Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting Information

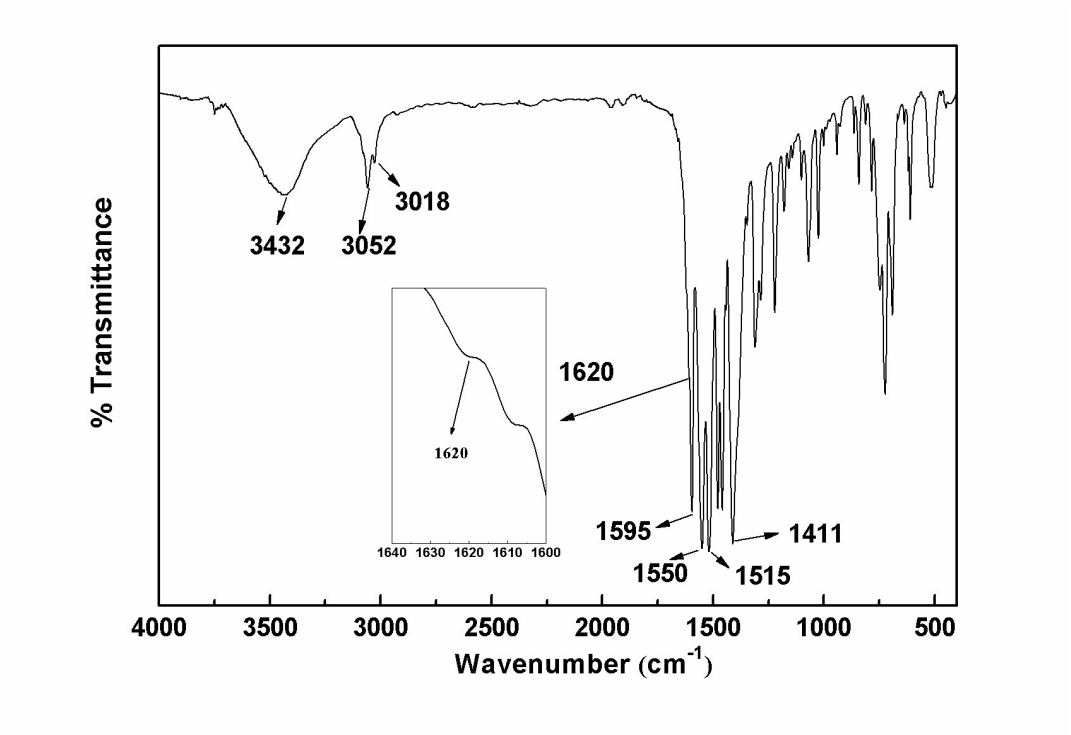
Table s1.

HXMY	Weight of hydrogel (g)	Weight of drying hydrogel (g)	Water content (%)	Average (%)
	1.323	1.034	21.84	
H4M2	1.125	0.841	25.24	25.09±3.18
	0.376	0.270	28.19	
	0.841	0.576	31.51	
H5M2	1.678	1.107	34.03	33.58±1.88
	0.483	0.313	35.20	
	1.567	0.945	39.69	
H6M2	1.294	0.855	33.93	37.43±3.08
	0.538	0.330	38.66	
	1.577	0.868	44.96	
H7M2	1.997	1.144	42.71	41.63±3.99
	0.610	0.383	37.21	
	1.132	0.742	34.45	
H8M2	1.294	0.851	34.23	35.10±1.31
	0.459	0.291	36.60	
	1.795	1.373	23.51	
H20M2	1.031	0.775	24.83	24.36±0.74
	0.663	0.499	24.74	

Table s2.

