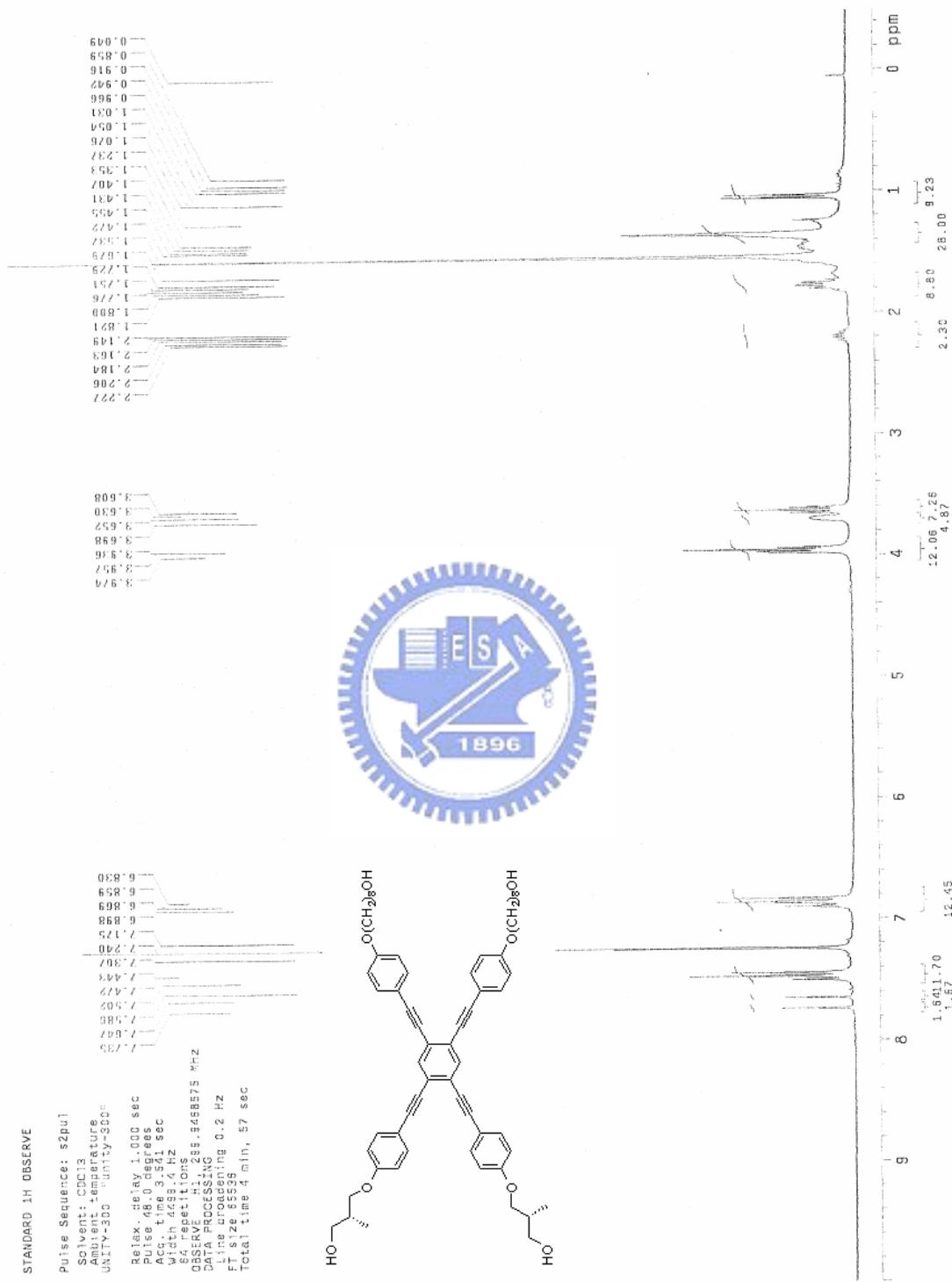
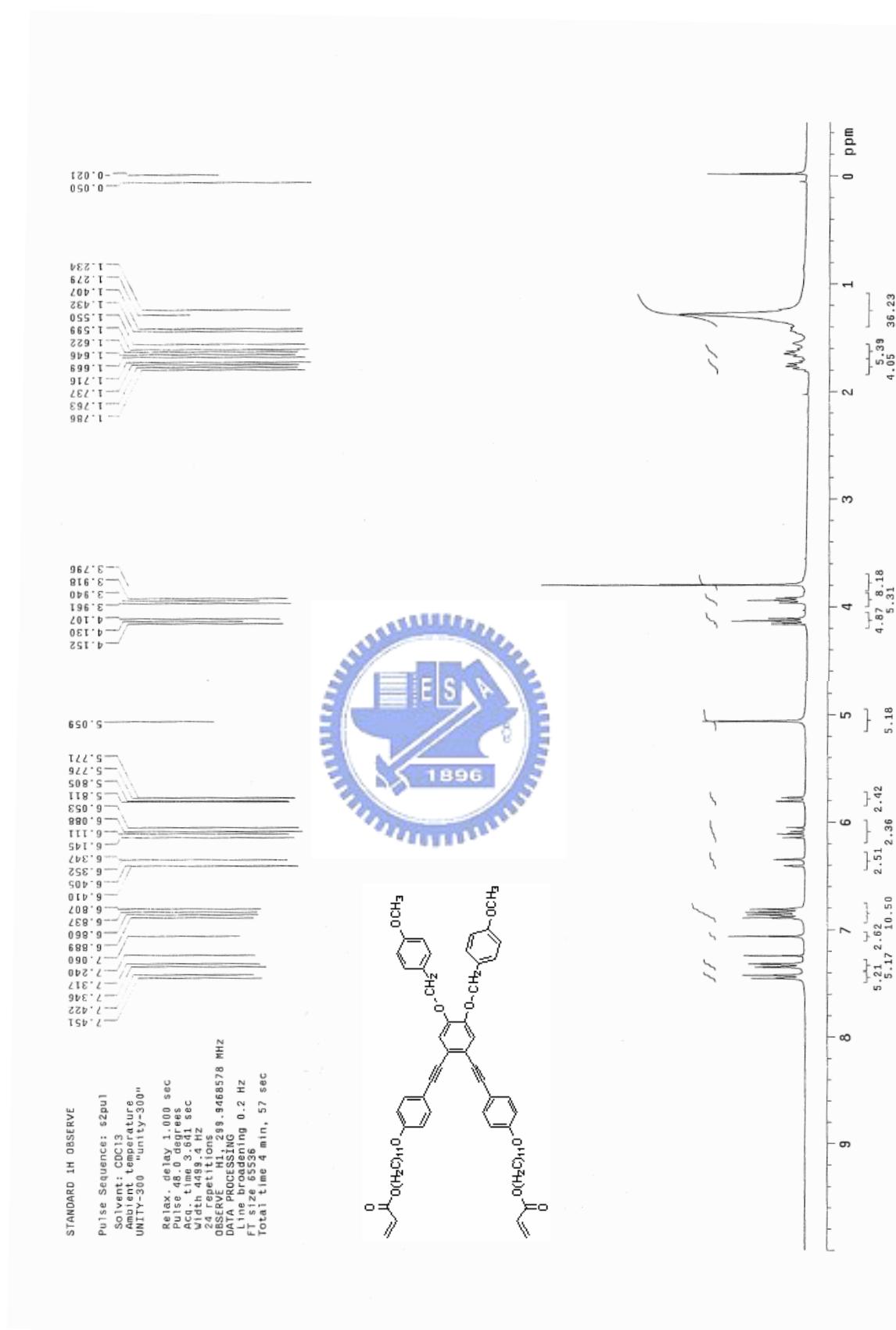


