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ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย



APPENDICES

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

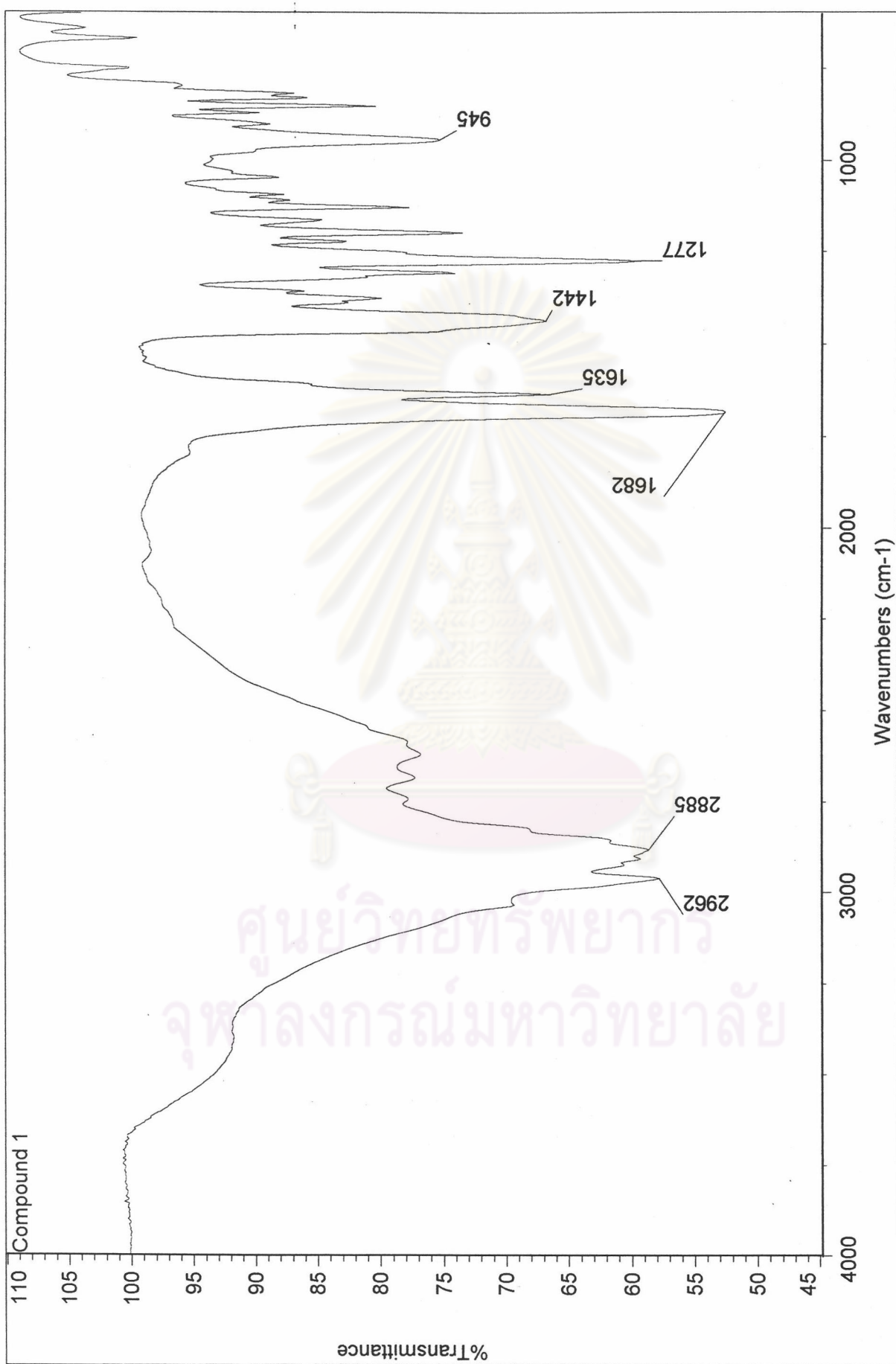


Figure 11 The IR spectrum of Compound 1

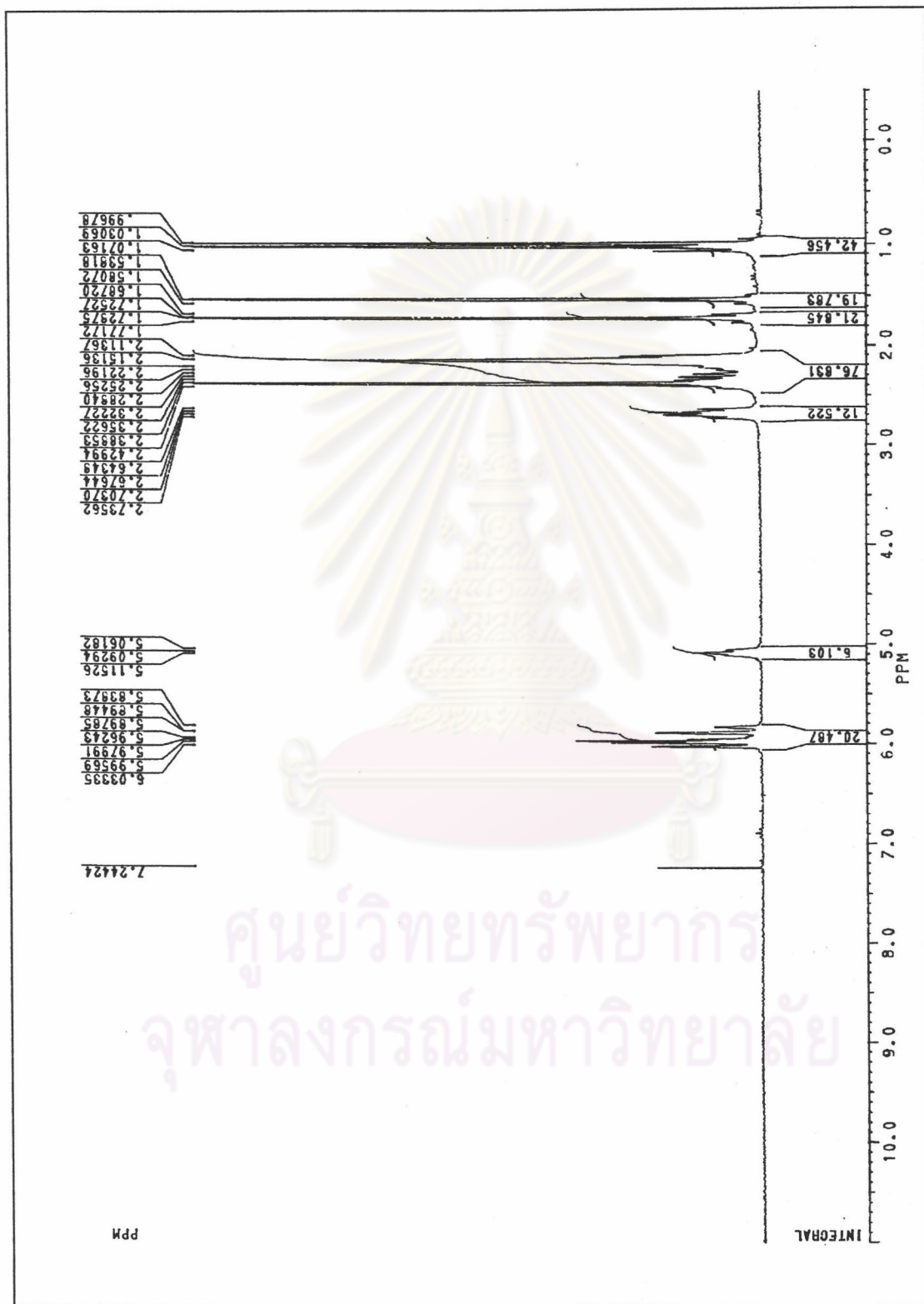


Figure 12 The ¹H-NMR spectrum of Compound 1

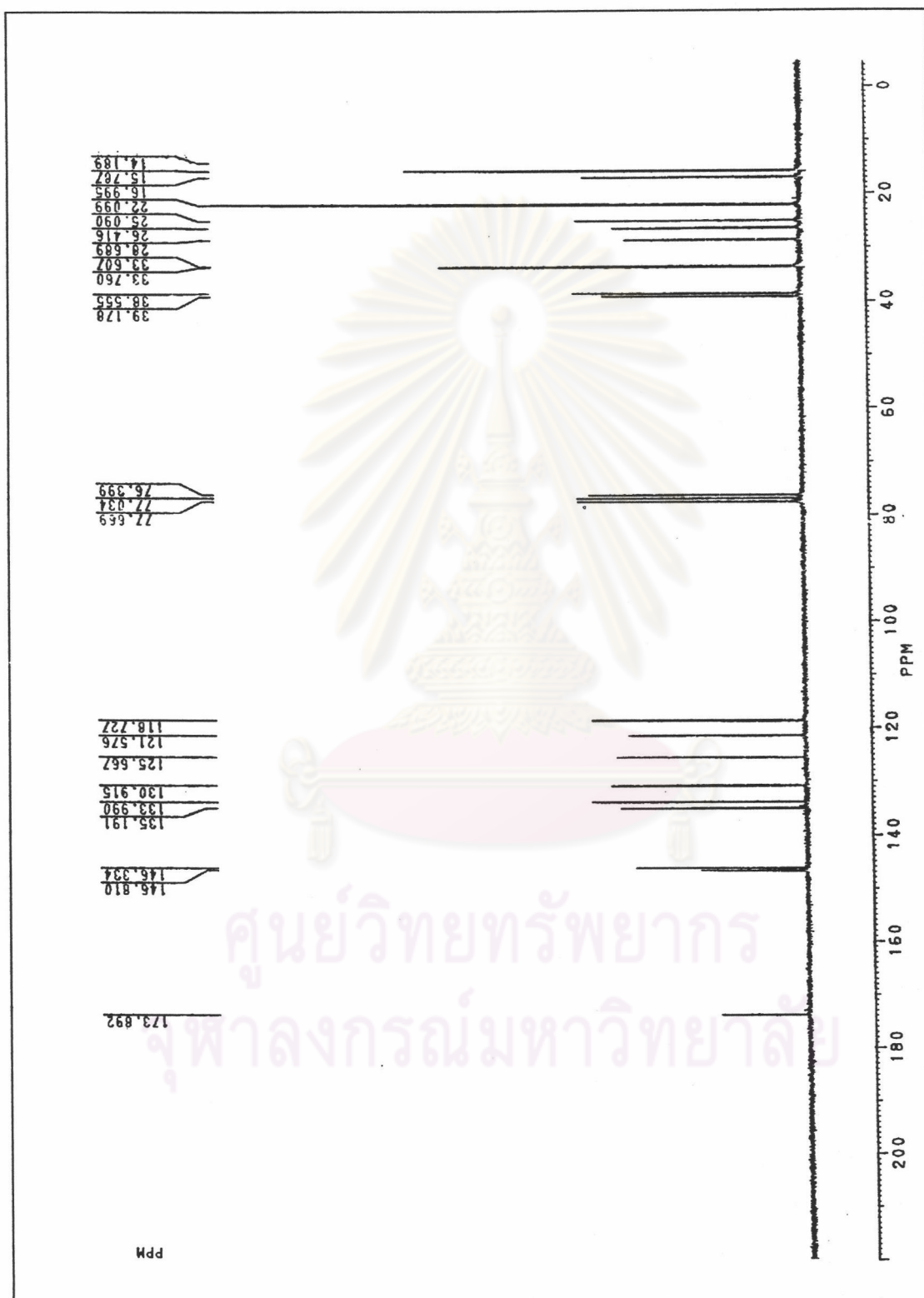


