

(*Electronic Supplementary Information*)

Structural studies of organocatalytic gels derived of L-Pro. Relationship between aggregation and supramolecular catalytic properties.

*Francisco Rodriguez-Llansola, Beatriu Escuder, Juan Felipe Miravet, Ian
W. Hamley and Wayne Hayes.*

Table S1 Minimum gel concentration (mM) for compounds **1a-c** and **2**

Entry	Compound	Toluene	CH ₃ CN	CH ₃ NO ₂	EtNO ₂	AcOEt	THF	H ₂ O	DME
1	1a	G (50)	G (34)	G (7)	G (29)	G (6)	G (30)	---	24
2	1b	G (7)	G (16)	G (4)	G (20)	G (7)	S	---	S
3	1c	G (11)	G (14)	G (3)	G (18)	G (9)	S	---	S
4	2	---	---	---	---	---	---	G (2)	---

G = Gel state; S = Soluble.

Table S2 FTIR values for xerogels of compounds **1a-c** and **2**

Entry	Compound	Solvent	Amide A (cm ⁻¹)	Amide I (cm ⁻¹)	Amide II (cm ⁻¹)
1	1a	CH ₃ CN	3287	1636	1548
2	1b	CH ₃ CN	3280	1641	1566-1540
3	1c	CH ₃ CN	3281	1636	1559-1539
4	1a	CH ₃ NO ₂	3281	1637	1550
5	1b	CH ₃ NO ₂	3277	1638	1564-1540
6	1c	CH ₃ NO ₂	3292	1636	1552-1541
7	2	CH ₃ NO ₂	3288	1636	1559-1539
8	1a	Toluene	3280	1636	1546
9	1b	Toluene	3281	1641	1540-1564
10	1c	Toluene	3288	1637	1539-1559
11	2	Water	3283	1638	1550

