

Chitosan Nanogels by Template Chemical Cross-Linking in Polyion Complex**Micelle Nanoreactors**

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Table S1. D_h of PIC micelles prepared in 0.1 M acetate buffer pH 4.3. $C_{PIC} = 1$ mg/mL, $f_+ = 0.5$.

D_h (nm) ^a			
Samples	C ₂₆	C ₄₄	C ₁₃₀
A ₂₀	69±4	62±4	86±7
A ₄₀	56±5	47±3	91±6

^a The error was calculated as standard deviation (SD) ($n = 3$).

Table S2. D_h of PIC micelles prepared in acetate buffer pH 4.3 at different buffer concentration (C_B). $C_{PIC} = 1$ mg/mL, $f_+ = 0.5$.

D_h (nm) ^a				
Sample	$C_B = 0.01M$	$C_B = 0.05M$	$C_B = 0.1M$	$C_B = 0.2M$
A ₂₀ C ₂₆	57±4	65±3	69±4	72±5
A ₄₀ C ₂₆	48±4	52±5	56±5	59±4
A ₂₀ C ₄₄	52±3	57±4	62±4	67±4
A ₄₀ C ₄₄	44±3	45±4	47±3	50±4

^a The error was calculated as standard deviation (SD) ($n = 3$).

Table S3. D_h of PIC micelles prepared in 0.1 M acetate buffer pH 4.3 at different mixing ratio.
 $C_{PIC} = 1 \text{ mg/mL}$.

Sample	$D_h \text{ (nm)}^a$		
	$f_+ = 0.37$	$f_+ = 0.45$	$f_+ = 0.50$
$A_{20}C_{26}$	75 ± 3	71 ± 4	69 ± 4
$A_{40}C_{26}$	68 ± 4	59 ± 4	56 ± 5
$A_{20}C_{44}$	72 ± 5	66 ± 3	62 ± 4
$A_{40}C_{44}$	60 ± 4	57 ± 4	47 ± 3

^a The error was calculated as standard deviation (SD) ($n = 3$).

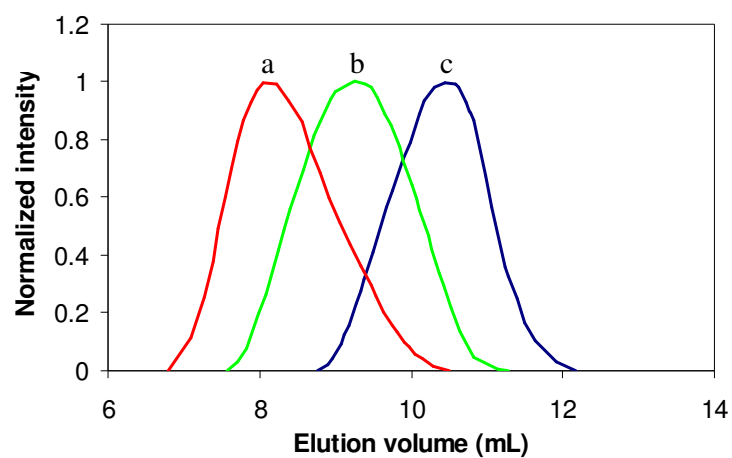


Figure S1. GPC chromatograms of C_{130} (a), C_{44} (b) and C_{26} (c).

