

Acylphloroglucinol and tocotrienol derivatives from the fruits of *Garcinia multiflora*

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Electronic Supplementary Information

1. Spectra of compound **1** and **2** p3-7
2. Spectra of compound **3** p7-8
3. Spectra of compound **4** p9-10
4. Spectra of compound **5** p10-13
5. Spectra of compound **6** p14-15
6. Spectra of compound **7** p15-18
7. Spectra of compound **8** p19-22
8. Spectra of compound **9** p23-26

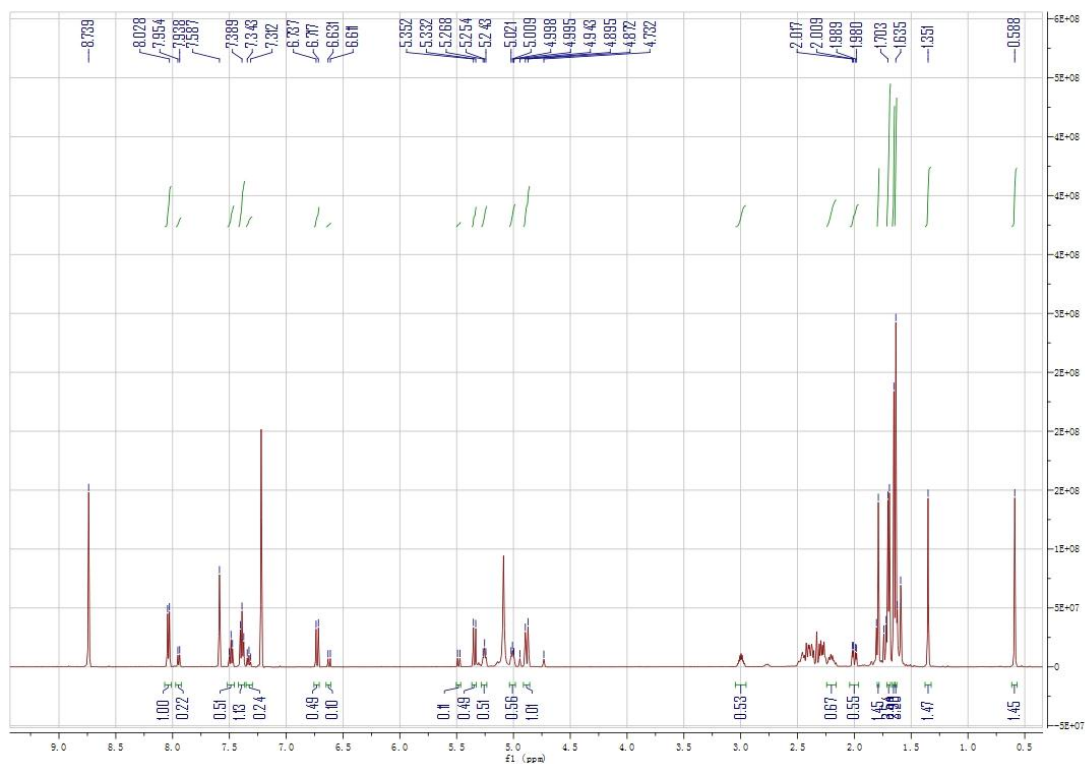


Fig 1. The ^1H -NMR spectrum of **1** and **2**

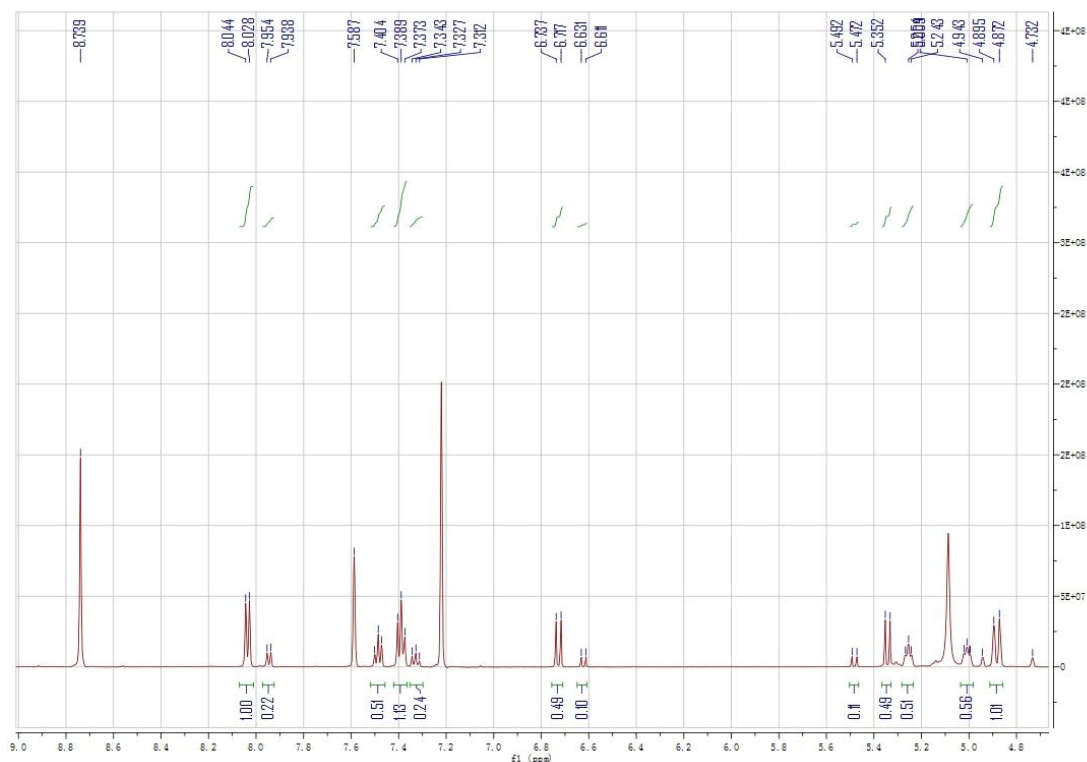


Fig 2. The expanded ^1H -NMR spectrum of **1** and **2**

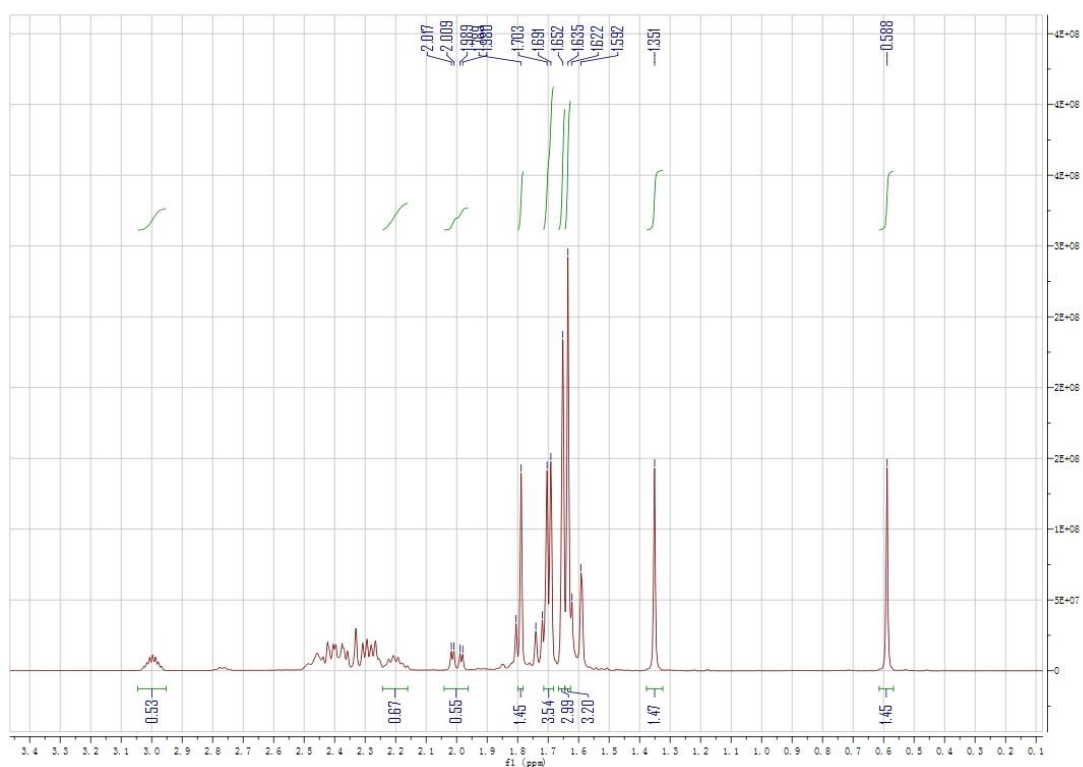


Fig 3. The expanded ^1H -NMR spectrum of **1** and **2**

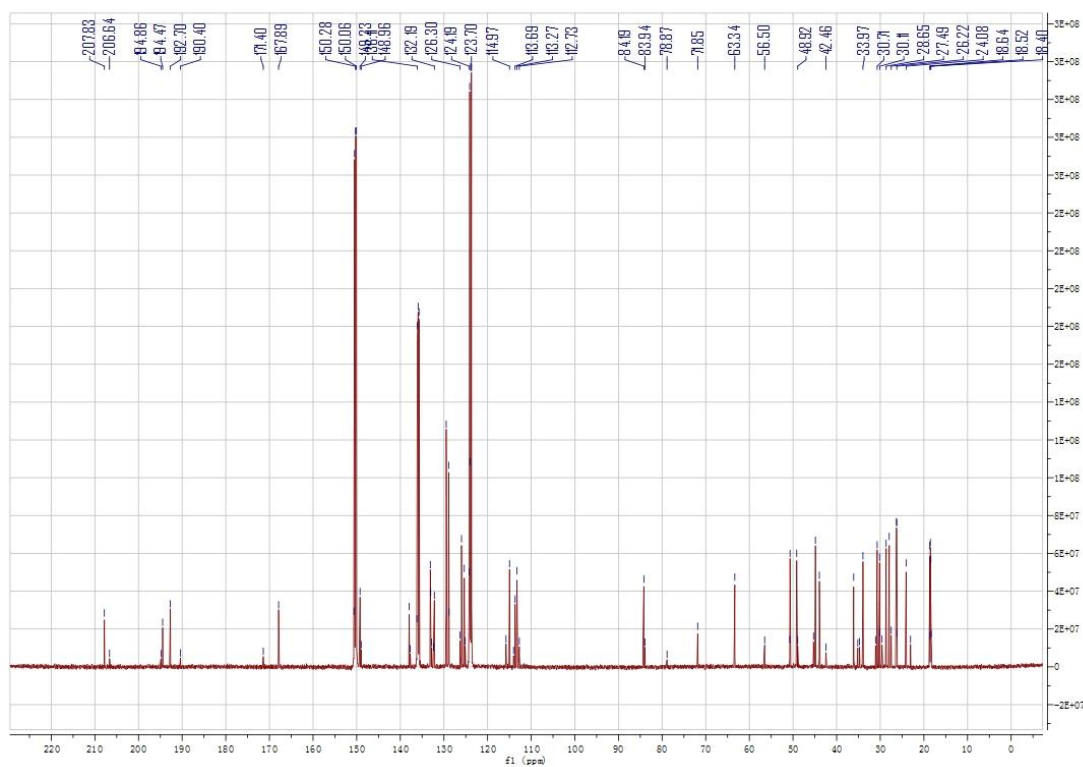


Fig 4. The ^{13}C -NMR spectrum of **1** and **2**

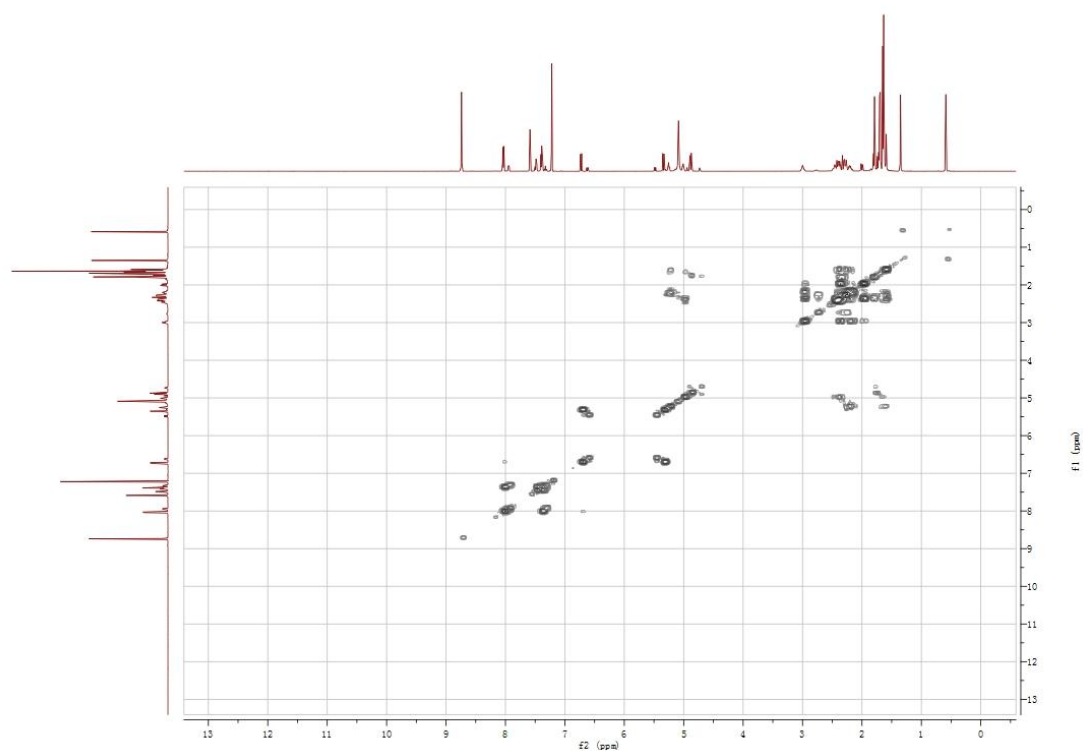


Fig 5. ^1H - ^1H COSY spectrum of **1** and **2**

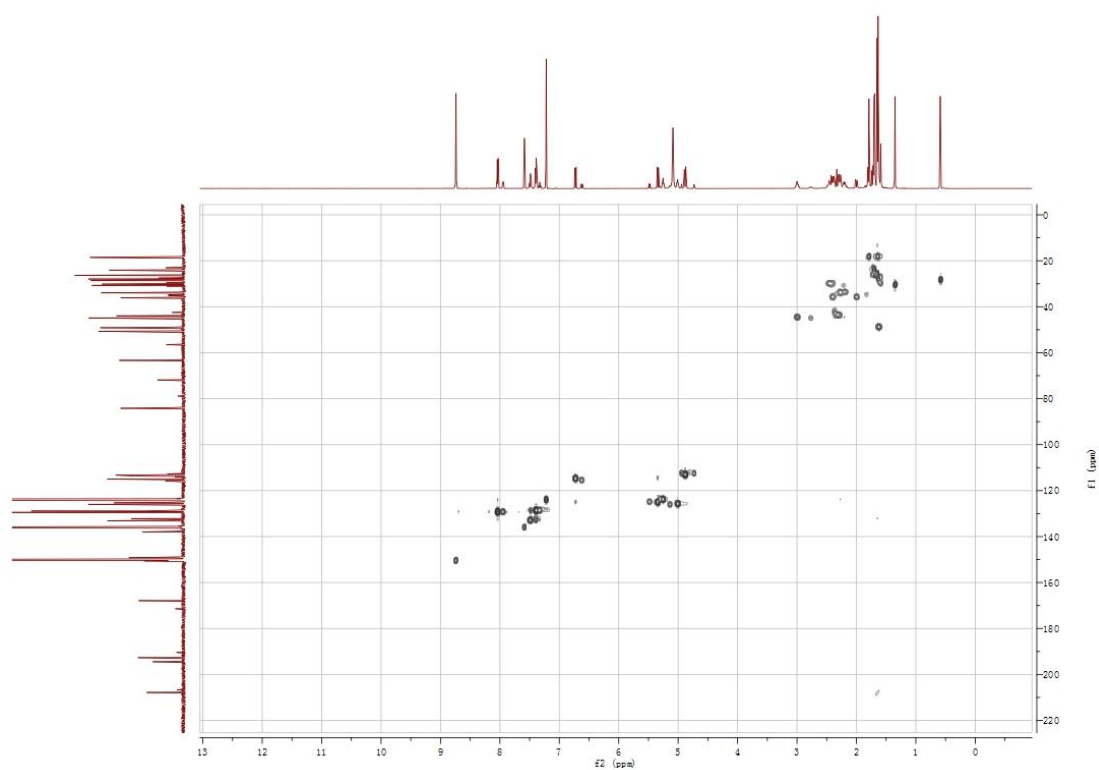


Fig 6. HSQC spectrum of **1** and **2**

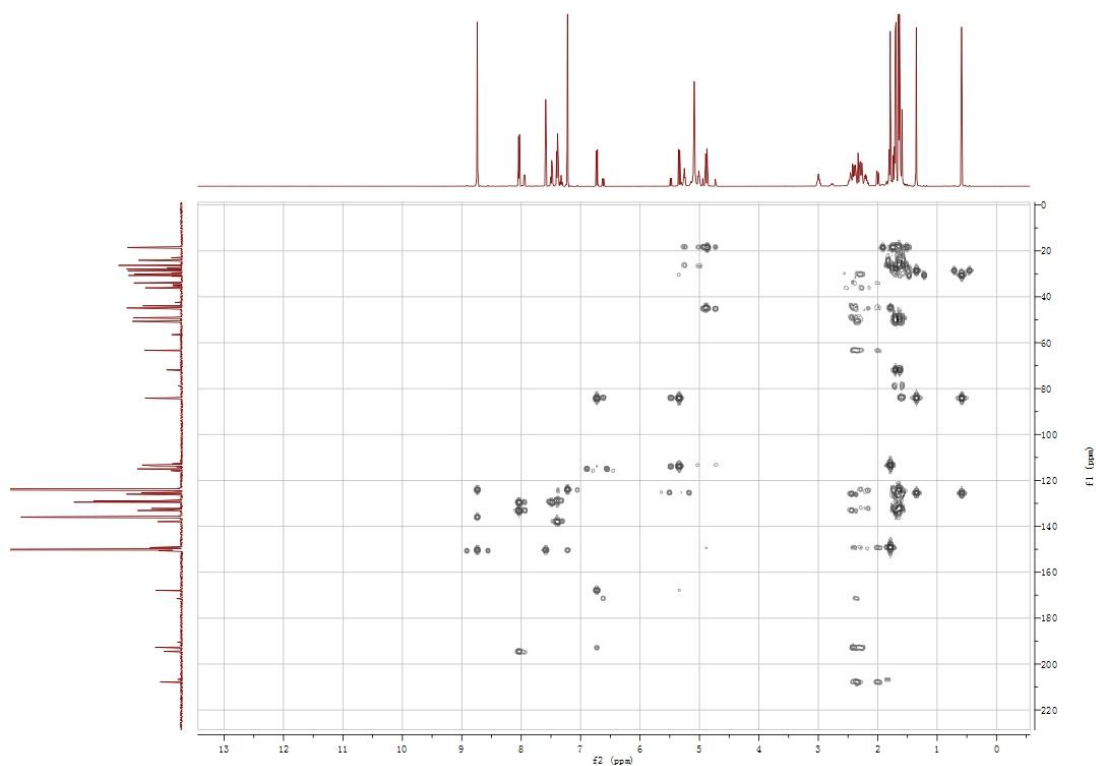


Fig 7. HMBC spectrum of **1** and **2**

Elemental Composition Report

Page 1

Single Mass Analysis

Tolerance = 10.0 PPM / DBE: min = -10.0, max = 120.0
Selected filters: None

Monoisotopic Mass, Odd and Even Electron Ions
25 formula(e) evaluated with 1 results within limits (up to 51 closest results for each mass)

