

ARTICLE

Revisiting urea-based gelators: strong solvent- and casting-microstructuration dependencies and organogel processing with an alumina template

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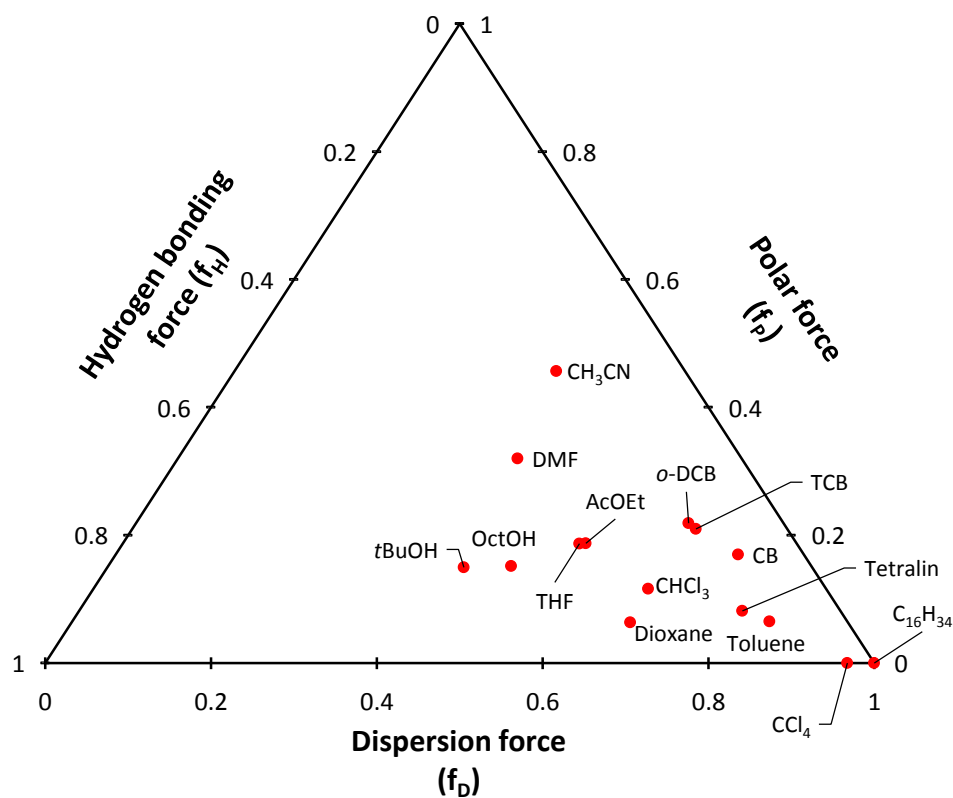