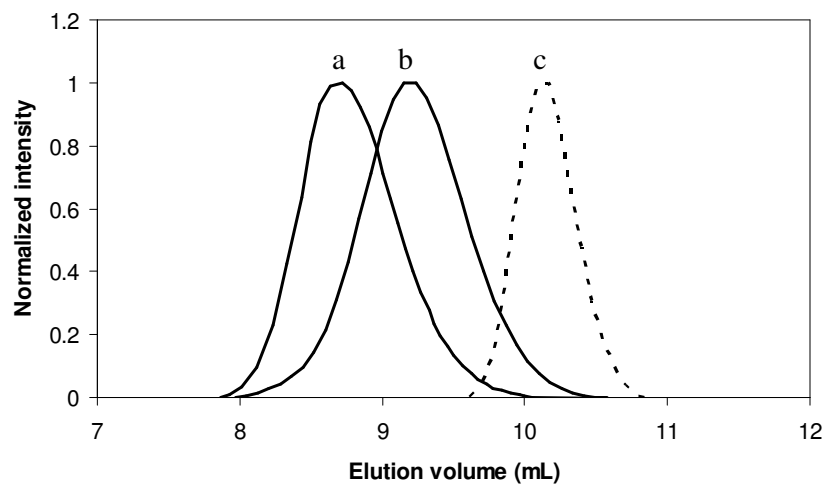


Figure S2. GPC chromatograms of PEO₁₁₄-b-PAMPS₄₀ (a), PEO₁₁₄-b-PAMPS₂₀ (b) and PEO₁₁₄-Br (c).

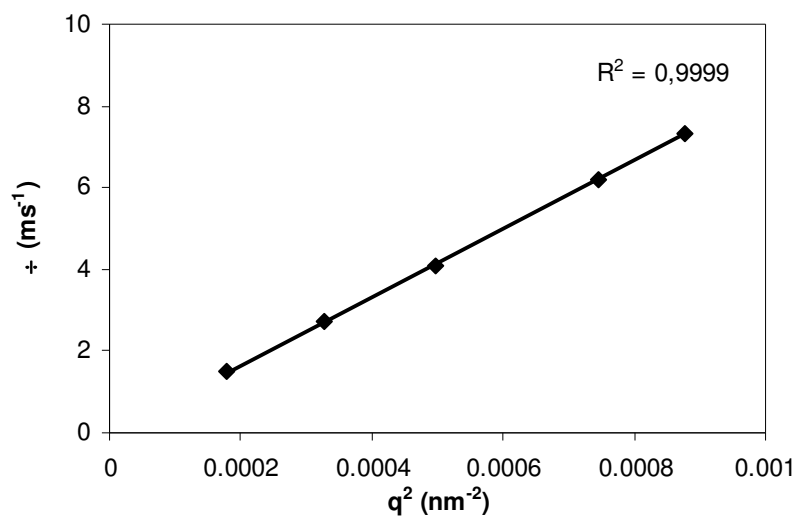


Figure S3. Relationship between the relaxation rate (Γ) and the square of the scattering vector (q^2) for PIC micelles A₂₀C₄₄ at T = 25°C in 0.1 M acetate buffer pH = 4.3. PIC concentration 1 mg/mL.

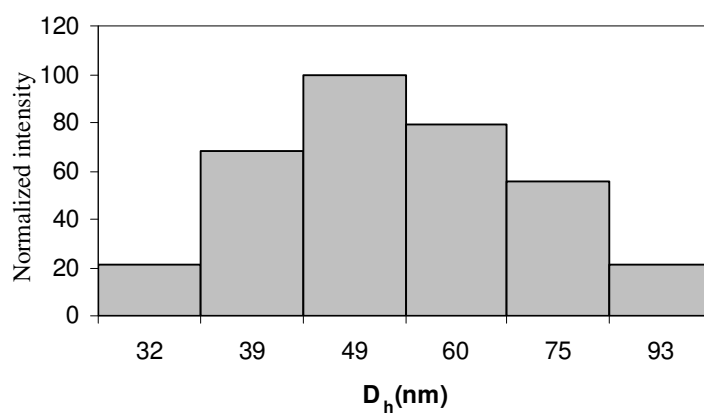


Figure S4. Distribution of D_h obtained by CONTIN analysis of PIC $A_{20}C_{44}$ at $T = 25^\circ\text{C}$ in 0.1 M acetate buffer $\text{pH} = 4.3$. PIC concentration 5 mg/mL.