

Figure 4 IR (KBr) spectrum of compound **TK1**

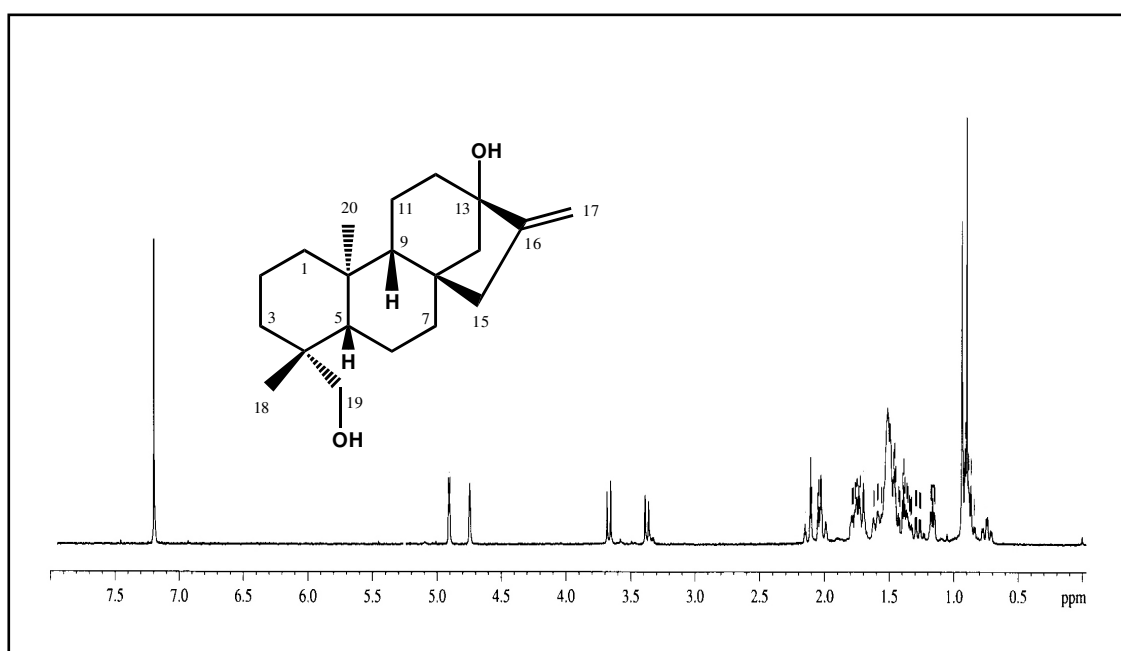


Figure 5 ¹H NMR (400 MHz) (CDCl₃) spectrum of compound **TK1**

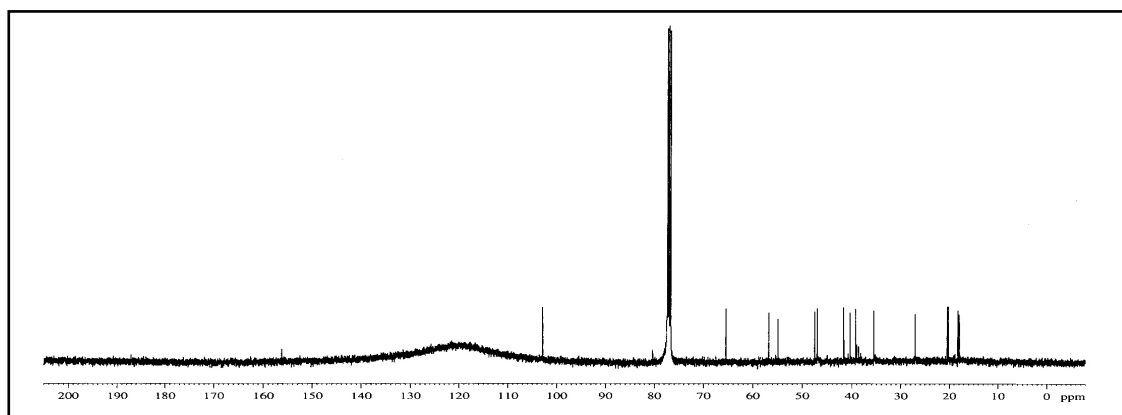


Figure 6 ^{13}C NMR (100 MHz) (CDCl_3) spectrum of compound **TK1**

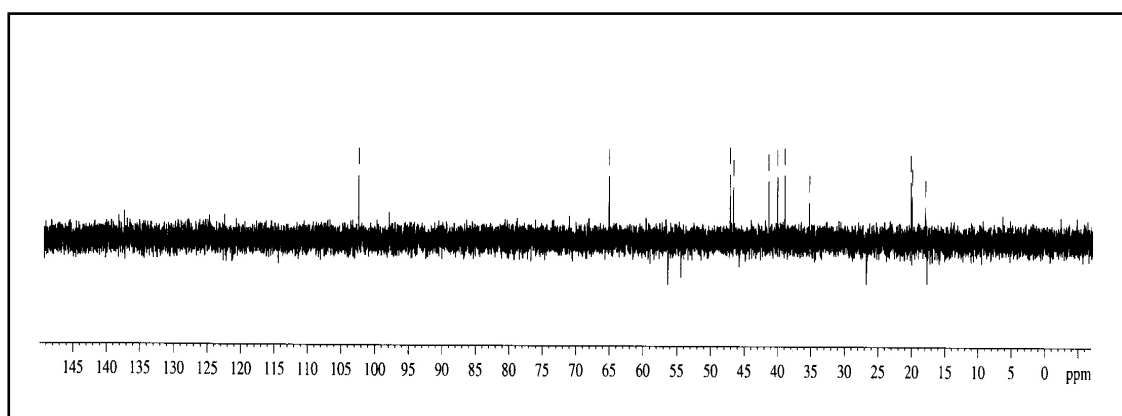


Figure 7 DEPT 135 $^\circ$ (100 MHz) (CDCl_3) spectrum of compound **TK1**

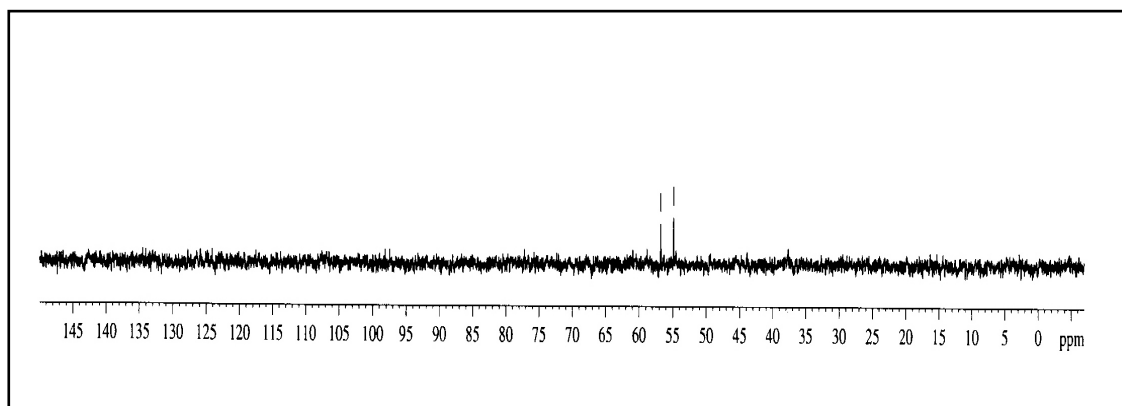


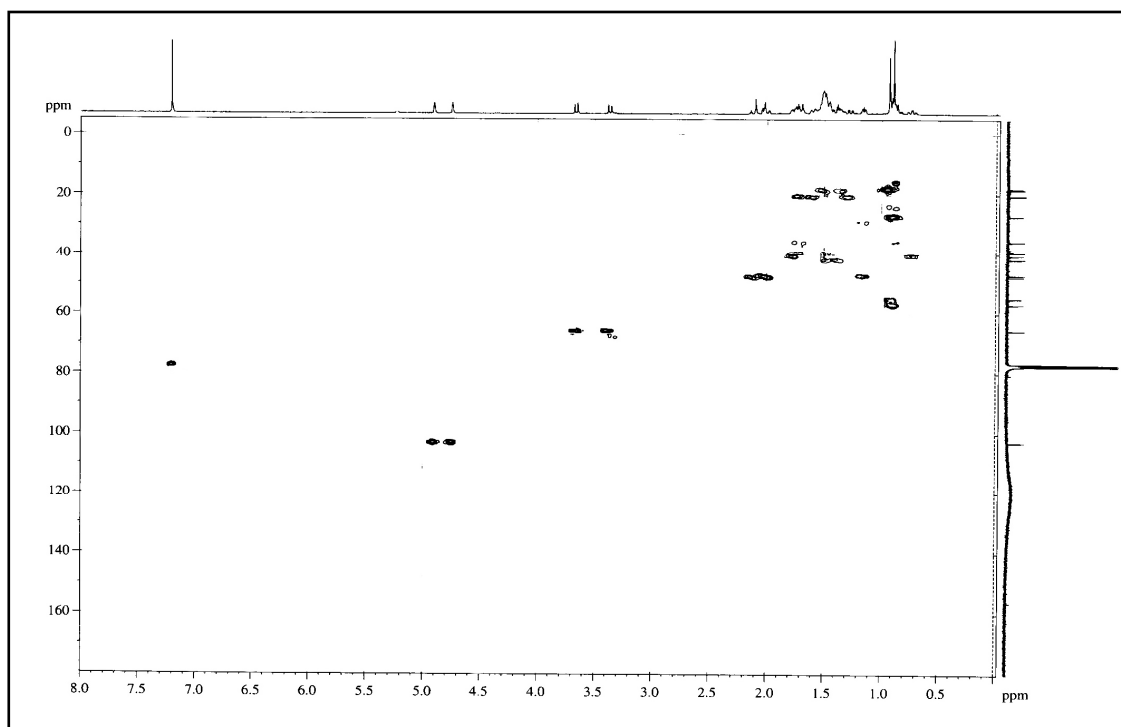
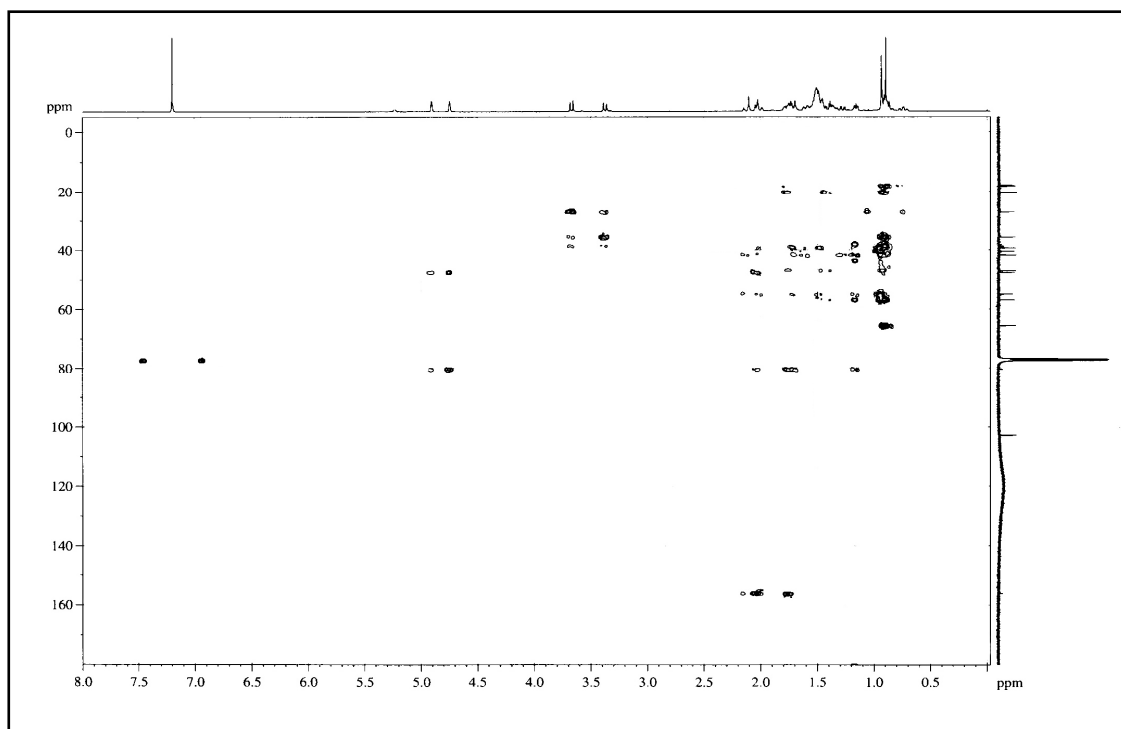
Figure 8 DEPT 90° (100 MHz) (CDCl₃) spectrum of compound **TK1****Figure 9** 2D HMQC (CDCl₃) spectrum of compound **TK1**

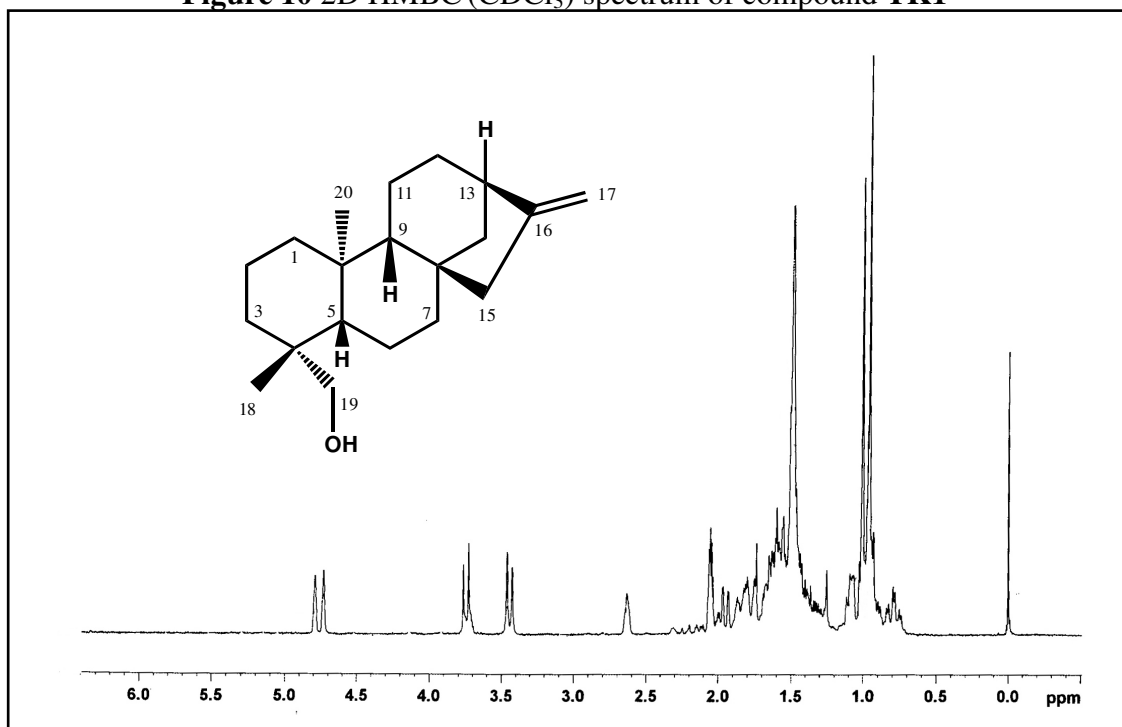
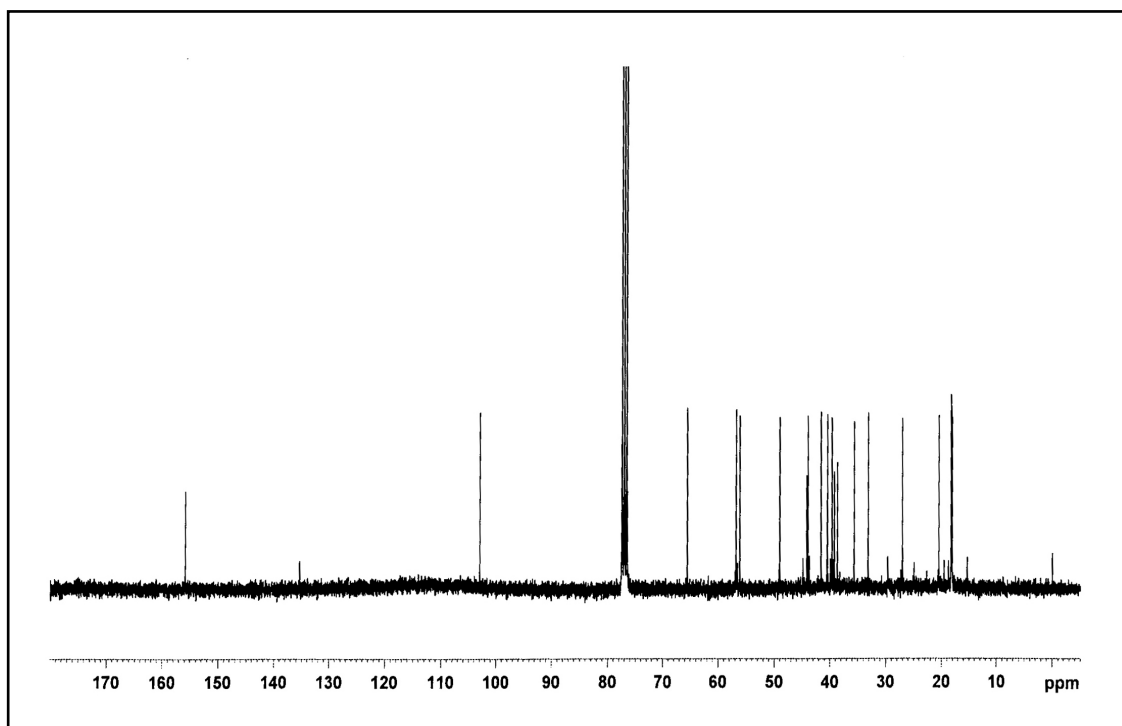
Figure 10 2D HMBC (CDCl_3) spectrum of compound **TK1****Figure 11** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK2**

