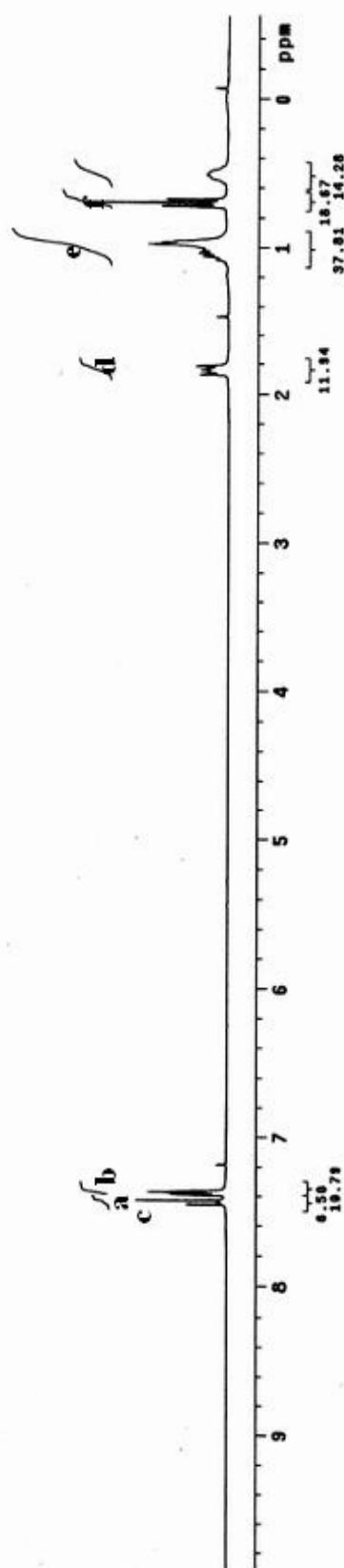
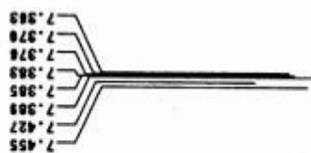
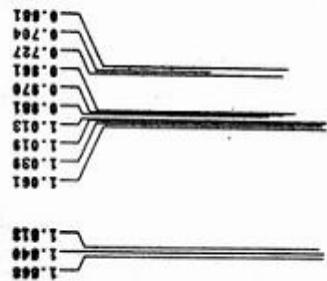
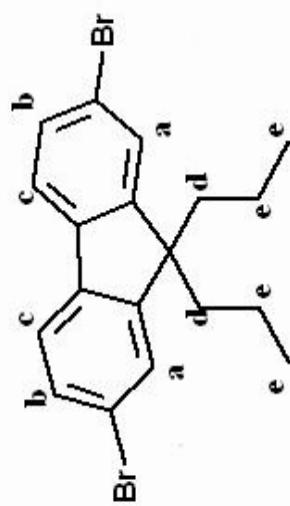
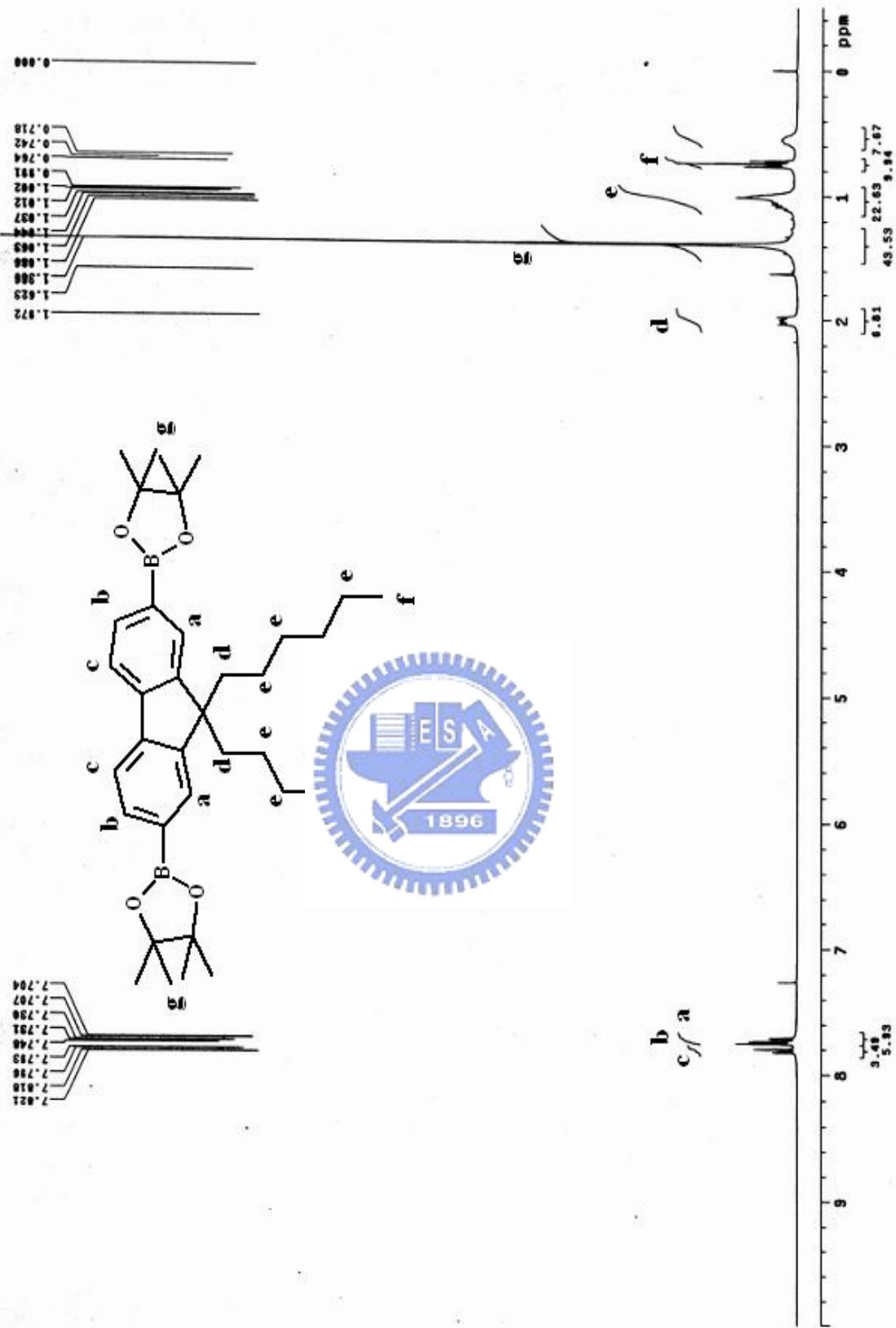


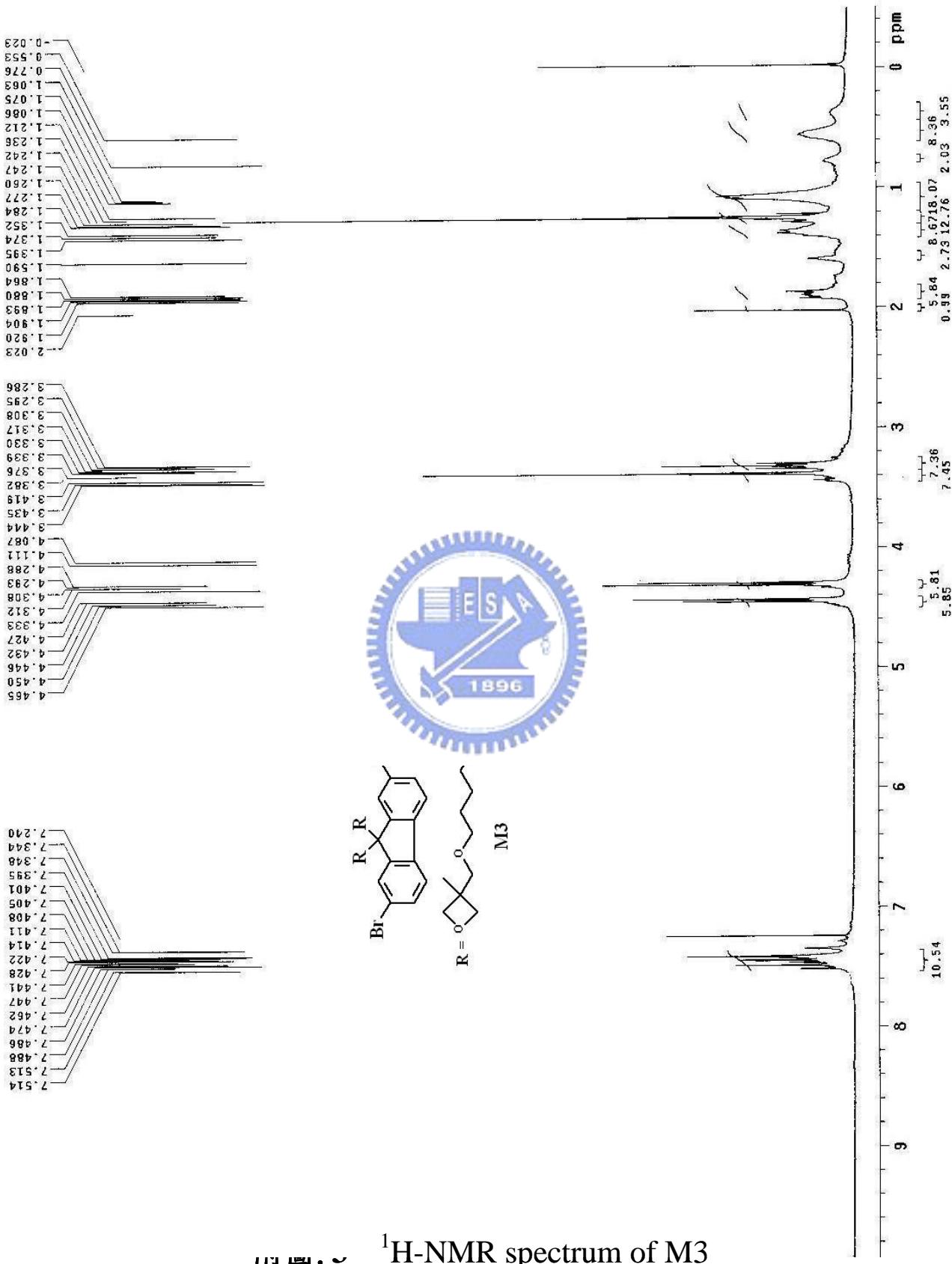
## 第七章 附圖

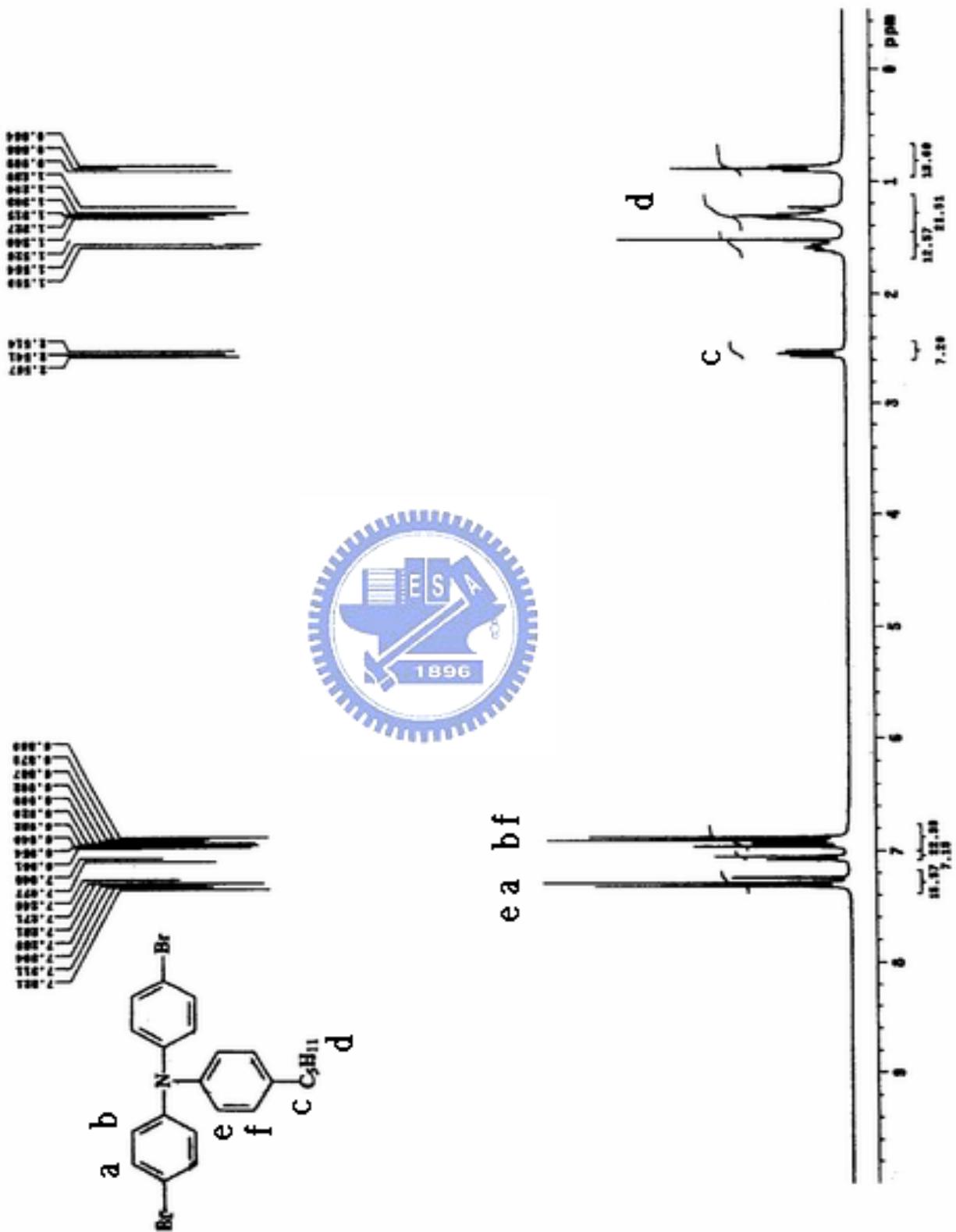


附圖. 1  $^1\text{H}$ -NMR spectrum of M1

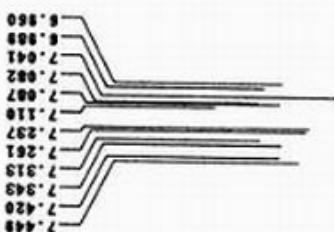
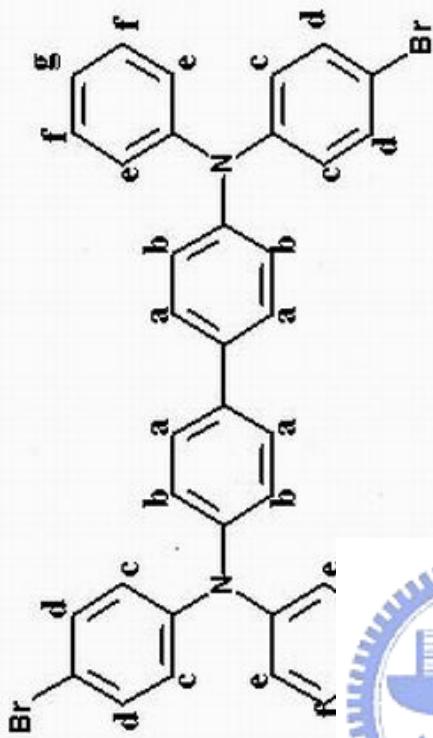


