

Supplementary Materials: Preparation of Uniform-Sized and Dual Stimuli-Responsive Microspheres of Poly(N-Isopropylacrylamide)/Poly(Acrylic Acid) with SemiIPN Structure by One-Step Method

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Table S1. Transmittance value of PNIPAM and semi-IPN microspheres at different pH values.

pH value	PNIPAM	Semi-IPN1	Semi-IPN2	Semi-IPN3
3.5	75	65	63	62
4.5	75.3	67	65.1	64.3
5.5	75.5	68.5	66.5	65.9
6.5	75.5	69	66.7	66.1
7.5	75.6	69	66.6	66.2
8.5	75.5	68.8	66.5	66.2
9.5	75.4	68.9	66.7	66.3

Table S2. Particle size of Semi-IPN microspheres at various pH values.

Samples	Particle size (μm)					
	pH 3.5	pH 4.5	pH 5.5	pH 6.5	pH 7.5	pH 8.5
Semi-IPN1	4.59 ± 1.02	5.73 ± 0.86	6.58 ± 0.98	6.62 ± 0.52	6.76 ± 1.53	6.81 ± 1.34
Semi-IPN2	3.13 ± 1.24	5.22 ± 0.91	5.93 ± 0.74	6.09 ± 1.77	6.3 ± 1.19	6.45 ± 1.65
Semi-IPN3	2.76 ± 0.33	4.52 ± 1.42	5.97 ± 0.48	6.12 ± 0.81	6.2 ± 0.73	6.17 ± 1.90

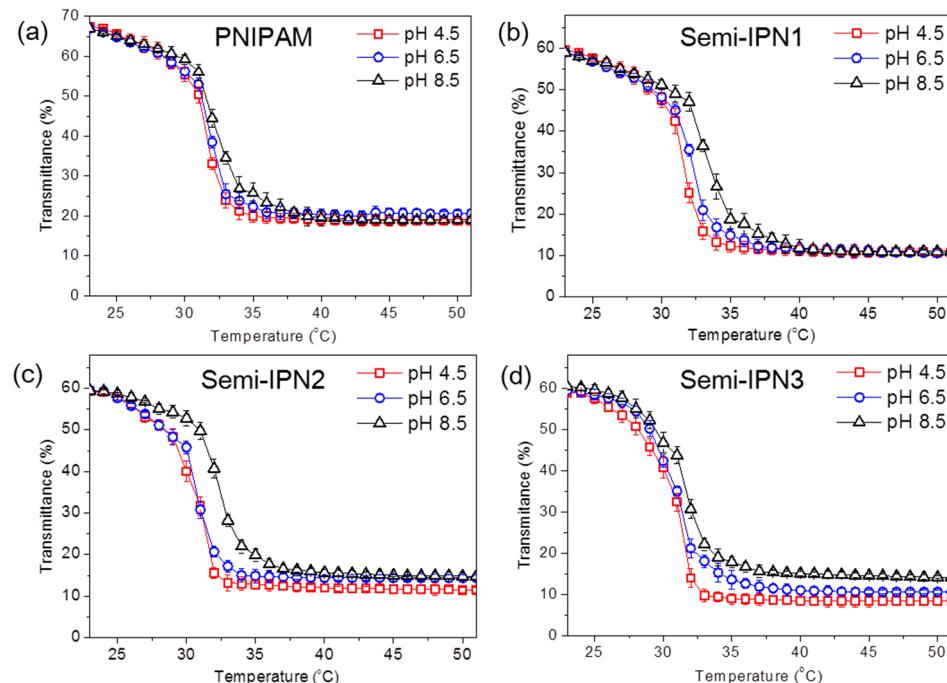


Figure S1. Transmittances of (a) PNIPAM, (b) semi-IPN1, (c) semi-IPN2 and (d) semi-IPN3 microsphere suspensions as a function of temperature at different pH values.

Table S3. LCST values of resultant microspheres at different pH values.

Samples	LCST		
	pH 4.5	pH 6.5	pH 8.5
PNIPAM	31.5	31.5	31.6
Semi-IPN1	31.7	31.9	32.3
Semi-IPN2	31.7	32.0	32.1
Semi-IPN3	31.8	32.2	32.5



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