

Supporting Information

Quantitative and Qualitative Analysis of Ionic Solvation of Individual Ions of Imidazolium Based Ionic Liquids in Significant Solution Systems by Conductance and FT-IR Spectroscopy

Deepak Ekka and Mahendra Nath Roy*

Department of Chemistry, University of North Bengal, Darjeeling-734013, India

Figure Captions:

Figure S1. Stretching frequency of $\text{-C}\equiv\text{N}$ in acetonitrile (black solid line), in $\{[\text{emim}]\text{NO}_3+\text{CH}_3\text{CN}\}$ (red solid line), in $\{[\text{emim}]\text{CH}_3\text{SO}_3+\text{CH}_3\text{CN}\}$ (violet solid line), in $\{[\text{emim}]\text{Tos}+\text{CH}_3\text{CN}\}$ (blue solid line).

Figure S2. Stretching frequency of -O-H in methanol (black solid line), in $\{[\text{emim}]\text{NO}_3+\text{CH}_3\text{OH}\}$ (red solid line), in $\{[\text{emim}]\text{CH}_3\text{SO}_3+\text{CH}_3\text{OH}\}$ (violet solid line), in $\{[\text{emim}]\text{Tos}+\text{CH}_3\text{OH}\}$ (blue solid line).

Figure S3. Stretching frequency of -N-O in nitromethane (black solid line), in $\{[\text{emim}]\text{NO}_3+\text{CH}_3\text{NO}_2\}$ (red solid line), in $\{[\text{emim}]\text{CH}_3\text{SO}_3+\text{CH}_3\text{NO}_2\}$ (violet solid line), in $\{[\text{emim}]\text{Tos}+\text{CH}_3\text{NO}_2\}$ (blue solid line).

Figure S4. Stretching frequency of -N-H in methylamine solution (black solid line), in $\{[\text{emim}]\text{NO}_3+\text{CH}_3\text{NH}_2\}$ (red solid line), in $\{[\text{emim}]\text{CH}_3\text{SO}_3+\text{CH}_3\text{NH}_2\}$ (violet solid line), in $\{[\text{emim}]\text{Tos}+\text{CH}_3\text{NH}_2\}$ (blue solid line)

