

Supporting Information

Light, temperature, and pH control of aqueous Azopyridine-terminated Poly(N-isopropylacrylamides) solutions

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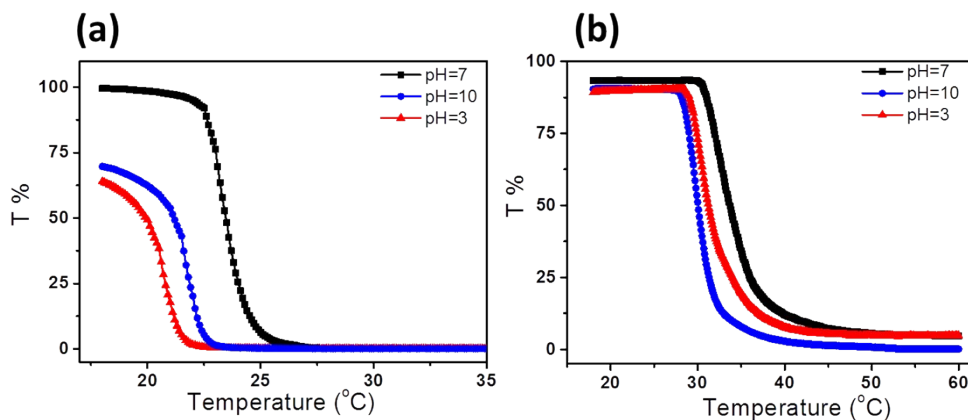


Figure S1. Cloud points determination from transmittance at 550 nm of (a), C12-PN-Azo 12K and (b), C12-PN-AzPyC₂H₅⁺ 12K (1.0 mg/mL) under different pH values.

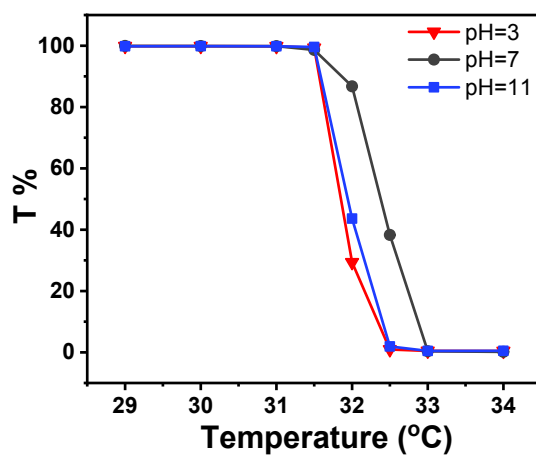


Figure S2. Plot of the % transmittance at 550 nm as a function of temperature for solutions of PNIPAM (1.0 mg/mL) of various pH.

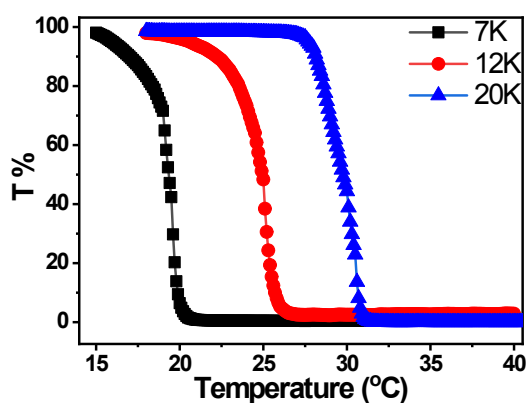


Figure S3. Plots of the % transmittance at 550 nm as a function of temperature for solutions of C12-PN-AzPy of various molar mass in water (pH 10).

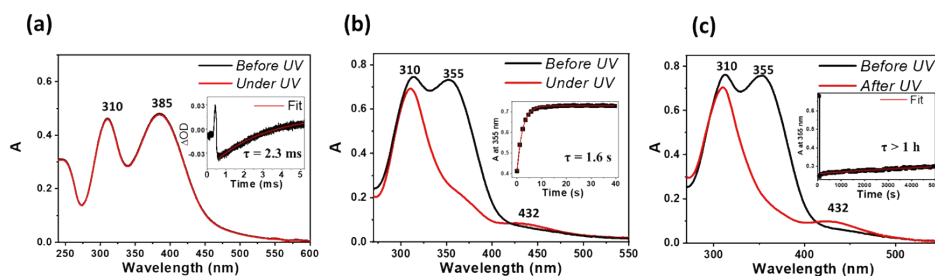


Figure S4. UV-Vis spectra of aqueous solutions of C12-PN-AzPy 7K (0.5 mg/mL) under (a) pH 3, (b) pH 7 and (c) pH 10 before (black line) and under constant irradiation (red line); inset: transient absorption monitored at 355 nm of the solution after a 10 s irradiation at 365 nm, 15 °C.

