

Supplementary Materials

The ^1H -NMR and ^{13}C -NMR spectra of pyrazole oxime derivatives (**9a–9w**) were listed below:

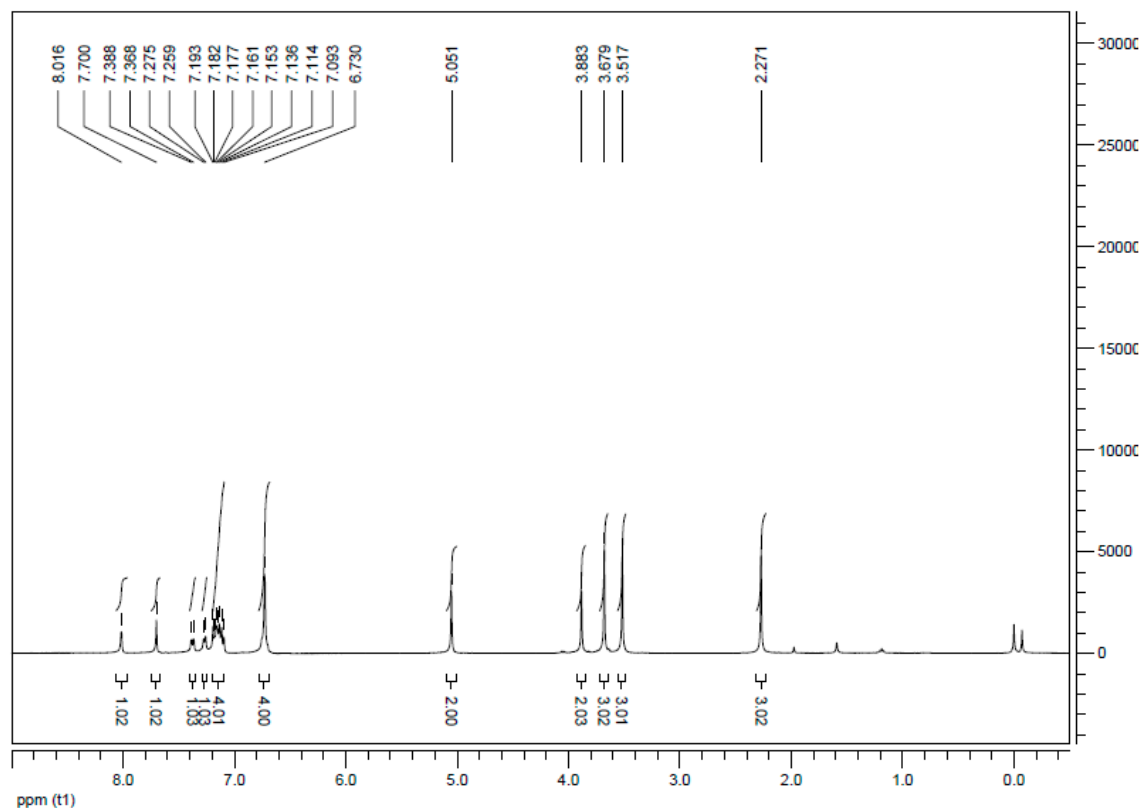


Figure S1. ^1H -NMR of compound **9a** (400 MHz, CDCl_3).