## 附圖.2 $^1\text{H}$ -NMR spectrum of M2





附圖. 4  $^1\text{H}$ -NMR spectrum of M4

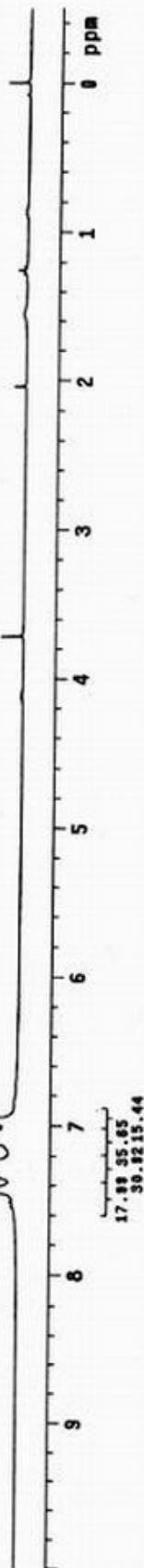


$\{\text{b}, \text{g}, \text{c}\}$

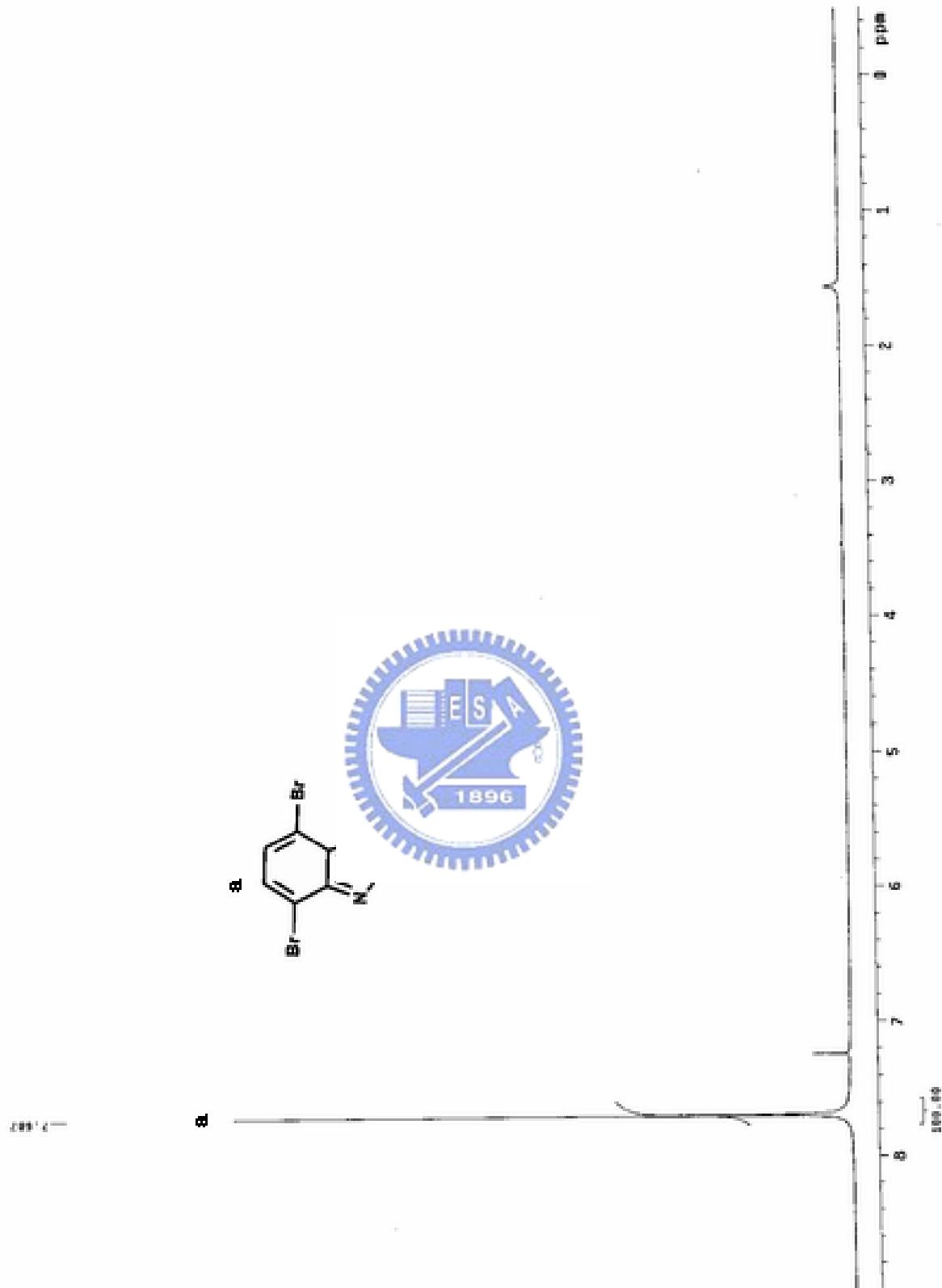
$\{\text{d}, \text{f}\}$

$\text{e}/\text{f}$

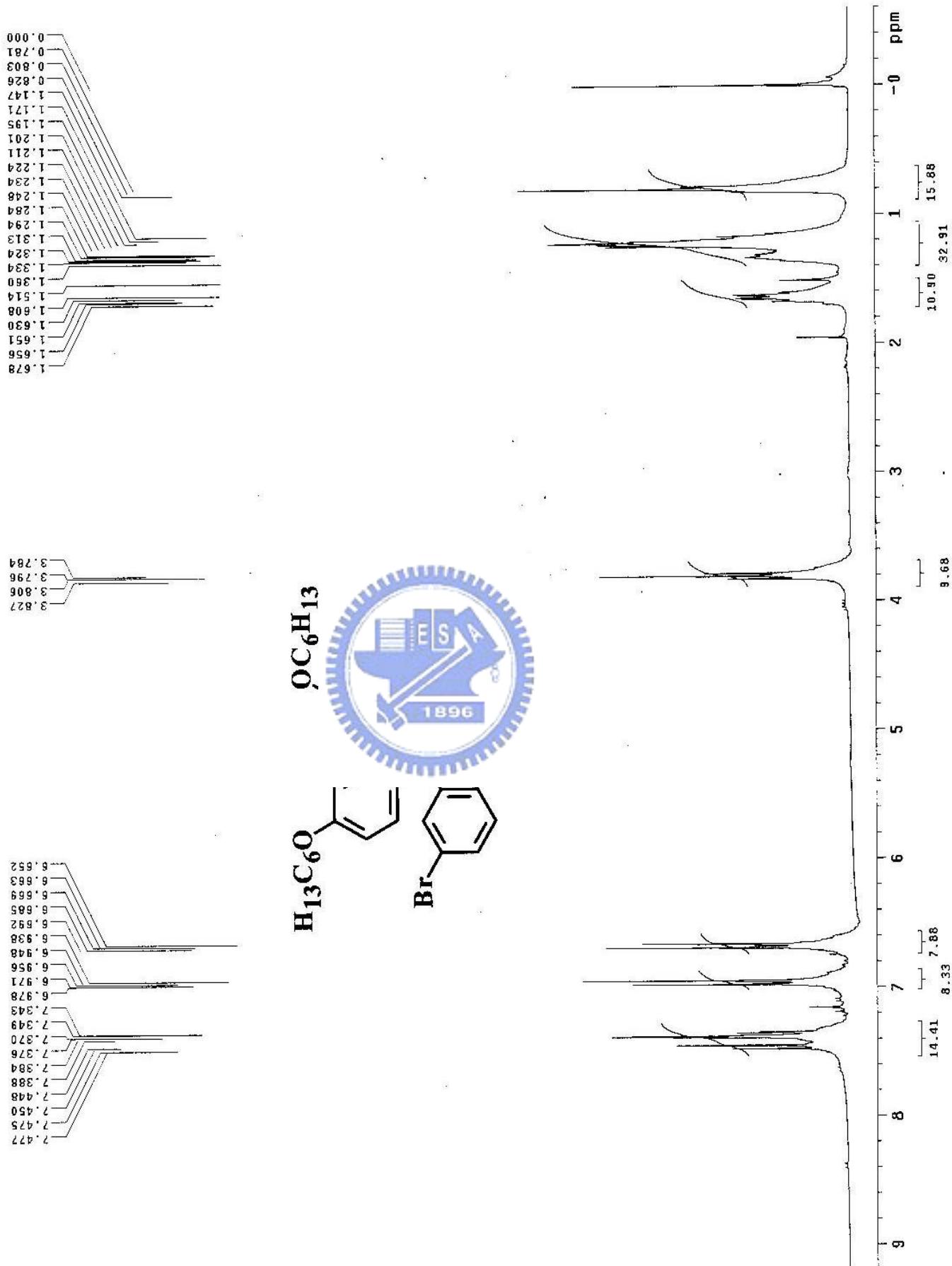
17.89  
35.65  
50.82  
15.44



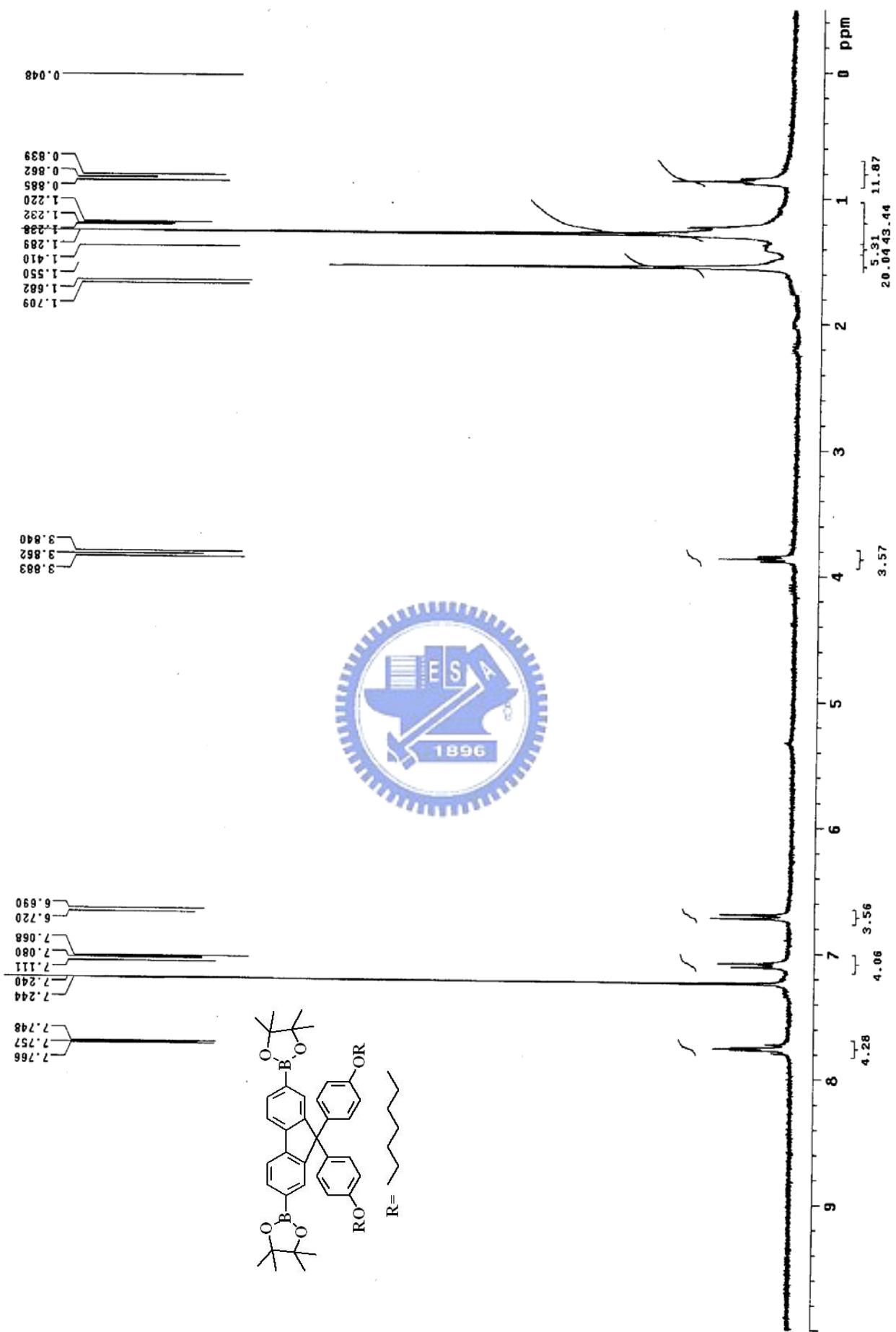
附圖. 5  $^1\text{H}$ -NMR spectrum of M5



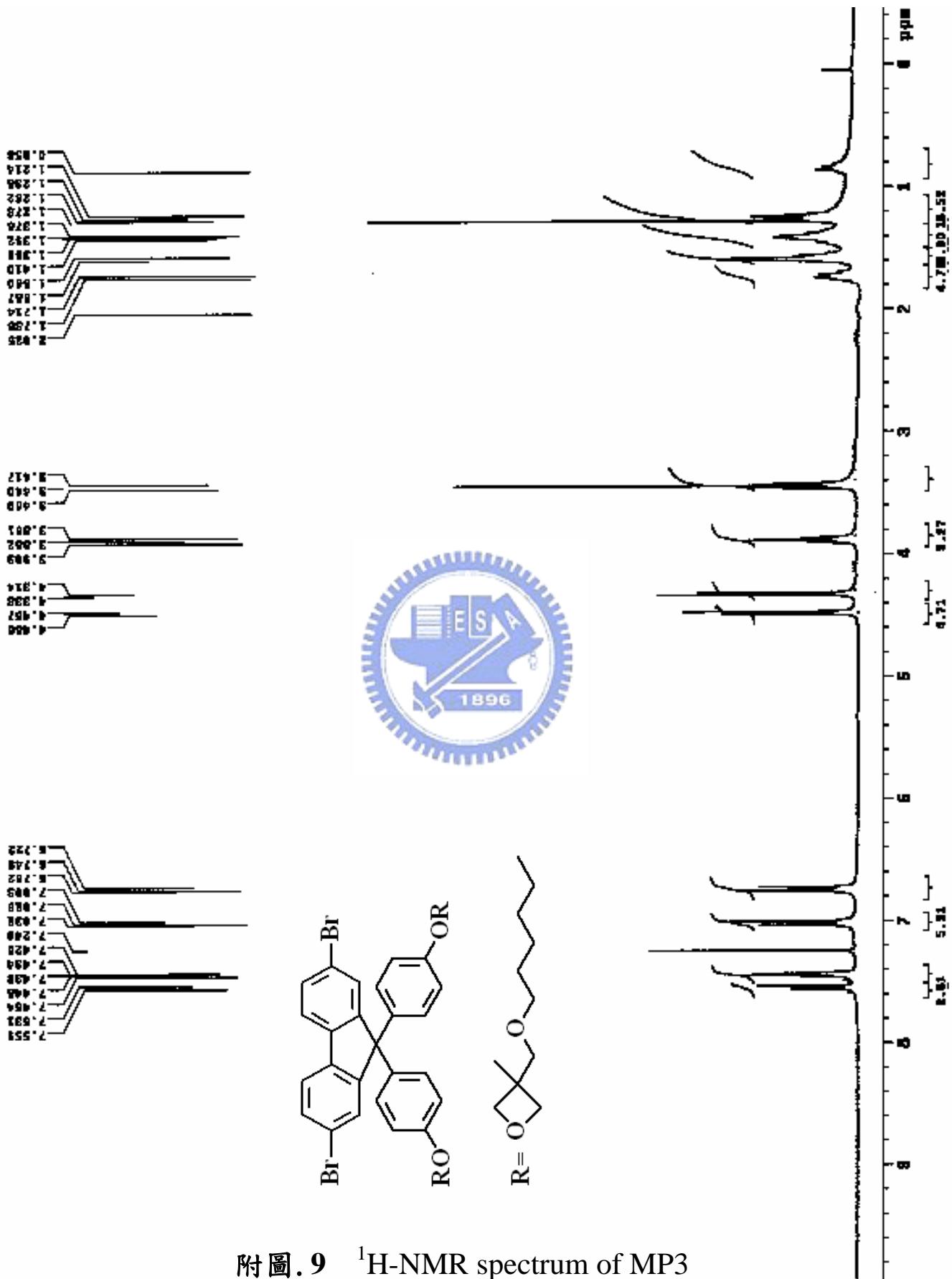
附圖. 6  $^1\text{H}$ -NMR spectrum of M6



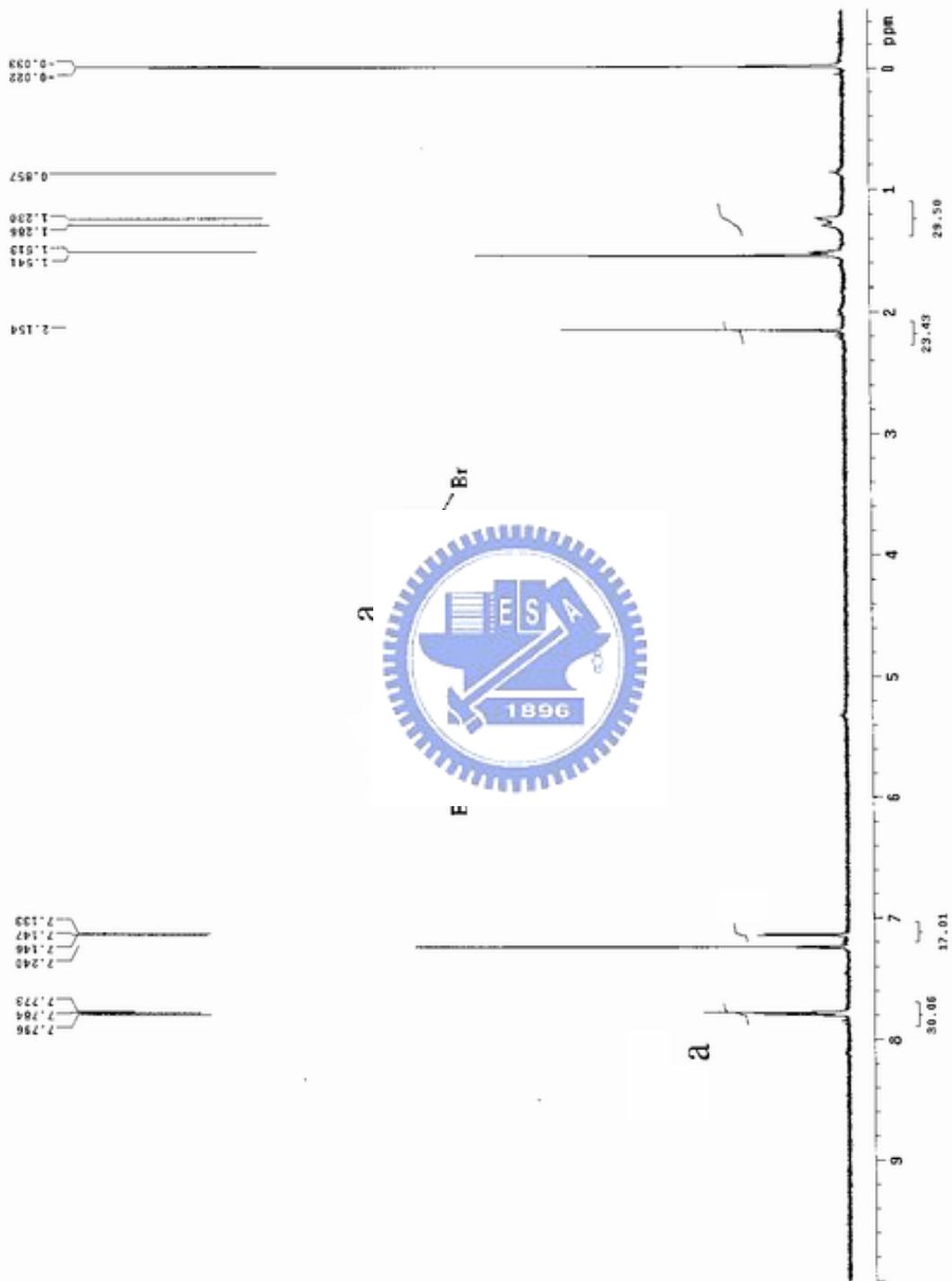