Figure 13 The ^{13}C -NMR spectrum of Compound 1

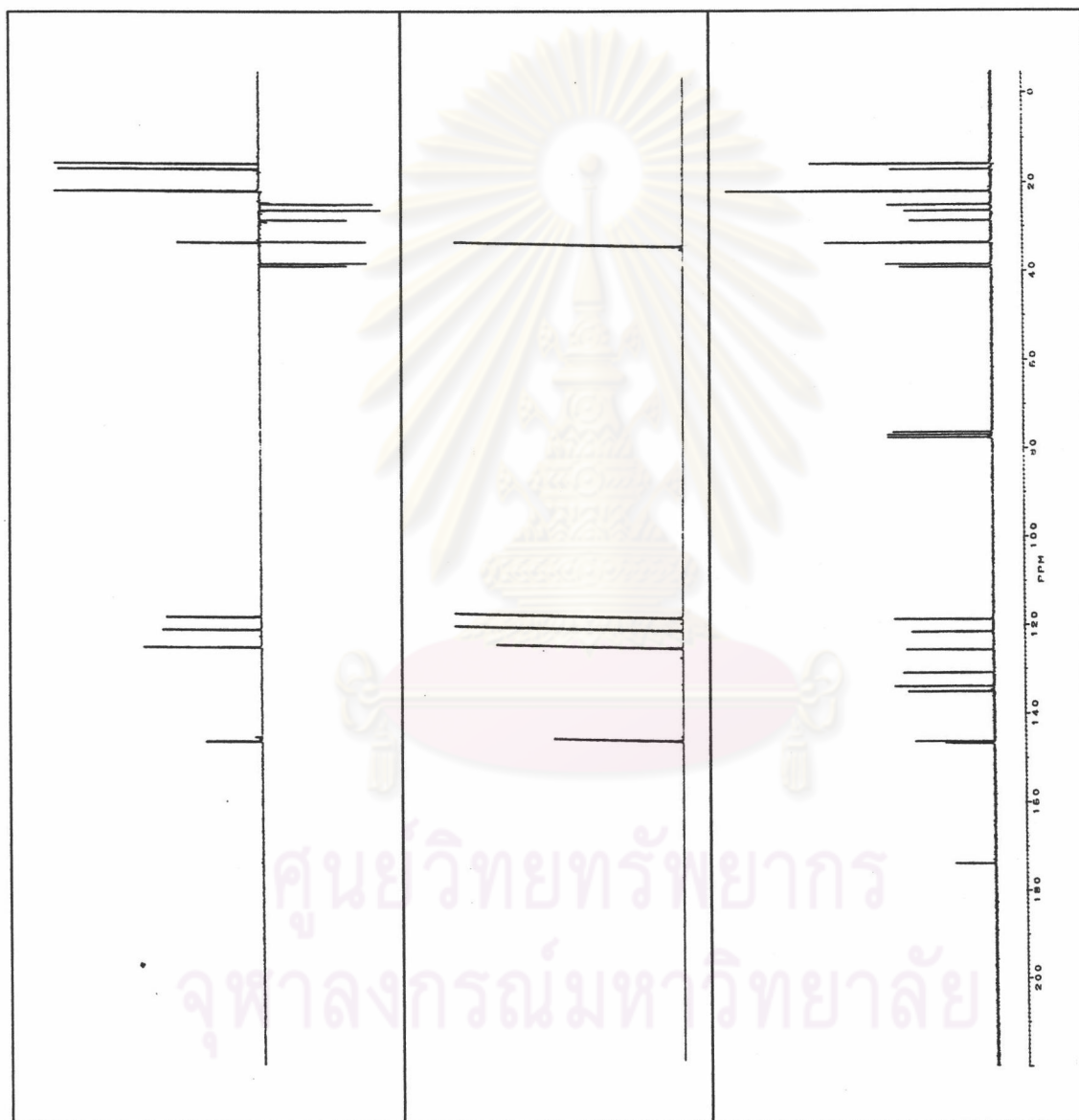


Figure 14 The DEPT-135, 90 and ¹³C-NMR spectrum of Compound 1

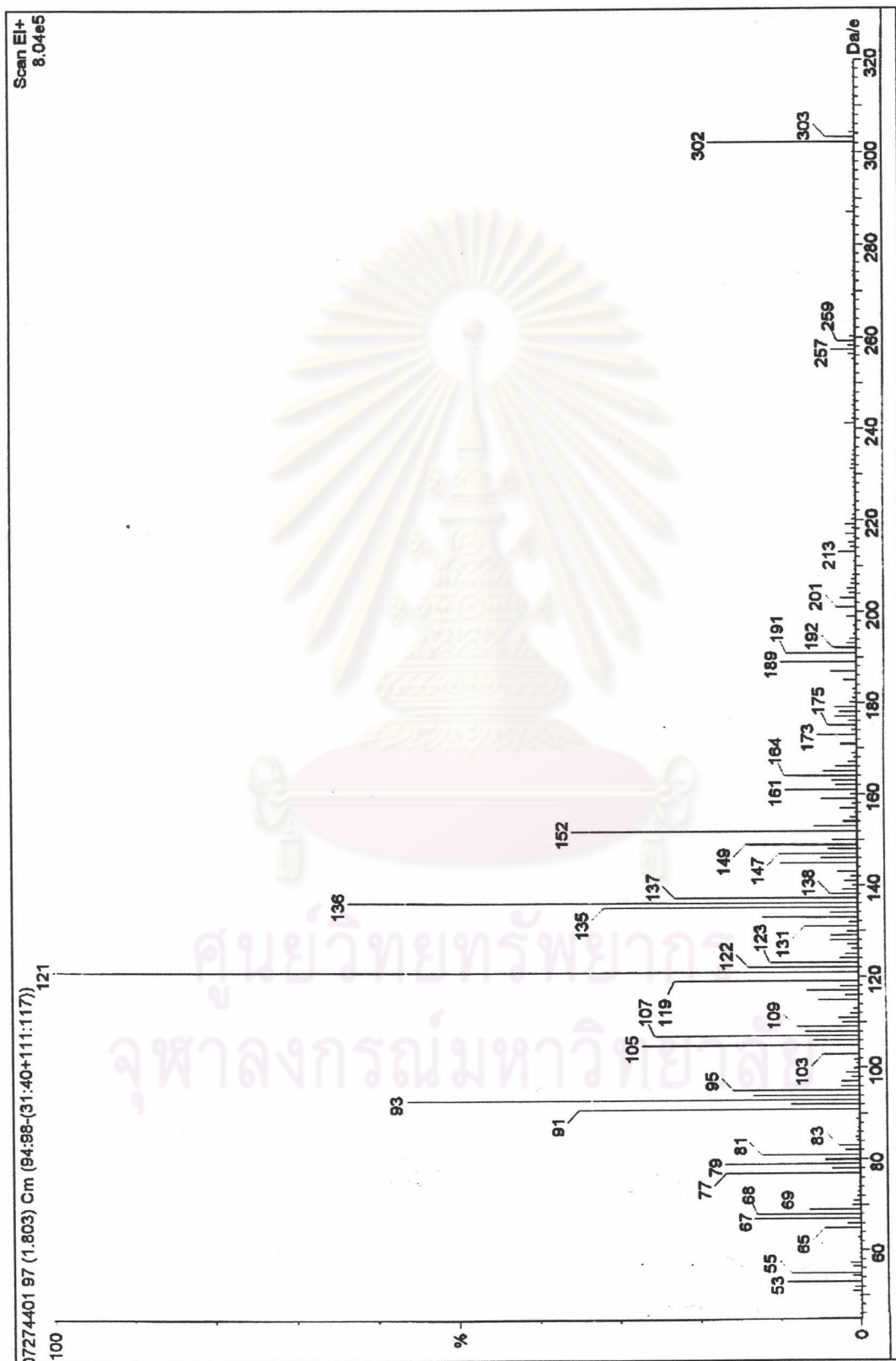


Figure 15 The EM-IS spectrum of Compound 1

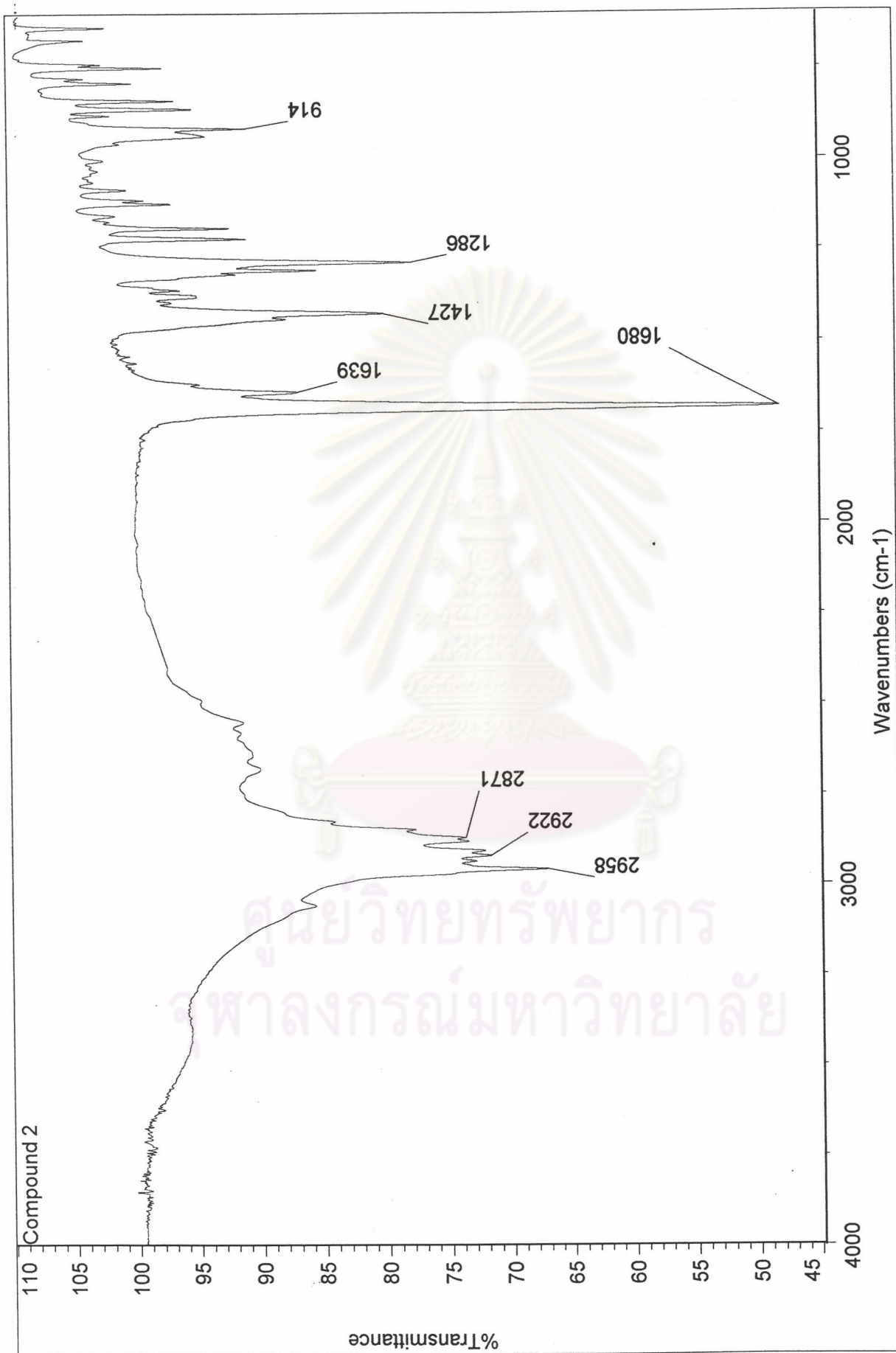


Figure 16 The IR spectrum of Compound 2

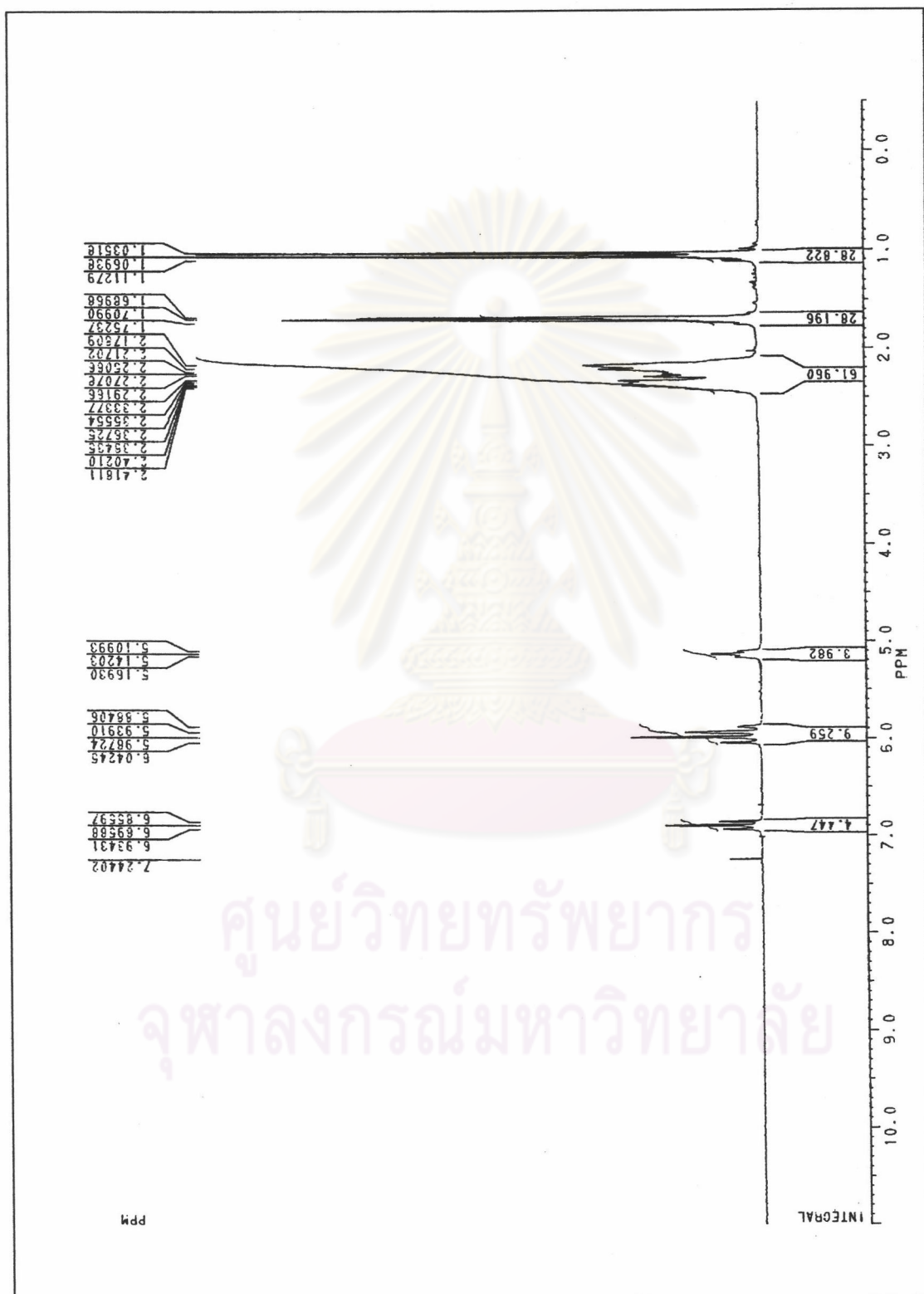


Figure 17 The $^1\text{H-NMR}$ spectrum of Compound 2