Fig. S1 Teas diagram including the set of solvents under consideration

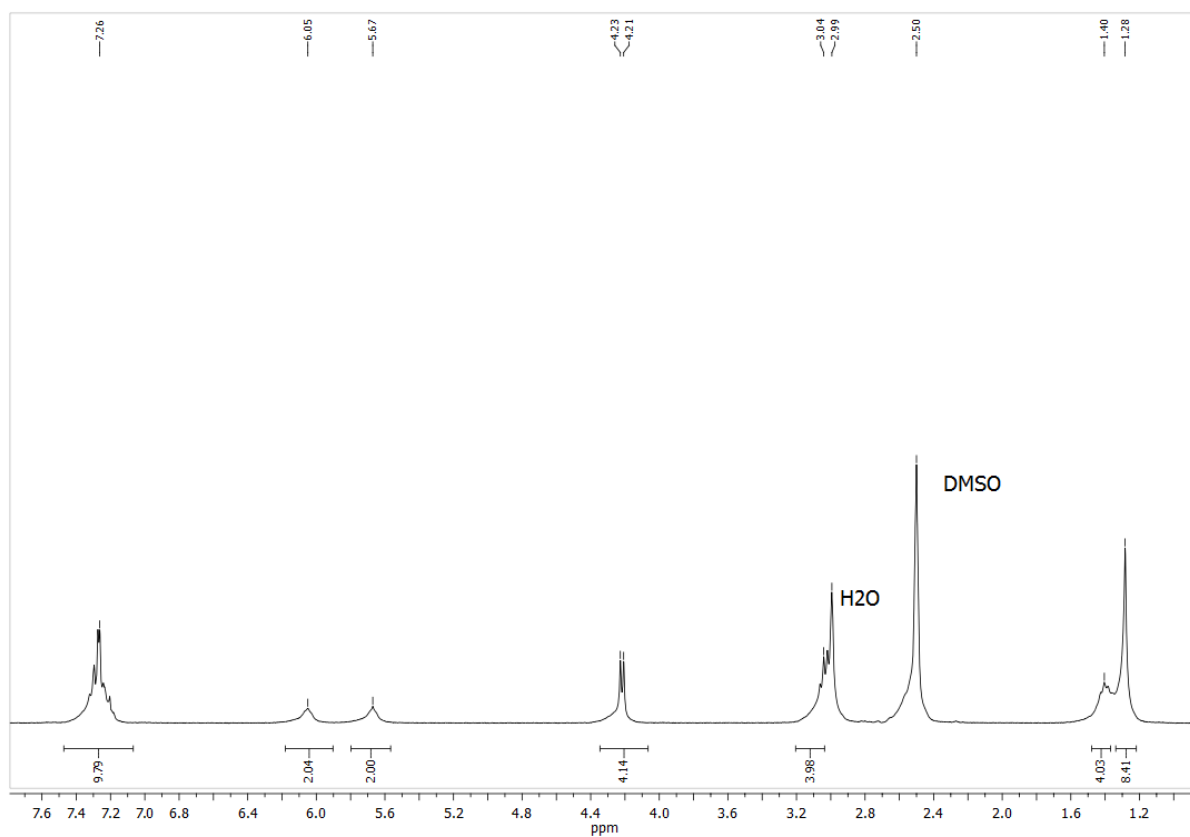


Fig. S2 ^1H NMR spectrum of compound **1** in DMSO-D_6 at 393 K

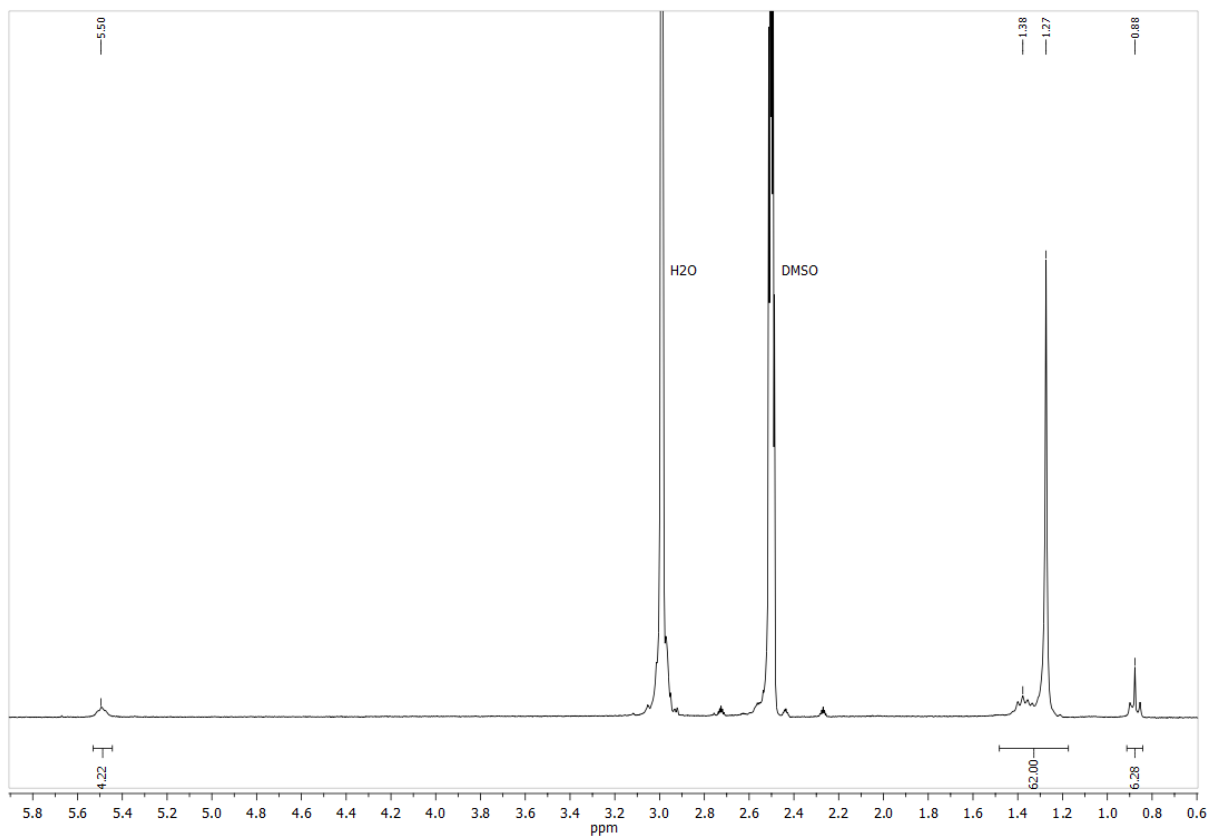


Fig. S3 ^1H NMR spectrum of compound 2 in DMSO-D_6 at 393 K

Table S1. Images of 1-based xerogels by optical microscopy depending on the solvent of preparation and on the casting method (*the corresponding gels were prepared at a concentration $C = 1.25 \times CGC$*)