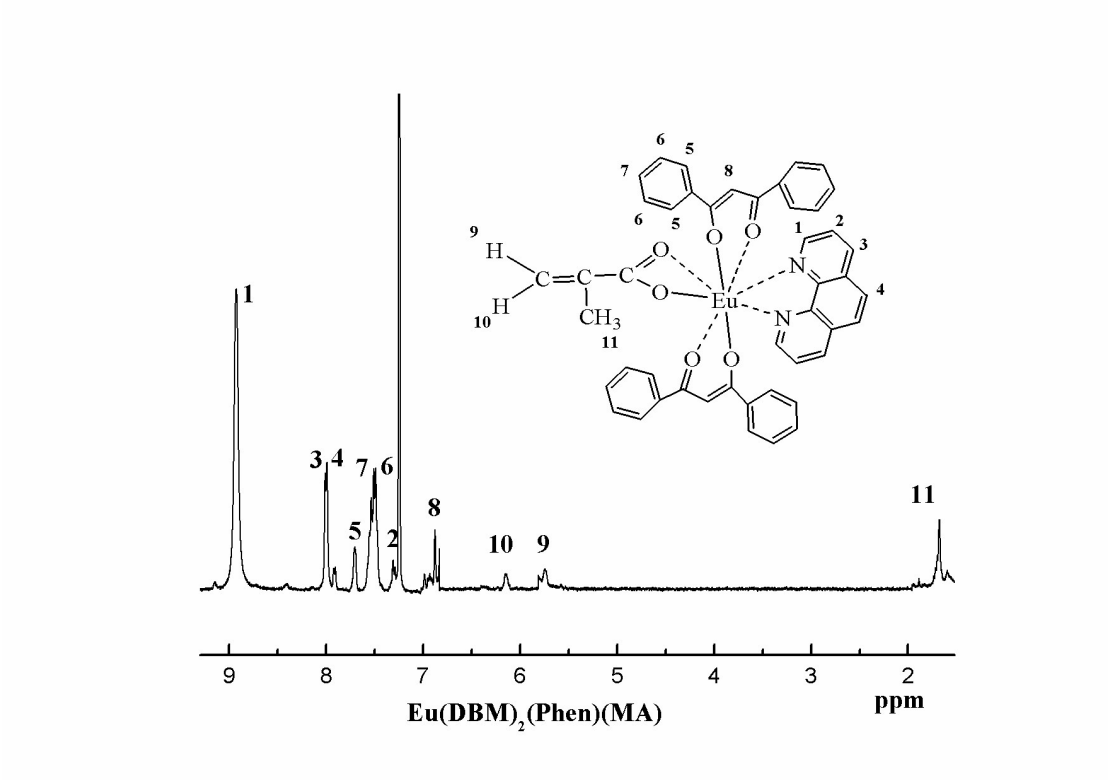
HXMY	Weight of drying hydrogel (g)	Weight of swelling hydrogel (g)				Swelling ratio (%)	Average （%）
		1d	3d	5d	7d		
	0.270	0.394	0.406	0.406	0.393	50.37	
H4M2	0.401	0.569	0.601	0.601	0.589	49.88	47.67±4.26
	0.276	0.346	0.394	0.394	0.389	42.75	
	0.303	0.460	0.471	0.471	0.462	55.45	
H5M2	0.477	0.739	0.768	0.768	0.755	61.01	53.59±8.51
	0.316	0.425	0.456	0.456	0.447	44.30	
	0.383	0.598	0.608	0.608	0.594	58.75	
H6M2	0.267	0.415	0.431	0.431	0.417	61.42	57.23±5.13
	0.396	0.408	0.600	0.600	0.588	51.52	
	0.330	0.519	0.519	0.519	0.499	57.27	
H7M2	0.272	0.440	0.448	0.448	0.410	64.71	58.91±5.17
	0.336	0.421	0.520	0.520	0.493	54.76	
	0.291	0.443	0.456	0.456	0.445	56.70	
H8M2	0.244	0.380	0.394	0.394	0.371	61.48	54.96±7.55
	0.302	0.431	0.443	0.443	0.428	46.69	
	0.499	0.705	0.752	0.752	0.731	50.70	
H20M2	0.169	0.261	0.266	0.266	0.255	57.40	49.52±8.53
	0.514	0.702	0.722	0.722	0.701	40.47	

Figure s1



EDPM. IR (KBr, cm^{-1}): 1620 (w, C=C), 1595 (vs, C=O).

