

## Ionogels: new insights on the gelation mechanism from time-resolved Raman and NMR spectroscopy

In this page, two supplementary figures are provided that are referred to in the manuscript with title as above.

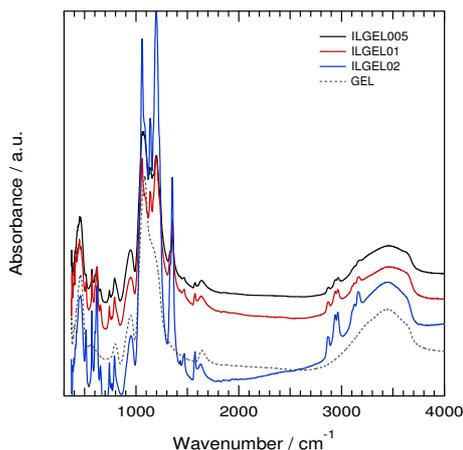


Figure 1: **S1**. Absorbance spectra measured in the transmission mode on ionogels (prepared into KBr pellets) with different ionic liquid contents. The wide 300–4000 cm<sup>-1</sup> spectral range is shown, which includes the H-O-H bending (1600–1650 cm<sup>-1</sup>) and O-H stretching (3000–3800 cm<sup>-1</sup>) modes of water. From bottom to top: pure ionic liquid (dotted line), ILGEL02, ILGEL01 and ILGEL005.

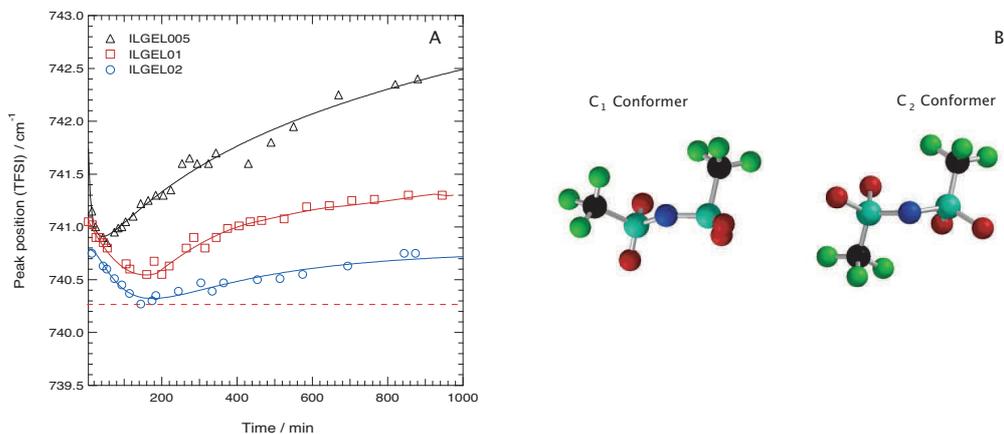


Figure 2: **S2**. A: Expansion-contraction mode of the TFSI anion as probed by Raman spectroscopy ( $\sim 740$  cm<sup>-1</sup>) as a function of time (from *in situ* reaction monitoring) and for ionogels of different ionic liquid content. From bottom to top: pure ionic liquid (dotted line), ILGEL02, ILGEL01 and ILGEL005. B: The two conformations in which the TFSI anion can be found, C<sub>1</sub> (or *cisoid*) and C<sub>2</sub> (or *transoid*) respectively.