

The  $^1\text{H}$  NMR spectra of the synthesized alkylammonium hydrosulfates were recorded with a 500 MHz Bruker spectrometer in  $\text{DMSO-d}_6$  calibrated with tetramethylsilane (TMS) as the internal reference. The detailed  $^1\text{H}$  NMR spectra of the synthesized alkylammonium hydrosulfates shown in Fig.1-6. TG curves of these alkylammonium hydrosulfates shown in Fig.7.

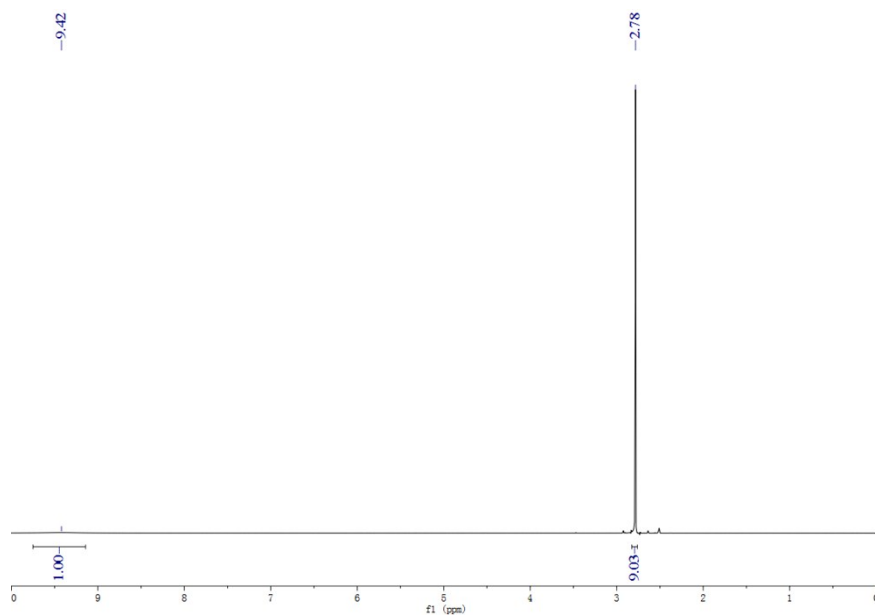


