## **Supporting Information**

for

## Block copolymers from ionic liquids for the preparation of thin carbonaceous shells

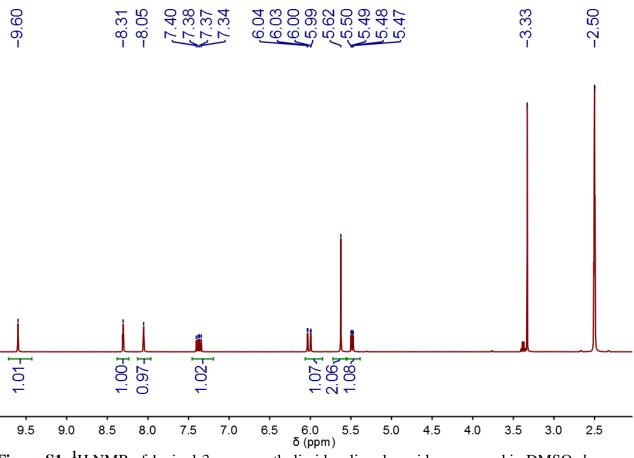
Sadaf Hanif, Bernd Oschmann, Dmitri Spetter, Muhammad Nawaz Tahir, Wolfgang Tremel and Rudolf Zentel\*

Address: Institute for Organic Chemistry, University of Mainz, Duesbergweg 10-14, 55128 Mainz, Germany

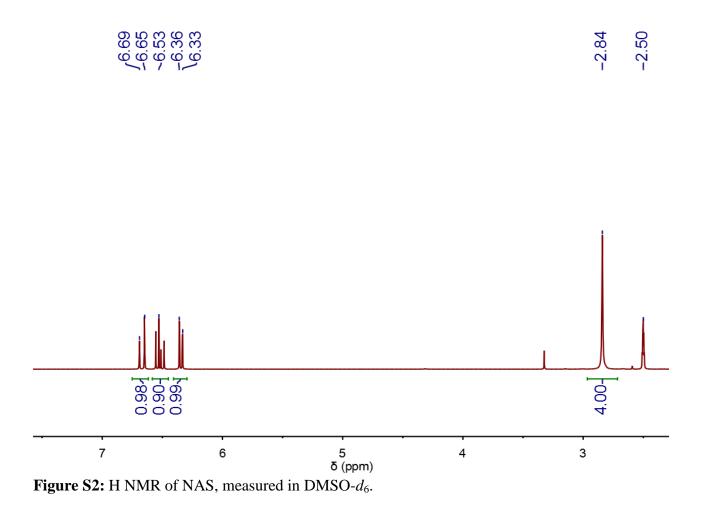
Email: Prof. R. Zentel\* - zentel@uni-mainz.de

\*Corresponding author

## **Additional spectra**



**Figure S1:** <sup>1</sup>H NMR of 1-vinyl-3-cyanomethylimidazolium bromide, measured in DMSO- $d_6$ .



S3

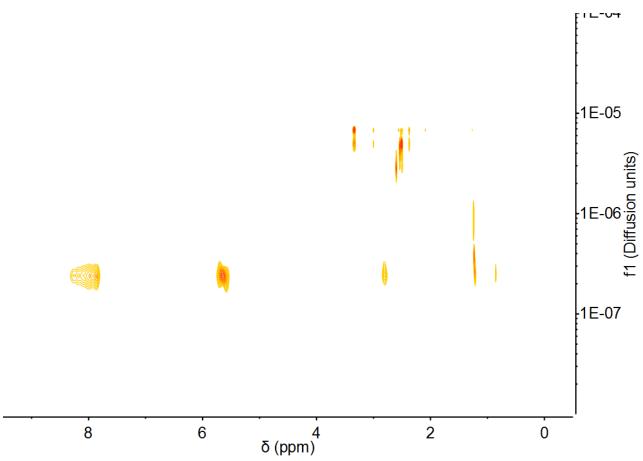


Figure S3: DOSY of the block copolymer PB. The spectrum shows just one polymeric species. DMSO and traces of water are also apparent, since the spectrum was measured in DMSO- $d_6$ .

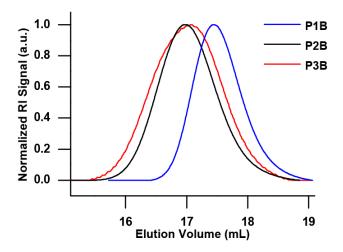


Figure S4: SEC of P1B (blue), P2B (black), P3B (red) measured in HFIP.

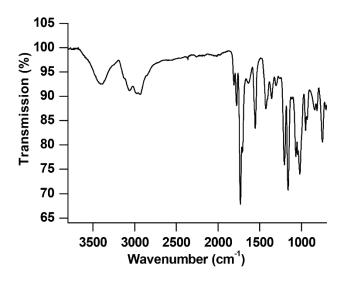


Figure S5: IR spectrum of the block copolymer PB.

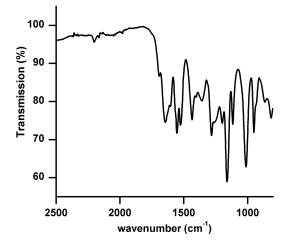


Figure S6: IR spectrum of the block copolymer after post polymerization modification (PC).