Figure 12 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK2**

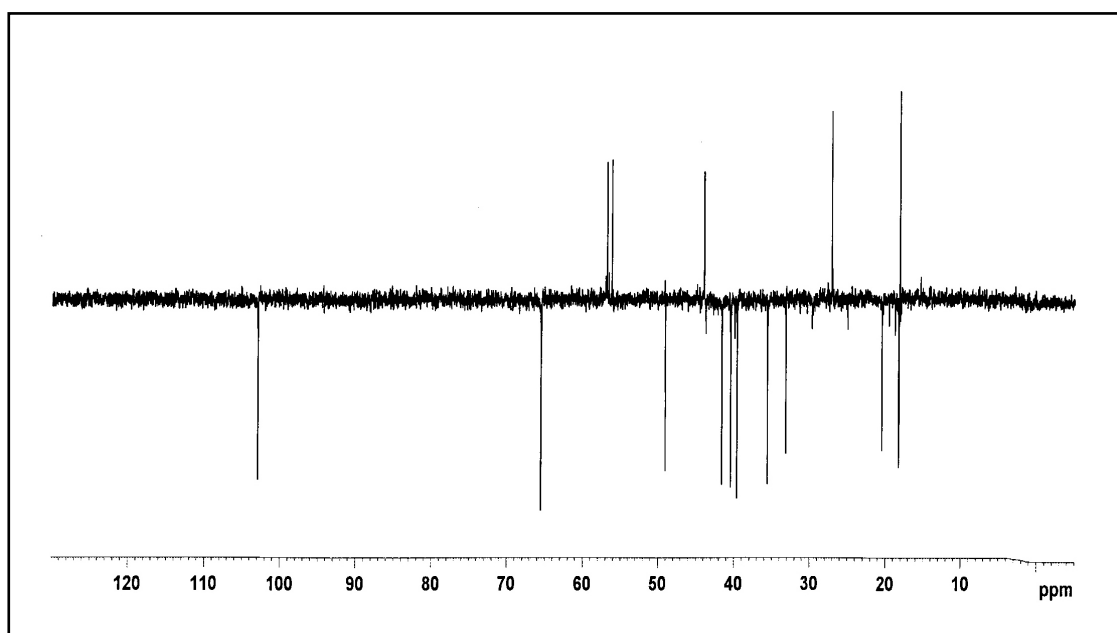


Figure 13 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK2**

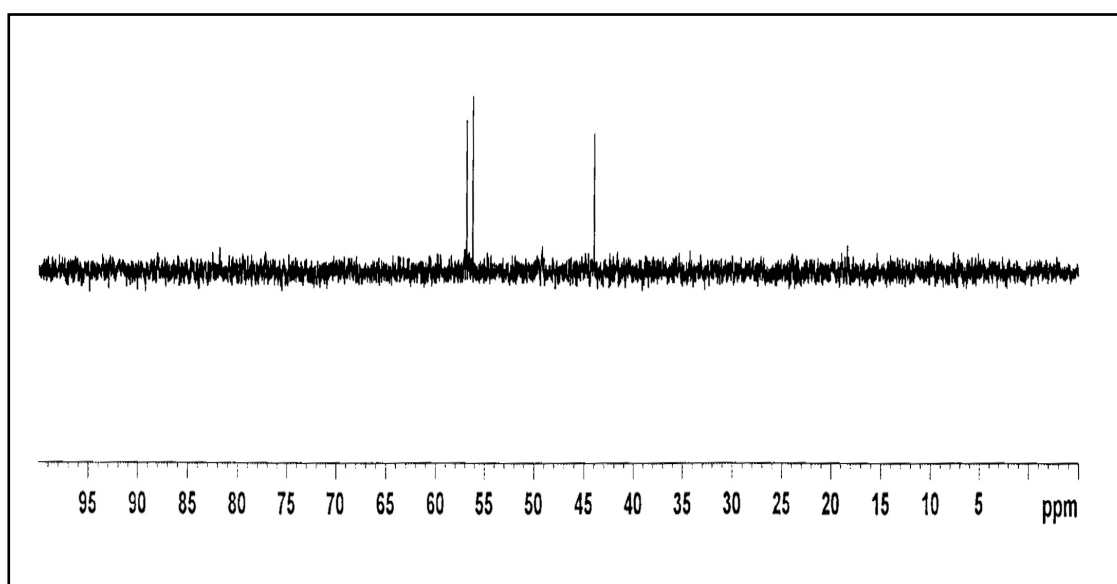


Figure 14 DEPT 90° (75 MHz) (CDCl_3) spectrum of compound **TK2**

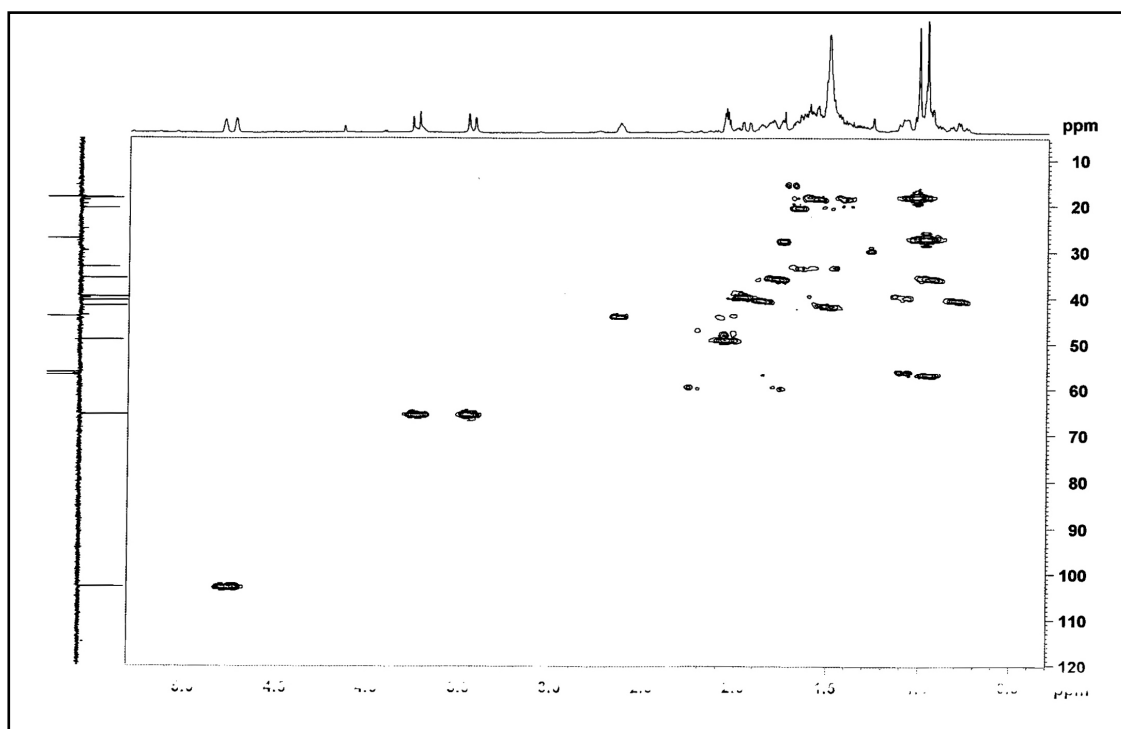


Figure 15 2D HMQC (CDCl_3) spectrum of compound **TK2**

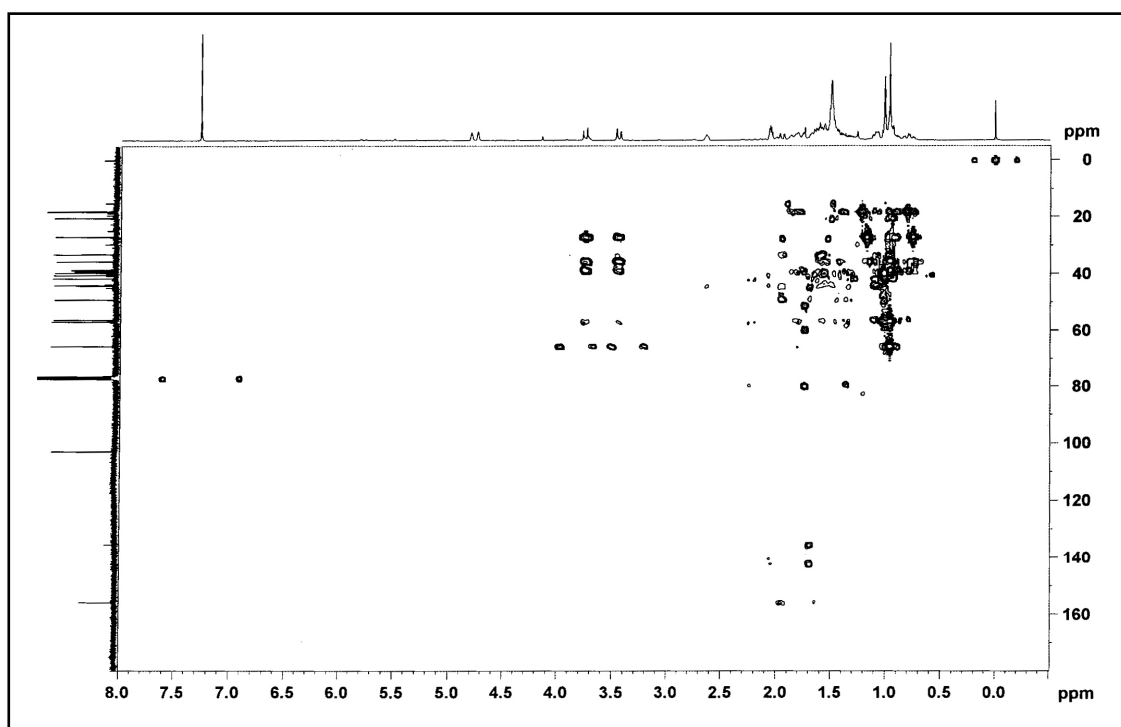


Figure 16 2D HMBC (CDCl_3) spectrum of compound **TK2**

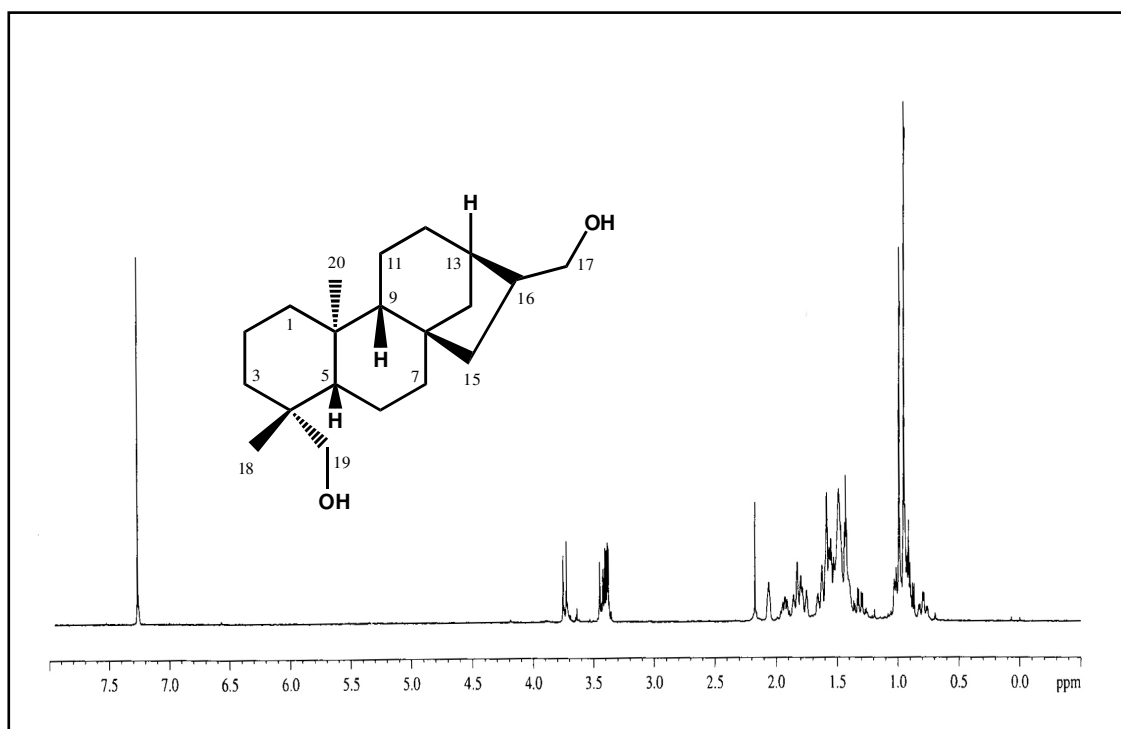


Figure 17 ^1H NMR (400 MHz) (CDCl_3) spectrum of compound **TK3**

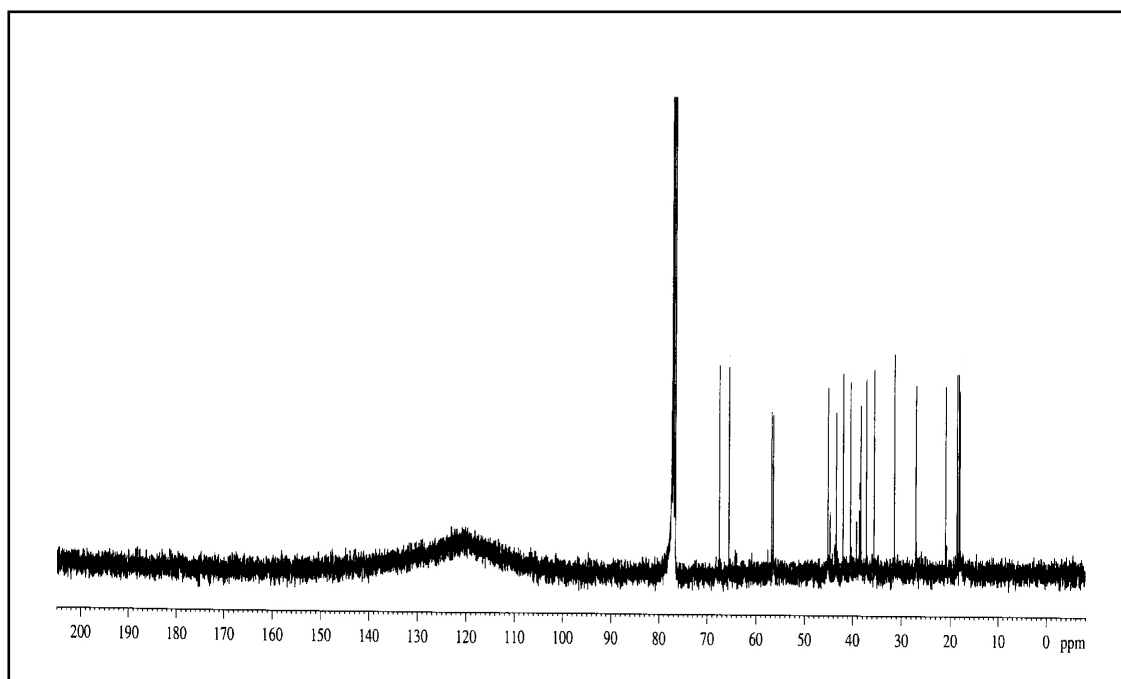


Figure 18 ^{13}C NMR (100 MHz) (CDCl_3) spectrum of compound **TK3**

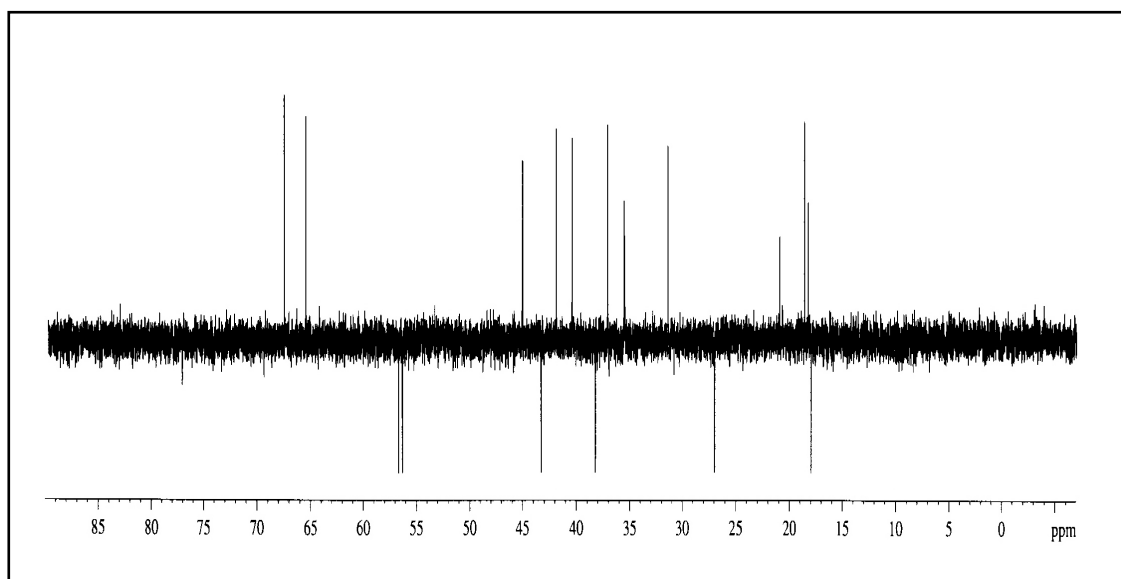


Figure 19 DEPT 135° (100 MHz) (CDCl₃) spectrum of compound **TK3**

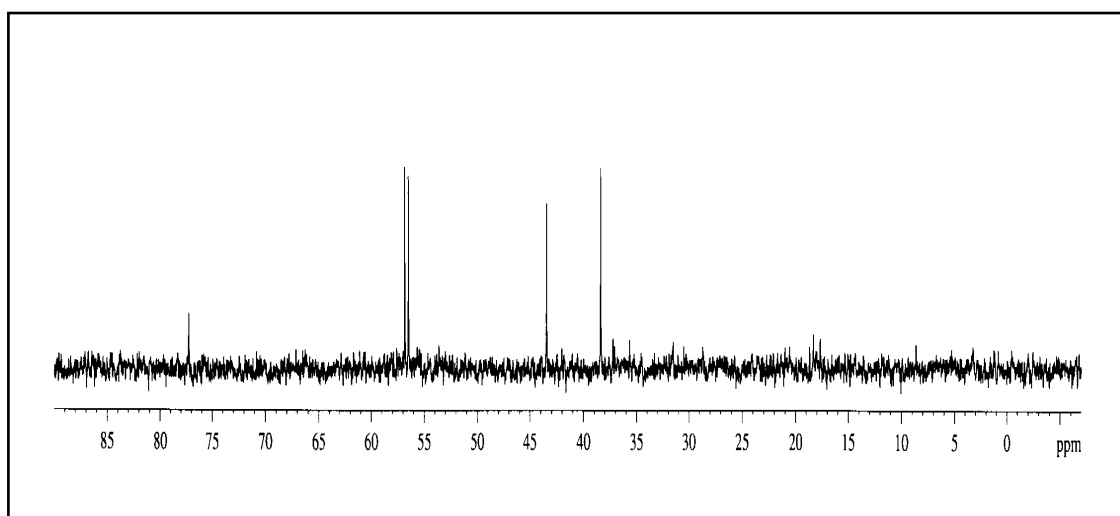


Figure 20 DEPT 90° (100 MHz) (CDCl₃) spectrum of compound **TK3**

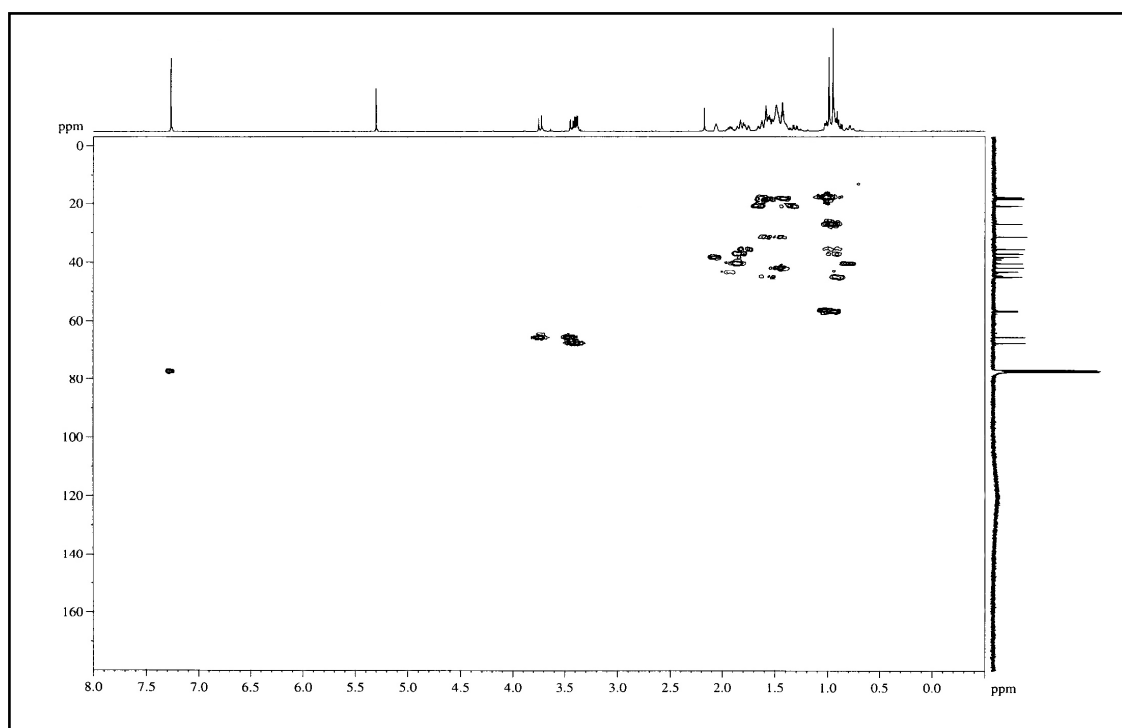


Figure 21 2D HMQC (CDCl_3) spectrum of compound TK3

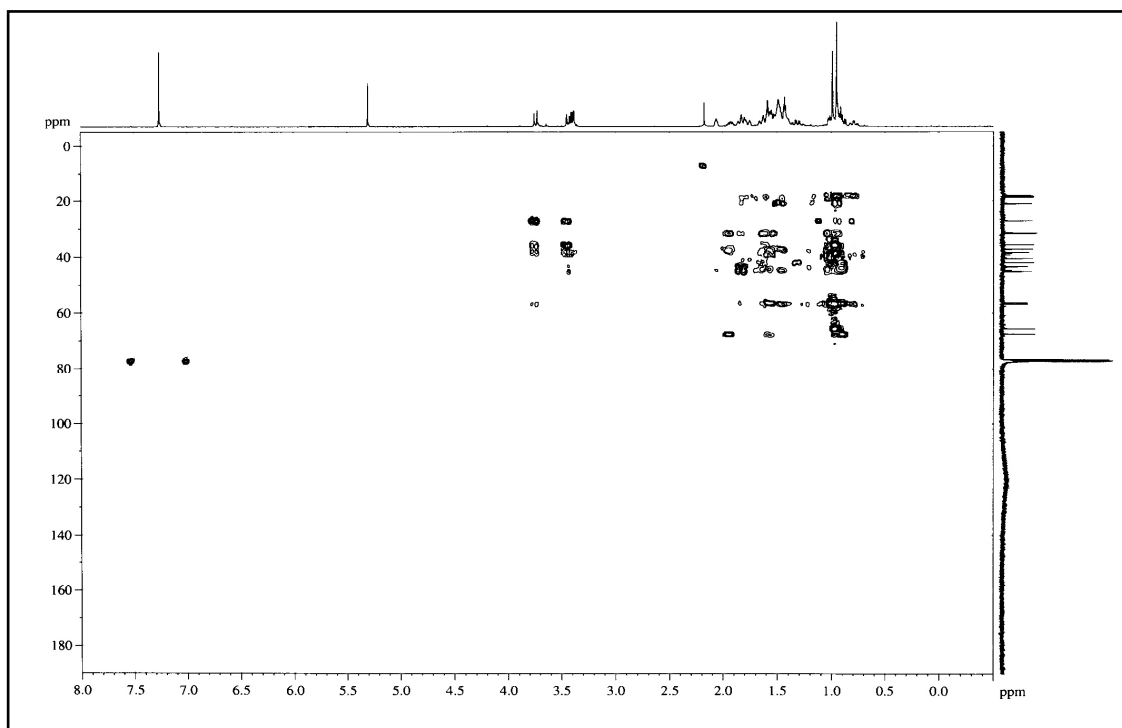


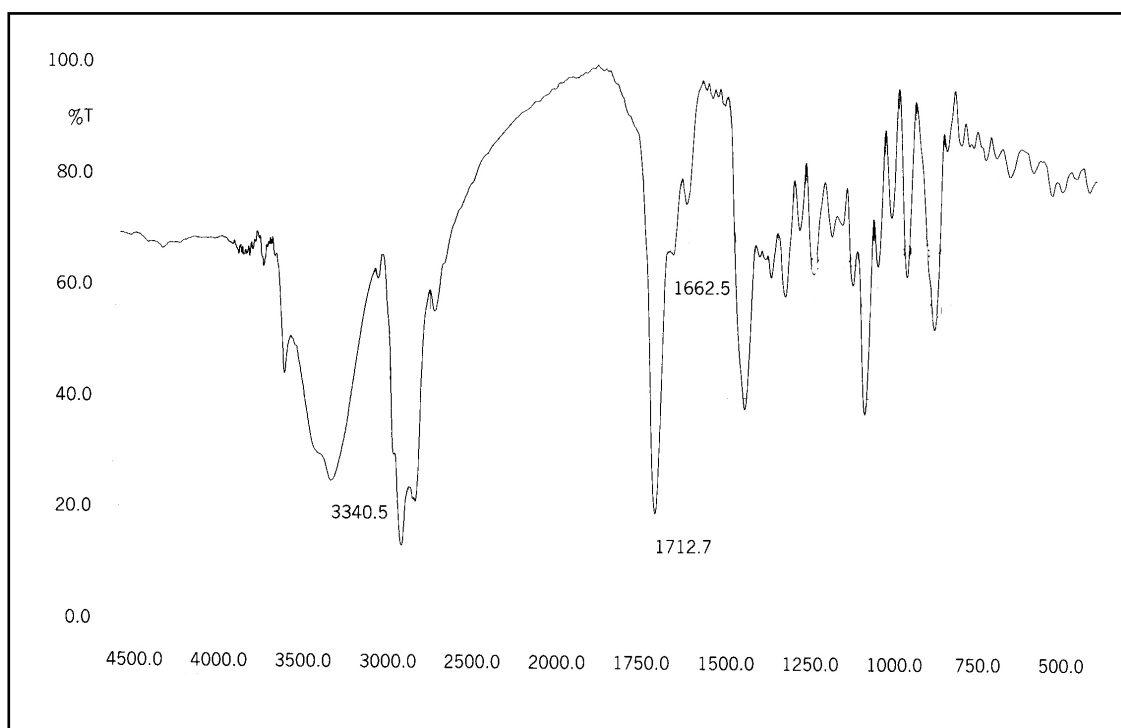
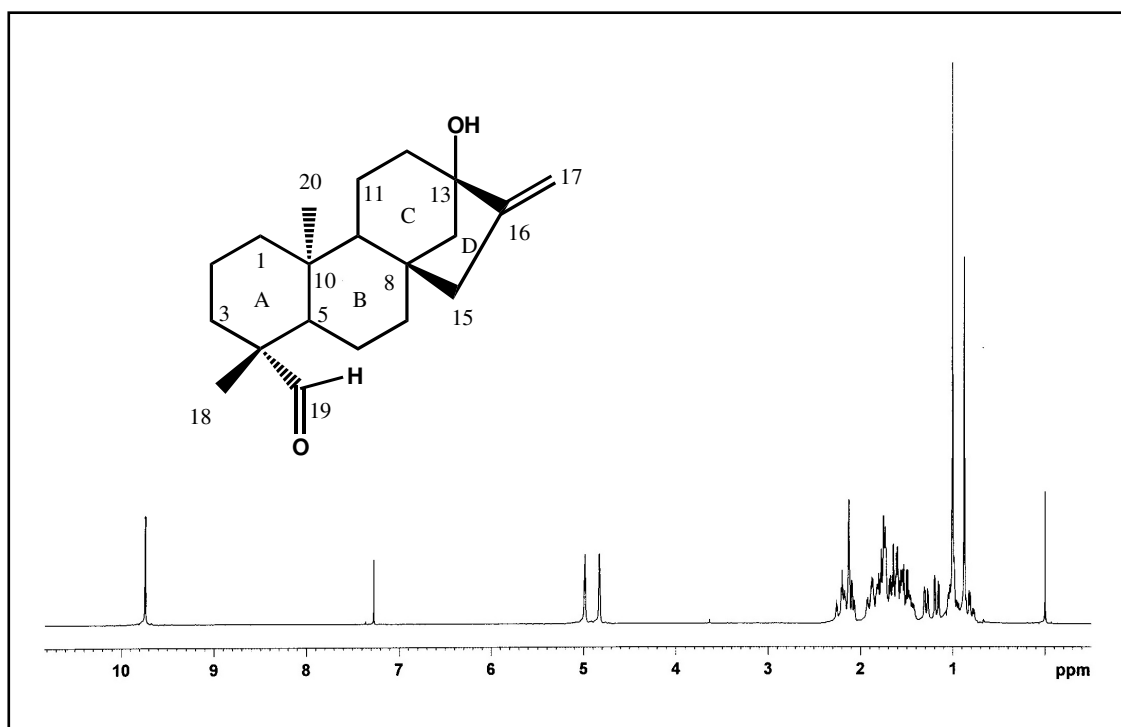
Figure 22 2D HMBC (CDCl_3) spectrum of compound **TK3****Figure 23** IR (KBr) spectrum of compound **TK4**

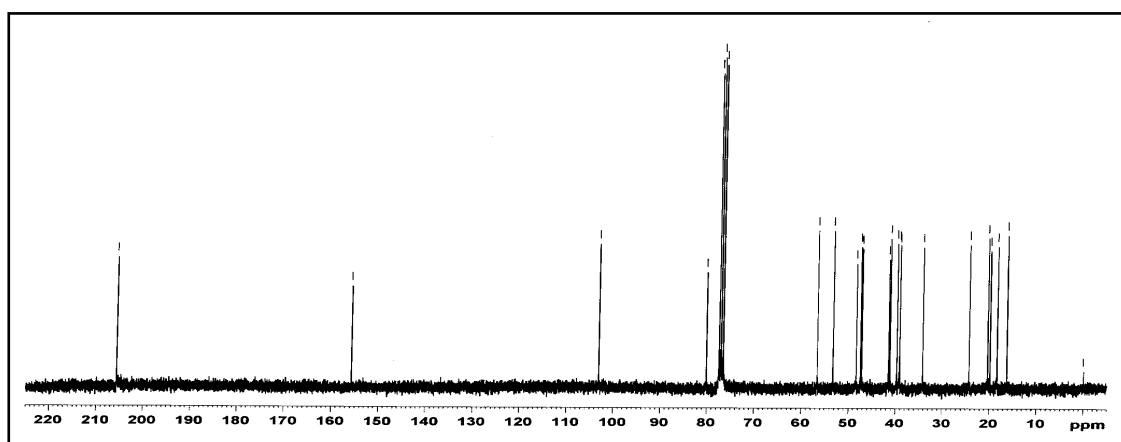
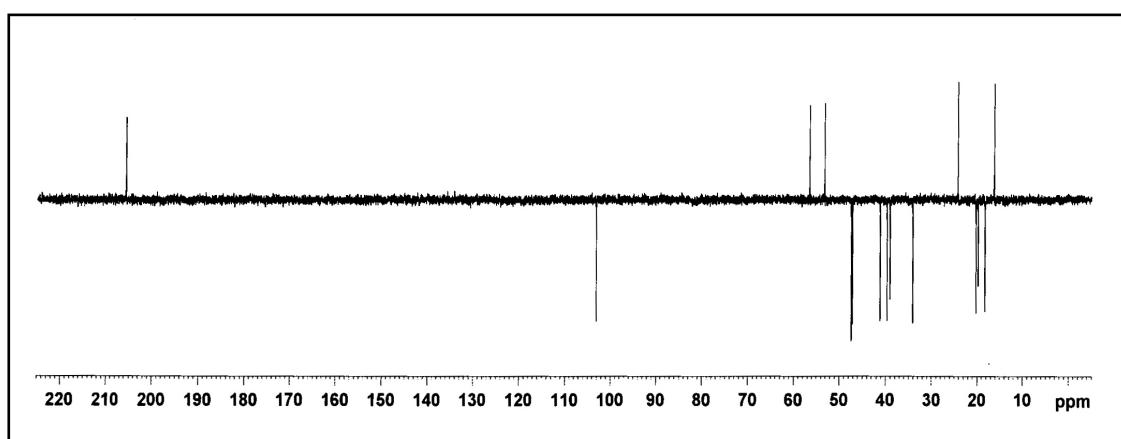
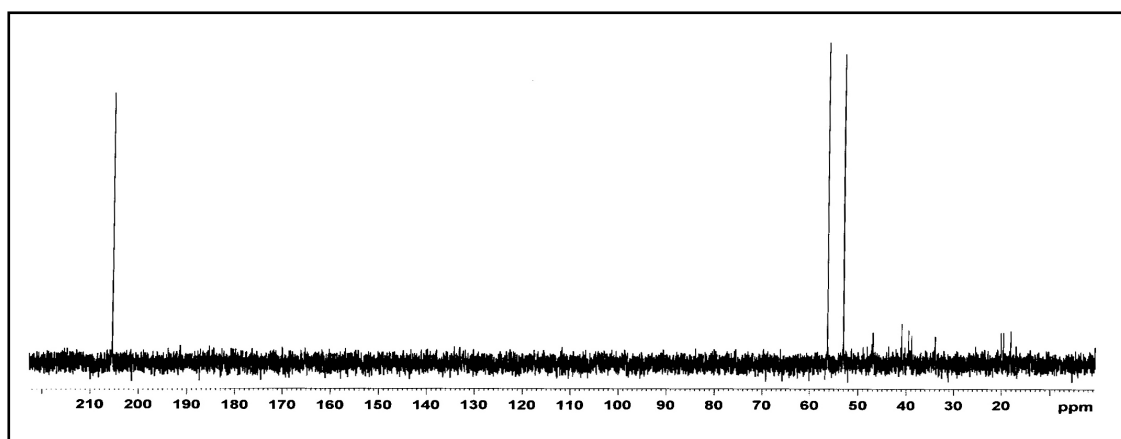
Figure 24 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK4****Figure 25** ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK4****Figure 26** DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK4**

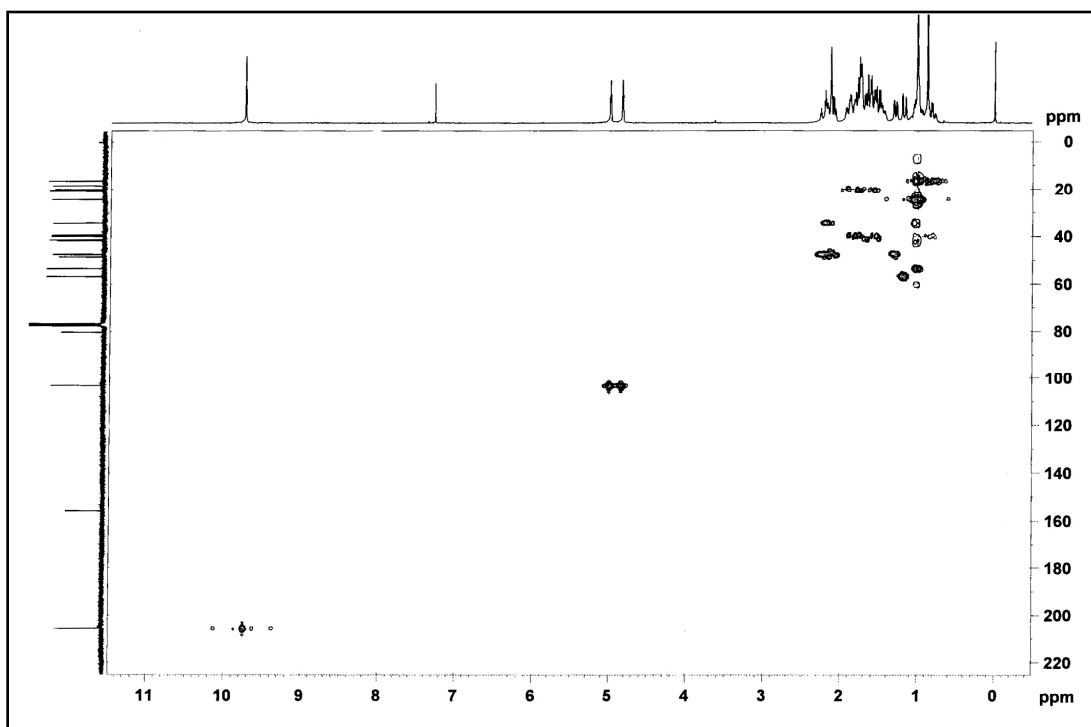
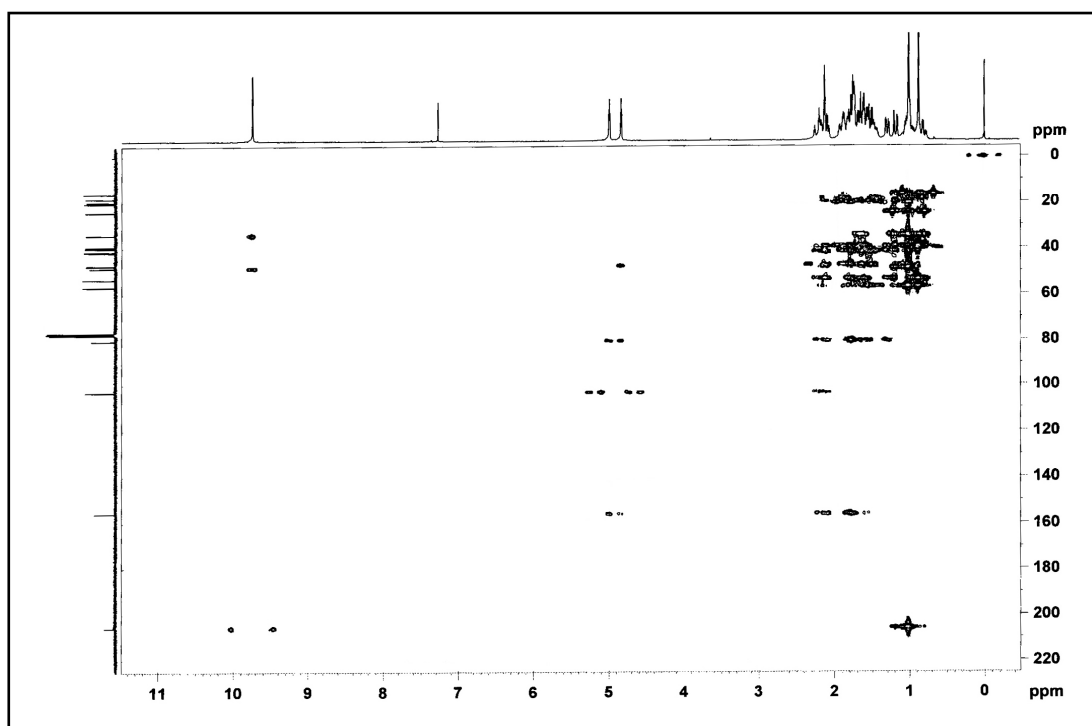
Figure 27 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK4****Figure 28** 2D HMQC (CDCl₃) spectrum of compound **TK4**