附圖.7  $^1\text{H}$ -NMR spectrum of MP1

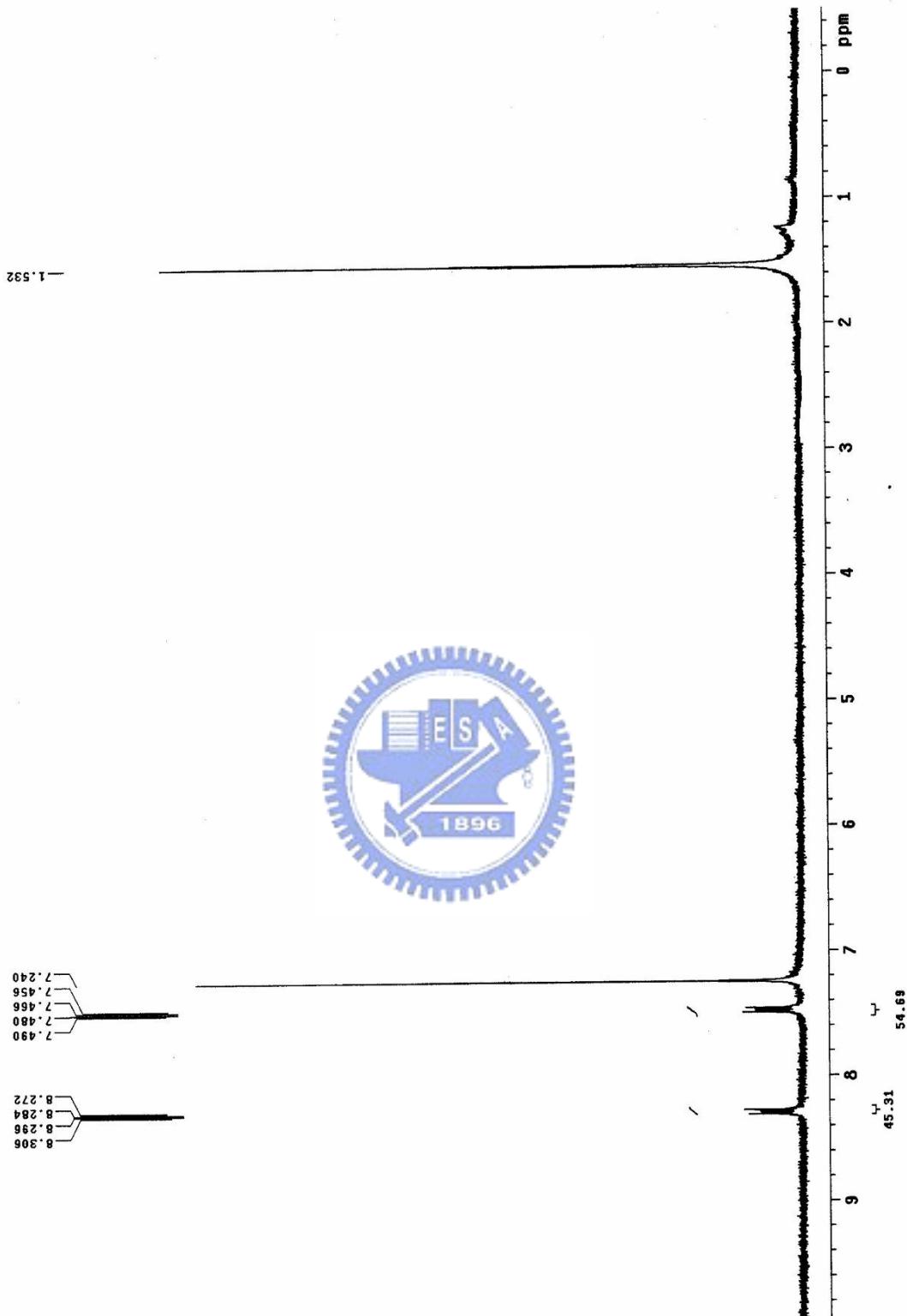


附圖.8  $^1\text{H}$ -NMR spectrum of MP2

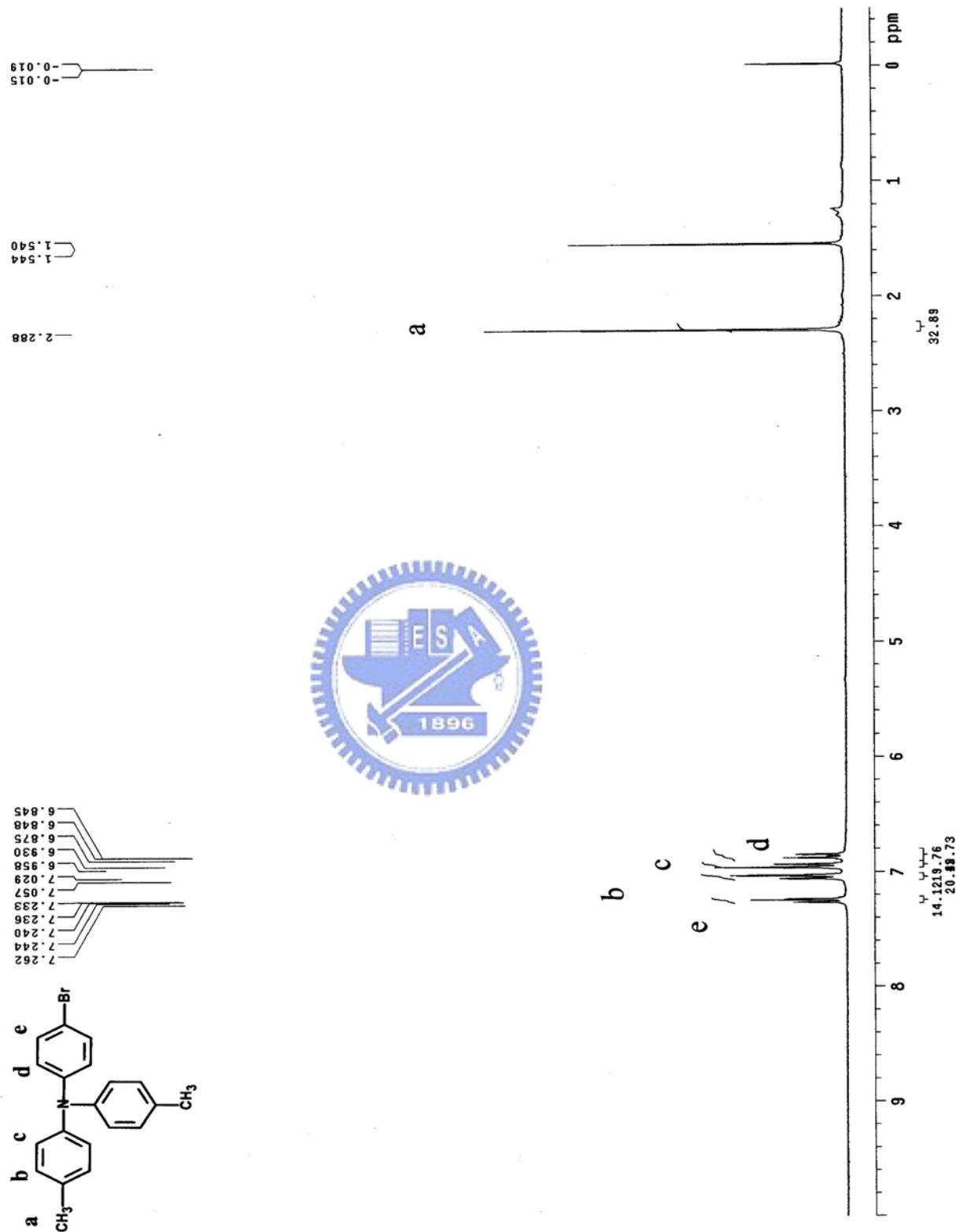


附圖.9  $^1\text{H}$ -NMR spectrum of MP3

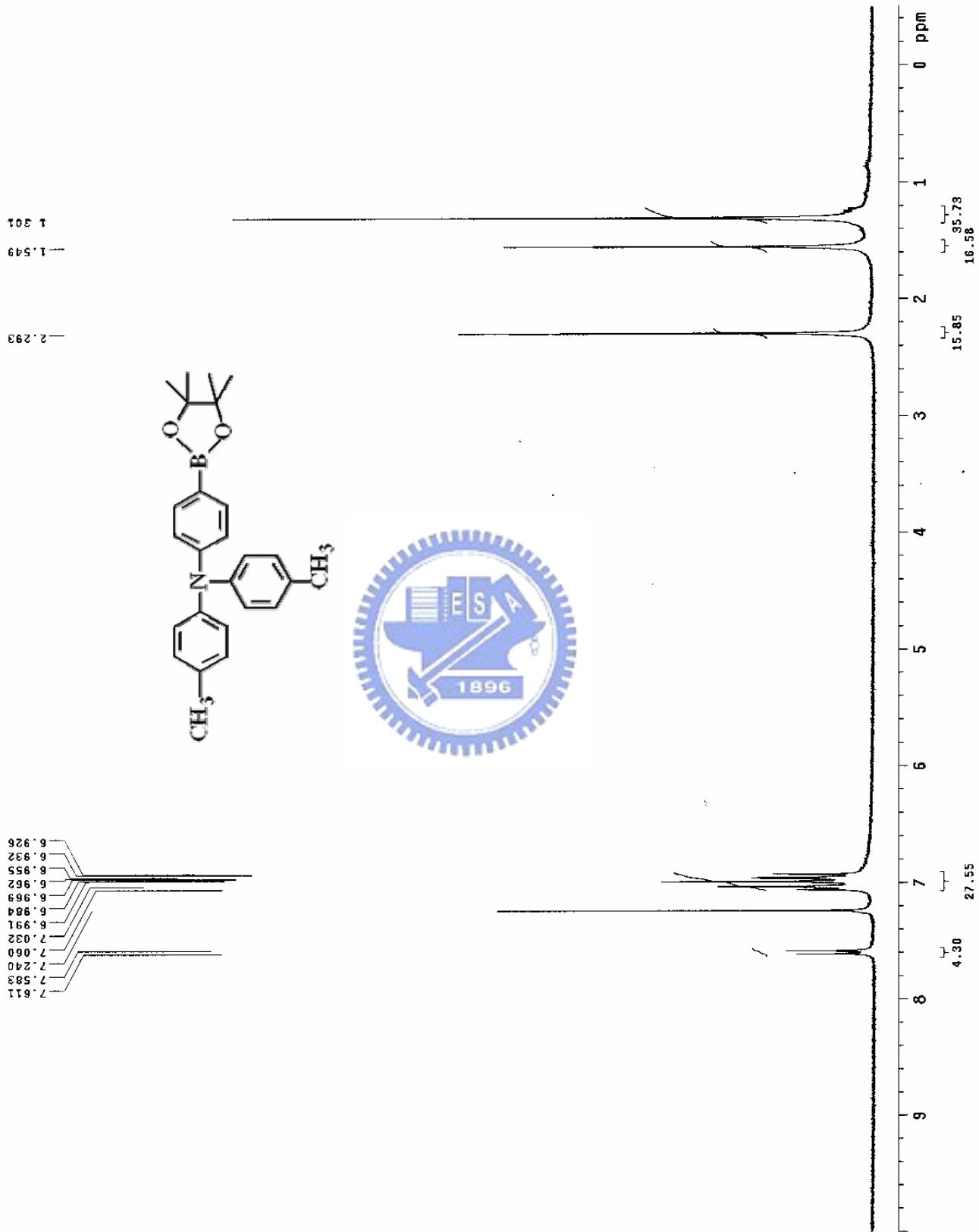




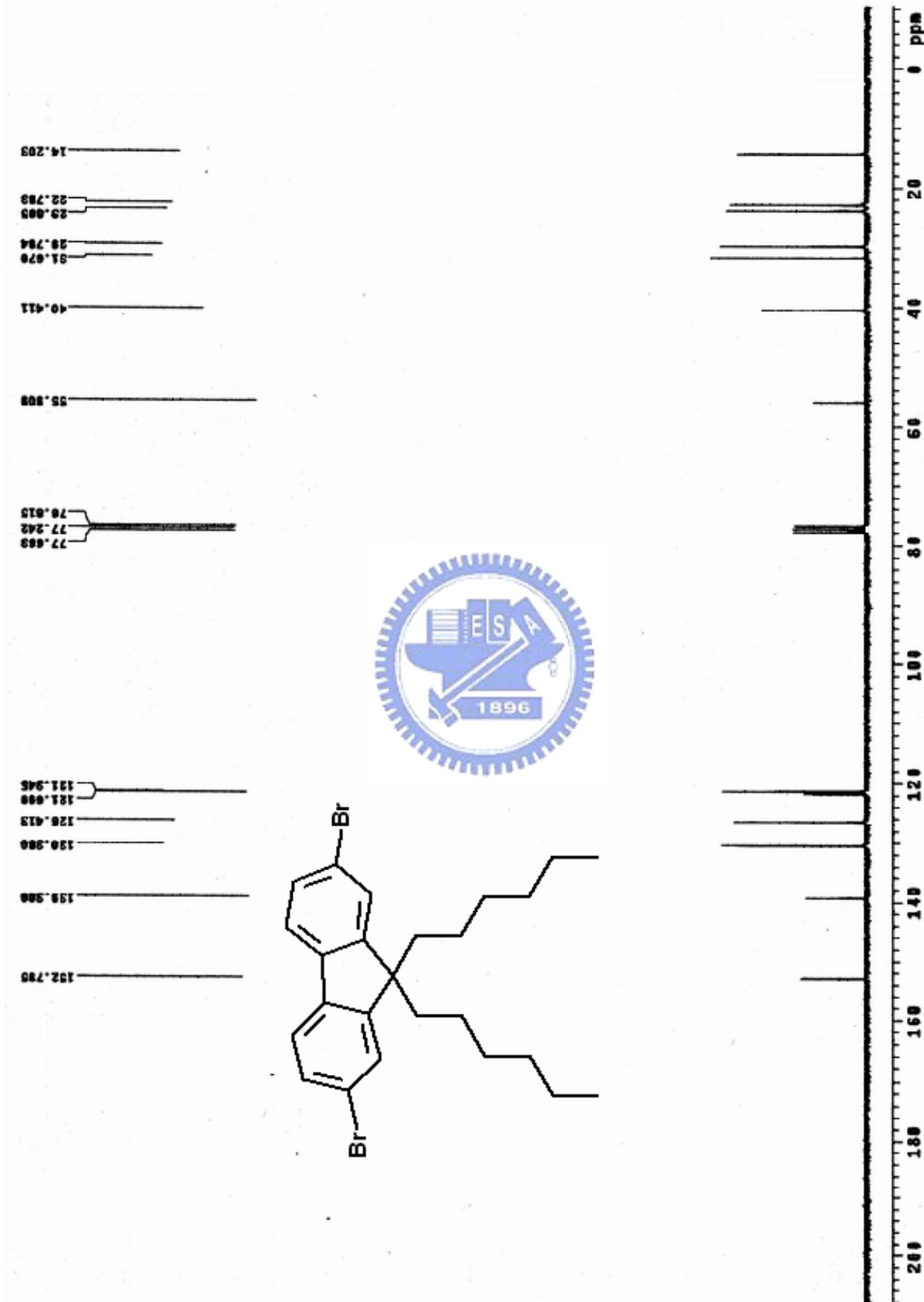
附圖. 11  $^1\text{H}$ -NMR spectrum of M8



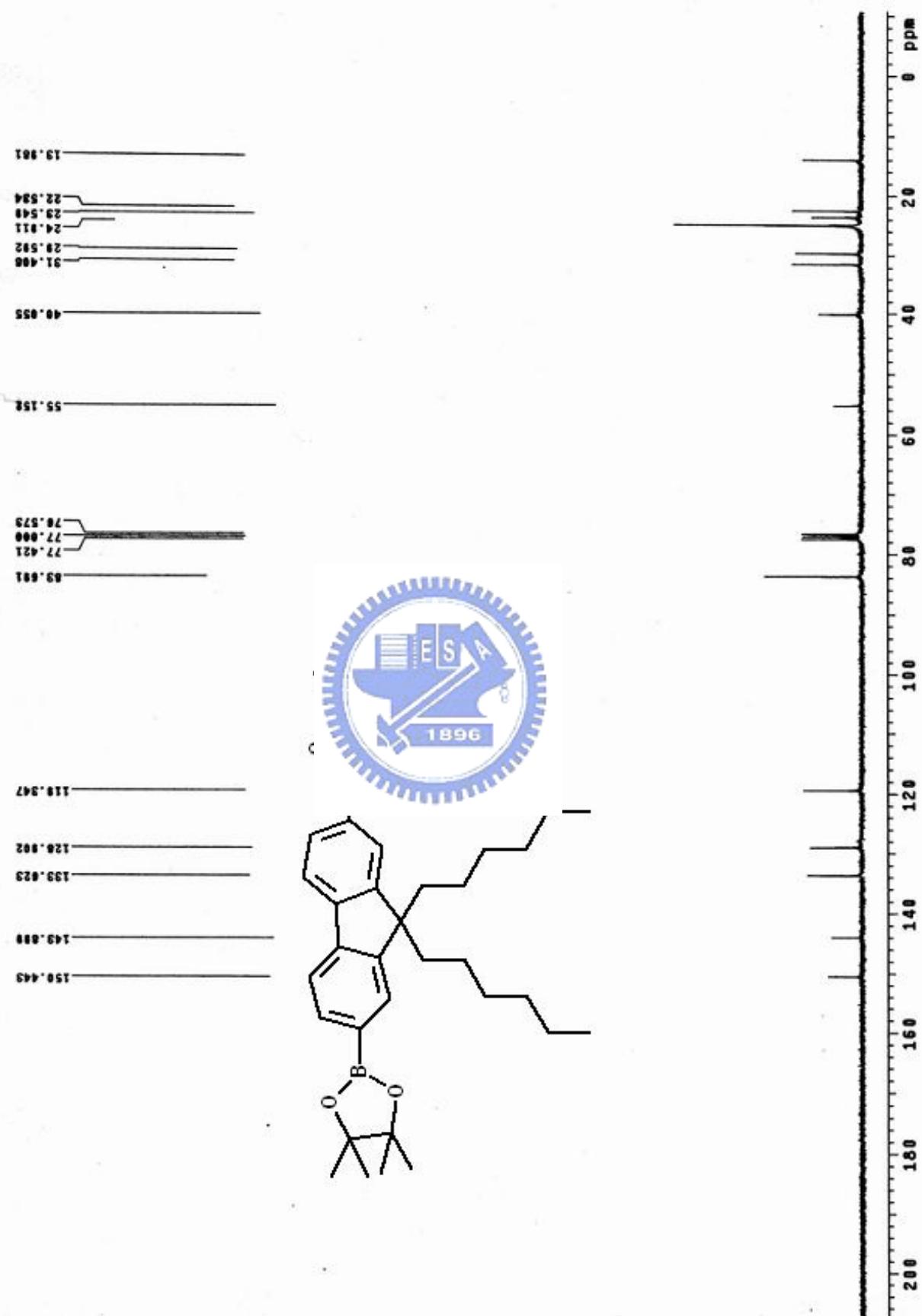
附圖. 12  $^1\text{H}$ -NMR spectrum of End Capping reagent 1



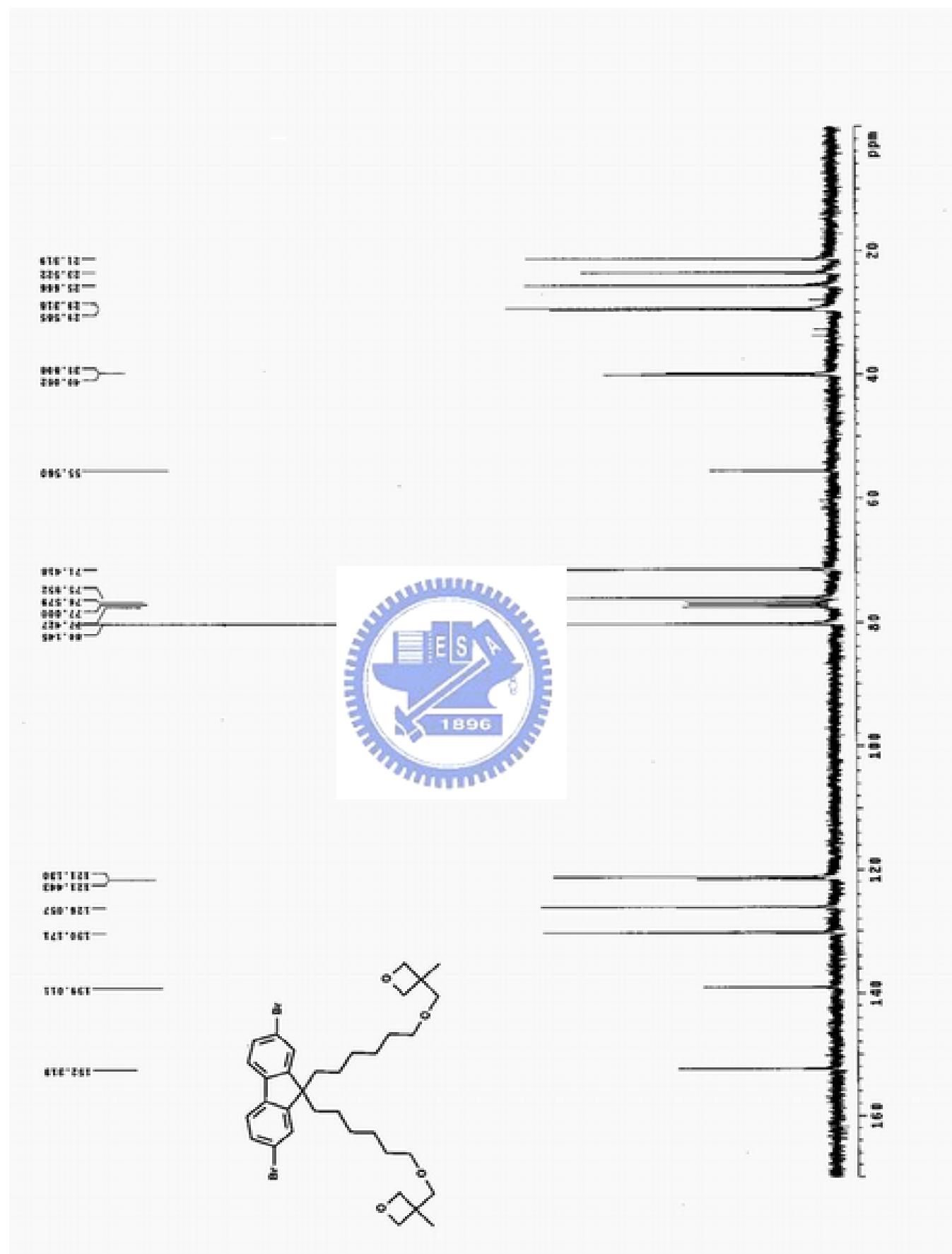
附圖. 13  $^1\text{H}$ -NMR spectrum of End Capping reagent 2