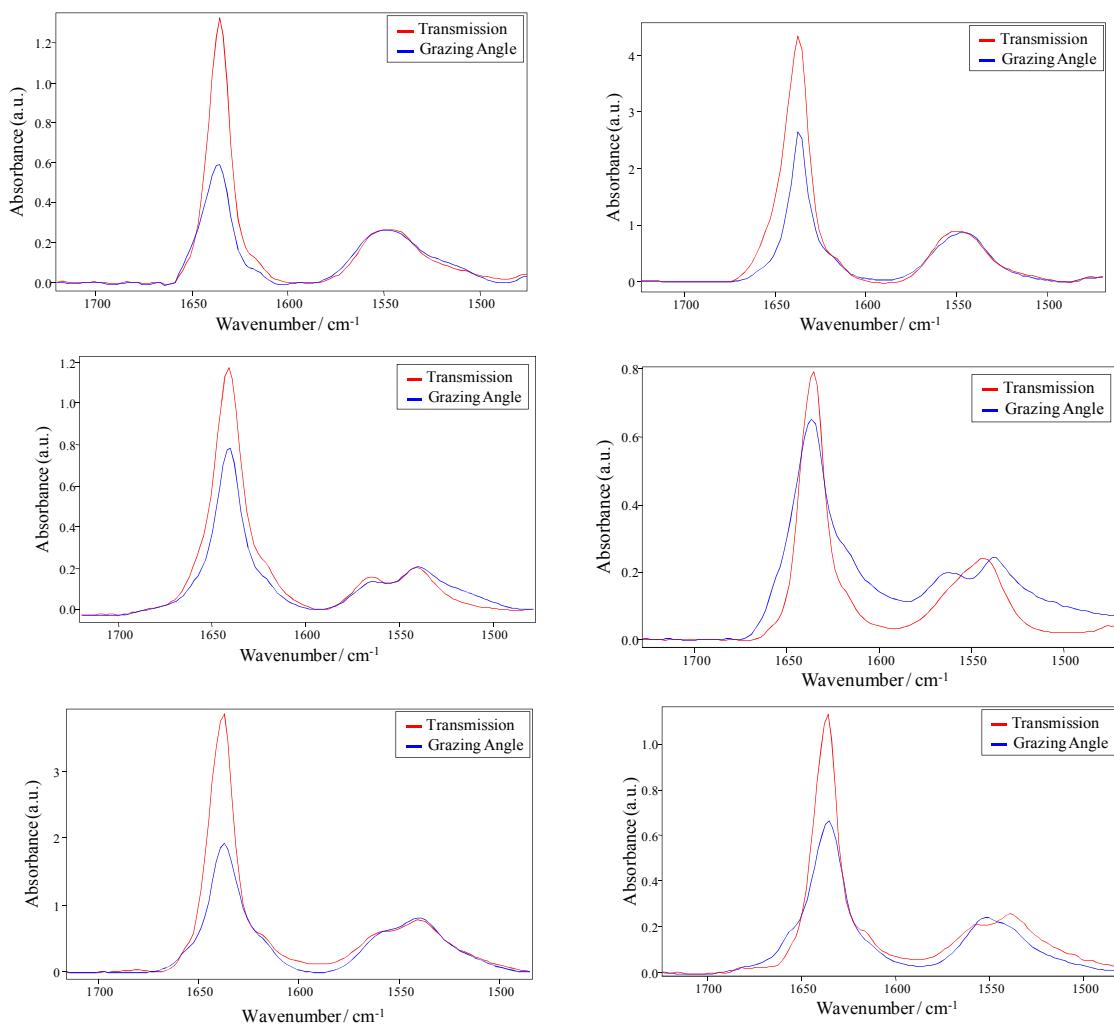


Fig. S1 Transmission vs. grazing angle ATR FT-IR spectra for xerogels of compound **1a-c** in acetonitrile (left) and in nitromethane (right). Top: compound **1a**; Center: compound **1b**; Bottom: compound **1c**.

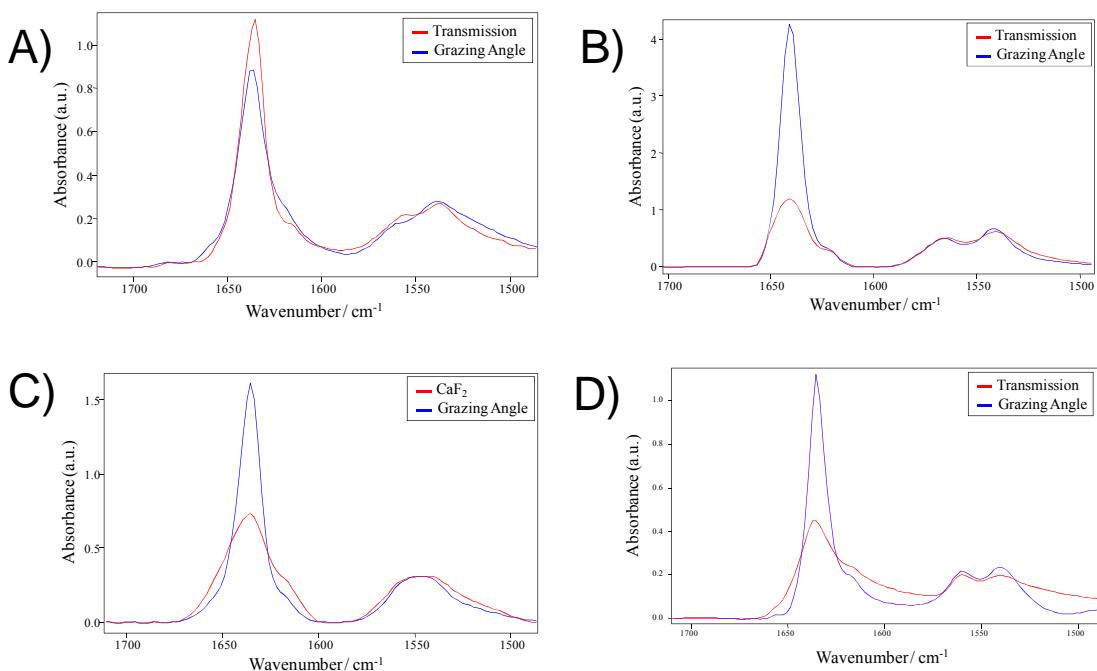


Fig. S2 Transmission vs. grazing angle ATR FT-IR spectra for xerogels of compound **1a-c** in toluene (A-C) and for compound **2** in water (D).