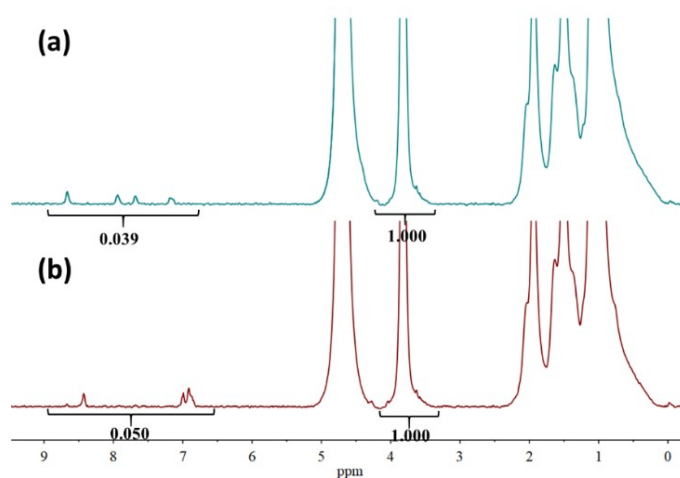


Figure S5. $^1\text{H-NMR}$ spectrum of C12-PN-AzPy 12K (a) before and (b) after UV irradiation under pH = 10. (1.0 mg/mL in D_2O , 18.5 °C);

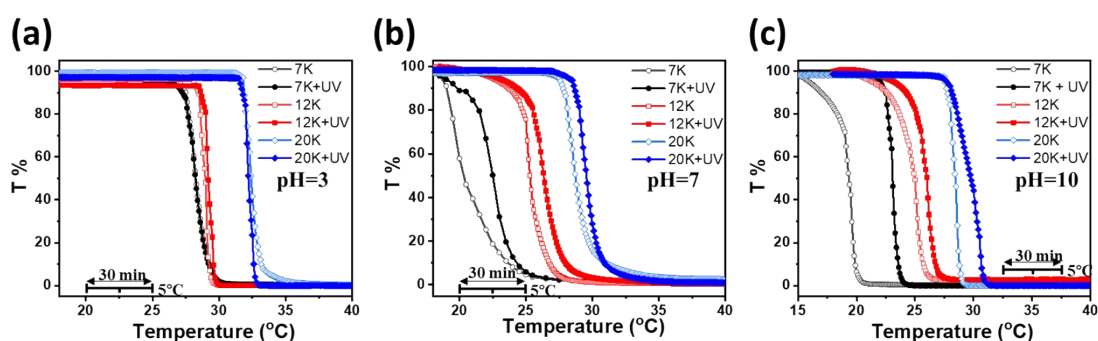


Figure S6. Changes of the transmittance at 550 nm as a function of temperature for aqueous solutions of C12-PN-AzPy (1.0 mg/mL) of (a) pH 3, (b) pH 7 and (c) pH 10 before irradiation (open symbols) and under continuous irradiation (full symbols) at 365 nm.

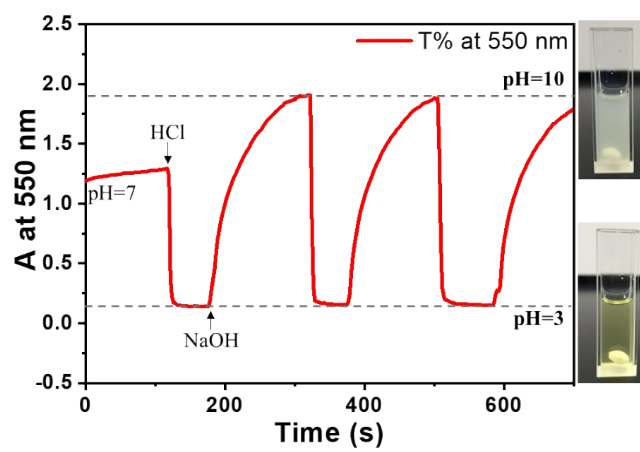


Figure S7. Plots of the absorbance at 550 nm as a function of pH for solutions of C12-PN-AzPy 7K at 20 °C (1.0 mg/mL)