

## Supporting Information

# Reinforcement of nanostructured organogels by hydrogen bonds

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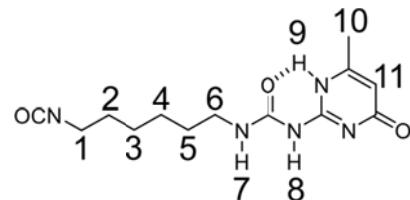
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Germany

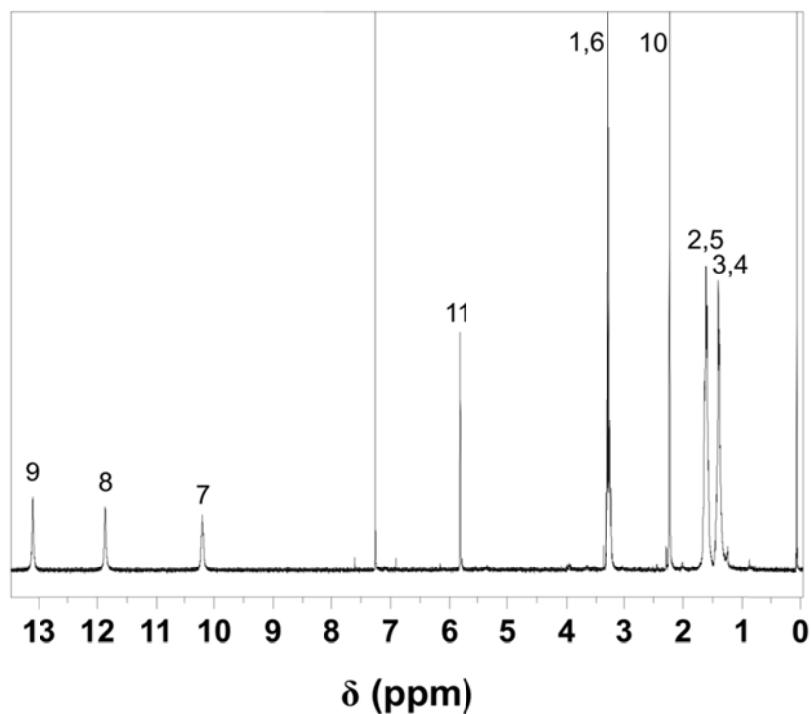
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### Polymer and Precursor Characterisation

#### <sup>1</sup>H-NMR:

*2(6-Isocyanatohexylaminocarbonylamino)-6-methyl-4[1H]pyrimidinone*

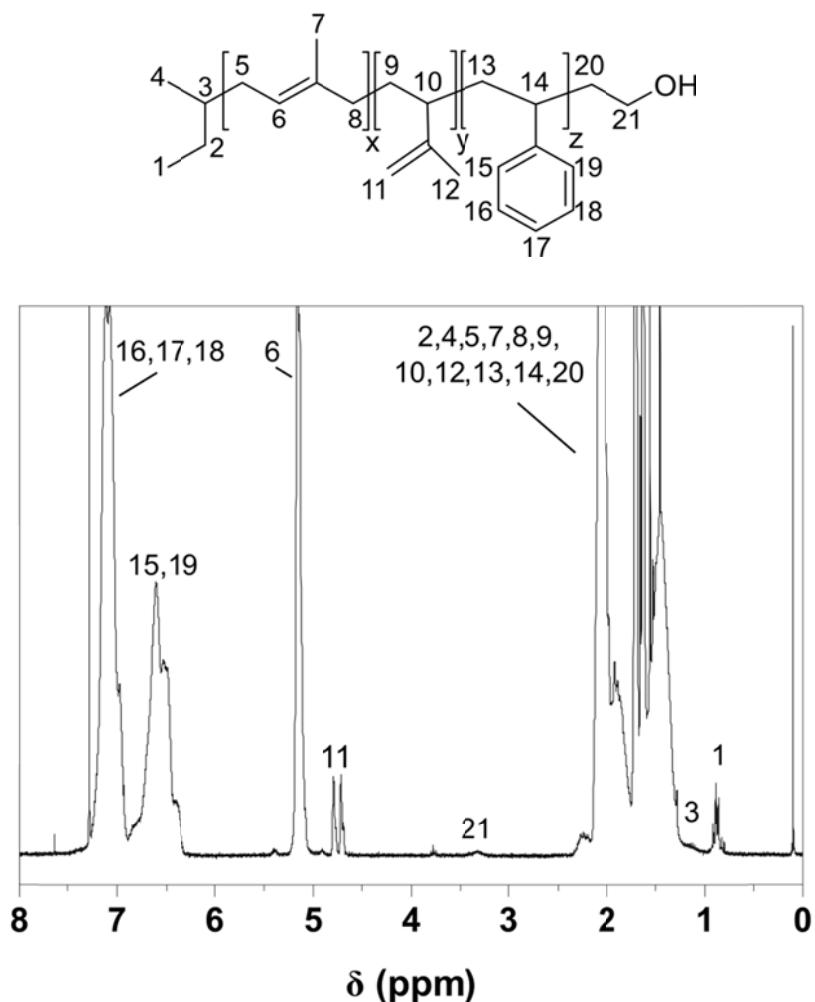




**Figure S1** <sup>1</sup>H-NMR of 2(6-isocyanatohexylaminocarbonylamino)-6-methyl-4[1H]pyrimidinone in CDCl<sub>3</sub> (300 MHz).