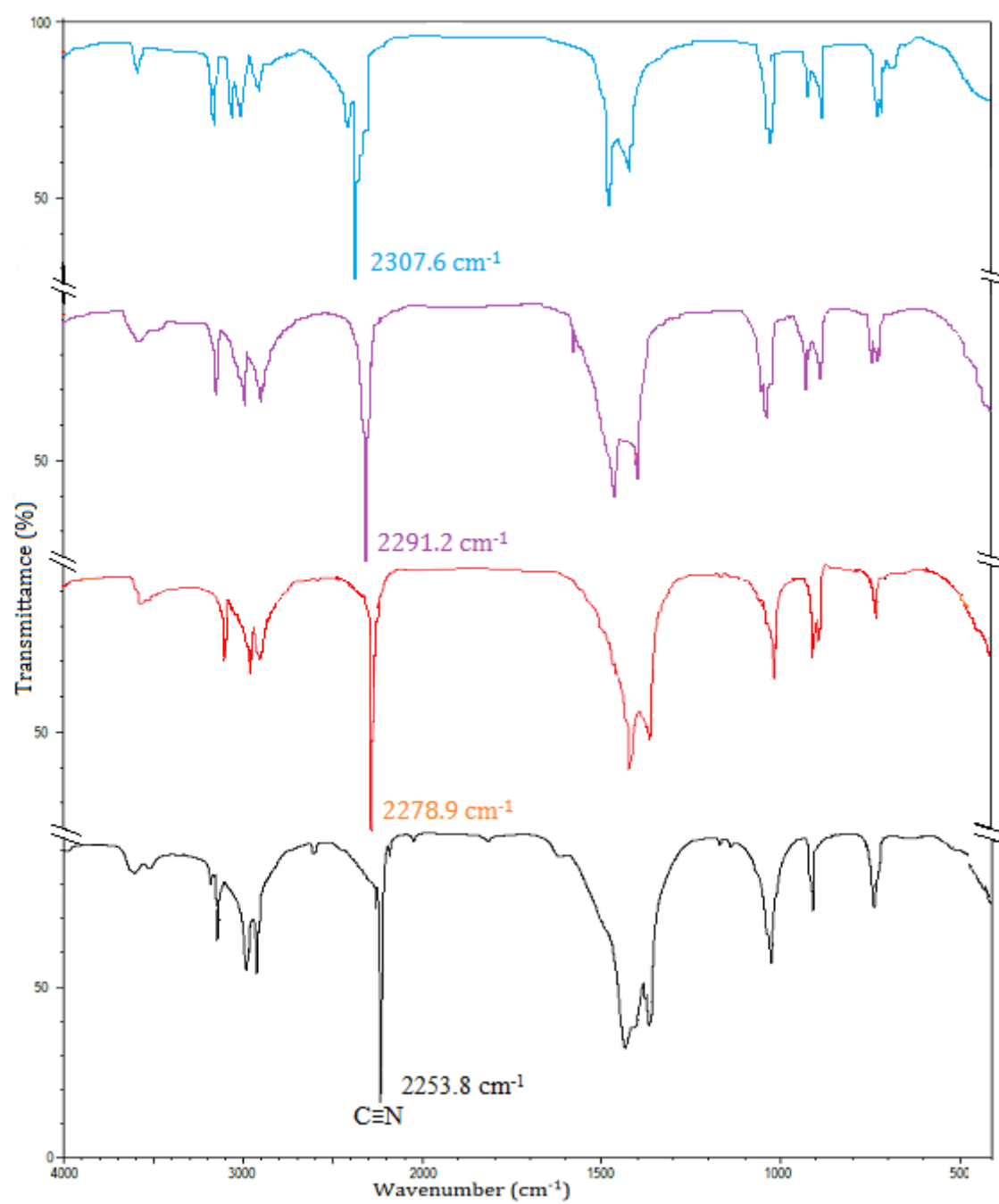


Figure S1.