Elements Used:
C: 0-200 H: 0-400 O: 3-5

MZG-01
10:26:42 30-Nov-2016
Voltage EI+

KIB
M161130EA-01AFAMM 45 (4.131)
568.3558

Autospec Premier
P776
1

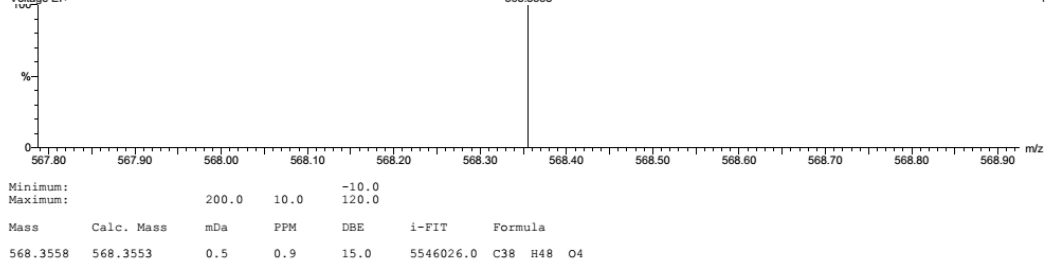


Fig 8. HR-EIMS spectrum of **1** and **2**



Fig 9. UV spectrum of **1** and **2**

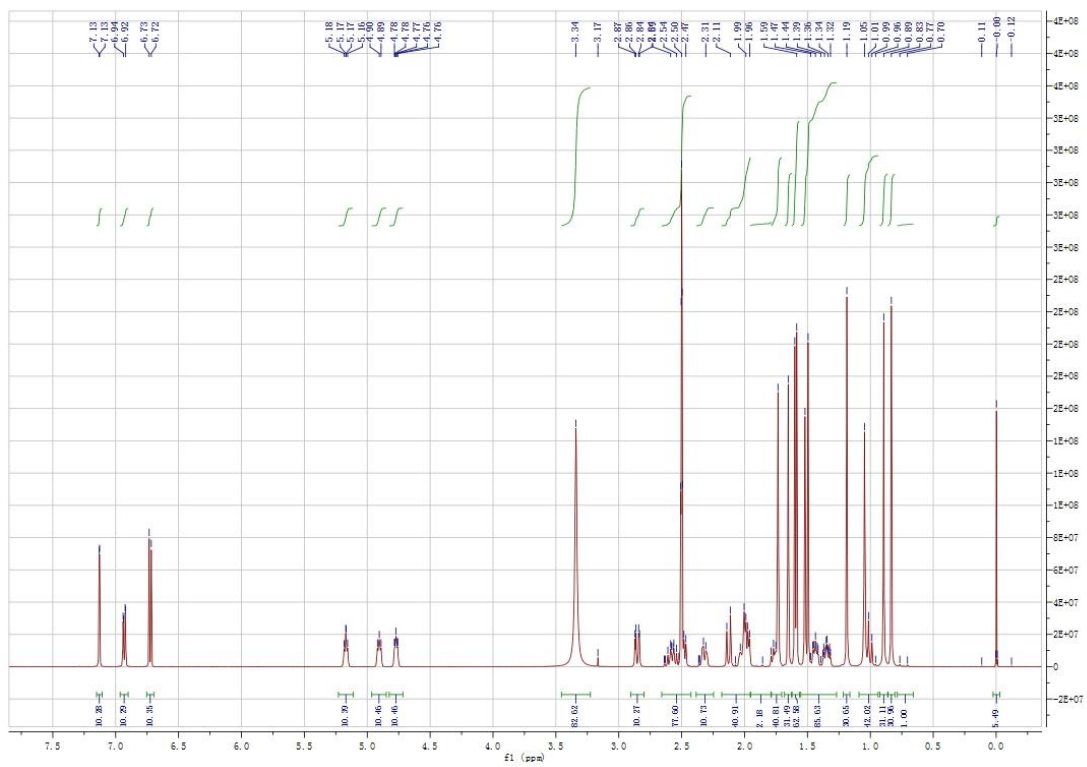


Fig 10. ^1H -NMR spectrum of **3**

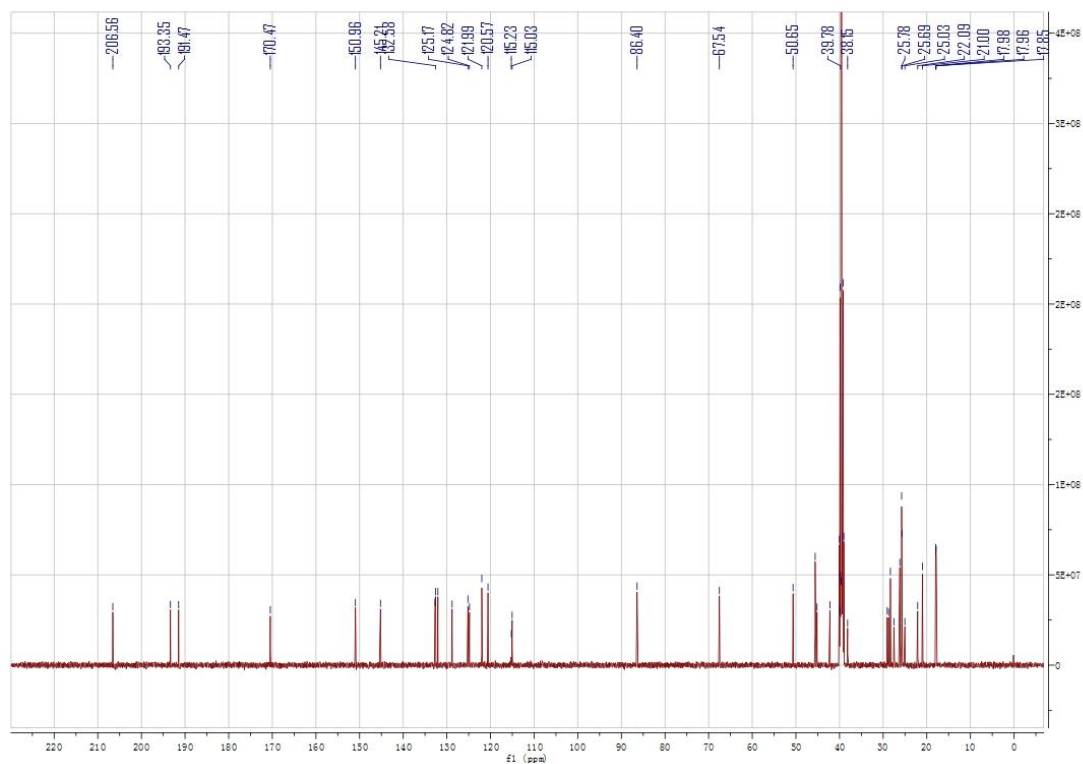


Fig 11. ^{13}C -NMR spectrum of **3**

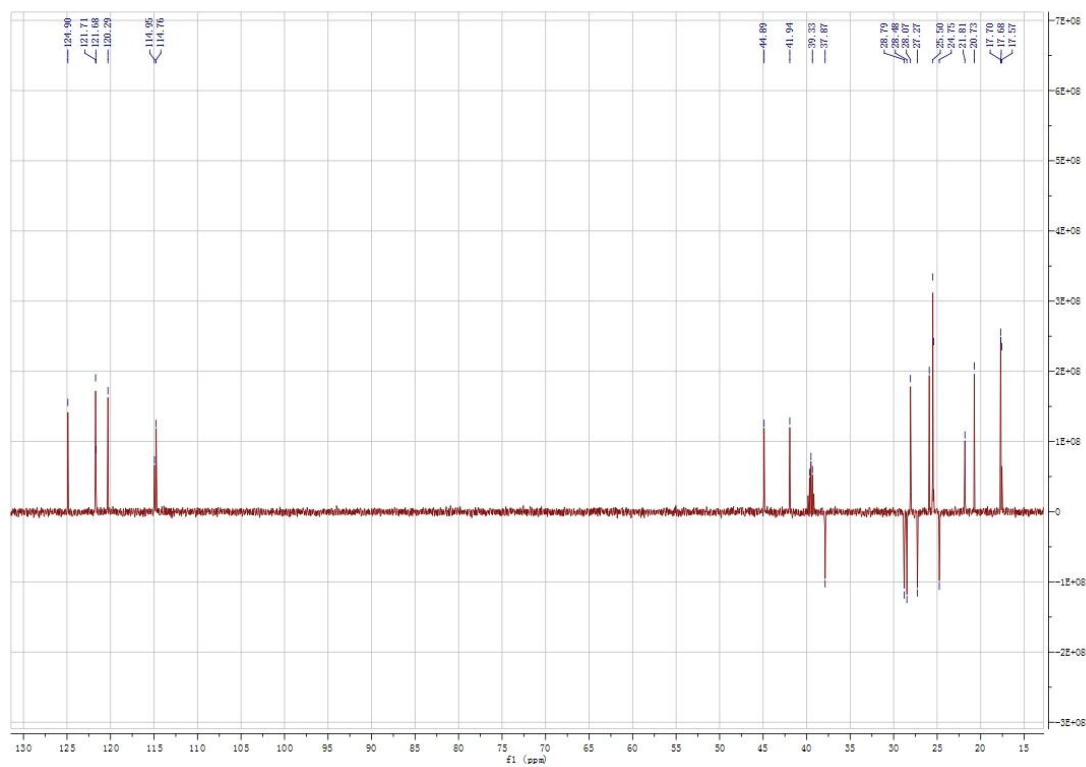


Fig 12. ^{13}C -NMR-DEPT spectrum of **3**

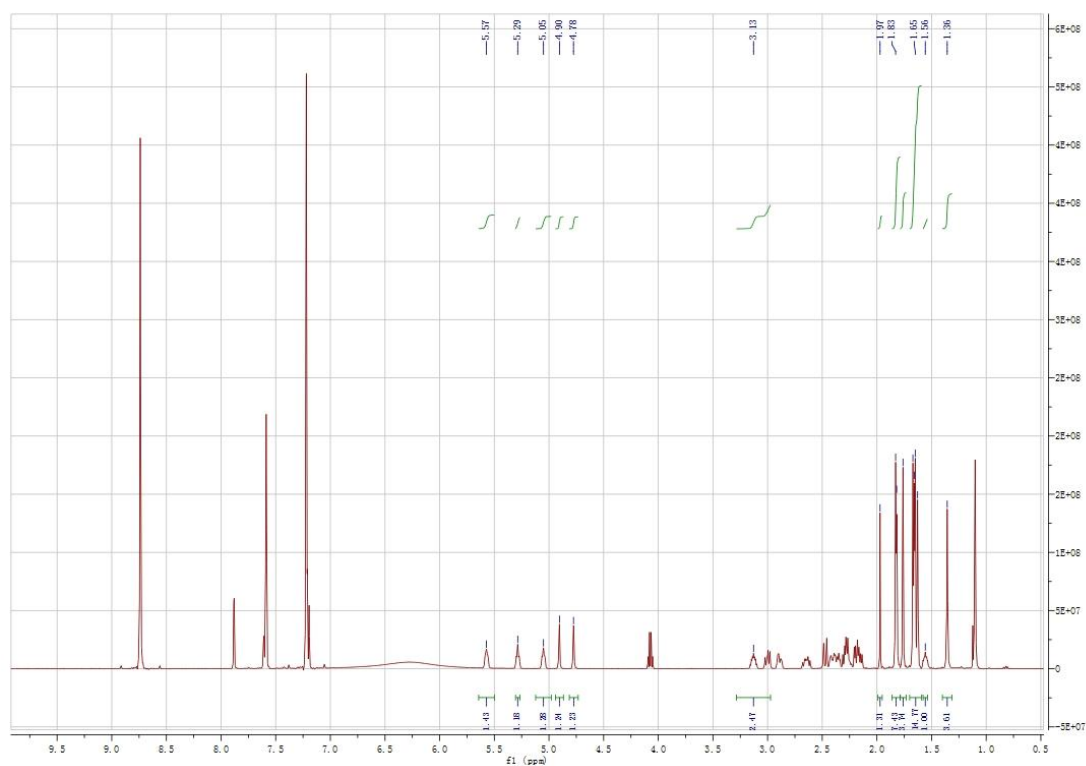