<sup>1</sup>H-NMR (300 MHz, CDCl<sub>3</sub>):δ (ppm) = 1.23-1.49 (m, 4H, H<sub>3,4</sub>), 1.50-1.70 (m, 4H, H<sub>2,5</sub>), 2.23 (s, 3H, H<sub>10</sub>), 3.20-3.34 (m, 4H, H<sub>1,6</sub>), 5.82 (s, 1H, H<sub>11</sub>), 10.20 (s, 1H, H<sub>7</sub>), 11.87 (s, 1H, H<sub>8</sub>), 13.11 (s, 1H, H<sub>9</sub>).

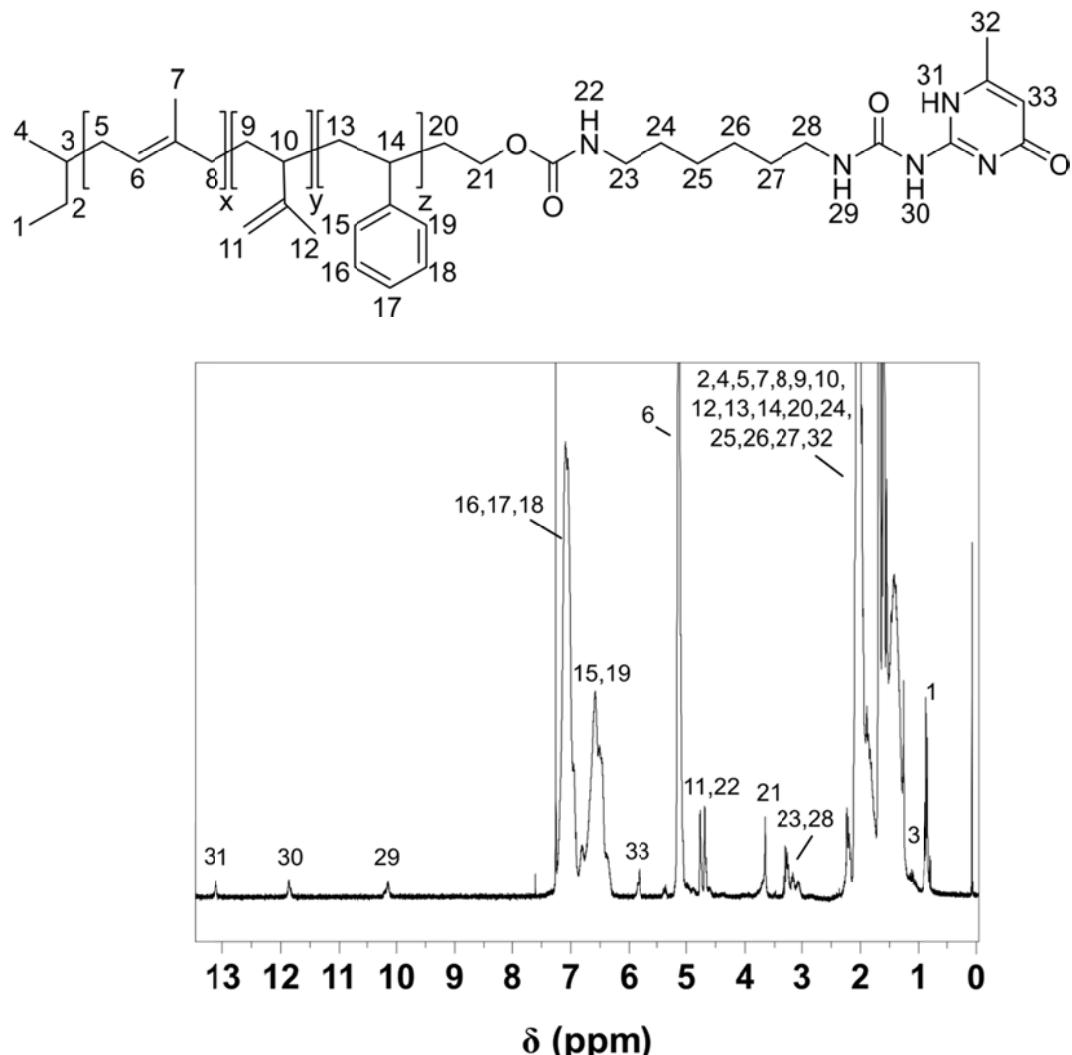
*PI-PS-OH*



**Figure S2:**  $^1\text{H}$ -NMR of poly(isoprene-*block*-styrene) in  $\text{CDCl}_3$ .

$^1\text{H}$ -NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  (ppm) = 0.76-0.90 (m, 3H,  $\text{H}_1$ ), 1.00-1.19 (m, 1H,  $\text{H}_3$ ), 1.20-2.35 (m, 23H,  $\text{H}_{2,4,5,7,8,9,10,12,13,14,20}$ ), 3.60 (m, 2H,  $\text{H}_{21}$ ), 4.62-4.81 (m, 2H per unit 3,4-PI,  $\text{H}_{11}$ ), 5.00-5.21 (m, 1H per unit 1,4-PI,  $\text{H}_6$ ), 6.29-7.24 (m, 5H per unit PS,  $\text{H}_{15,16,17,18,19}$ ).

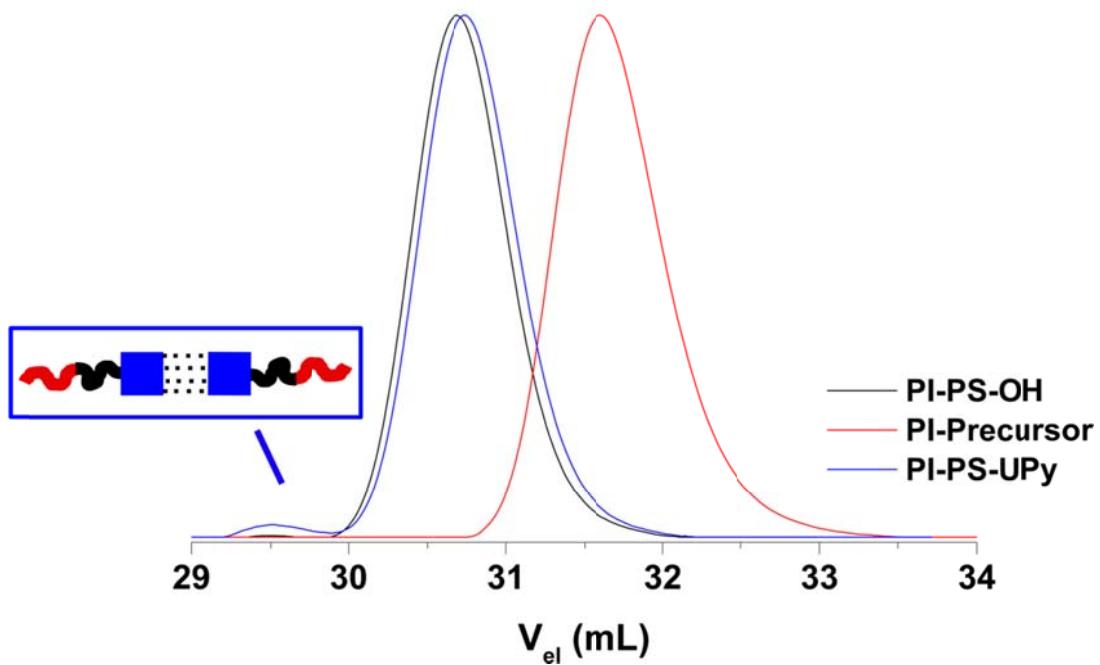
