

Rheology and thermal stability of pH-dependent hydrogels of *N*-acyl-L-carnosine amphiphiles: effect of alkoxy tail length[†]

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Supporting Information

Table S1. MGC (mg/mL) values of the gelators in aqueous buffers (20 mM) of different pH at 298 K.

Gelator	Molar Mass (g/mole)	MGC (mg/mL)						
		pH = 1	pH = 2	pH = 7	pH = 8	pH = 9	pH = 10	pH = 11
C₆OBC *	430	-	9.82	8.74	9.94	14.20	15.60	-
C₈OBC	458	-	8.00	5.20	5.50	5.80	6.20	-
C₁₀OBC	474	-	7.30	5.0	5.25	5.40	6.15	-
C₁₂OBC	486	-	7.00	4.80	5.10	5.50	5.98	6.90
C₁₄OBC	514	6.52	5.53	3.38	4.80	5.47	6.06	6.80
C₁₆OBC	570	6.16	4.98	2.97	3.02	3.31	3.40	5.94

* data represent MGC values at 288 K.

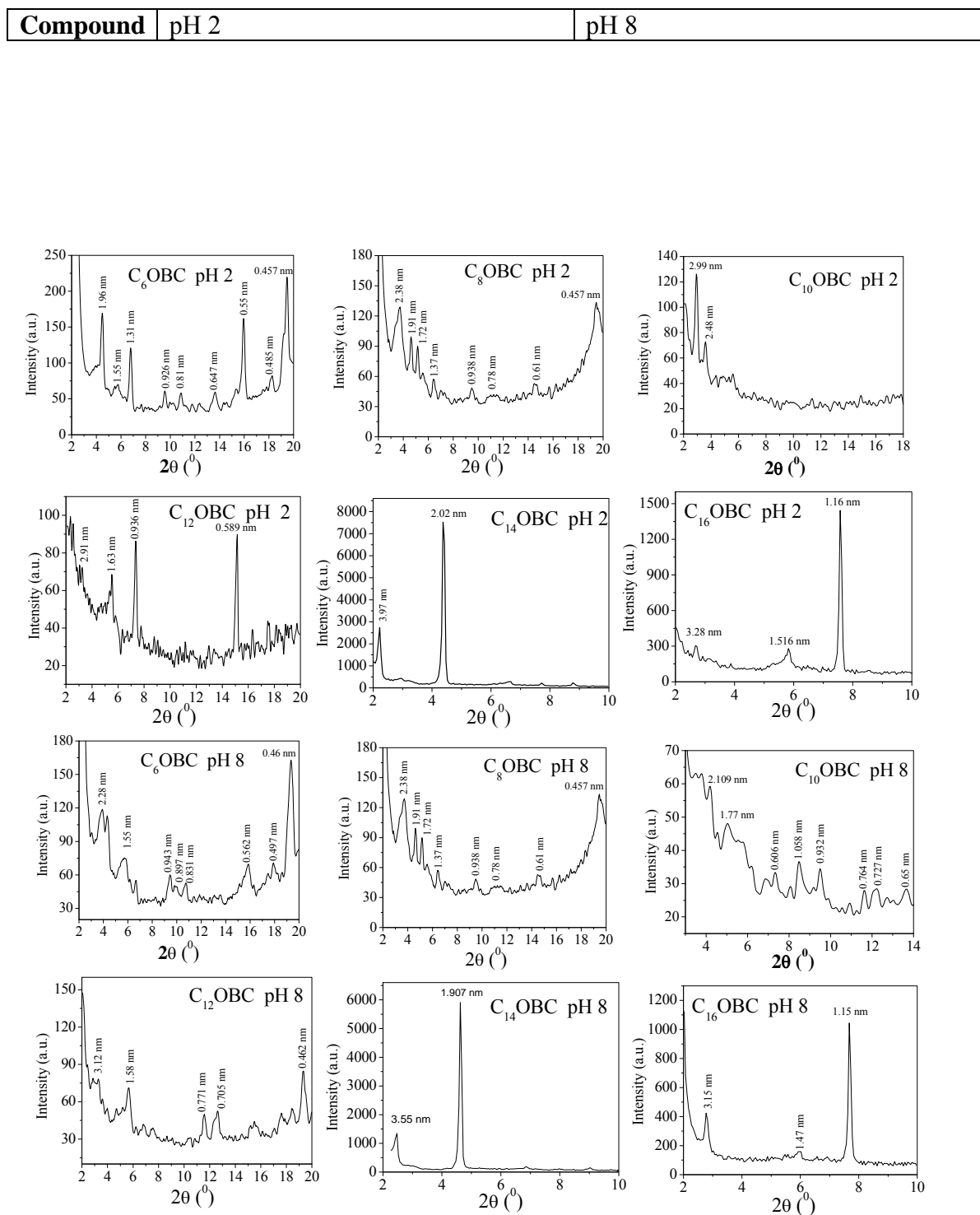


Figure S1. XRD of the air dried C_n OBC gels in 20 mM phosphate buffer of pH 2 and pH 8.