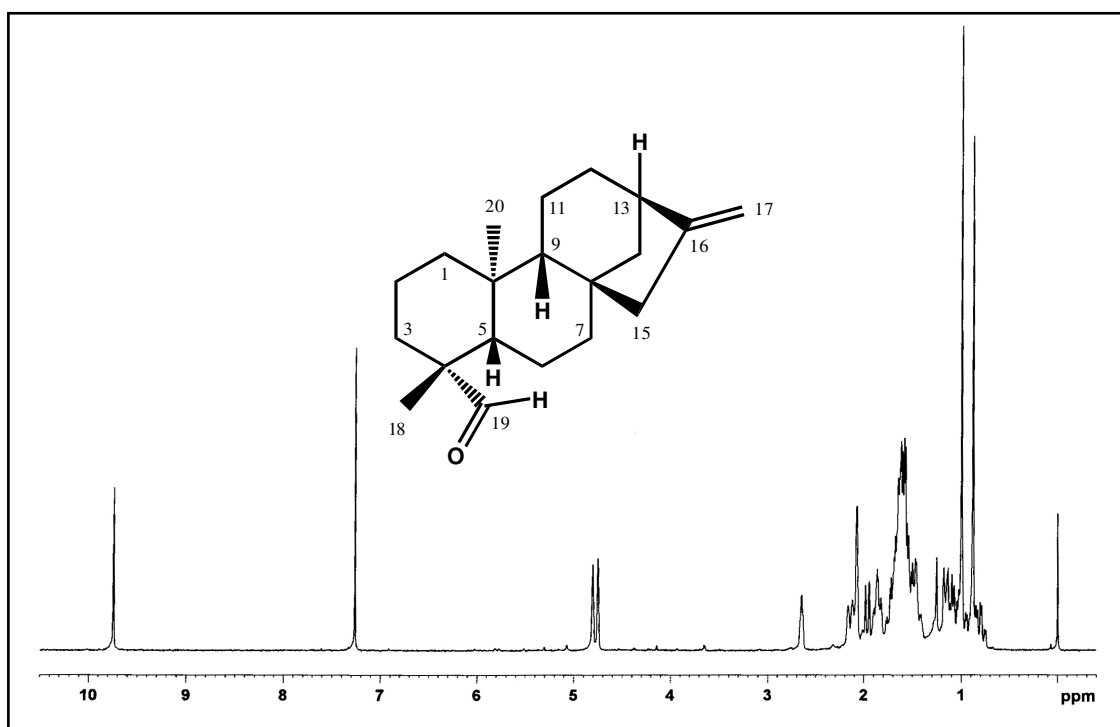
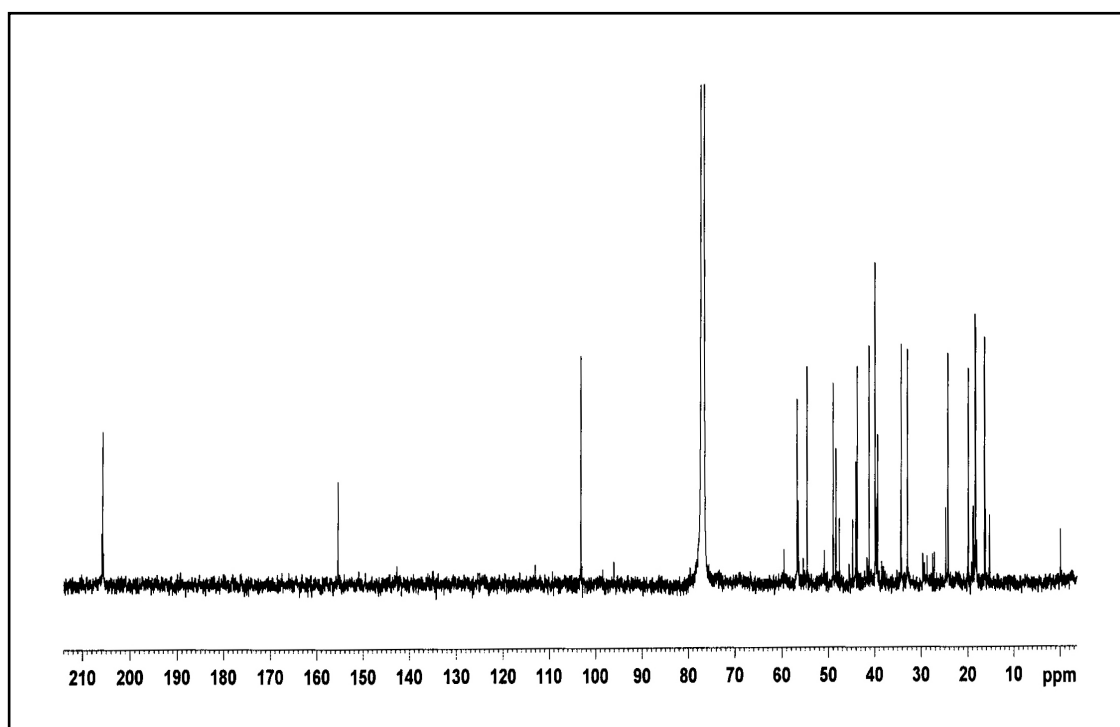
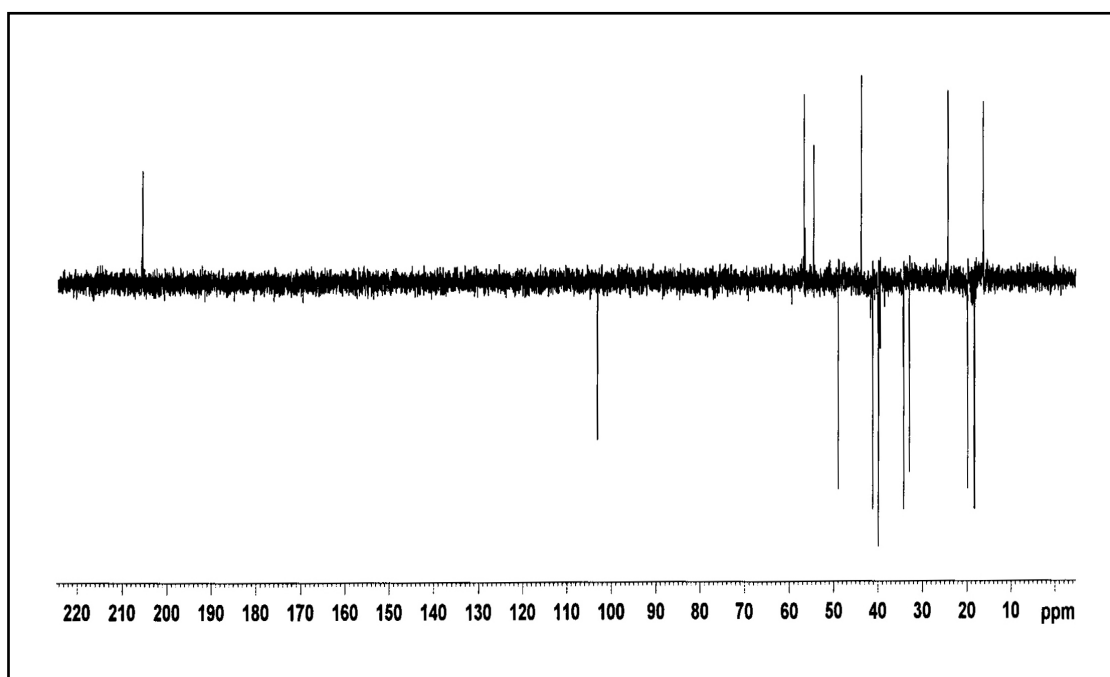
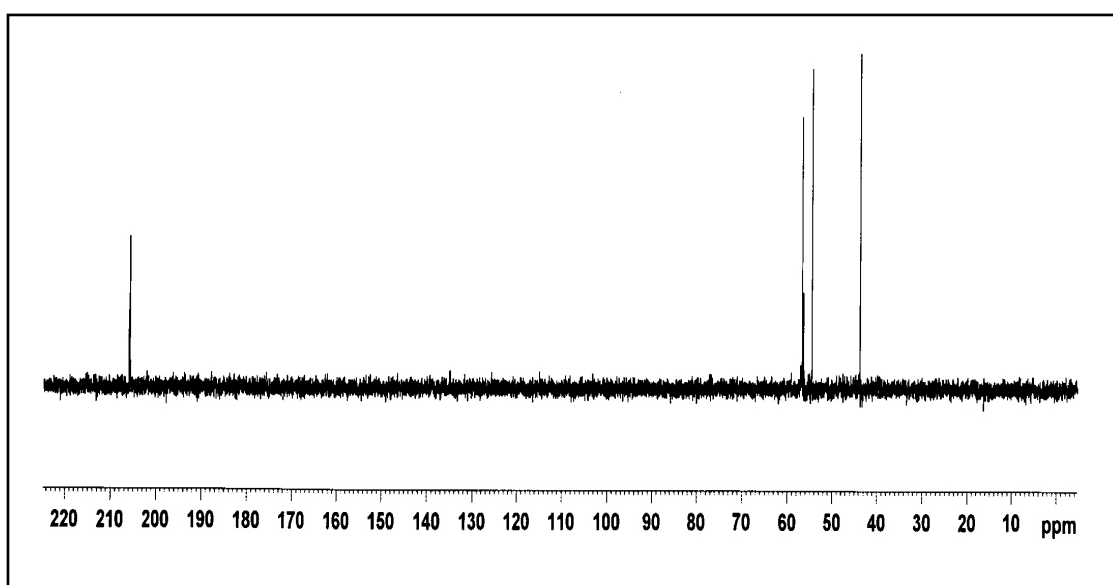
Figure 29 2D HMBC (CDCl_3) spectrum of compound **TK4****Figure 30** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK5**

Figure 31 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK5****Figure 32** DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK5****Figure 33** DEPT 90° (75 MHz) (CDCl_3) spectrum of compound **TK5**

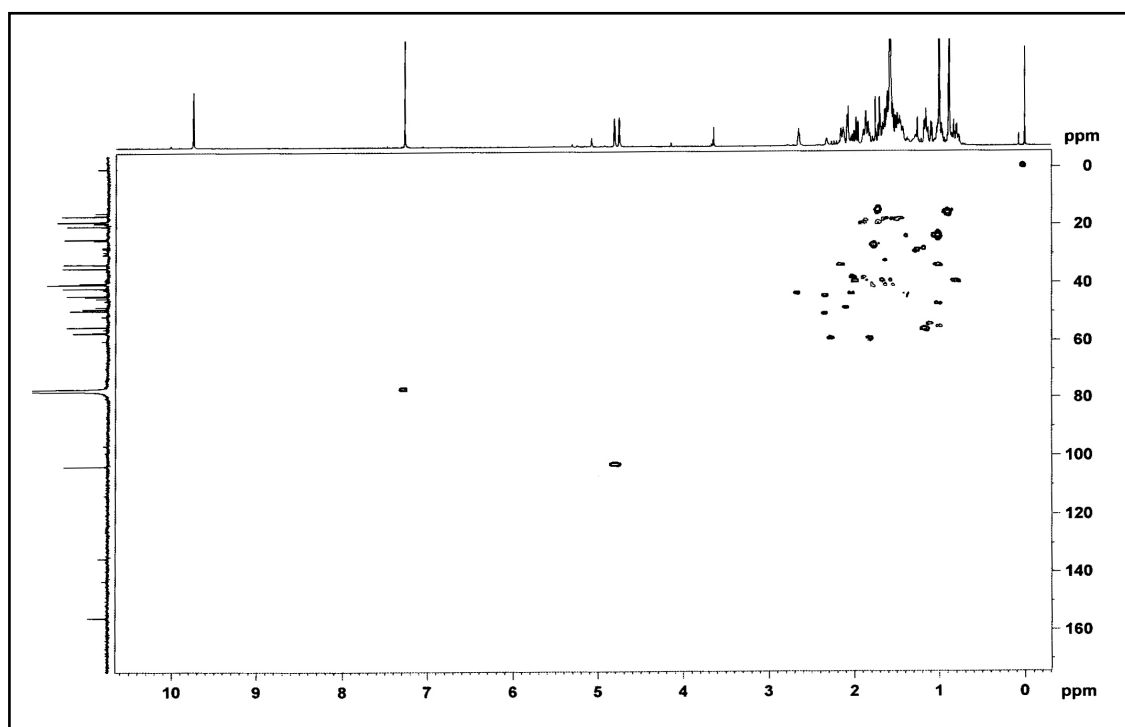


Figure 34 2D HMQC (CDCl_3) spectrum of compound TK5

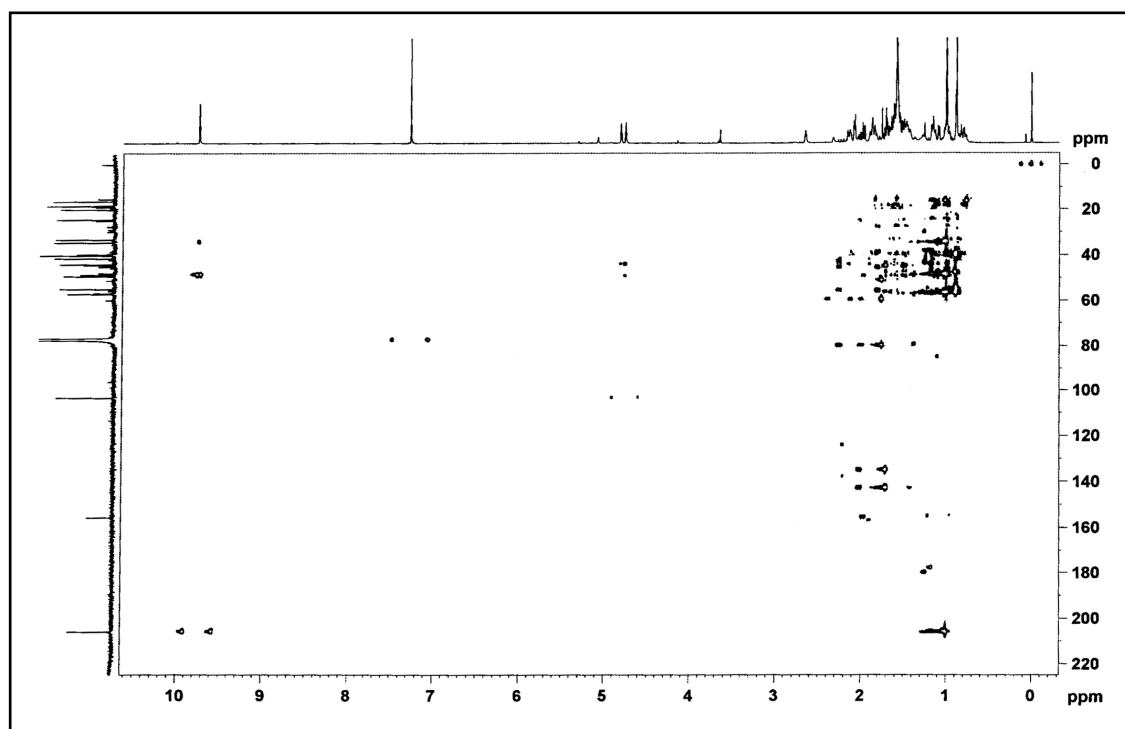


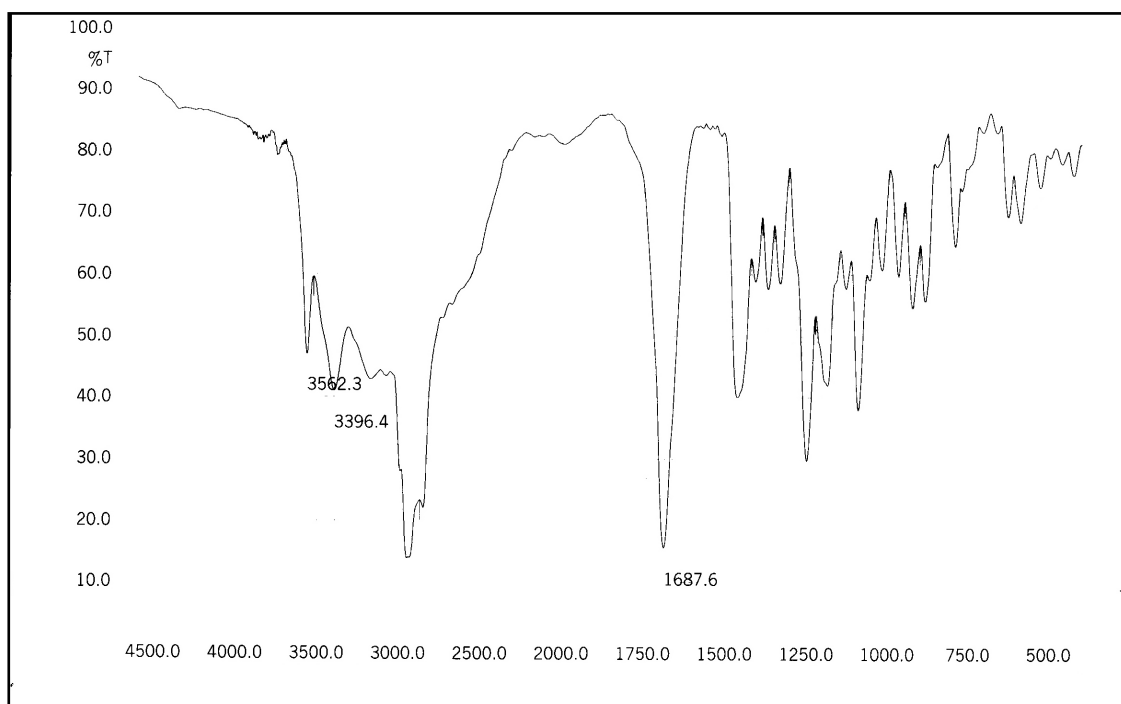
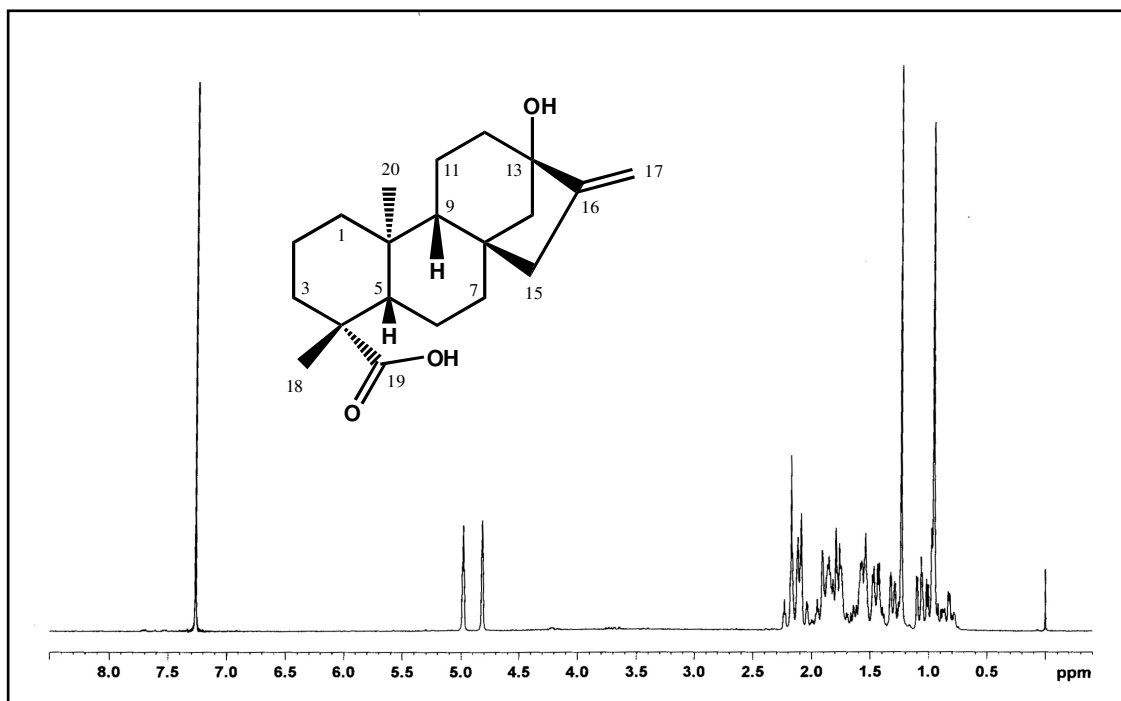
Figure 35 2D HMBC (CDCl_3) spectrum of compound **TK5****Figure 36** IR (KBr) spectrum of compound **TK6**

Figure 37 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK6**

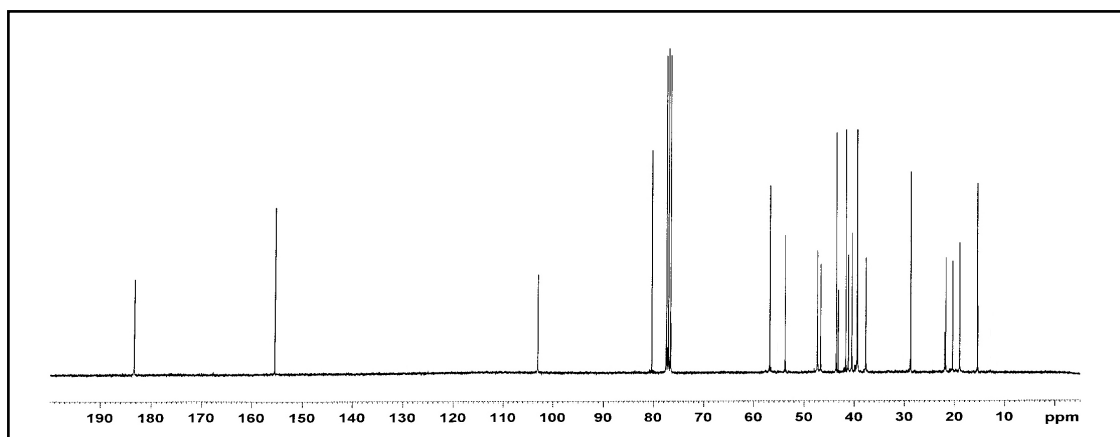


Figure 38 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK6**

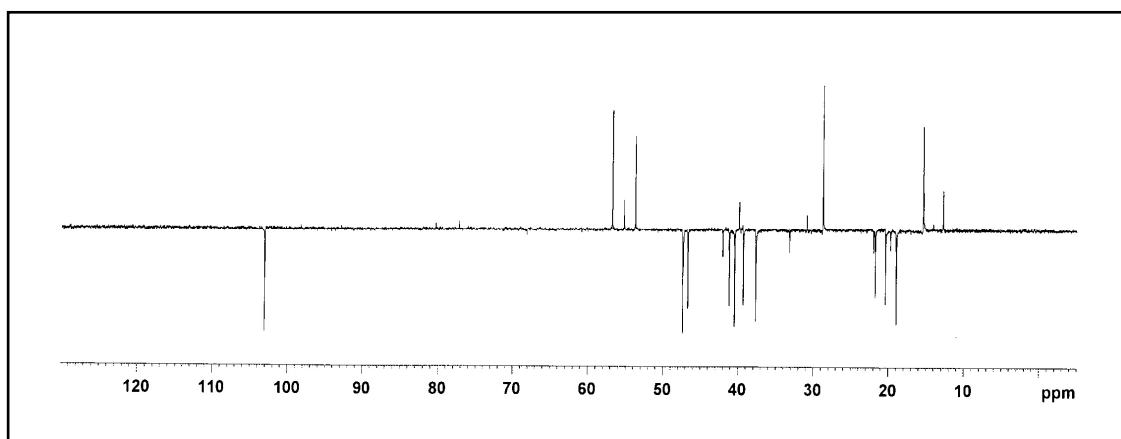


Figure 39 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK6**

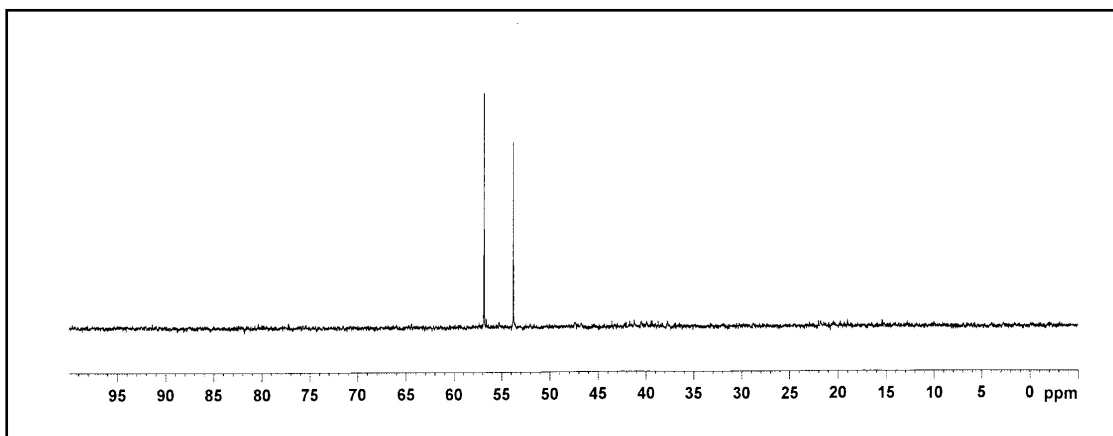


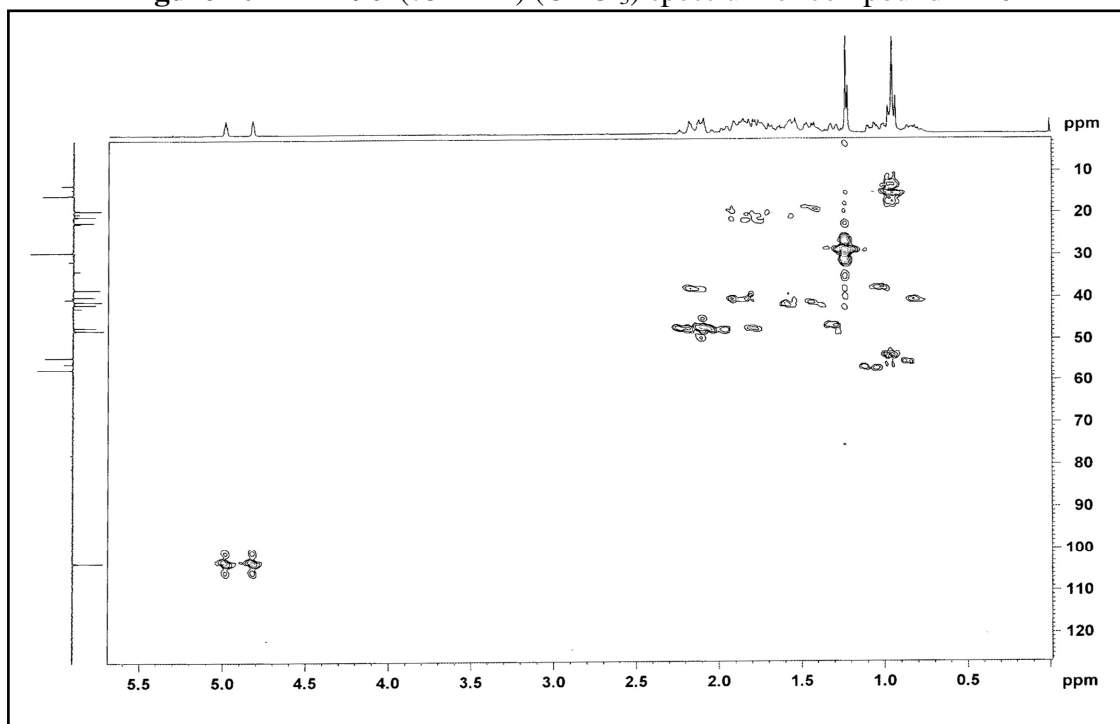
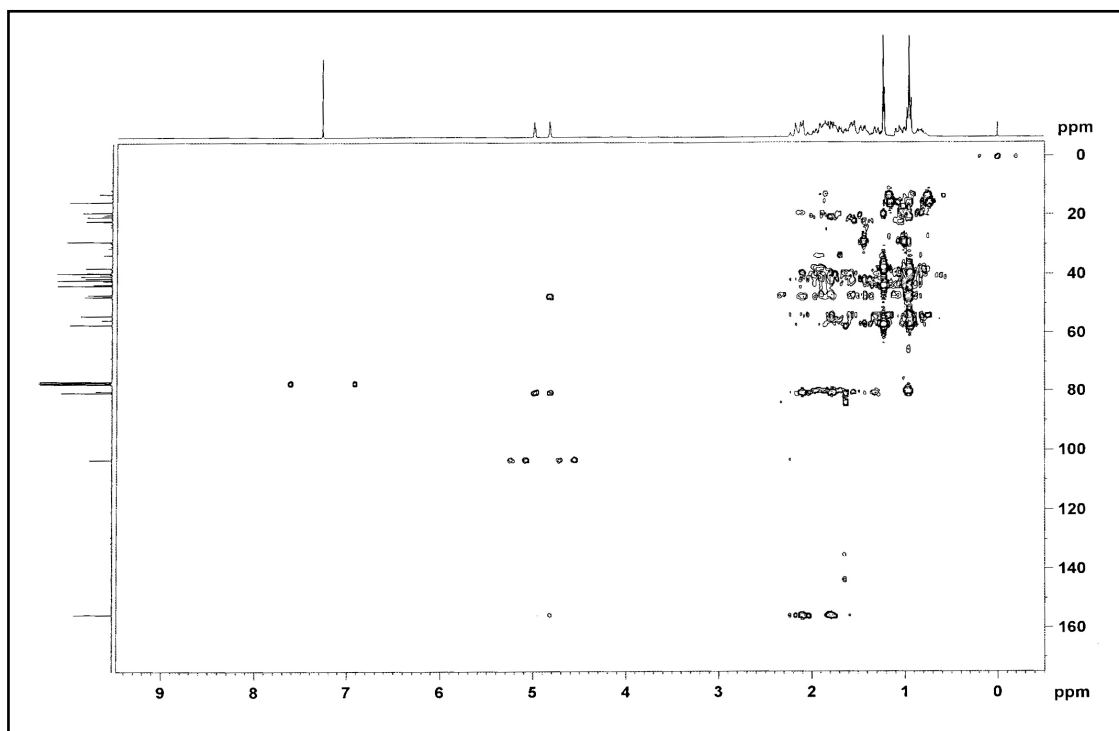
Figure 40 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK6****Figure 41** 2D HMQC (CDCl₃) spectrum of compound **TK6**