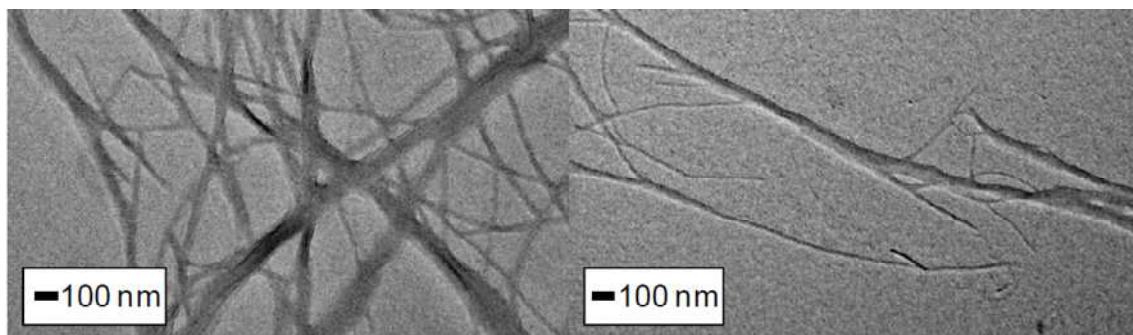


Fig. S3 TEM photographs of a xerogel of compound **2**.