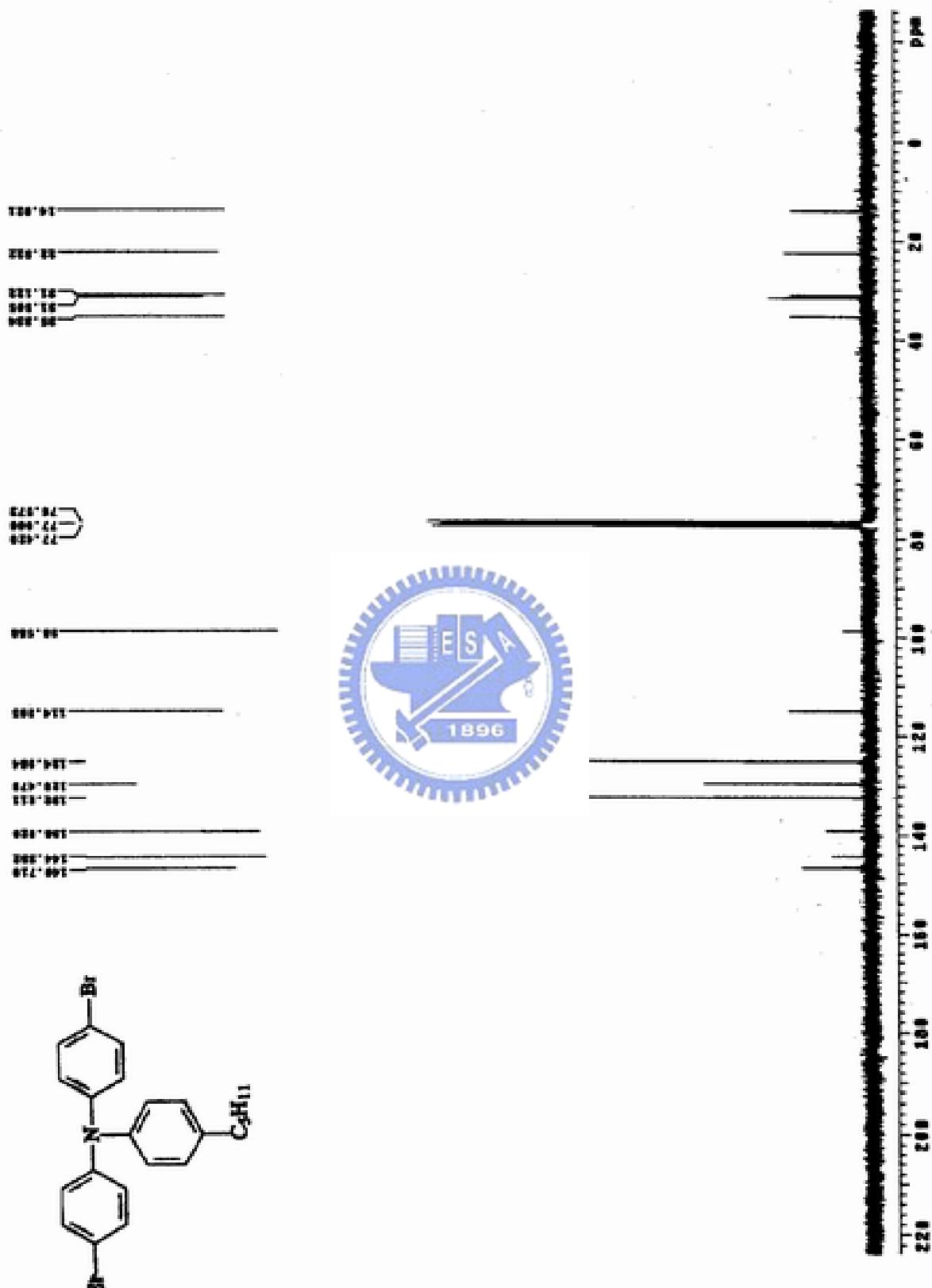
附圖. 14  $^{13}\text{C}$ -NMR spectrum of M1



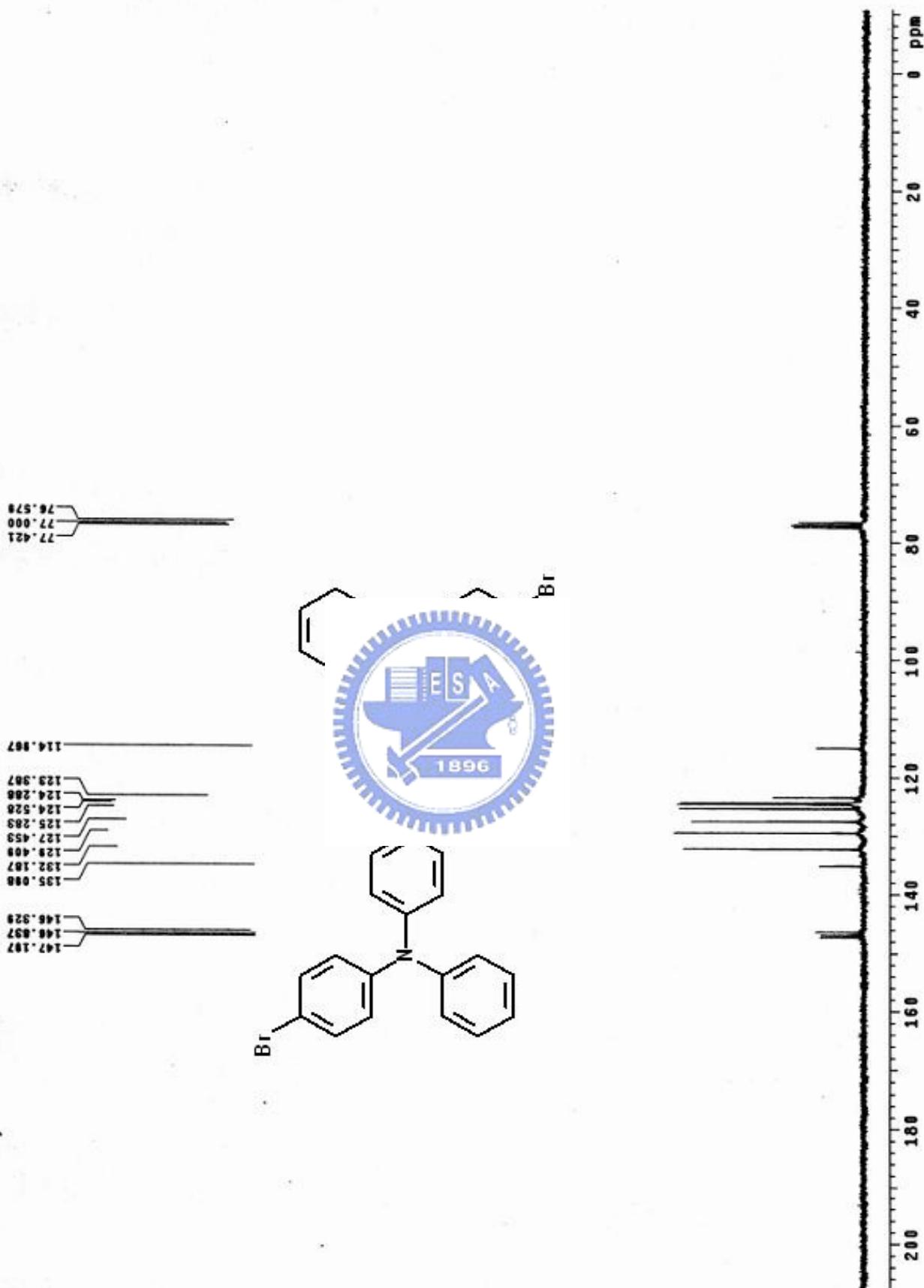
附圖. 15  $^{13}\text{C}$ -NMR spectrum of M2



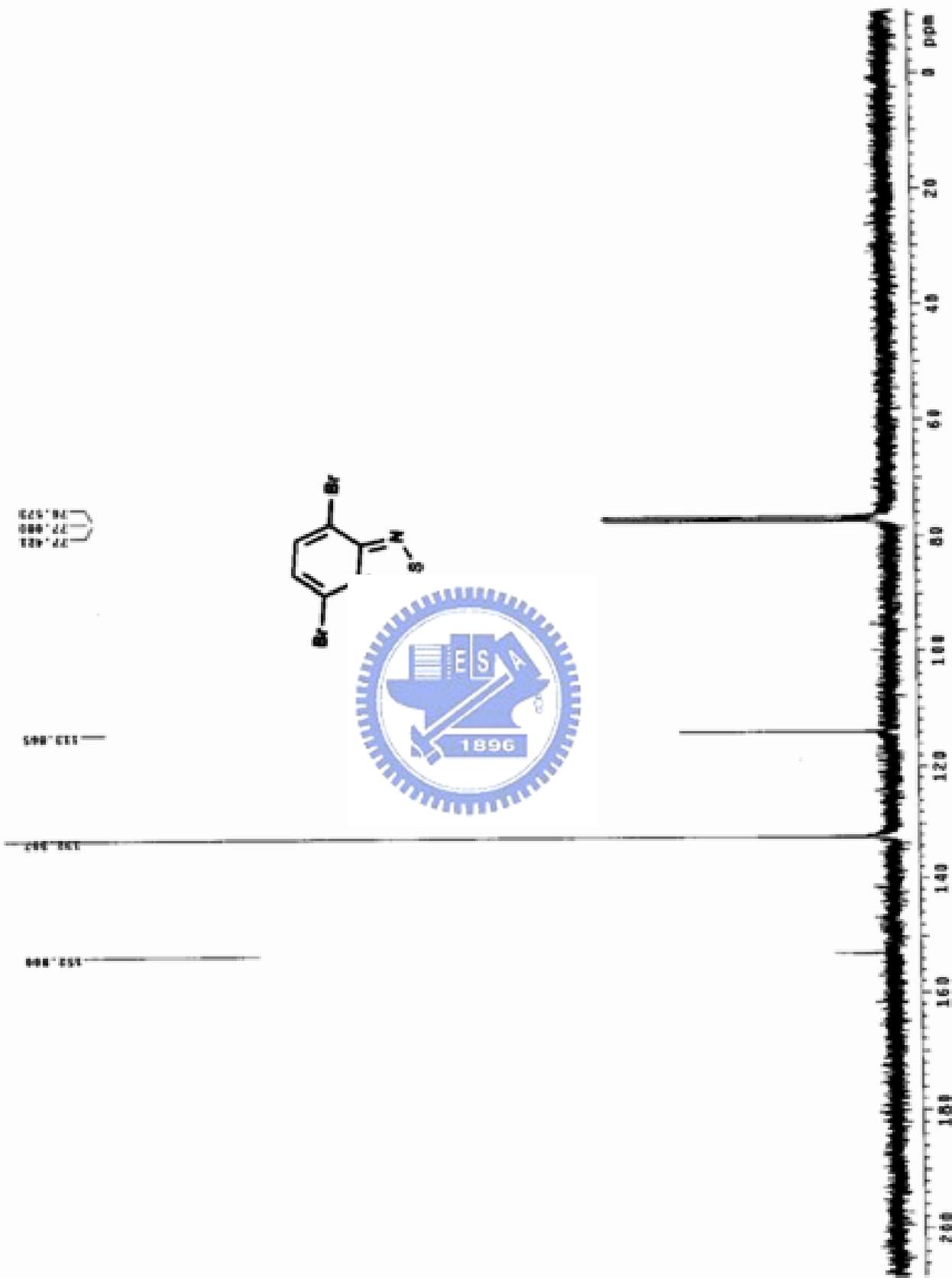
附圖. 16  $^{13}\text{C}$ -NMR spectrum of M3



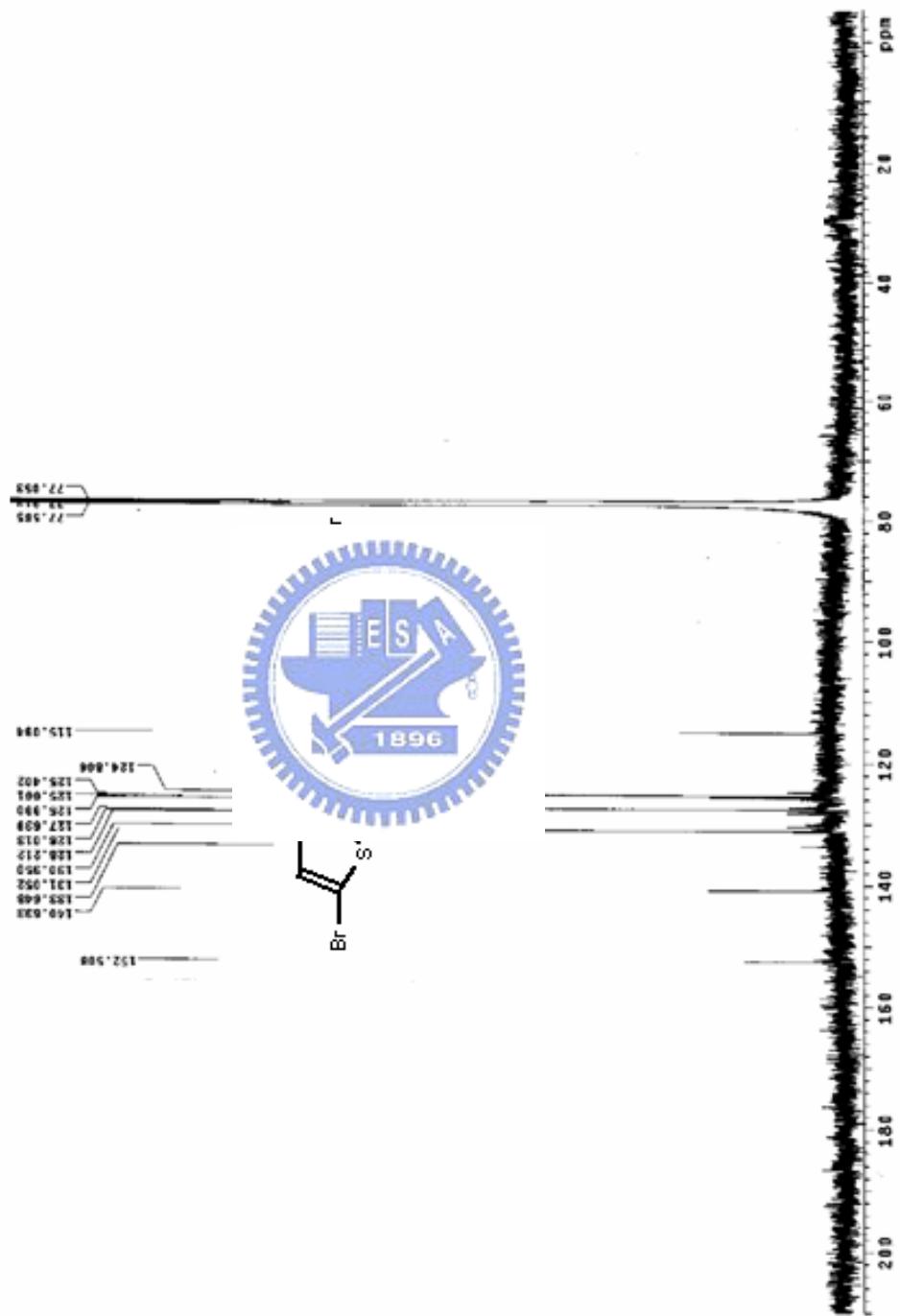
附圖. 17  $^{13}\text{C}$ -NMR spectrum of M4



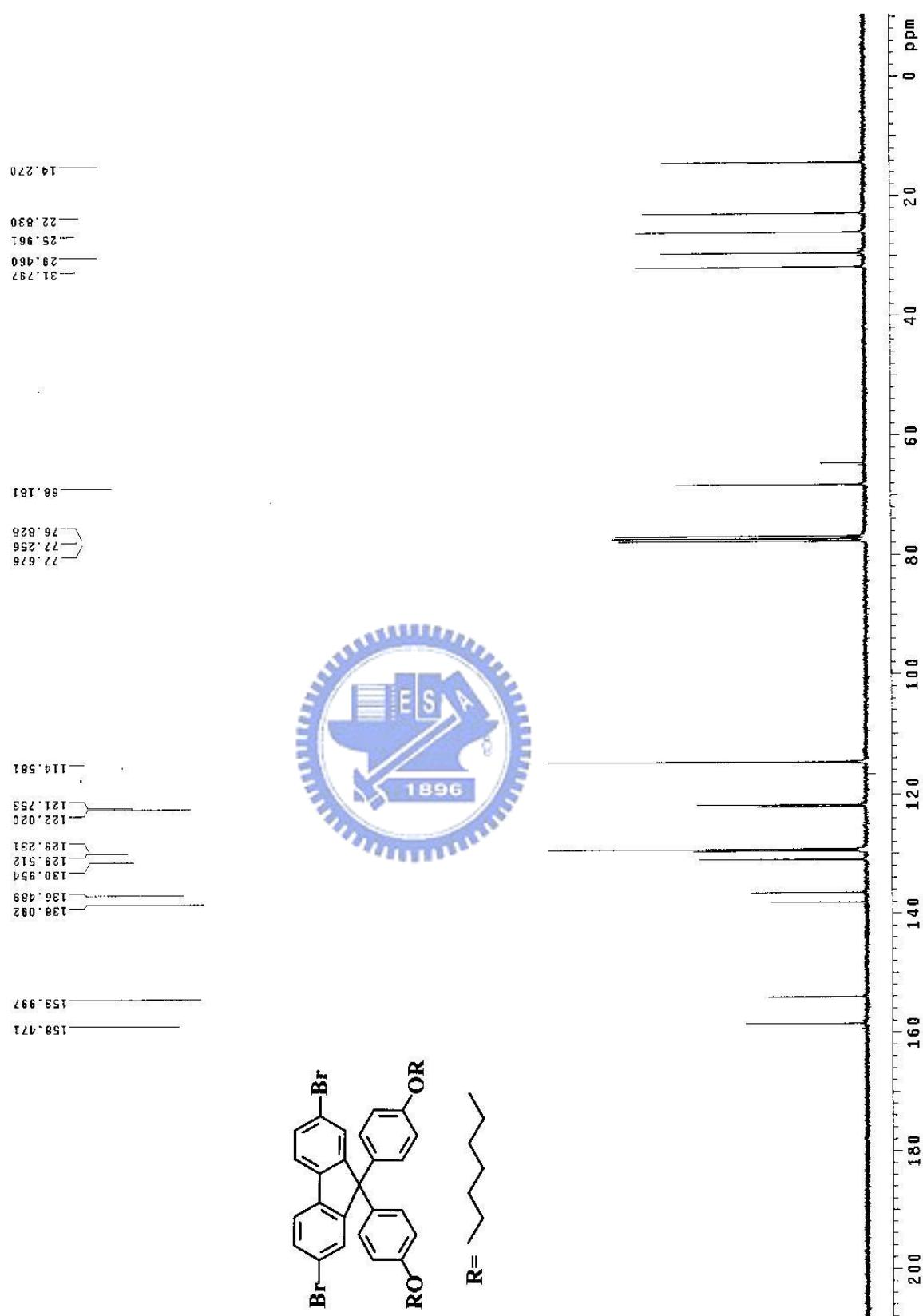
附圖. 18  $^{13}\text{C}$ -NMR spectrum of M5



