## **ELECTRONIC SUPPORTING INFORMATION**

## Macroporous Poly(ionic liquid)/Ionic Liquid Gels via CO<sub>2</sub>-based Emulsion-Templating Polymerization.

K. Mathieu, C. Jérôme and A. Debuigne\*

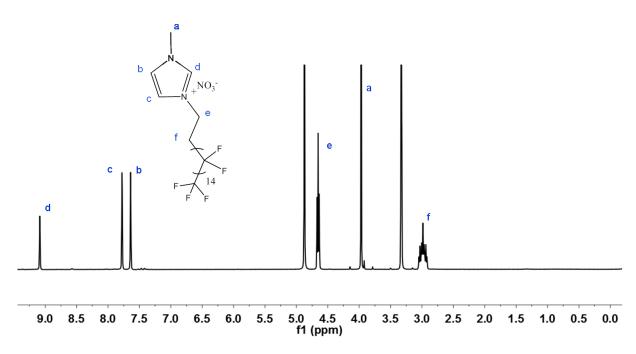
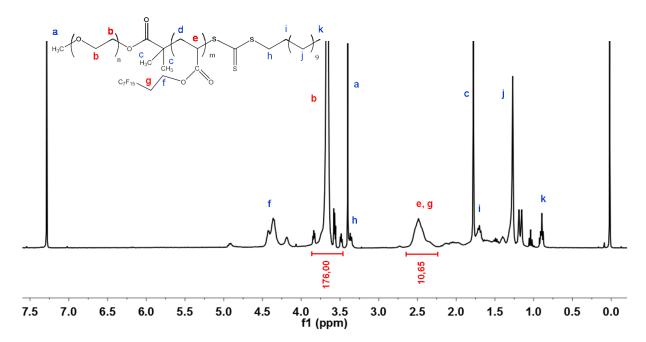
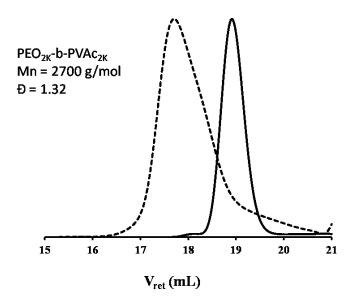


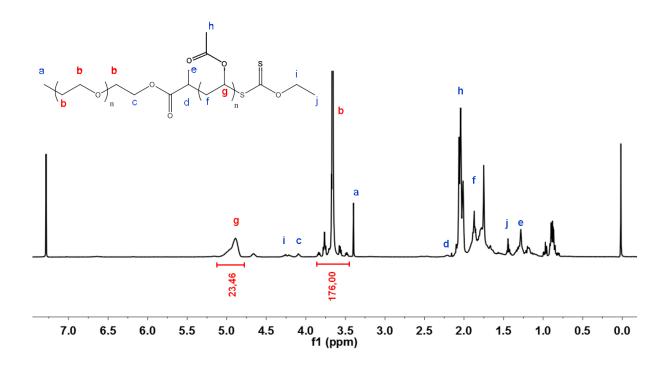
Figure S1. <sup>1</sup>H NMR spectra of [OctF<sub>17</sub>MeIm][NO<sub>3</sub>] in MeOD.



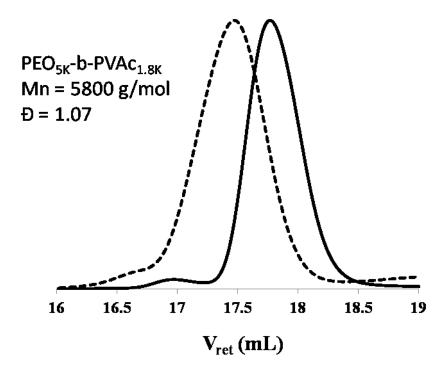
**Figure S2.** <sup>1</sup>H NMR spectra of, PEO<sub>2K</sub>-*b*-PFDA<sub>1.8K</sub> in CDCl<sub>3</sub>. Values of integrals used for the determination of the molar mass of the PFDA block are indicated in red



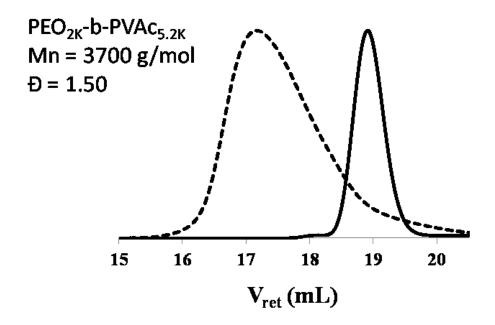
**Figure S3.** SEC chromatograms (calibration PEO) in THF of PEO<sub>2K</sub> (full line) and PEO<sub>2K</sub>-b-PVAc<sub>2K</sub> (dotted line).



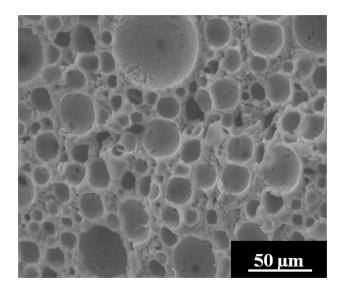
**Figure S4.** <sup>1</sup>H NMR spectra of, PEO<sub>2K</sub>-*b*-PVAc<sub>2K</sub> in CDCl<sub>3</sub>. Values of integrals used for the determination of the molar mass of the PVAc block are indicated in red.



**Figure S5.** SEC chromatograms (calibration PEO) in THF of PVAc<sub>5K</sub> (full line) and PEO<sub>5K</sub>-*b*-PVAc<sub>1.8K</sub> (dotted line).



**Figure S6.** SEC chromatograms (calibration PEO) in THF of PVAc<sub>2K</sub> (full line) and PEO<sub>2K</sub>-*b*-PVAc<sub>5.2K</sub> (dotted line).



**Figure S7.** SEM pictures of PILs/ILs gel obtained after the polymerization of [OctVIm][Br] and [C<sub>6</sub>(VIm)<sub>2</sub>][Br]<sub>2</sub> in a mixture of [OctMeIm][Br] and water at 150 bar and 40 °C and stabilized with PEO<sub>5K</sub>-*b*-PVAc<sub>1.8K</sub> (Sample **G**).