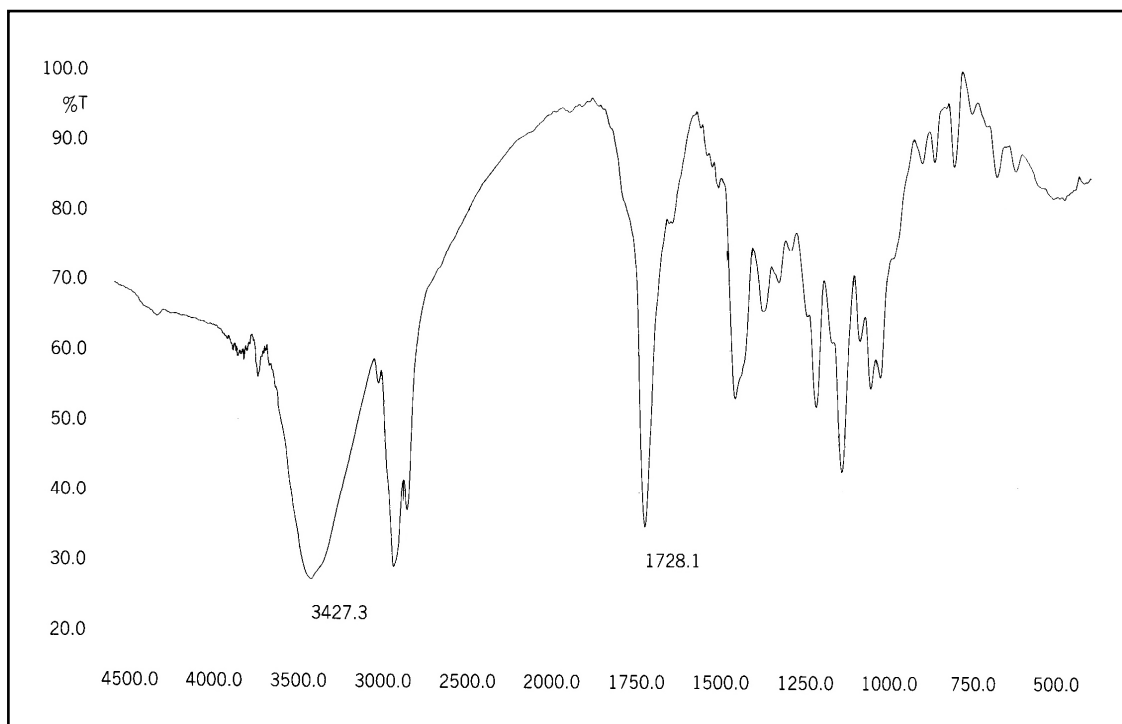
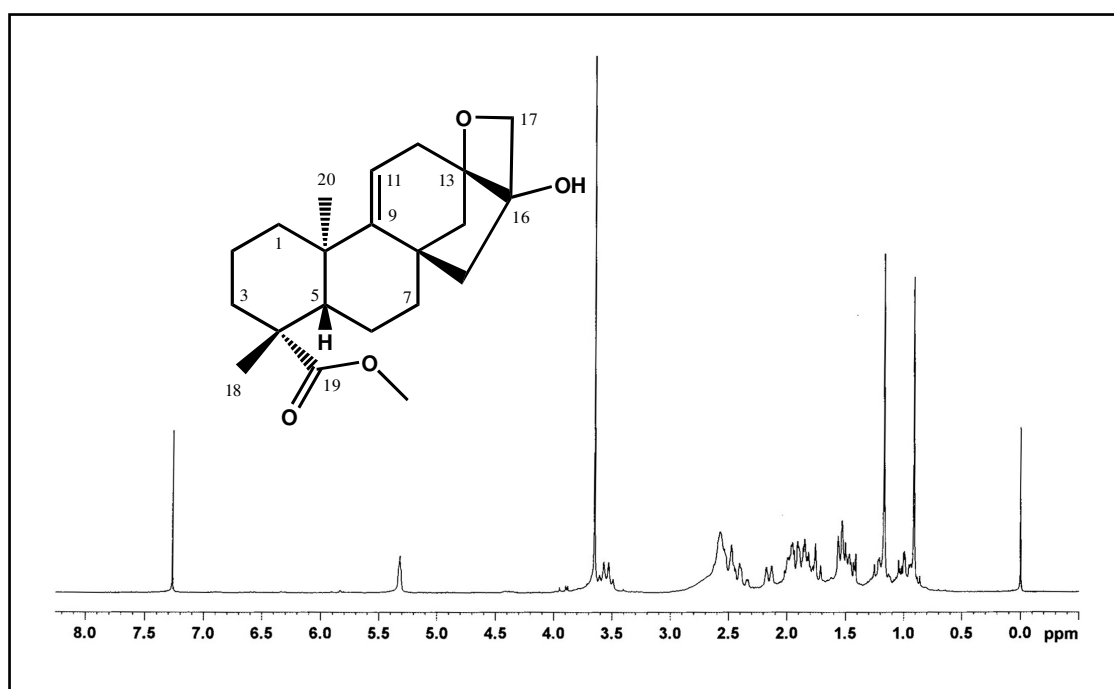
Figure 42 2D HMBC (CDCl_3) spectrum of compound **TK6****Figure 43** IR (KBr) spectrum of compound **TK7**

Figure 44 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK7**

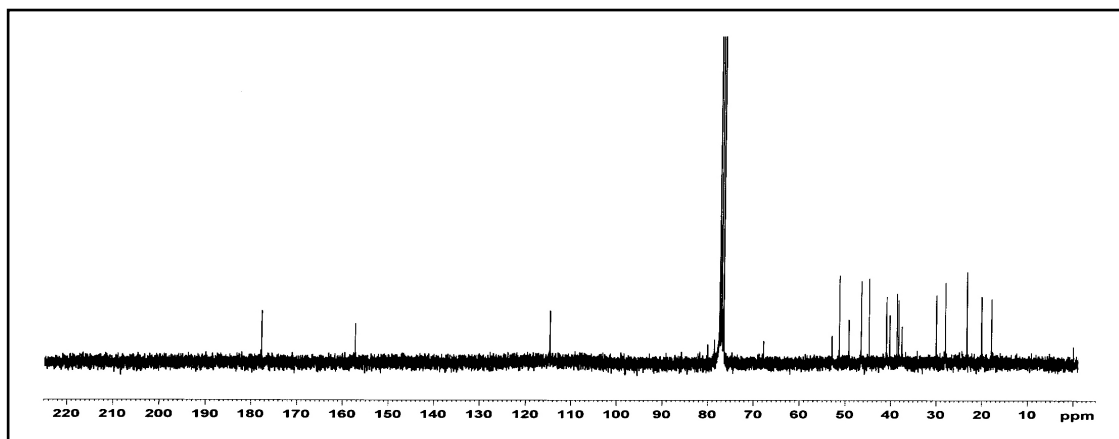


Figure 45 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK7**

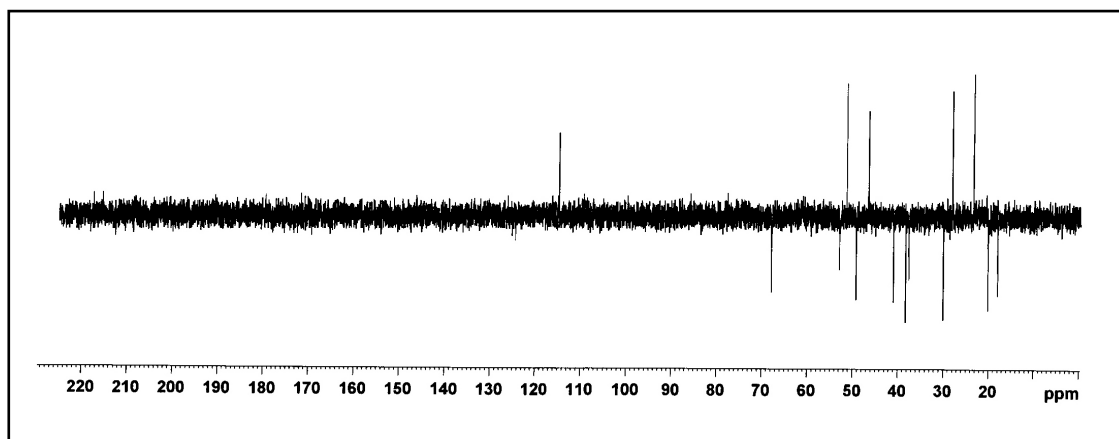


Figure 46 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK7**

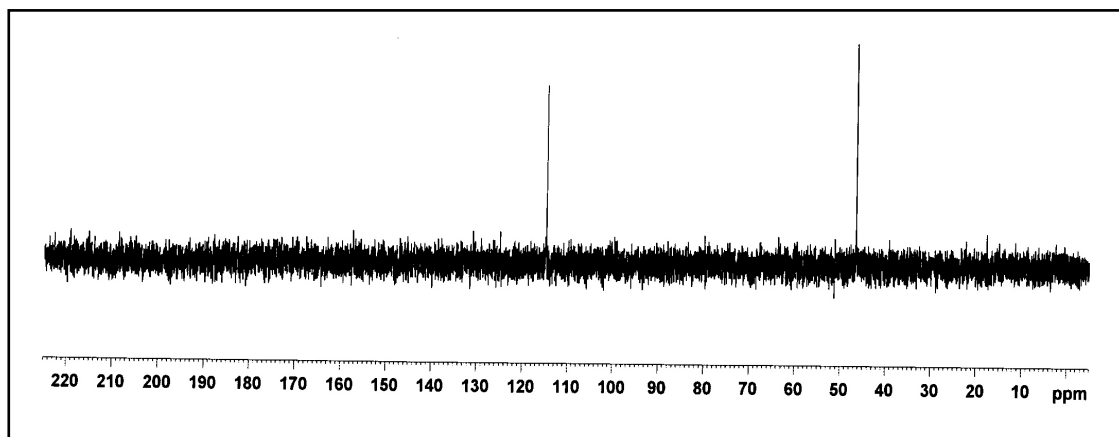


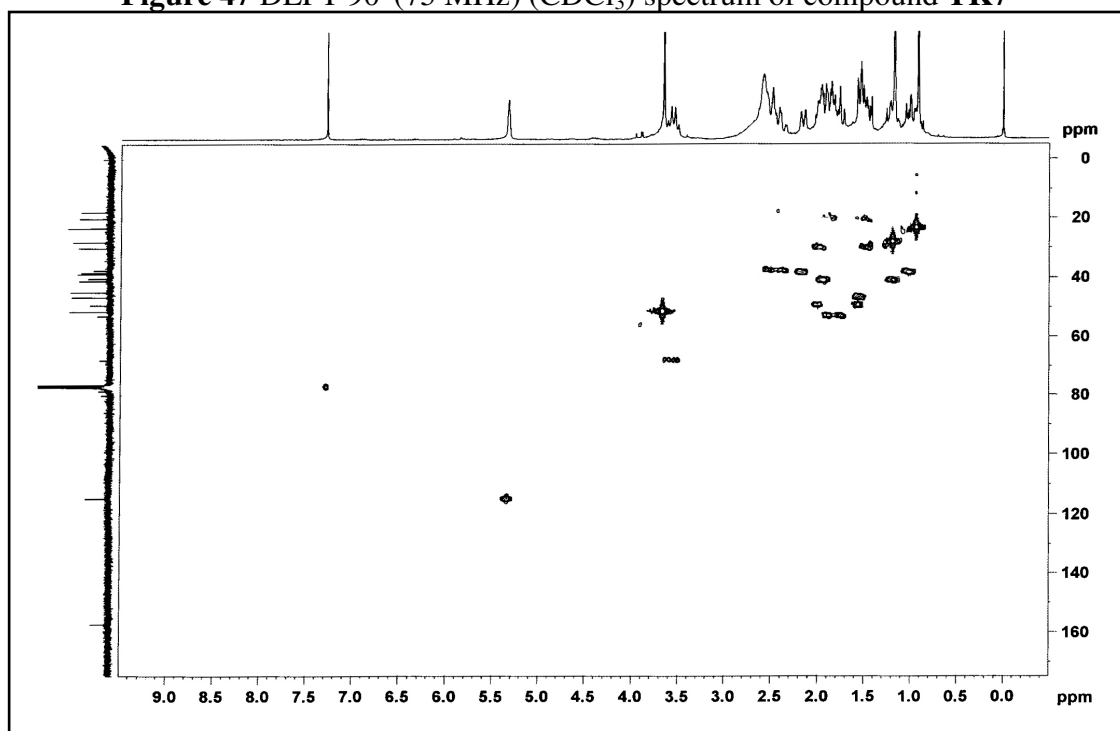
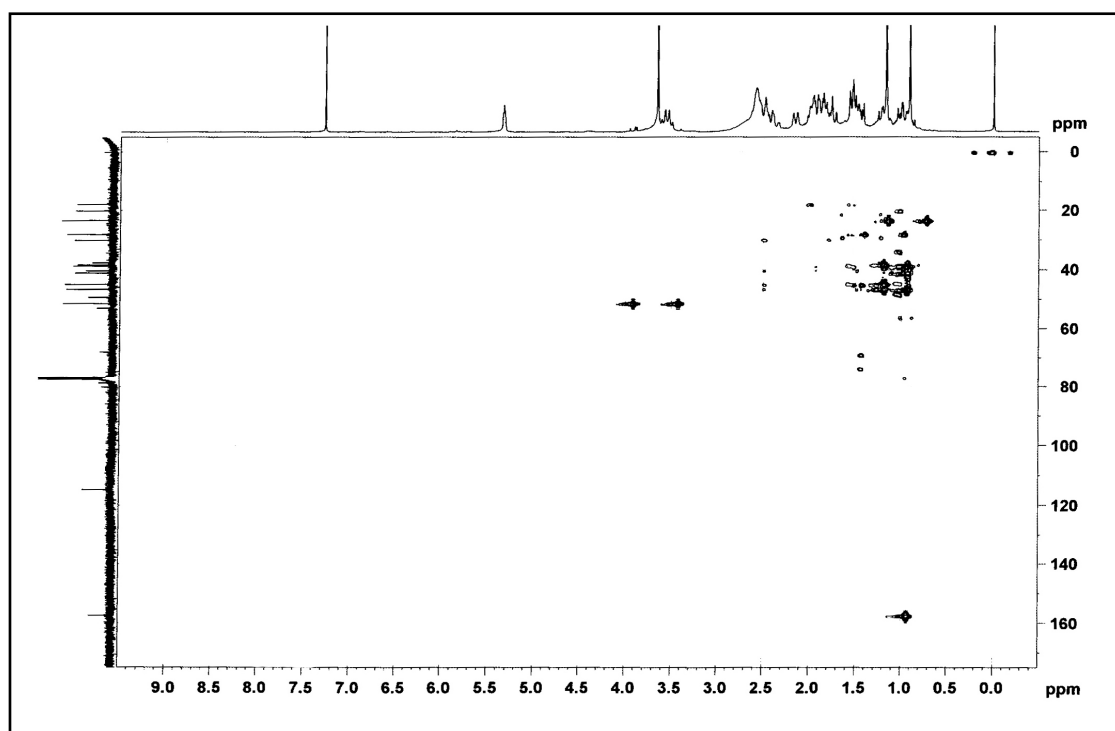
Figure 47 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK7****Figure 48** 2D HMQC (CDCl₃) spectrum of compound **TK7**

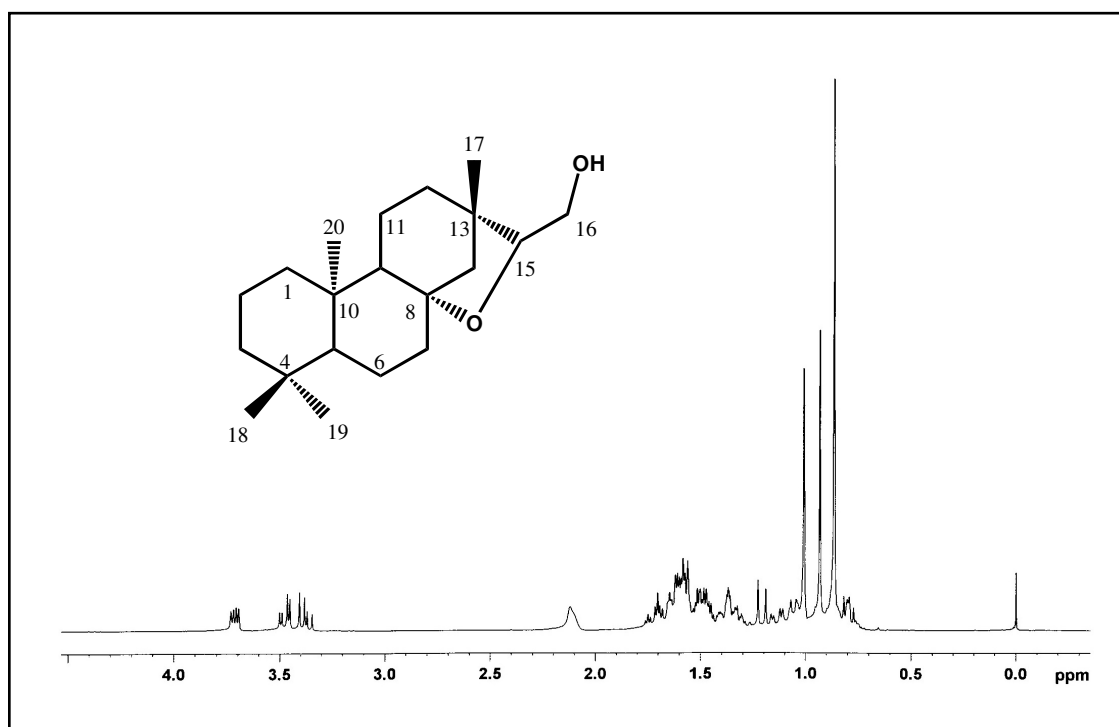
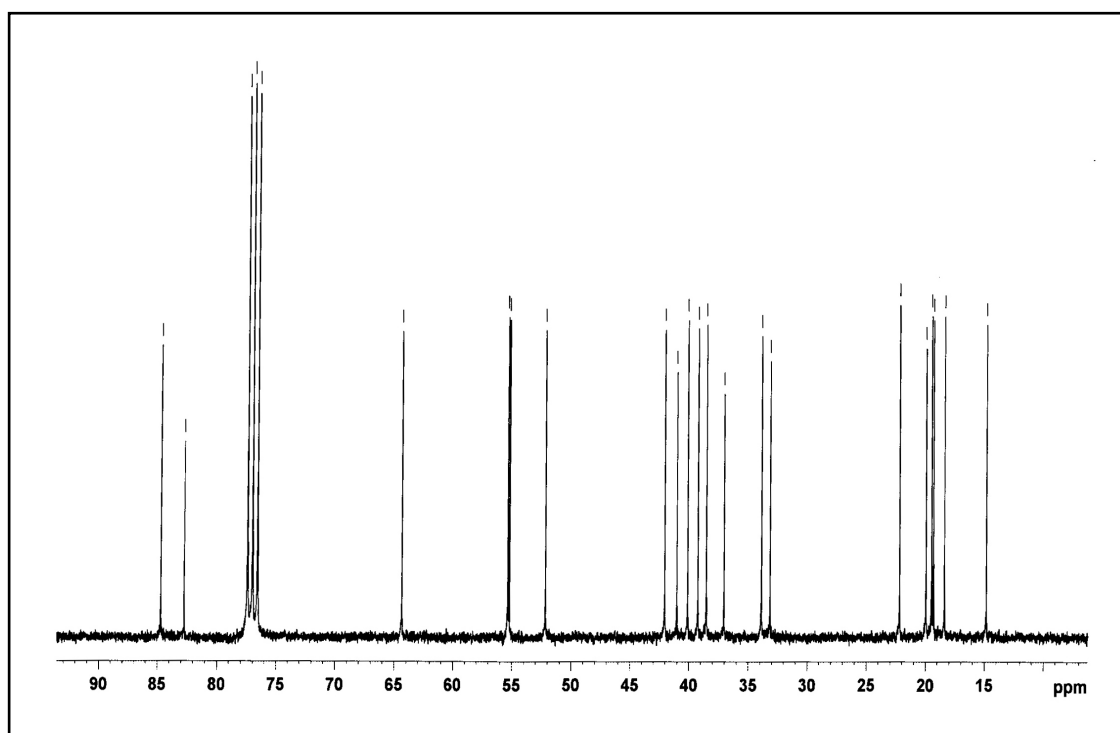
Figure 49 2D HMBC (CDCl_3) spectrum of compound **TK7****Figure 50** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK8**

Figure 51 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK8**

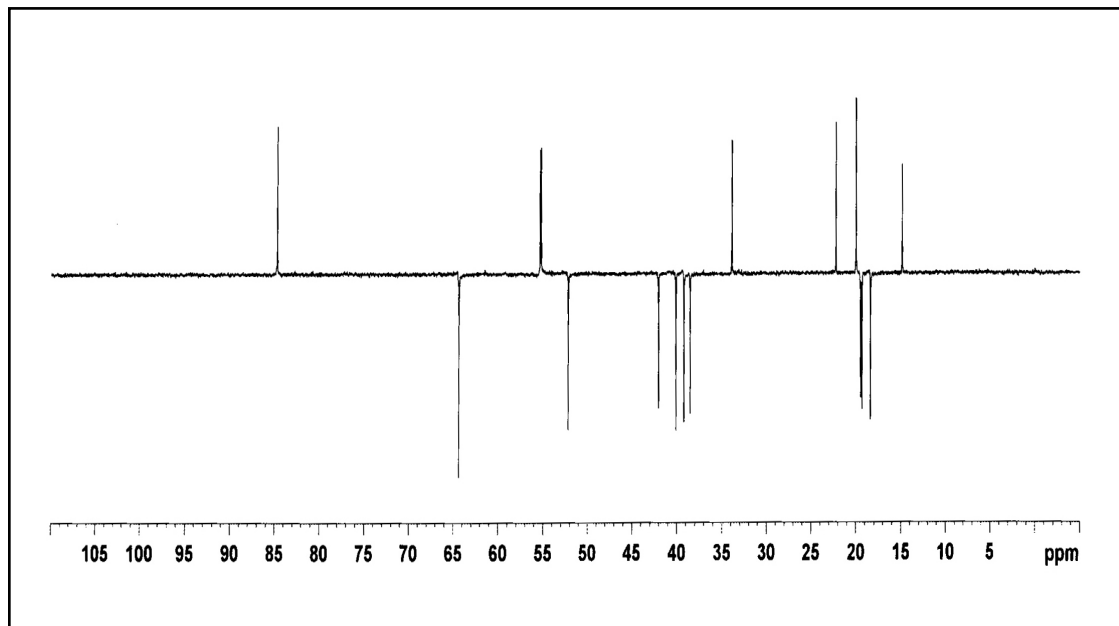


Figure 52 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK8**

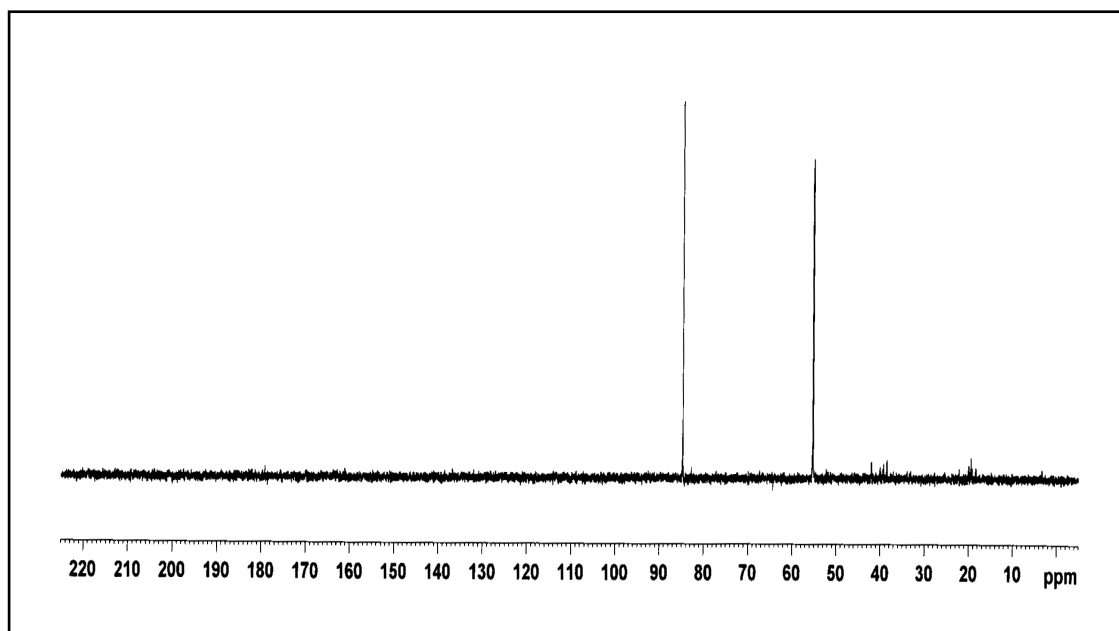


Figure 53 DEPT 90° (75 MHz) (CDCl_3) spectrum of compound **TK8**

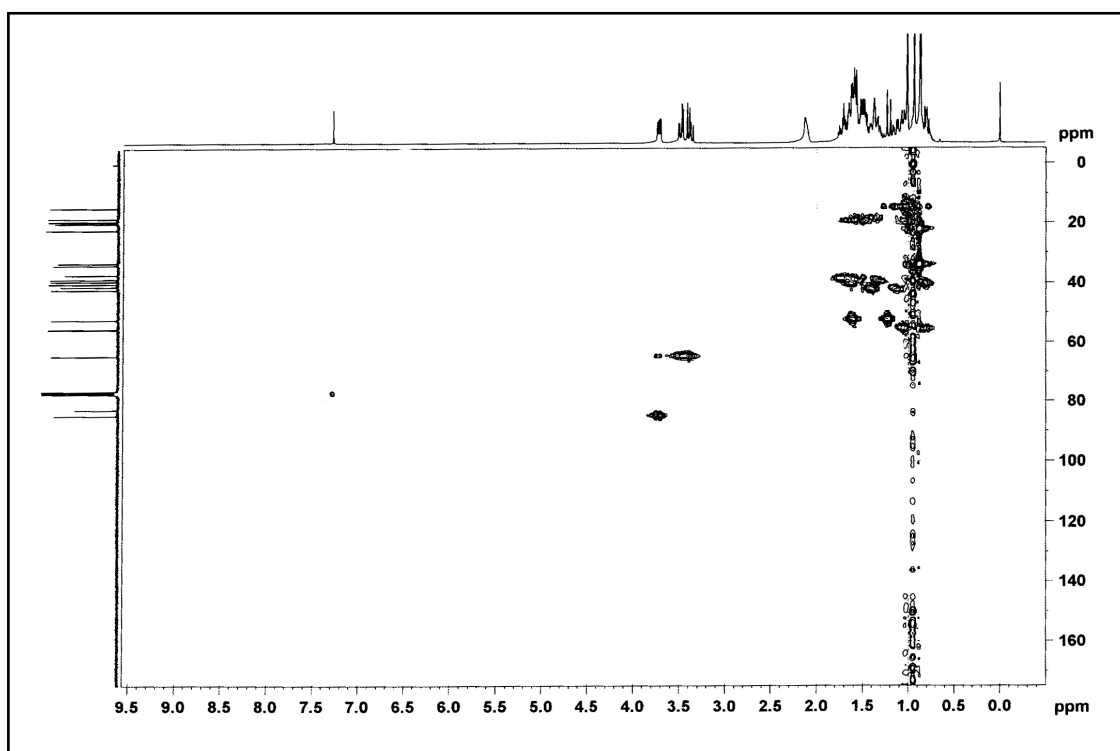


Figure 54 2D HMQC (CDCl₃) spectrum of compound TK8

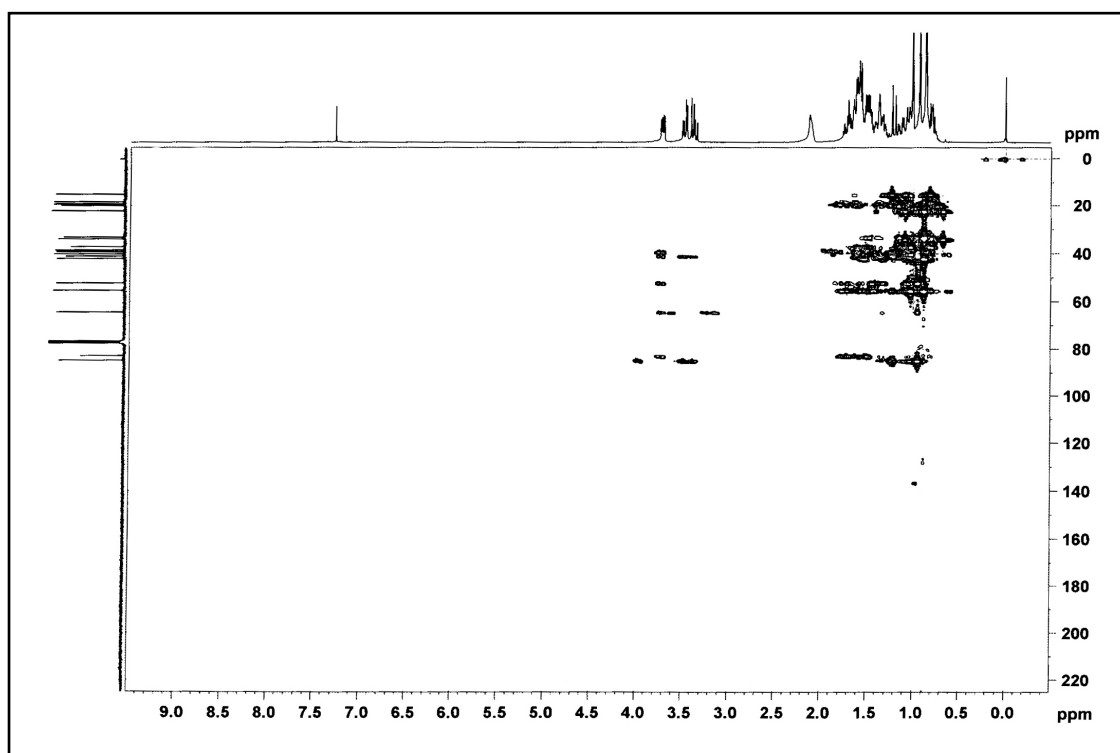


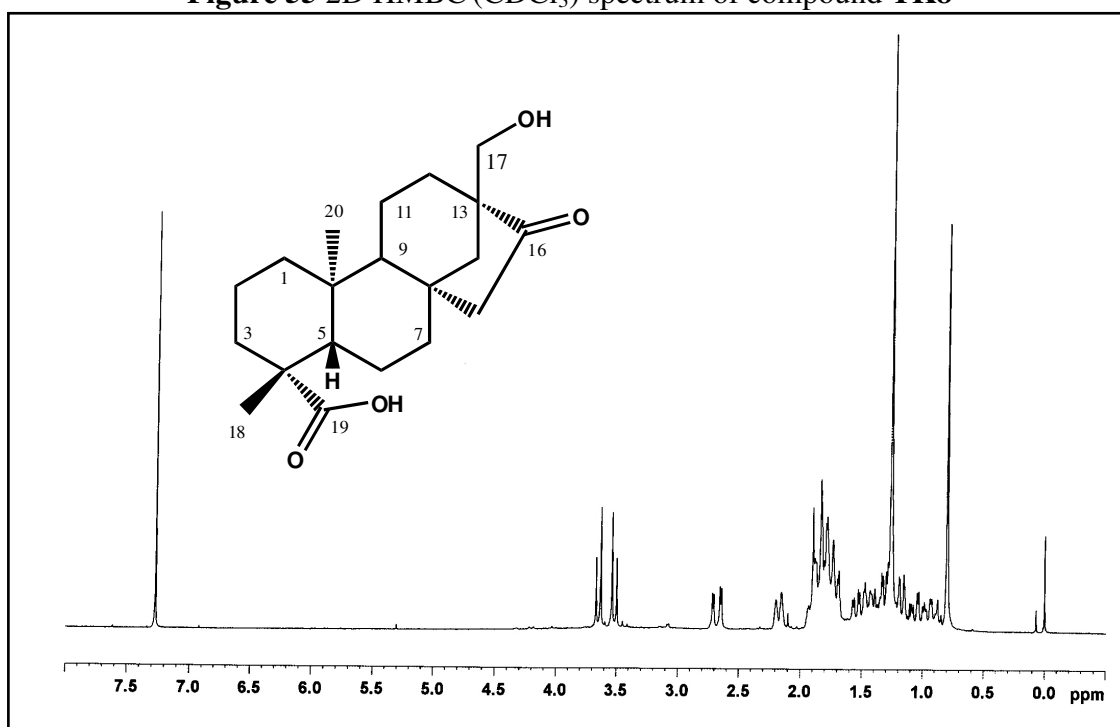
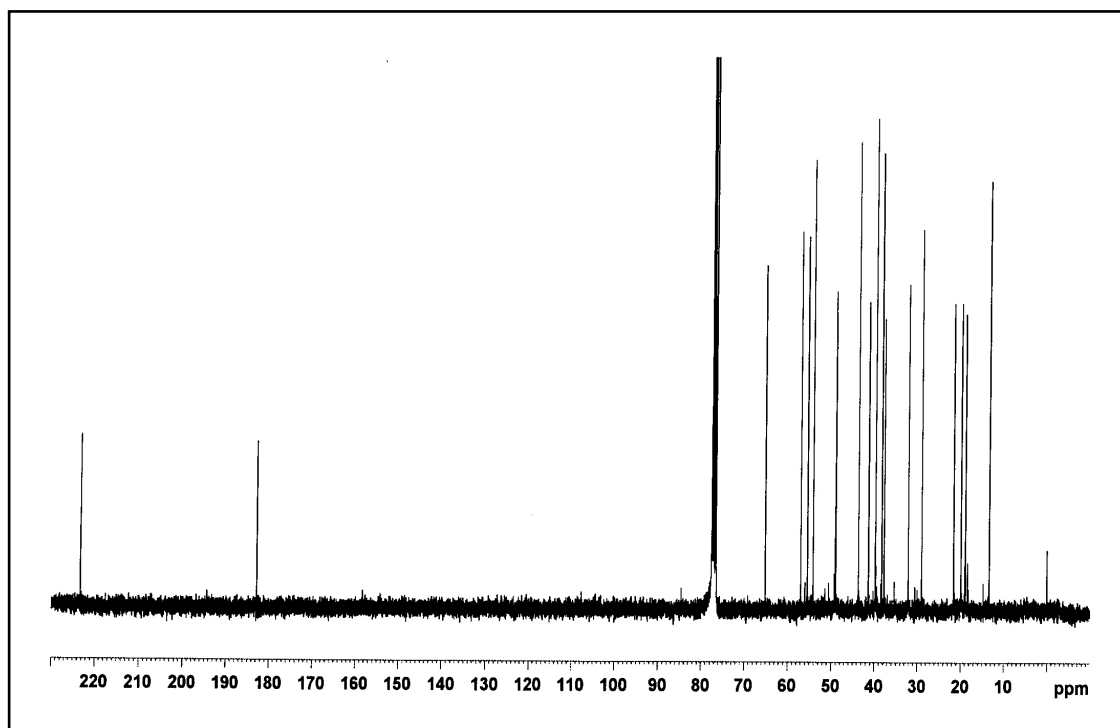
Figure 55 2D HMBC (CDCl_3) spectrum of compound **TK8****Figure 56** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK9**