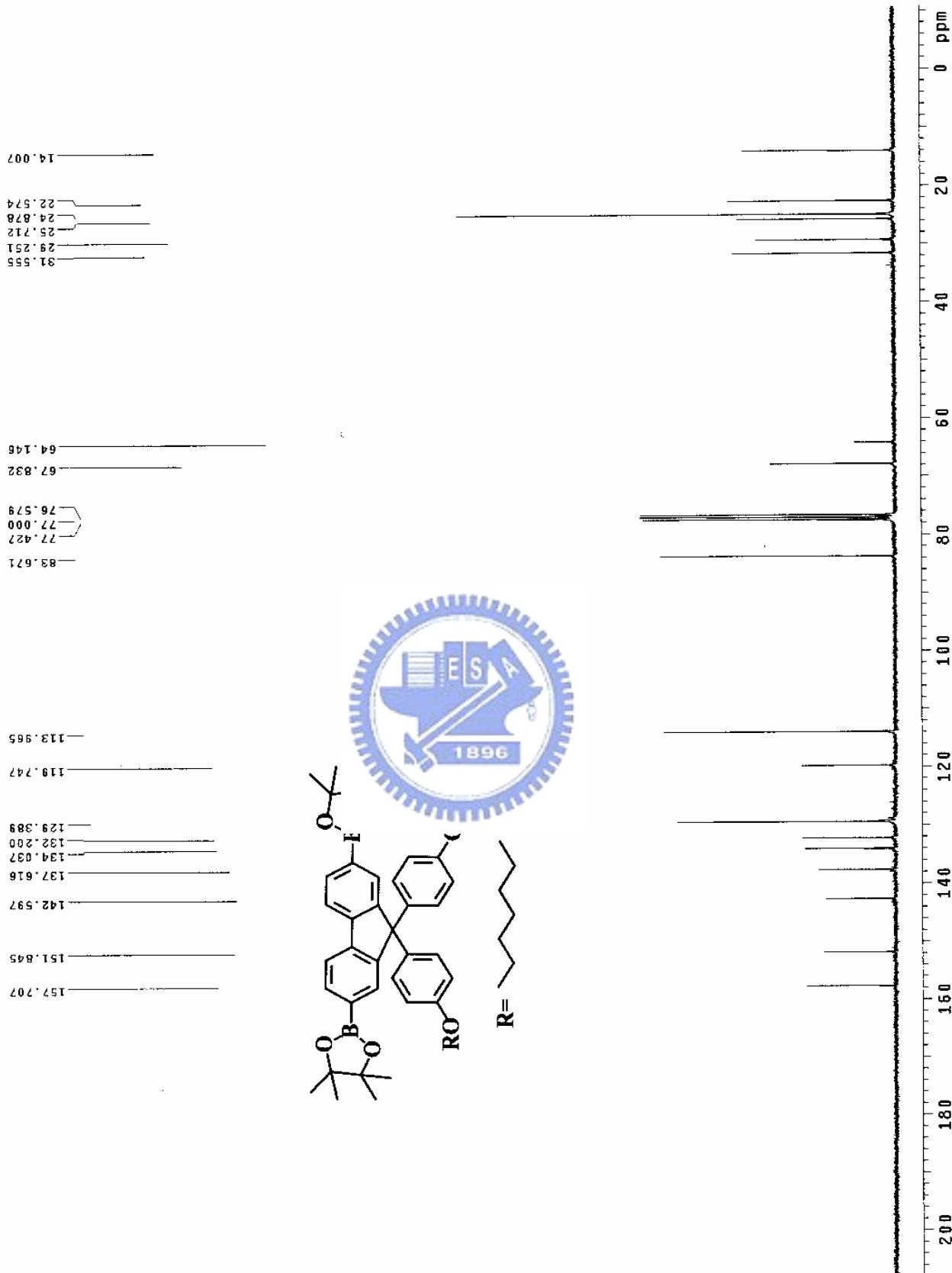
附圖. 19  $^{13}\text{C}$ -NMR spectrum of M6



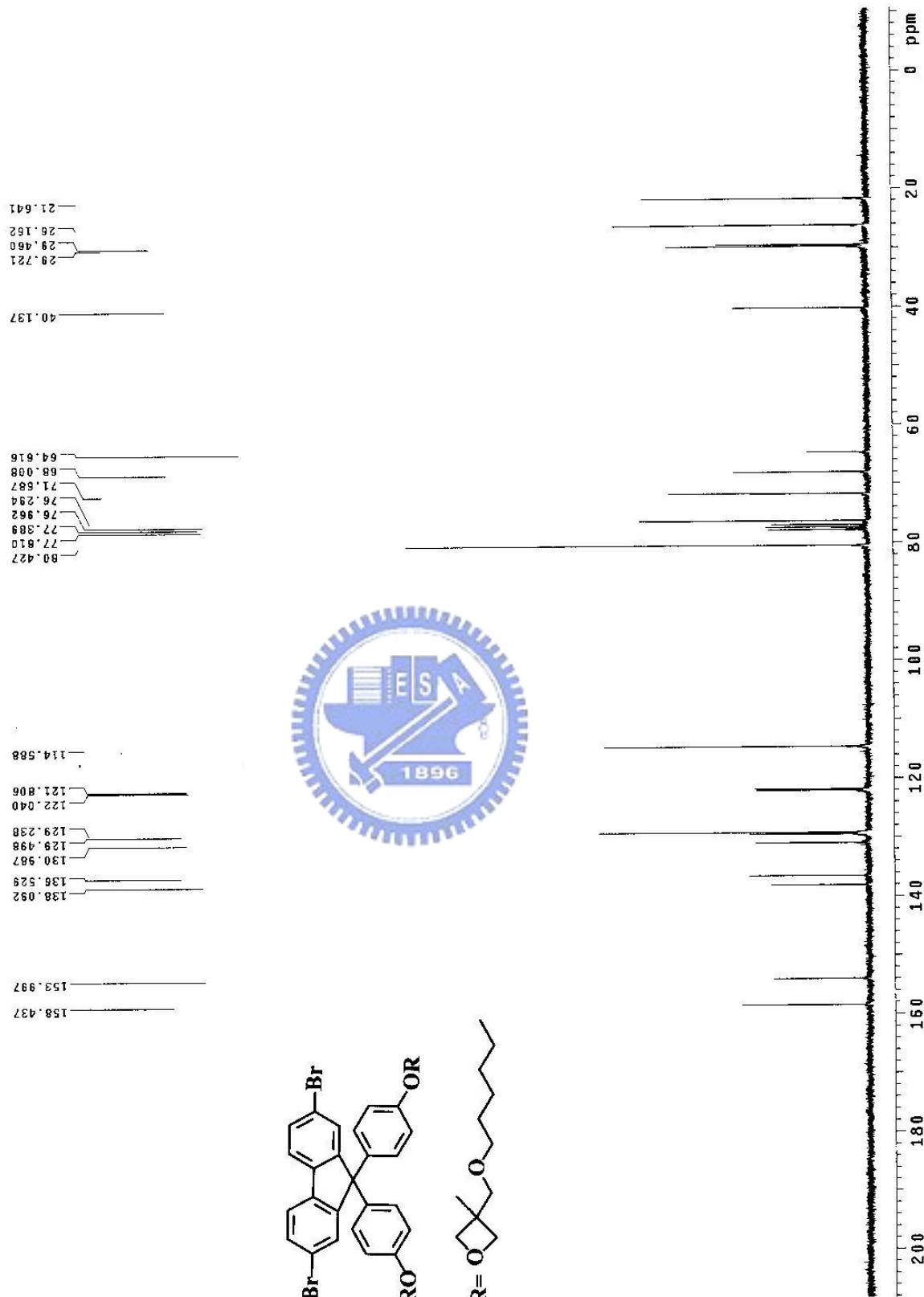
附圖. 20  $^{13}\text{C}$ -NMR spectrum of M7



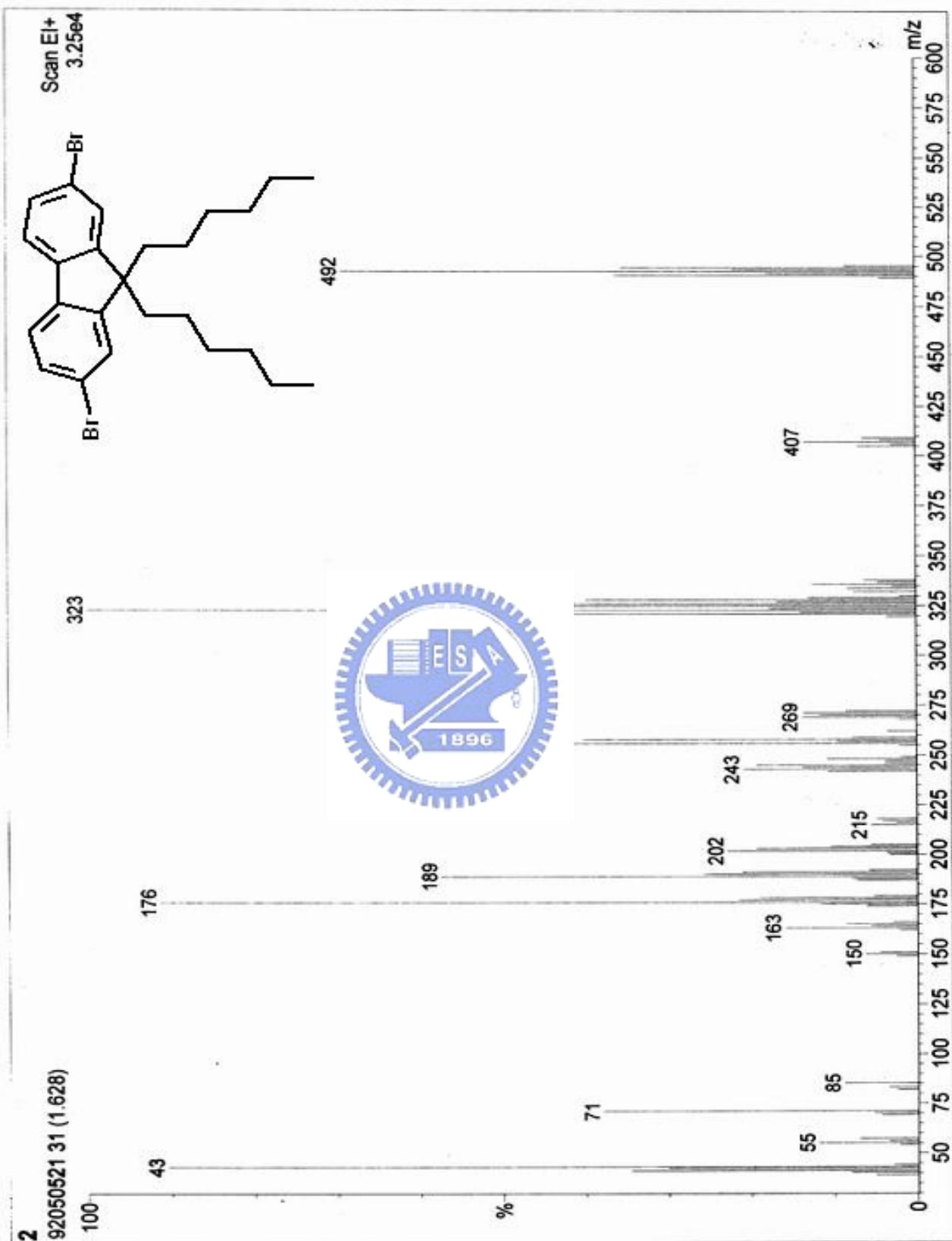
附圖. 21  $^{13}\text{C}$ -NMR spectrum of MP1



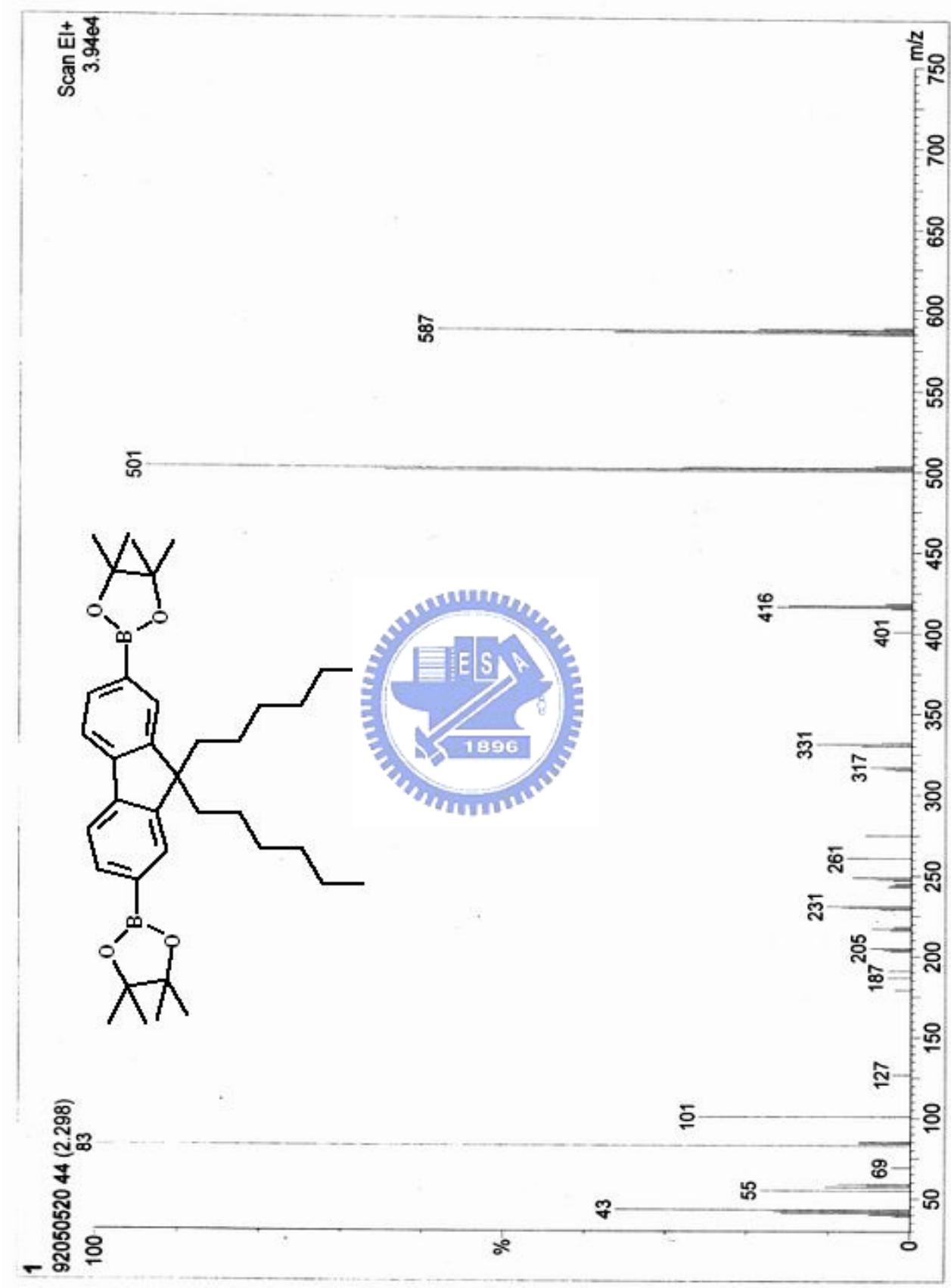
附圖. 22  $^{13}\text{C}$ -NMR spectrum of MP2



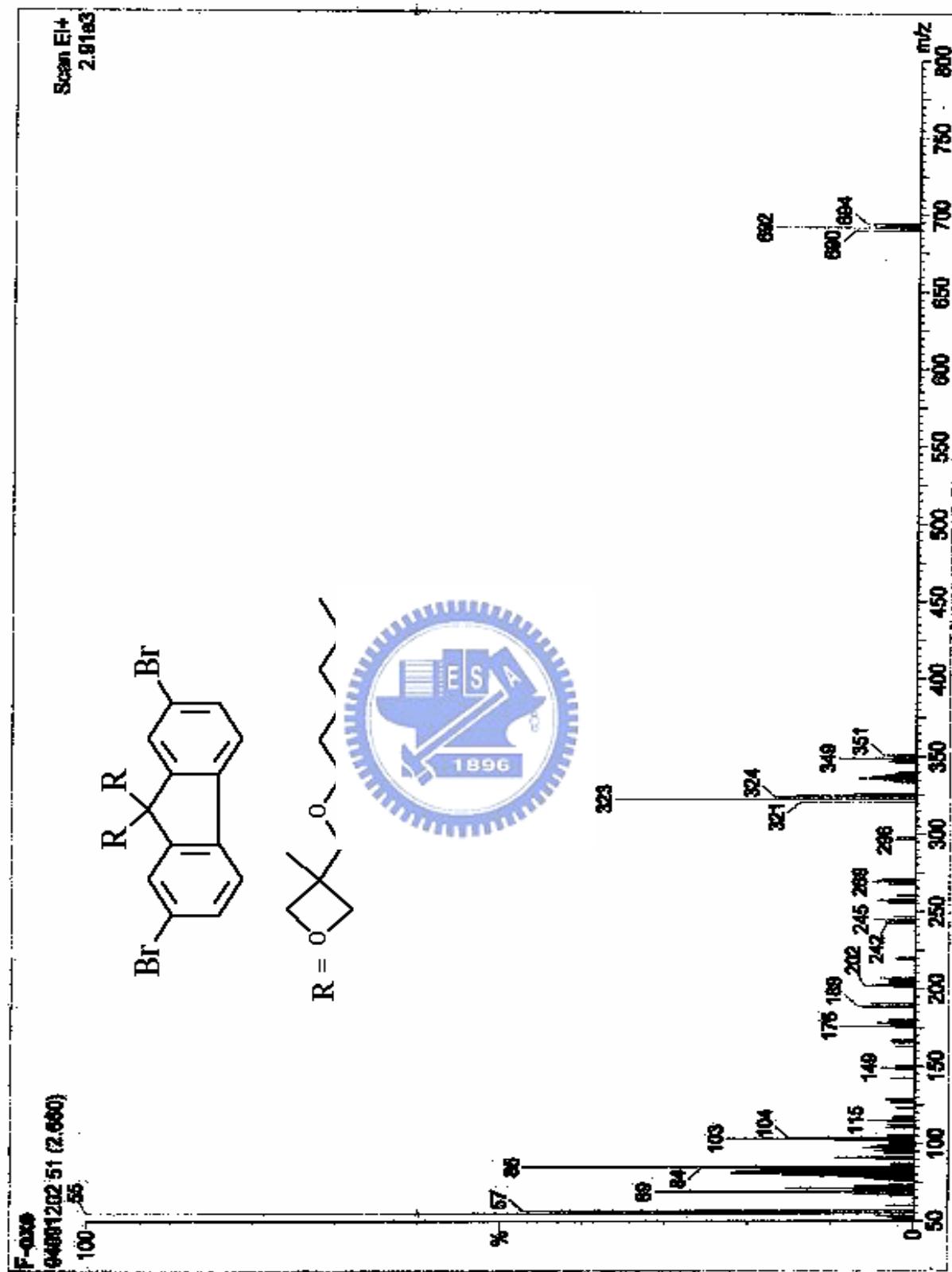
附圖. 23  $^{13}\text{C}$ -NMR spectrum of MP3



