

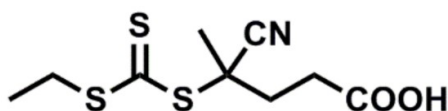
**In situ synthesis of thermo-responsive ABC triblock terpolymer nano-objects by
seeded RAFT polymerization**

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Scheme S1. The chemical structure of ECT.

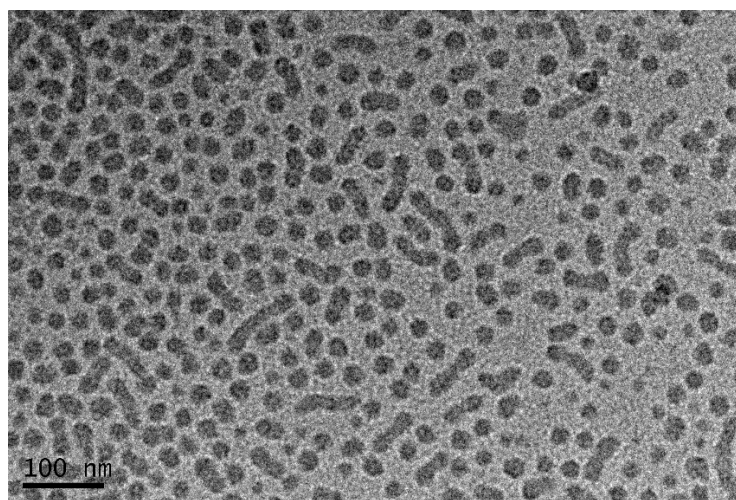
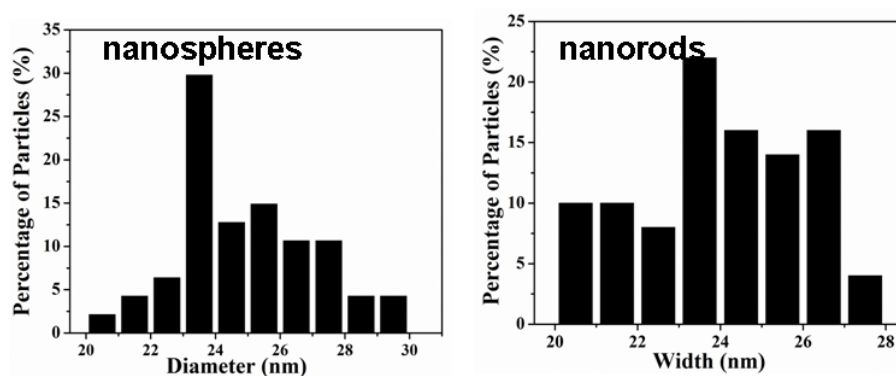


Figure S1. The TEM image of the seed-nanoparticles of PS₁₃₅-*b*-PDMA₈₀-TTC diblock copolymer dispersed in the ethanol/water/NIPAM (80/20/16.7 by weight) ternary mixture with polymer concentration at 4.9 wt%.

A: PS₁₃₅-*b*-PDMA₈₀-TTC seed-nanoparticles



B: PS₁₃₅-*b*-PDMA₈₀-*b*-PNIPAM₃₁₂ nano-objects

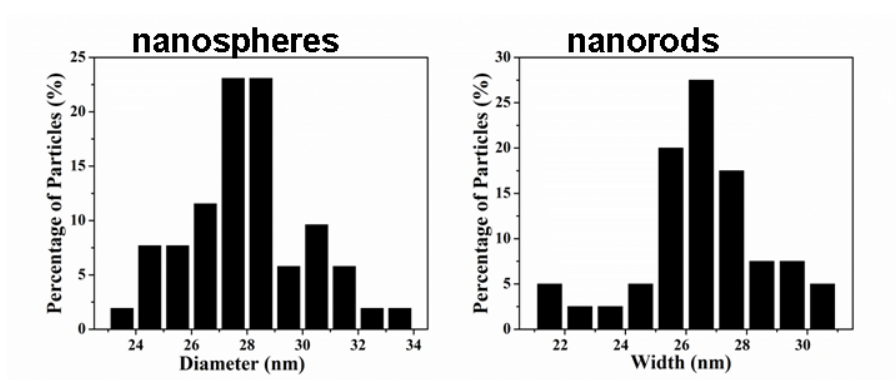


Figure S2. Size distribution of the PS₁₃₅-*b*-PDMA₈₀-TTC seed-nanoparticles (A) and the typical triblock terpolymer nano-objects of PS₁₃₅-*b*-PDMA₈₀-*b*-PNIPAM₃₁₂ (B).

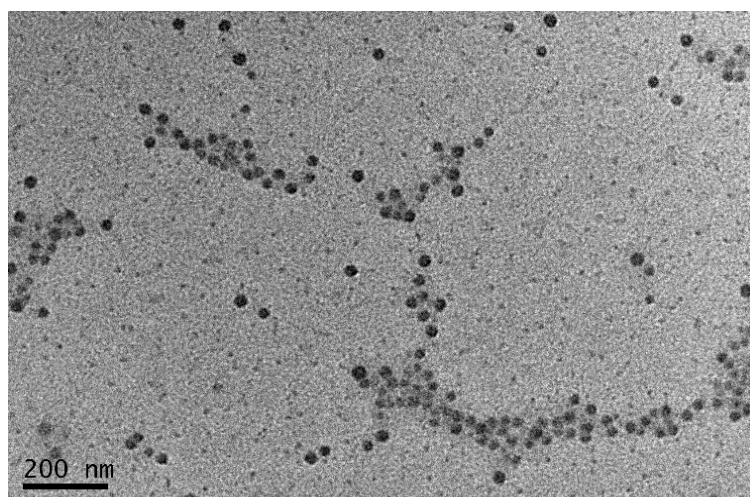


Figure S3. The TEM image of the PS₁₃₅-*b*-PDMA₈₀-*b*-PNIPAM₃₆₈ triblock terpolymer nanospheres prepared through the seeded RAFT polymerization at time of 4 h.

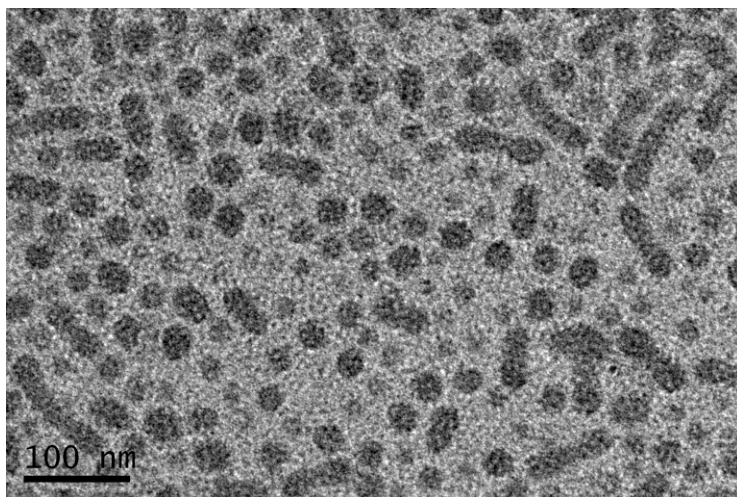


Figure S4. TEM image of PS₁₃₅-*b*-PDMA₈₀-*b*-PNIPAM₇₆ triblock terpolymer nano-objects in water at temperature of 50 °C.