Electronic Supplementary Information

Role of water in the formation of unusual organogels with *cyclo*(leucyl-leucyl)

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- AFM images of the surface of dried gel of *cyclo*(Leu-Leu) on the silicon substrate.
- Gelation ability and minimum gelation concentration of *cyclo*(Leu-Leu) in the systems studied.
- Data of DSC analysis for gel of *cyclo*(Leu-Leu) in benzene with water.

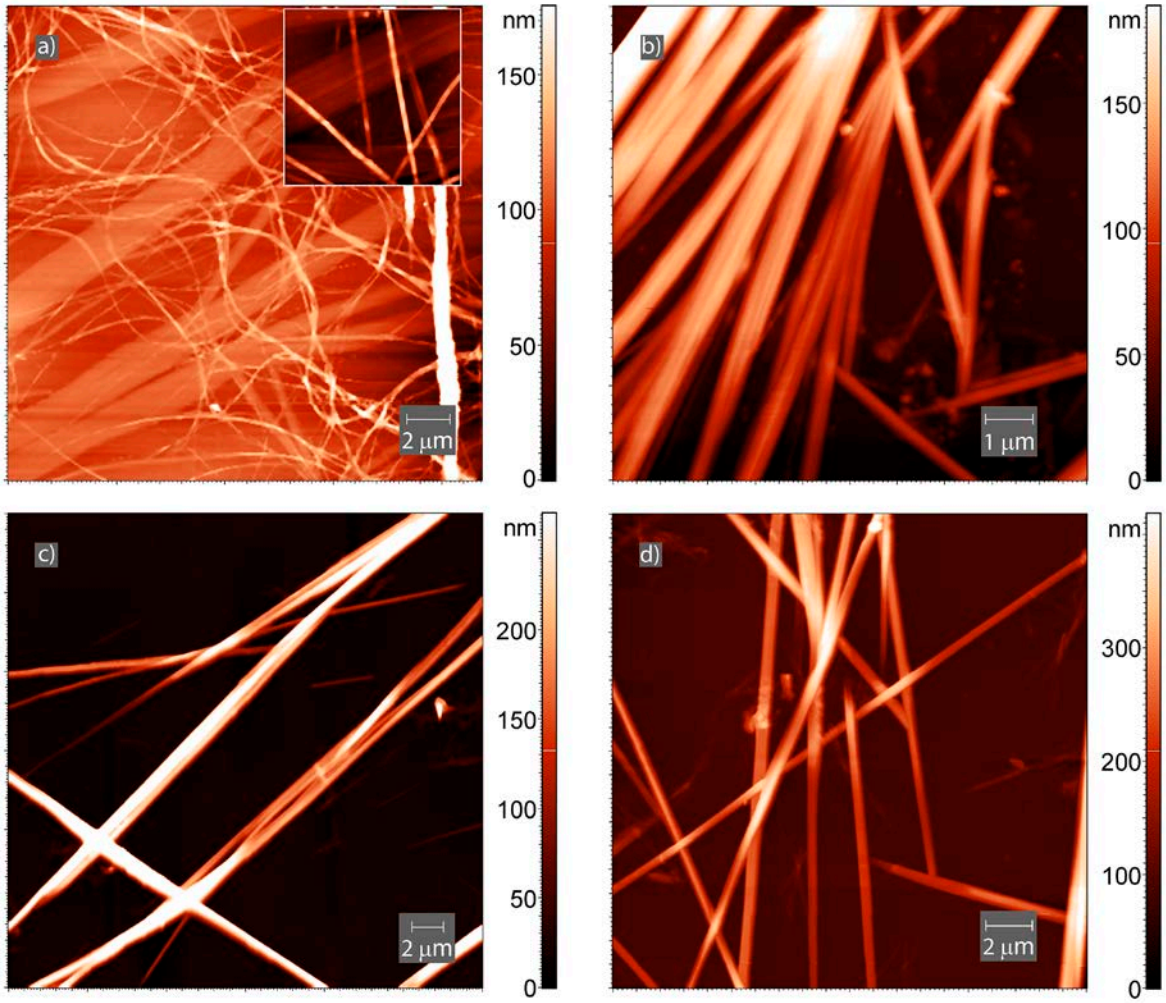

Fig. S1. AFM images of the surface of dried cyclo(Leu-Leu) gel (xerogel) in (a) benzene, (b) toluene (c) o-xylene and (d) ethylbenzene on the silicon substrate.