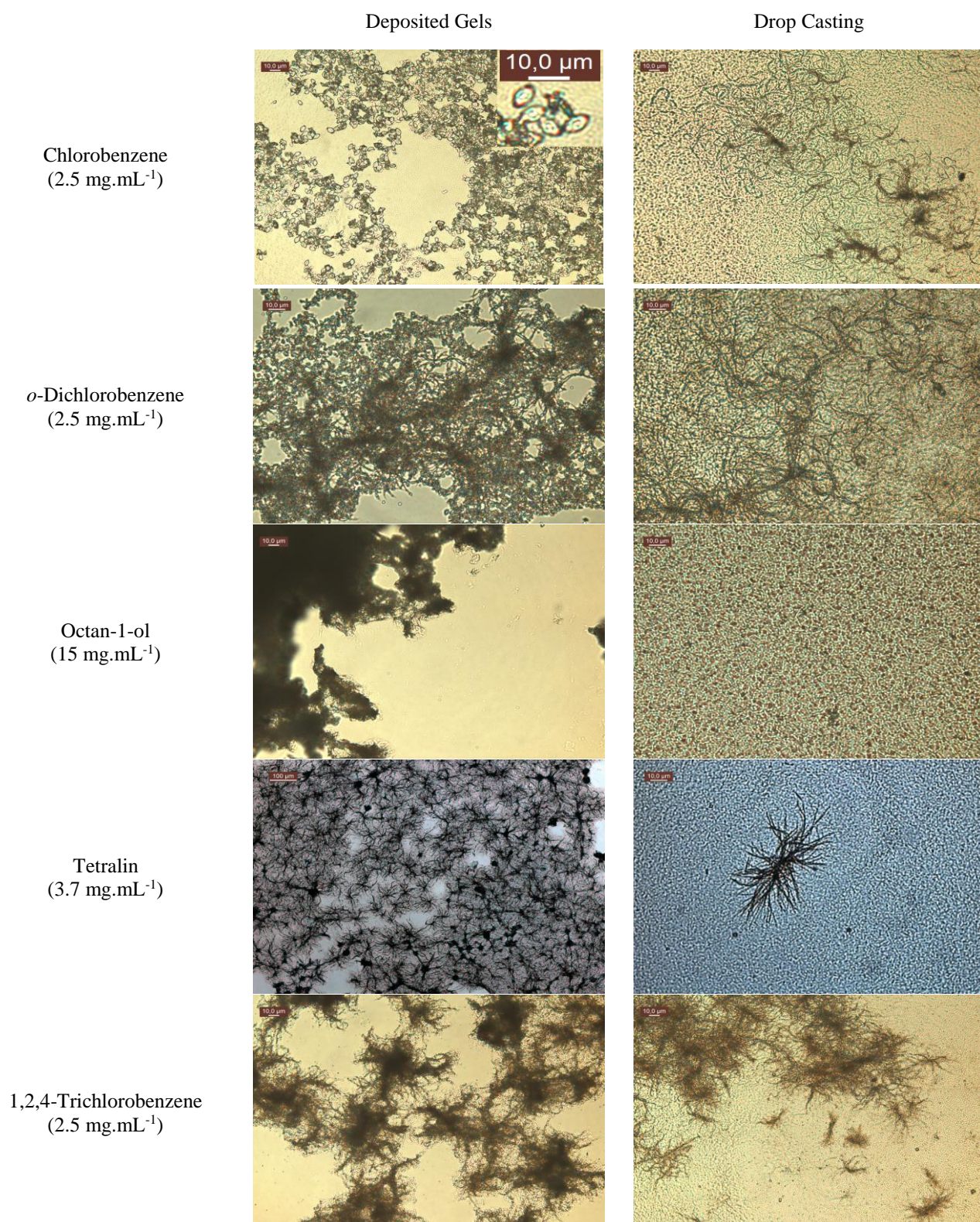
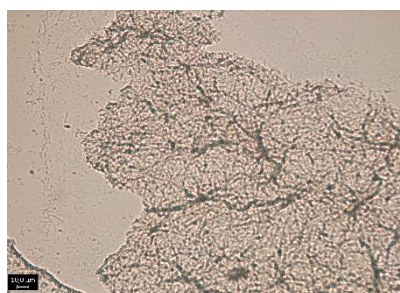
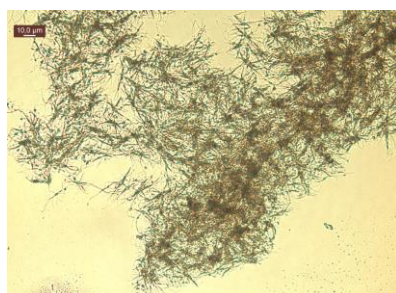


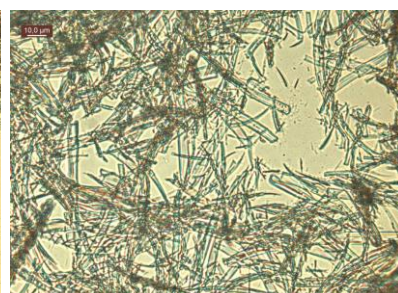
Table S2. Images of 2-based xerogels by optical microscopy depending on the solvent of preparation (the corresponding gels were prepared at a concentration $C = 1.25 \times \text{CGC}$ and deposited as such)



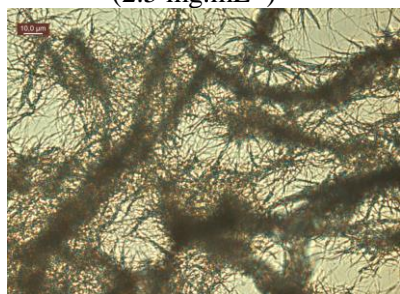
Chloroform
(2.5 mg.mL⁻¹)