Fig 13. ^1H -NMR spectrum of **4**

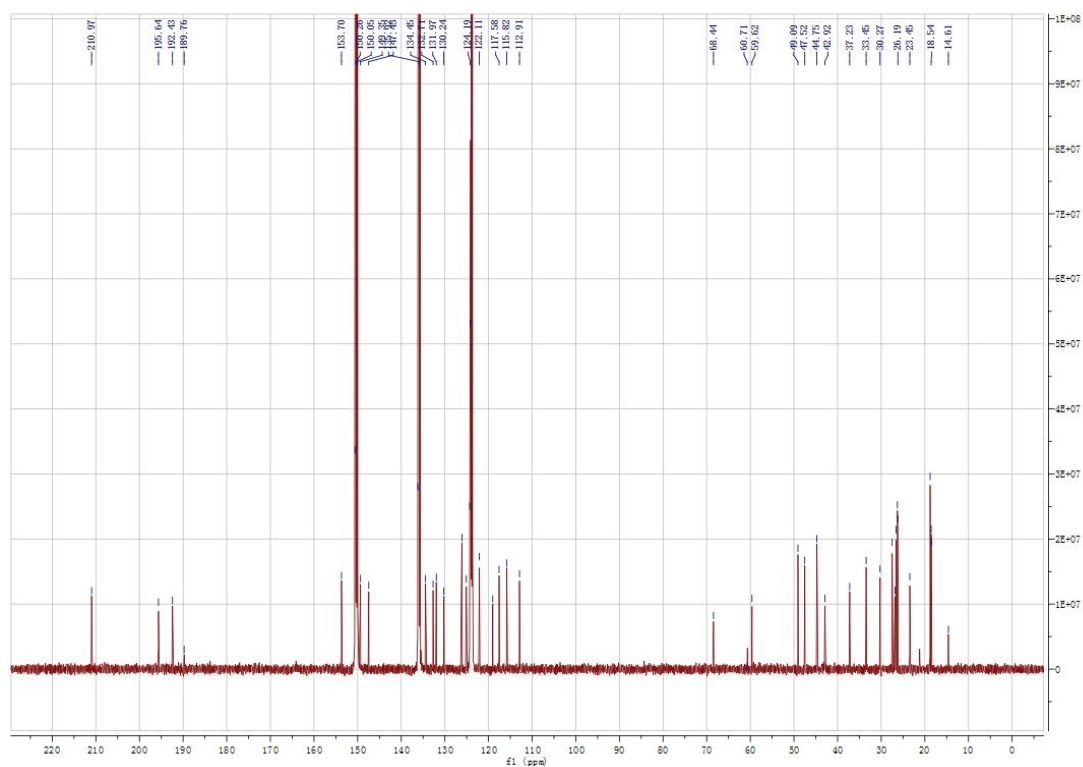


Fig 14. ^{13}C -NMR spectrum of **4**

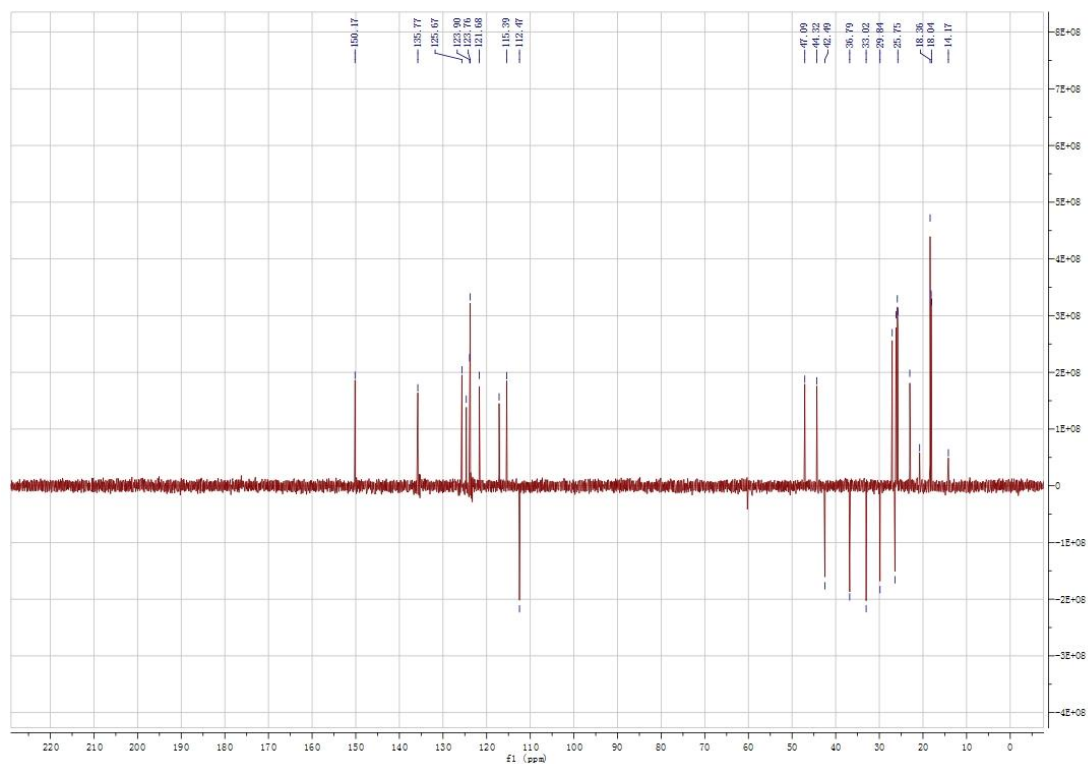


Fig 15. ^{13}C -NMR-DEPT spectrum of 4

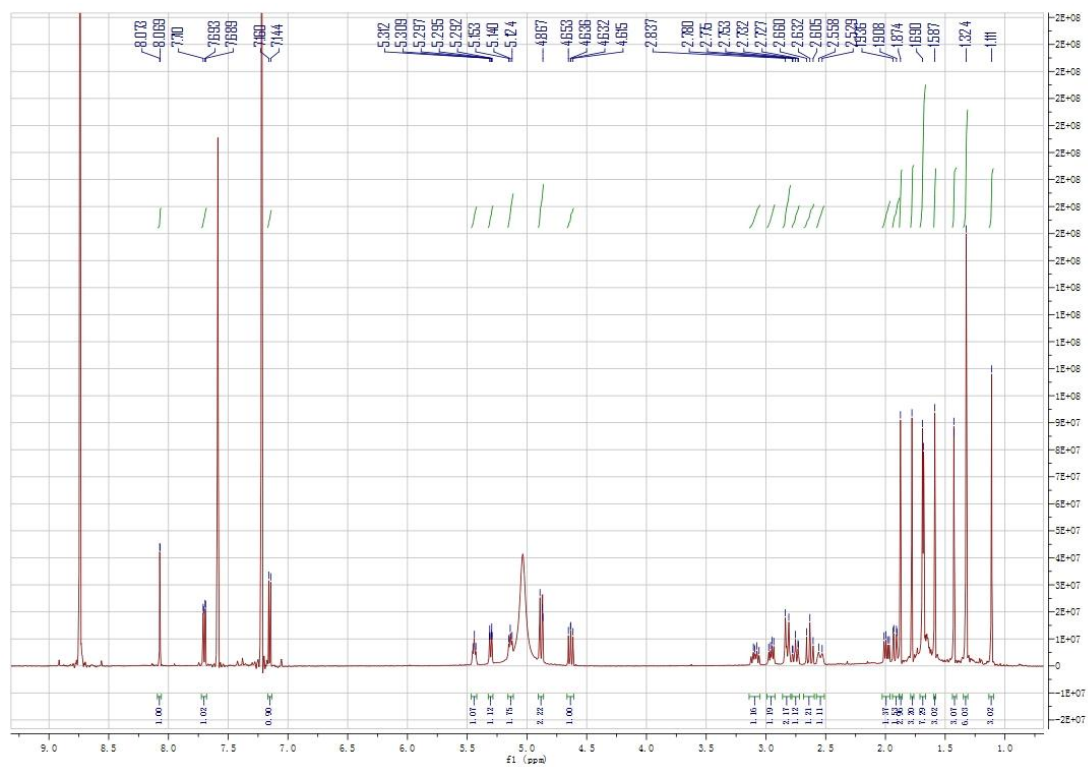


Fig 16. ^1H -NMR spectrum of 5

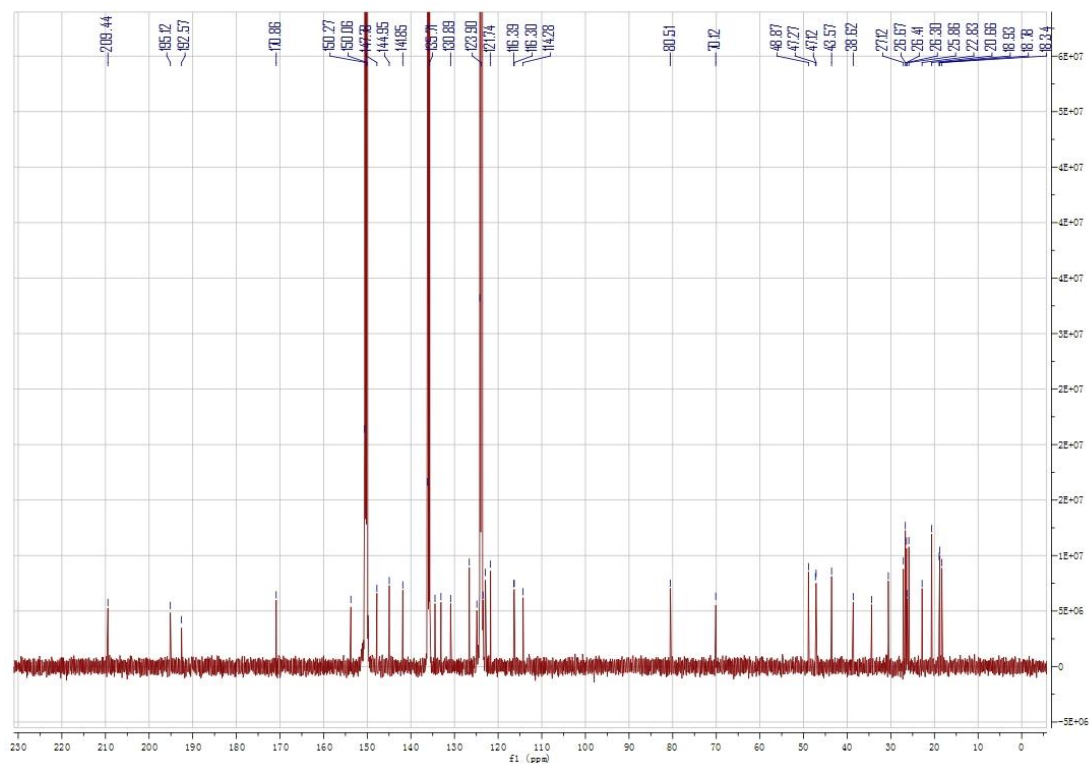


Fig 17. ^{13}C -NMR spectrum of 5

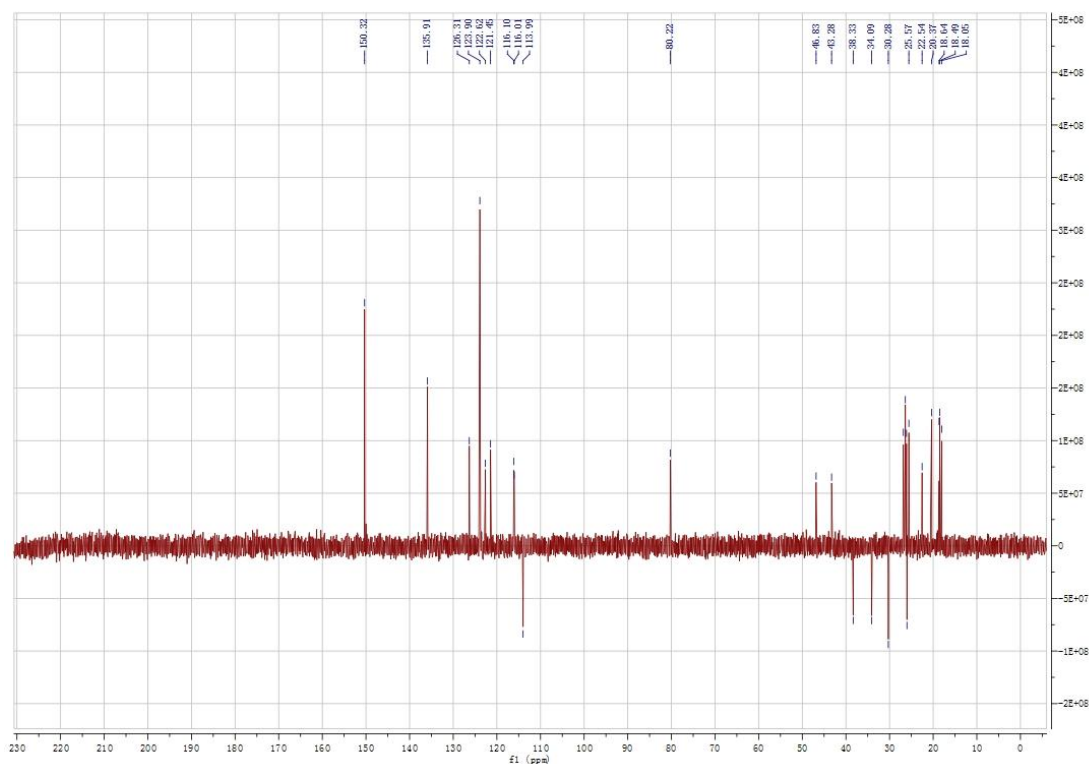


Fig 18. ^{13}C -NMR-DEPT spectrum of 5

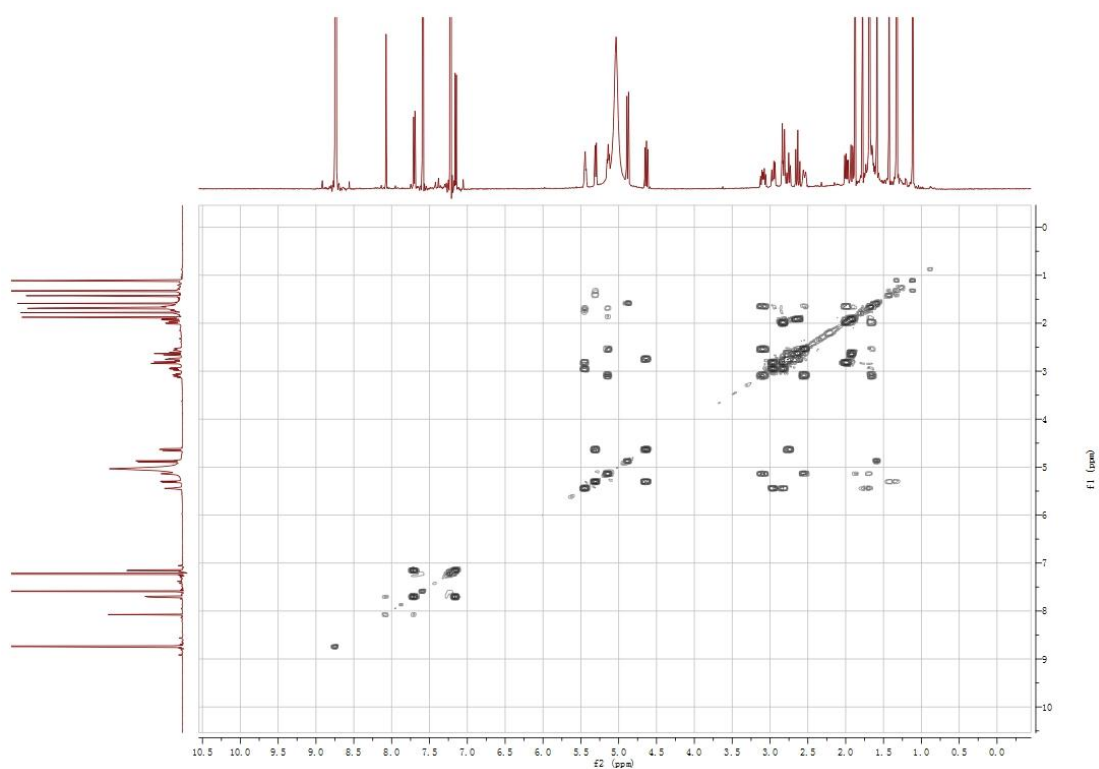


Fig 19. ^1H - ^1H COSY spectrum of 5