Figure 57 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK9**

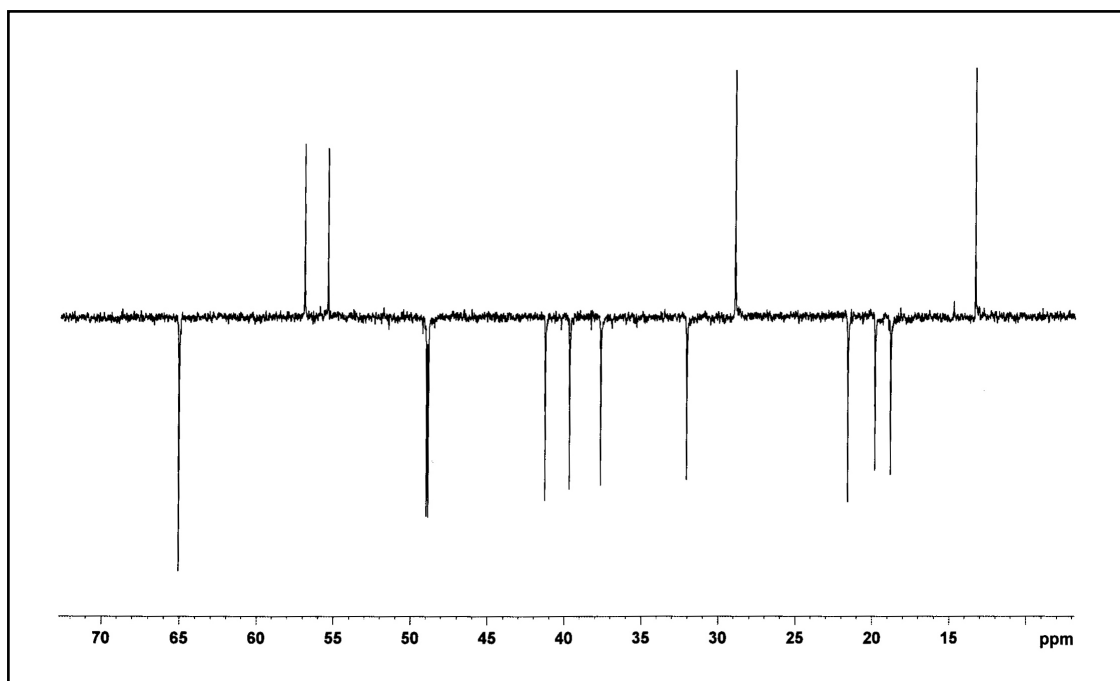


Figure 58 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK9**

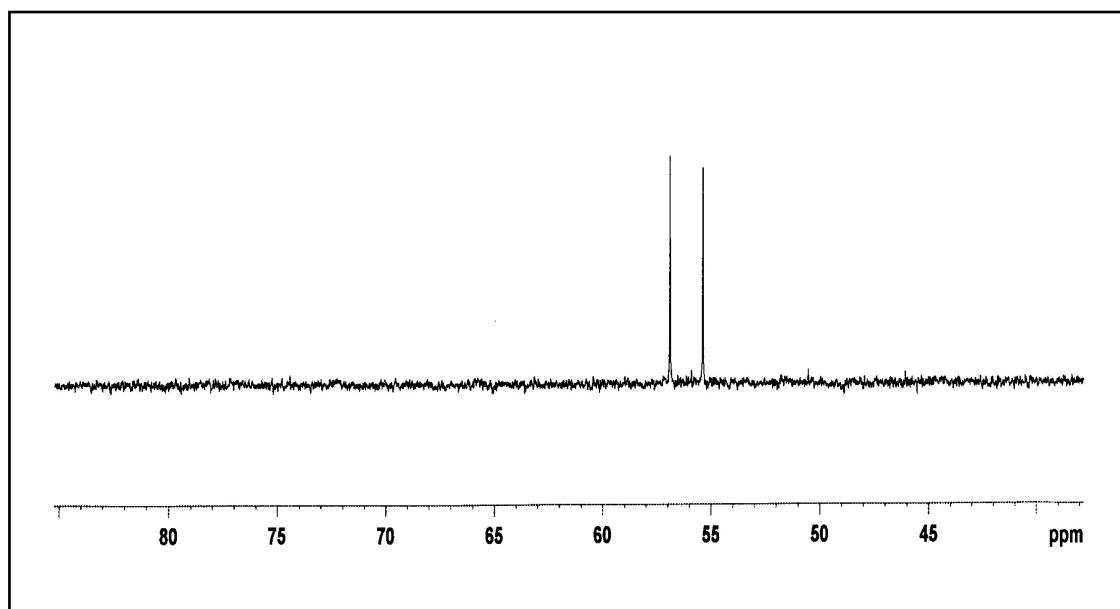


Figure 59 DEPT 90° (75 MHz) (CDCl_3) spectrum of compound **TK9**

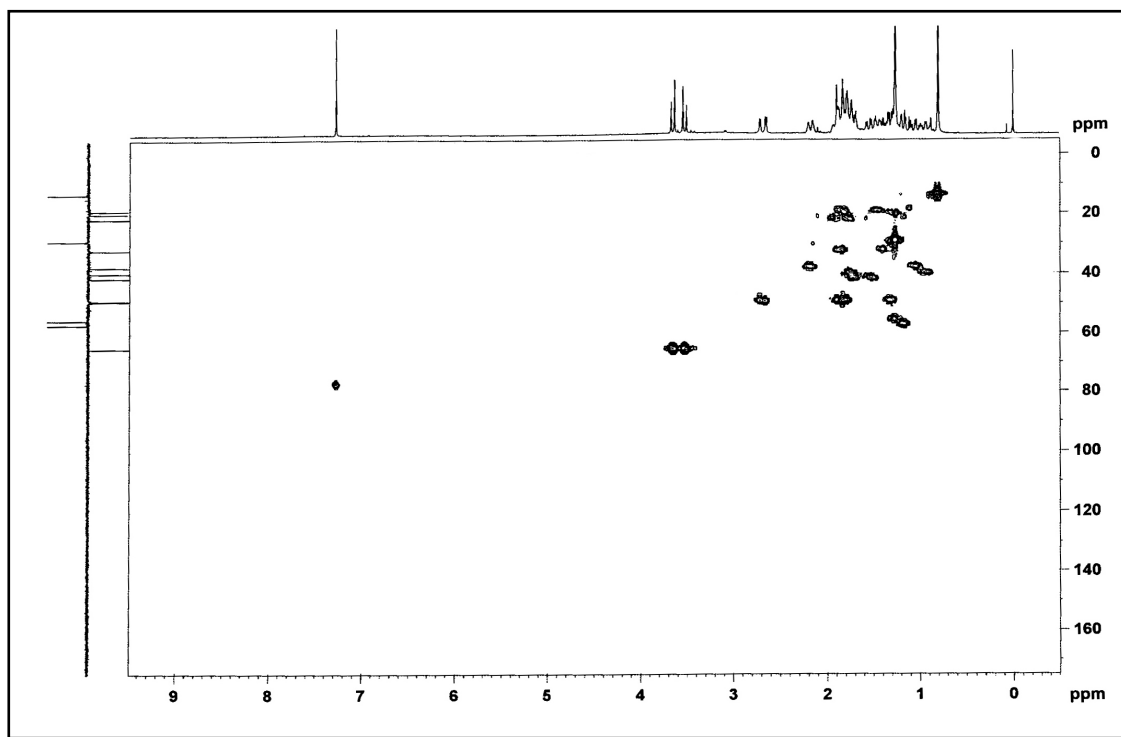


Figure 60 2D HMQC (CDCl_3) spectrum of compound TK9

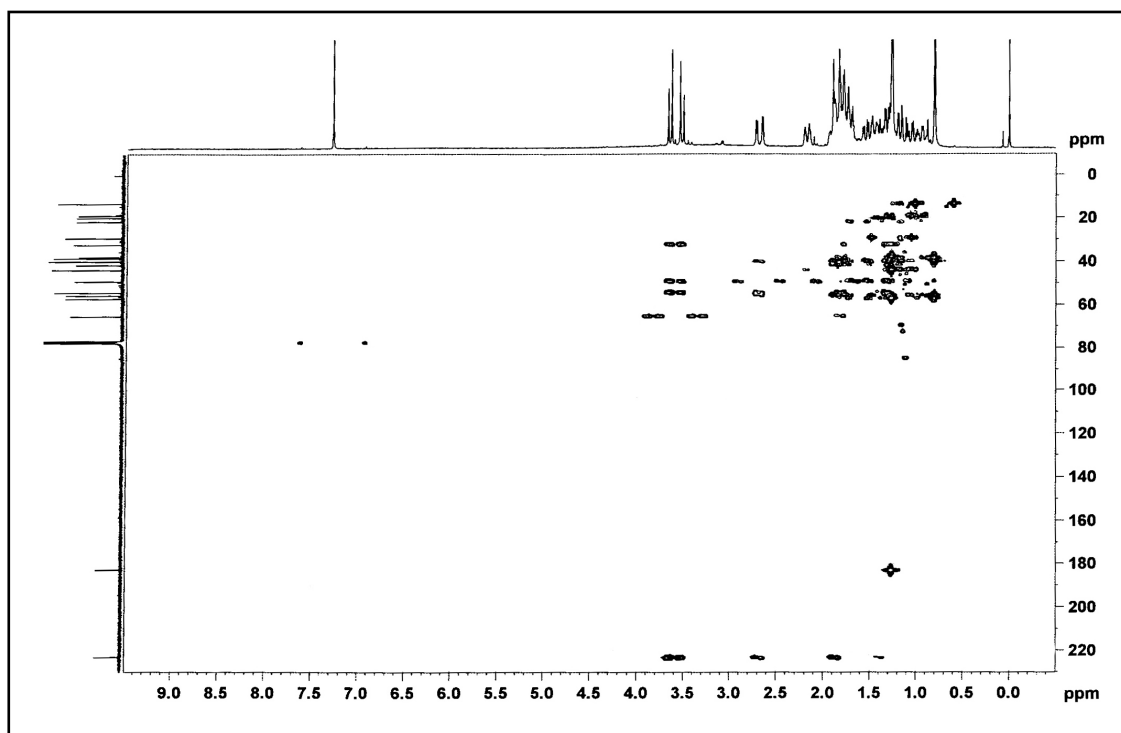


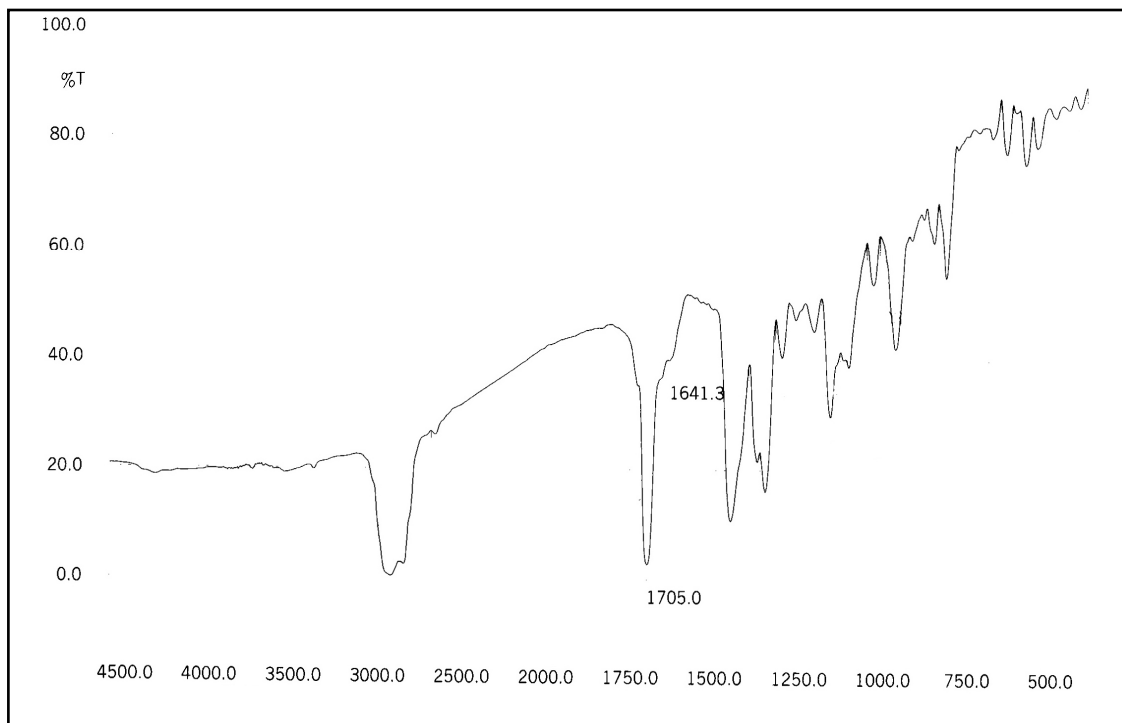
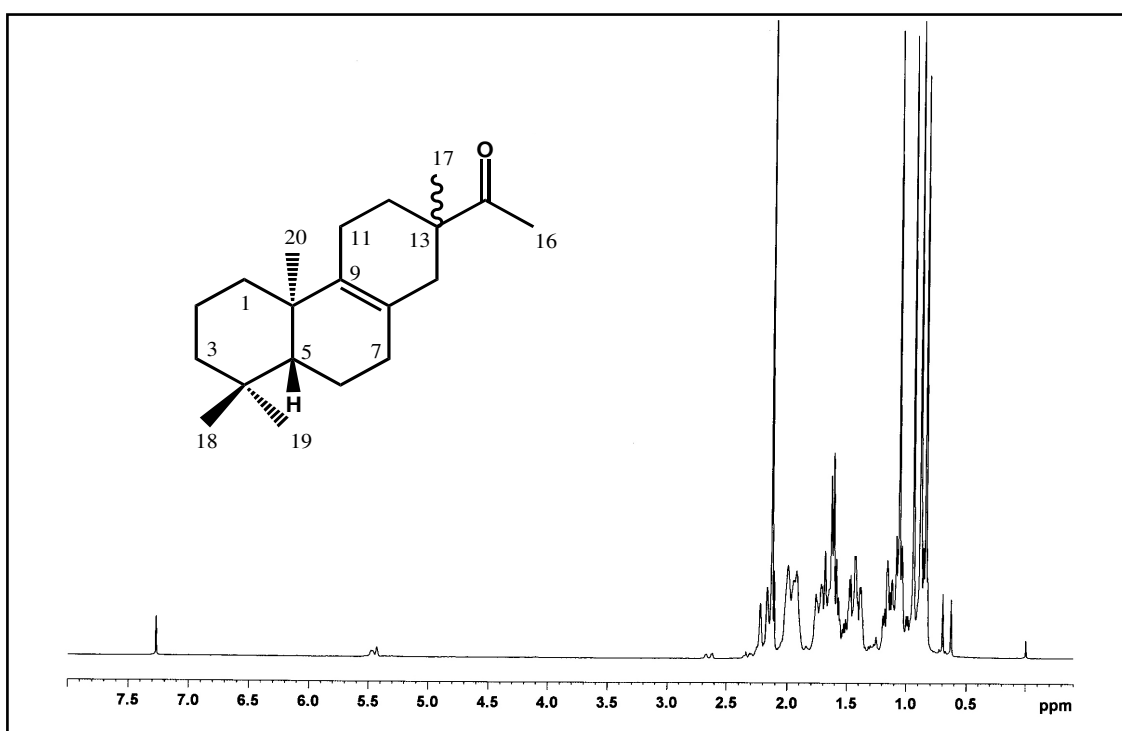
Figure 61 2D HMBC (CDCl_3) spectrum of compound **TK9****Figure 62** IR (KBr) spectrum of compound **TK10**

Figure 63 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK10**

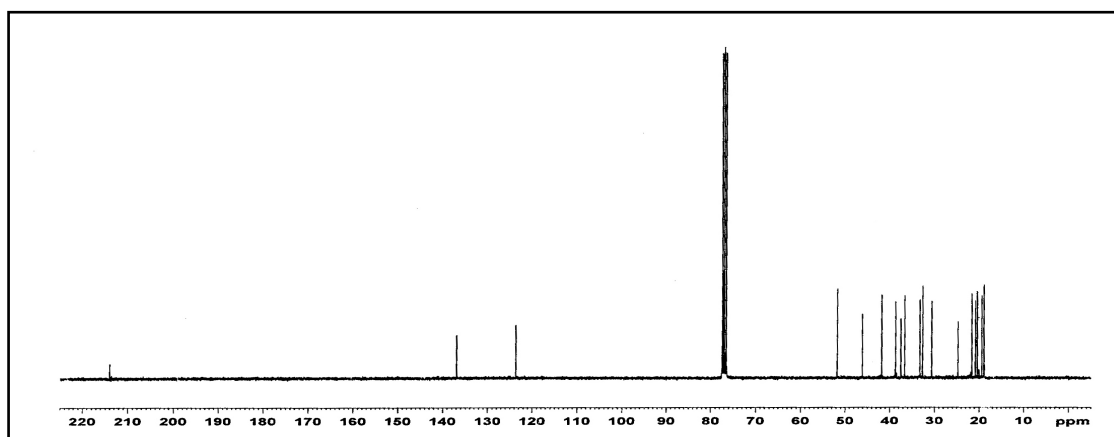


Figure 64 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK10**

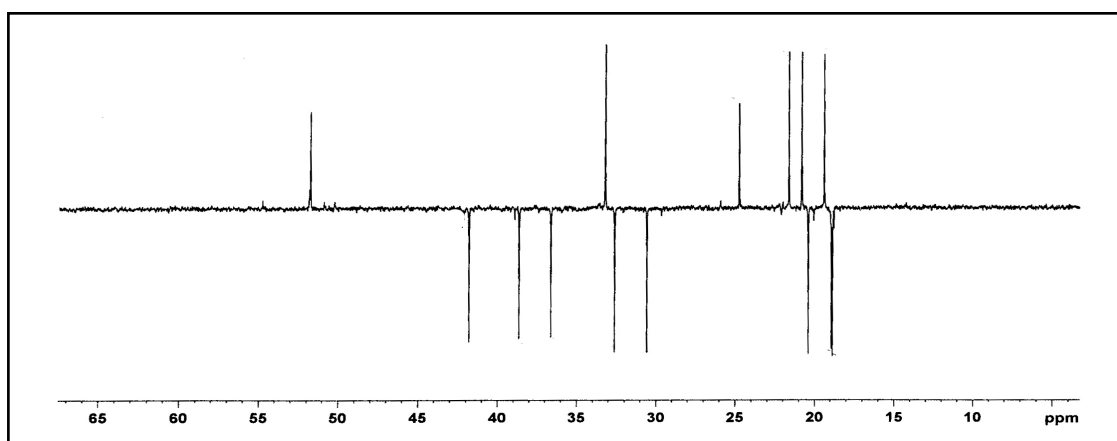


Figure 65 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK10**

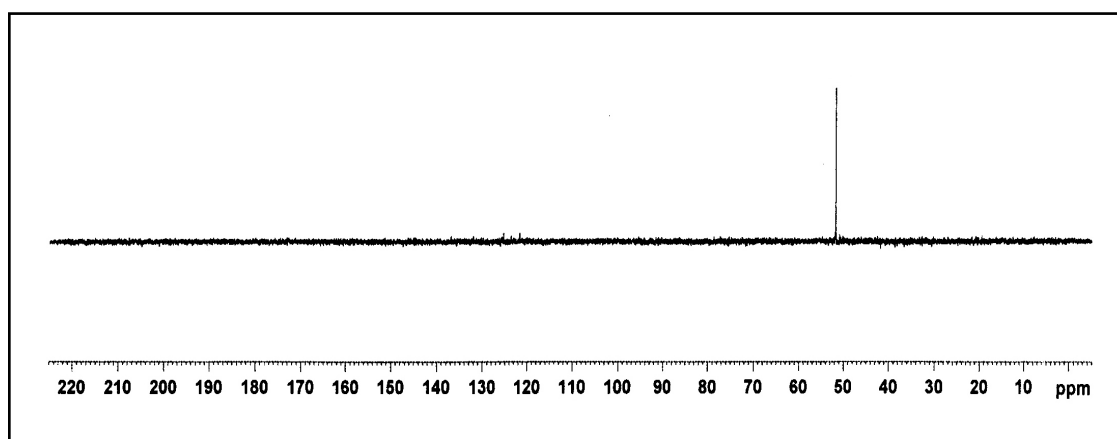


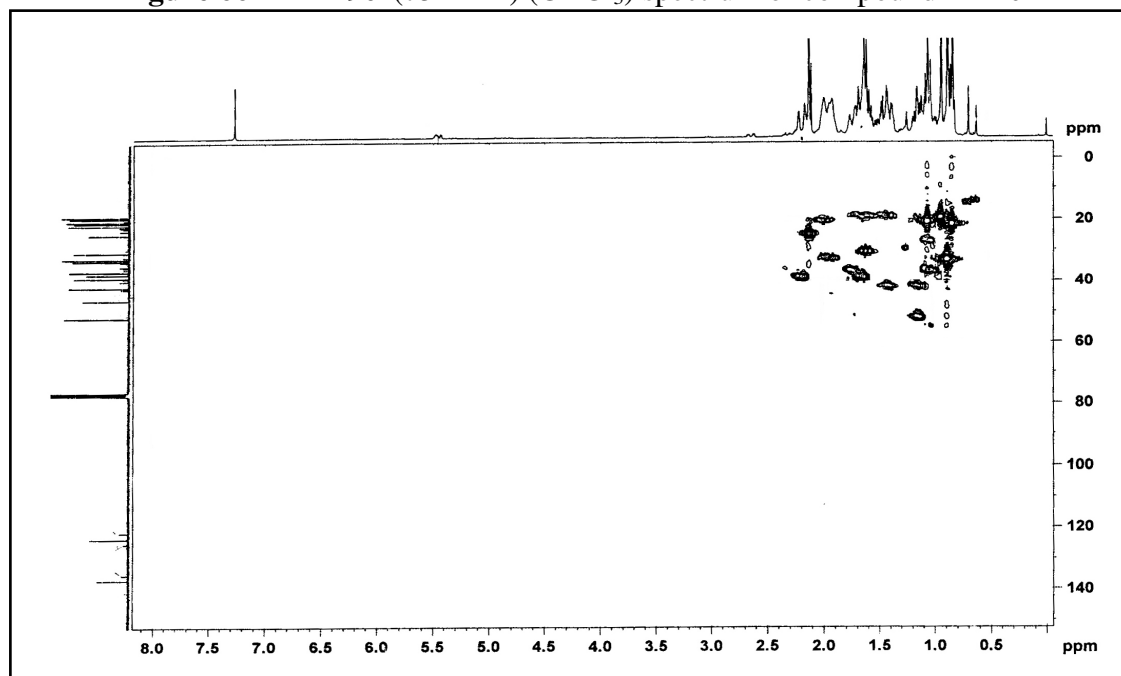
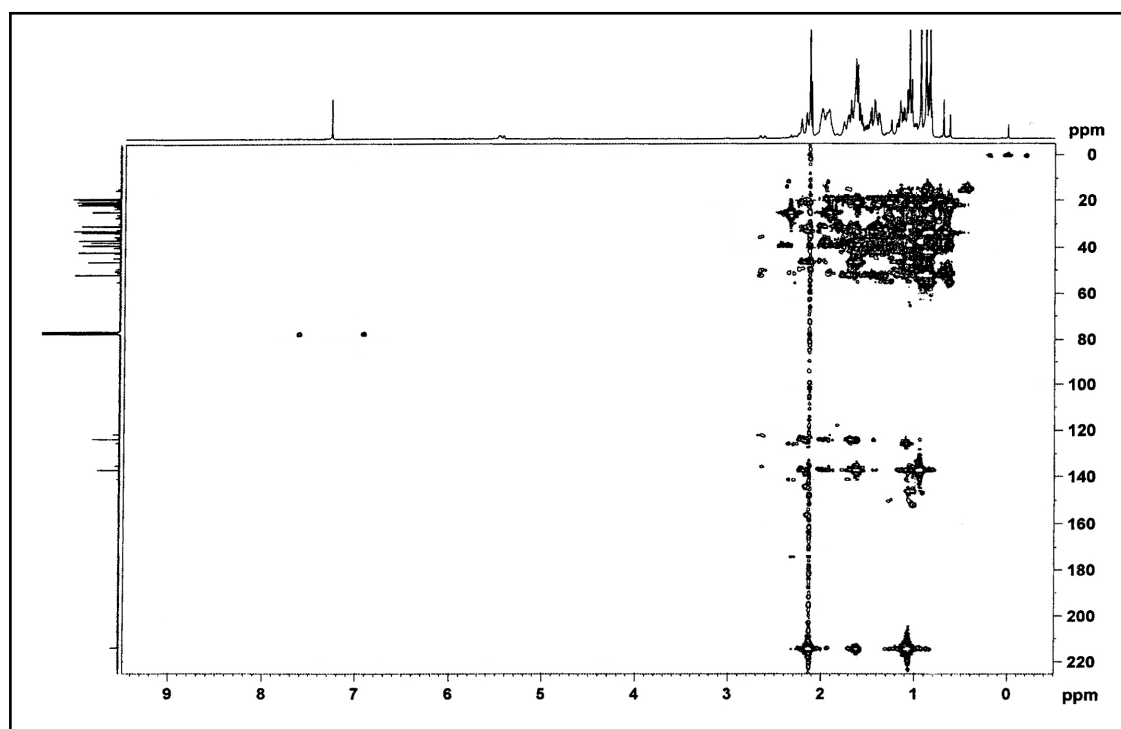
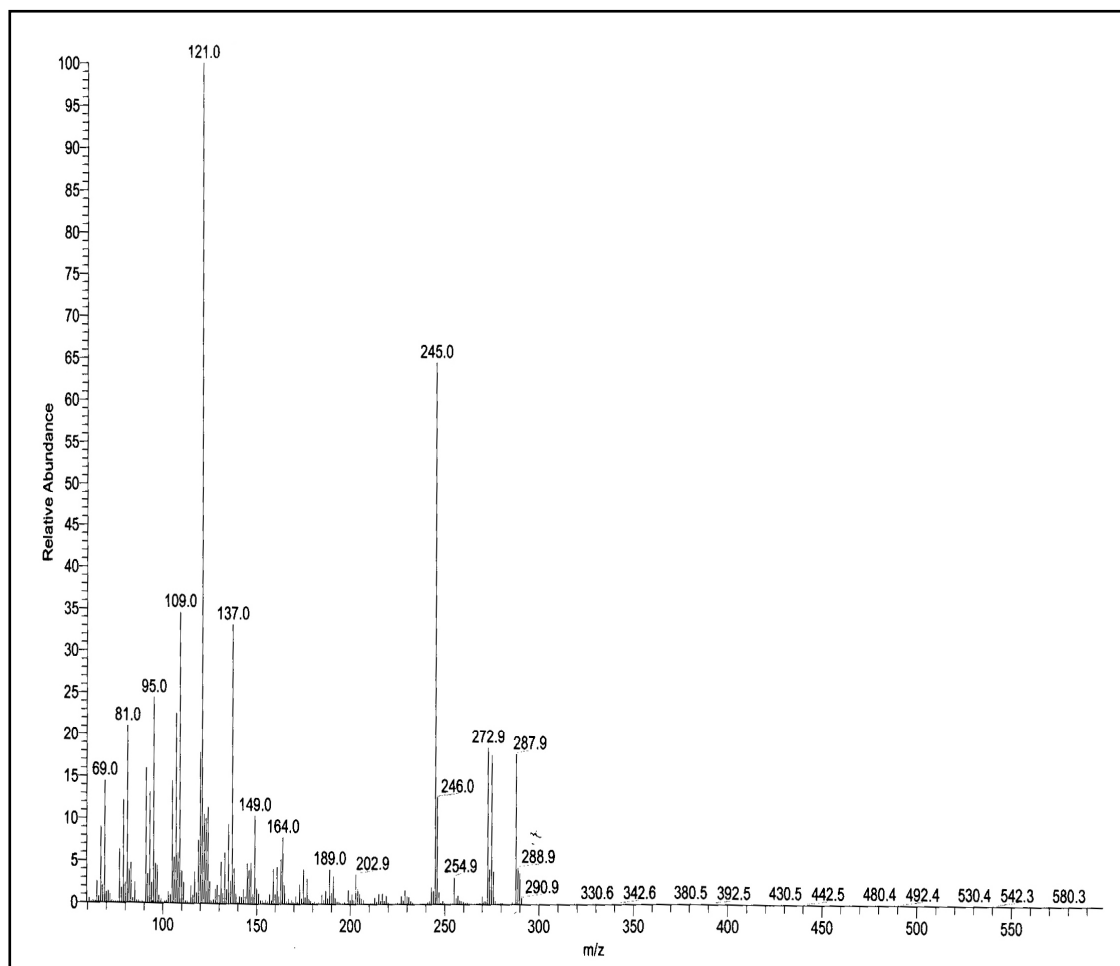
Figure 66 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK10****Figure 67** 2D HMQC (CDCl₃) spectrum of compound **TK10**