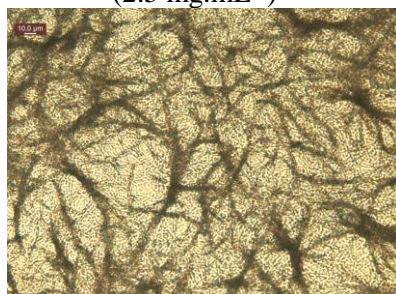
Tetrahydrofurane
(2.5 mg.mL⁻¹)



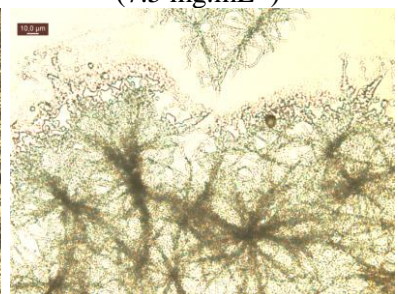
tert-Butanol
(7.5 mg.mL⁻¹)



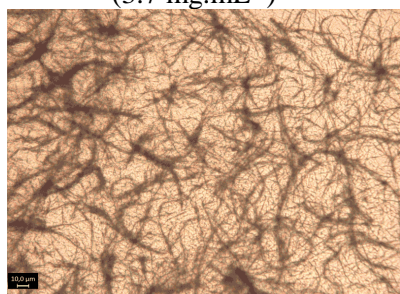
1,4-Dioxane
(3.7 mg.mL⁻¹)



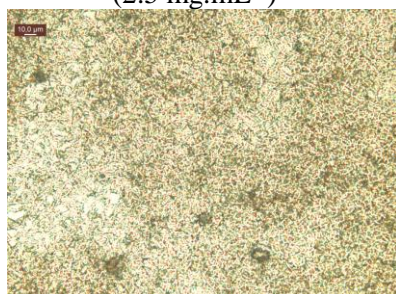
Toluene
(2.5 mg.mL⁻¹)



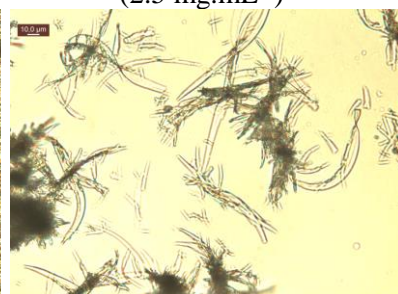
Chlorobenzene
(2.5 mg.mL⁻¹)



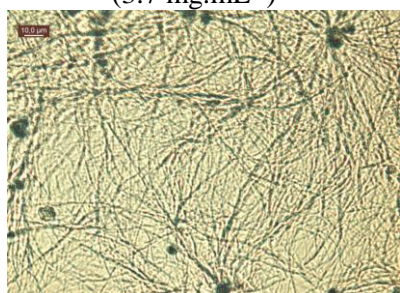
p-Xylene
(3.7 mg.mL⁻¹)



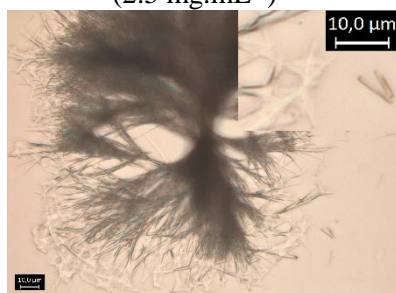
1,1,2,2-Tetrachloroethane
(2.5 mg.mL⁻¹)



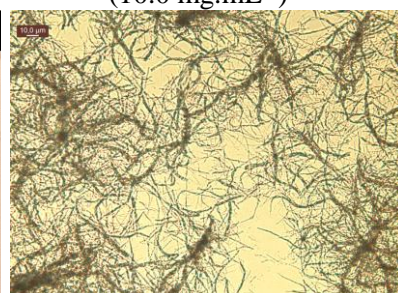
N,N-Dimethylformamide
(10.0 mg.mL⁻¹)



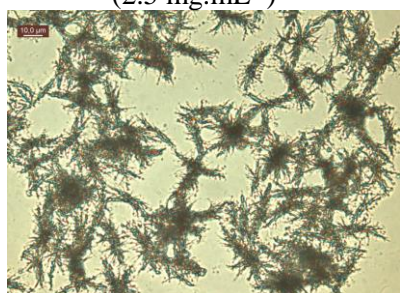
o-Dichlorobenzene
(2.5 mg.mL⁻¹)



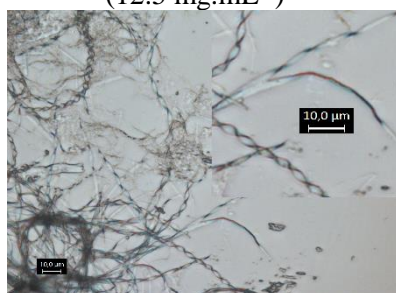
Octan-1-ol
(12.5 mg.mL⁻¹)



Tetralin
(5 mg.mL⁻¹)