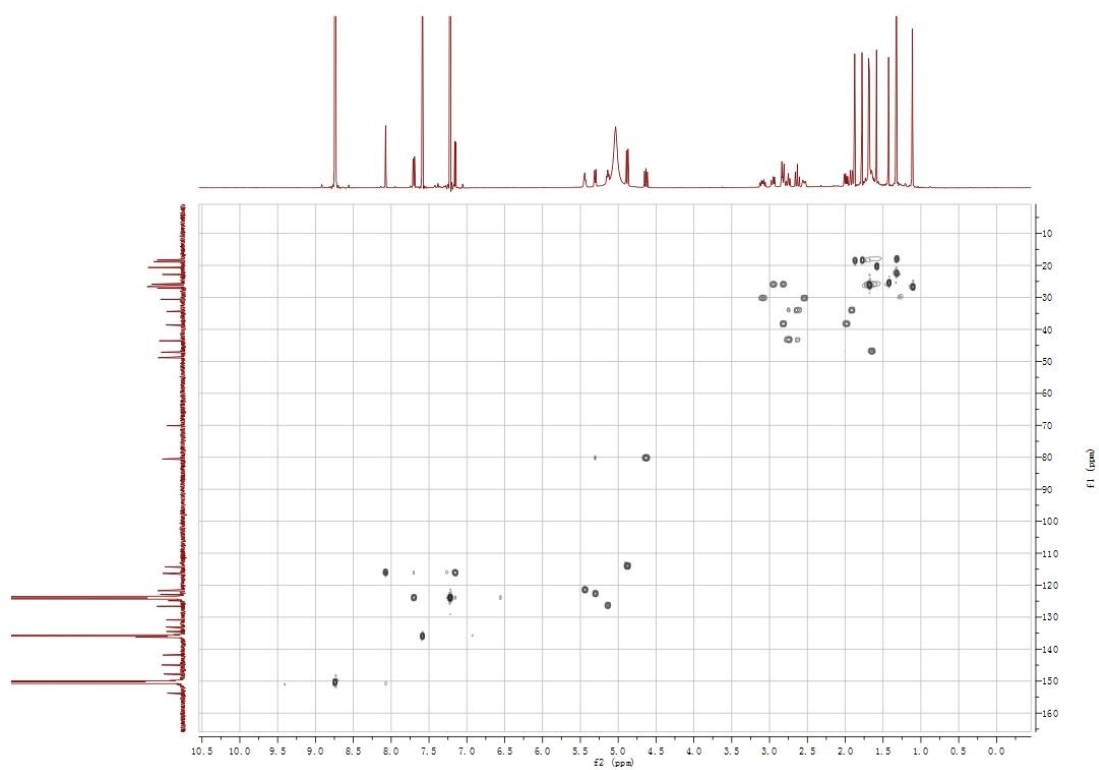


Fig 20. HSQC spectrum of 5

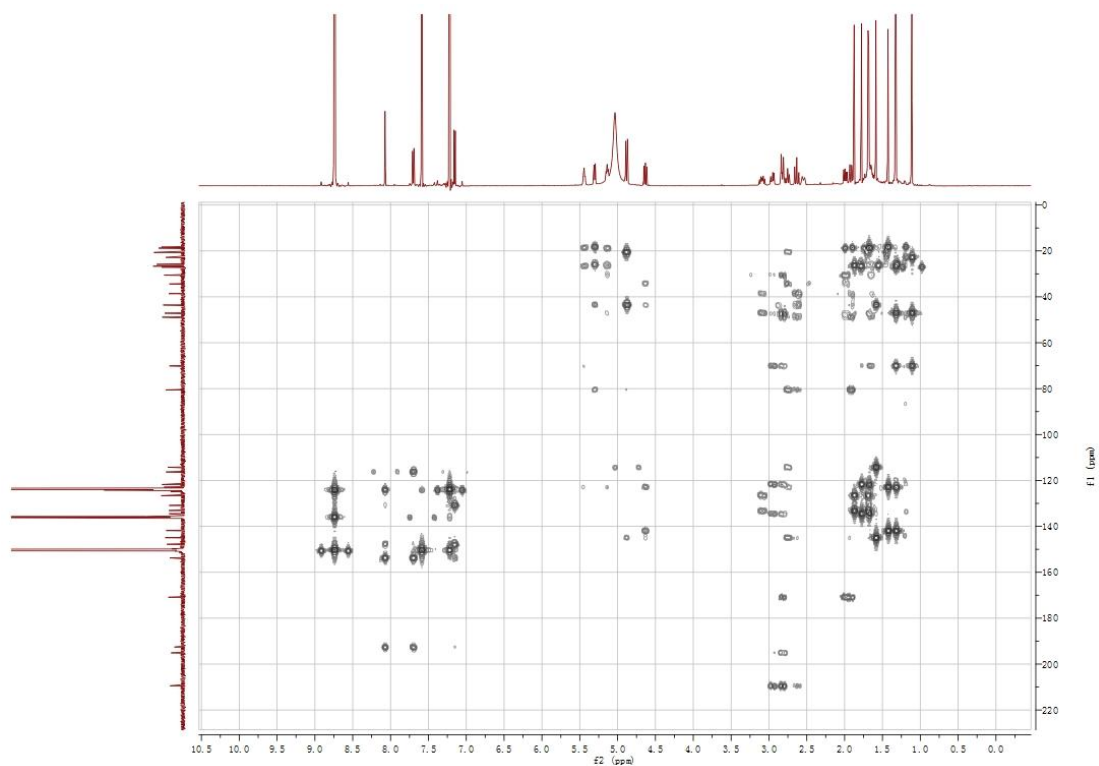


Fig 21. HMBC spectrum of 5

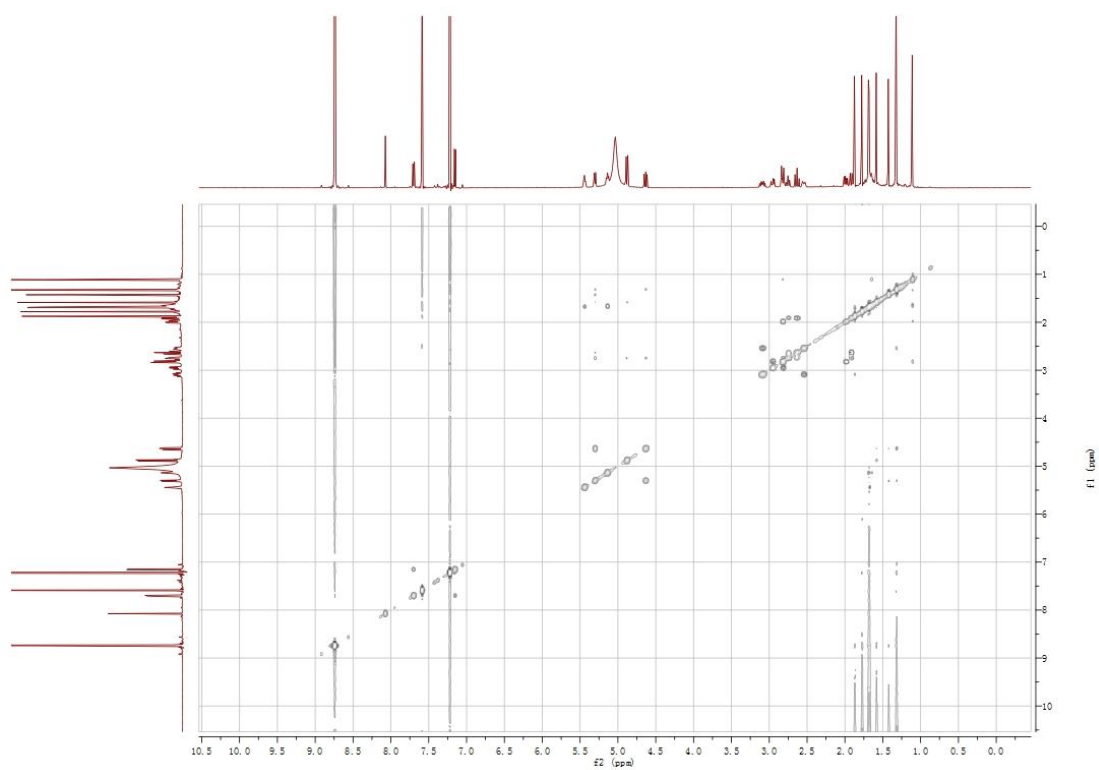


Fig 22. ROESY spectrum of 5

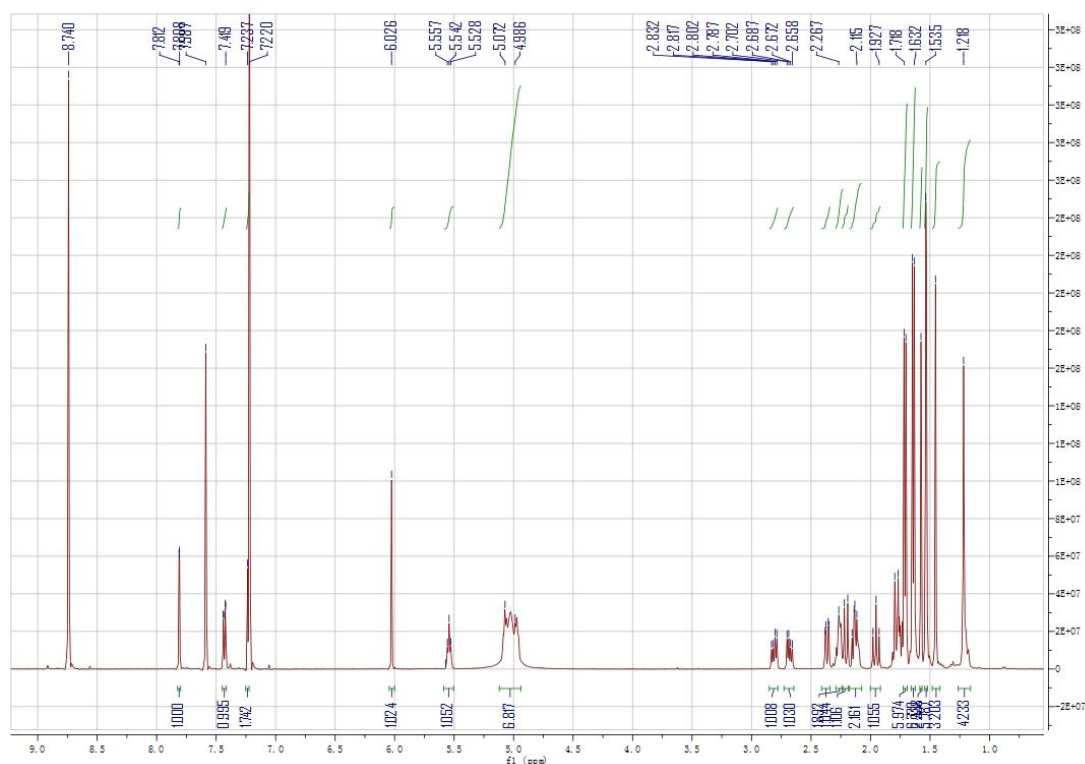


Fig 23. ¹H-NMR spectrum of 6

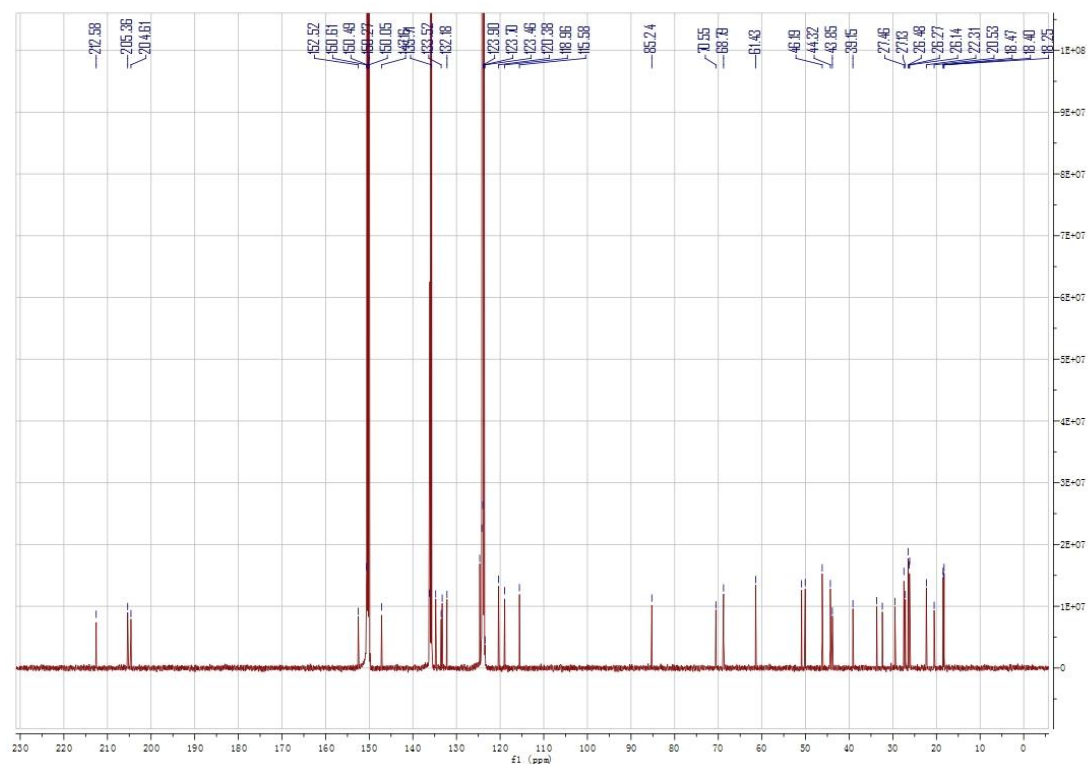


Fig 24. ¹³C-NMR spectrum of 6

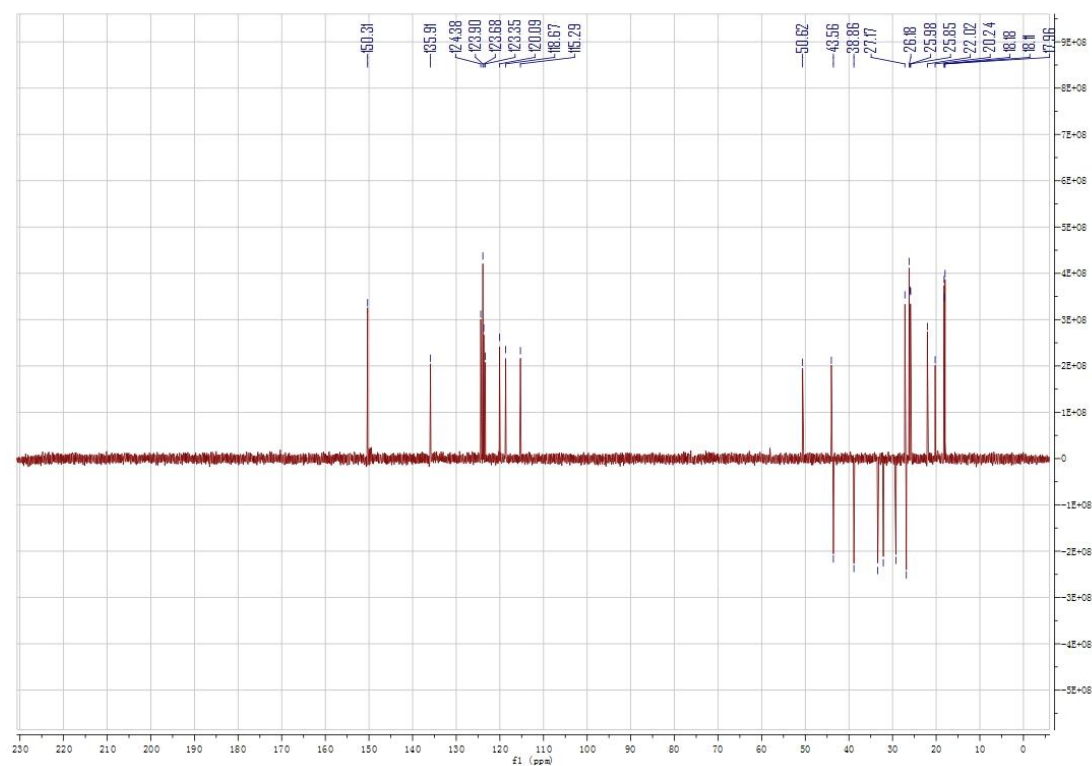


Fig 25. ^{13}C -NMR-DEPT spectrum of **6**

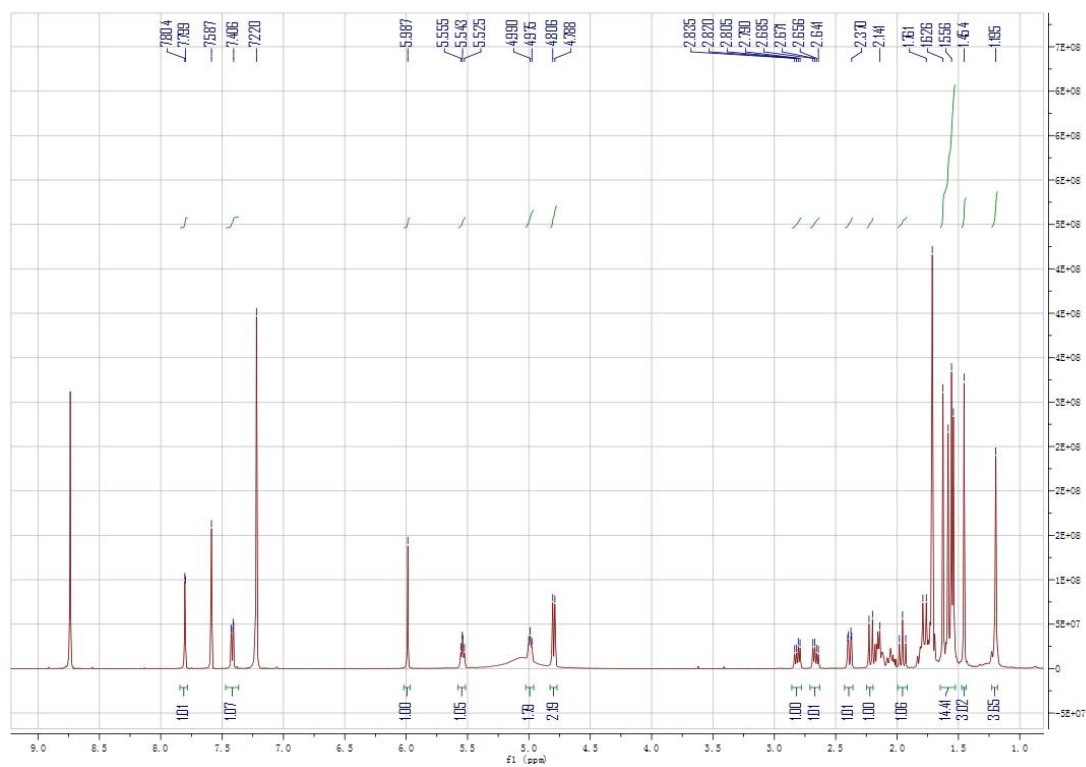


Fig 26. ^1H -NMR spectrum of **7**

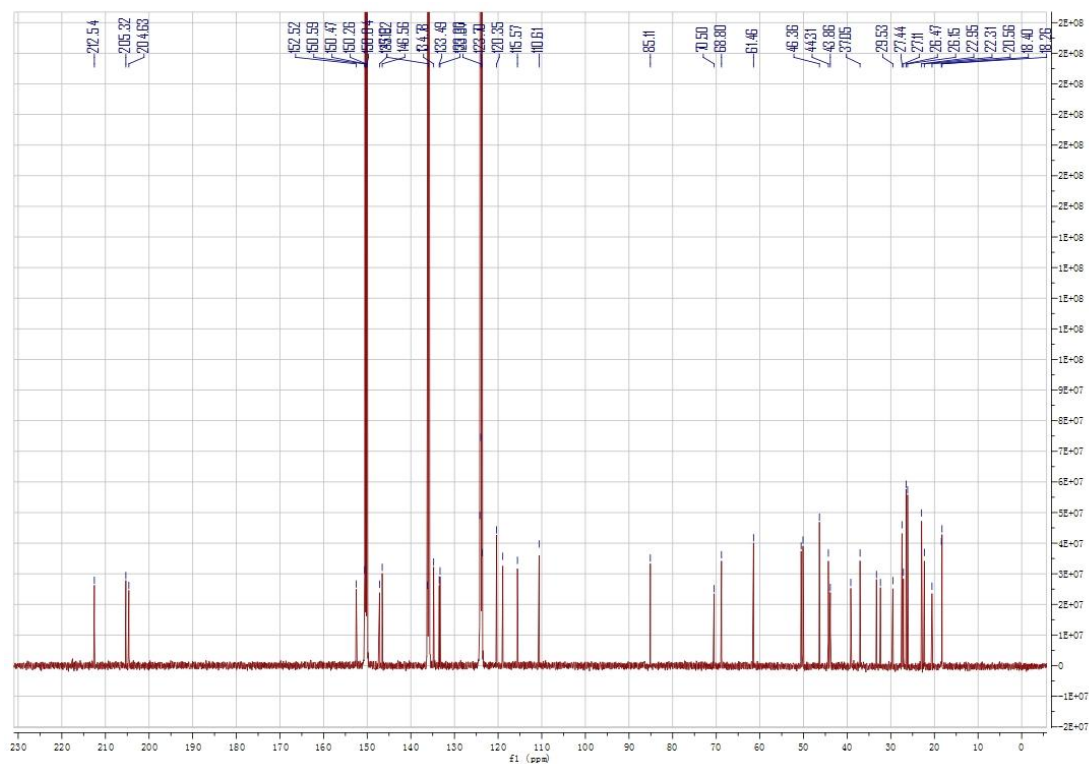