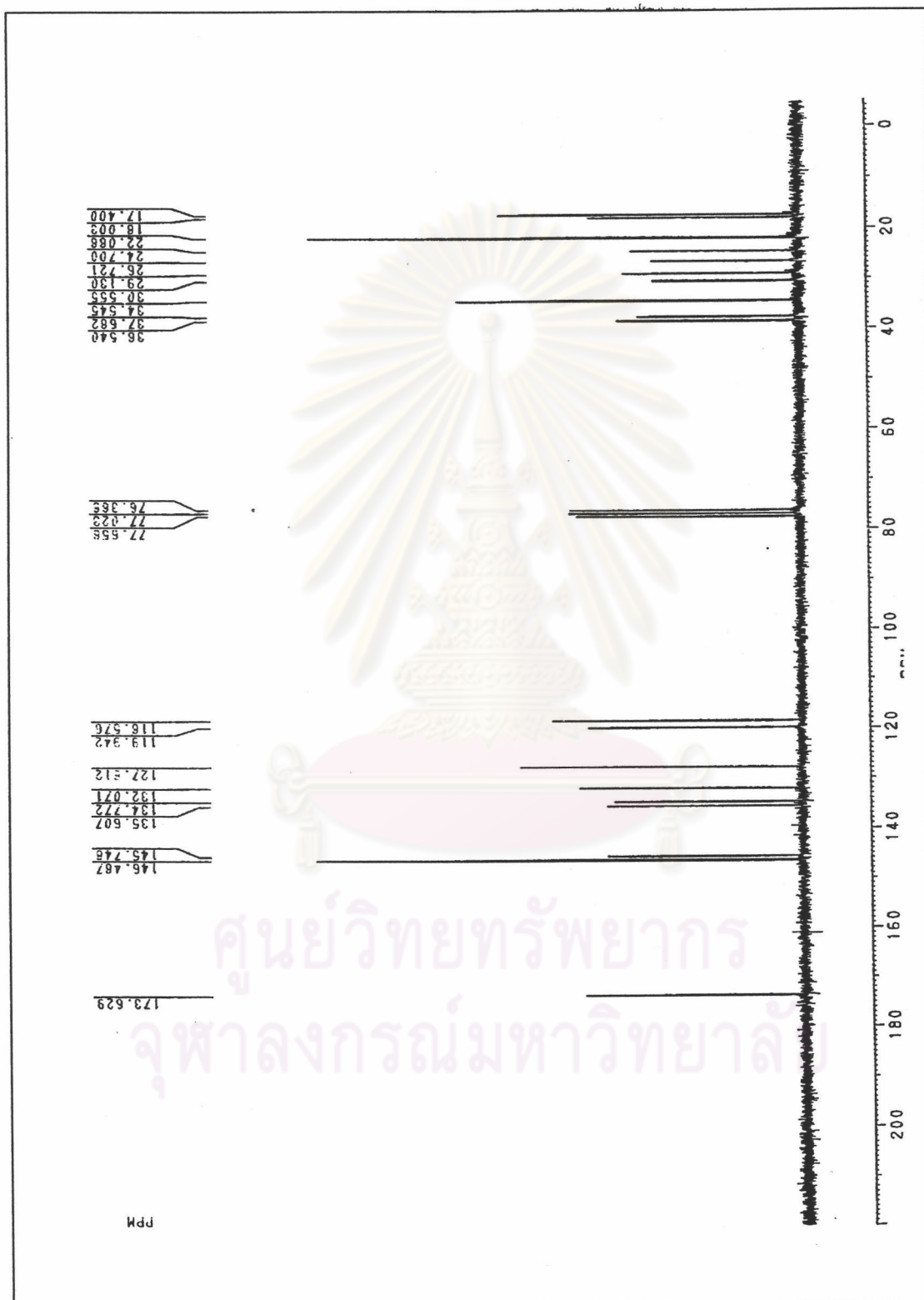


Figure 18 The ^{13}C -NMR spectrum of Compound 2

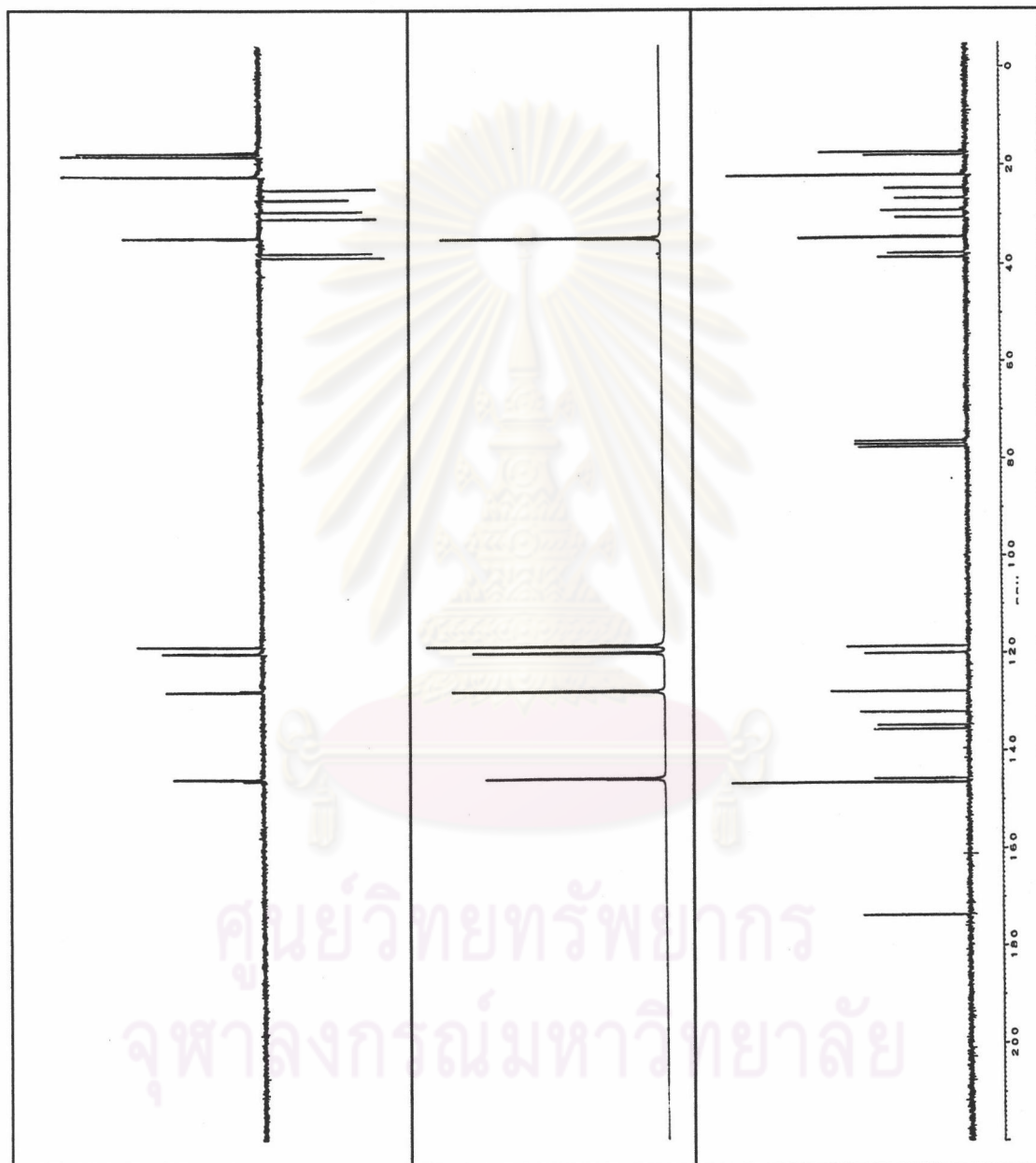


Figure 19 The DEPT-135, 90 and ^{13}C -NMR spectrum of Compound 2

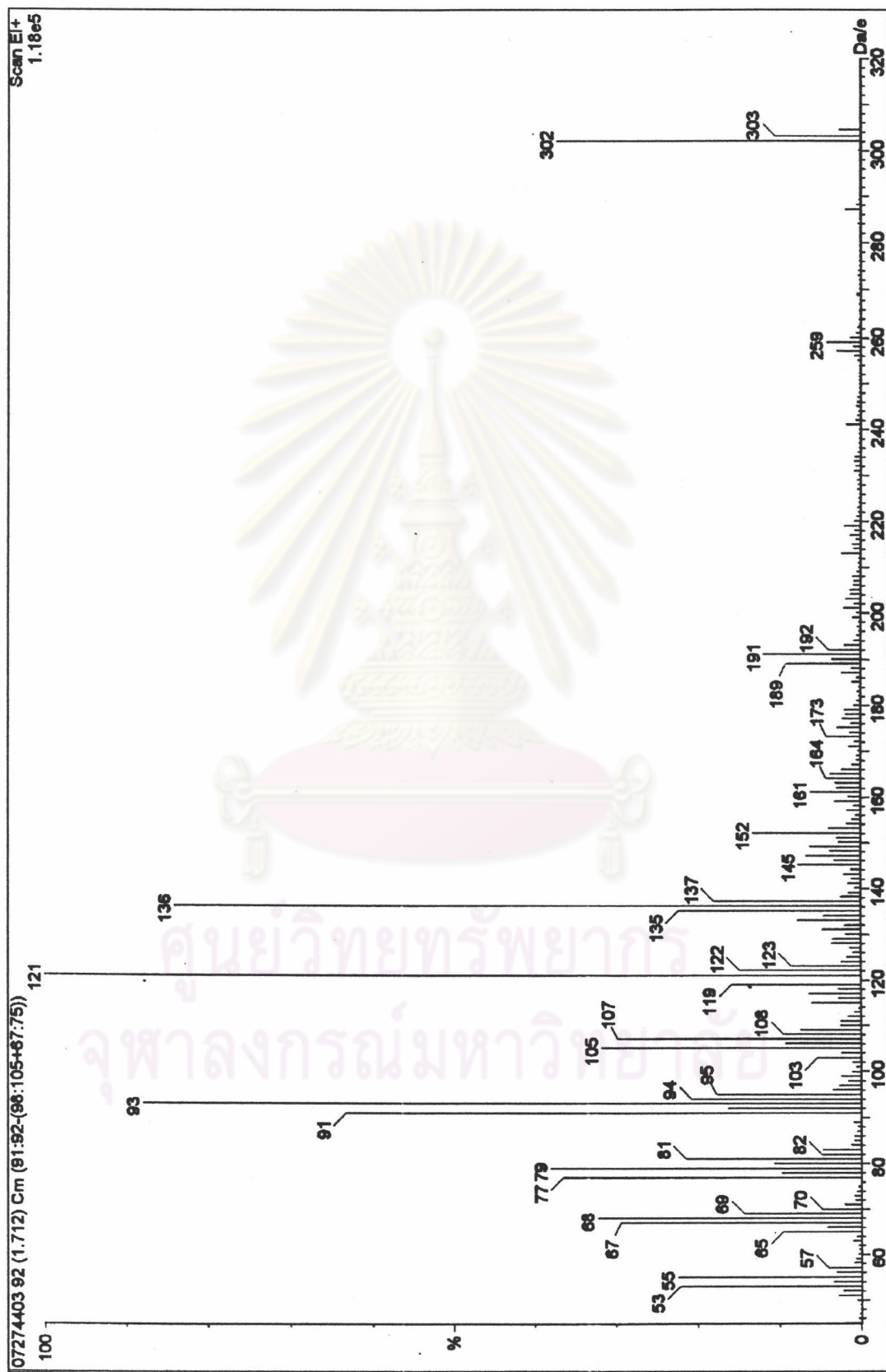


Figure 20 The EM-IS spectrum of Compound 2

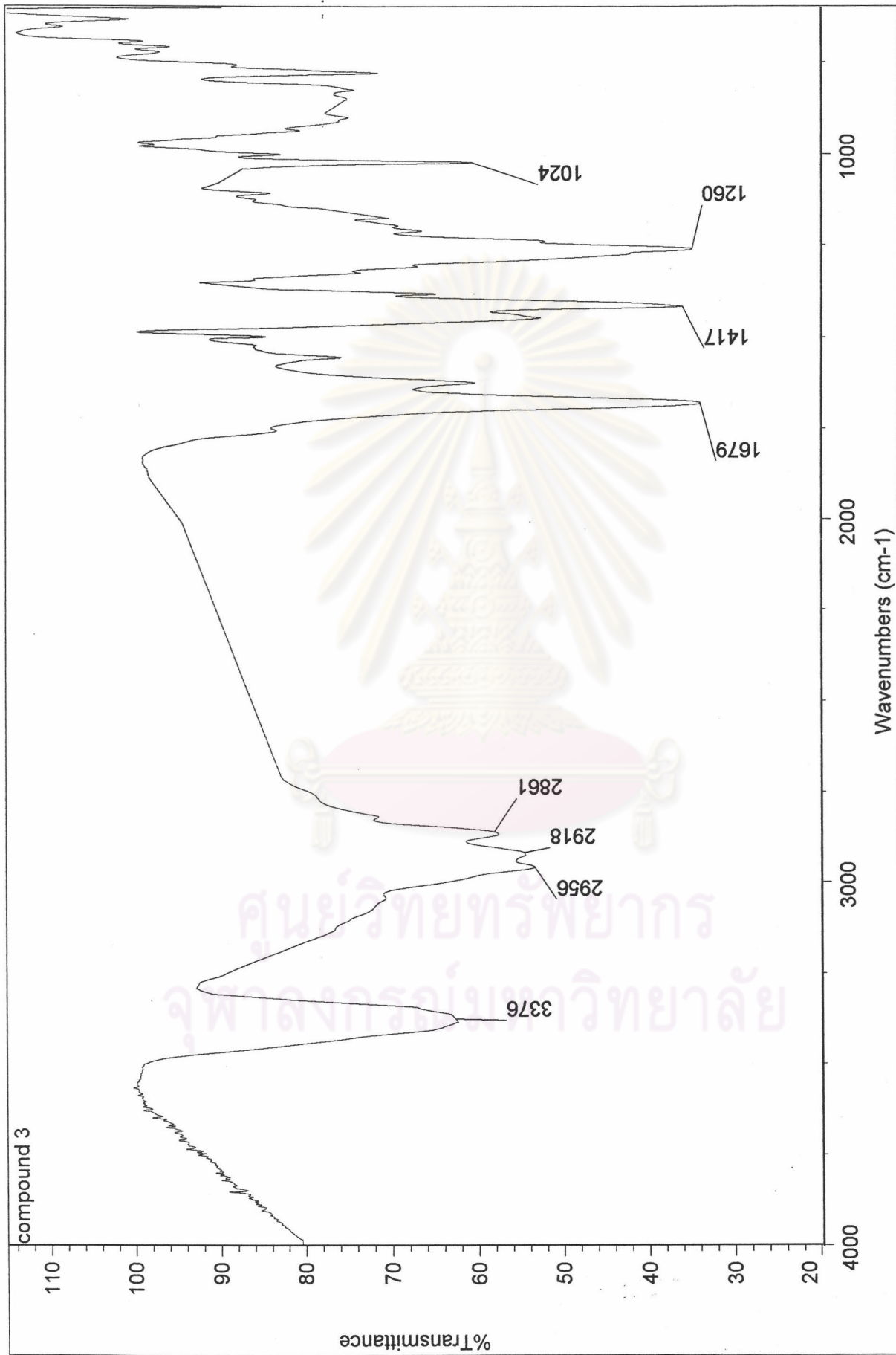


Figure 21 The IR spectrum of Compound 3

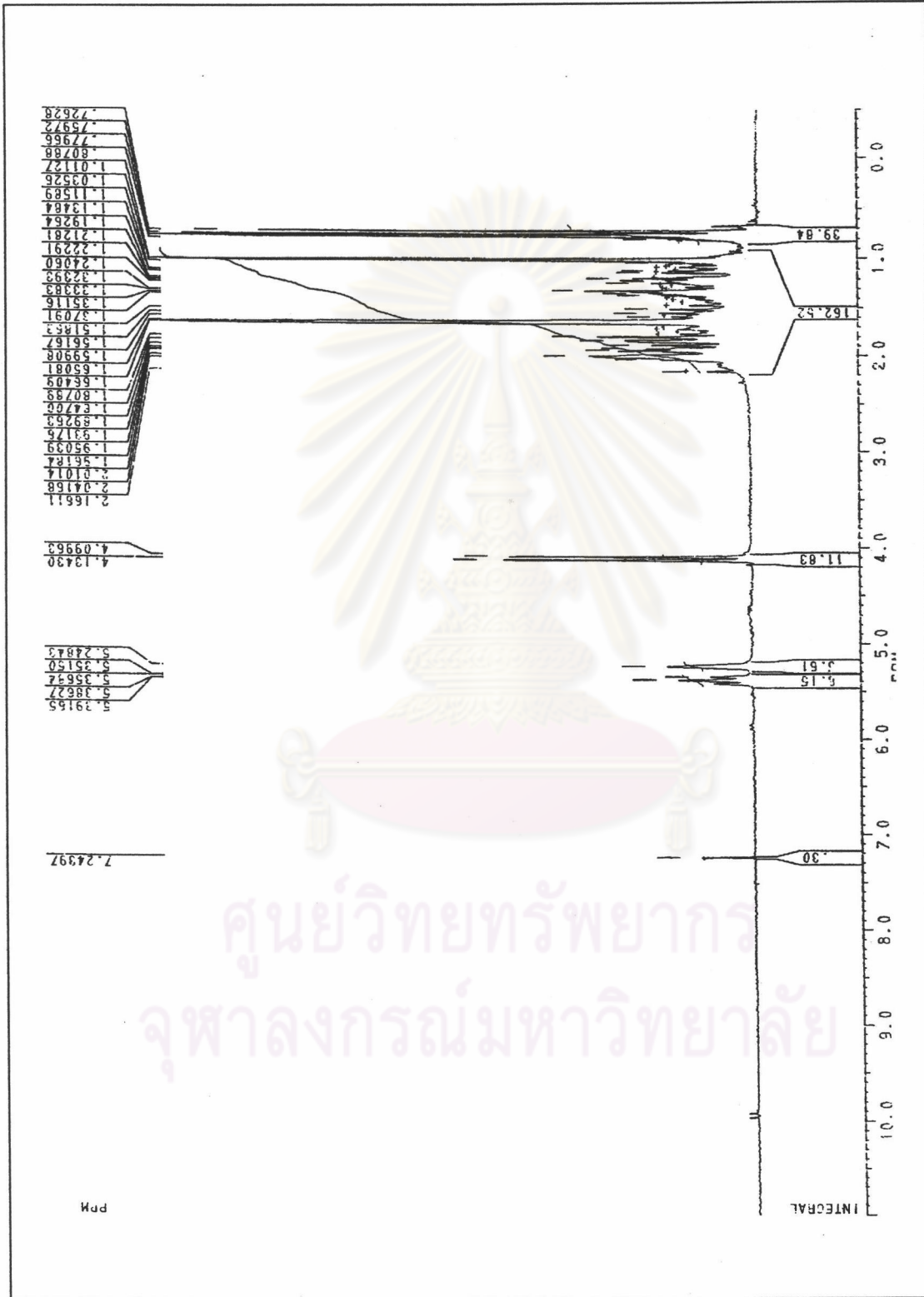