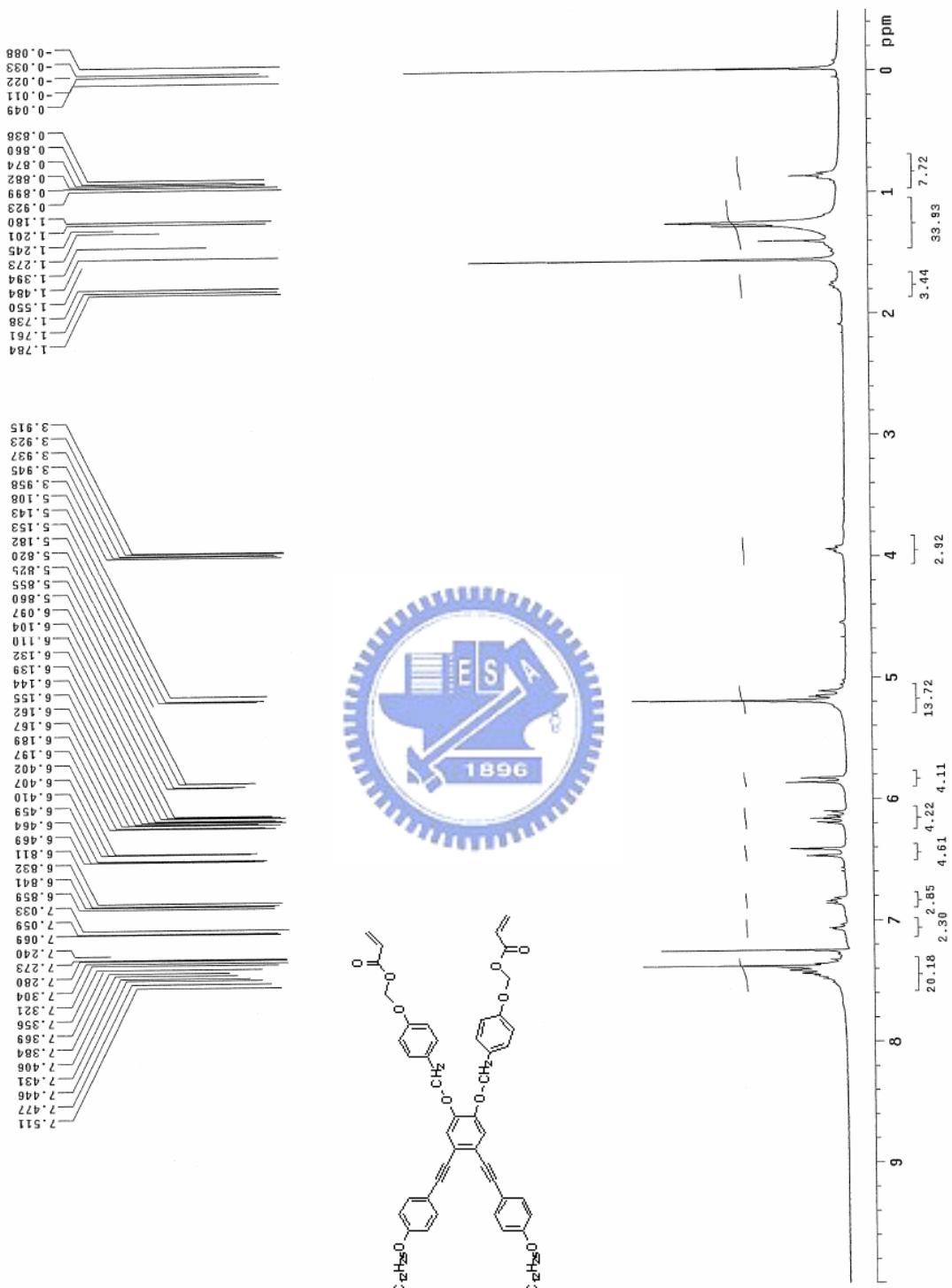
附圖 1. ^1H -NMR spectrum of compound 4



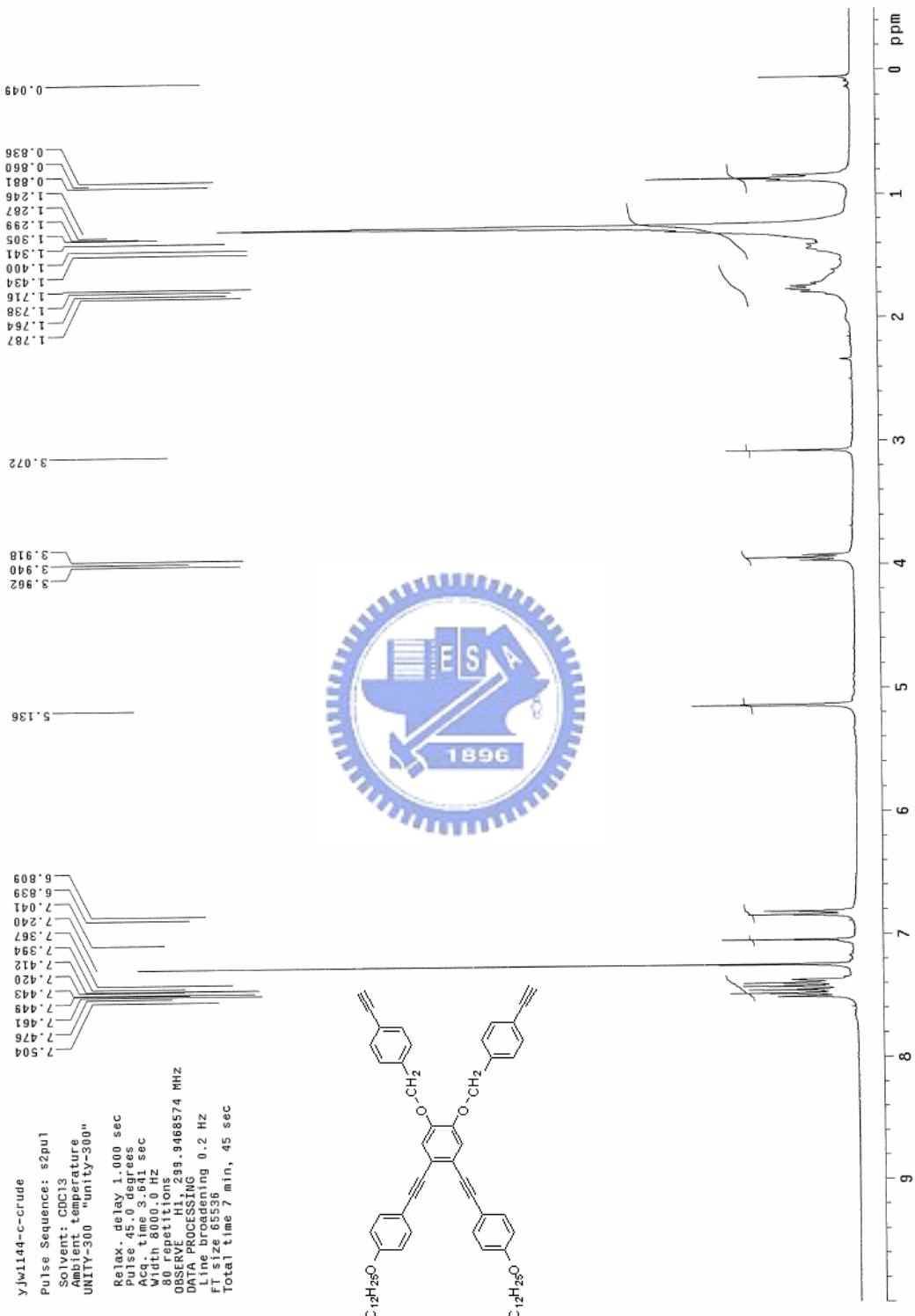
附圖 2. ^1H -NMR spectrum of compound 10



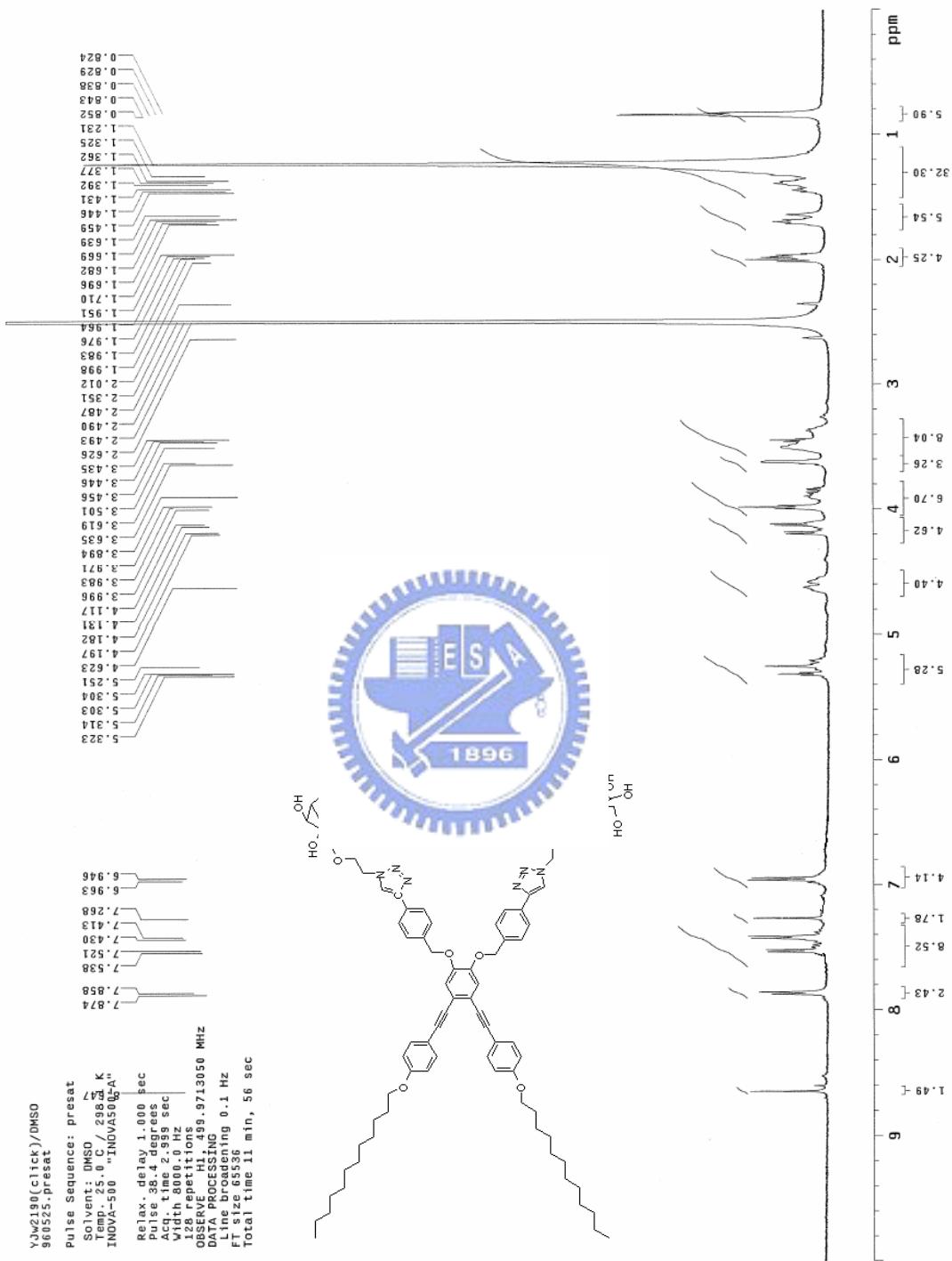
