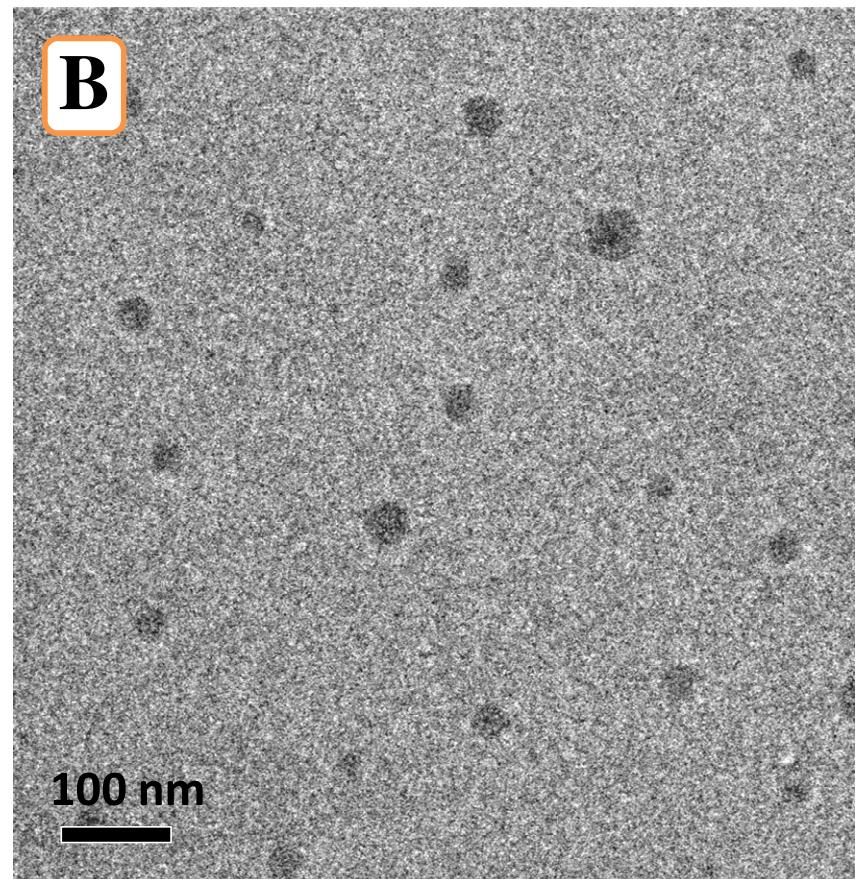
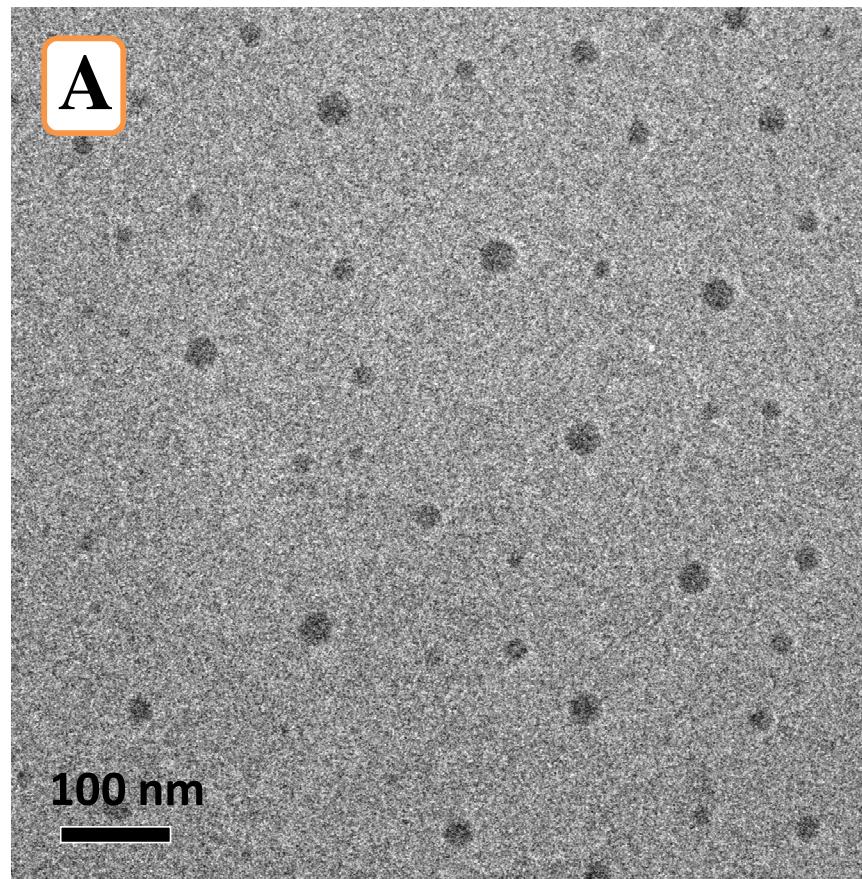


