

**Electronic supporting information**

**Development of a highly robust solid phase microextraction fiber based on copolymerilized polymerizable ionic liquid monomer pair coating**

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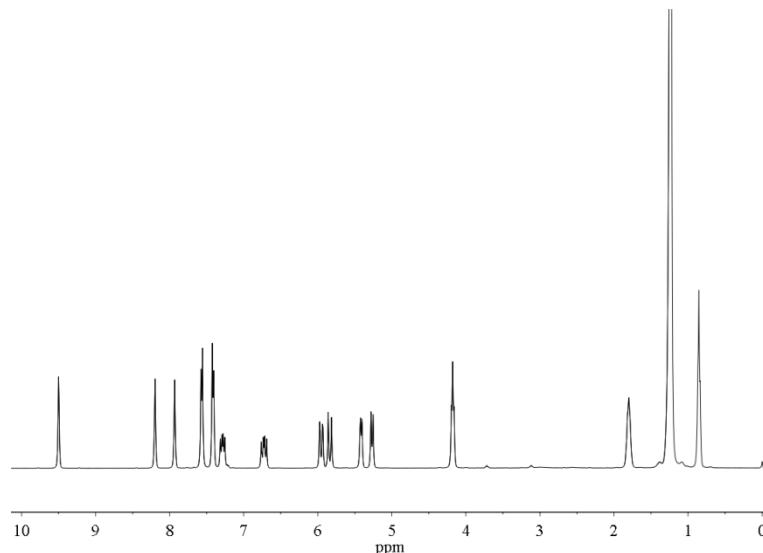


Fig. S1 <sup>1</sup>H NMR of [C<sub>16</sub>VIm]<sup>+</sup>SS<sup>-</sup>.

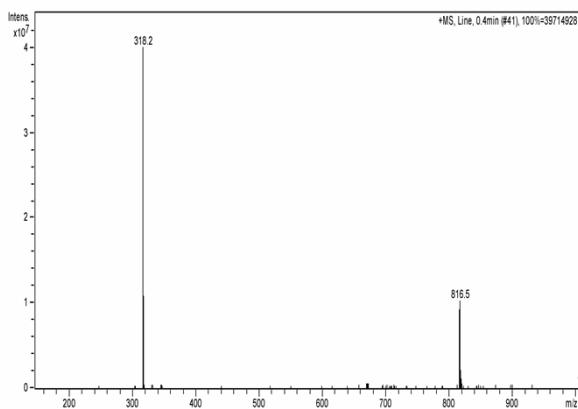


Fig. S2 IT-MS (Positive Ion Mode) for  $[C_{16}VIm]^+SS^-$ .  $m/z [C_{16}VIm^+] = 318.2$  amu,  $m/z [(2C_{16}VIm^+)SS^-] = 816.5$  amu.

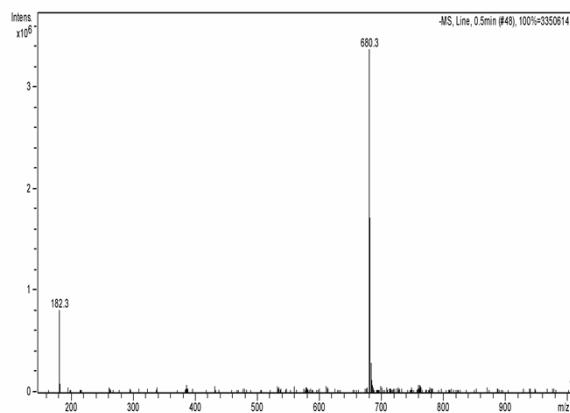


Fig. S3 IT-MS (Negative Ion Mode) for  $[C_{16}VIm]^+SS^-$ .  $m/z [SS^-] = 182.3$  amu,  $m/z [C_{16}VIm^+(2SS^-)] = 680.3$  amu.