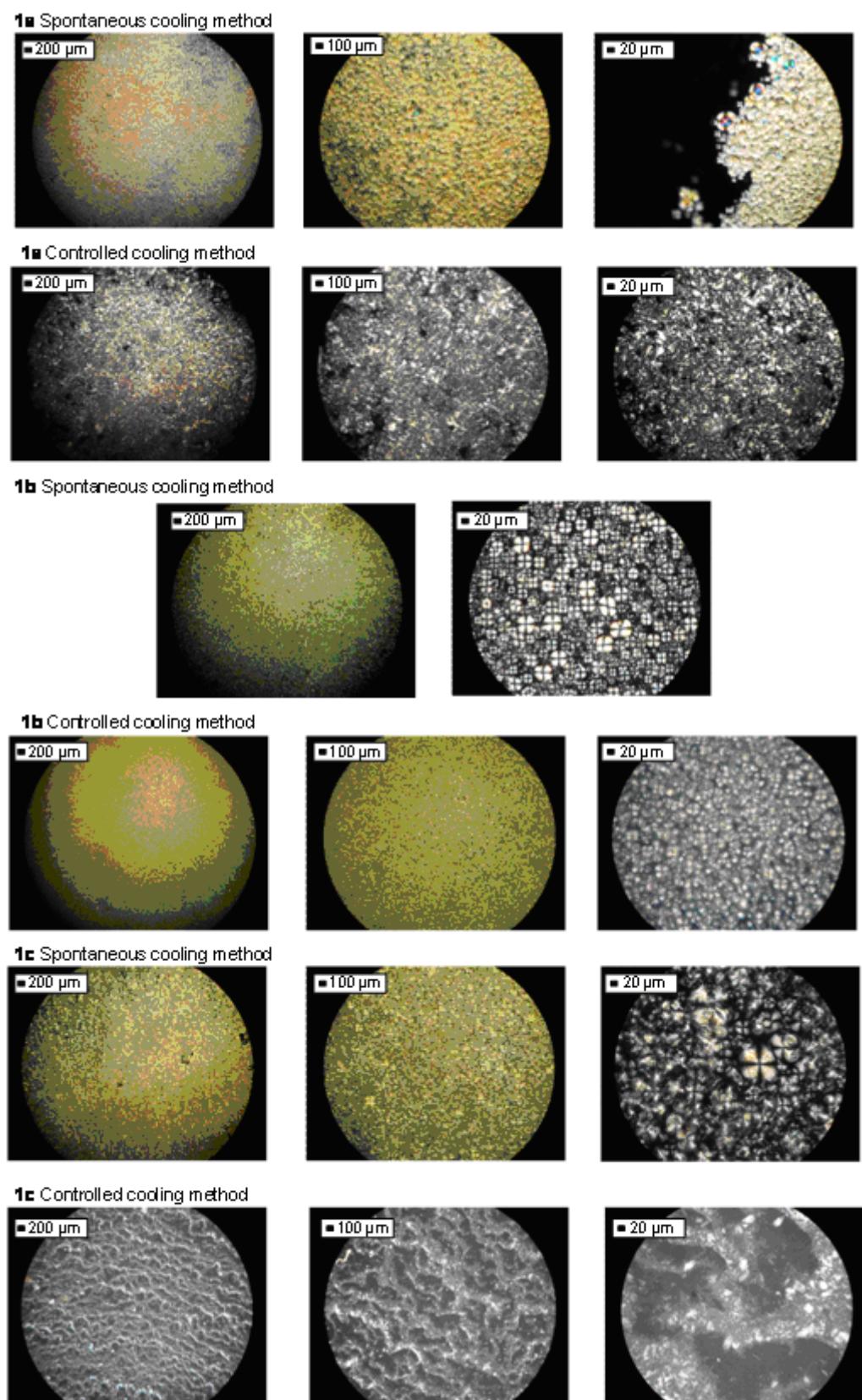


Fig. S4 POM images of gels of **1a-c** in acetonitrile obtained by different gelation methods.

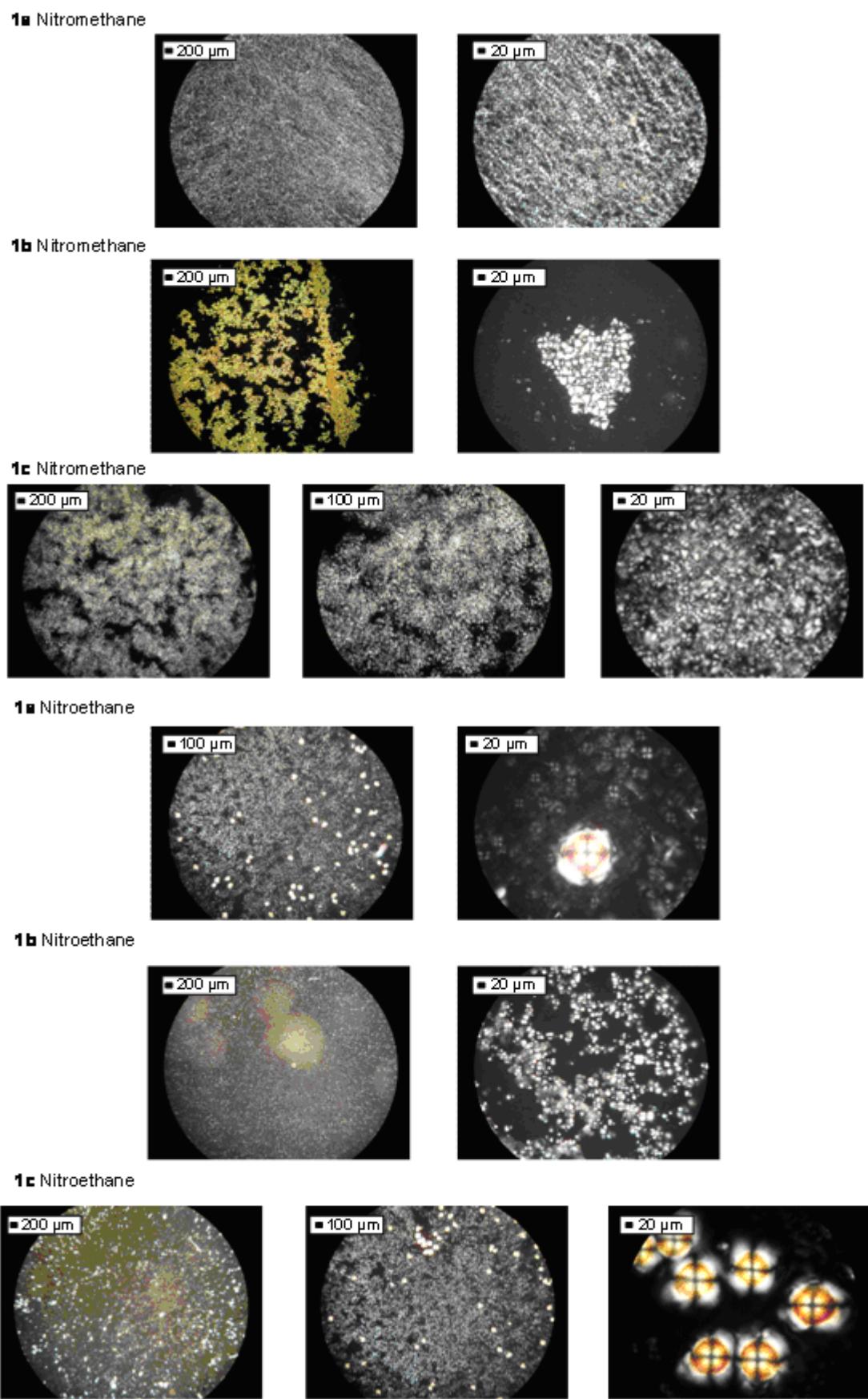


Fig. S5 POM images of gels of **1a-c** in nitroalkanes.