Fig 27. ^{13}C -NMR spectrum of 7

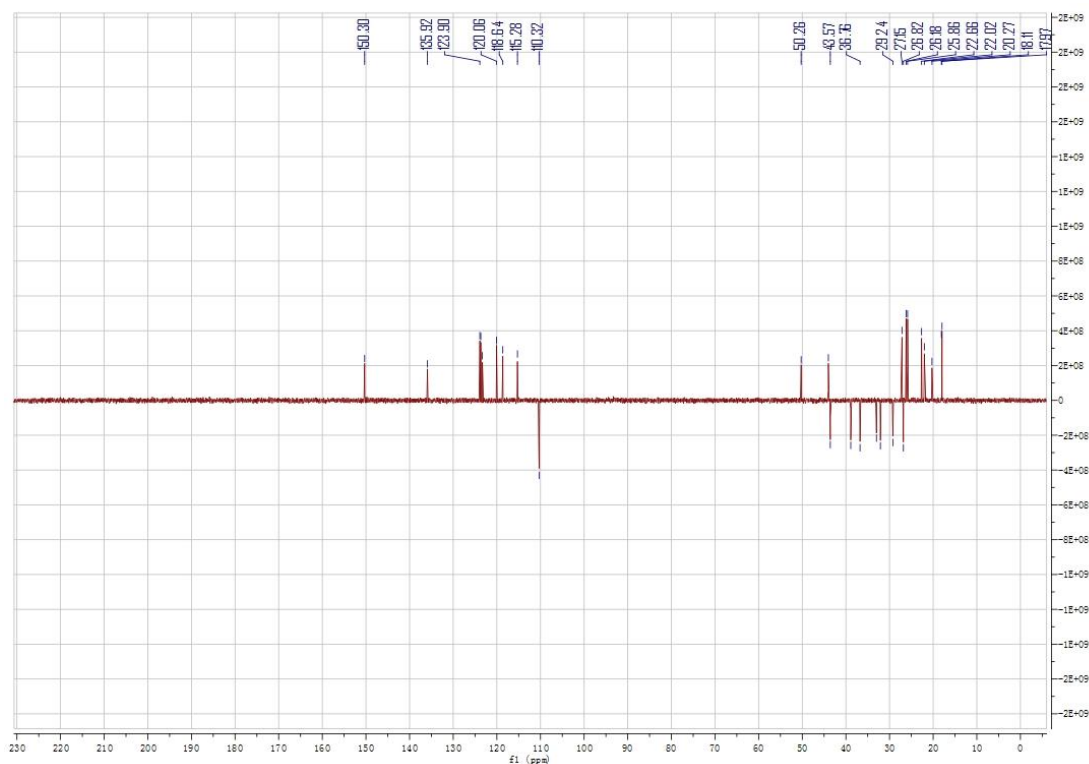


Fig 28. ^{13}C -NMR-DEPT spectrum of 7

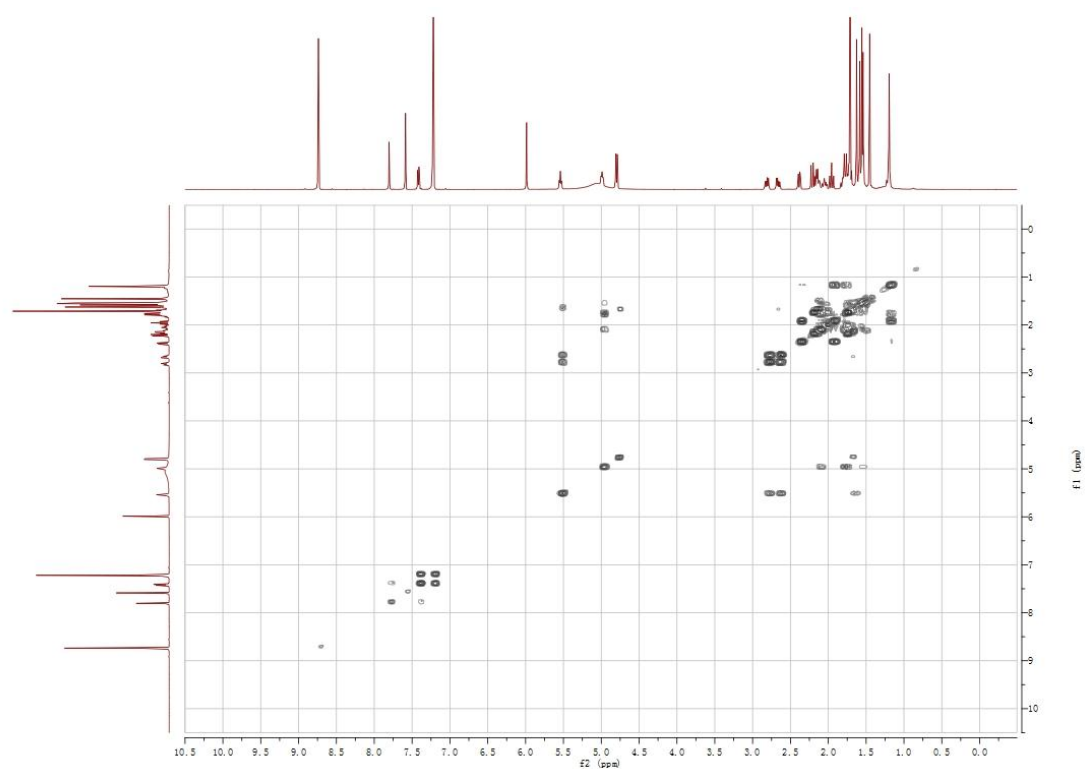


Fig 29. ^1H - ^1H COSY spectrum of 7

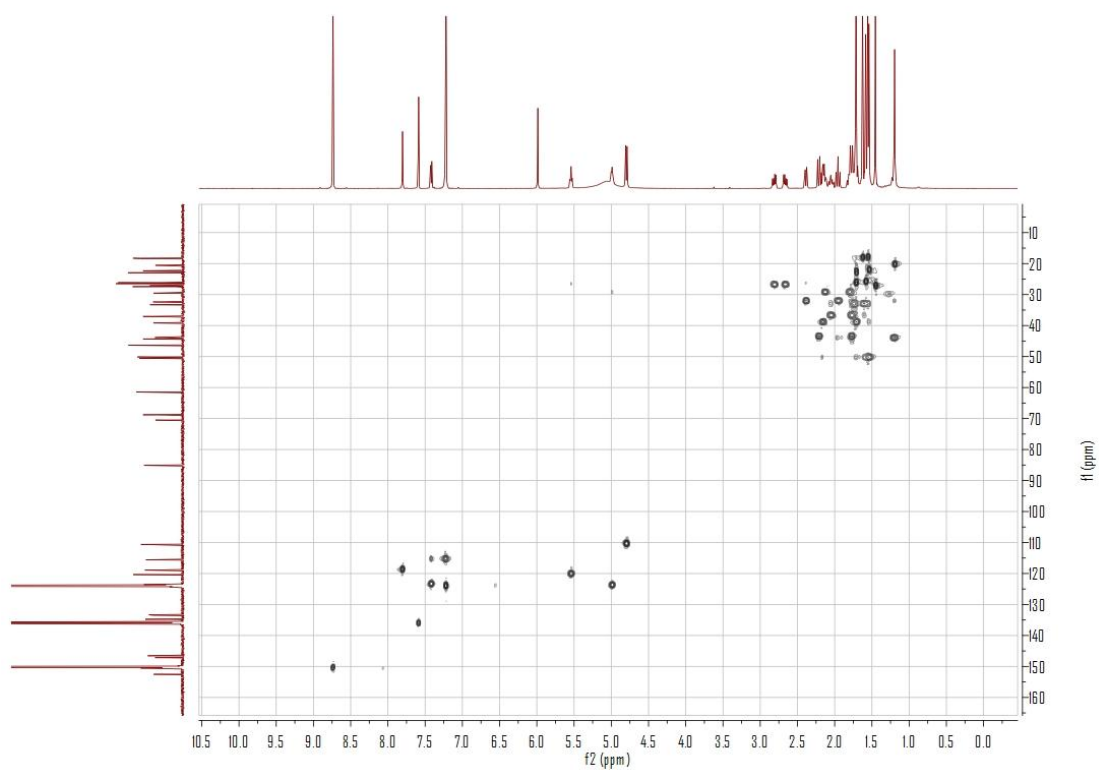


Fig 30. HSQC spectrum of 7

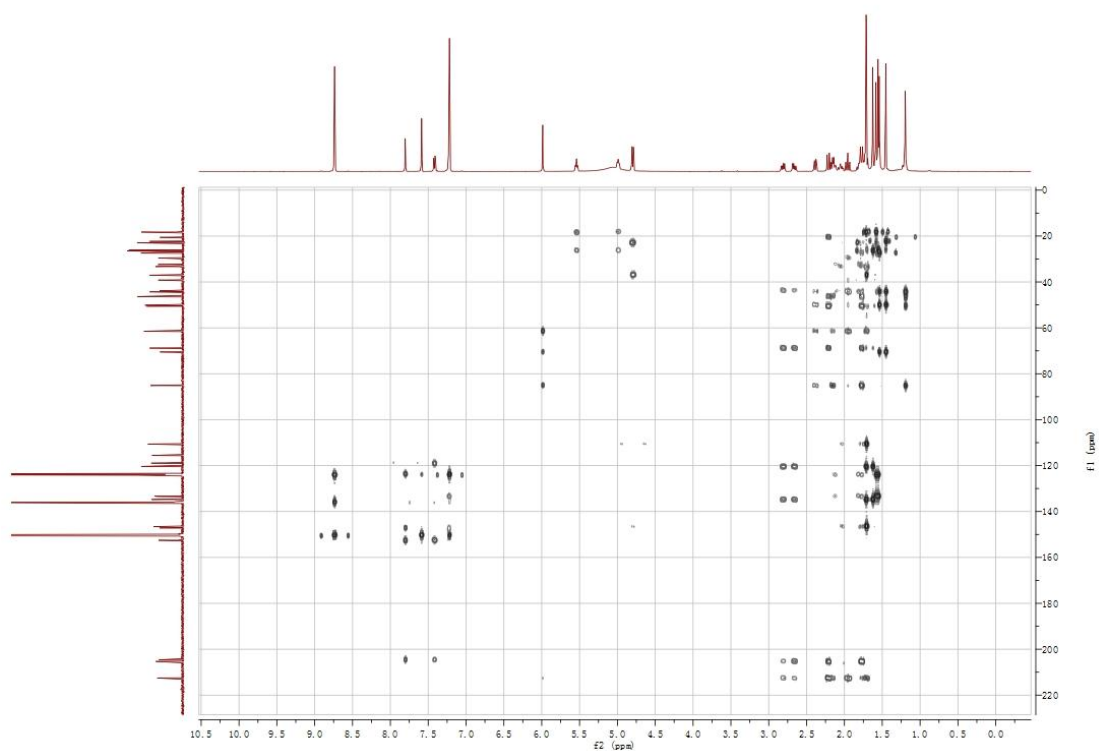


Fig 31. HMBC spectrum of 7

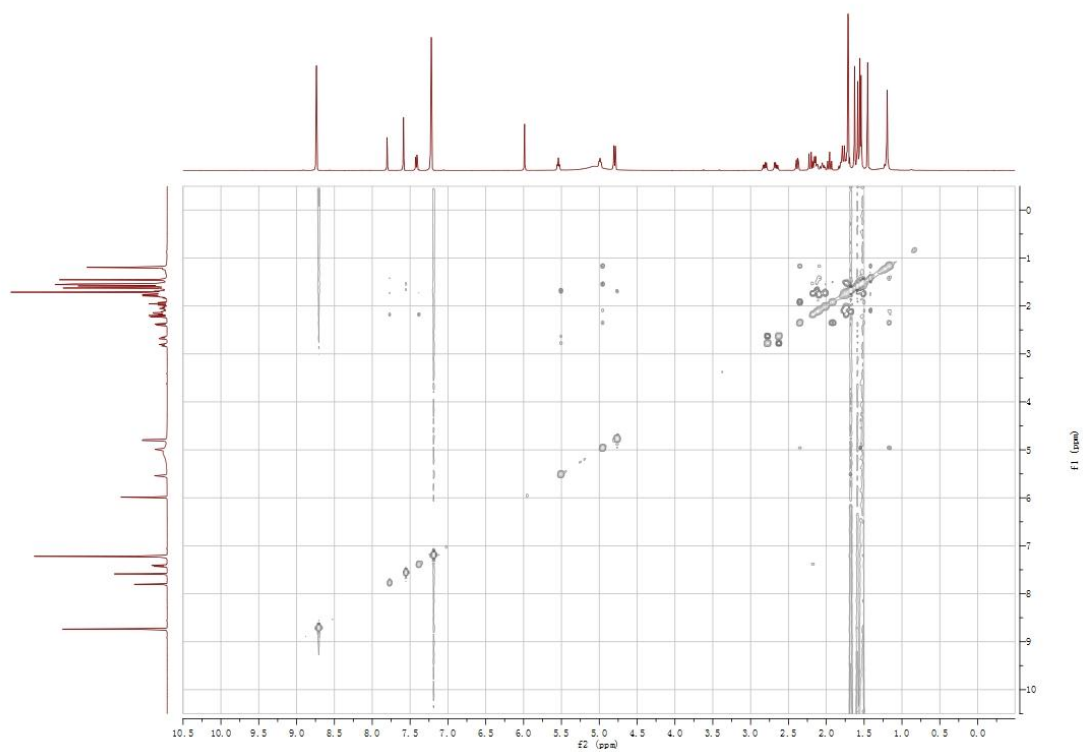


Fig 32. ROESY spectrum of 7

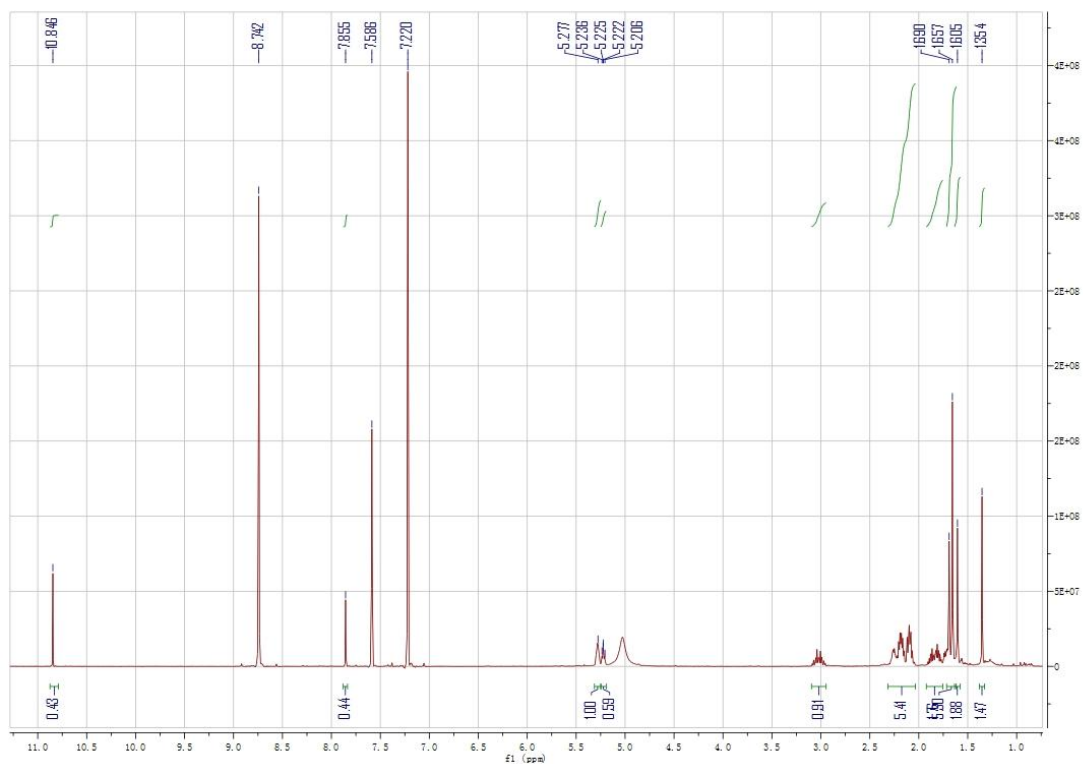


Fig 33. ¹H-NMR spectrum of **8**

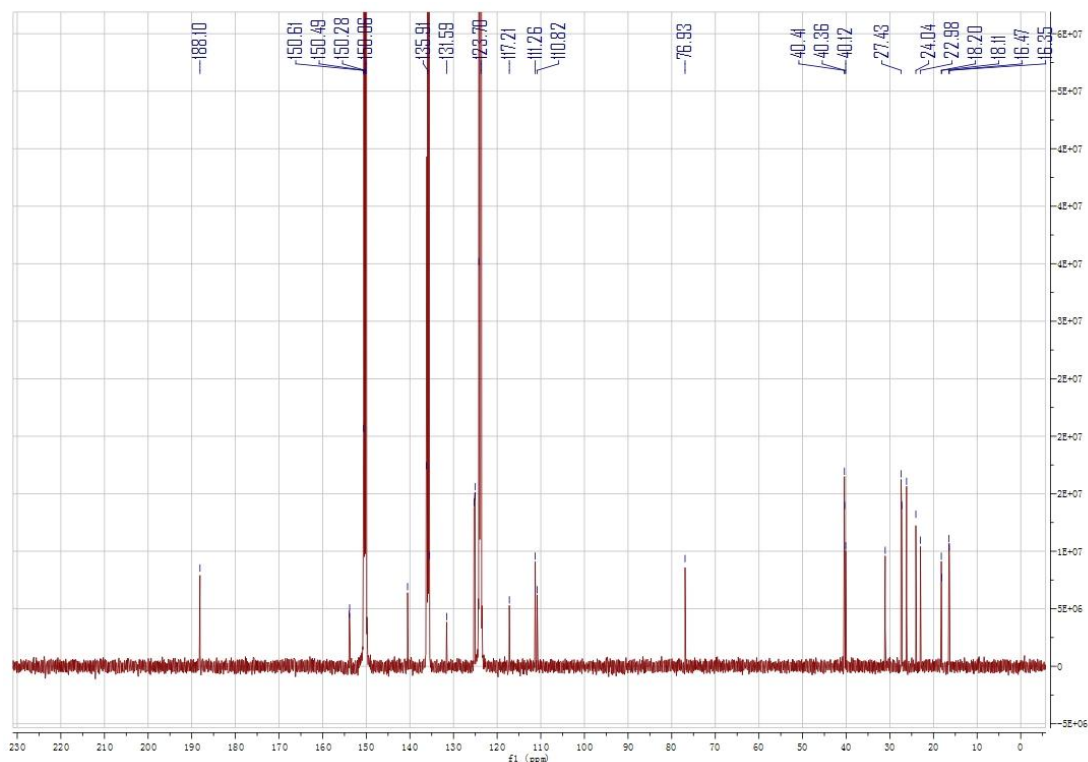