Figure s2



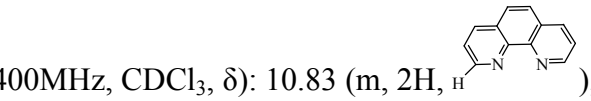
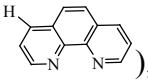
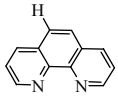
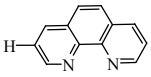
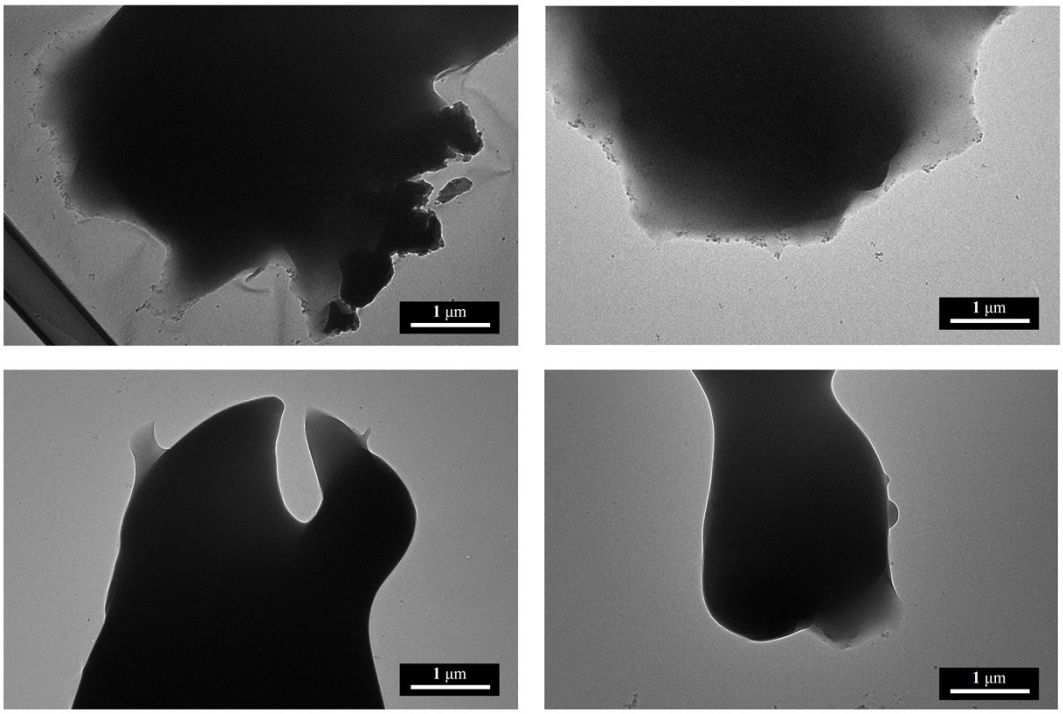
^{1}H NMR (400MHz, $CDCl_3$, δ): 10.83 (m, 2H, ), 10.43 (m, 2H, ), 9.97 (m, 2H, ), 8.86 (m, 2H, ), 7.99 (m, 1H, $=CH_a(H_b)$), 7.51 (m, 1H, $=CH_b(H_a)$), 6.90 (s, 2H, =CH–), 6.79 (m, 12H, –Ph), 6.01 (m, 8H, –Ph), 3.05 (s, 3H, CH_3).

Figure s3

(a)



(b)

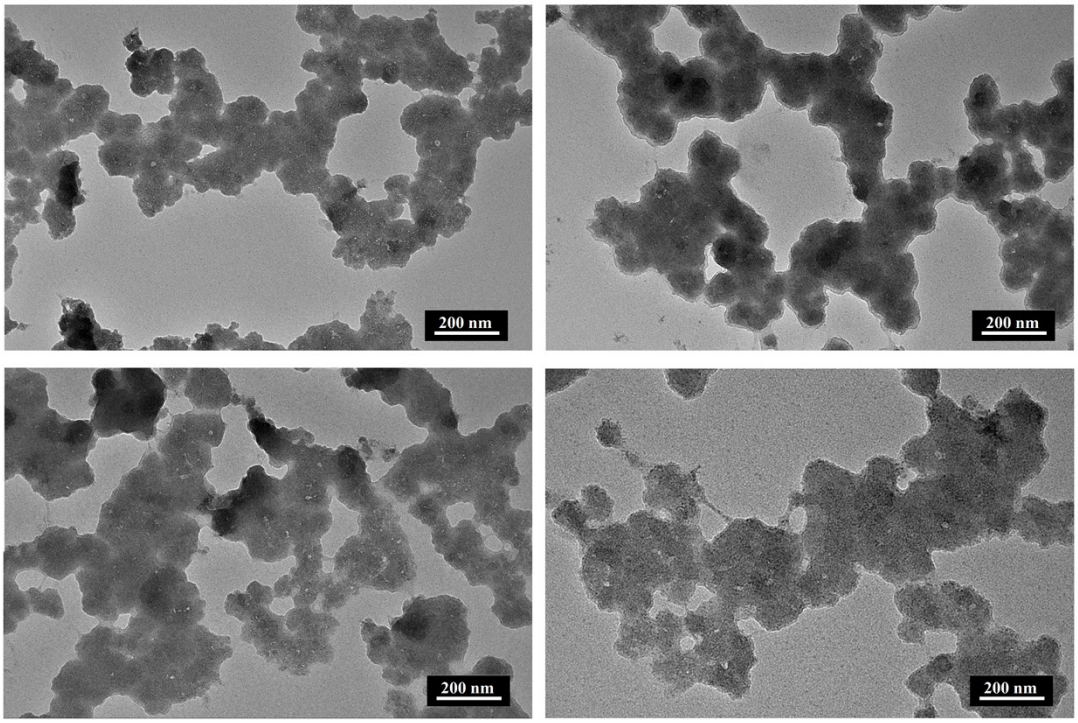


Figure s4