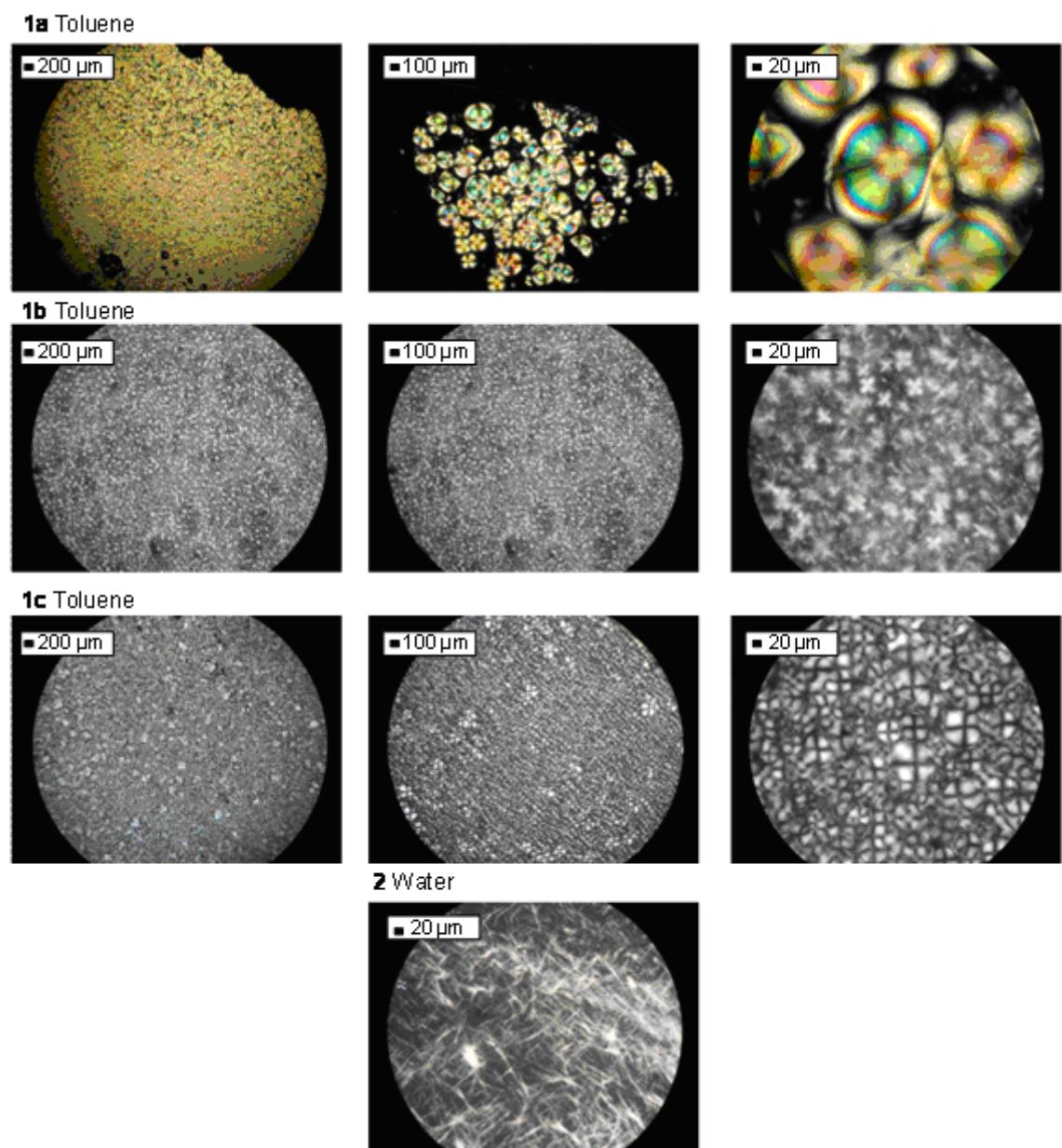


Fig. S6 POM images of gels of **1a-c** in toluene and a gel of **2** in water.