Figure 68 2D HMBC (CDCl_3) spectrum of compound **TK10****Figure 69** EIMS spectrum of compound **TK10**

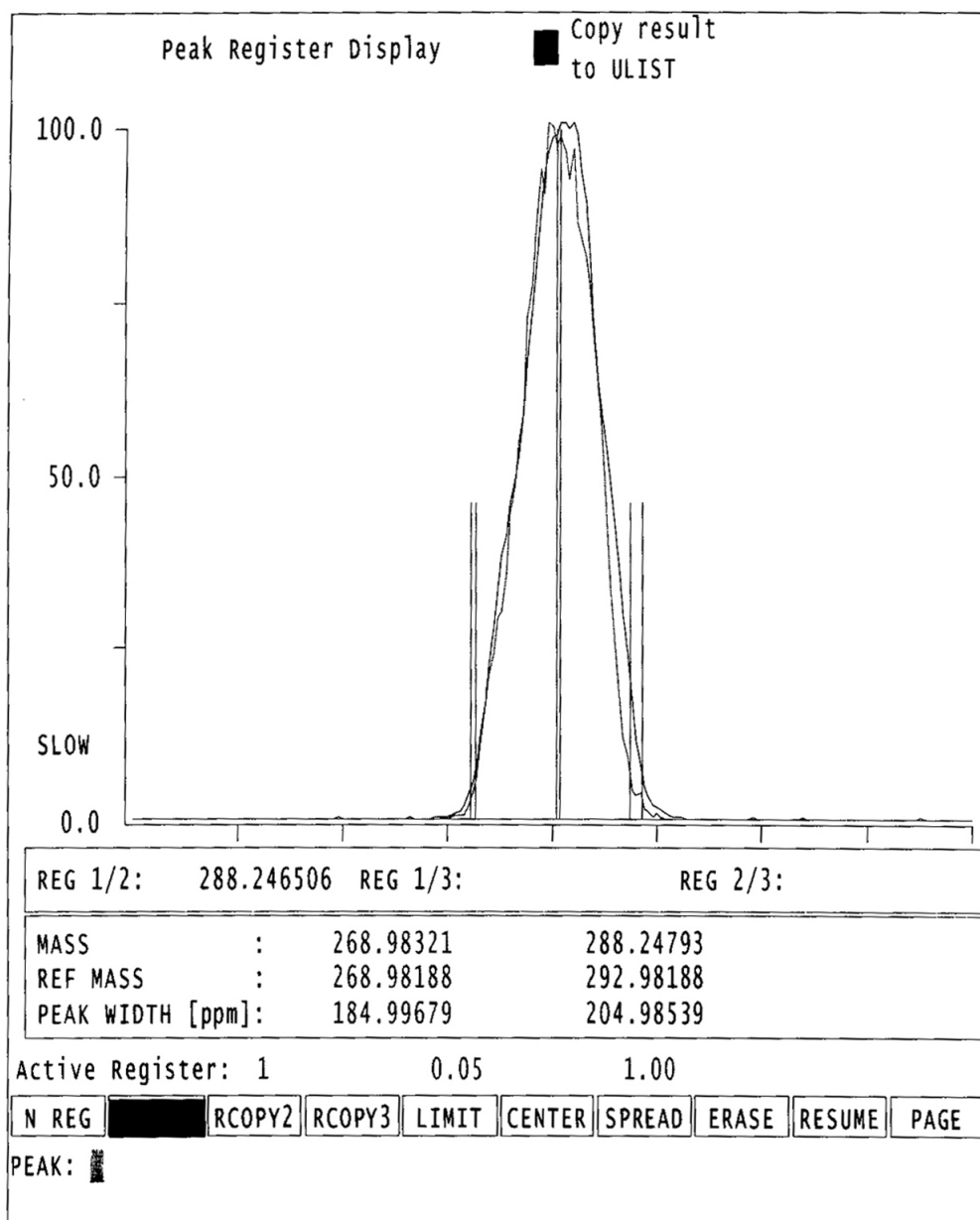


Figure 70 HREIMS spectrum of compound **TK10**

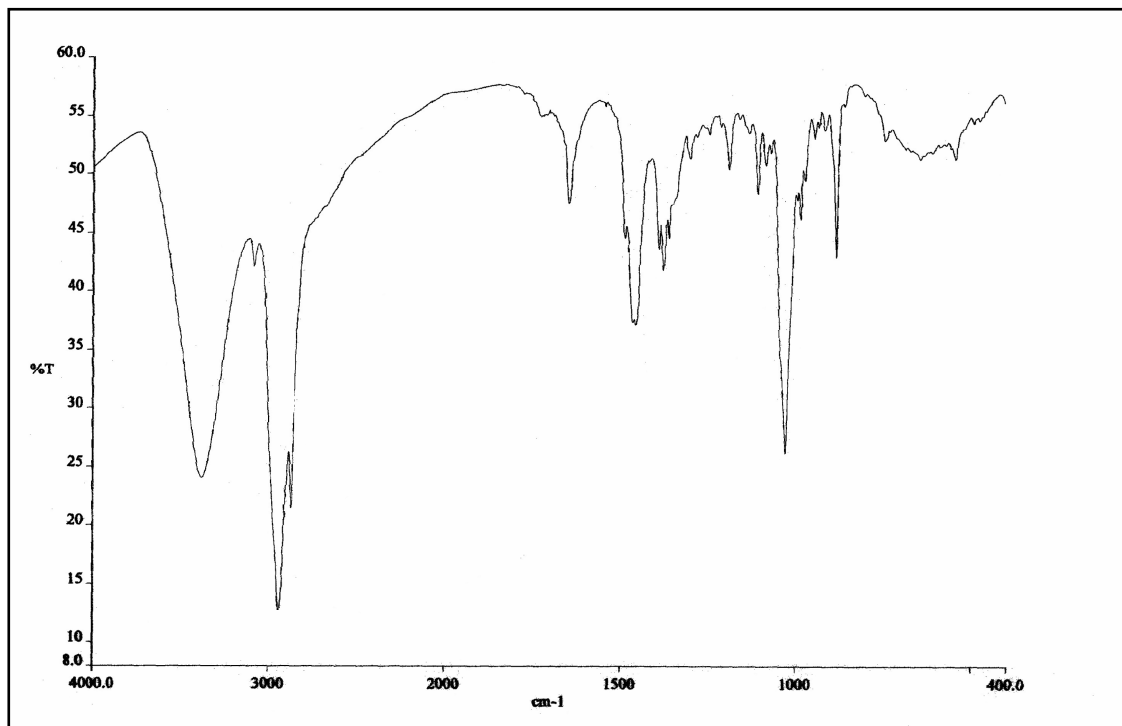


Figure 71 IR (KBr) spectrum of compound TK11

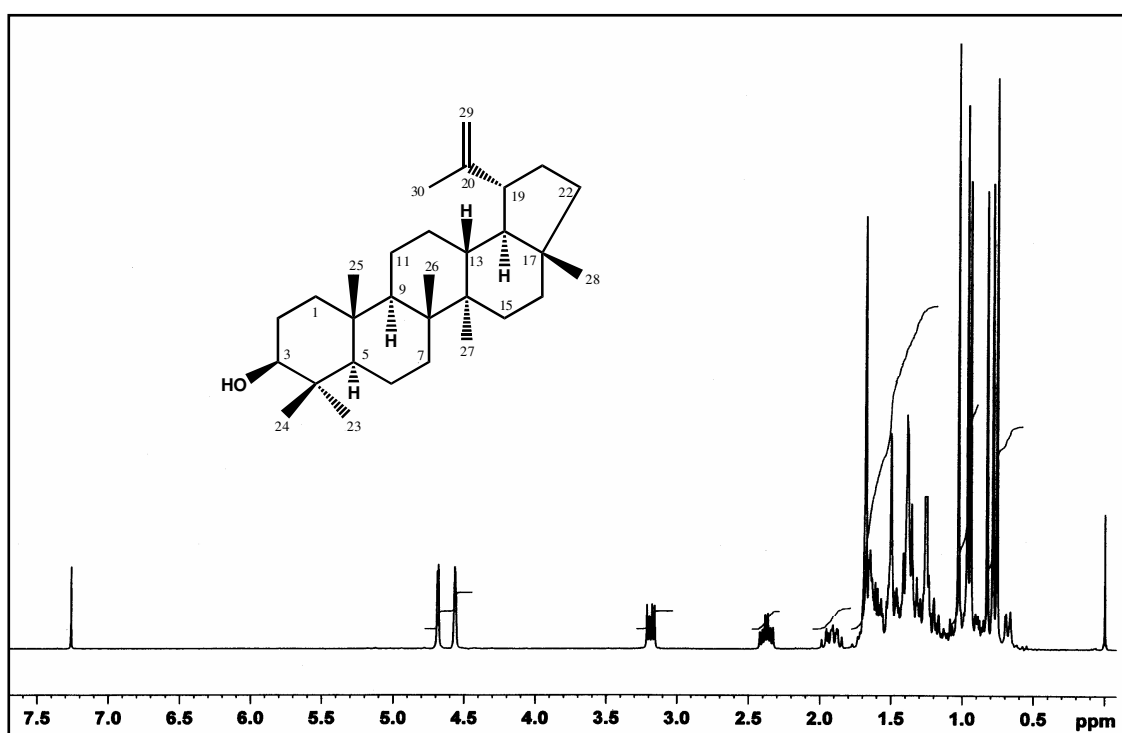


Figure 72 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK11**

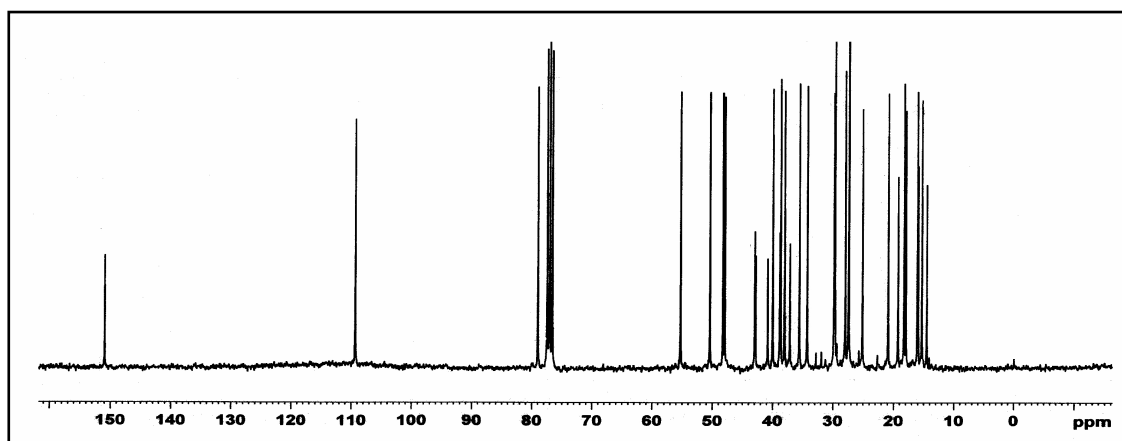


Figure 73 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK11**

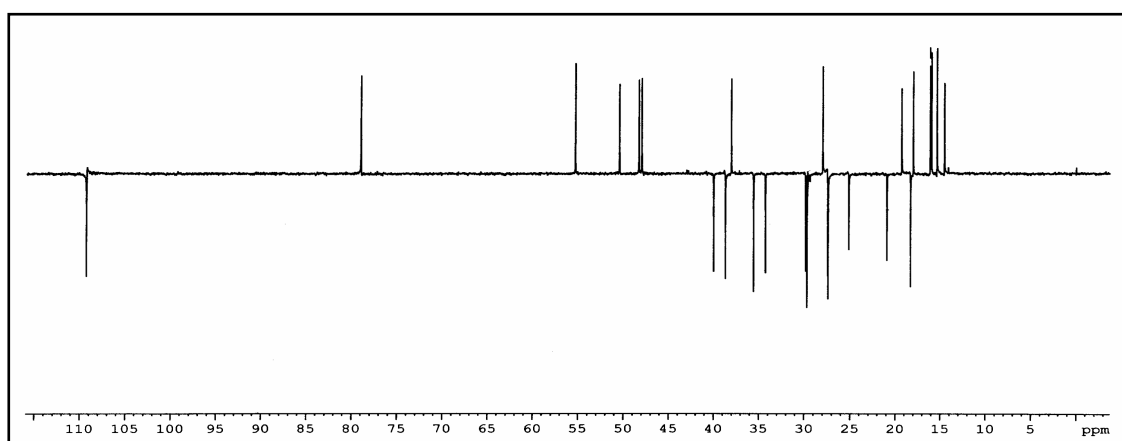


Figure 74 DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK11**

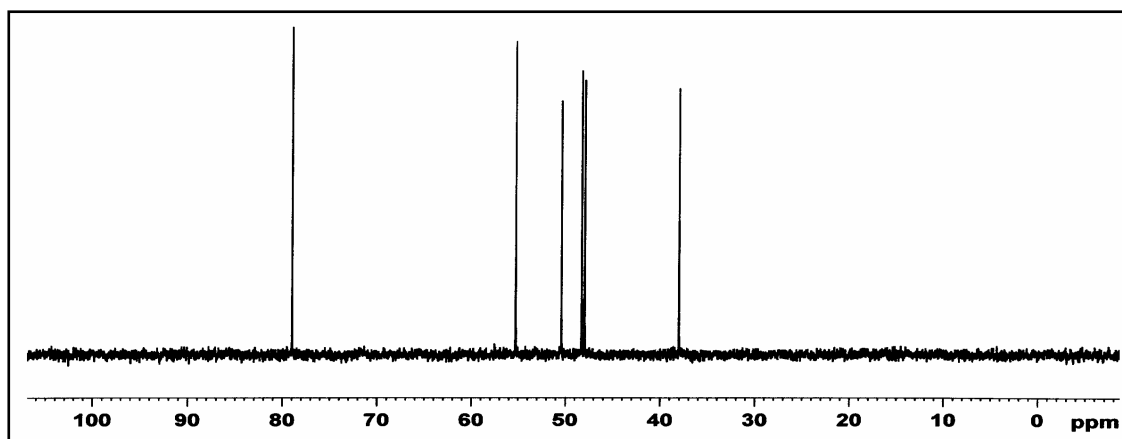


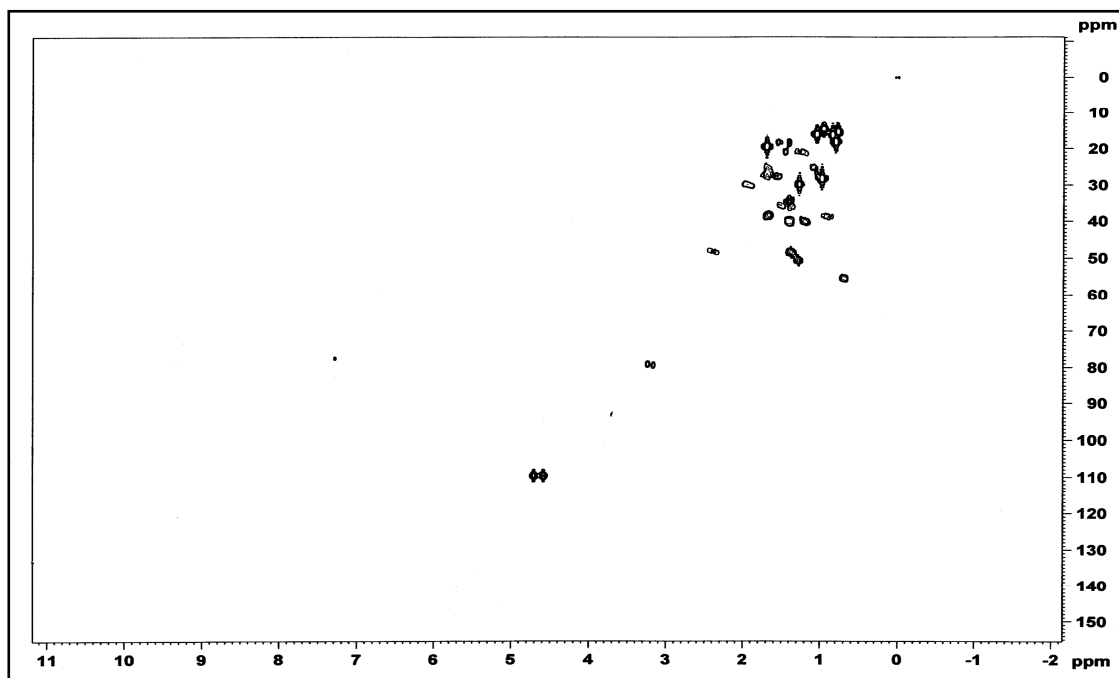
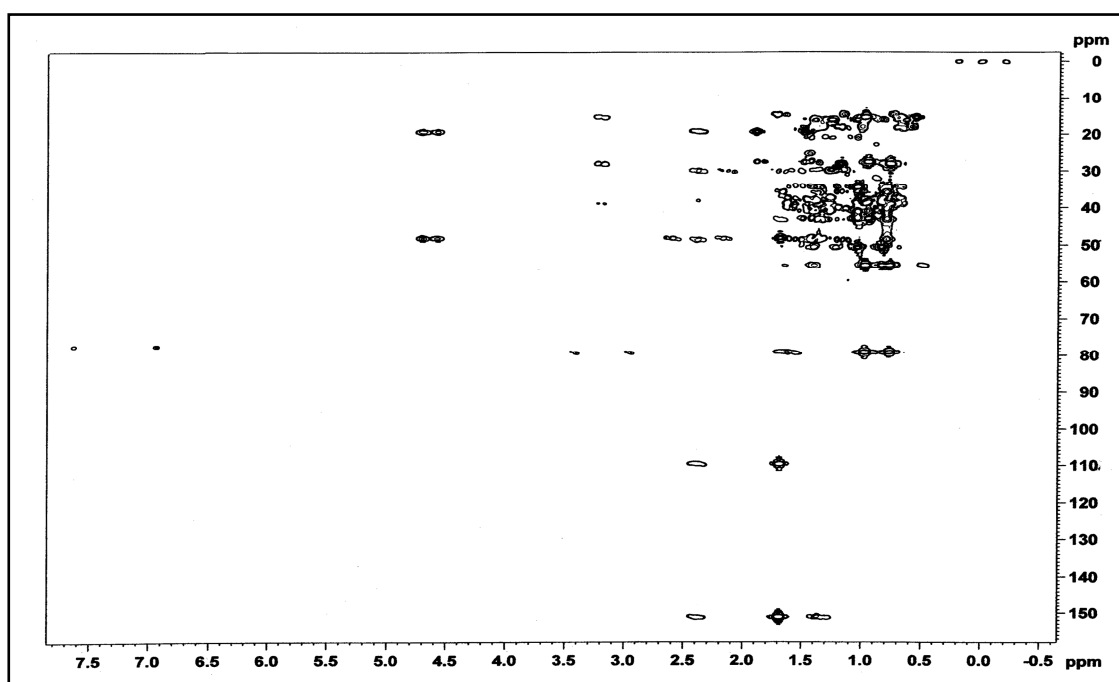
Figure 75 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK11****Figure 76** 2D HMQC (300 MHz) (CDCl₃) spectrum of compound **TK11**

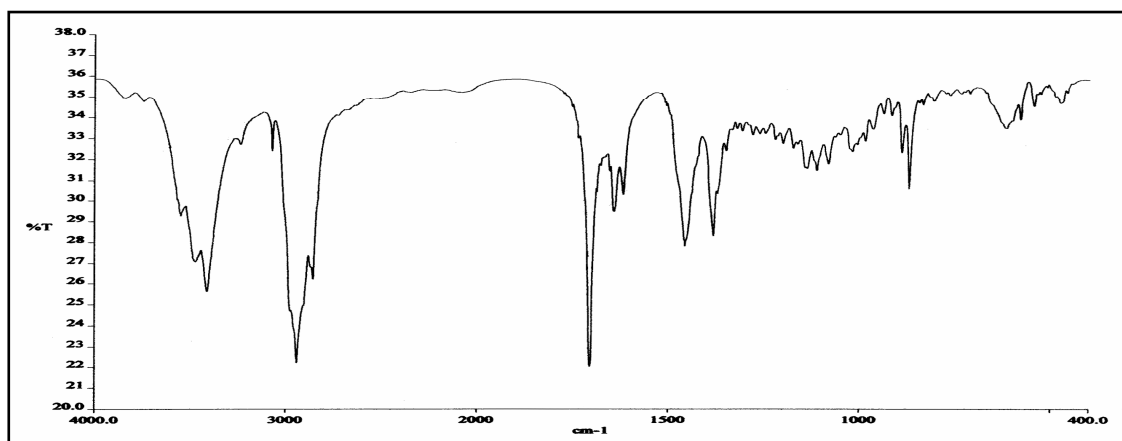
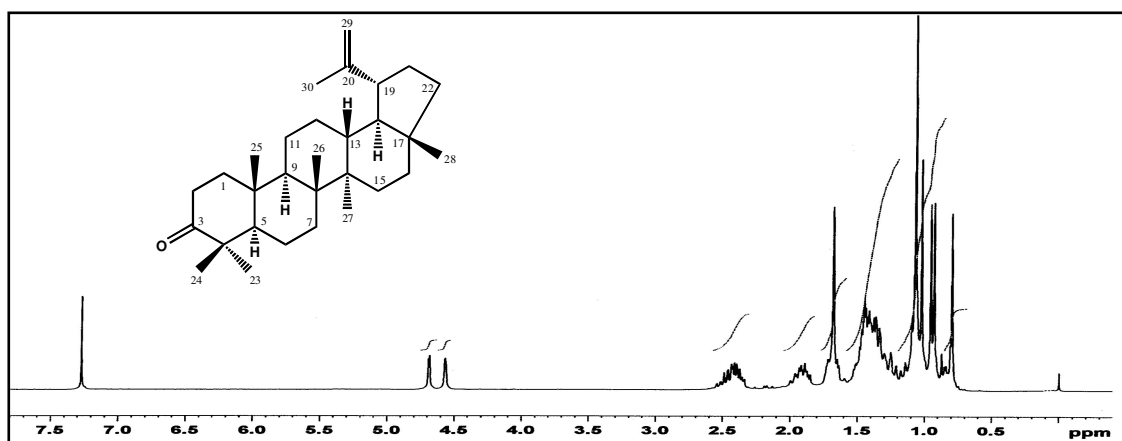
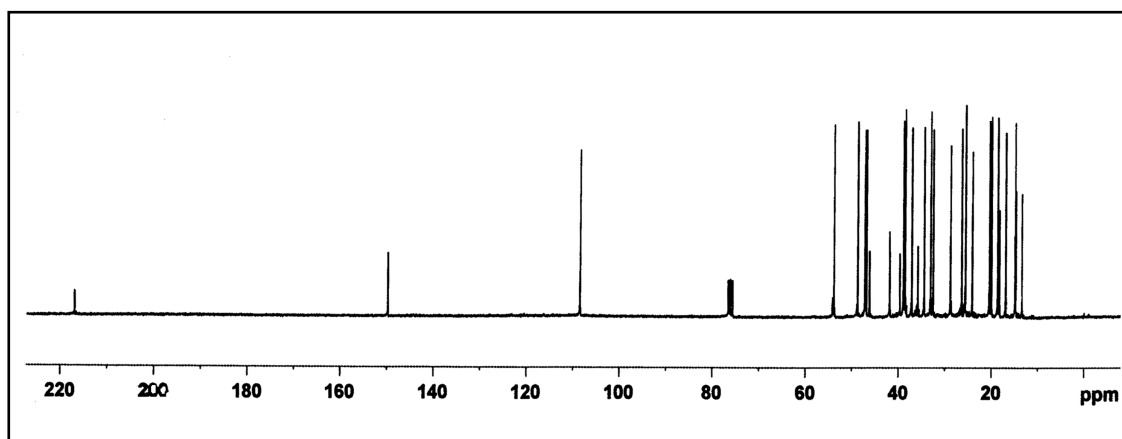
Figure 77 2D HMBC (300 MHz) (CDCl₃) spectrum of compound **TK11****Figure 78** IR (KBr) spectrum of compound **TK12****Figure 79** ¹H NMR (300 MHz) (CDCl₃) spectrum of compound **TK12**

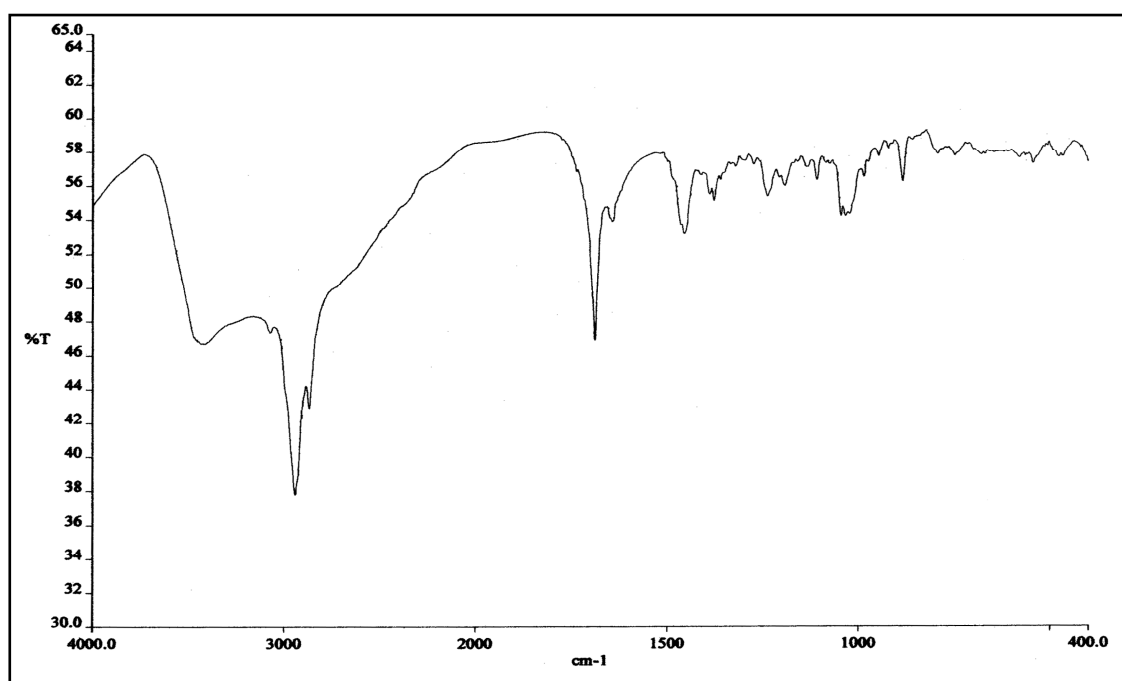
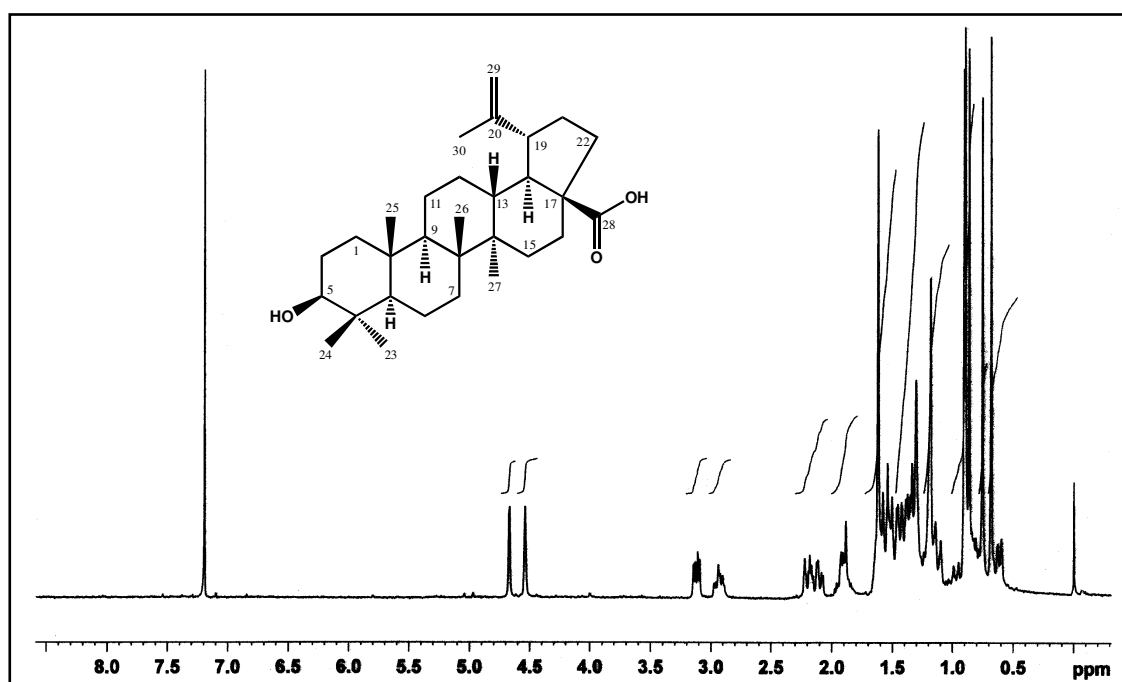
Figure 80 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound TK12**Figure 81** IR (KBr) spectrum of compound TK13