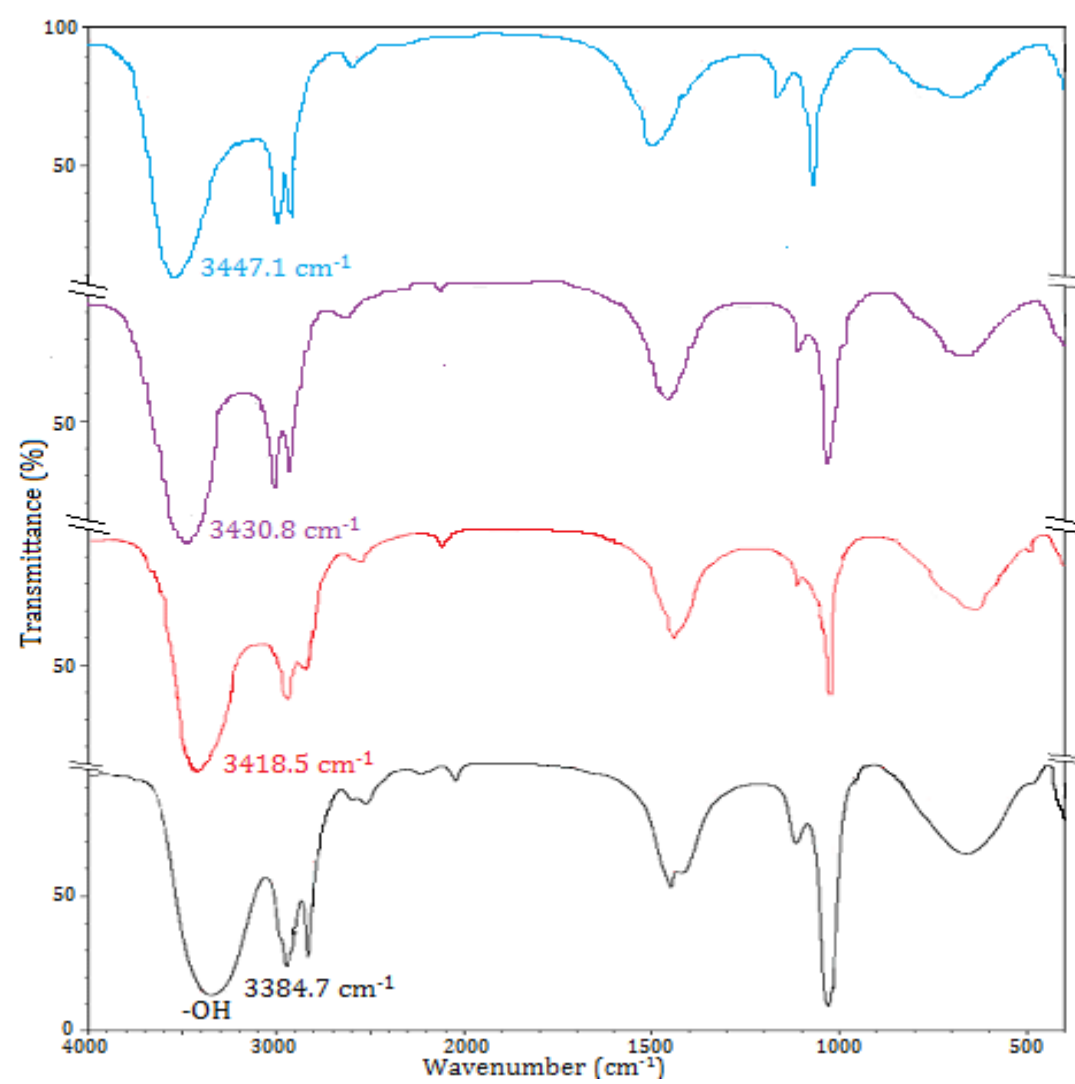


Figure S2.

