

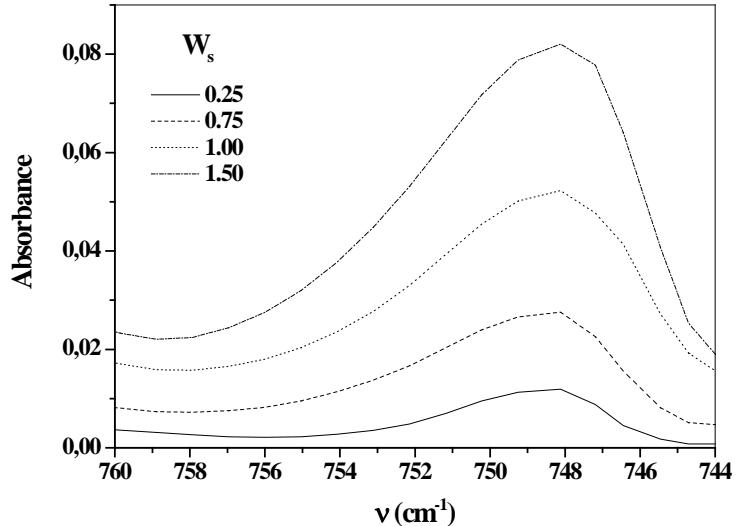
## Supplementary Information

### The Effect of Different Interfaces and Confinement on the Structure of the Ionic Liquid 1-butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide Entrapped in Cationic and Anionic Reverse Micelles.

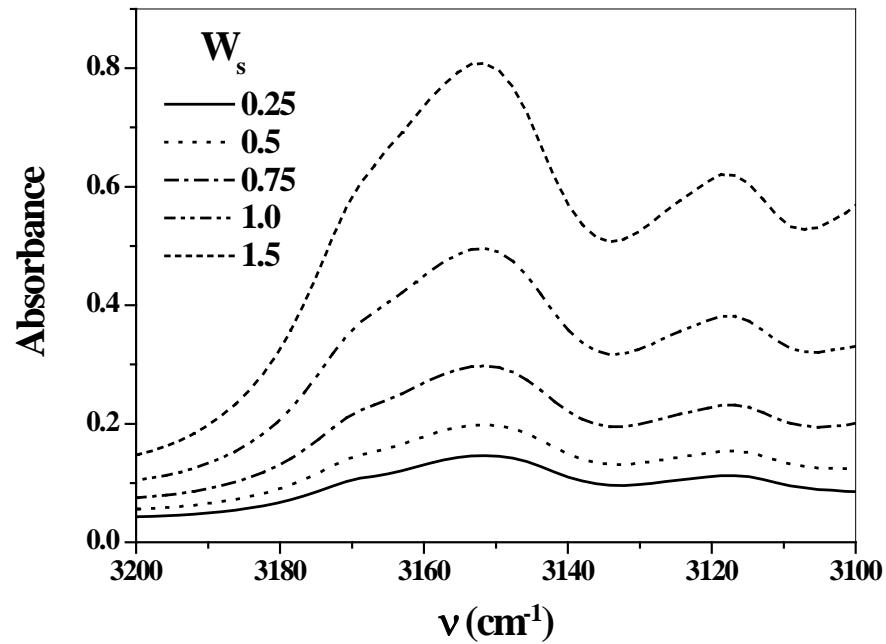
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**Figure S1.** FT-IR spectra of [bmim][Tf<sub>2</sub>N] inside AOT/chlorobenzene RMs at different  $W_s$  values, in the region of 760-740  $\text{cm}^{-1}$  ( $\nu_{\text{S-N-S}}^{\text{s}}$ ). [AOT] = 0.1 M. The chlorobenzene bands have been subtracted. IR Path length cell = 0.015 mm.



**Figure S2.** FT-IR spectra of [bmim][Tf<sub>2</sub>N] inside AOT/chlorobenzene RMs at different  $W_s$  values, in the region of 3100-3200  $\text{cm}^{-1}$ . [AOT] = 0.1 M. The chlorobenzene bands have been subtracted. IR Path length cell = 0.5 mm.