Figure 22 The ¹H-NMR spectrum of Compound 3

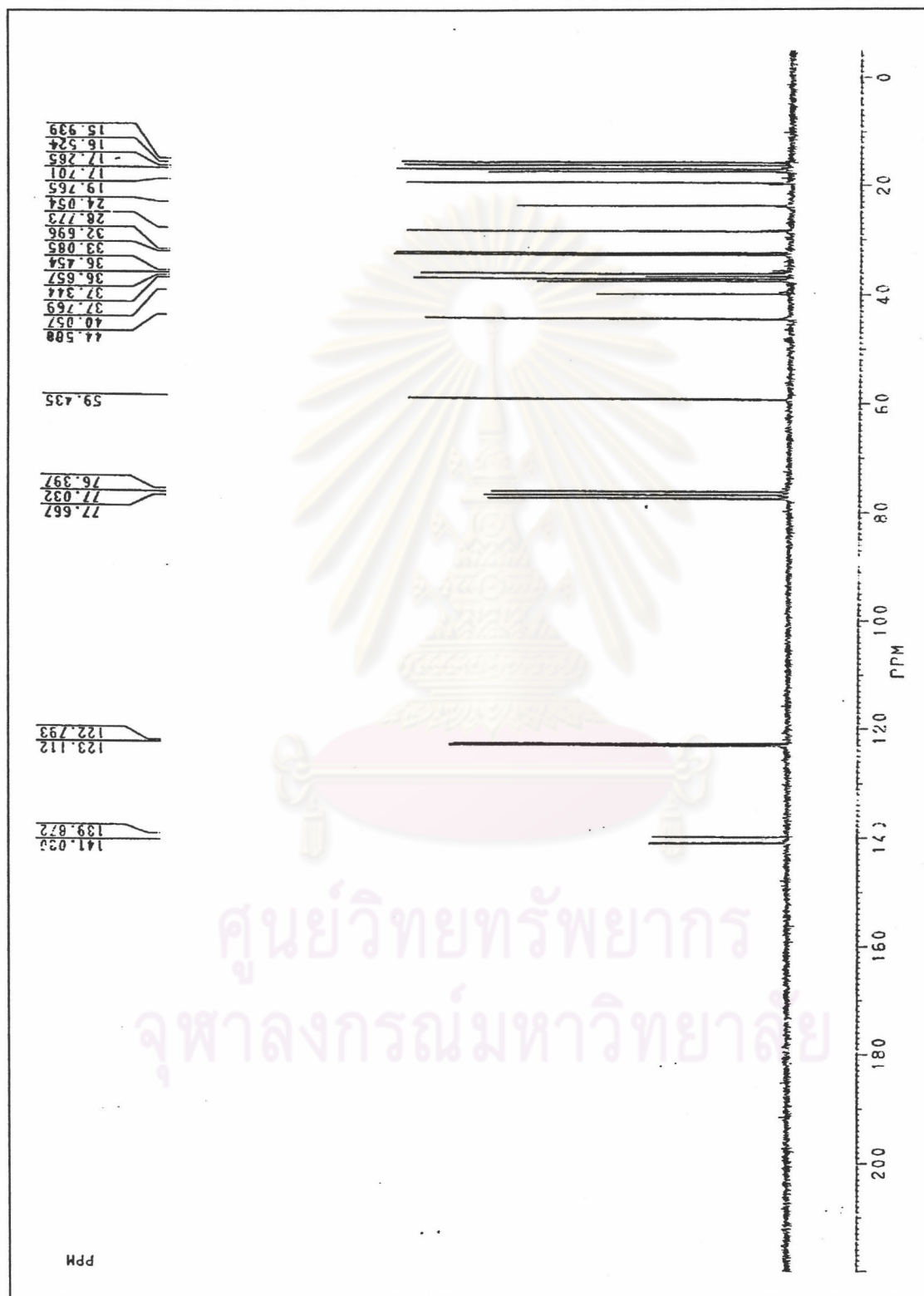


Figure 23 The $^{13}\text{C-NMR}$ spectrum of Compound 3

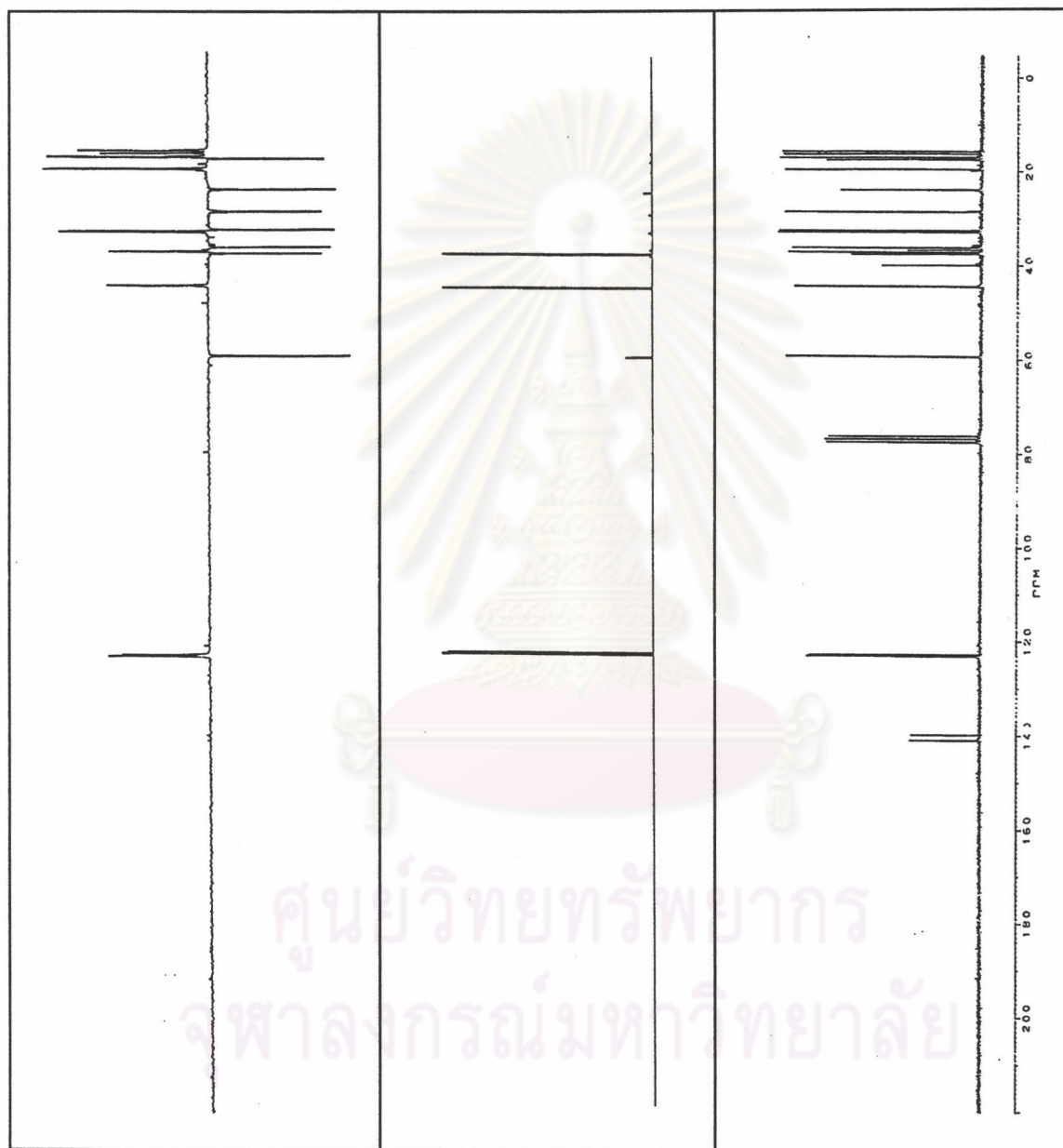


Figure 24 The DEPT-135, 90 and ^{13}C -NMR spectrum of Compound 3

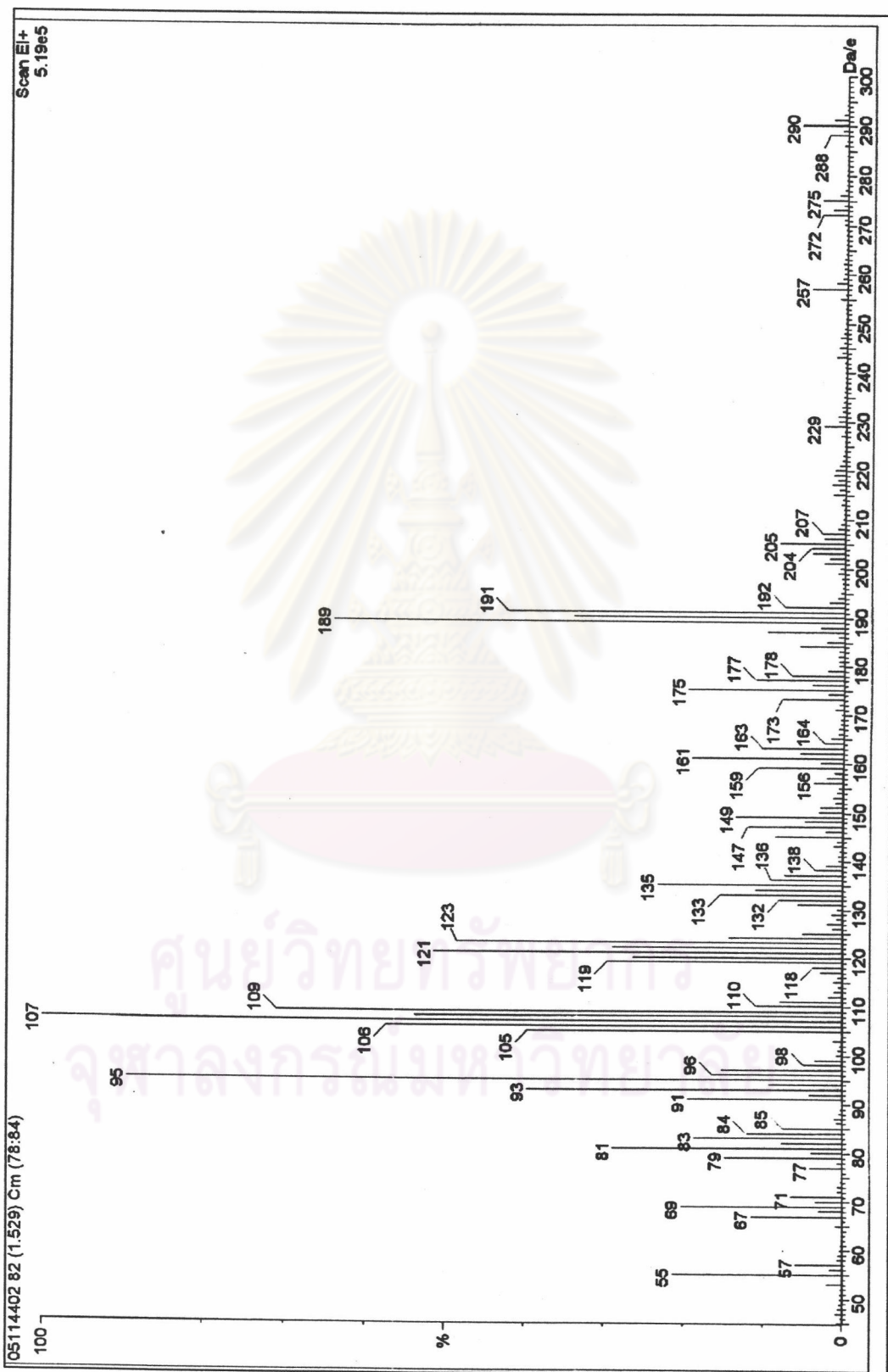


Figure 25 The EM-IS spectrum of Compound 3

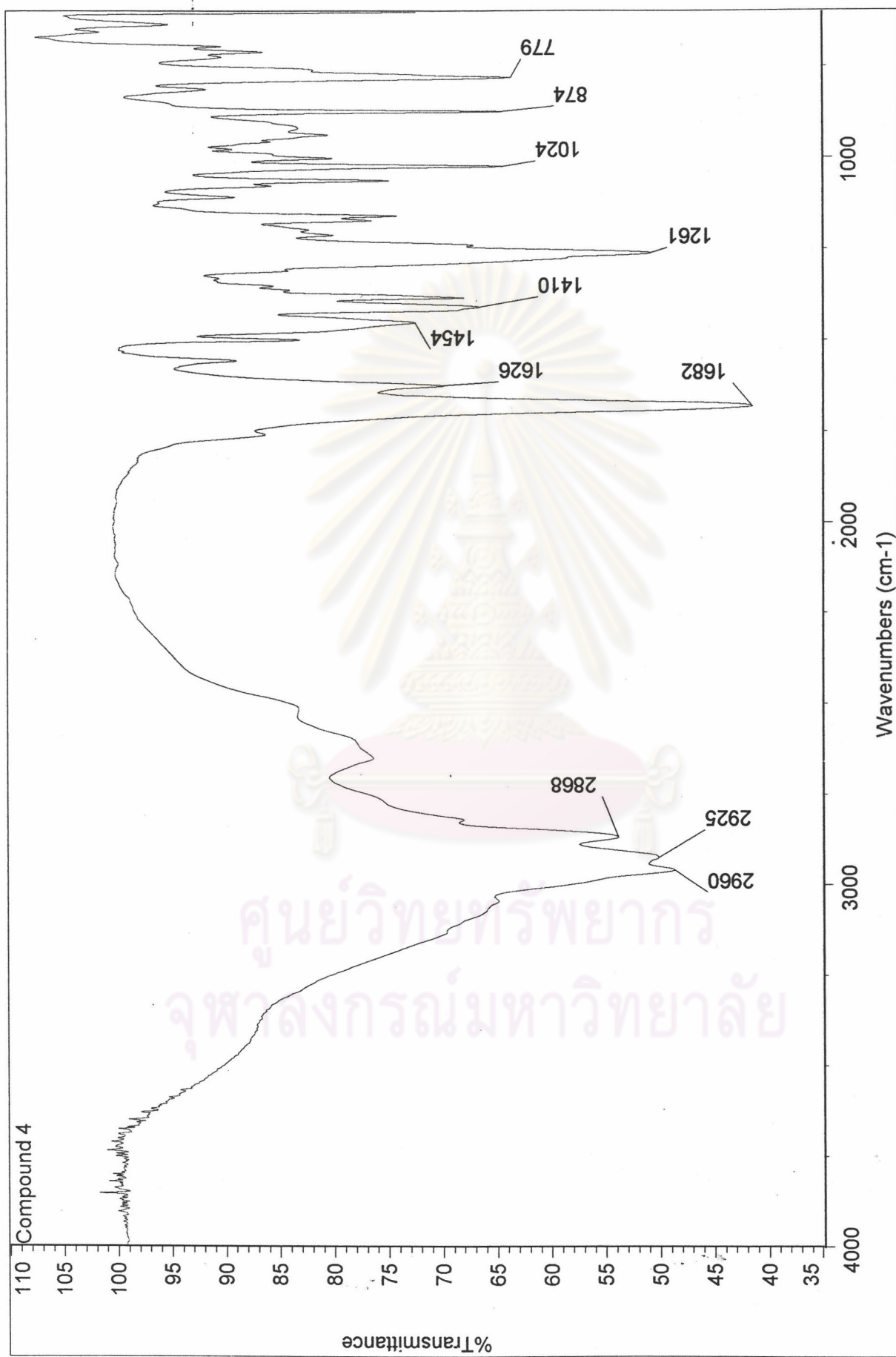


Figure 26 The IR spectrum of Compound 4

