

Supporting Information for

Cooperative self-assembly and crystallization into fractal patterns by PNIPAM-based nonlinear multihydrophilic block copolymers under alkaline conditions

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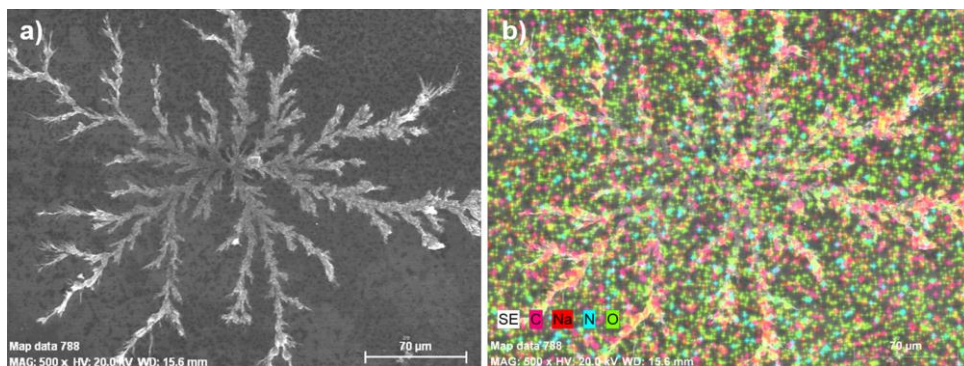


Fig. S1 FE-SEM image (a) and corresponding elemental mapping data (b) of the fractal pattern from the aqueous solution of (PNIPAM-*b*-PAA)₂-(PVP)₂ (2 mg/mL) in the presence of NaOH (10 mM) at 20 °C. Wherein, C and N come from polymer chains while Na from NaOH. According to EDX spectra, $n_N : n_{Na} = 3.7 : 1$.

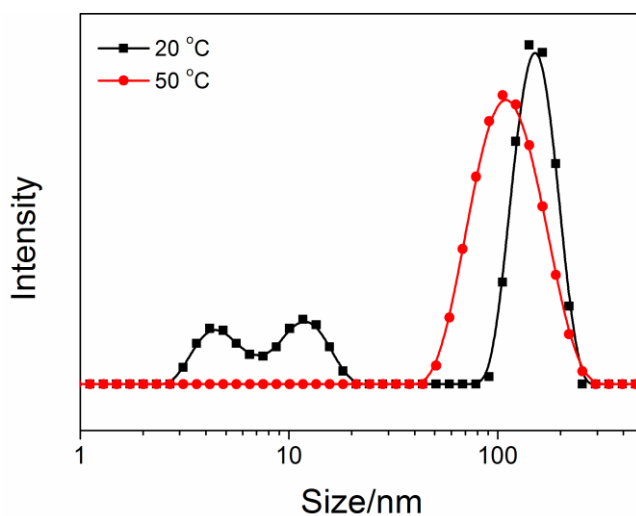


Fig. S2 Hydrodynamic radii (R_h) distributions of $(\text{PNIPAM-}b\text{-PAA})_2\text{-(PVP)}_2$ in H_2O (2.0 mg/mL, NaOH ~ 10 mM) at 20 °C and 50 °C respectively.

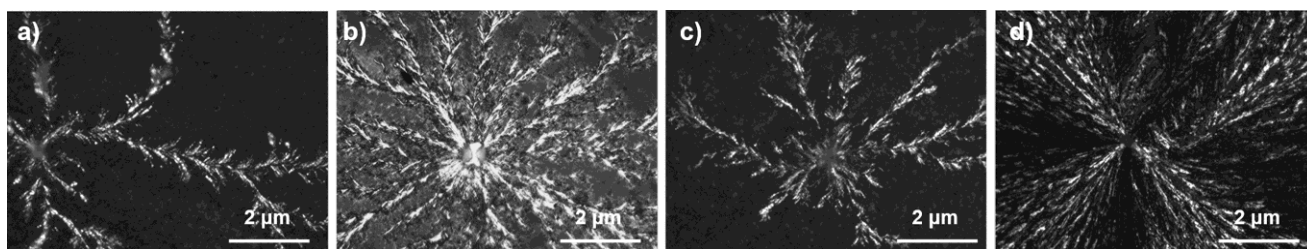


Fig. S3 POM images of the dried patterns on glass surface from the aqueous solutions of four DHBCs (2 mg/mL) in the presence of NaOH (14 mM). (a) $(\text{PNIPAM})_2\text{-(PAA)}_2$; (b) $(\text{PNIPAM})_3\text{-PAA}$; (c) PNIPAM-(PAA)_3 ; (d) $\text{PNIPAM-}b\text{-PAA}$.