附圖. 24 Mass spectrum of M1

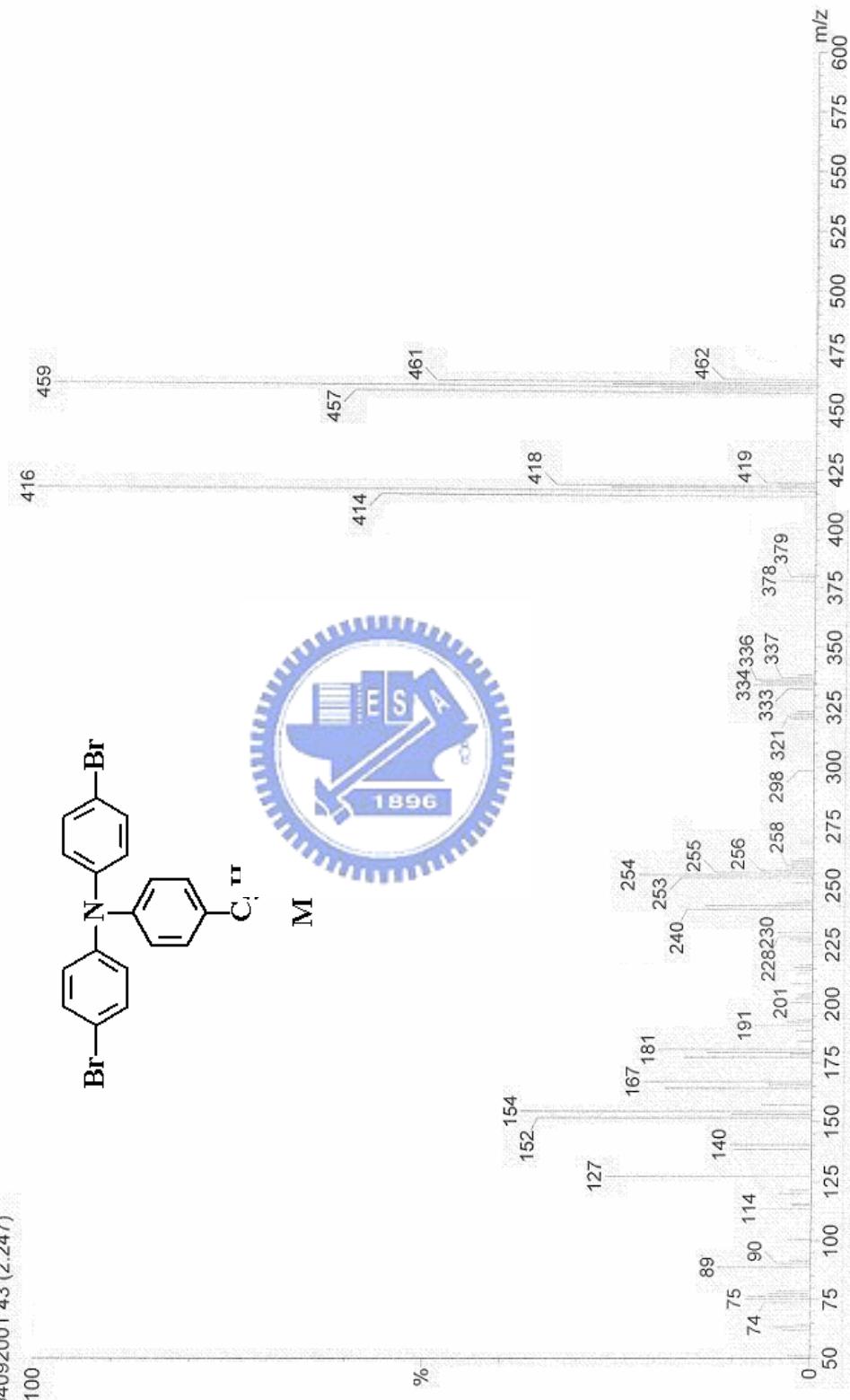
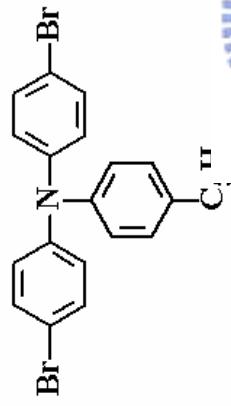


附圖. 25 Mass spectrum of M2



附圖. 26 Mass spectrum of M3

Triphenyl  
94092001 43 (2.247)

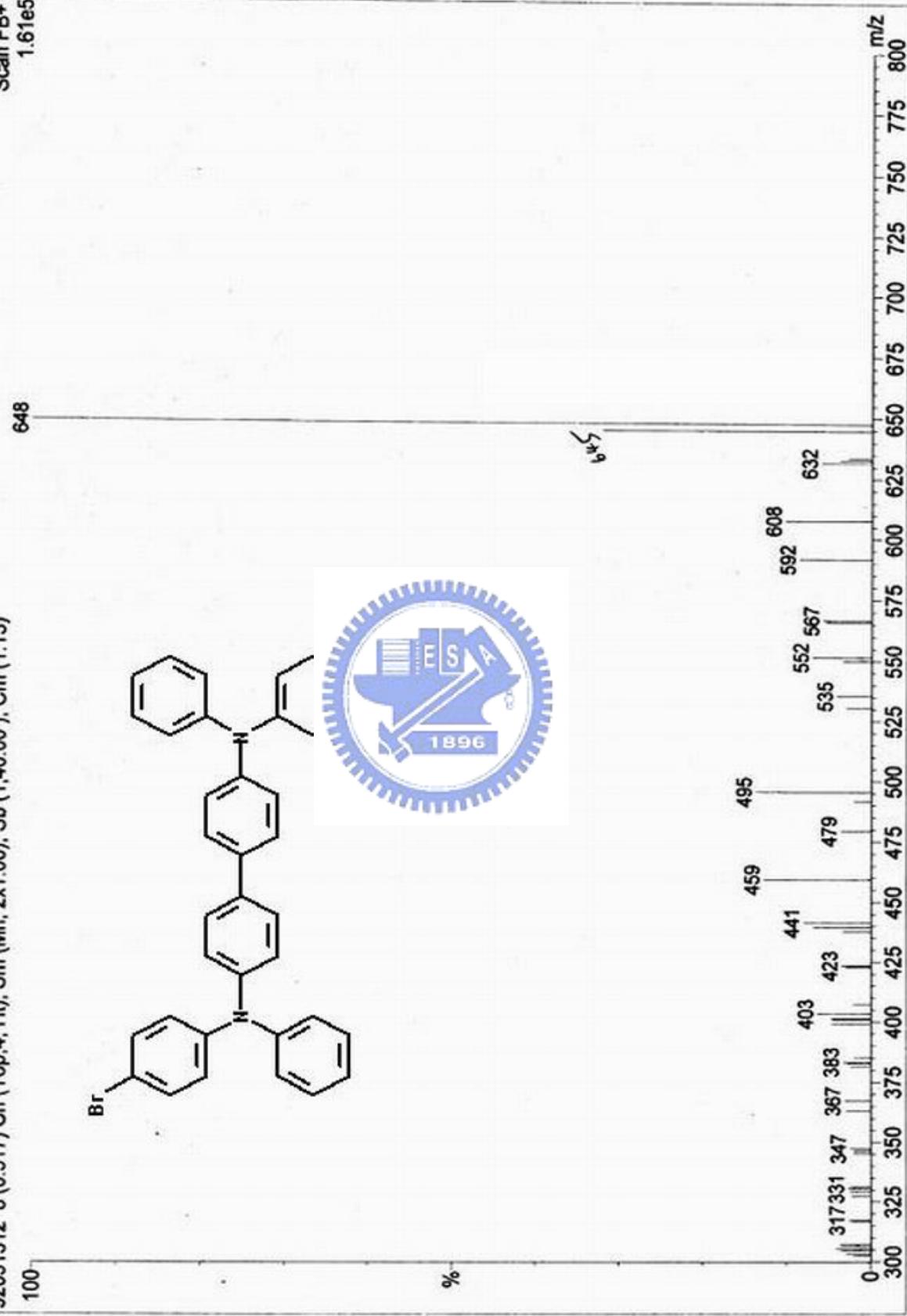
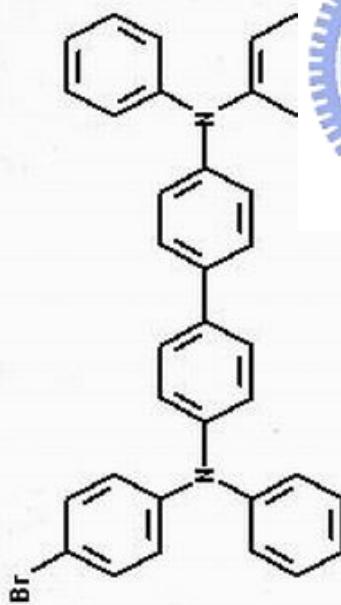


附圖. 27 Mass spectrum of M4

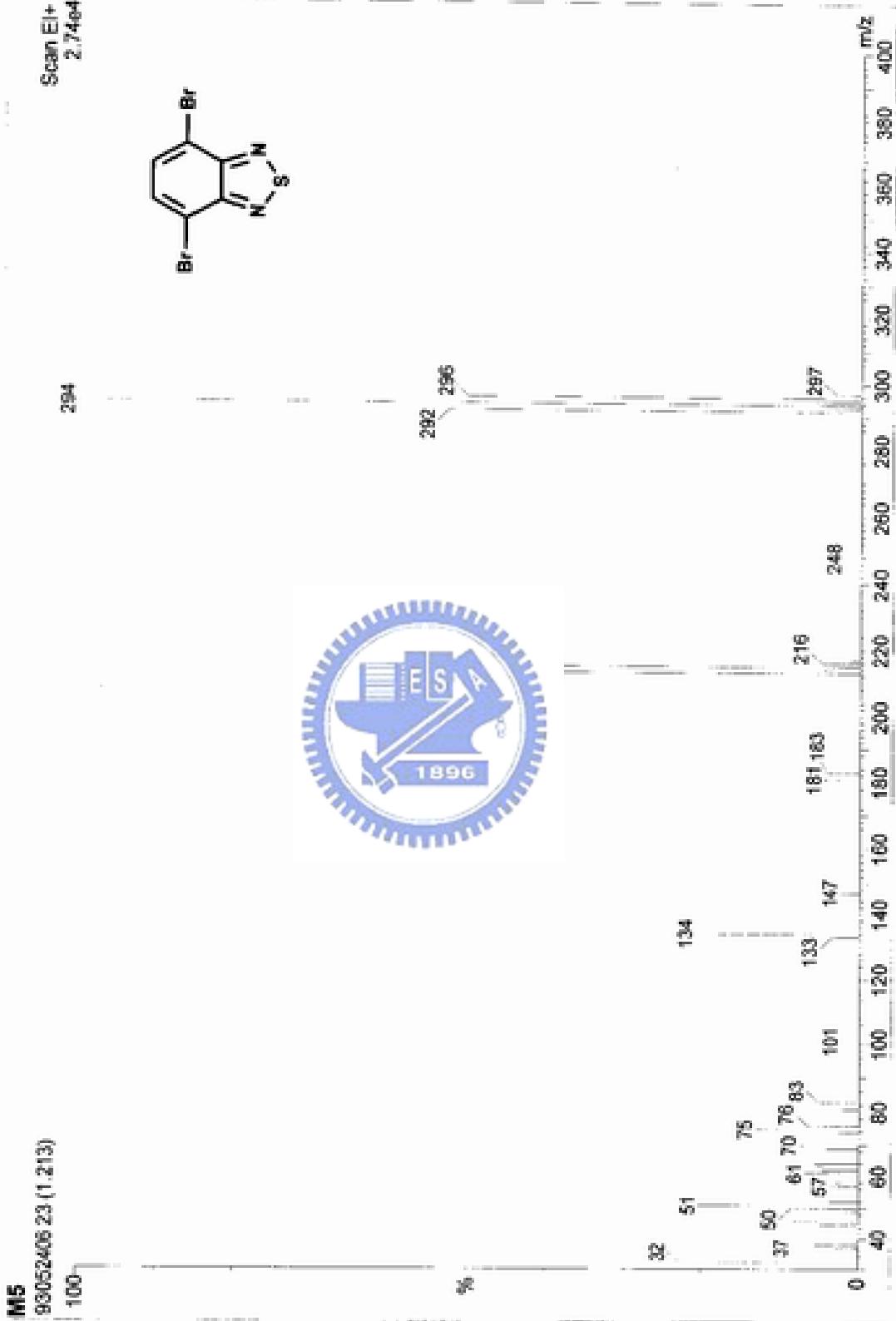
6(3NBA)