	2 θ	hkl	d (2l)/nm	2 θ	hkl	d /nm
C ₆ OBC	4.50	001	1.96 (3.04)	3.9	001	2.28
	9.54	002	0.93	9.91	002	0.90
	13.66	003	0.65	10.69	003	0.83
C ₈ OBC	3.73	001	2.38 (3.54)	4.05	001	2.19
	6.48	002	1.37	9.67	002	0.91
	11.29	003	0.78	14.51	003	0.61
C ₁₀ OBC	2.97		2.99 (4.10)	4.21	001	2.11
	3.58		2.48	8.4	002	1.06
				12.23	003	0.73
C ₁₂ OBC	3.05	001	2.91 (4.54)	2.85	001	3.12
	5.45	002	1.64	5.60	002	1.59
	9.49	003	0.94			
C ₁₄ OBC	2.22	001	3.97 (5.04)	2.48	001	3.55
	4.37	002	2.02	4.63	002	1.91
	6.64	003	1.33	6.87	003	1.28
C ₁₆ OBC	2.69	001	3.28 (5.56)	2.80	001	3.15
	5.82	002	1.52	6.00	002	1.47
	7.57	003	1.16	7.67	003	1.15

Table S2. 2 θ values and the corresponding interlayer distance of the hydrogels of C_nOBC gelators in 20 mM phosphate buffer of pH 2 and 8.