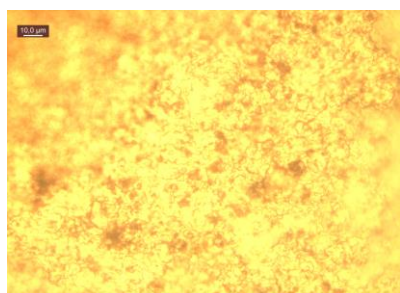


1,2,4-Trichlorobenzene
(5 mg.mL⁻¹)

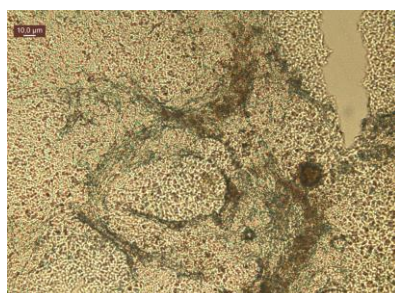


Hexadecane
(5 mg.mL⁻¹)

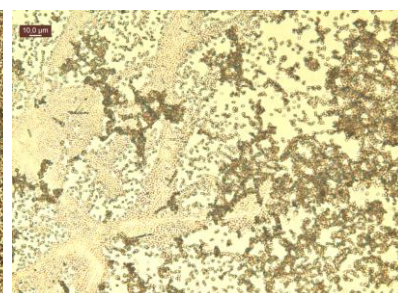
Table S3. Images of 2-based xerogels by optical microscopy depending on the solvent of preparation (the corresponding gels were prepared at a concentration $C = 1.25 \times \text{CGC}$ and drop-casted).



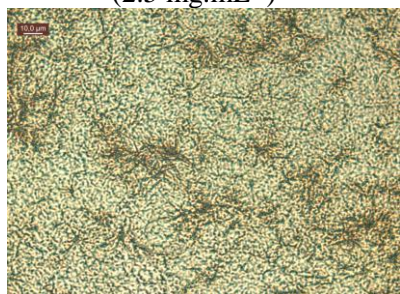
Chloroform
(2.5 mg.mL⁻¹)



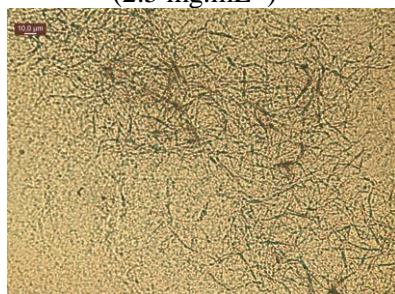
Tetrahydrofurane
(2.5 mg.mL⁻¹)



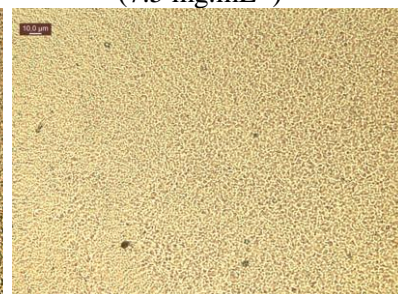
tert-Butanol
(7.5 mg.mL⁻¹)



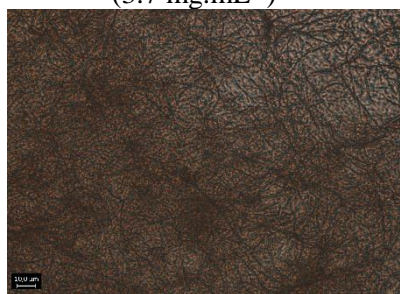
1,4-Dioxane
(3.7 mg.mL⁻¹)



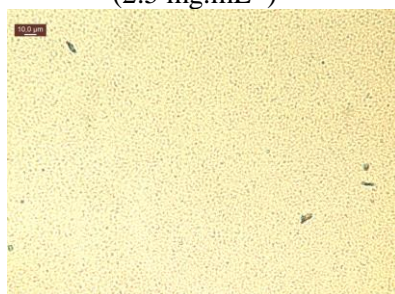
Toluene
(2.5 mg.mL⁻¹)



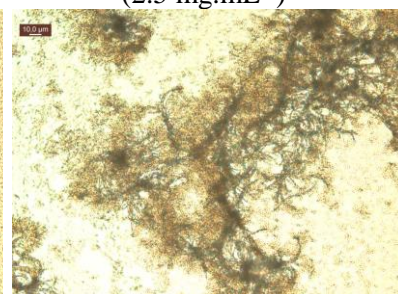
Chlorobenzene
(2.5 mg.mL⁻¹)



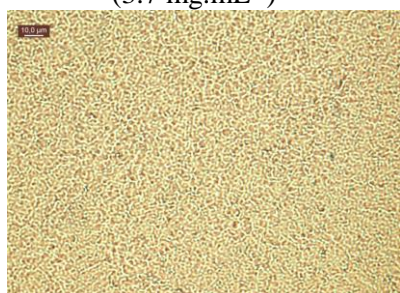
p-Xylene
(3.7 mg.mL⁻¹)



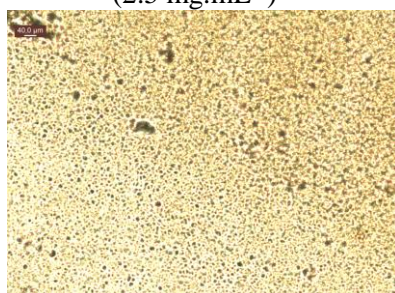
1,1,2,2-Tetrachloroethane
(2.5 mg.mL⁻¹)