**6/(3NBA)**  
92051312 8 (0.517) Cn (Top 4, Ht); Sm (Mn, 2x1.00); Sb (1.40.00); Cm (1:13)

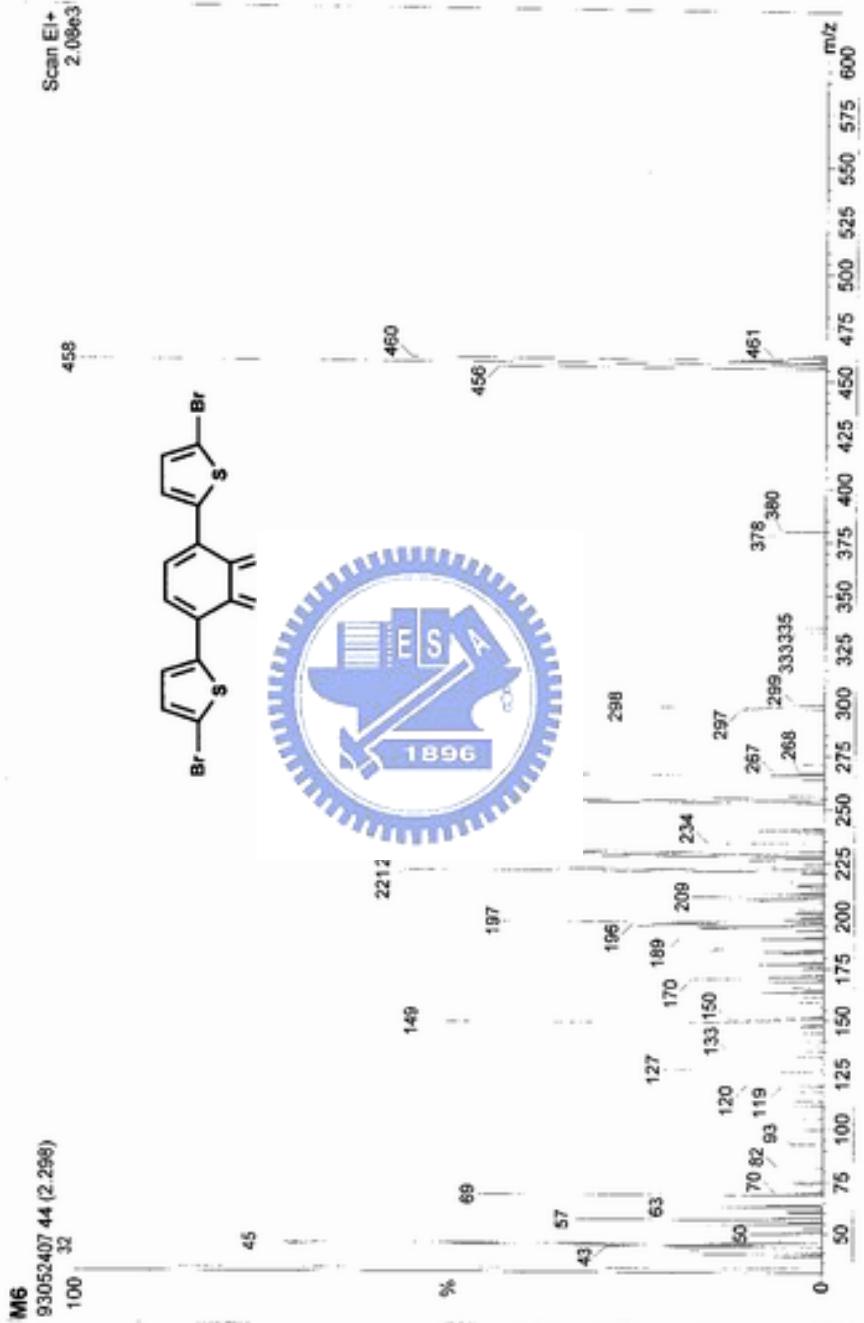
Scan FB+  
1.61e5



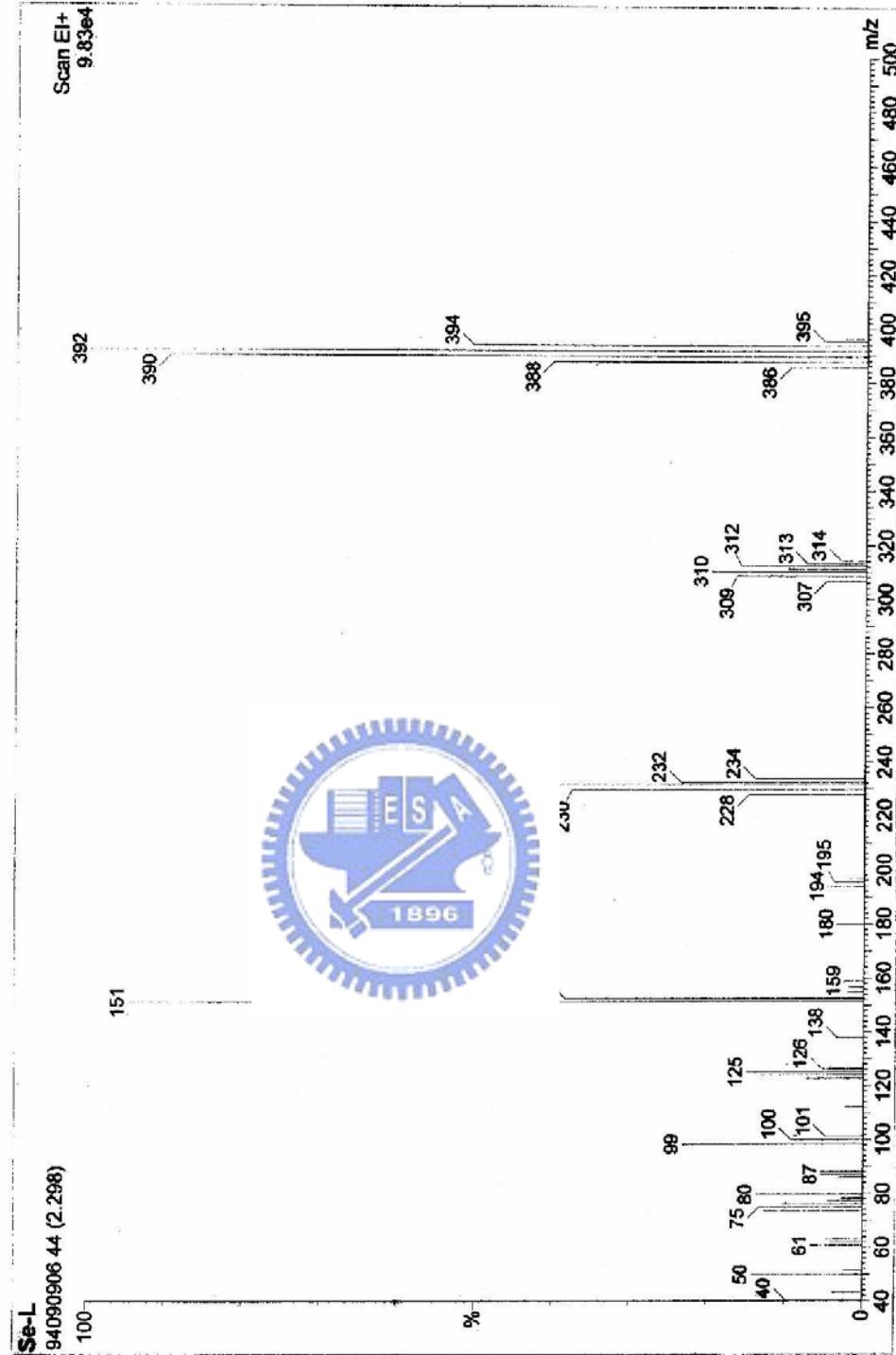
附圖. 28 Mass spectrum of M5



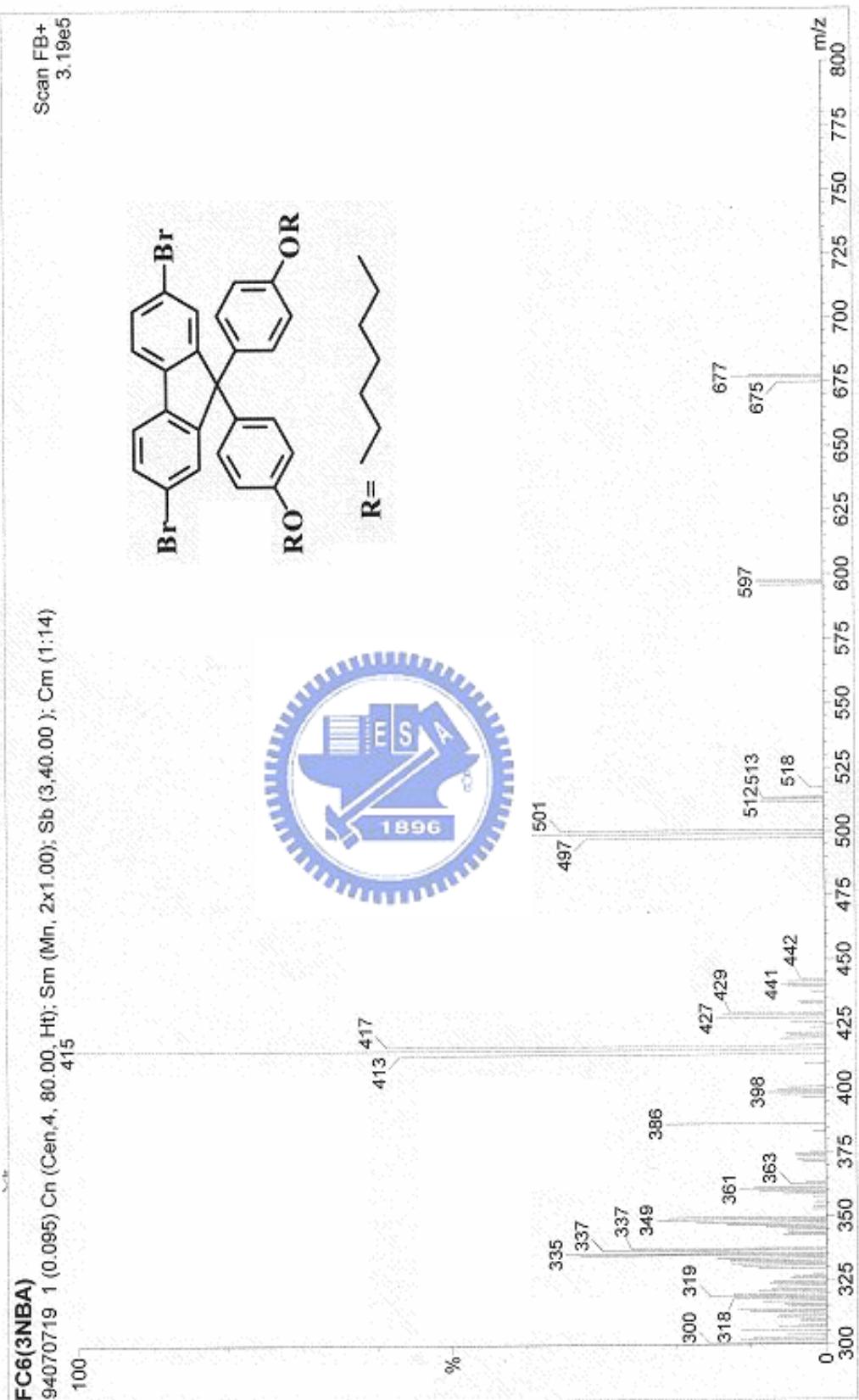
附圖. 29 Mass spectrum of M6



附圖. 30 Mass spectrum of M7

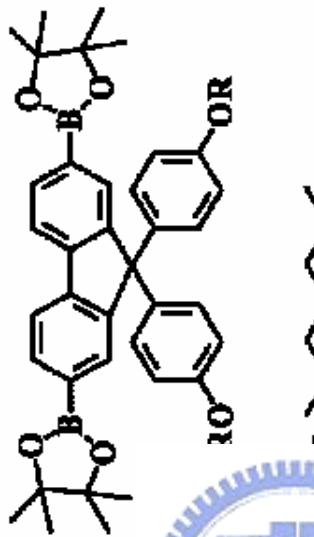
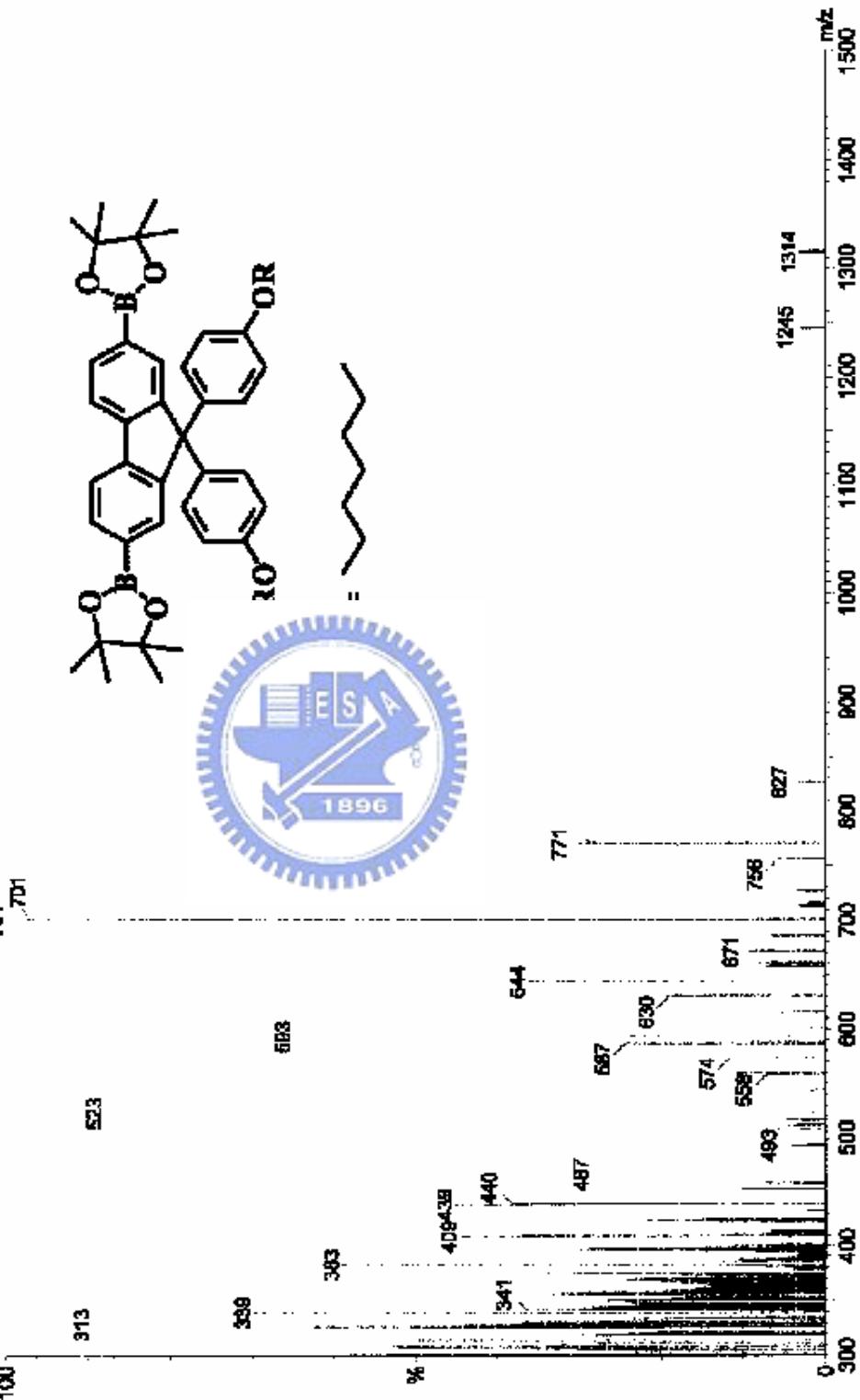