附圖 3. ^1H -NMR spectrum of M3



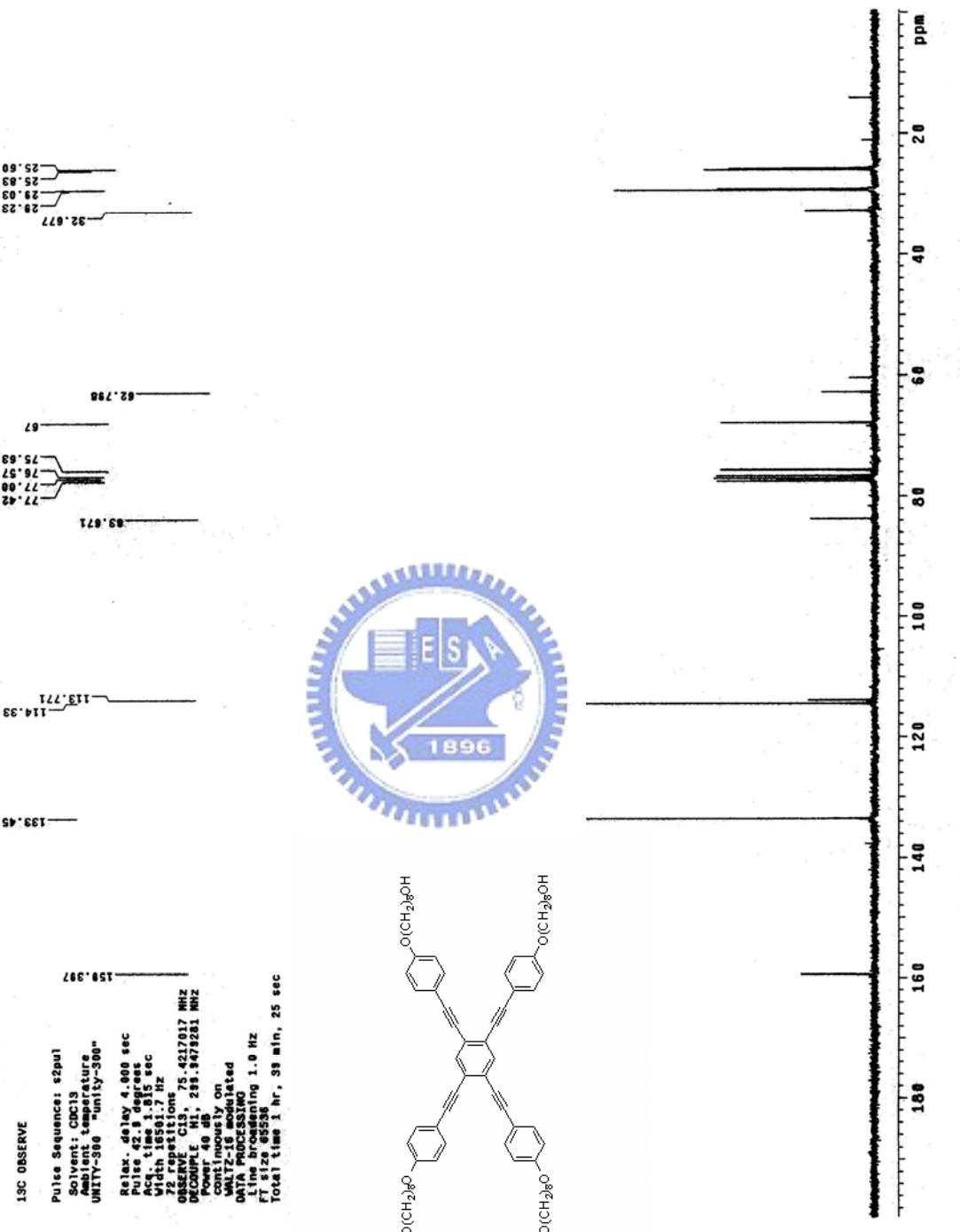
附圖 4. ^1H -NMR spectrum of M4



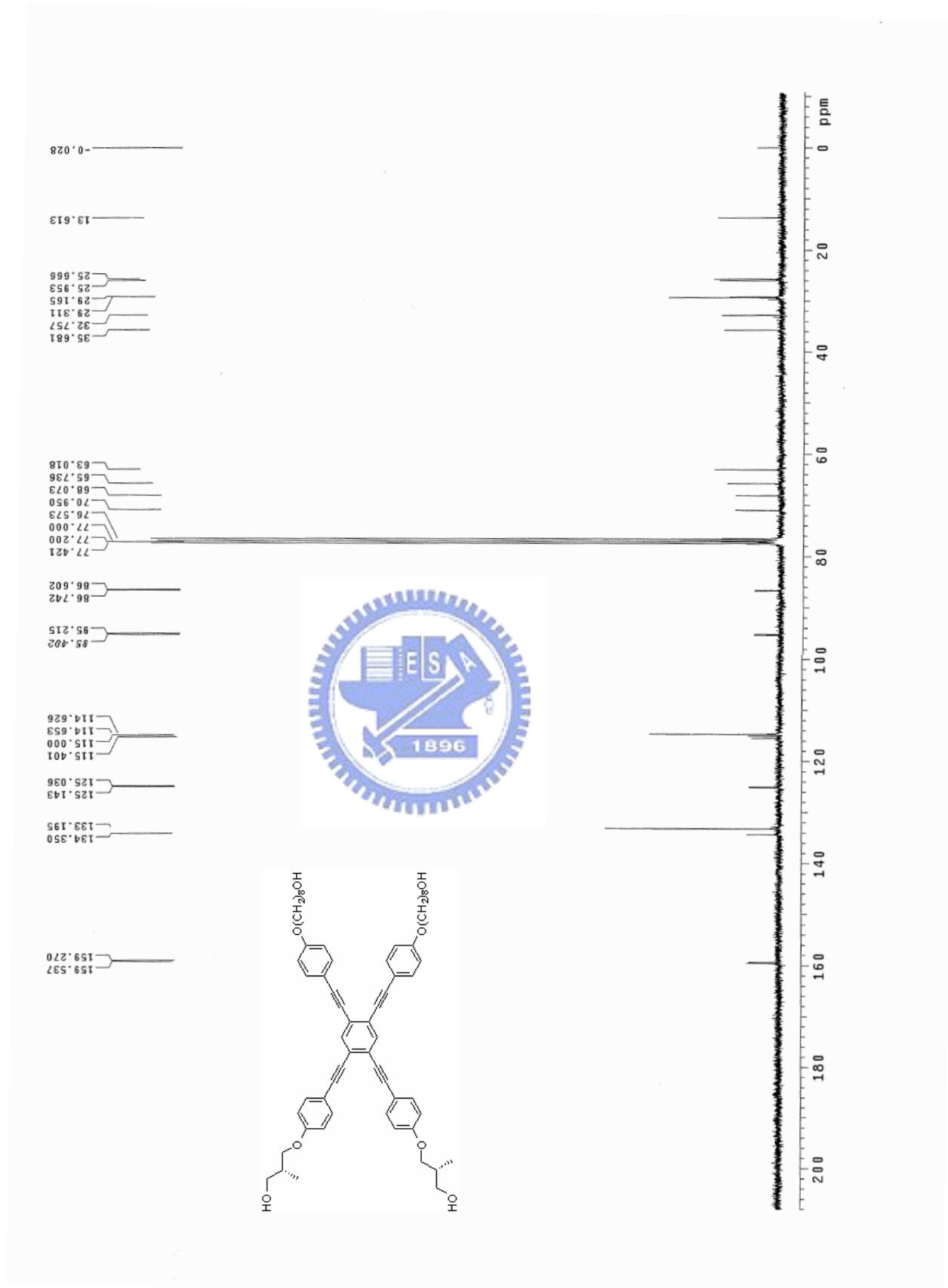
附圖 5. ¹H-NMR spectrum of compound 28



