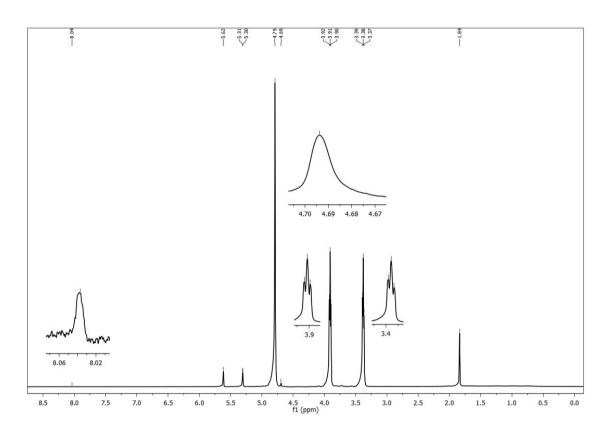
## Synthesis and Spectroscopic Characterization of Protic Tris(2-Hydroxyethyl)-Ammonium Ionic Liquids

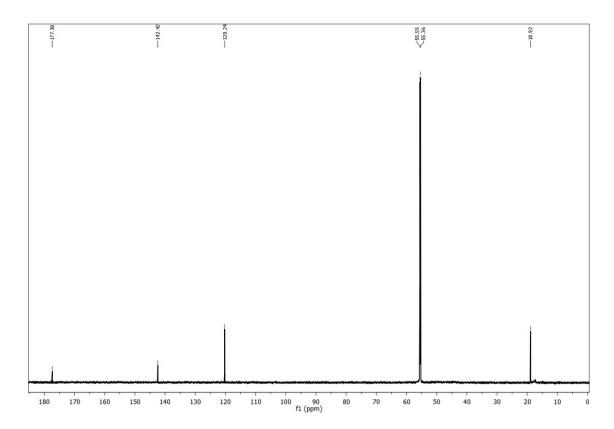
Hüseyin AKBAŞ<sup>1,\*</sup>

<sup>1</sup>Department of Chemistry, Tokat Gaziosmanpaşa University, 60250, Tokat, Turkey \*Corresponding author. E-mail:huseyin.akbas@gop.edu.tr

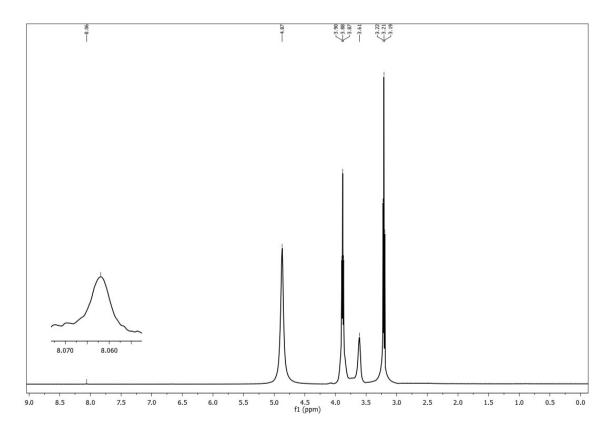
## **Supplementary Material**



**Figure S1.** The <sup>1</sup>H NMR spectrum of **PIL1**.



**Figure S2.** The <sup>13</sup>C NMR spectrum of **PIL1**.



**Figure S3.** The  $^1\text{H}$  NMR spectrum of **PIL2**.

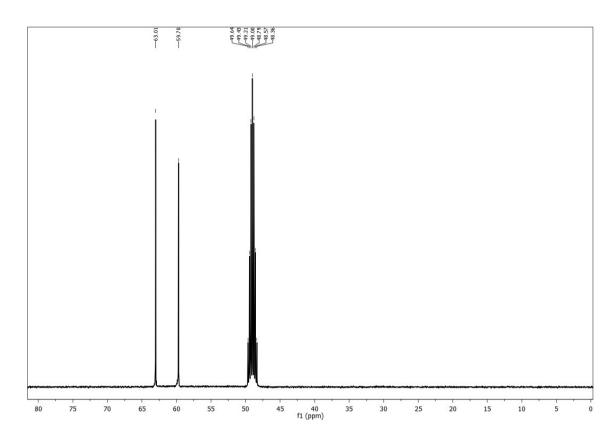
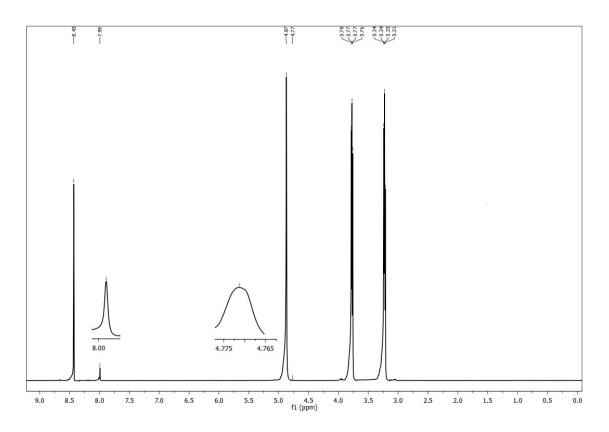
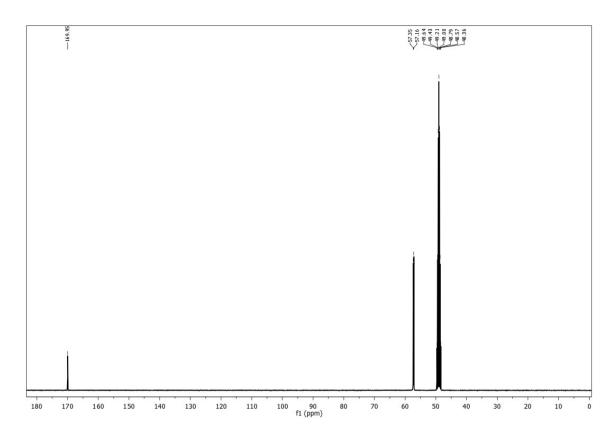