Figure S9. Cryo-TEM images of micellar structures of (A) the aqueous P2 and (B) P3 solutions.

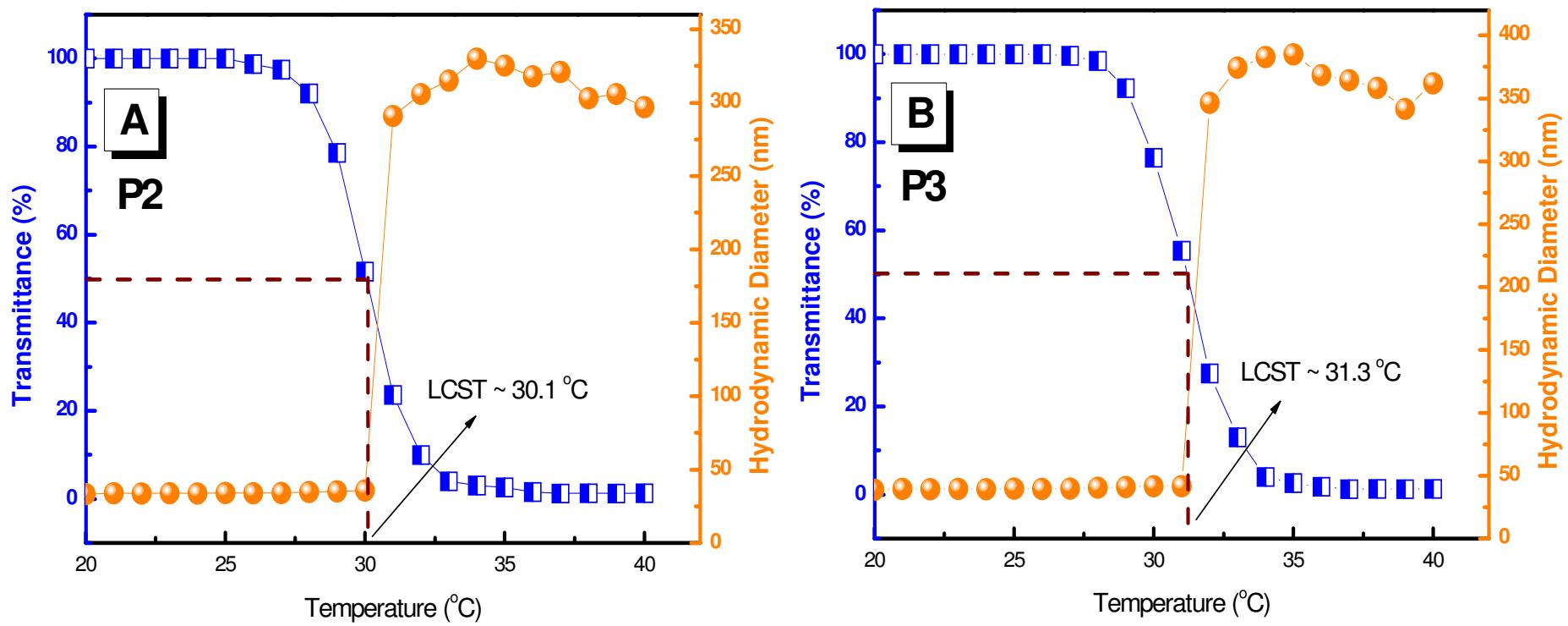


Figure S10. Transmittance (blue line) and hydrodynamic diameter (orange line) vs temperature for (A) P2 (1 mg /mL) and (B) P3 (1 mg /mL) in water (monitored at 700 nm).