Fig.1 Trimethylammonium sulfate  $[\text{Me}_3\text{NH}][\text{HSO}_4]$

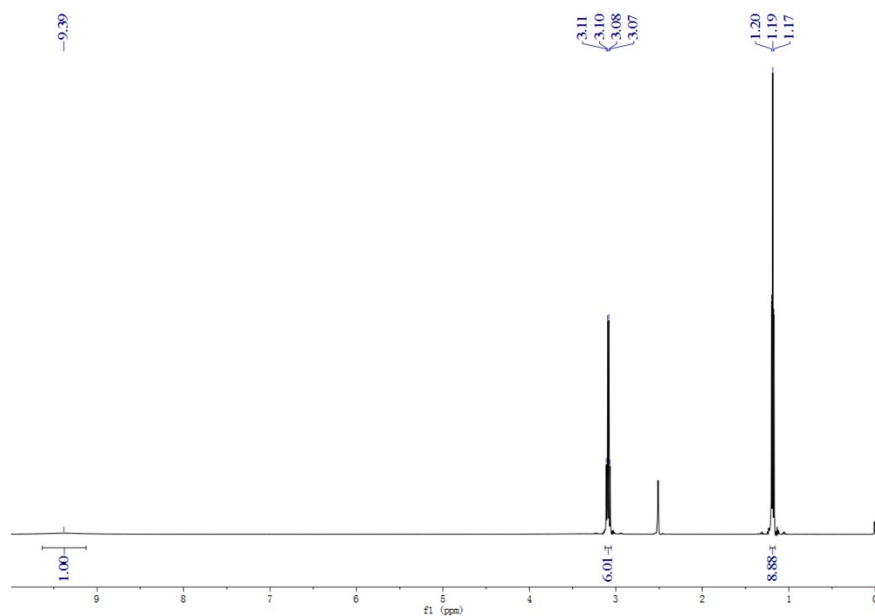


Fig. 2 Triethylammonium sulfate  $[\text{Et}_3\text{NH}][\text{HSO}_4]$

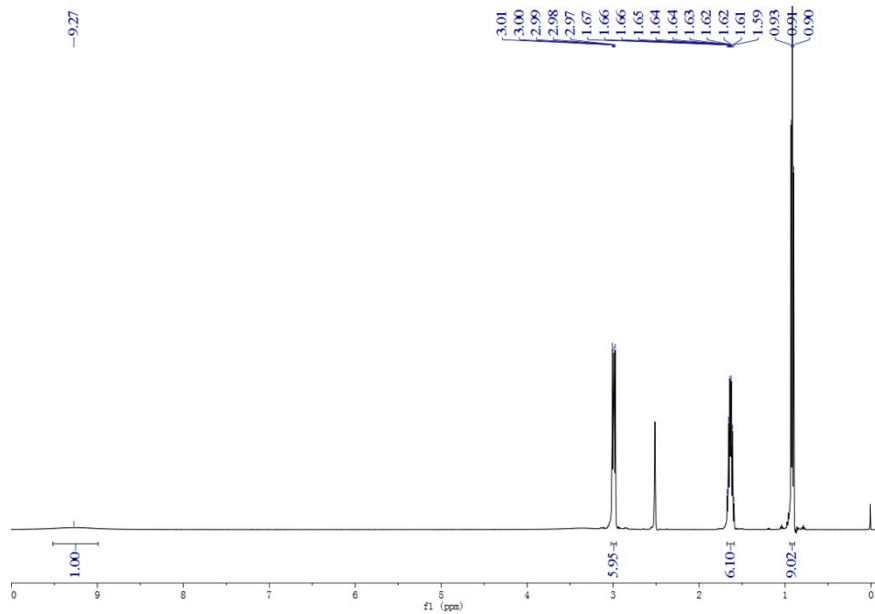


Fig.3 Tripropylammonium sulfate [Pr<sub>3</sub>NH][HSO<sub>4</sub>]

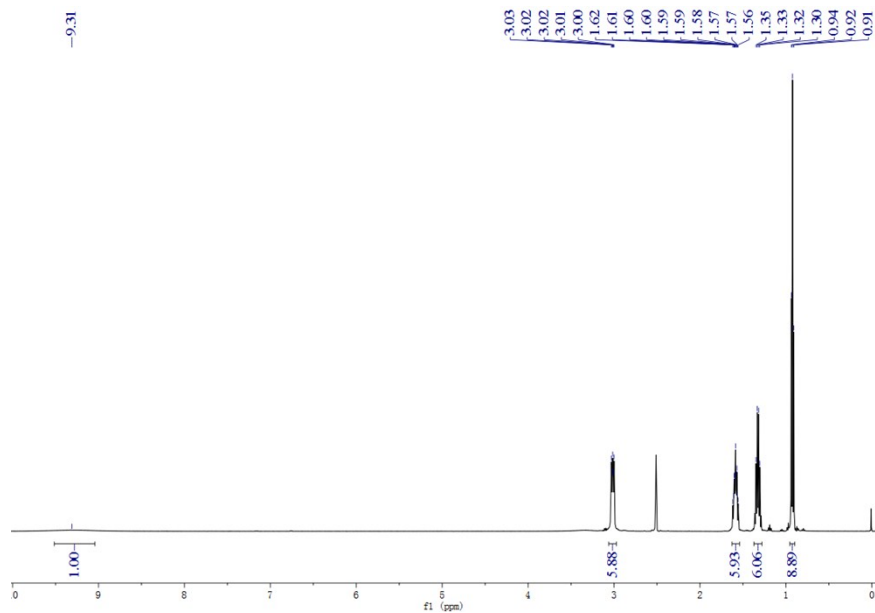


Fig.4 Tributylammonium sulfate [Bu<sub>3</sub>NH][HSO<sub>4</sub>]