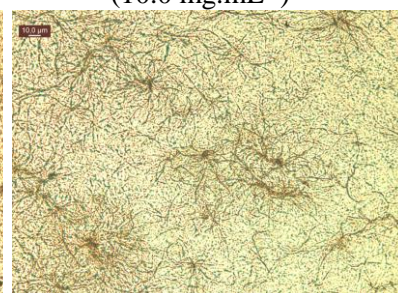
N,N-Dimethylformamide
(10.0 mg.mL⁻¹)



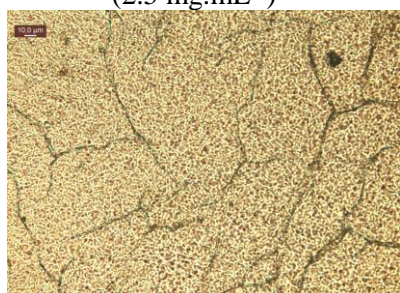
o-Dichlorobenzene
(2.5 mg.mL⁻¹)



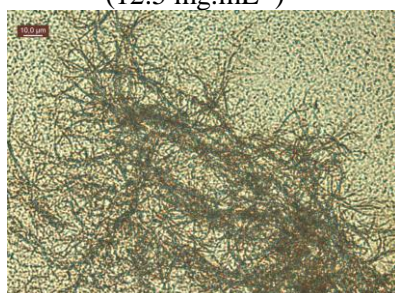
Octan-1-ol
(12.5 mg.mL⁻¹)



Tetralin
(5 mg.mL⁻¹)

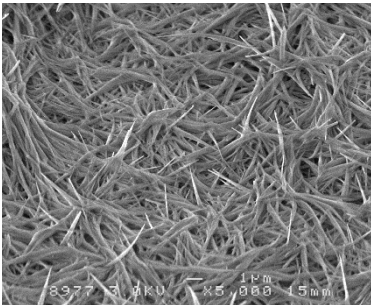
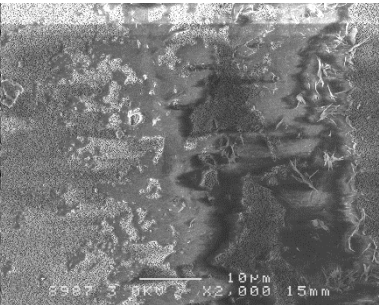
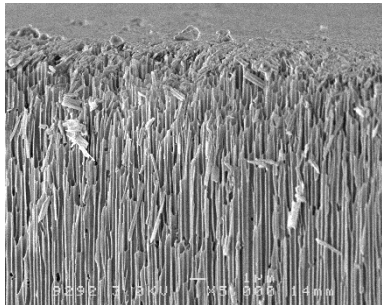
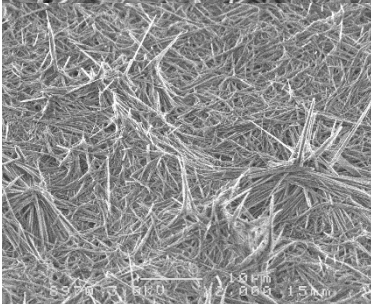
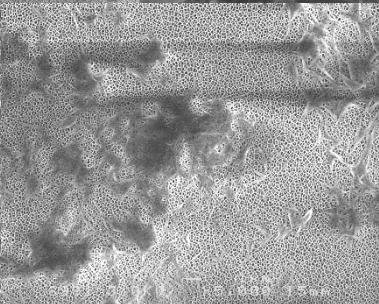
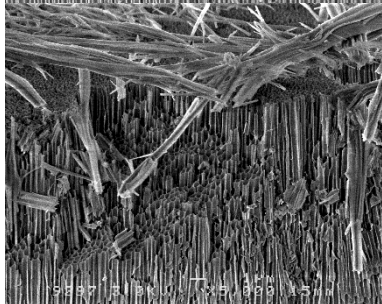
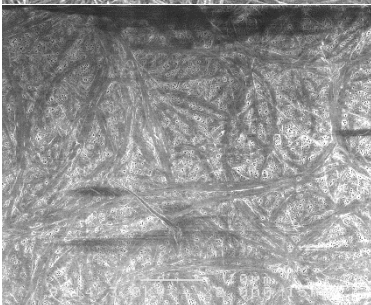
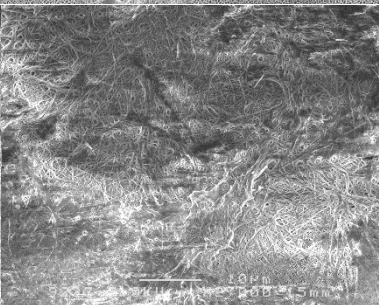
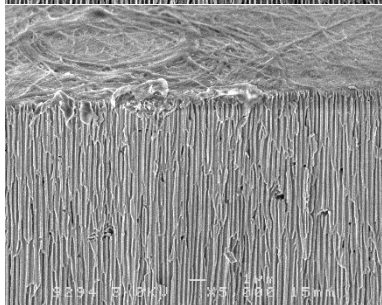
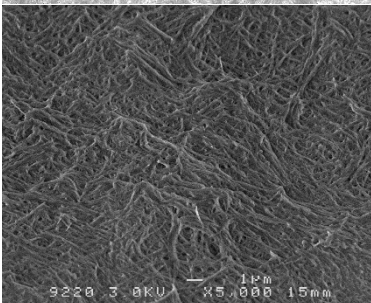
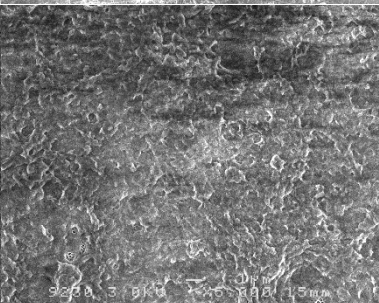
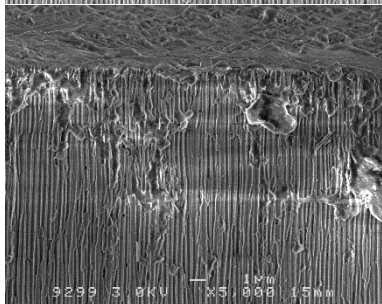
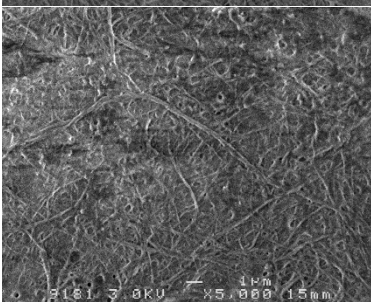
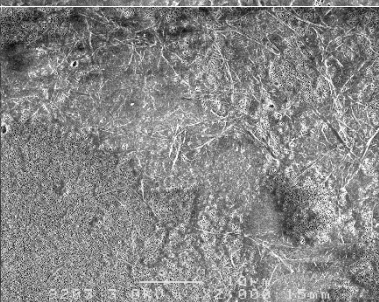
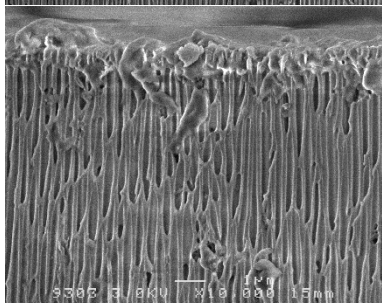