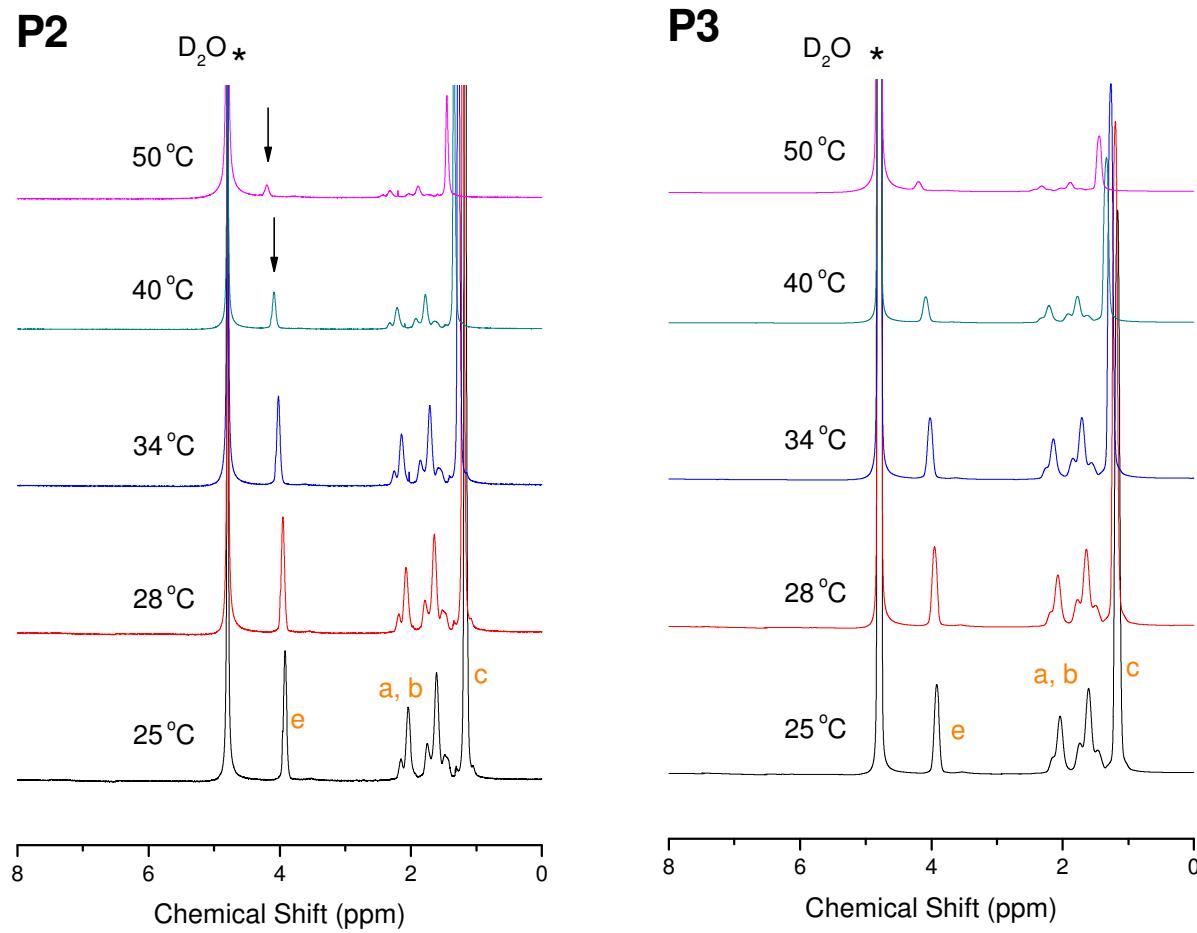


Figure S11. Temperature-programming ¹H NMR spectra of P2 and P3 in D₂O.