*PI-PS-UPy*



**Figure S3:**  $^1\text{H}$ -NMR of poly(isoprene-*block*-styrene)-UPy in  $\text{CDCl}_3$ .

$^1\text{H}$ -NMR (300 MHz,  $\text{CDCl}_3$ ):  $\delta$  (ppm) = 0.76-0.90 (m, 3H,  $\text{H}_1$ ), 1.00-1.19 (m, 1H,  $\text{H}_3$ ), 1.20-2.35 (m, 34H,  $\text{H}_{2,4,5,7,8,9,10,12,13,14,20,24,25,26,27,32}$ ), 2.97-3.31 (m, 4H,  $\text{H}_{23,28}$ ), 3.63-3.73 (m, 2H,  $\text{H}_{21}$ ), 4.62-4.81 (m, 2H per unit 3,4-PI,  $\text{H}_{11}$  + s, 1H,  $\text{H}_{22}$ ), 5.00-5.21 (m, 1H per unit 1,4-PI,  $\text{H}_6$ ), 5.28 (s, 1H,  $\text{H}_{33}$ ), 6.29-7.24 (m, 5H per unit PS,  $\text{H}_{15,16,17,18,19}$ ), 10.20 (s, 1H,  $\text{H}_{29}$ ), 11.87 (s, 1H,  $\text{H}_{30}$ ), 13.11 (s, 1H,  $\text{H}_{31}$ ).

**GPC:**



**Figure S4:** GPC measurements of poly(isoprene-*block*-styrene) (PI-PS), PI precursor, and PI-PS-UPy in THF at room temperature with a flow rate of 1 mL/min ( $c \approx 1$  mg/mL).