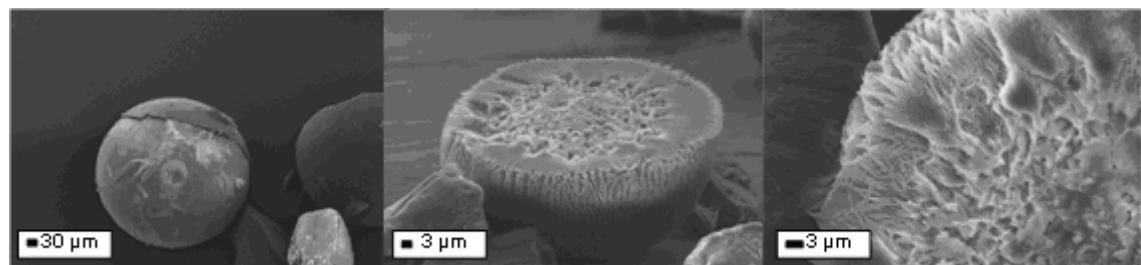


Fig. S7 SEM images of spherulites detected in the gelation studies of **1c** in acetonitrile.

Fig. S8 Variation of the elastic modulus (G') and viscous modulus (G'') vs the gelator

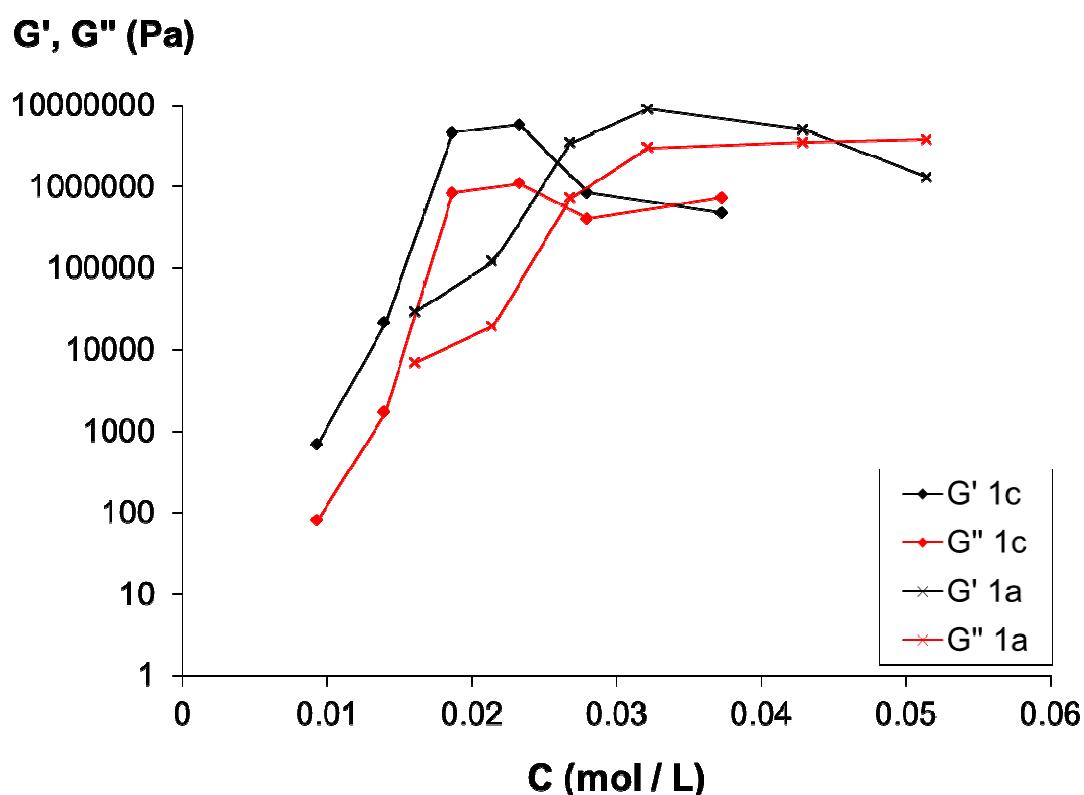


Fig. S9 Variation of the elastic modulus (G') and viscous modulus (G'') vs the gelator concentration for gels **1a** and **1c** in nitromethane.