Fig 34. ¹³C-NMR spectrum of **8**

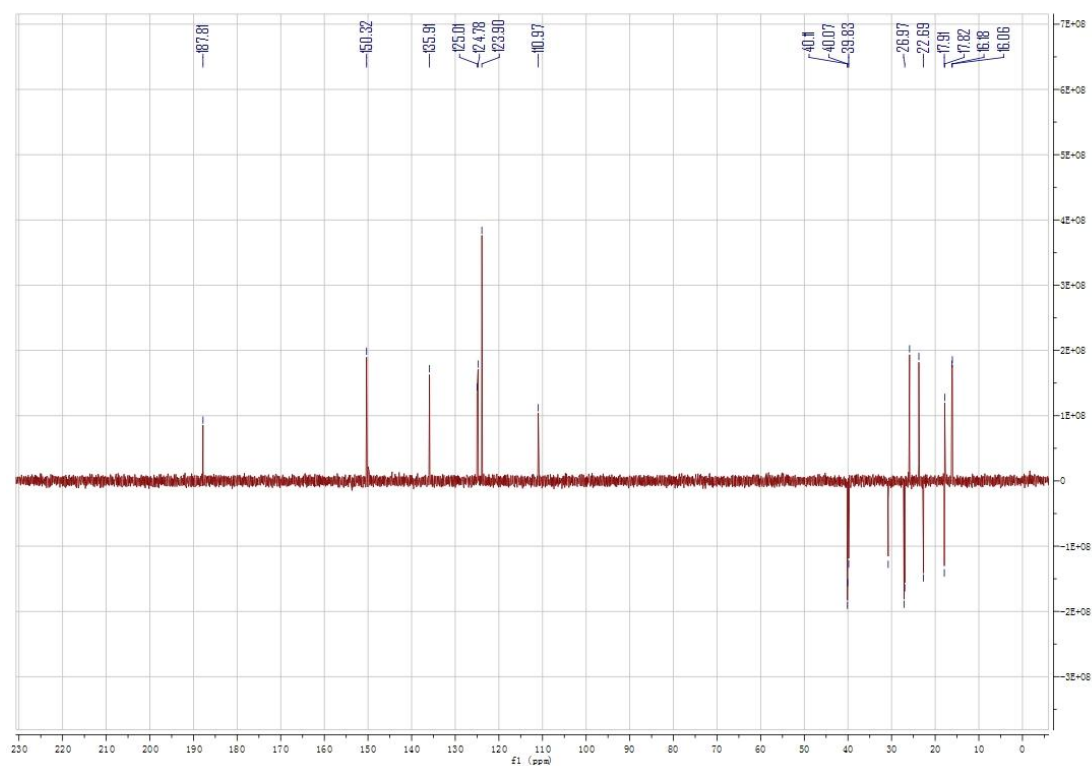


Fig 35. ^{13}C -NMR-DEPT spectrum of **8**

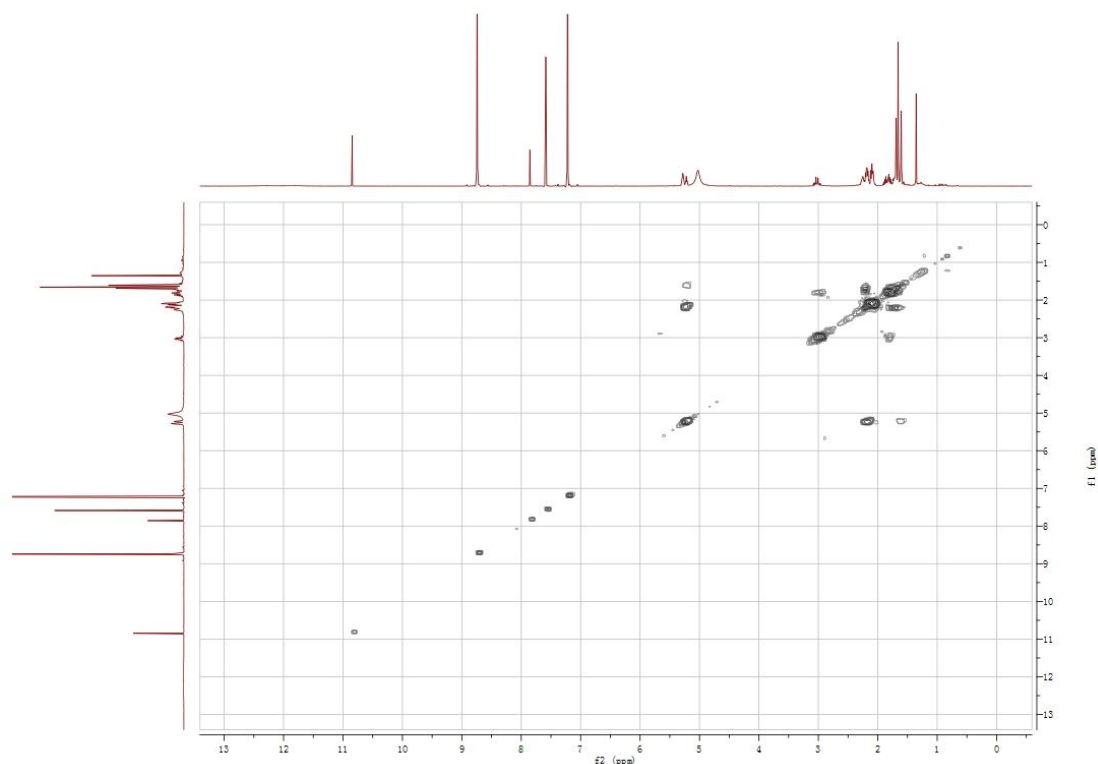


Fig 36. ^1H - ^1H COSY spectrum of **8**

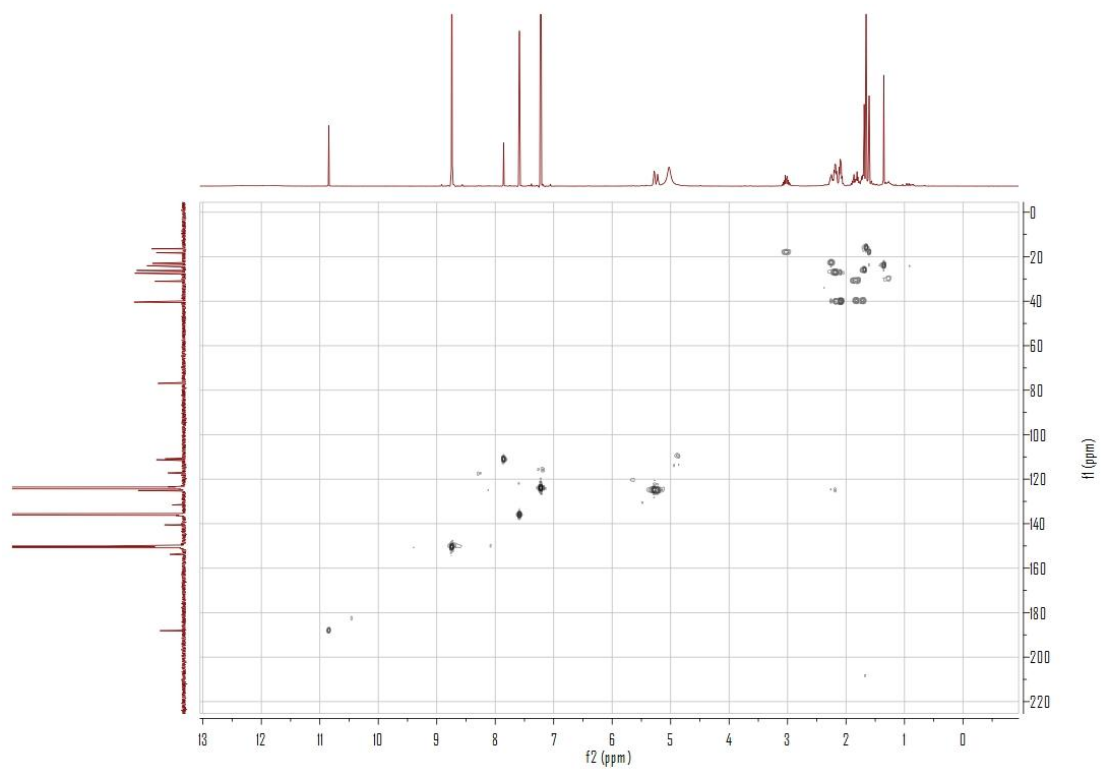


Fig 37. HSQC spectrum of **8**

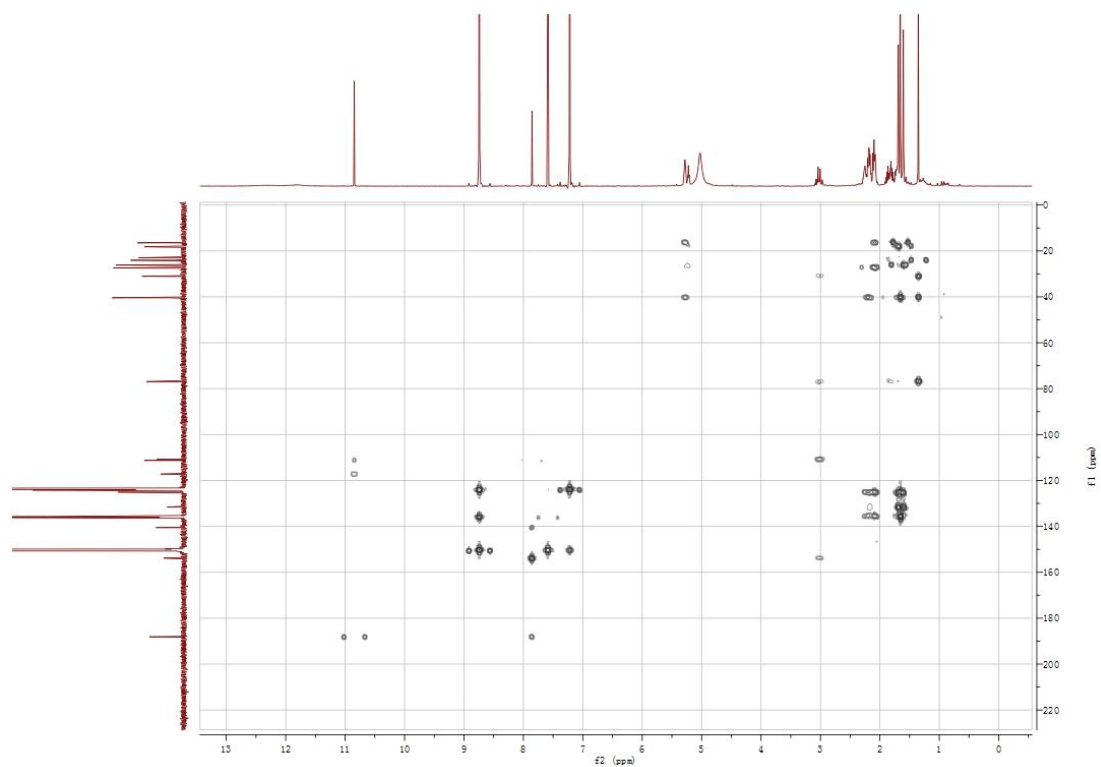


Fig 38. HMBC spectrum of **8**

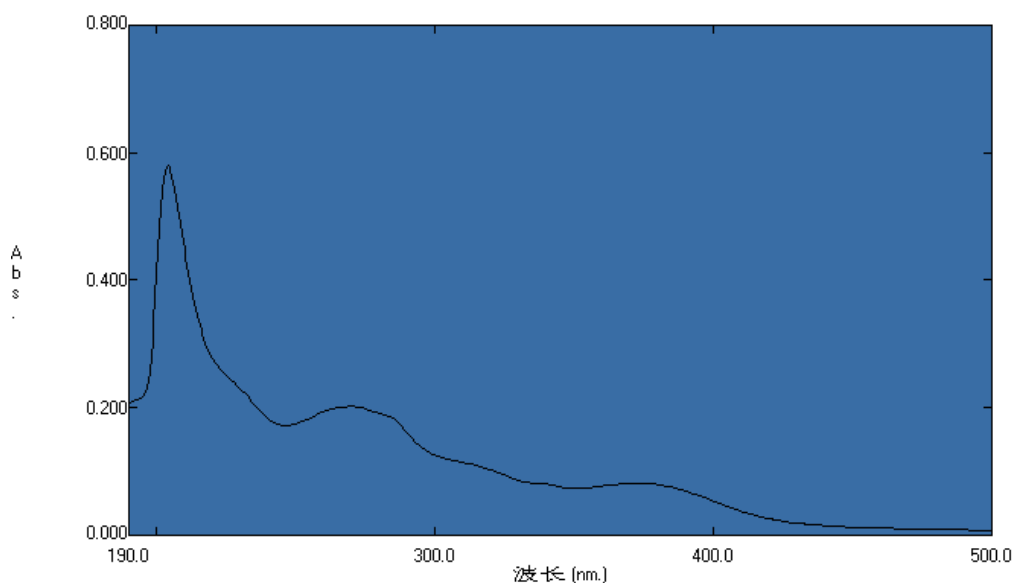
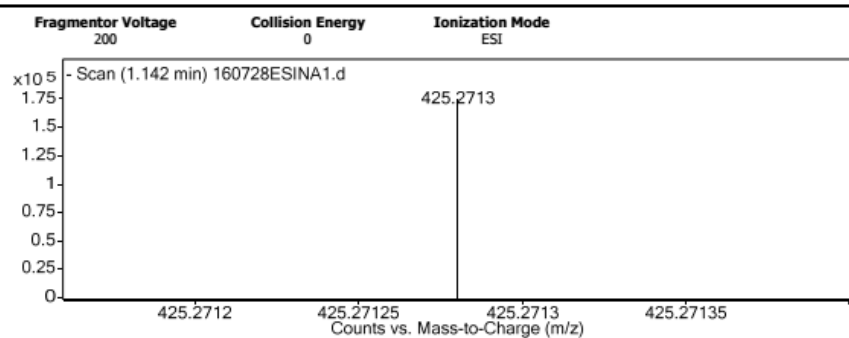


Fig 39. UV spectrum of **8**

User Spectra



Peak List

m/z	z	Abund	Formula	Ion
112.9856		26377.74		
425.2713	1	173498.75	C16 H37 N6 O7	M-
426.2739	1	32286.77	C16 H37 N6 O7	M-
599.3388	1	109484.13		
600.3414	1	29716.48		
601.3524	1	46687.3		
851.5479	1	139941.47		
852.5506	1	71111.62		
1025.6149	1	46671.06		
1026.618	1	26002.35		

Formula Calculator Element Limits

Element	Min	Max
C	0	200
H	0	400
O	0	15
N	0	6
S	0	6

Formula Calculator Results

Formula	CalculatedMass	Mz	Diff.(mDa)	Diff. (ppm)	DBE
C16 H37 N6 O7	425.2724	425.2713	1.1	2.5	1.5
C20 H37 N6 O2 S	425.2699	425.2713	-1.4	3.4	5.5
C28 H33 N4	425.2705	425.2713	-0.8	1.8	14.5
C27 H37 O4	425.2692	425.2713	-2.1	5.0	9.5