1,2,4-Trichlorobenzene
(5 mg.mL⁻¹)

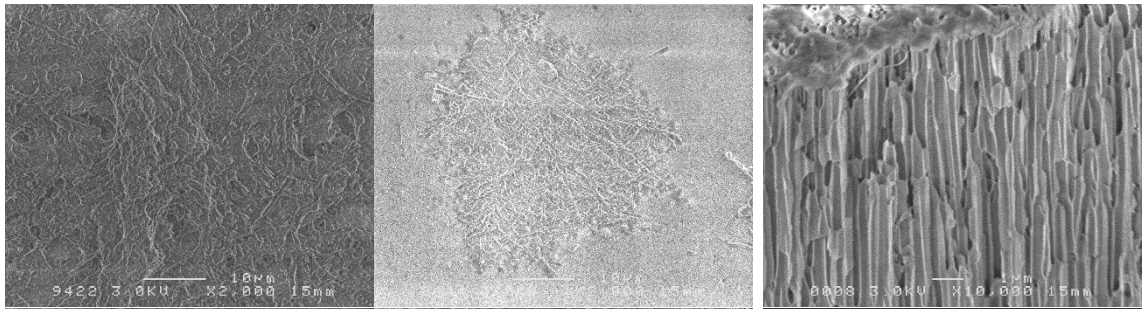


Hexadecane
(5 mg.mL⁻¹)

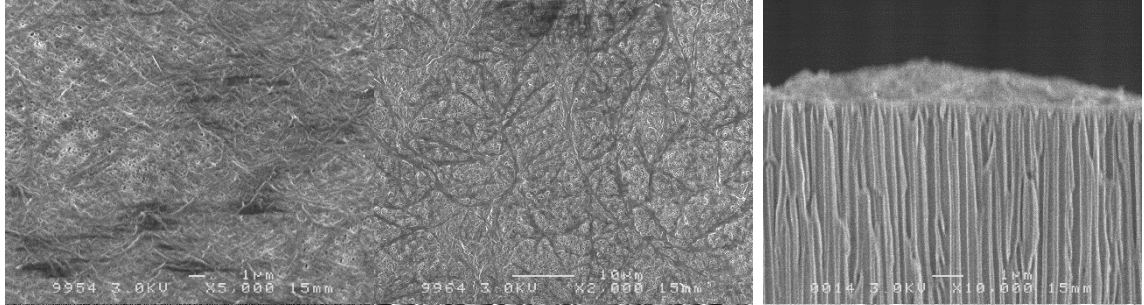
Table S4. Images of the slice, upper and lower faces of the alumina membranes by SEM microscopy depending on the method of deposition.