In organogel with toluene, fibers with a length of more than 20 μm and width from 300 nm to 1.5 μm are formed, Fig. S1 b. Such fibers have a complex structure and are bundles of smaller fibers about 150 nm wide. In the xerogel formed from *o*-xylene there are twisted fibers more than 30 μm in length, which are consist from the individual fibers of 350 - 700 nm wide and 100 - 300 nm height, Fig. S1 c. The fibers of width from 500 nm to 1.2 μm and height from 40 nm to 250 nm were formed in ethylbenzene, Fig. S1 d.

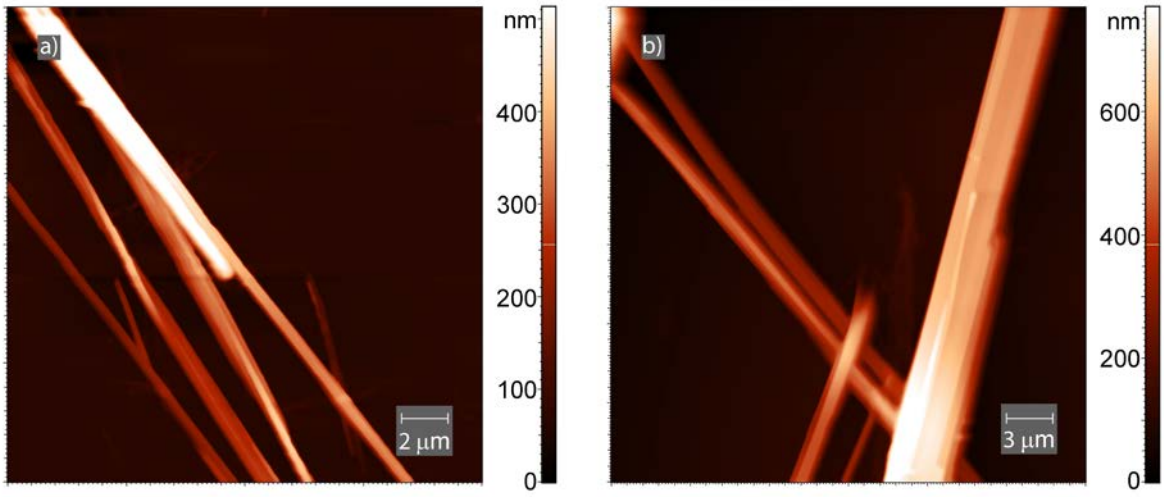

Fig. S2. AFM images of the surface of dried gel of *cyclo*(Leu-Leu) in (a) *o*-xylene (1.5 mg mL^{-1}, 20 μL H_2O) and (b) ethylbenzene (2.5 mg mL^{-1}, 20 μL H_2O) on the silicon substrate.