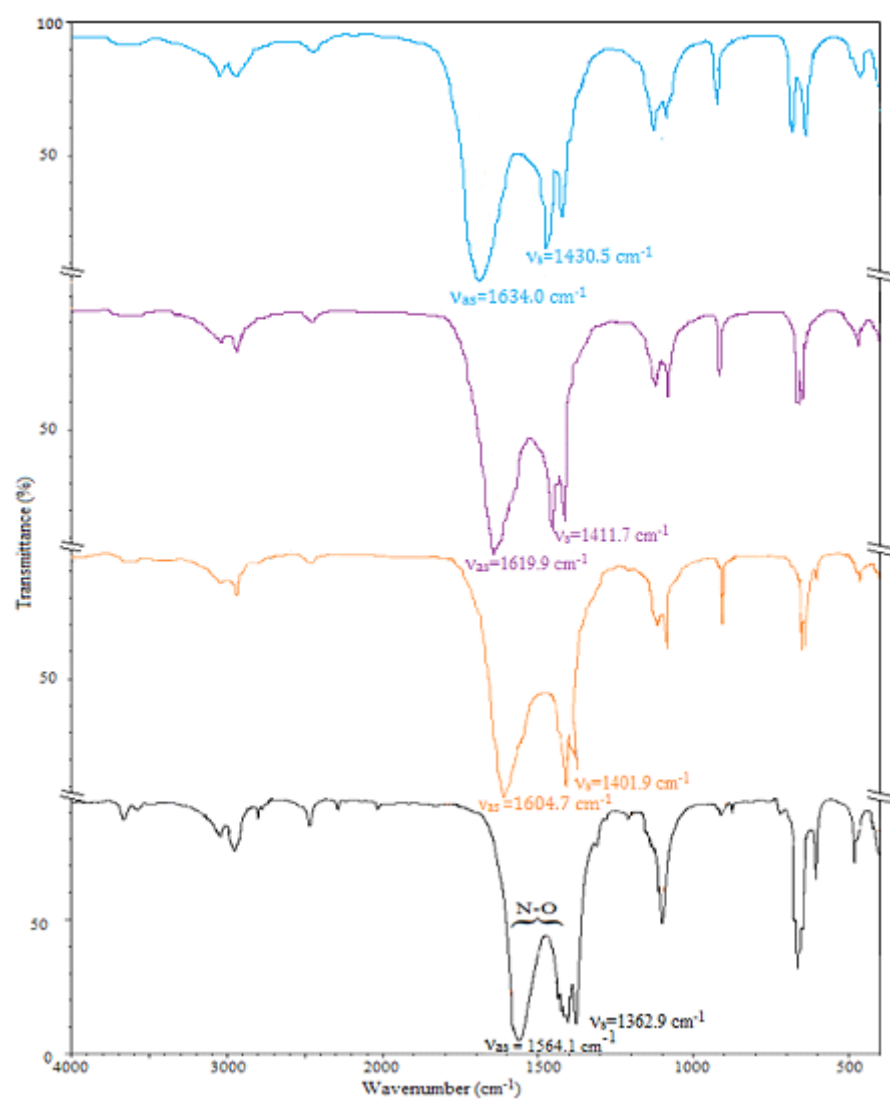


Figure S3.

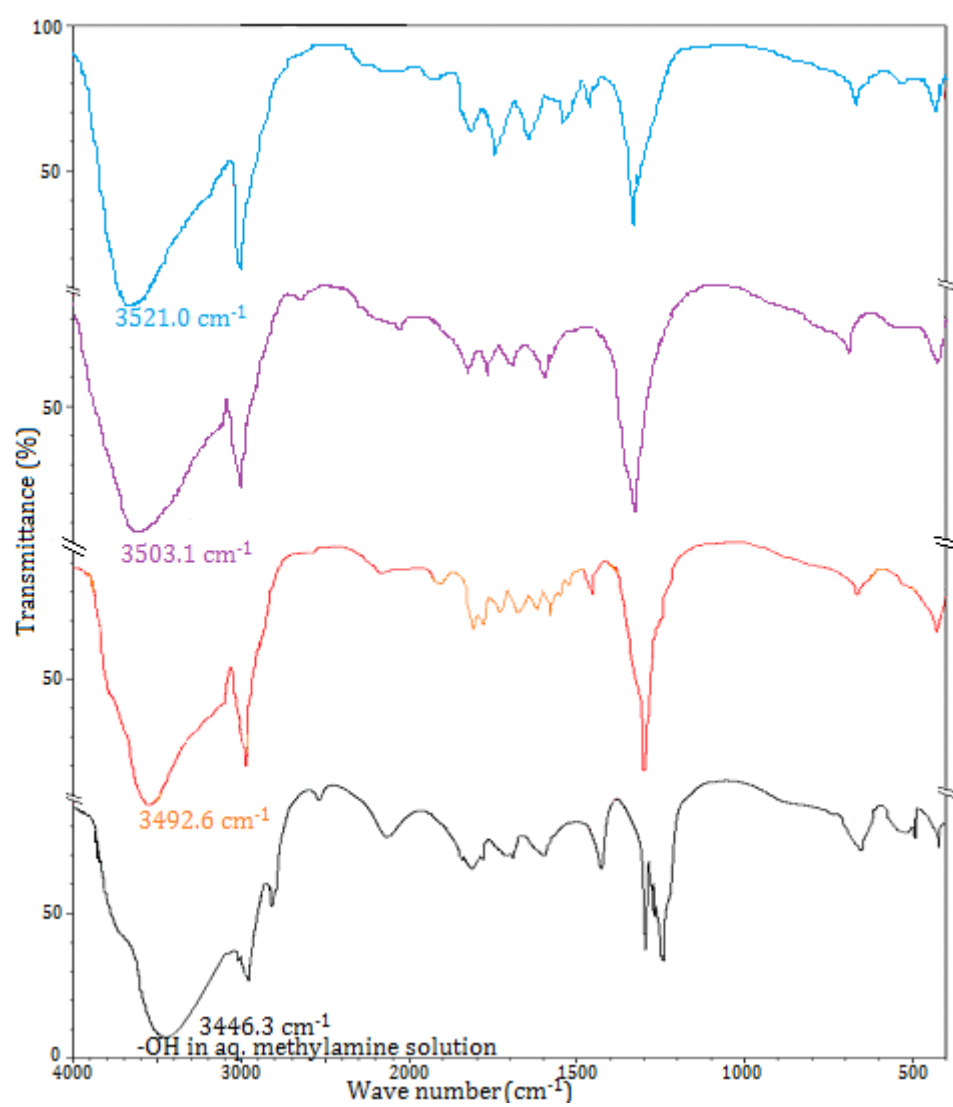


Figure S4.