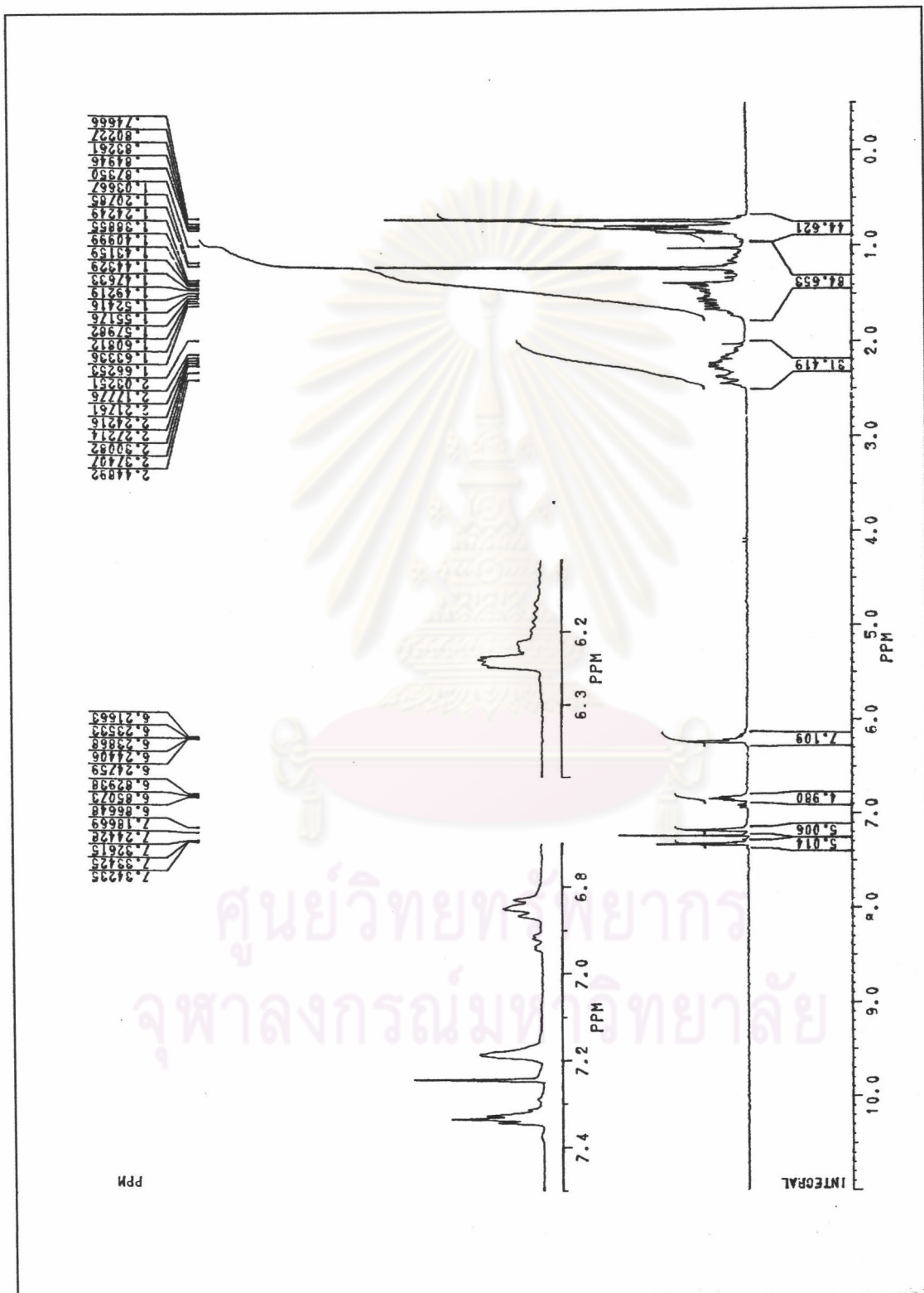


Figure 27 The ¹H-NMR spectrum of Compound 4

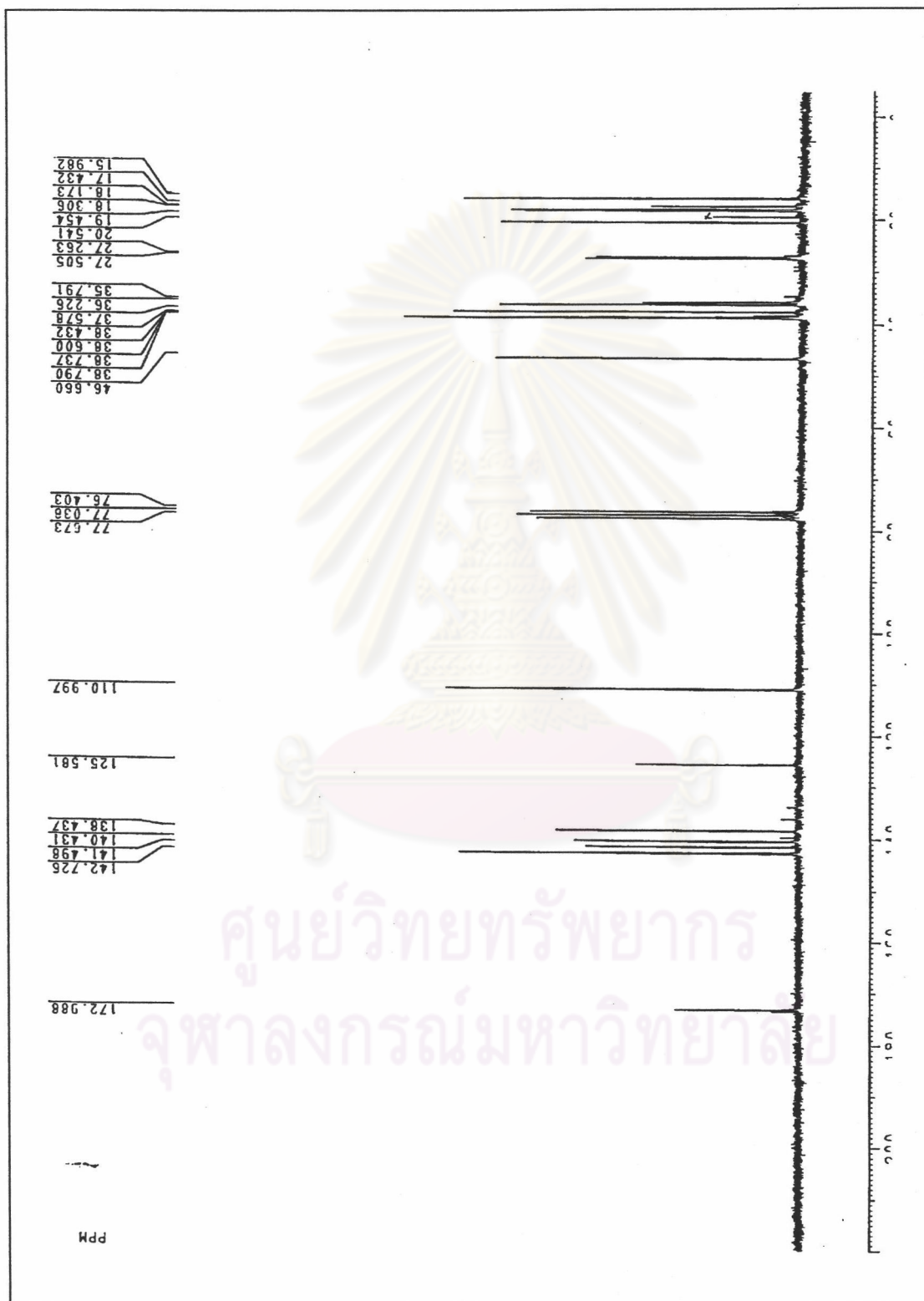


Figure 28 The ^{13}C -NMR spectrum of Compound 4

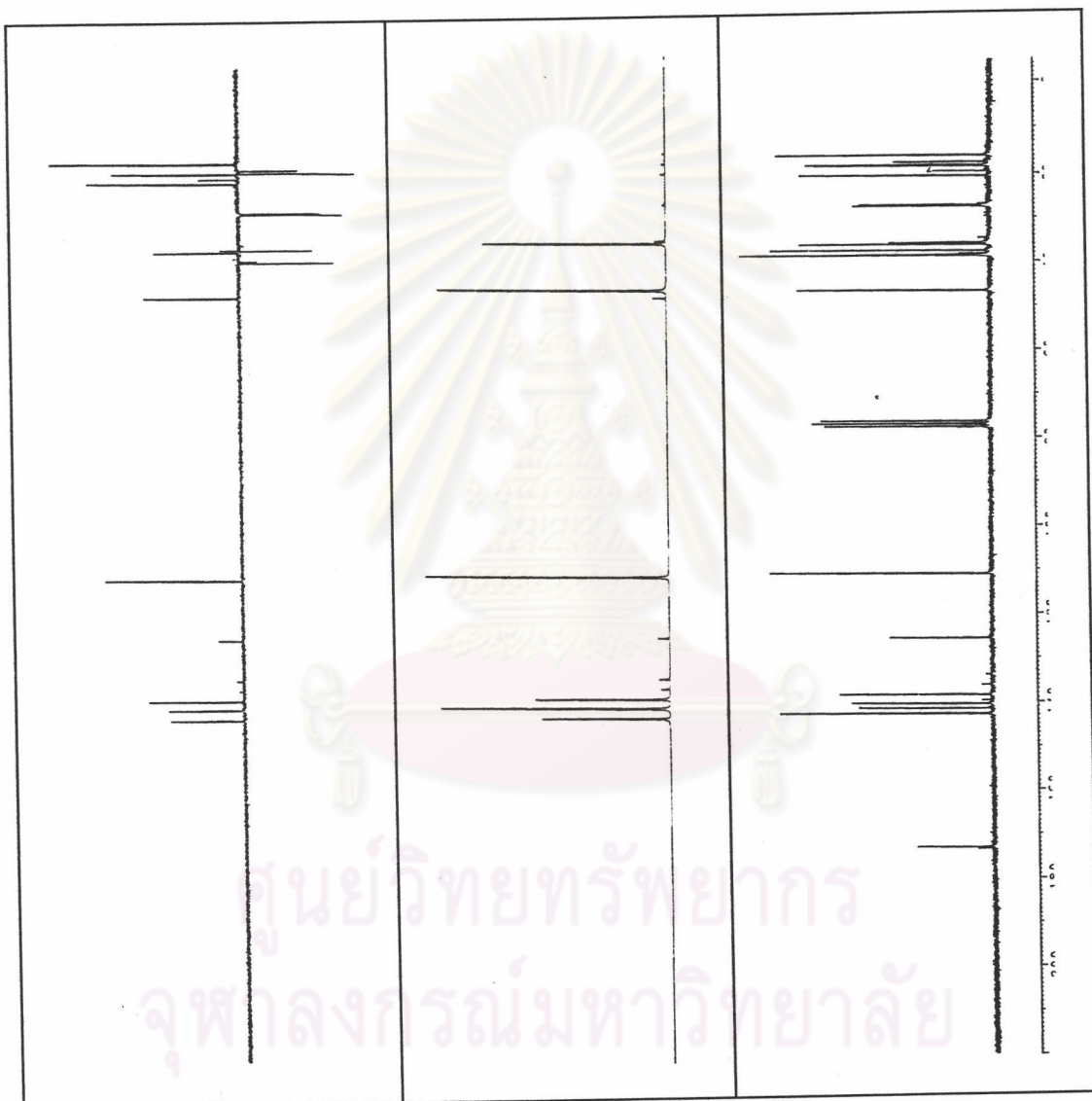


Figure 29 The DEPT-135, 90 and ¹³C-NMR spectrum of Compound 4

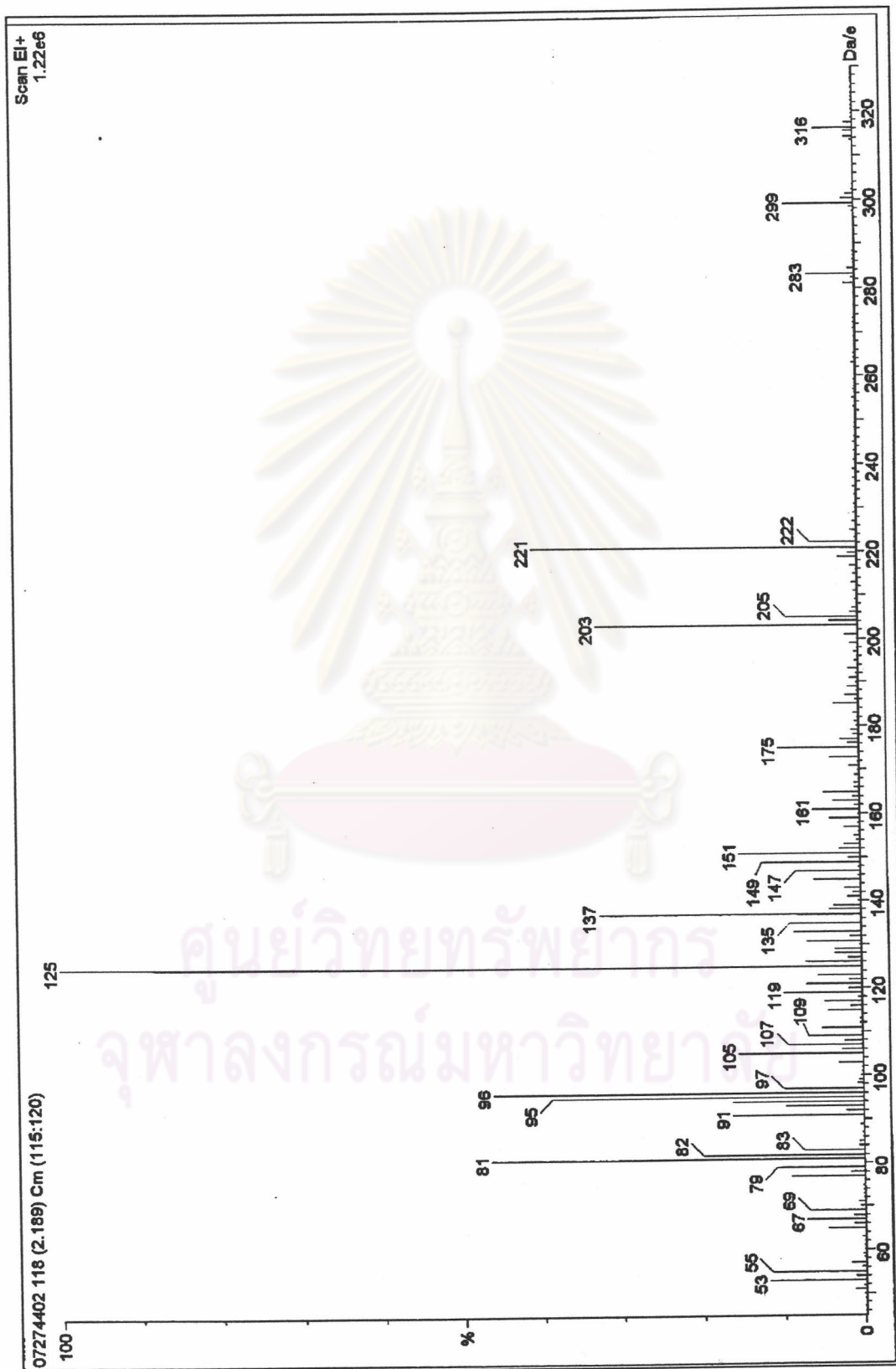


Figure 30 The EM-IS spectrum of Compound 4

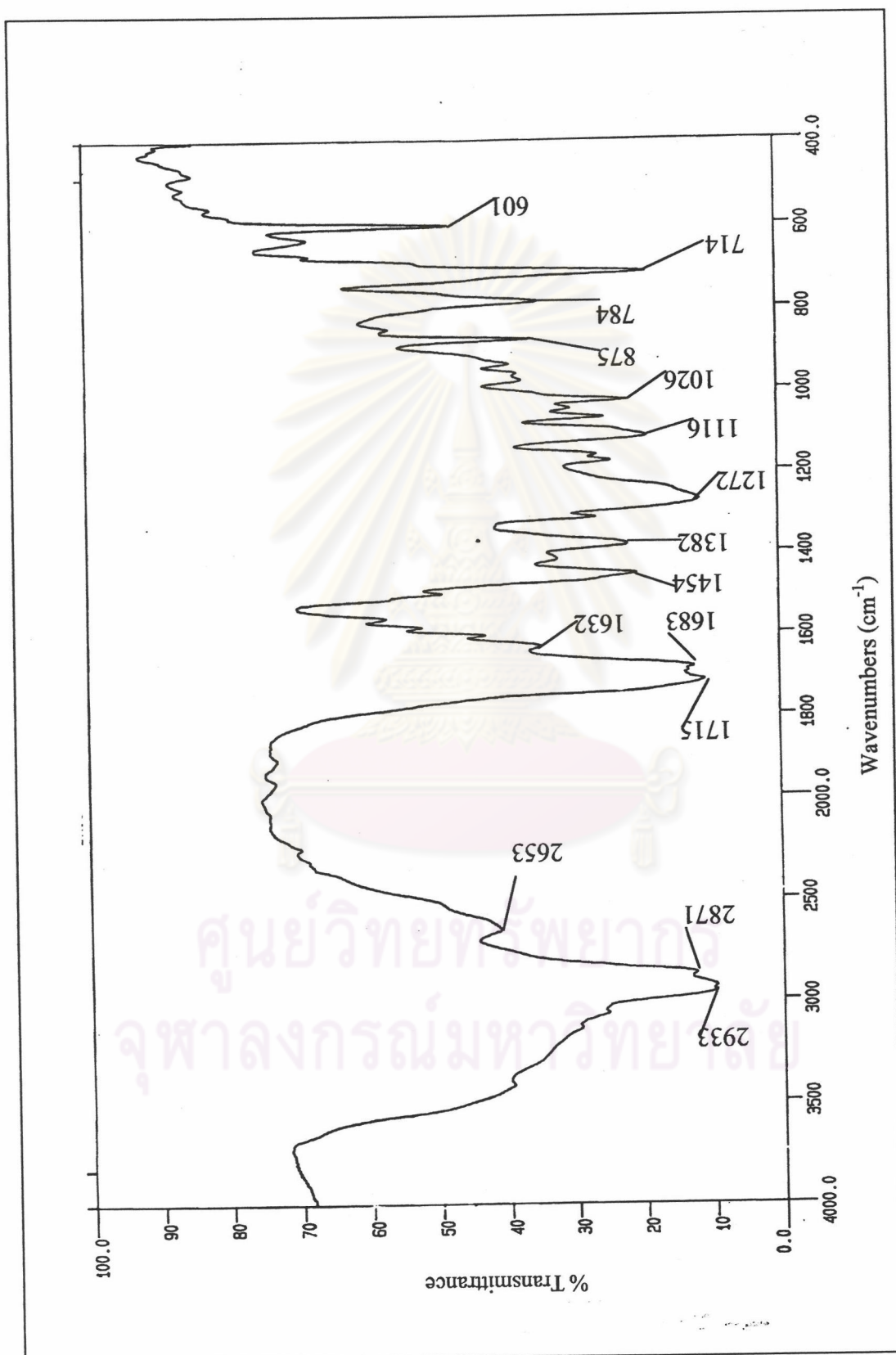


