

Fig.1 ^1H NMR

The structure of $[\text{C}_4\text{mim}][\text{Gly}]$ IL was confirmed by ^1H NMR (Varian XL-300 ,DMSO, δ/ppm relative to TMS) : 0.866-0.915 (t, 3H, $J=7.35\text{Hz}$), 1.205-1.279(m,2H, $J=7.4\text{Hz}$), 1.738-1.787 (m,2H, $J=7.35\text{Hz}$), 2.721(s,2H), 2.998(d,2H), 3.886(s,2H), 4.179-4.227(q,2H $J=7.2\text{Hz}$), 7.753 (s,1H), 7.704 (s,1H), 9.868(s,1H).(see Figure 1). Elemental analysis. Calcd for $\text{C}_{10}\text{H}_{19}\text{N}_3\text{O}_2 \cdot 1.3\text{H}_2\text{O}$: C, 50.74 ; H, 9.20;N, 17.75; O, 22.31. Found: C,51.01 ; H,9.24 ; N, 17.55;O,22.20.

Table 1 The NMR spectrum δ_{H} (300 MHz, DMSO) of BMIGly

Chemical shift	Hydrogen number	Radical
0.866-0.915 (t, $J=7.35\text{Hz}$)	3	$\text{NCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_3$
1.205-1.279(m, $J=7.4\text{Hz}$)	2	CH_2CH_3
1.738-1.787 (m, $J=7.35\text{Hz}$)	2	$\text{CH}_2\text{CH}_2\text{CH}_3$
2.721(s)	2	CH_2NH_2
2.998(d)	2	NH_2
3.886(s)	3	NCH_3
4.179-4.227(q, $J=7.2\text{Hz}$)	2	NCH_2
7.753 (s)	1	$\text{C}(4)\text{H}$
7.704 (s)	1	$\text{C}(5)\text{H}$
9.868(s)	1	$\text{C}(2)\text{H}$

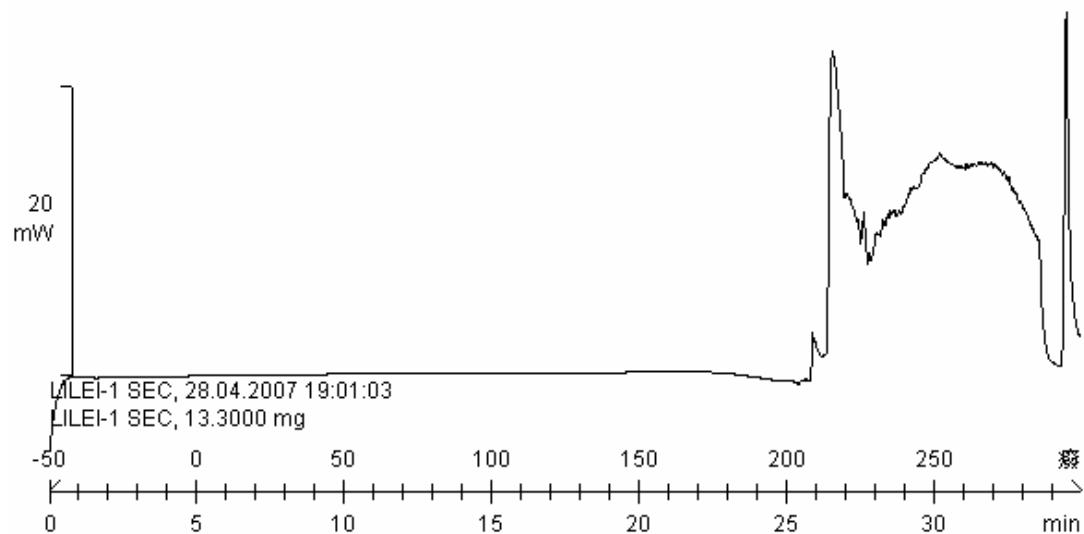


Fig.2 DSC

Calorimetric data of [C₄mim][Gly] IL were obtained with a differential scanning calorimeter DSC821e (Mettler-Toledo Co., Switzerland).

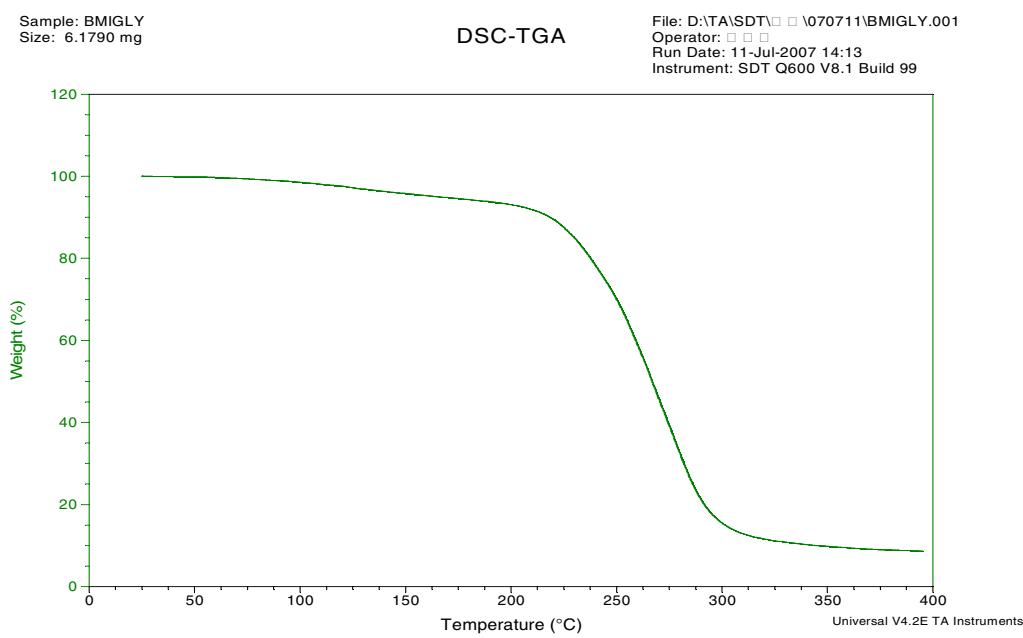


Fig.3 DSC-TGA of [C₄mim][Gly]

The thermal decomposition temperatures, T_d, 483 .5K, for the AAiIL was determined by thermogravimetric analysis using a TA Instruments (SDT) model Q600 thermogravimetric analyzer.