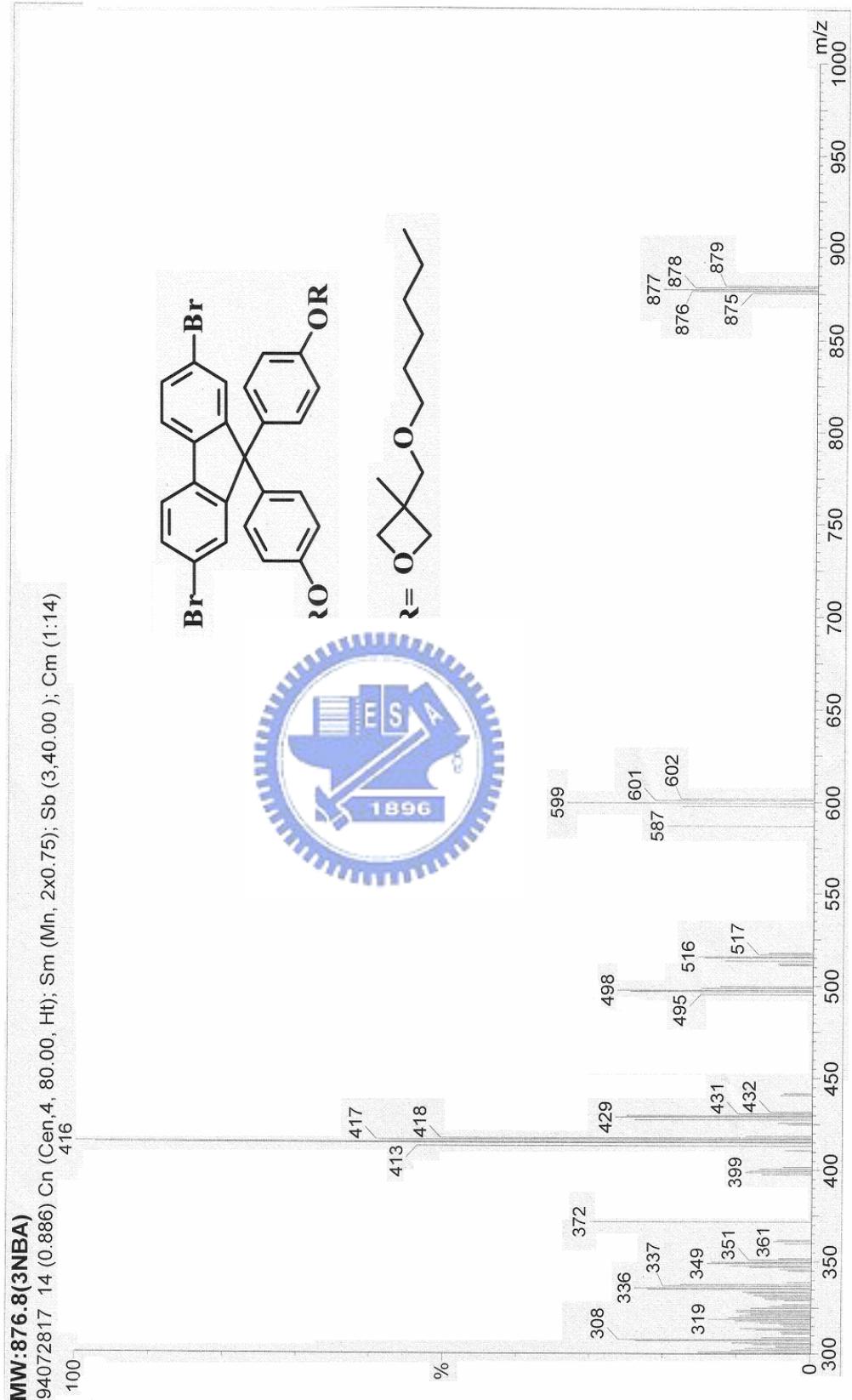
附圖. 31 Mass spectrum of M8



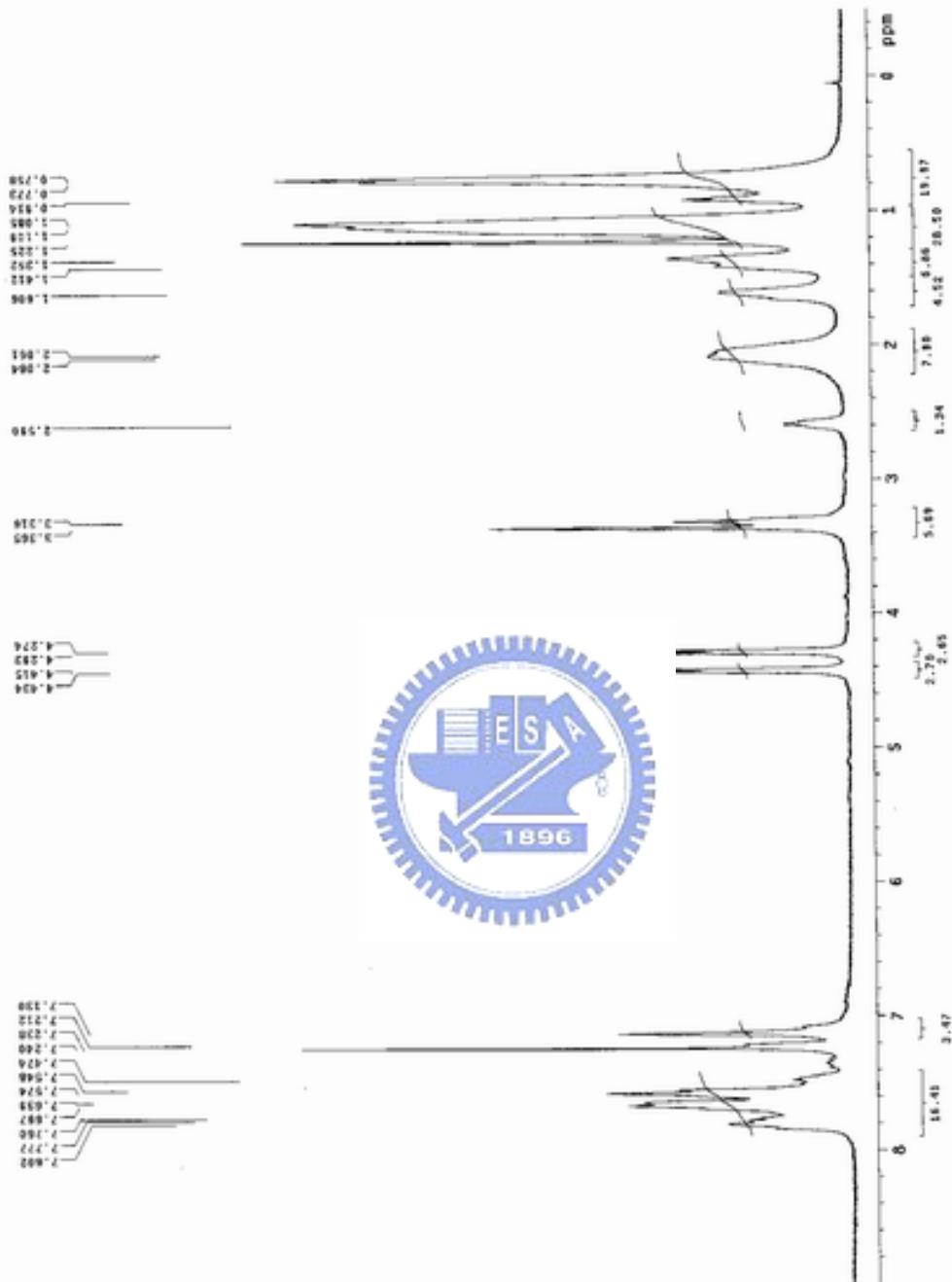
附圖. 32 Mass spectrum of MP1

**FBM(3NBA)**  
94070720 14 (0.962) Cn (Can, 4, 80.00, Hf); Sm ( $\frac{75}{76}$ H, 2x1.00); Sb (3.40,00 x; Cm (1:14))

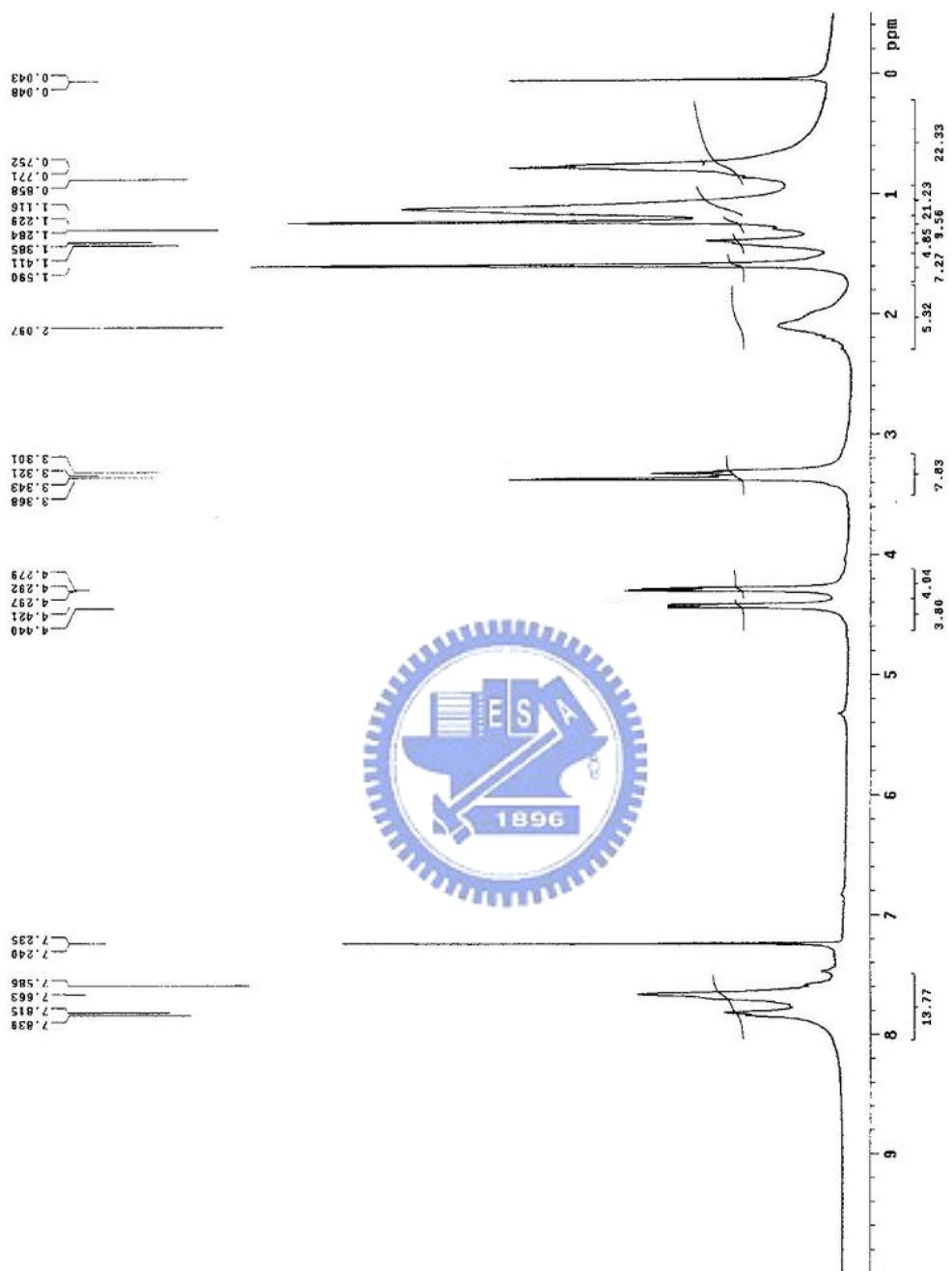




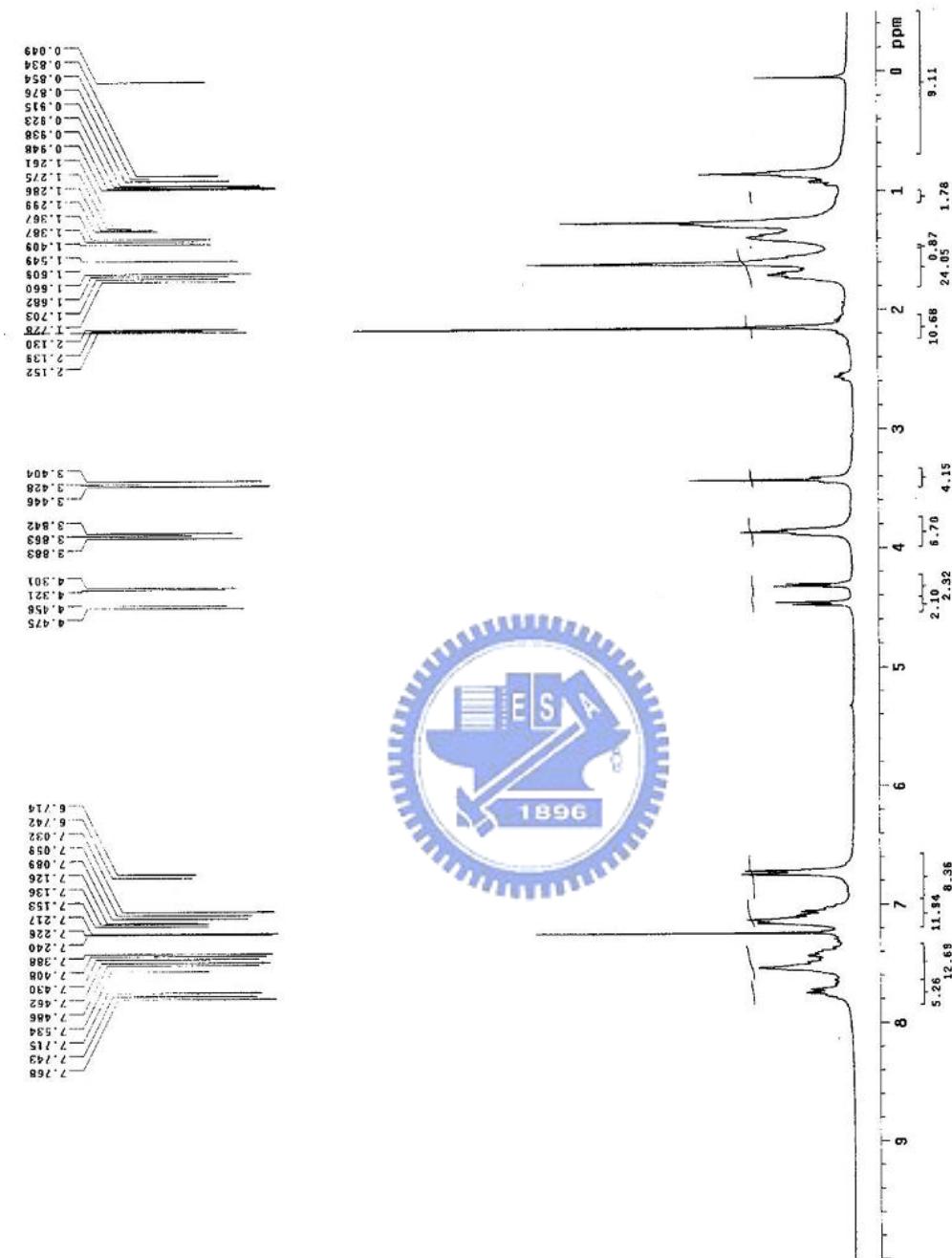
附圖. 34 Mass spectrum of MP3



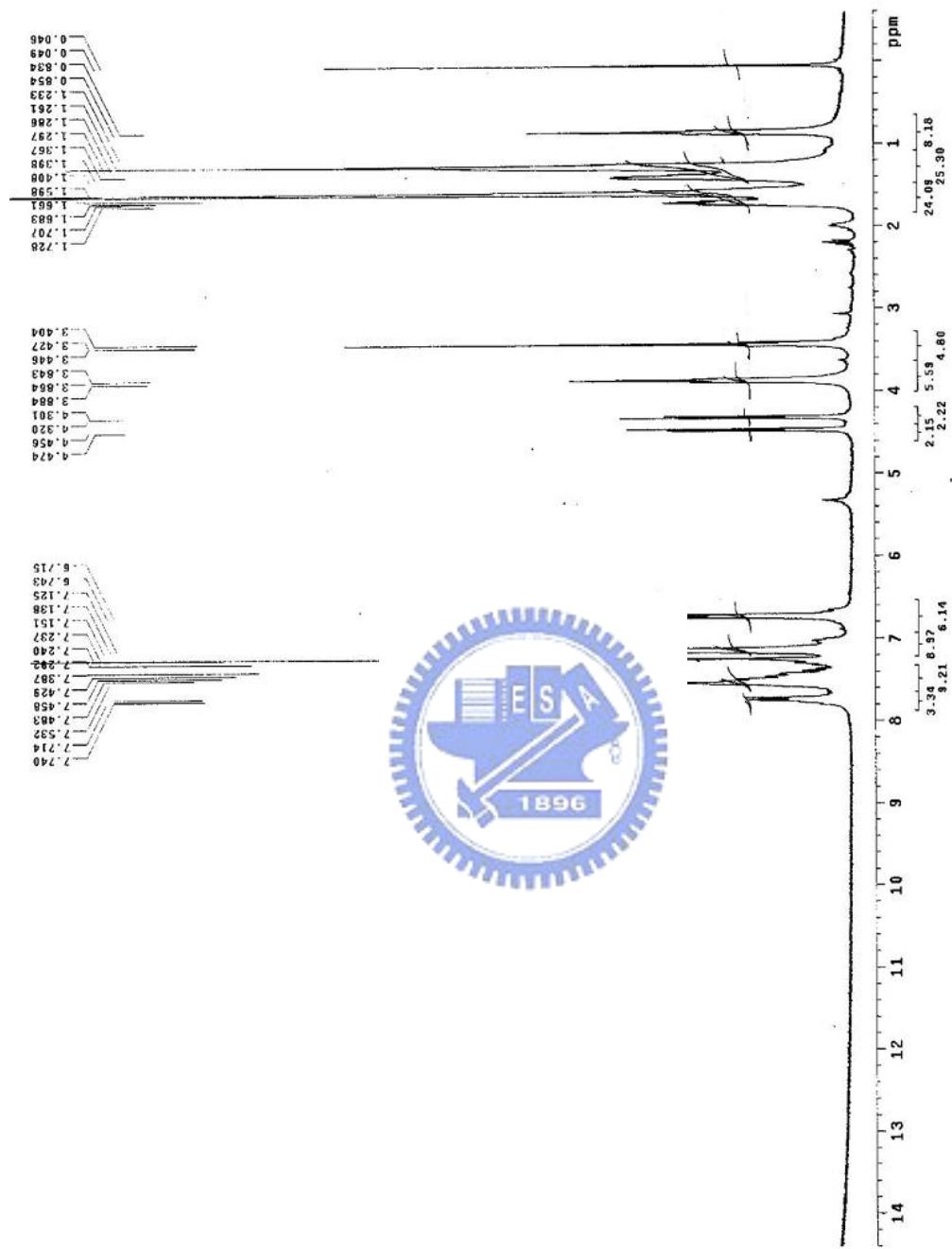
附圖. 35  $^1\text{H-NMR}$  spectrum of PF-B1



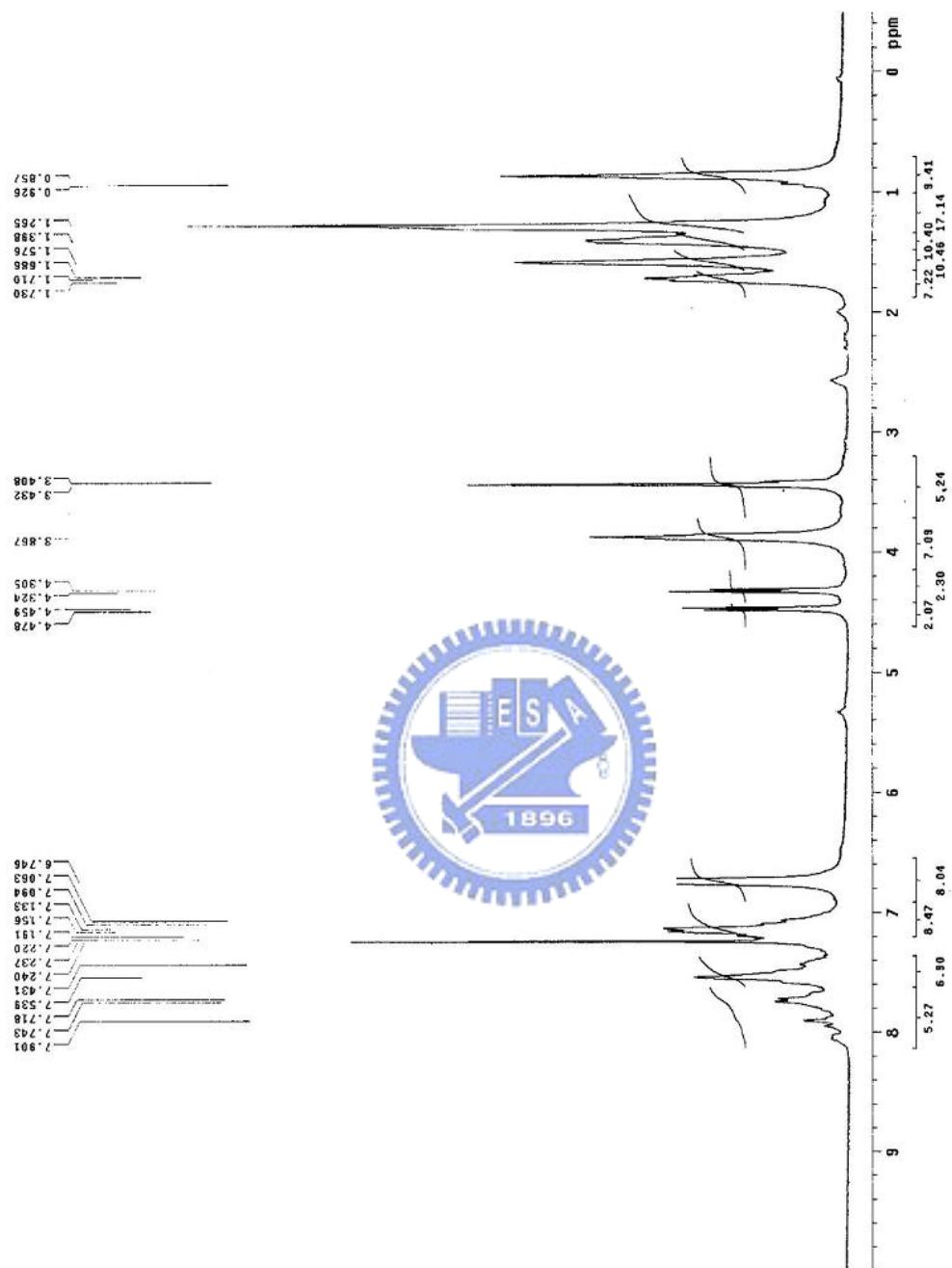
附圖. 36  $^1\text{H}$ -NMR spectrum of PF-G1



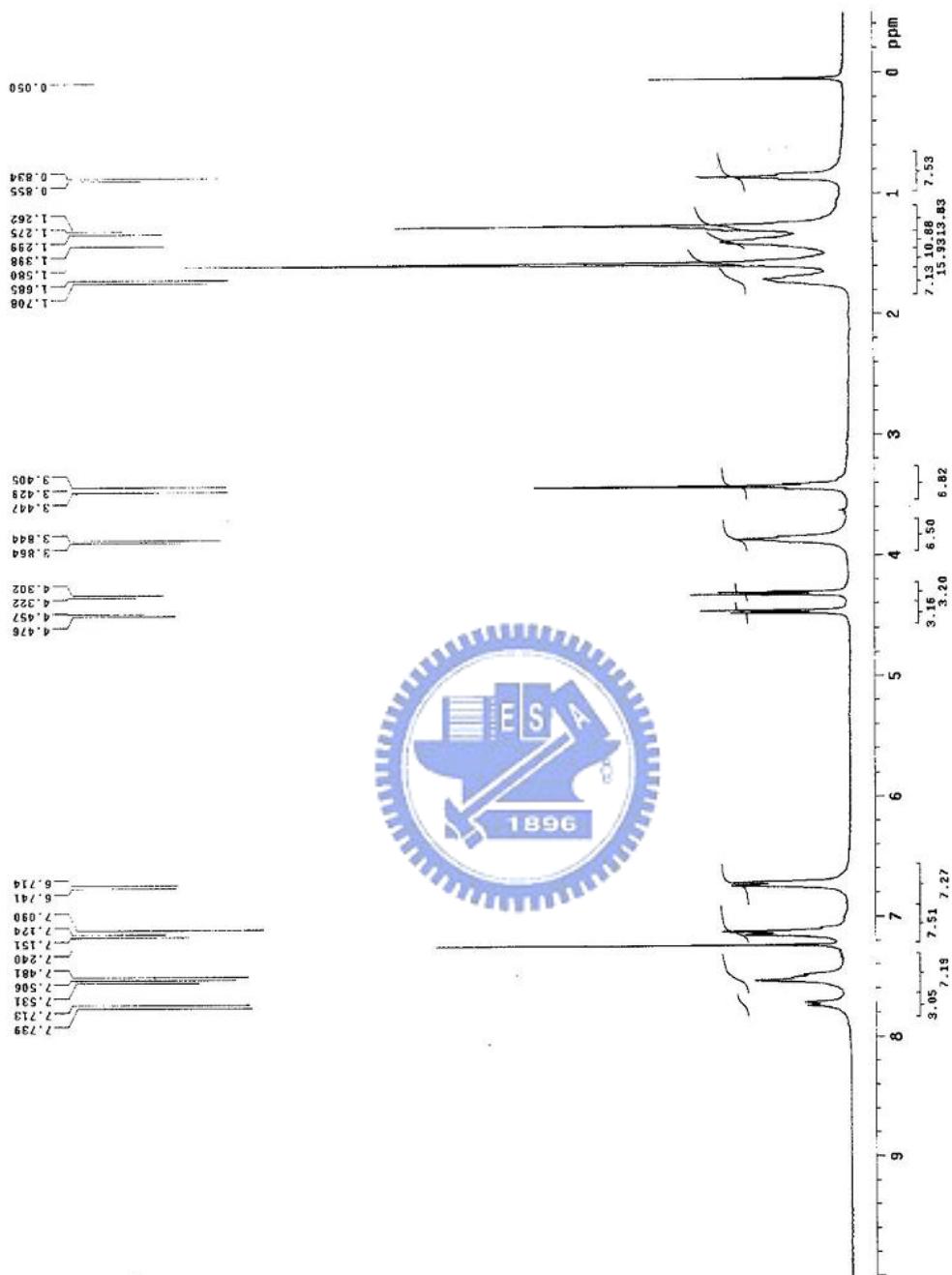
附圖. 37  ${}^1\text{H}$ -NMR spectrum of PPF-B1



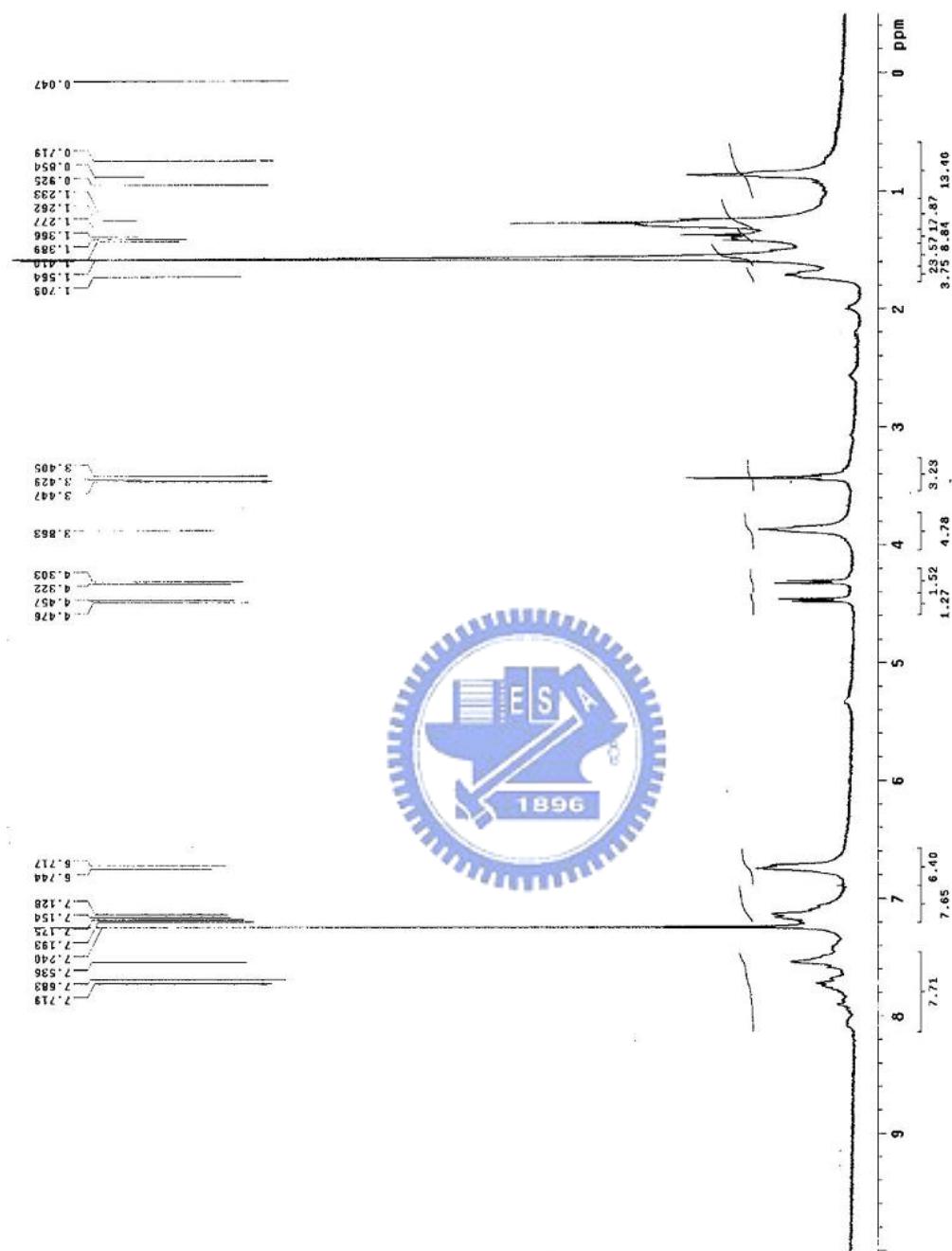
附圖. 38  $^1\text{H}$ -NMR spectrum of PPF-B2



附圖. 39  $^1\text{H}$ -NMR spectrum of PPF-G1



附圖. 40  $^1\text{H}$ -NMR spectrum of PPF-G2



附圖. 41  ${}^1\text{H}$ -NMR spectrum of PPF-R1