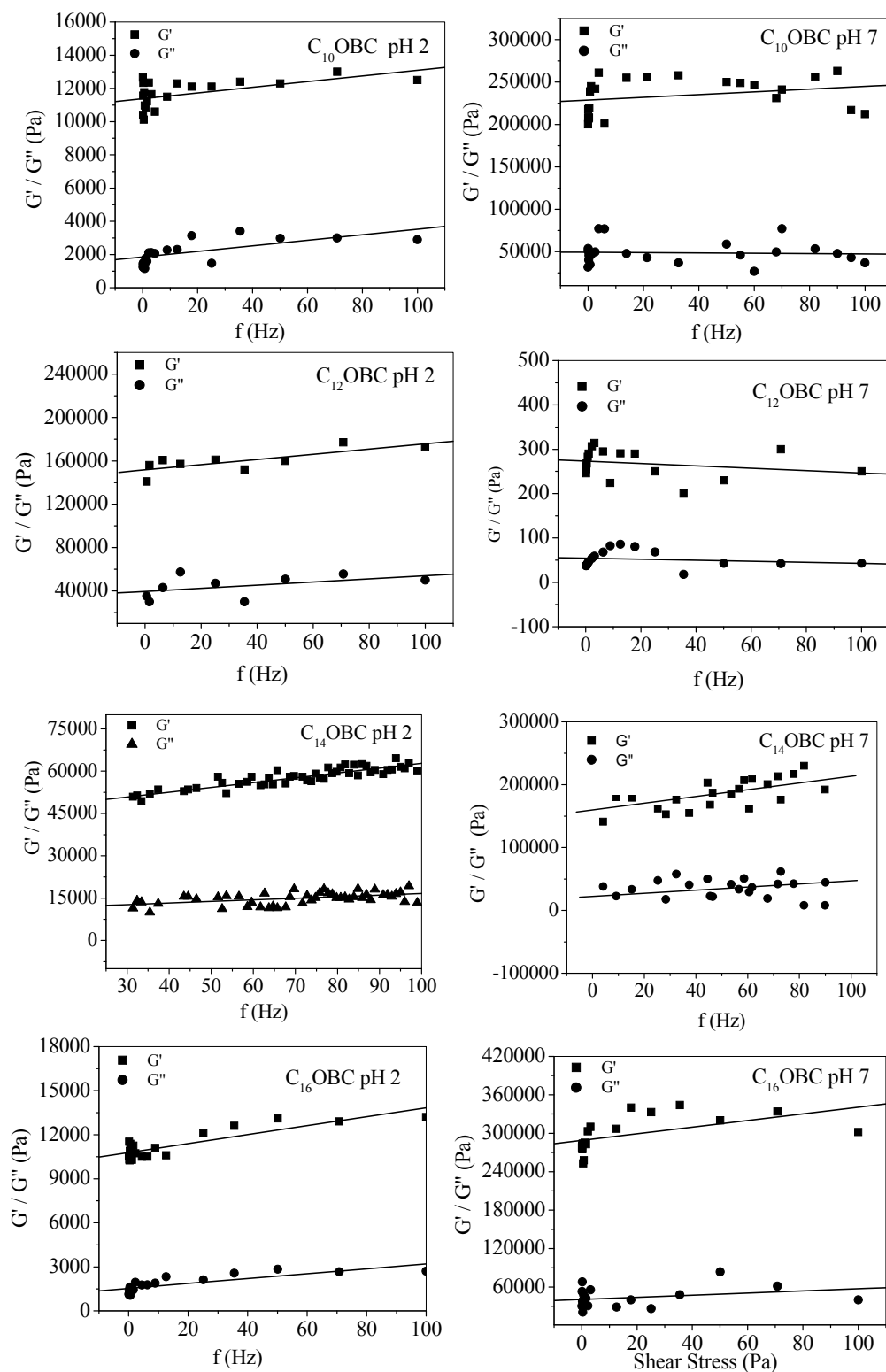


Figure S2. Plot of G' / G'' Vs frequency of C_n OBC gels in 20 mM phosphate buffer of pH 2 and pH 7

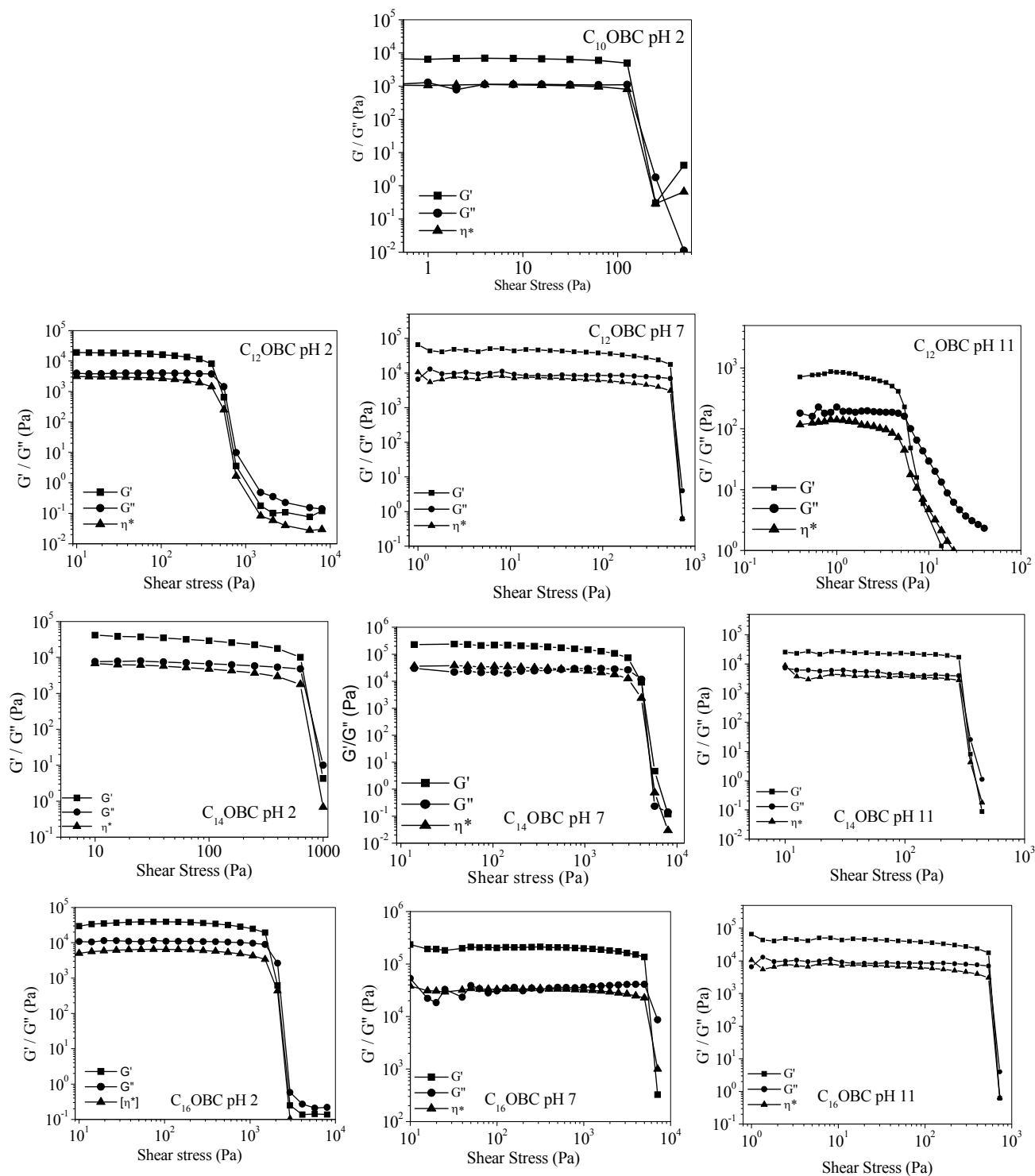


Figure S3. Plot of G' / G'' Vs amplitude of C_n OBC gels in 20 mM phosphate buffer of pH 2, pH 7 and pH 11.