附圖 6. ^1H -NMR spectrum of compound 32



附圖 7. ¹³C-NMR spectrum of compound 4

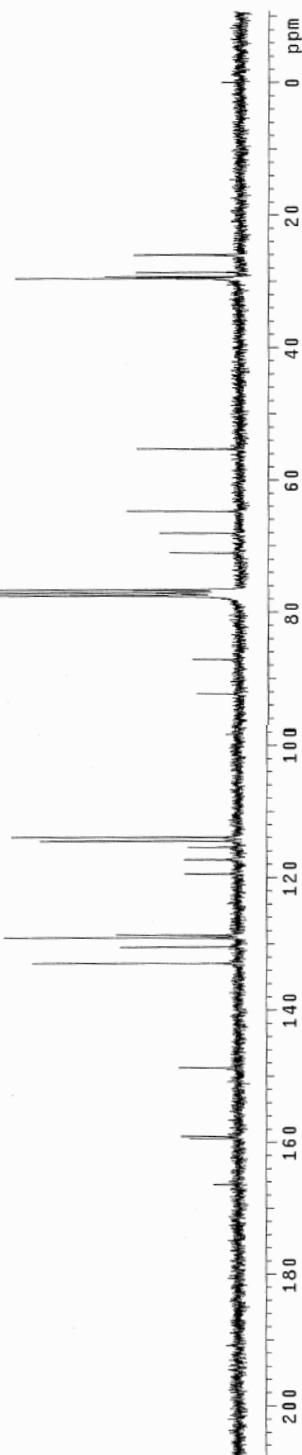
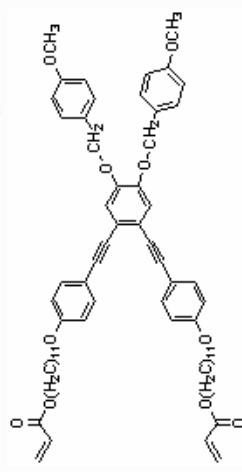
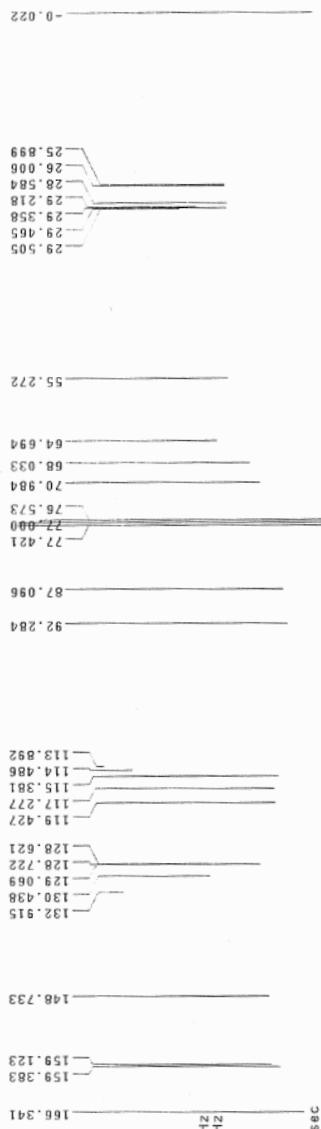