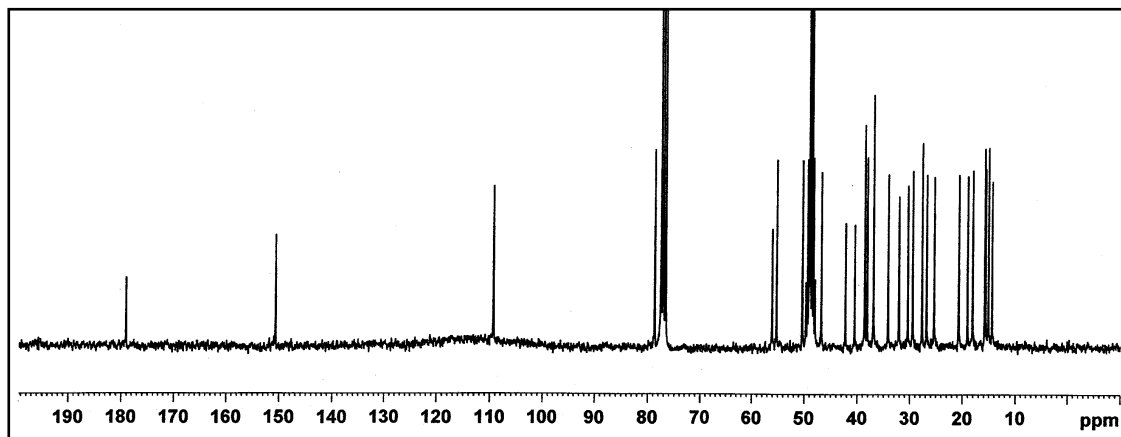
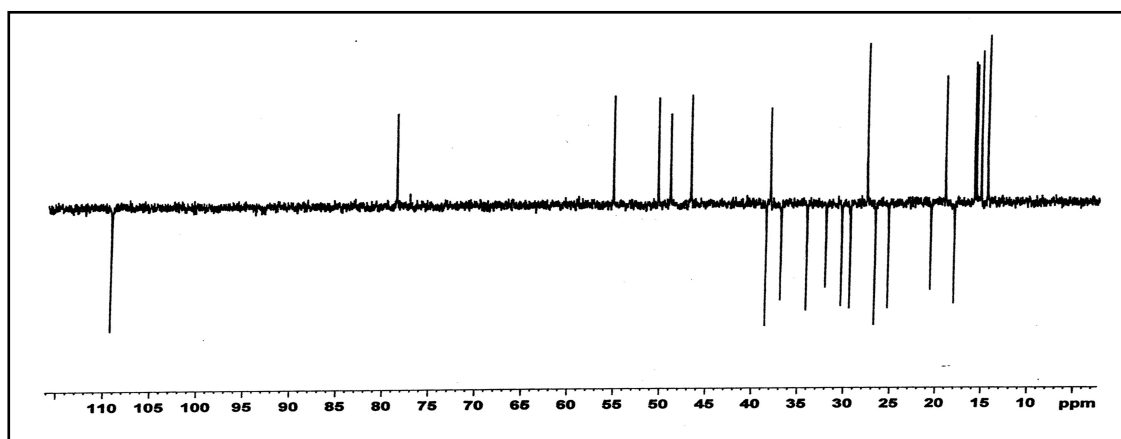
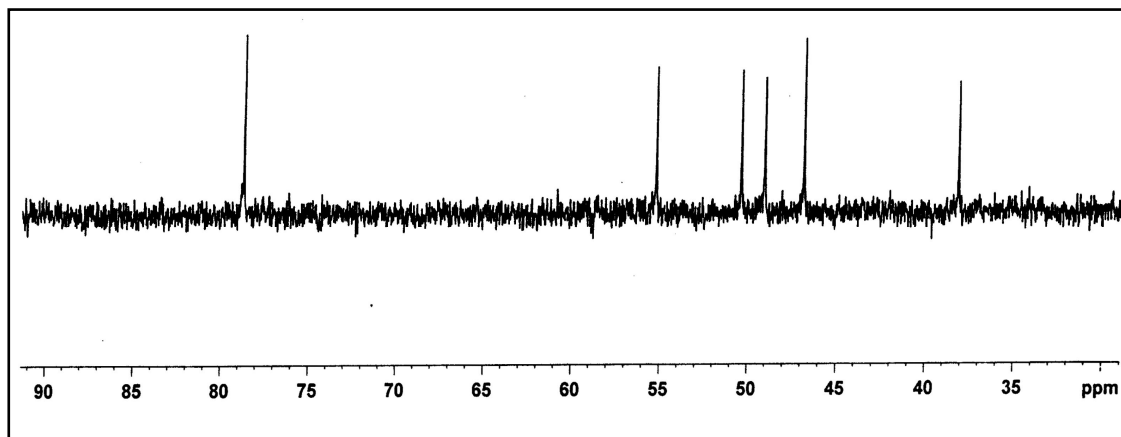
Figure 82 ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK13****Figure 83** ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK13****Figure 84** DEPT 135° (75 MHz) (CDCl_3) spectrum of compound **TK13**

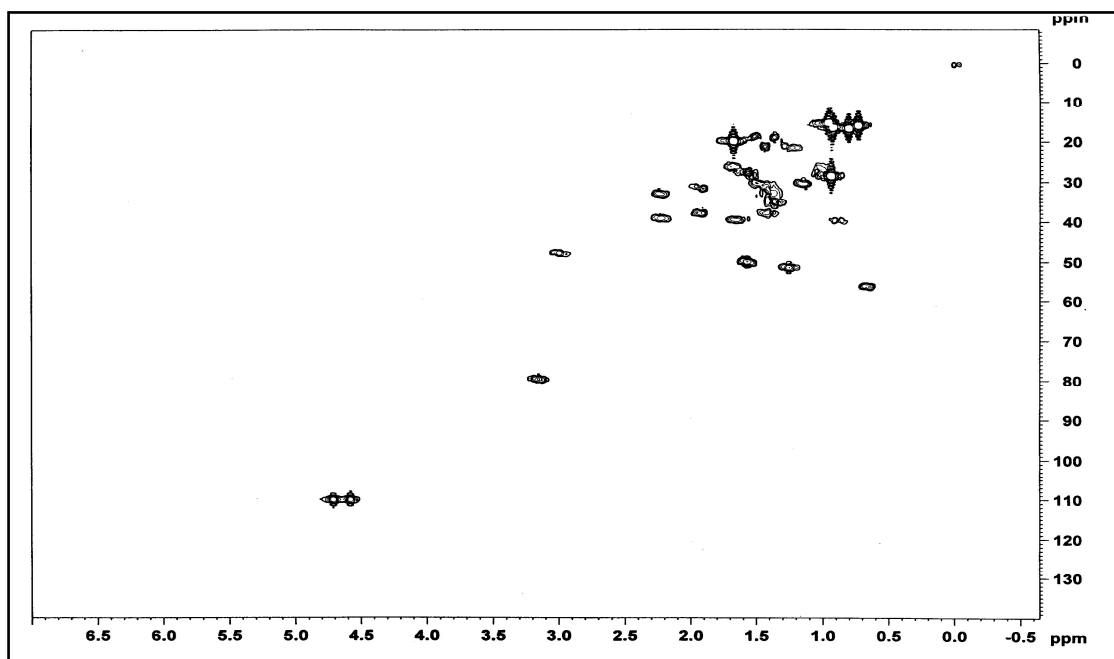
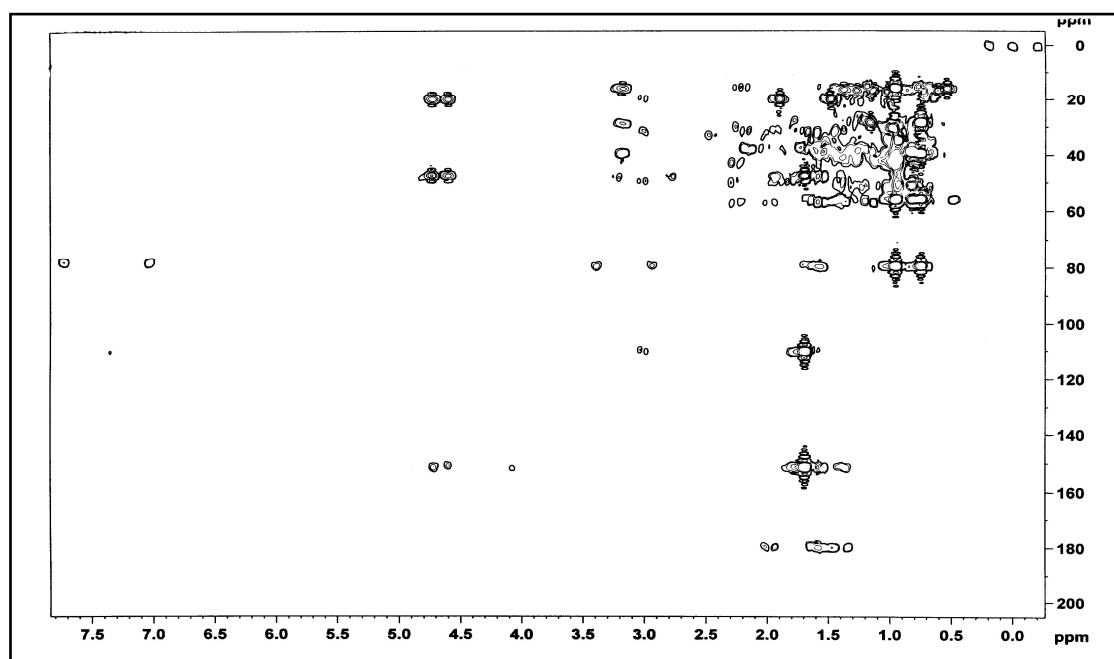
Figure 85 DEPT 90° (75 MHz) (CDCl₃) spectrum of compound **TK13****Figure 86** 2D HMQC (300 MHz) (CDCl₃) spectrum of compound **TK13**

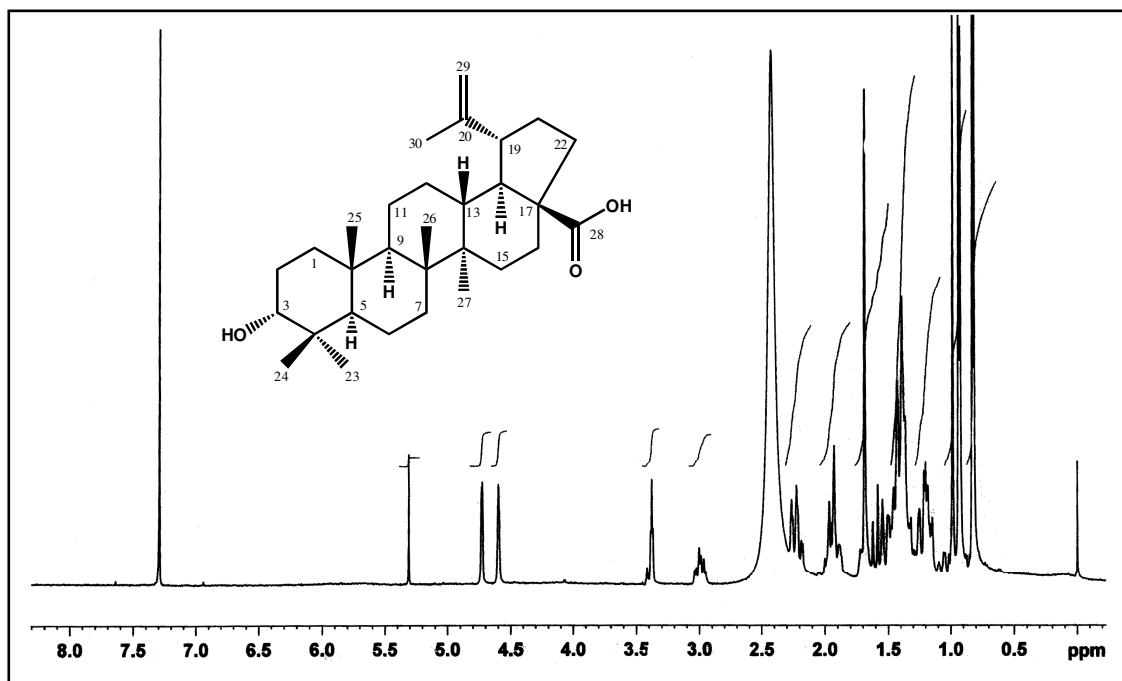
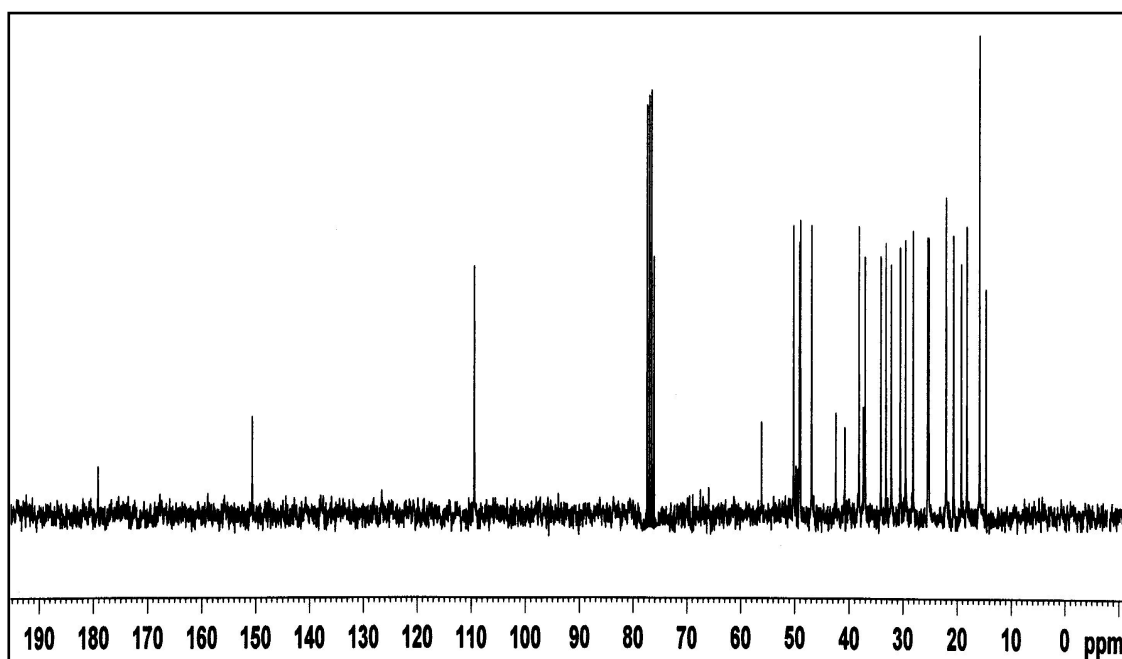
Figure 87 2D HMBC (300 MHz) (CDCl_3) spectrum of compound **TK13****Figure 88** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK14**

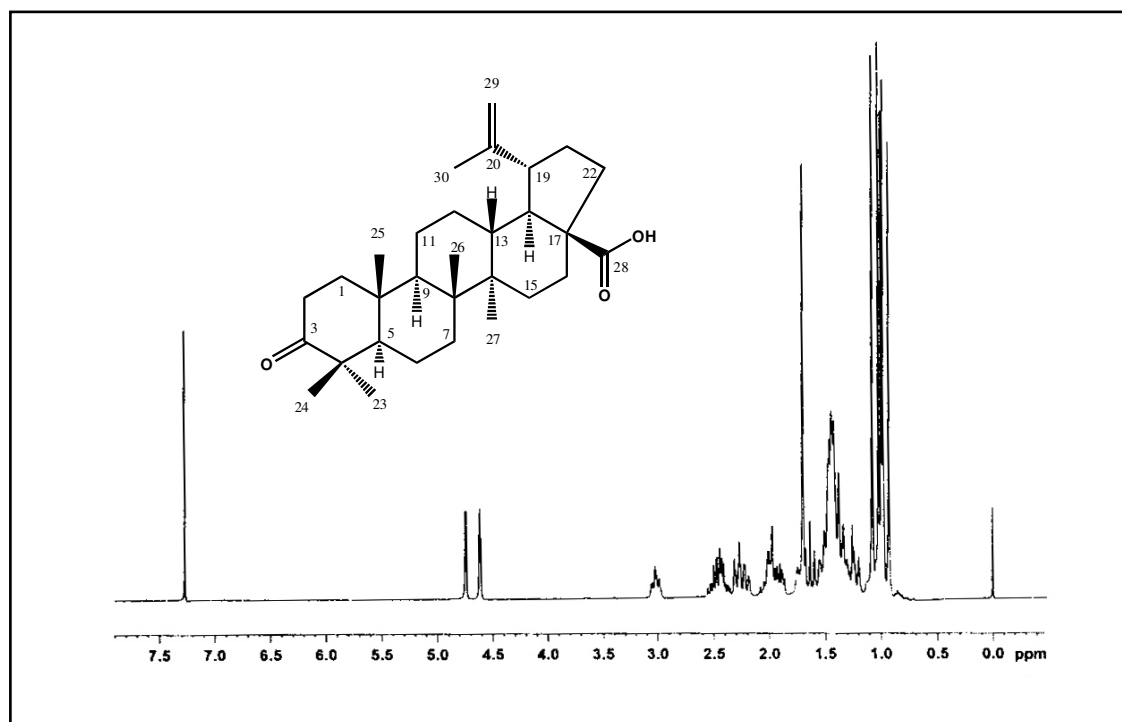
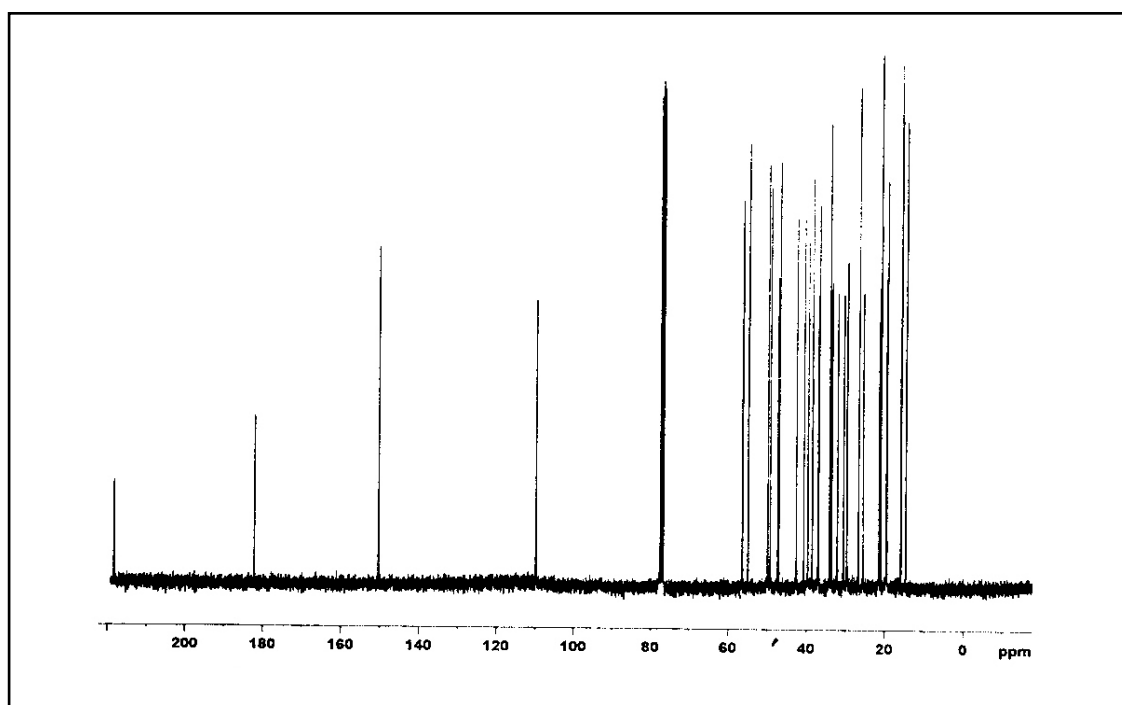
Figure 89 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK14****Figure 90** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK15**

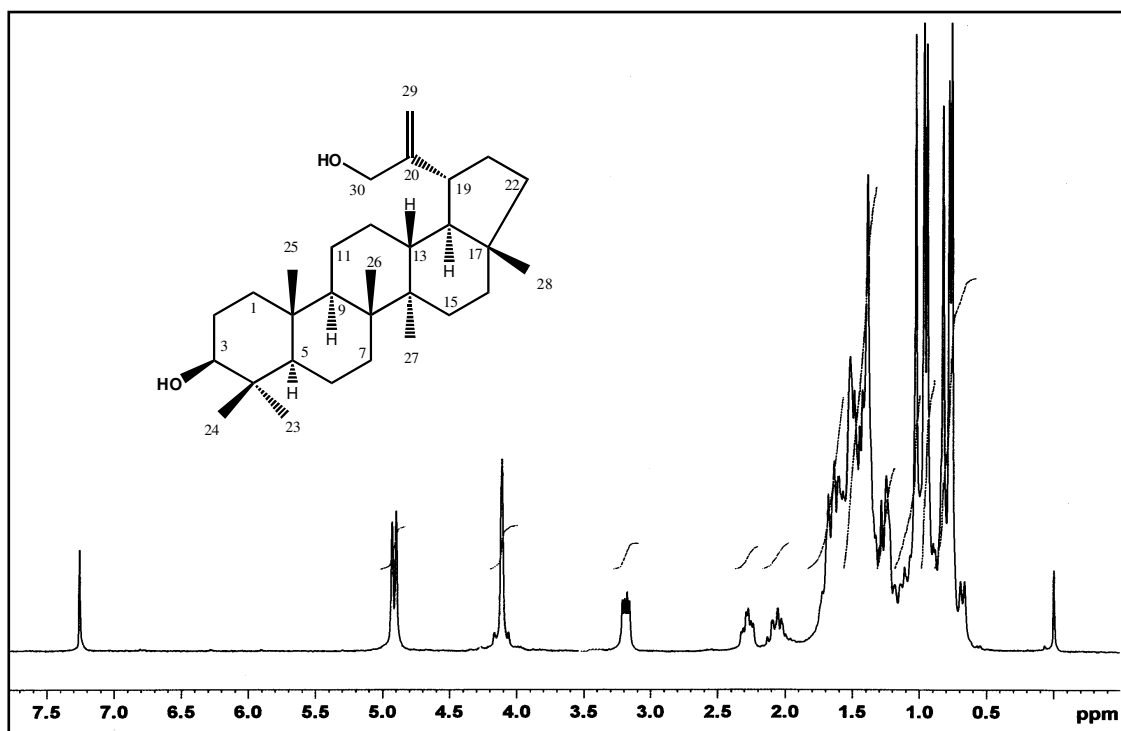
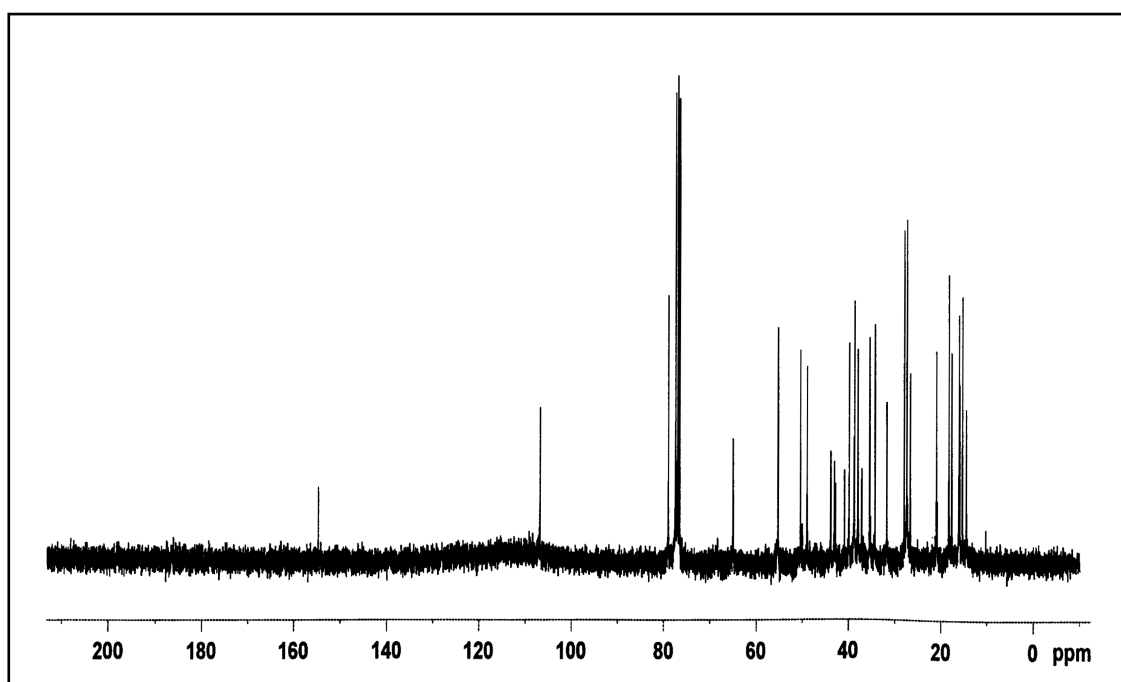
Figure 91 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK15****Figure 92** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK16**

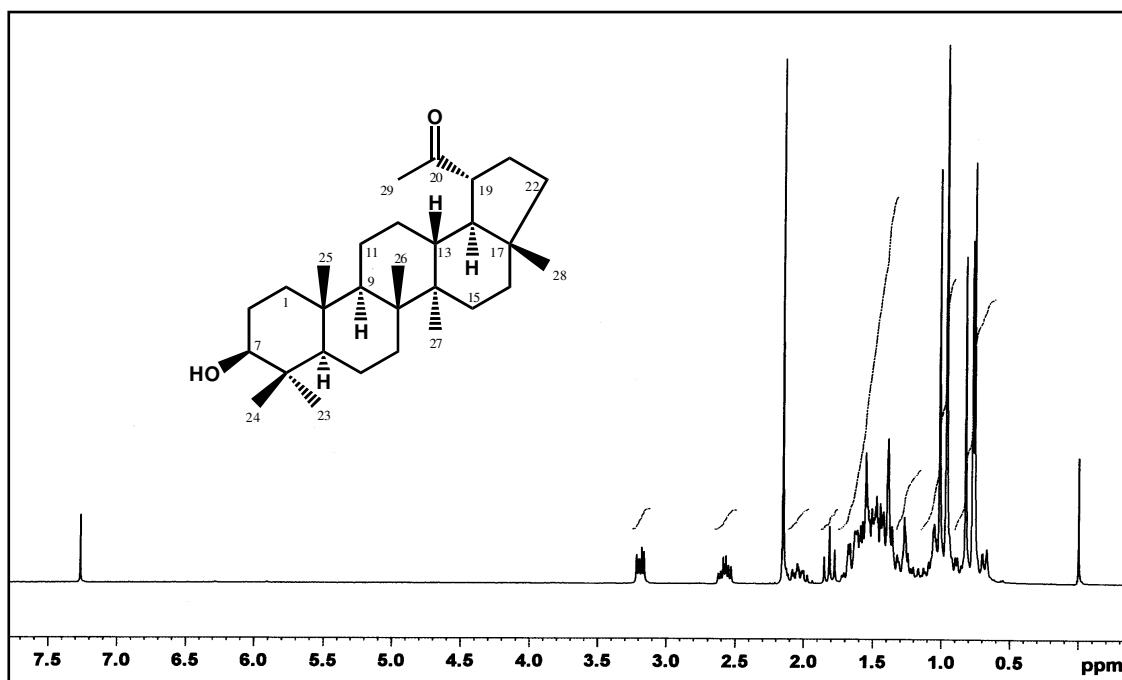
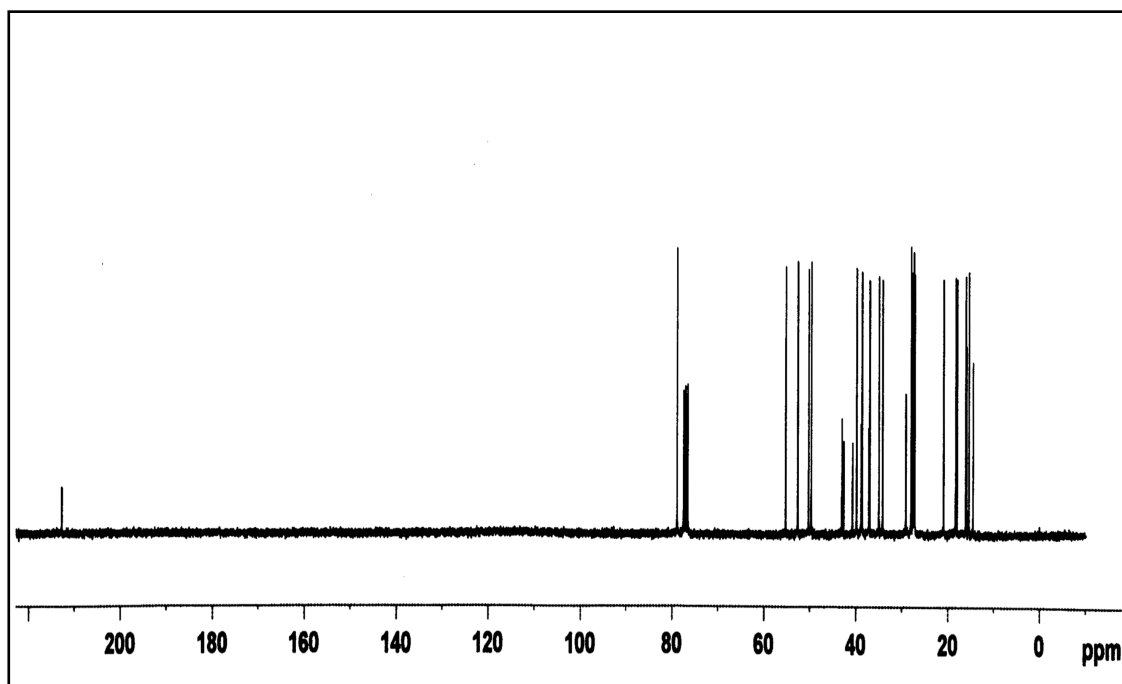
Figure 93 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK16****Figure 94** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK17**