Method	Upper face	Lower face	Slice
<i>i</i>			
<i>ii</i>			
<i>iii</i>			
<i>iv</i>			
<i>v</i>			

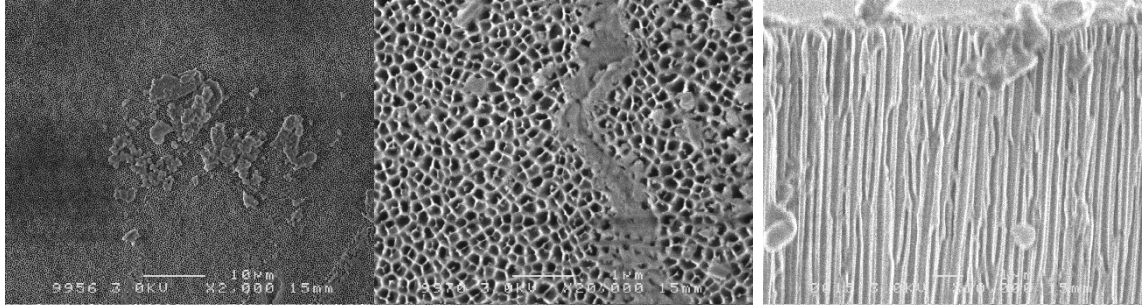
vi



vii



viii



ix

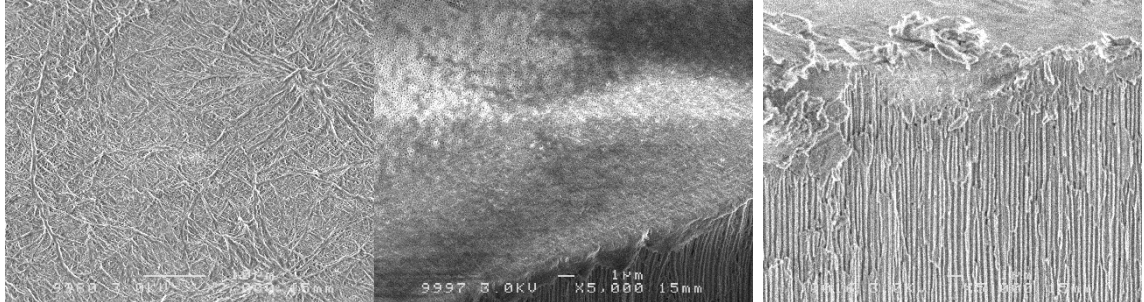


Figure S4. ^1H NMR spectra of a sample of compound **1** before and after a DSC cycle ($30^\circ\text{C} \rightarrow 120^\circ\text{C} \rightarrow 30^\circ\text{C}$).

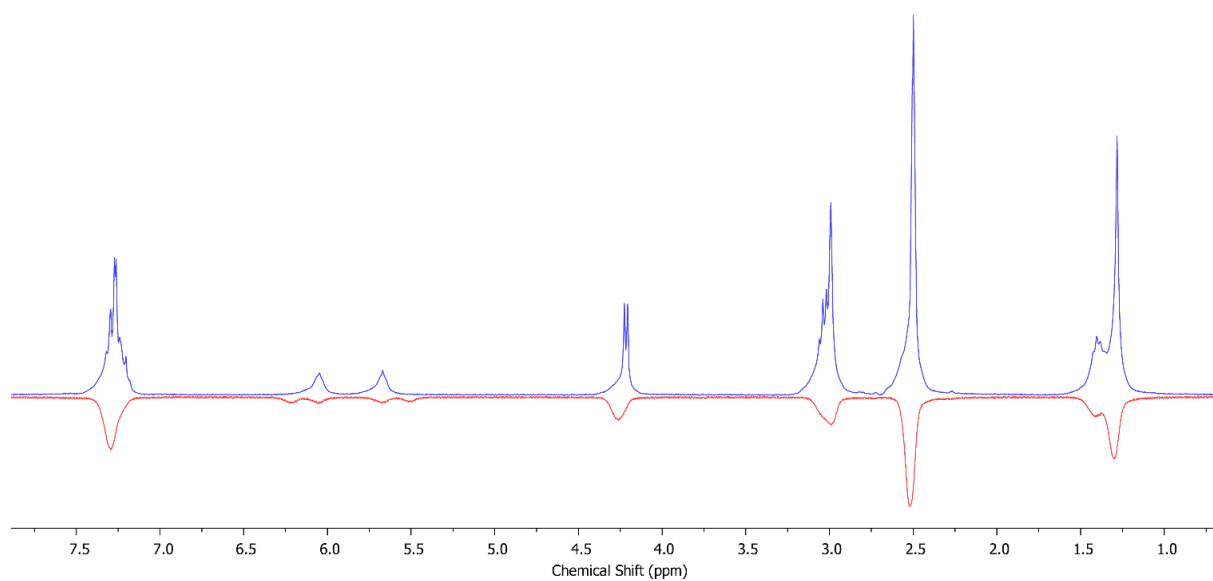


Figure S5. SEM micrographs of the **2**-based xerogel prepared from *o*DCB after one week in a 5M NaOH aqueous solution at 80°C