附圖 8. ^{13}C -NMR spectrum of compound 10

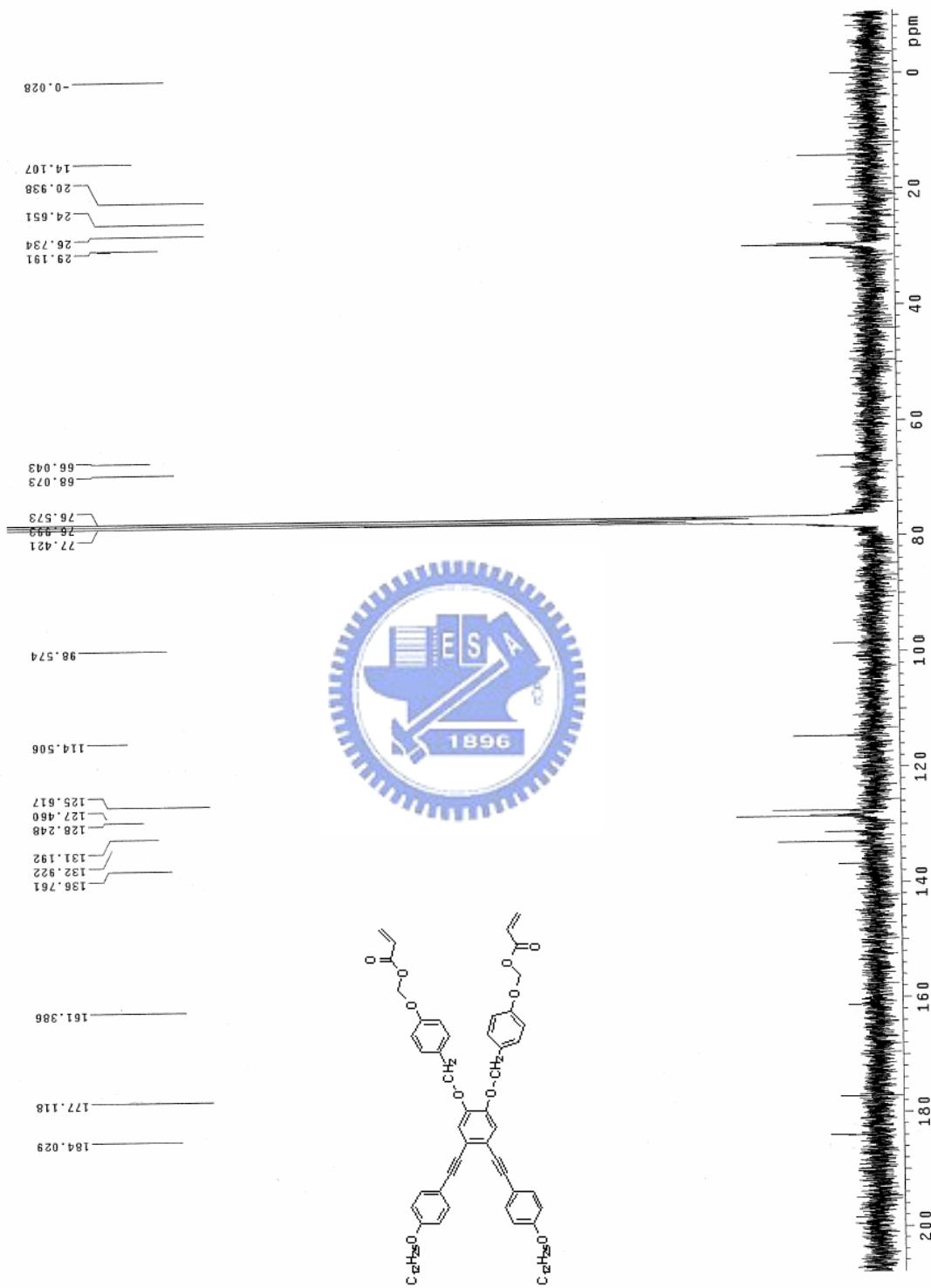
13C OBSERVE

Pulse Sequence: s2pu1
Solvent: CDCl₃
Ambient temperature
UNITY-300 "Unity-300"

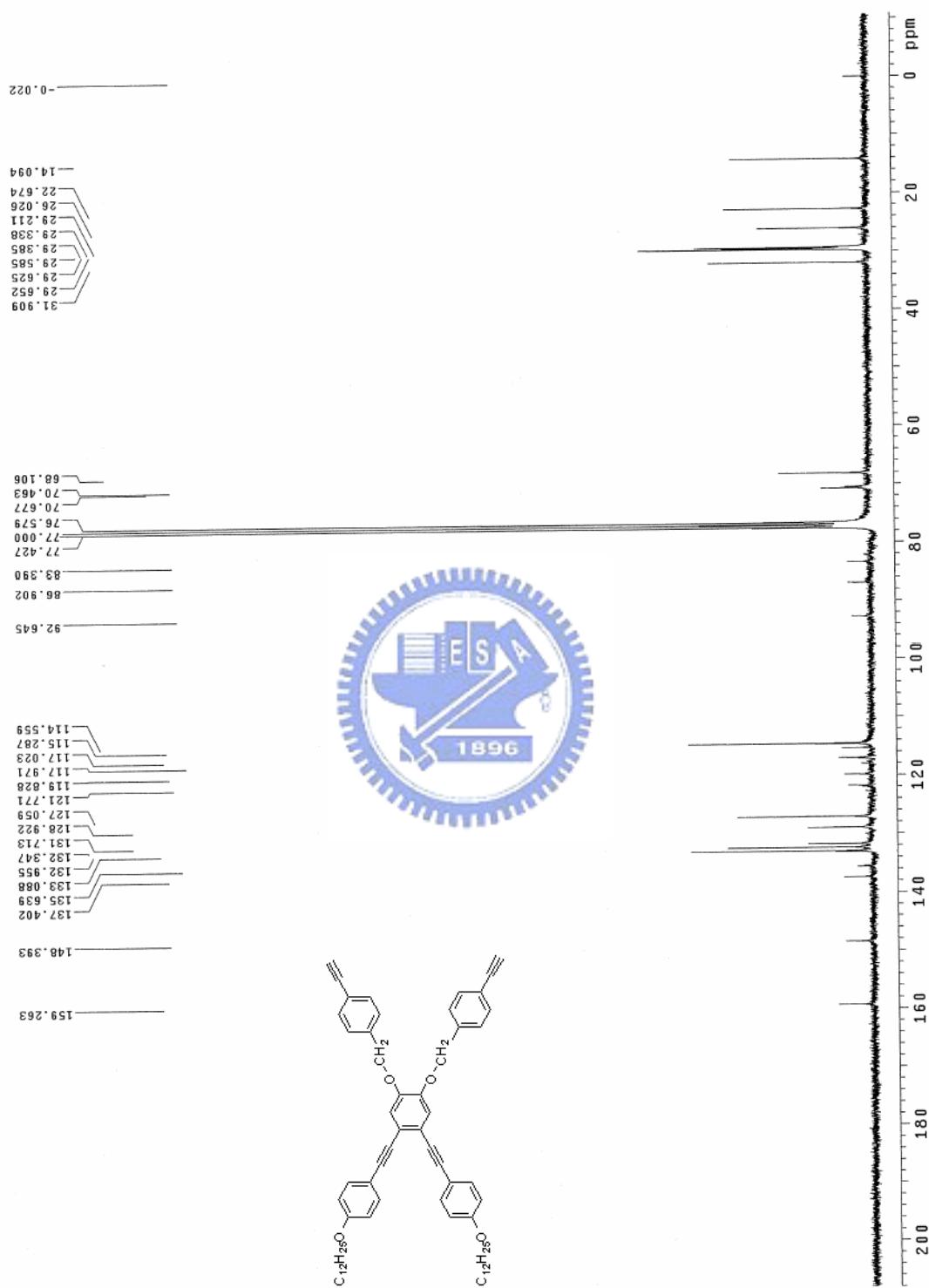
Relax. delay 2.000 sec
Pulse 44.8 degrees
Acq. time 1.815 sec
Width 16501.7 Hz
2688 repetitions
OBSERVE C13, 75.4216966 MHz
DECUPLE H1, 299.9479281 MHz
Power 39 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 7 hr, 6 min, 27 sec