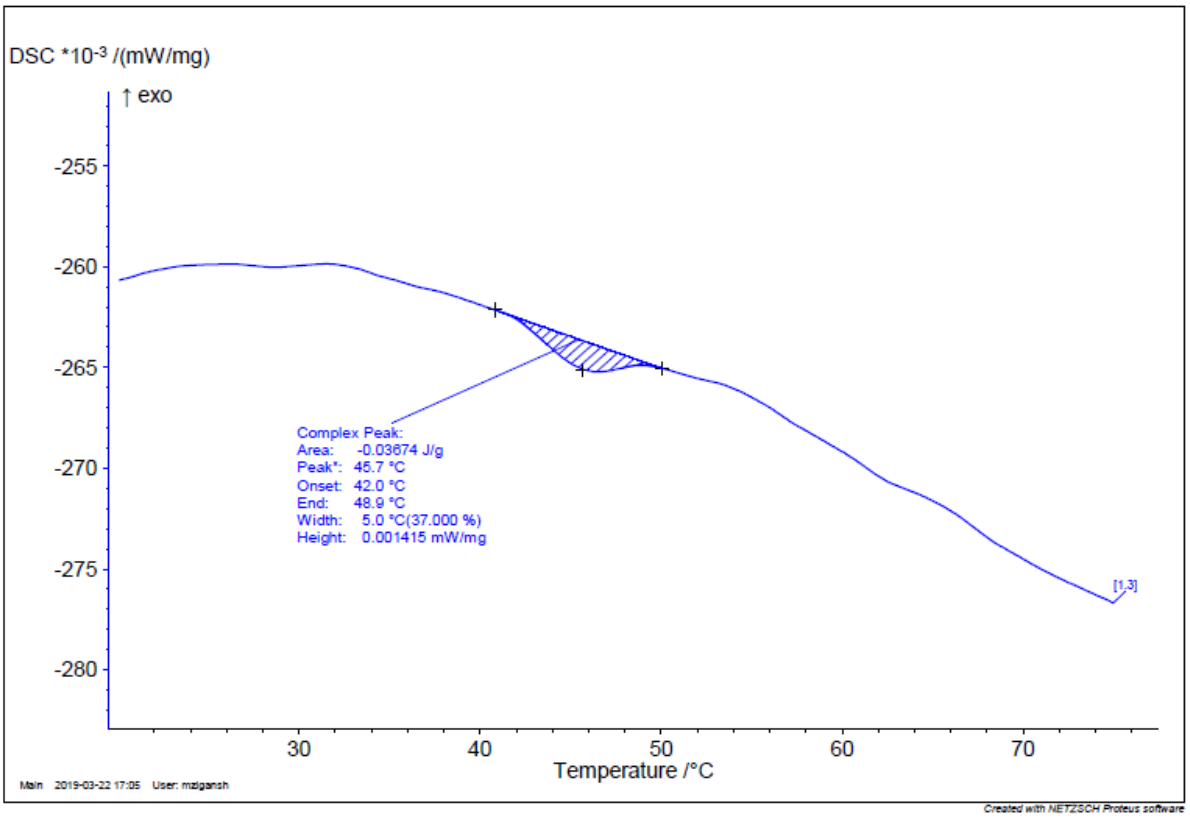

Fig. S3. Data of DSC analysis for gel of *cyclo*(Leu-Leu) in benzene with water.

Table S1. Gelation ability and concentration of *cyclo*(Leu-Leu) in the systems with 1 mL of solvent without shaking.[a]

Solvent	Concentration of *cyclo*(Leu-Leu), mg mL^{-1}					
	1.5	2	2.5	3	4	5
Benzene	G^c	G^c	G^c	G^b	G^b	G^b
Toluene	G^c	G^c	G^c	G^b	G^b	G^b
o-Xylene	G^d	PG^c	G^c	G^b	G^b	G^b
m-Xylene	G^d	G^c	G^c	G^b	G^b	G^b
p-Xylene	G^d	G^c	G^c	G^b	G^b	G^b
Ethylbenzene	PG^c	PG^c	PG^c	G^c	G^c	G^b
sec-Amylbenzene	PG^c	PG^c	PG^c	PG^c	PG^c	PG^c
n-Hexane	I	I	I	I	I	I
n-Heptane	I	I	I	I	I	I
Cyclohexane	I	I	I	I	I	I
Tetrachloromethane	I	I	I	I	I	I
Tetrachloroethylene	PG^d	PG^d	PG^d	G^c	G^c	G^c

[a] MGC is the minimum value of *cyclo*(Leu-Leu) concentration indicated by letters G or PG, where G – complete gelation, PG – partial gelation, I – insoluble; [b] after one day; [c] after two days; [d] after three days.

Table S2. Gelation ability and concentration of *cyclo*(Leu-Leu) in the systems with 0.5 mL of solvent without shaking. [a]

Solvent	MGC, mg mL^{-1}		
	1.5	2	2.5
Benzene	G^c	G^c	G^d
Toluene	G^c	G^d	G^d
o-Xylene	G^d	G^d	G^c
m-Xylene	G^d	G^b	G^b
p-Xylene	G^b	G^b	G^d
Ethylbenzene	G^c	G^c	G^d
Tetrachloroethylene	PG^d	PG^d	G^d

[a] MGC is the minimum value of *cyclo*(Leu-Leu) concentration indicated by letters G or PG, where G – complete gelation, PG – partial gelation; [b] after 12 h; [c] after one day; [d] after two days.

Table S3. Gelation ability and concentration of *cyclo*(Leu-Leu) in systems with 1 mL of aromatic solvents. [a]

Solvent	MGC, mg mL^{-1}		
	1.5	2	2.5
Benzene	G^b	G^b	G^b
Toluene	G^b	G^b	G^b
o-Xylene	PG^c	G^b	G^b
m-Xylene	G^b	G^b	G^b
p-Xylene	PG^b	G^b	G^c
Ethylbenzene	G^c	G^b	G^c

[a] MGC is the minimum value of *cyclo*(Leu-Leu) concentration indicated by letters G or PG, where G – complete gelation, PG – partial gelation; [b] after six hours, 10 µl of water were added; [c] after 18 hours, 20 µl of water were added.