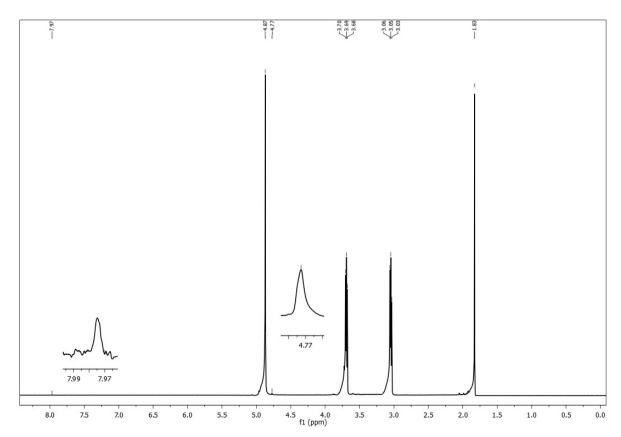
Figure S4. The <sup>13</sup>C NMR spectrum of PIL2.



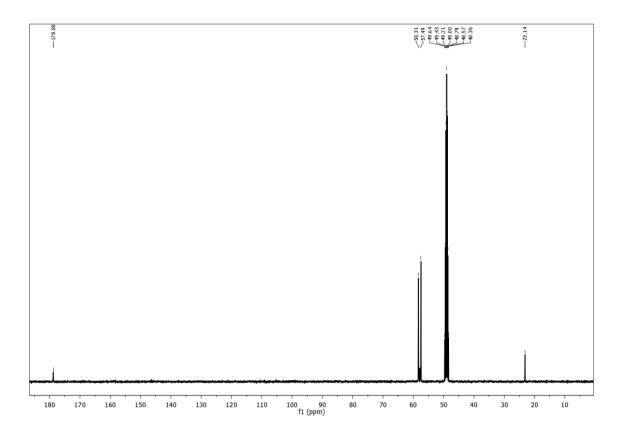
**Figure S5.** The  $^1\mathrm{H}$  NMR spectrum of **PIL3**.



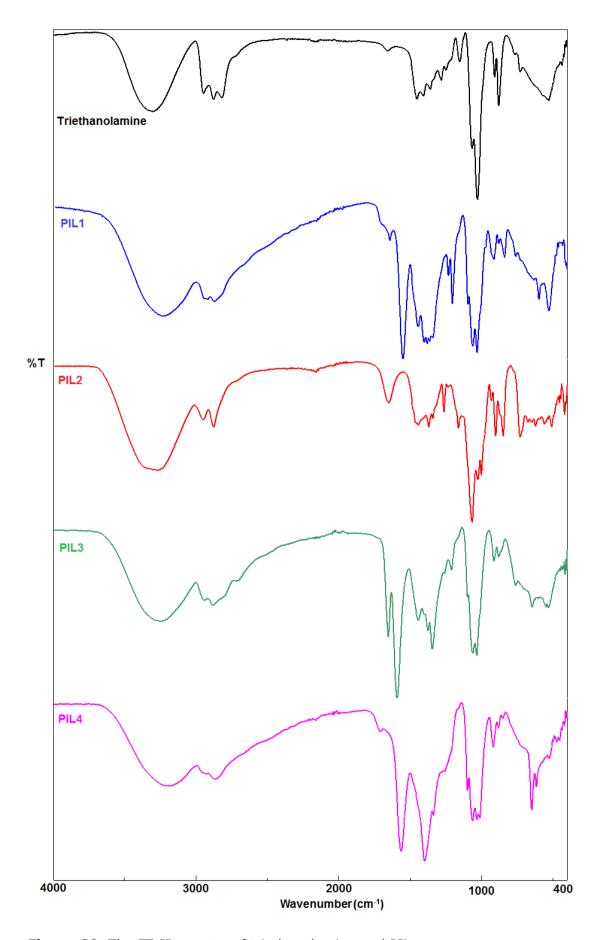
**Figure S6.** The  $^{13}$ C NMR spectrum of **PIL3**.



**Figure S7.** The  $^1\text{H}$  NMR spectrum of **PIL4**.



**Figure S8.** The <sup>1</sup>H NMR spectrum of **PIL4**.



**Figure S9.** The FT-IR spectra of triethanolamine and PILs.