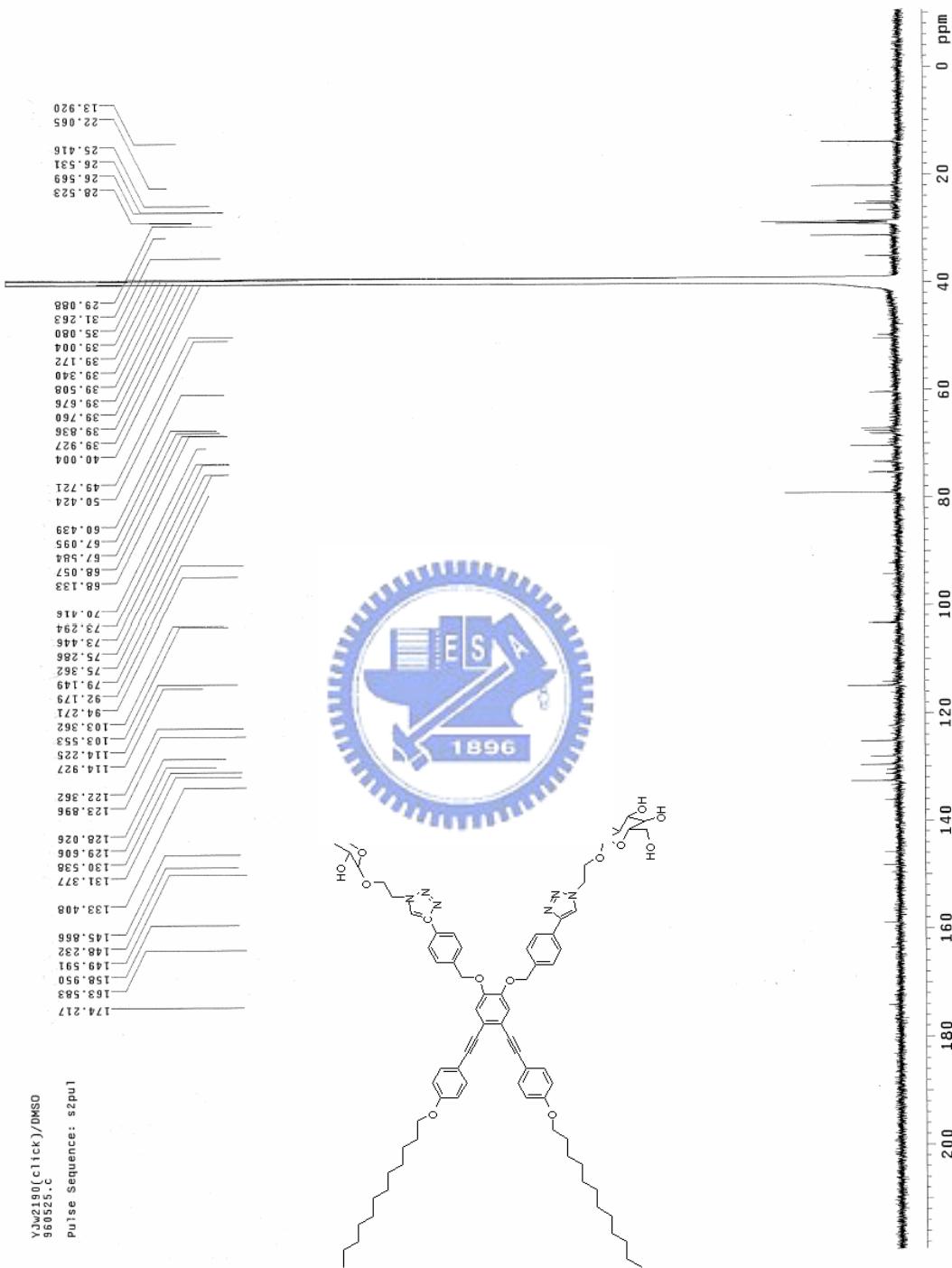
附圖 9. ¹³C-NMR spectrum of M3



附圖 10. ^{13}C -NMR spectrum of M4

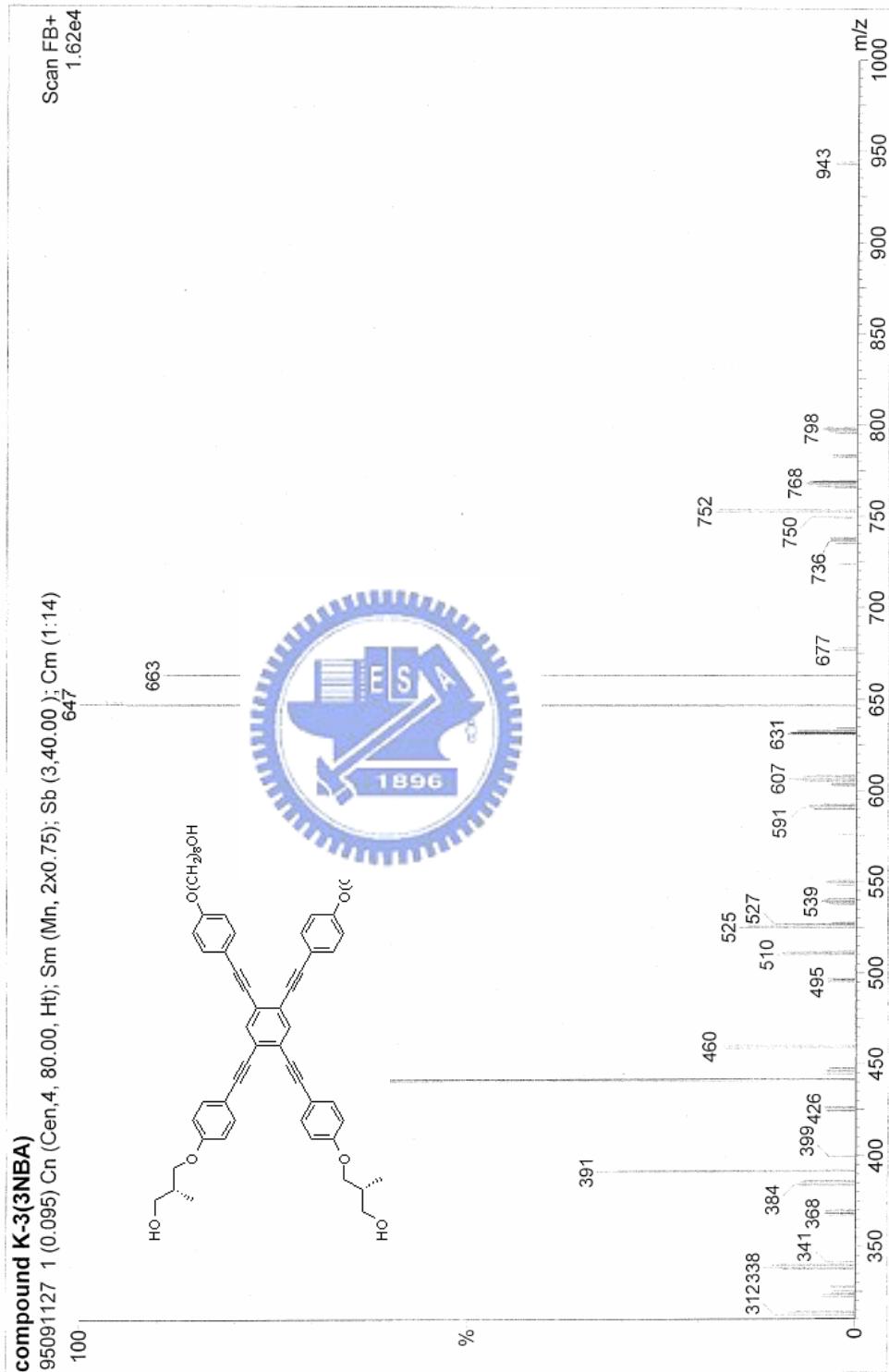


附圖 11. ^{13}C -NMR spectrum of compound 28