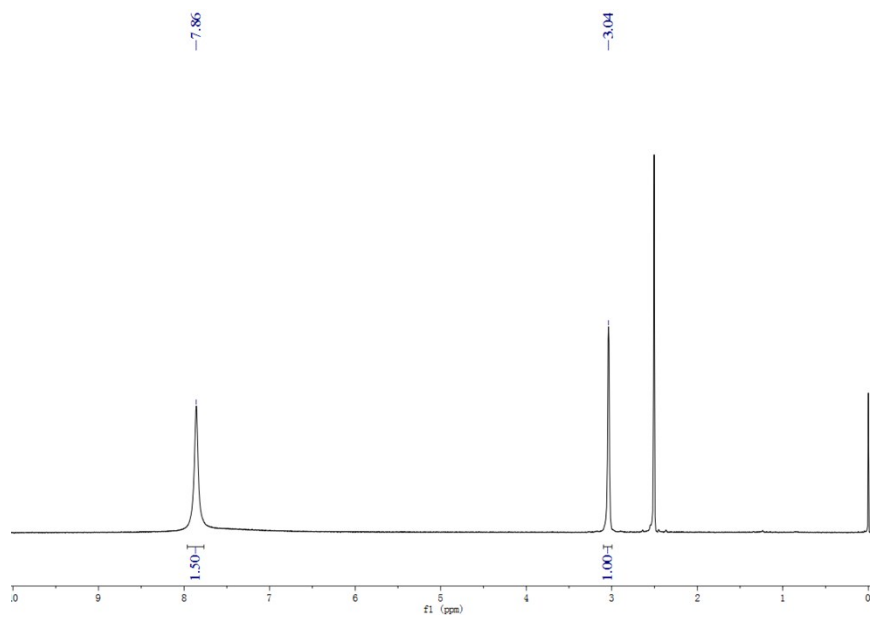


Fig.5 Ethane-1,2-diaminium hydrogen sulfate  $[H_3NCH_2CH_2NH_3][HSO_4]_2$

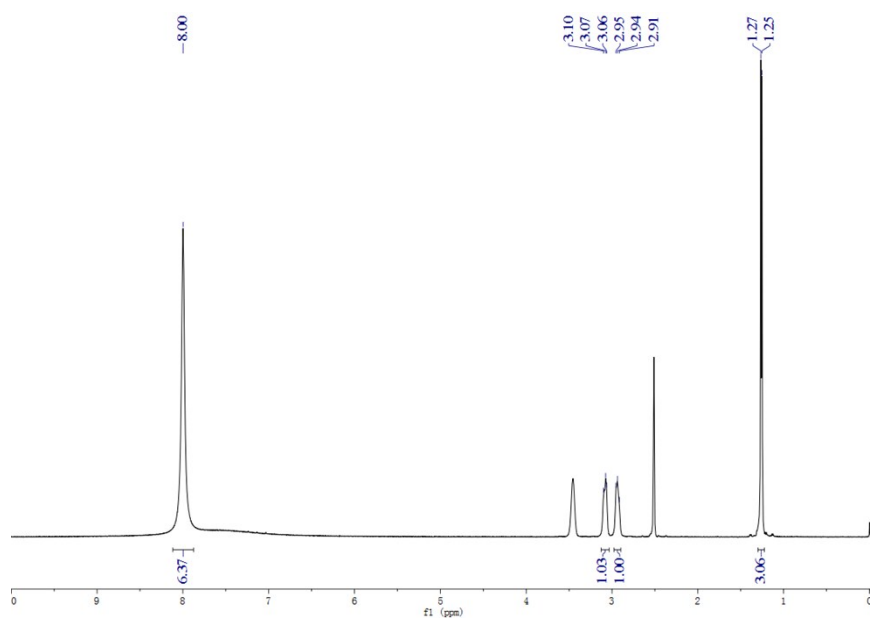


Fig.6 Propane-1, 2-diaminium hydrogen sulfate  $[H_3NCH_2CH(CH_3)NH_3][HSO_4]_2$

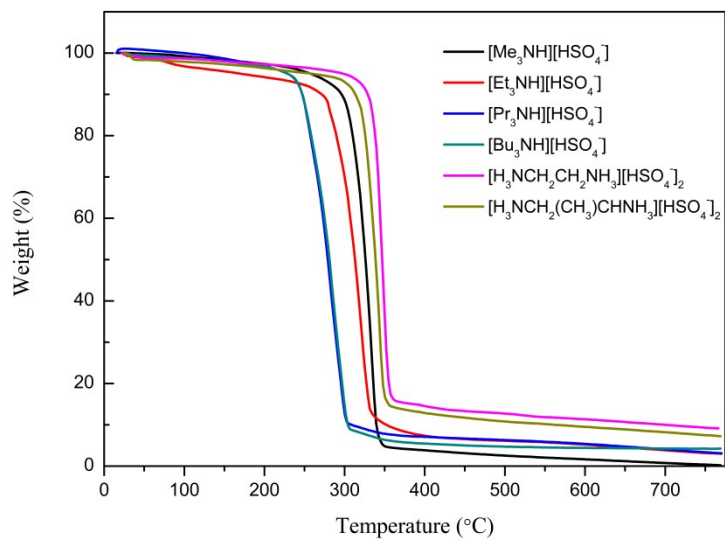


Fig.7 TG curves of these alkylammonium hydrosulfates