Fig 40. HR-ESIMS of **8**

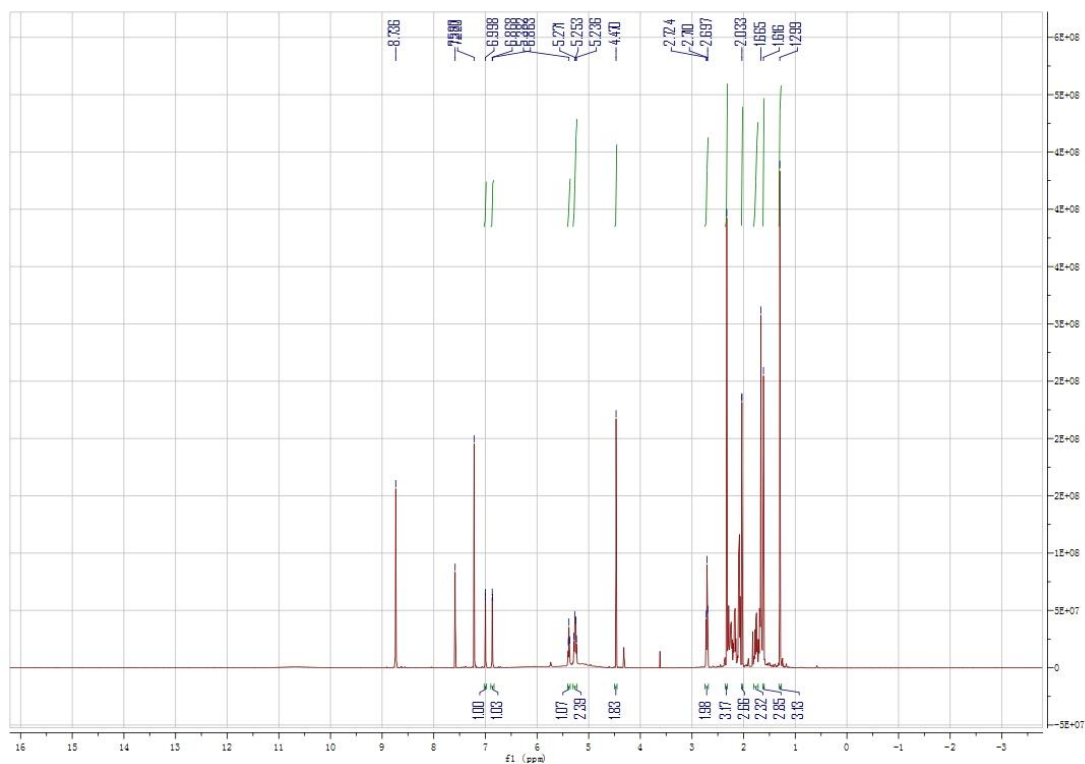


Fig 41. ¹H-NMR spectrum of 9

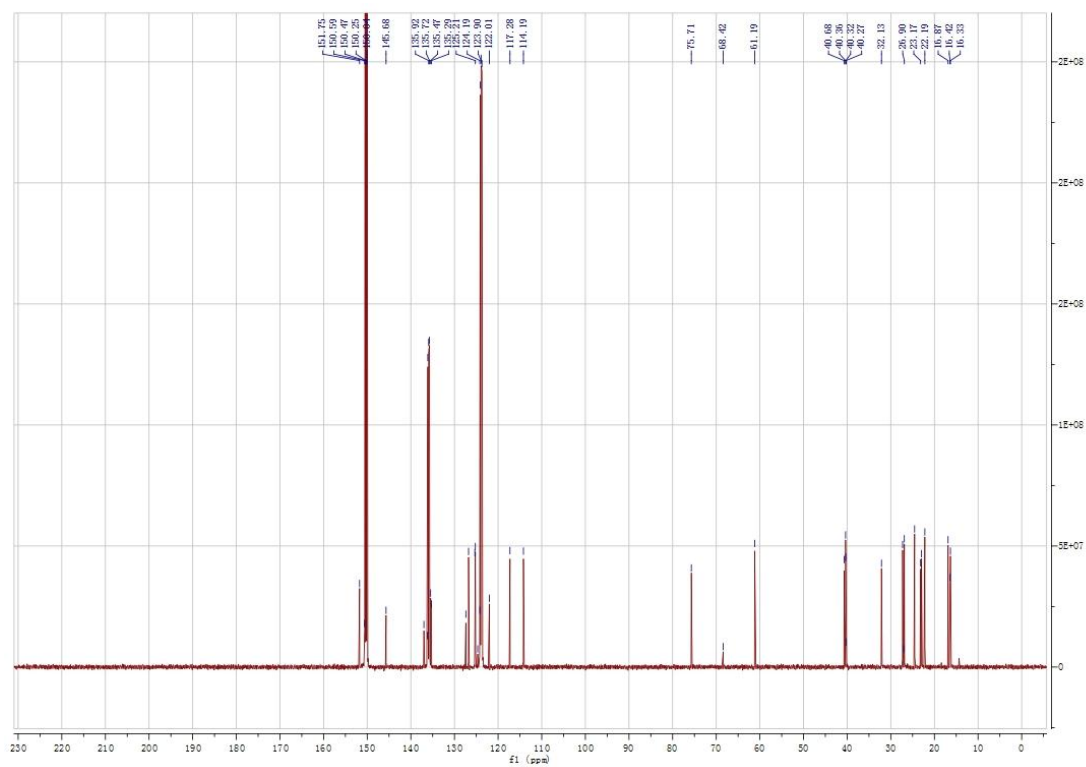


Fig 42. ¹³C-NMR spectrum of 9

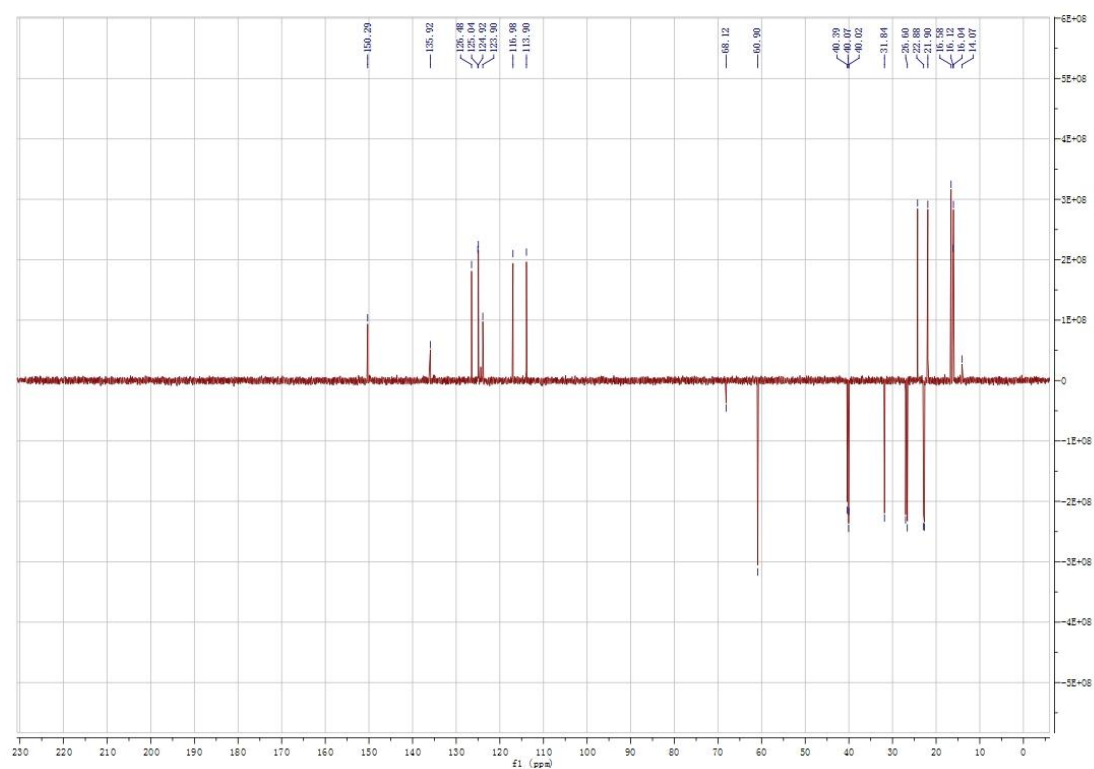


Fig 43. ^{13}C -NMR-DEPT spectrum of **9**

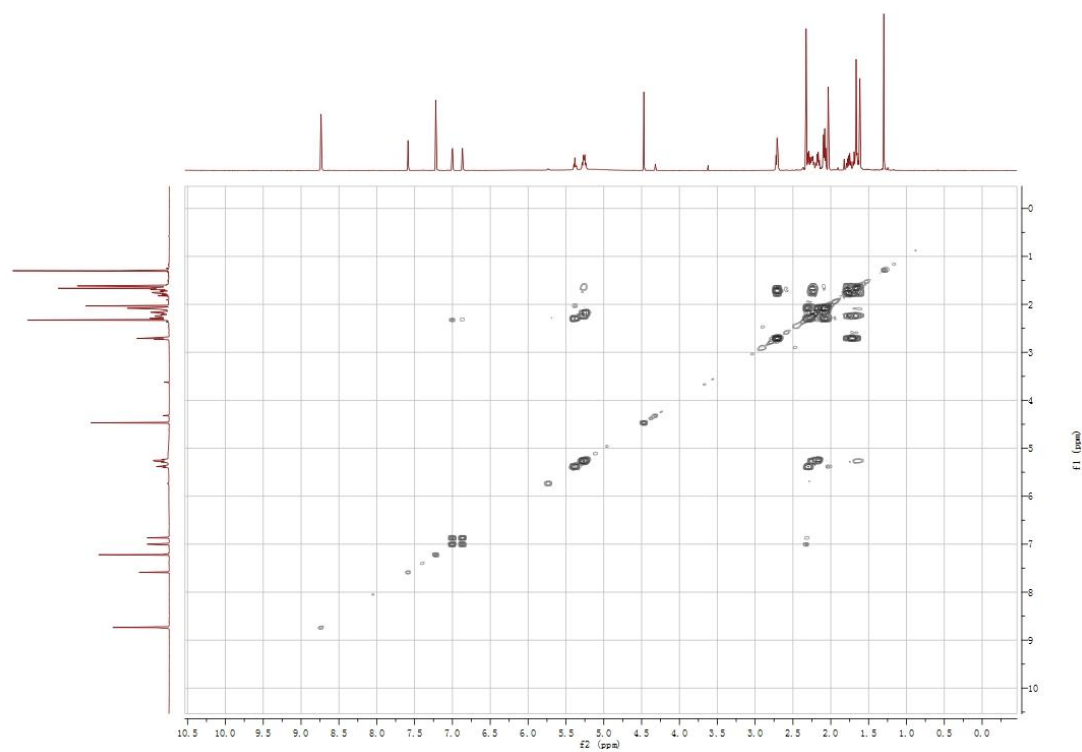


Fig 44. ^1H - ^1H COSY spectrum of **9**

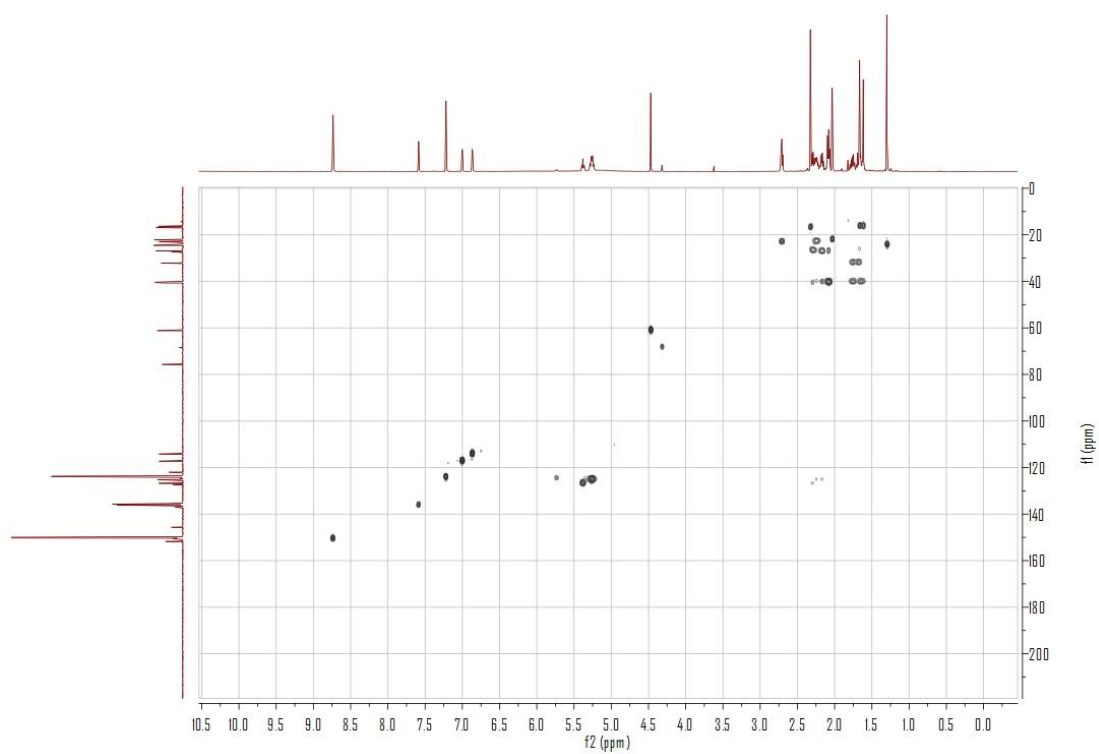


Fig 45. HSQC spectrum of **9**

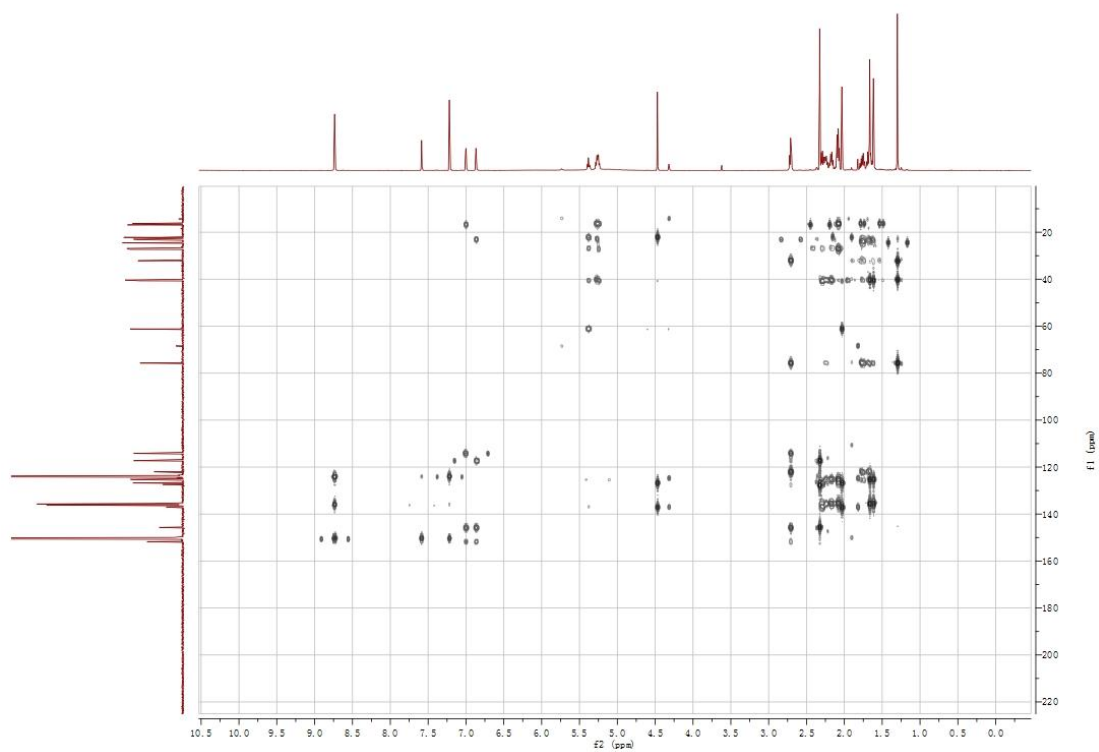


Fig 46. HMBC spectrum of **9**

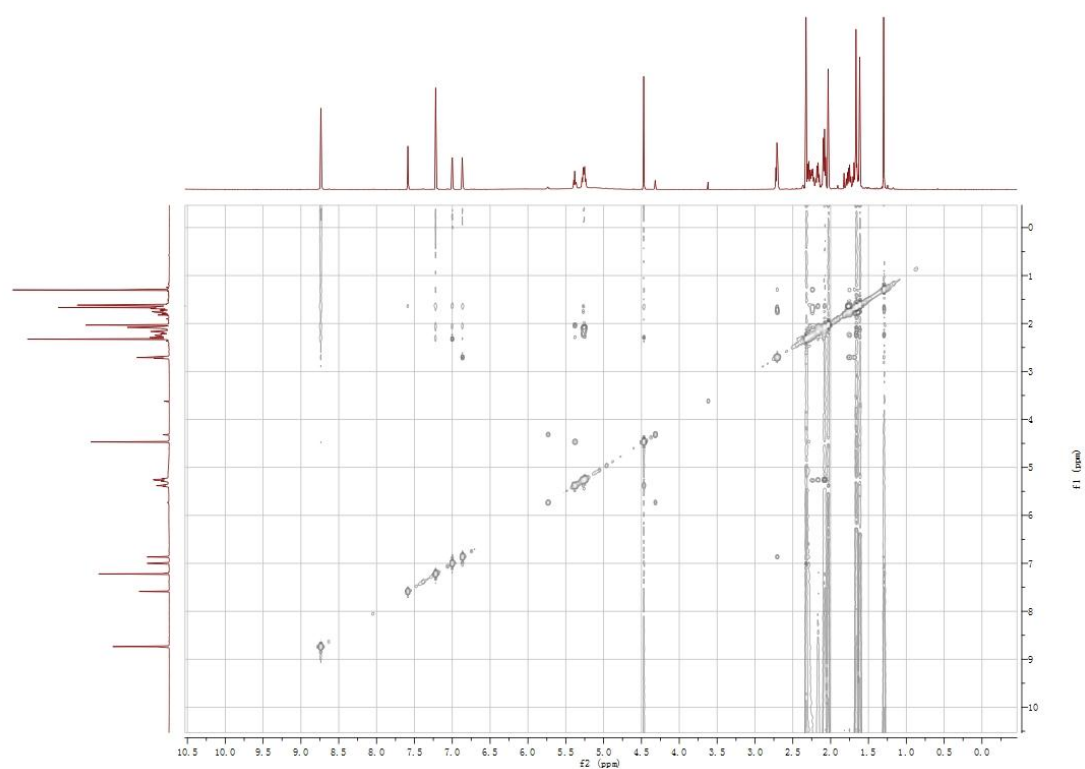


Fig 47. ROESY spectrum of **9**