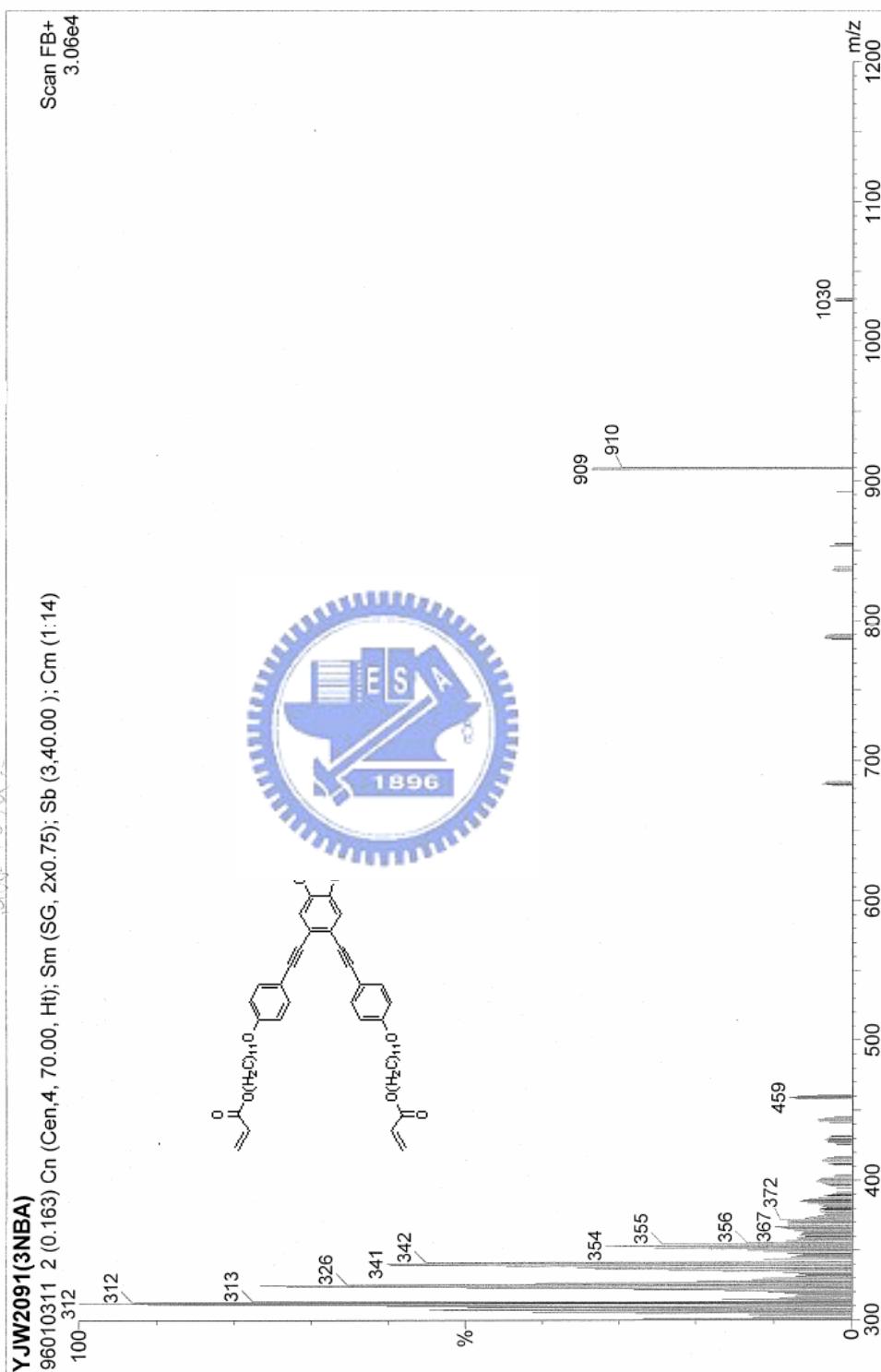


附圖 12. ^{13}C -NMR spectrum of compound 32

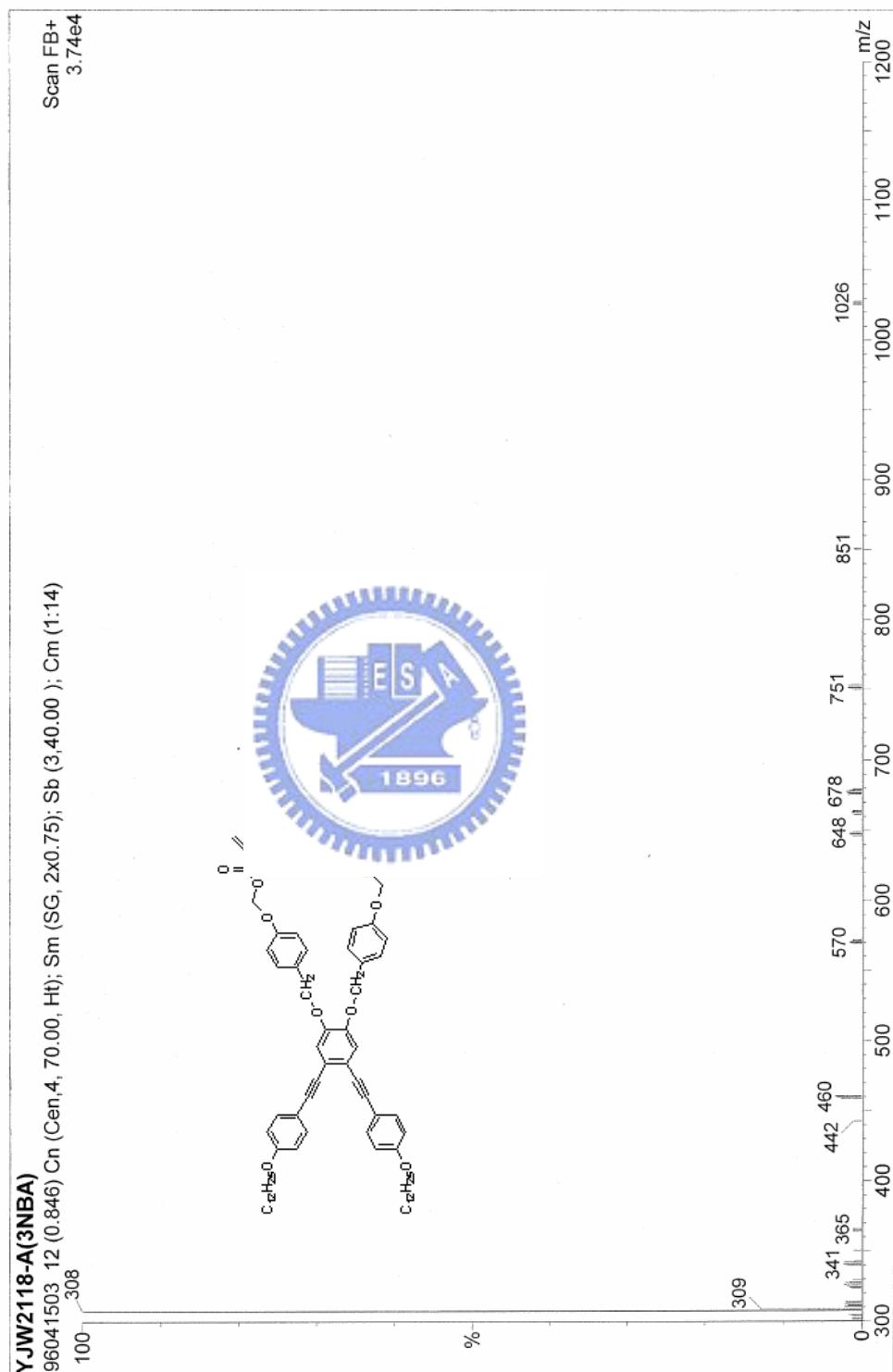




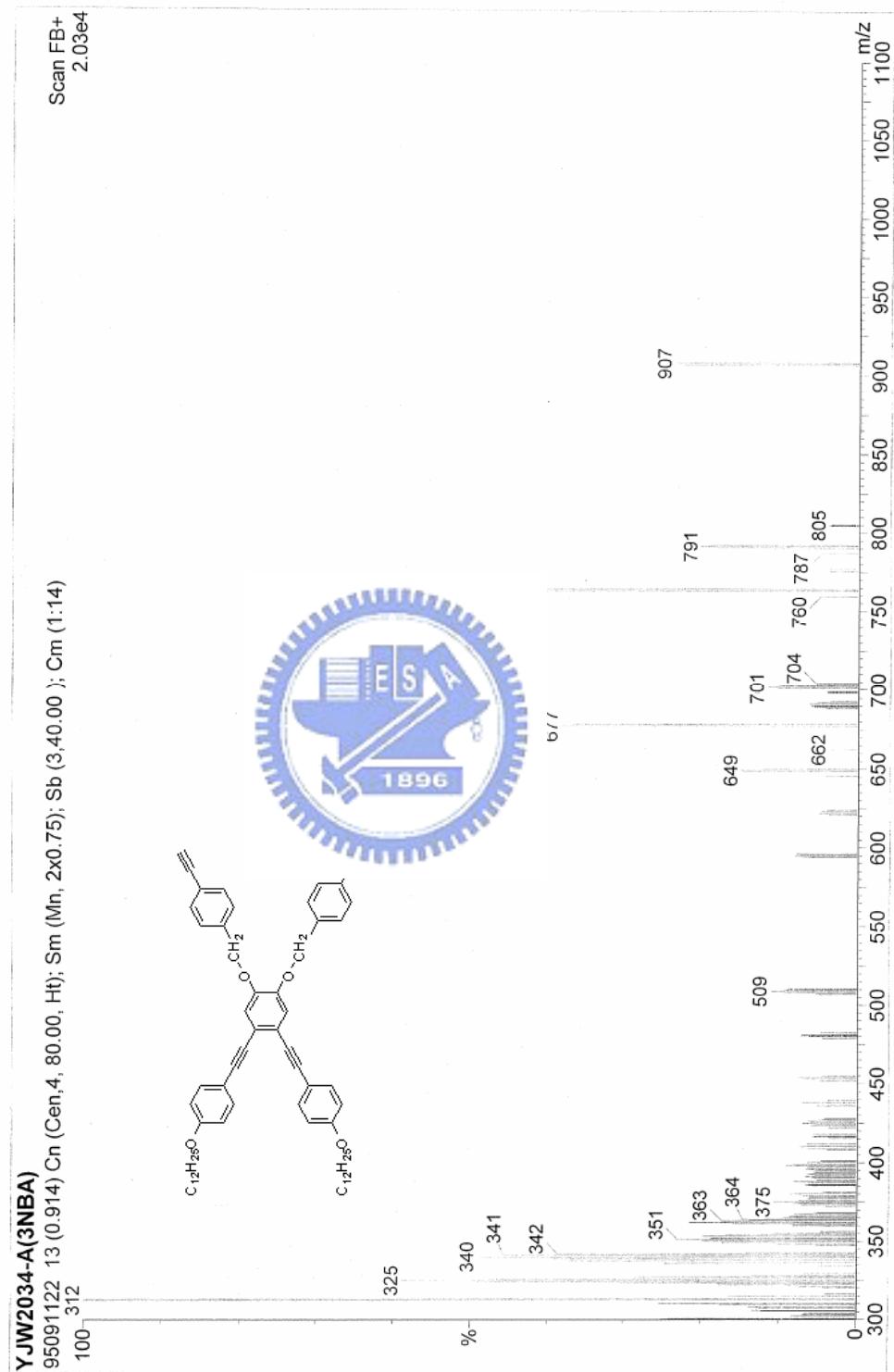
附圖 14. Mass spectrum of compound 10