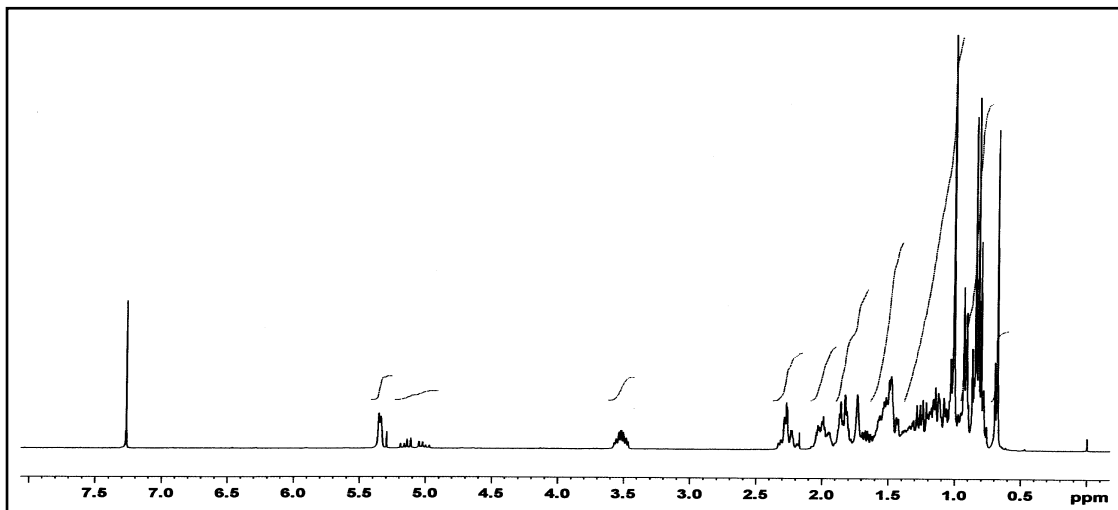
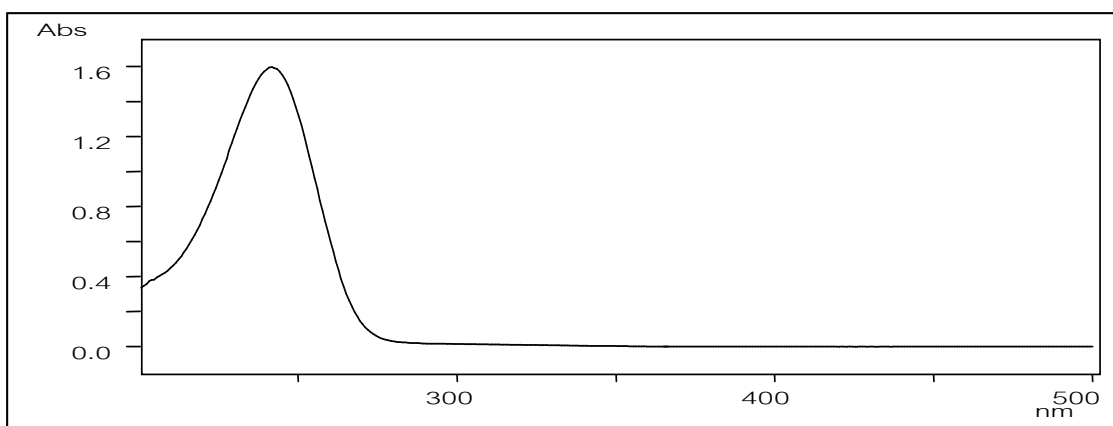
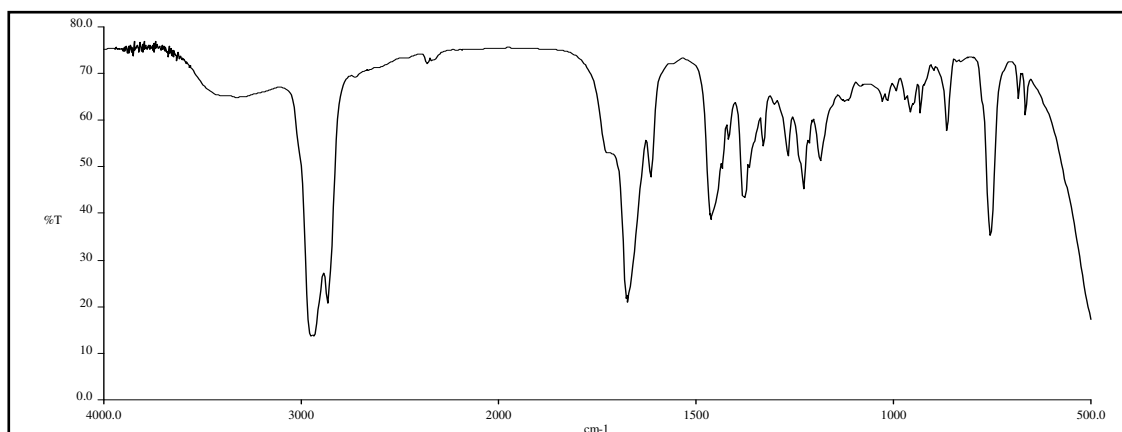
Figure 95 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK17****Figure 96** 2D HMBC (CDCl_3) spectrum of compounds **TK18** and **19****Figure 97** UV (MeOH) spectrum of compound **TK20**

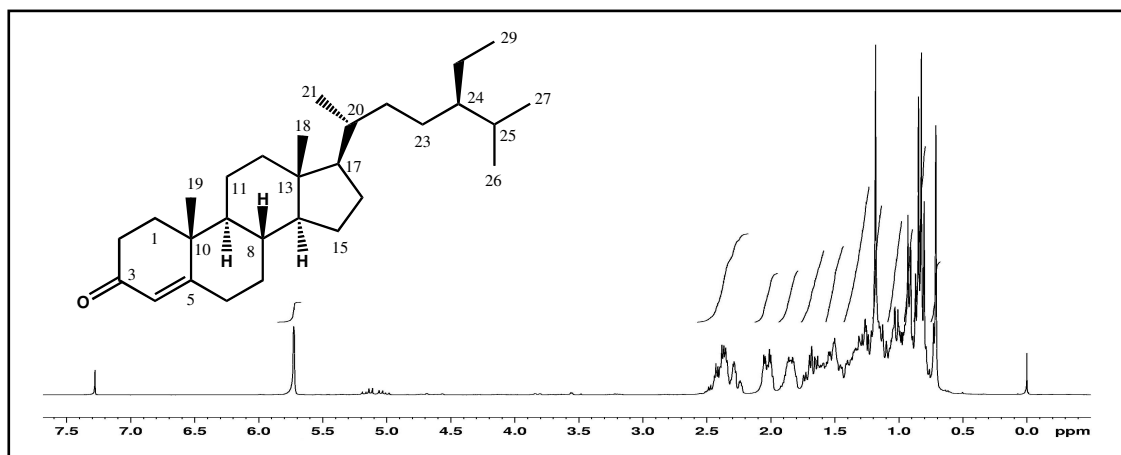
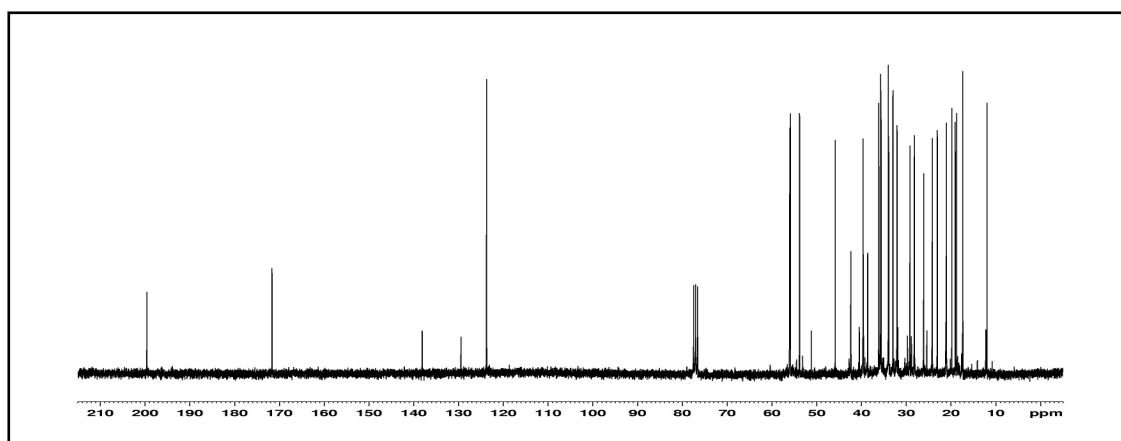
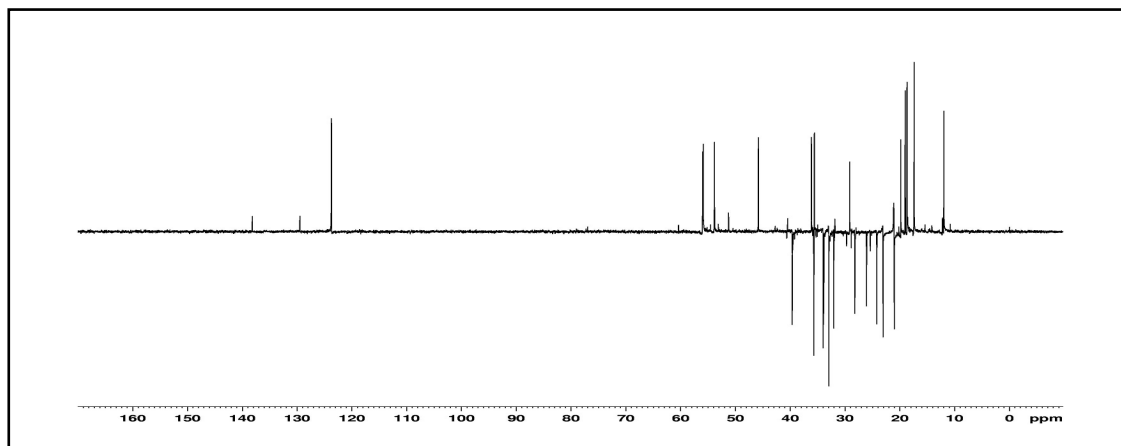
Figure 98 IR (neat) spectrum of compound **TK20****Figure 99** ¹H NMR (300 MHz) (CDCl₃) spectrum of compound **TK20****Figure 100** ¹³C NMR (75 MHz) (CDCl₃) spectrum of compound **TK20**

Figure 101 DEPT (75 MHz) 135° (CDCl_3) spectrum of compound **TK20**

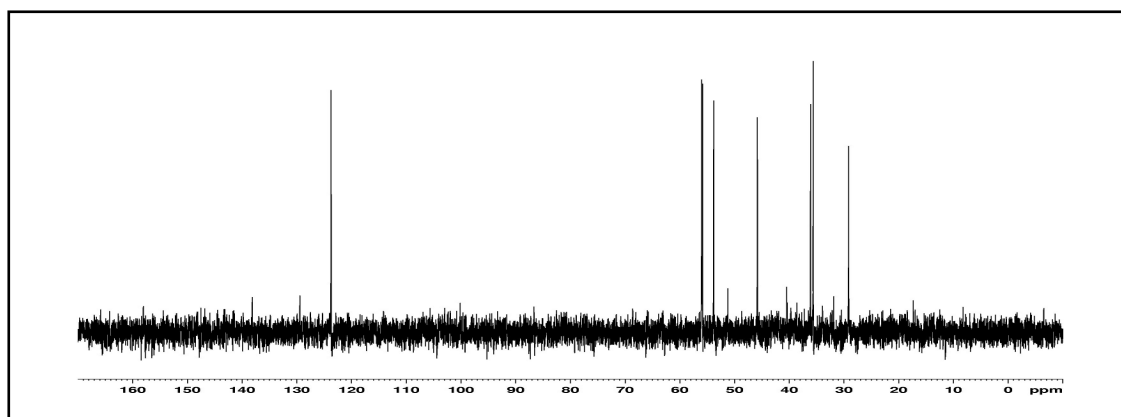


Figure 102 DEPT 90° (CDCl_3) spectrum of compound **TK20**

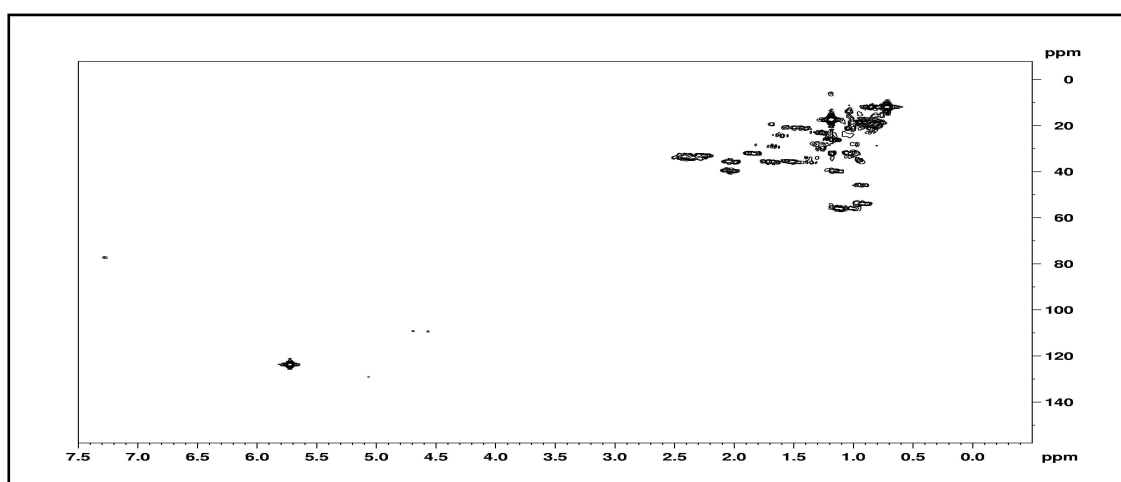


Figure 103 2D HMQC (CDCl_3) spectrum of compound **TK20**

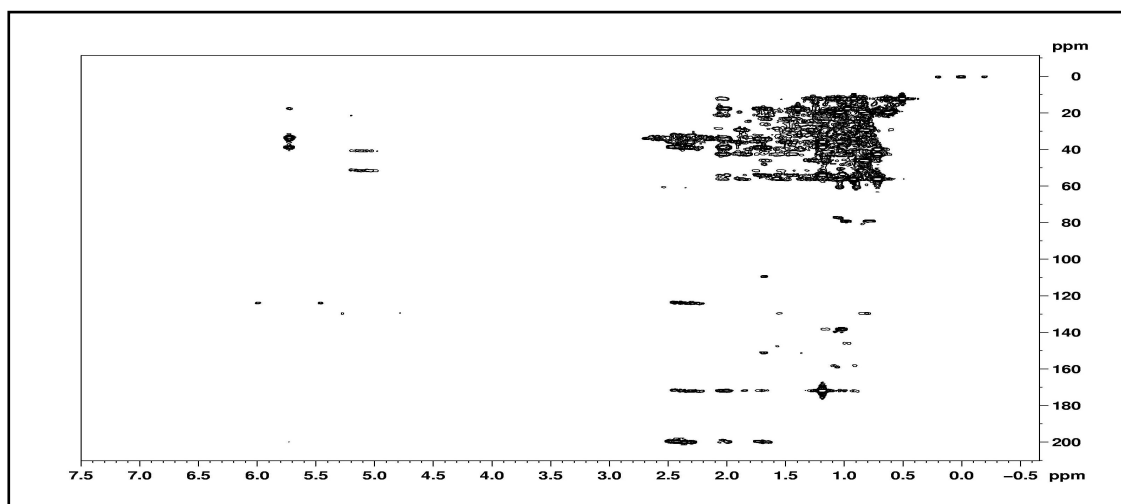
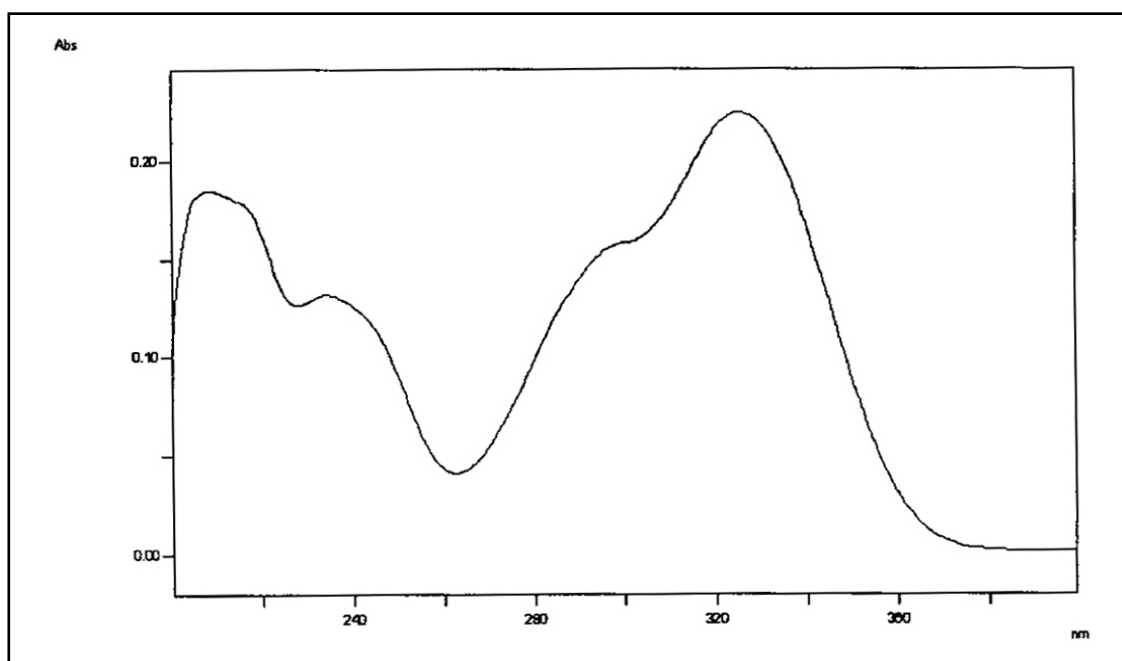
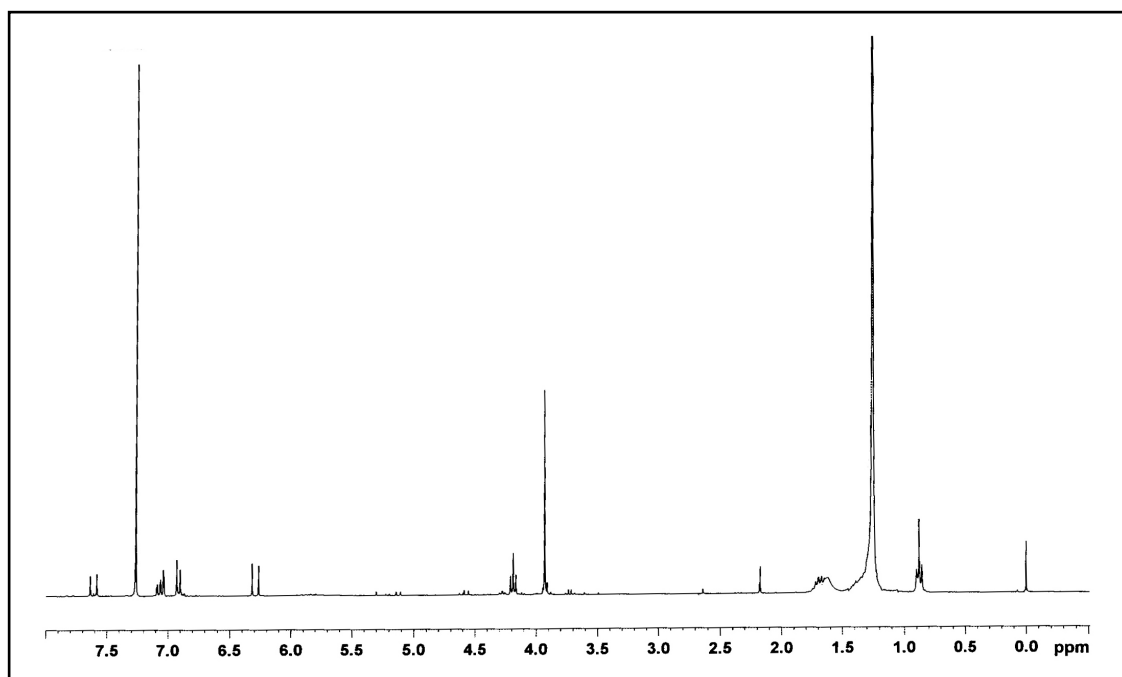


Figure 104 2D HMBC (CDCl_3) spectrum of compound **TK20****Figure 105** UV (MeOH) spectrum of compound **TK21****Figure 106** ^1H NMR (300 MHz) (CDCl_3) spectrum of compound **TK21**

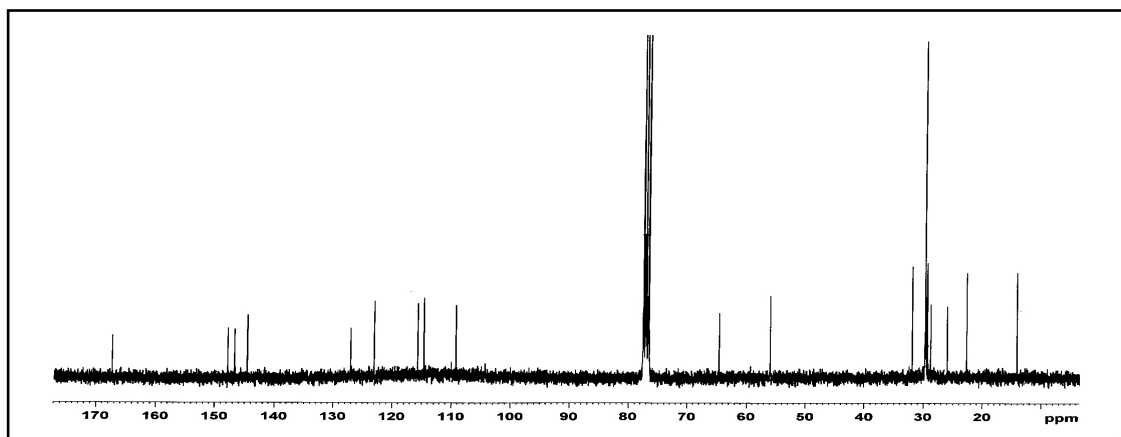


Figure 107 ^{13}C NMR (75 MHz) (CDCl_3) spectrum of compound **TK21**

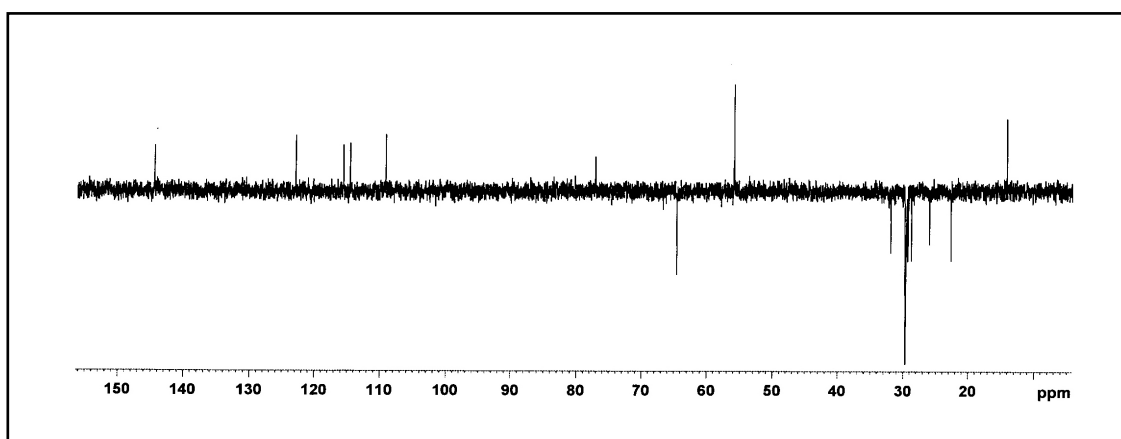


Figure 108 DEPT 135° (CDCl_3) spectrum of compound **TK21**

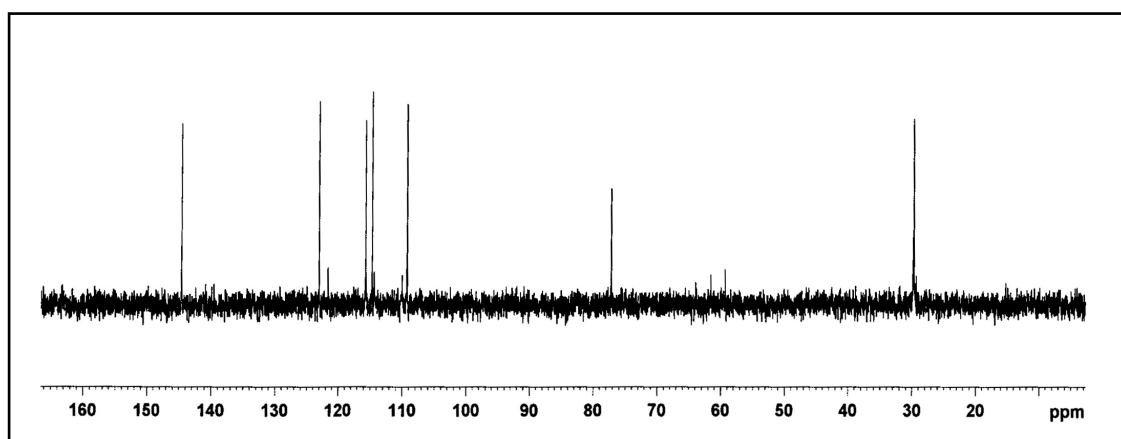
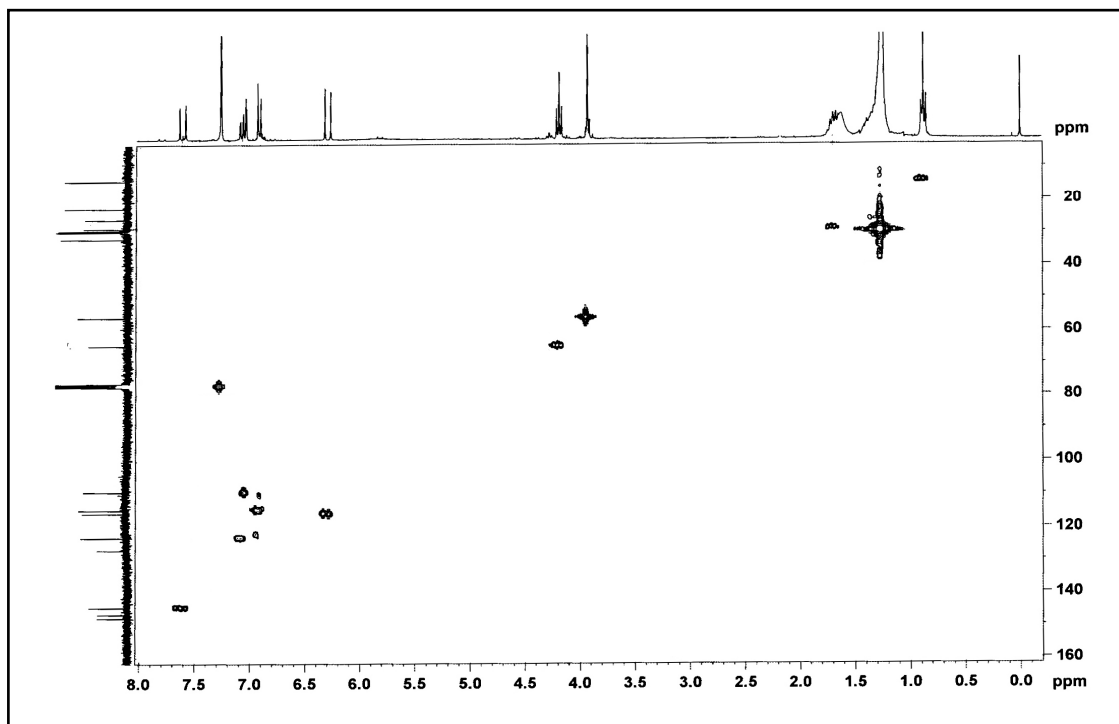


Figure 109 DEPT 90° (CDCl₃) spectrum of compound **TK21****Figure 110** 2D HMQC (CDCl₃) spectrum of compound **TK21**