Figure 31 The IR spectrum of Compound 5

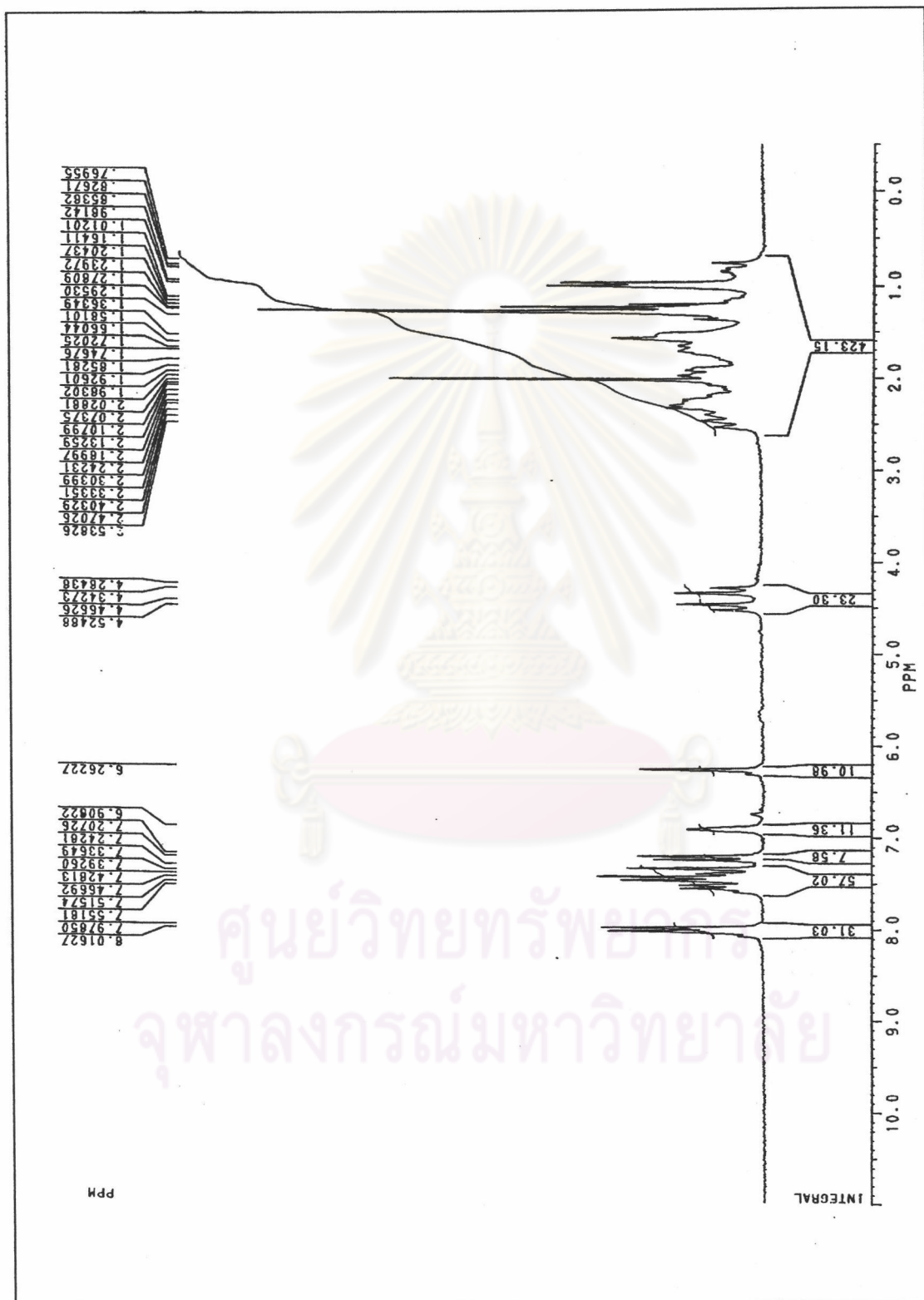


Figure 32 The ¹H-NMR spectrum of Compound 5

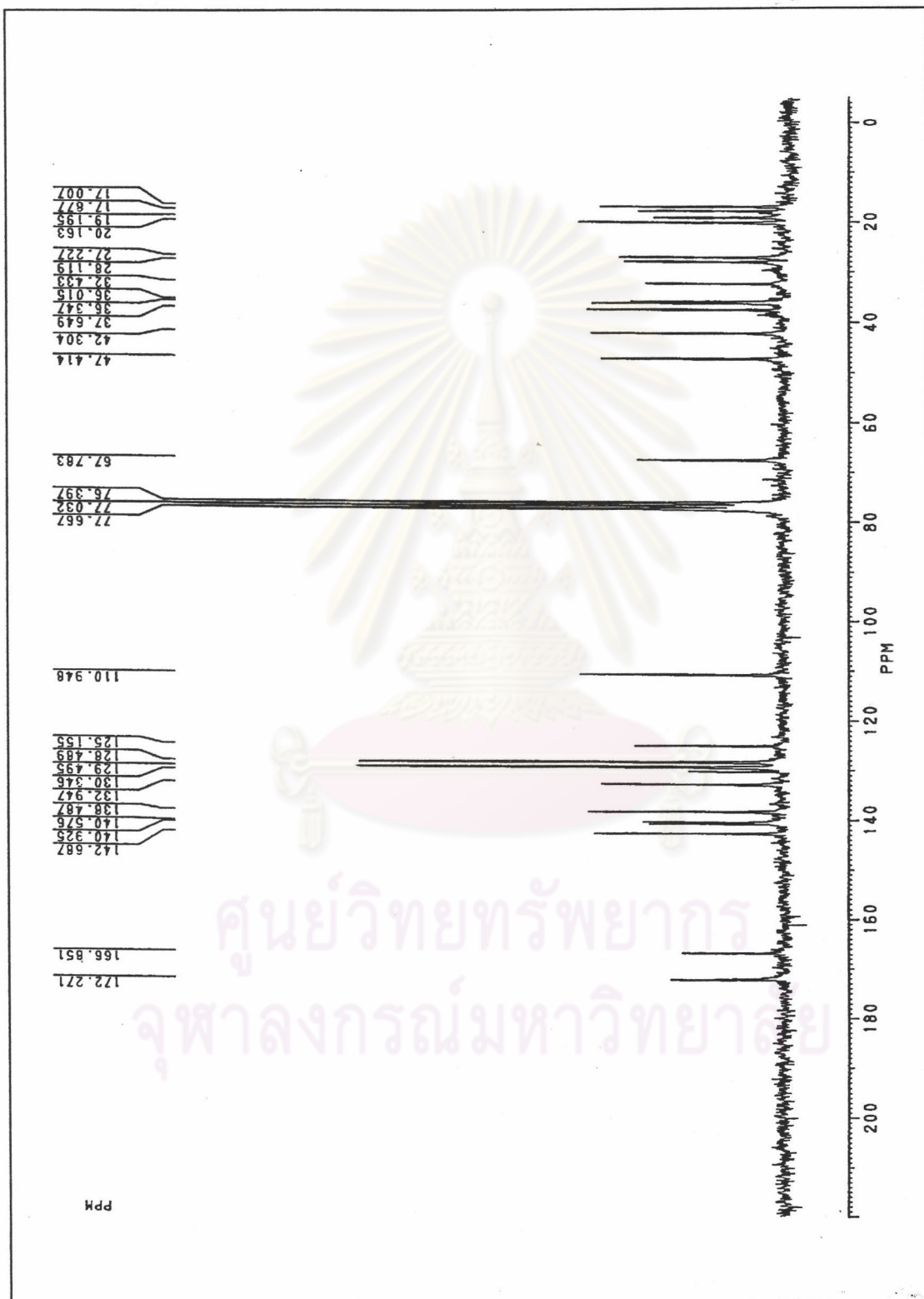


Figure 33 The ¹³C-NMR spectrum of Compound 5

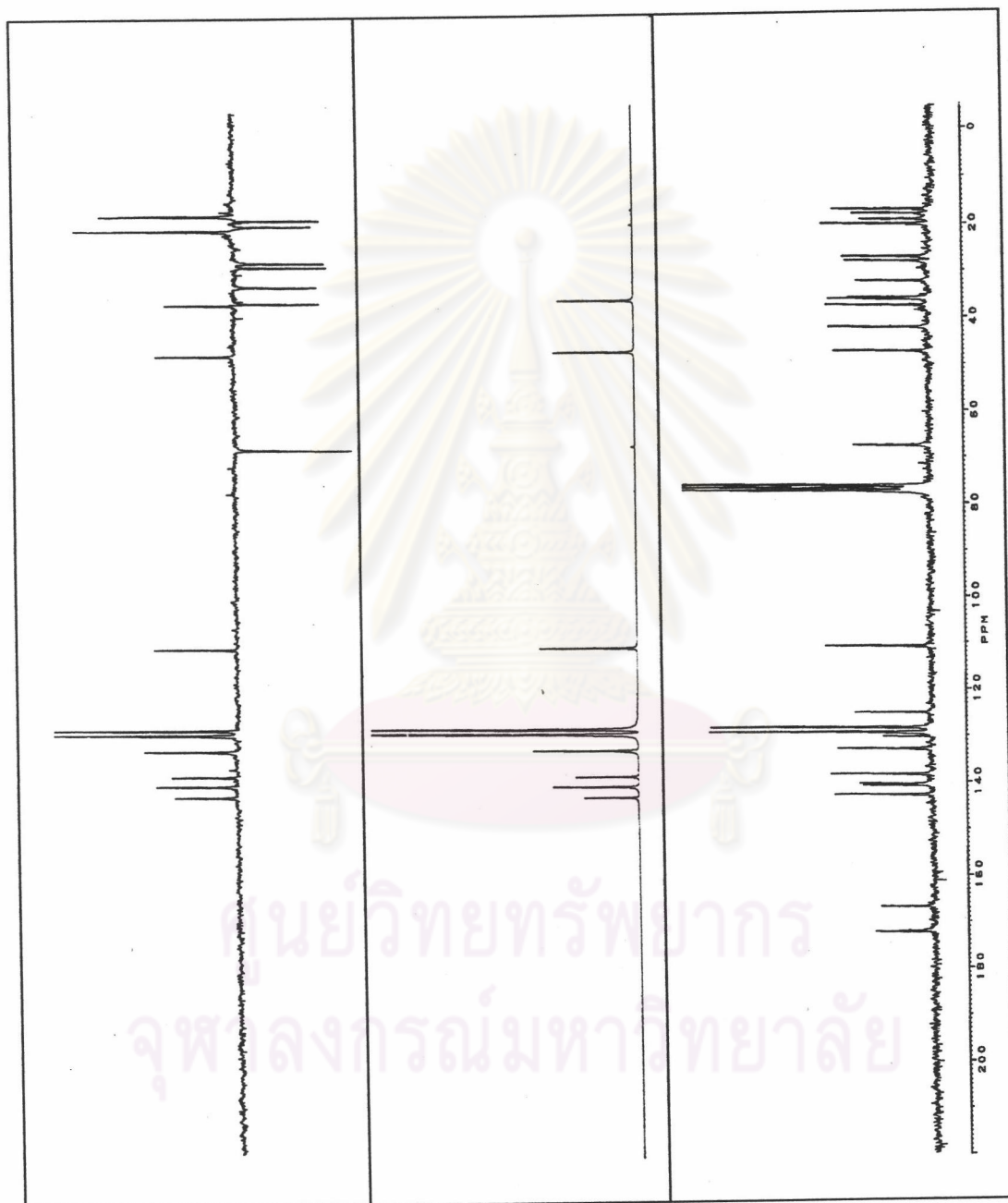


Figure 34 The DEPT-135, 90 and ¹³C-NMR spectrum of Compound 5



Figure 35 The EM-IS spectrum of Compound 5

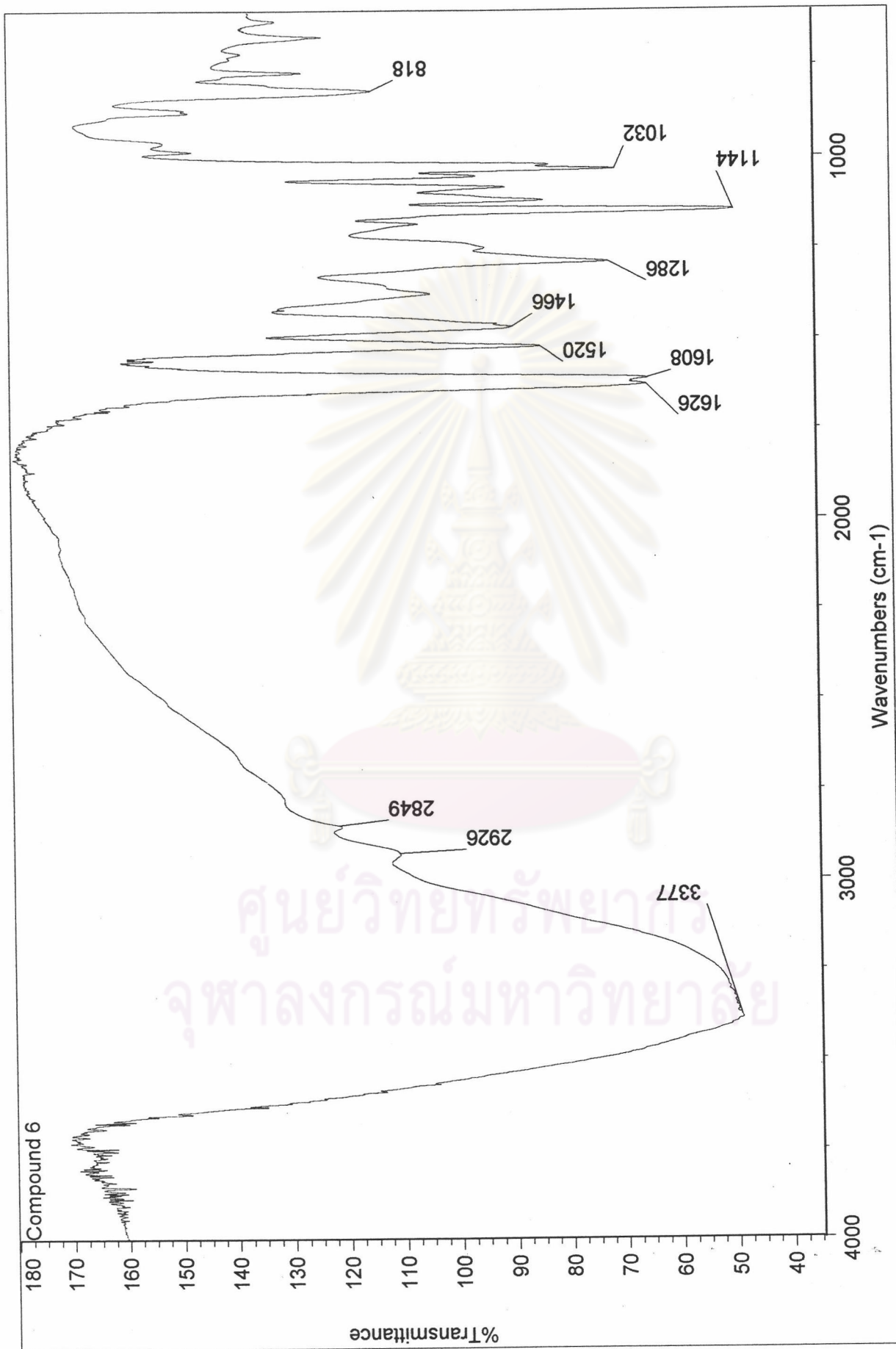