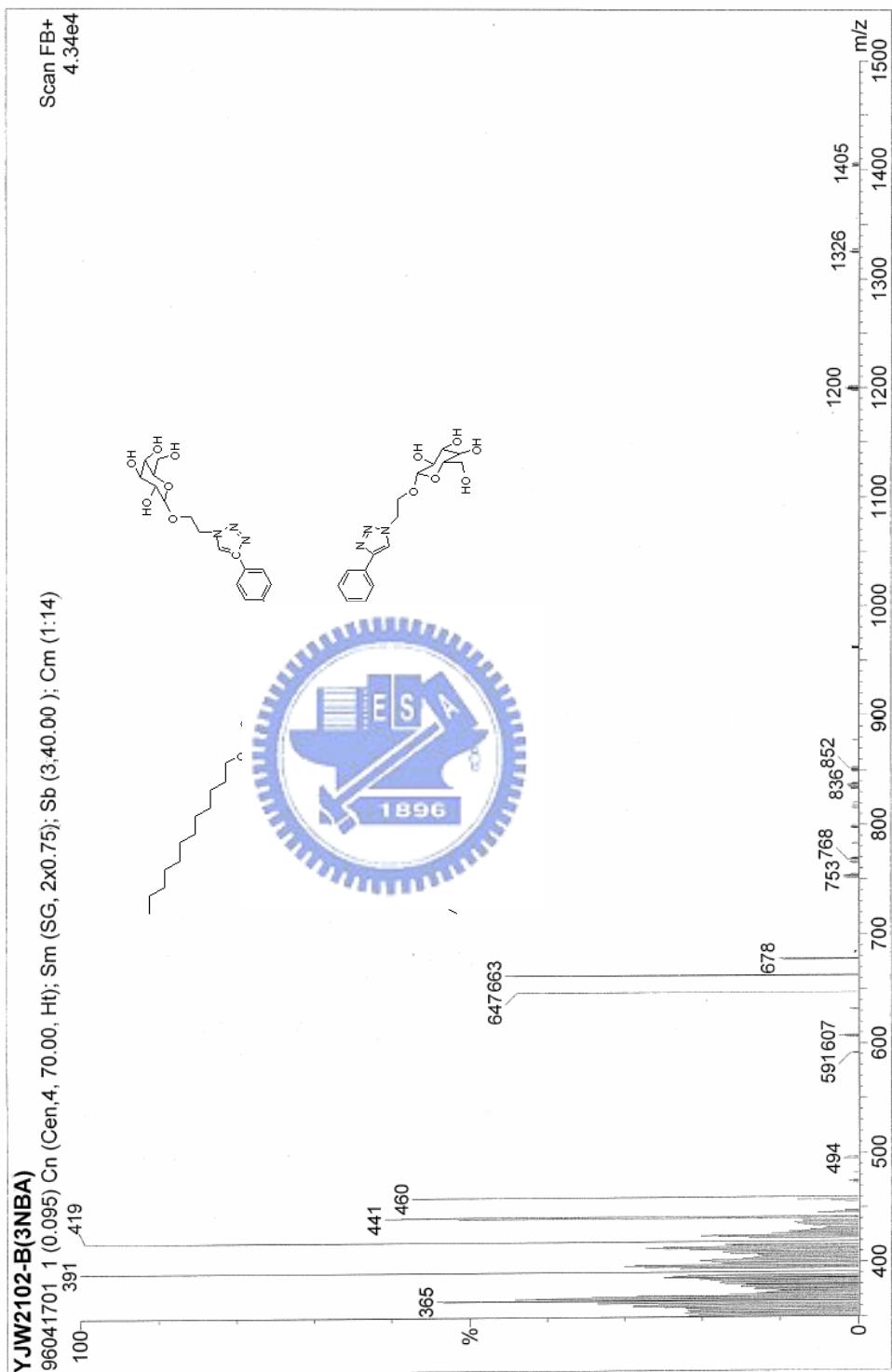
附圖 15. Mass spectrum of M3



附圖 16. Mass spectrum of M4



附圖 17. Mass spectrum of compound 28



附圖 18. Mass spectrum of compound 32