Figure 36 The IR spectrum of Compound 6

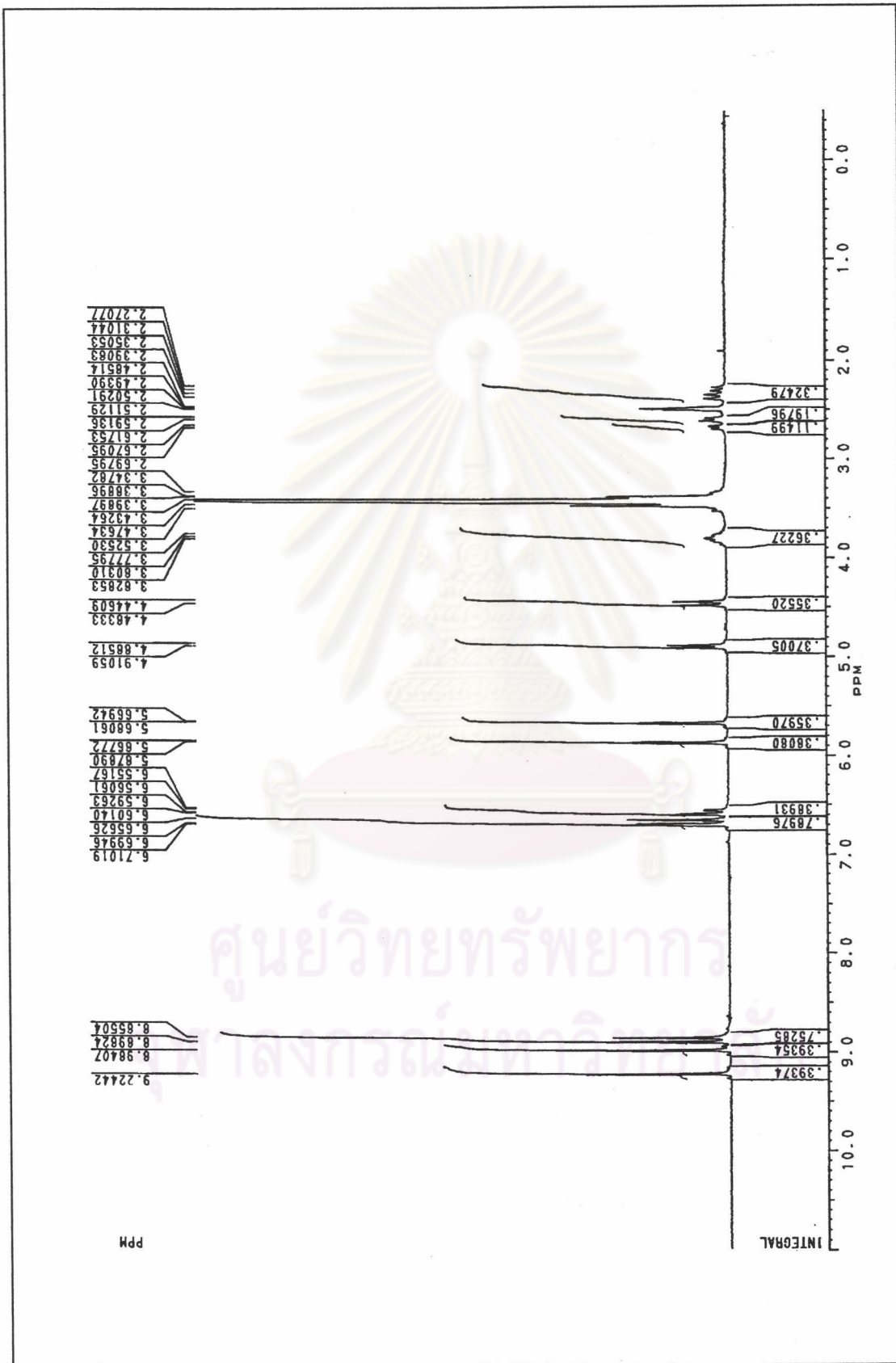


Figure 37 The ¹H-NMR spectrum of Compound 6

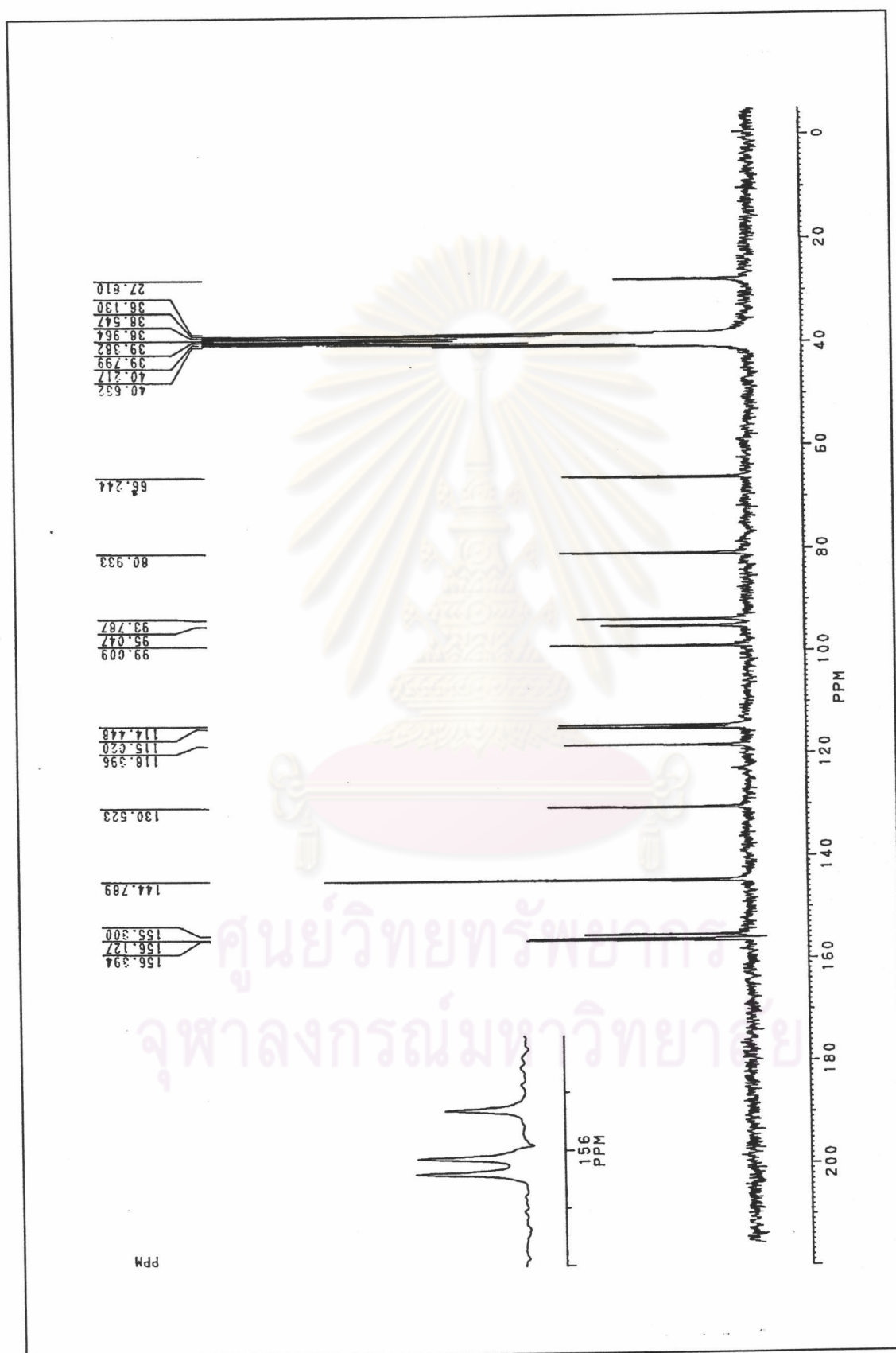


Figure 38 The ^{13}C -NMR spectrum of Compound 6

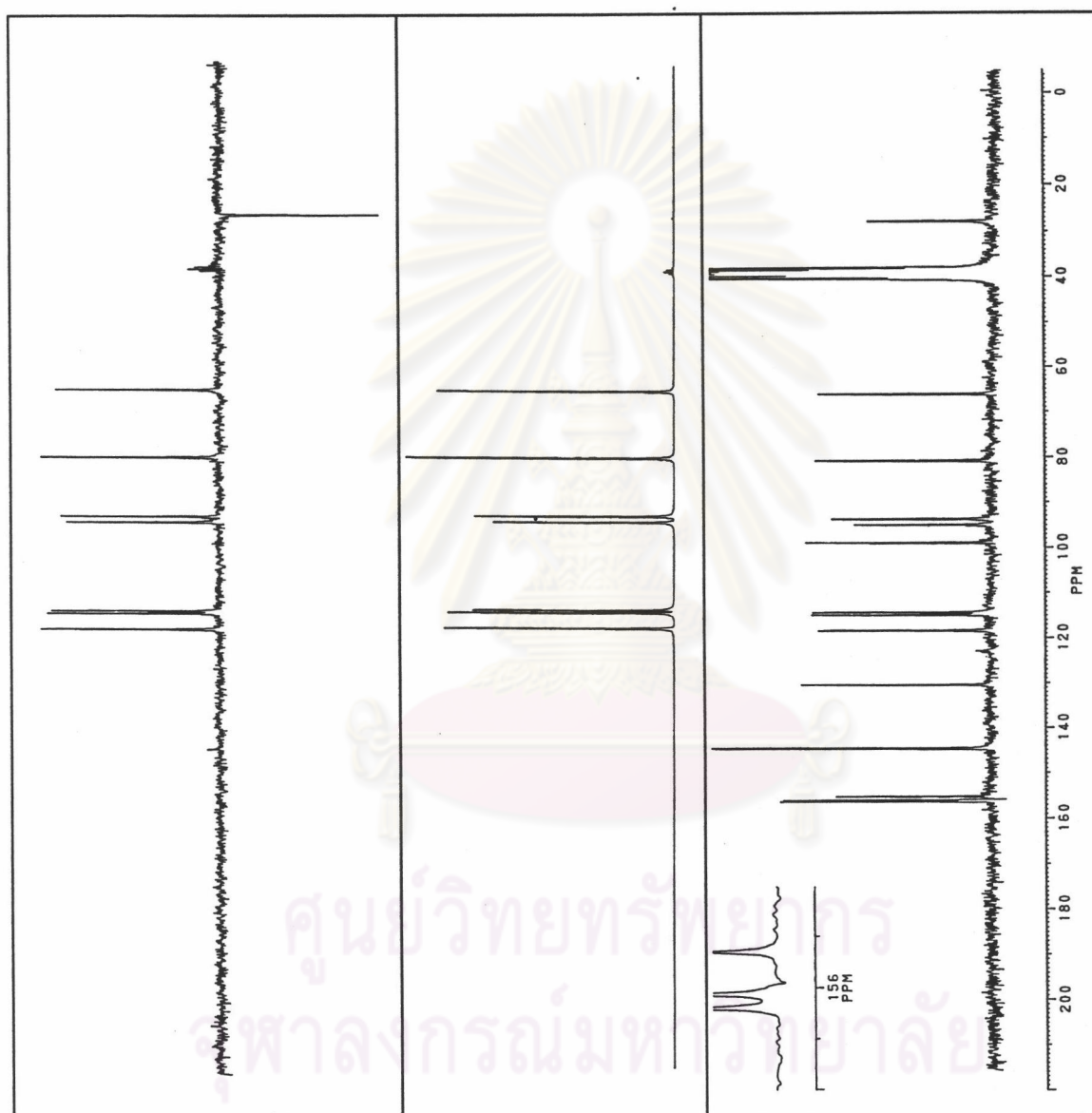


Figure 39 The DEPT-135, 90 and ¹³C-NMR spectrum of Compound 6

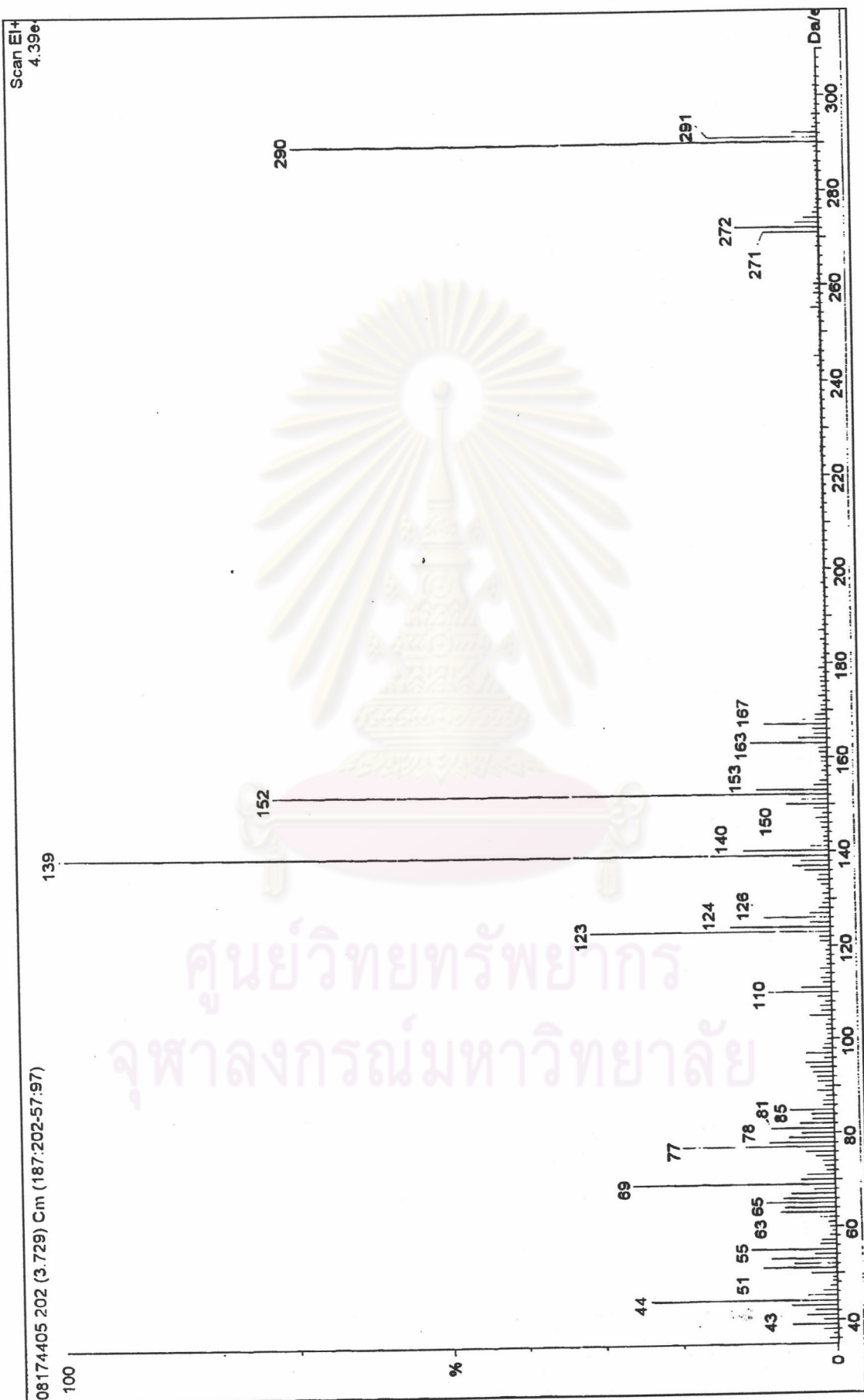


Figure 40 The EM-IS spectrum of Compound 6

VITA

Miss Chalalai Moonthongchun was born on December 2, 1977 in Bangkok, Thailand. She graduated with Bachelor Degree of Science in Biochemistry from Chulalongkorn University in 1999. During the same year, she was admitted into the Master Degree Program in Biotechnology at Chulalongkorn University and complete the program in year 2002.



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