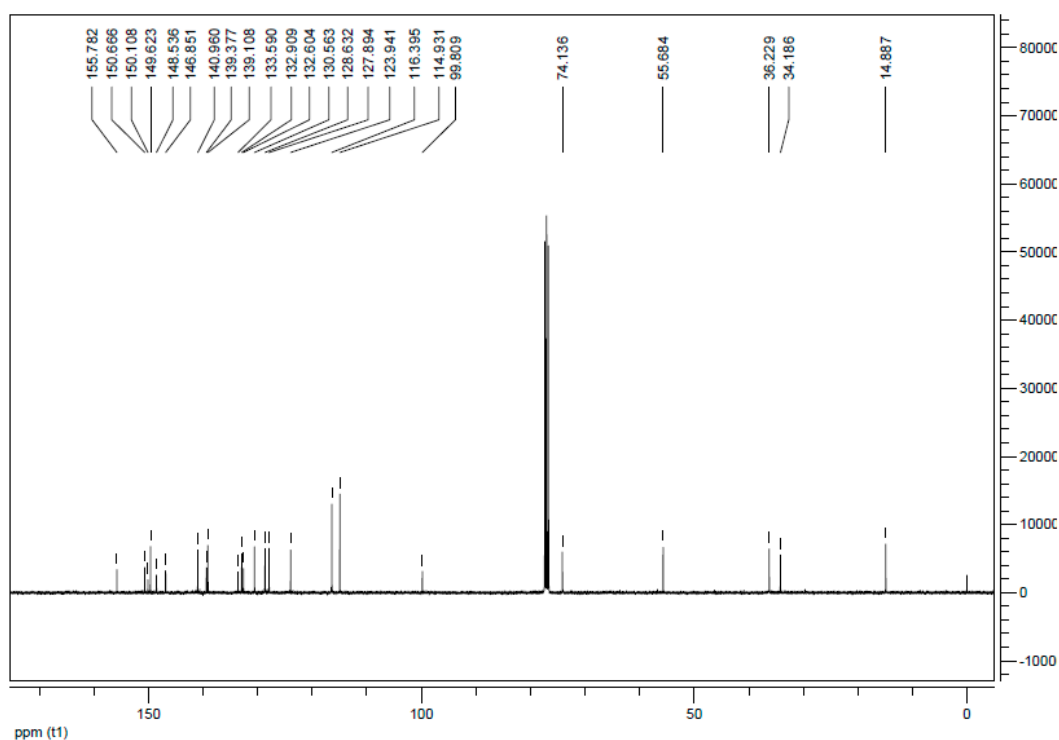


Figure S2. ^{13}C -NMR of compound **9a** (100 MHz, CDCl_3).

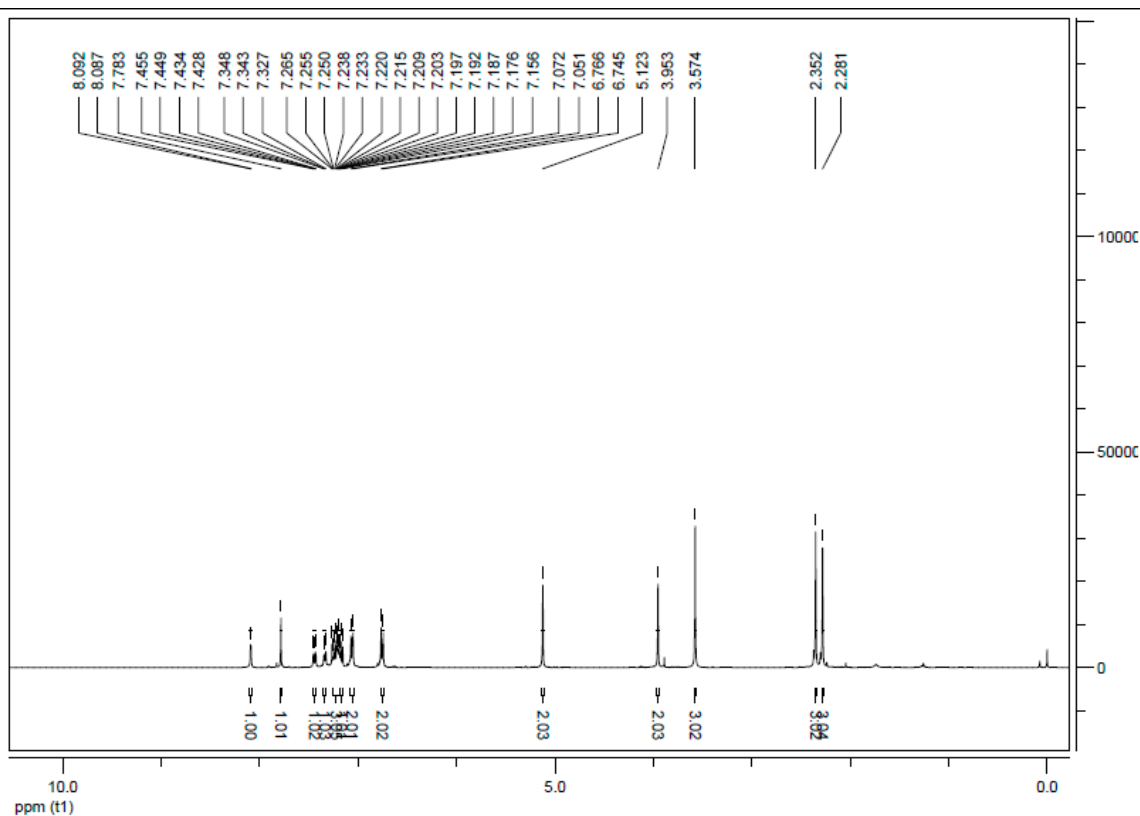


Figure S3. ¹H-NMR of compound **9b** (400 MHz, CDCl₃).

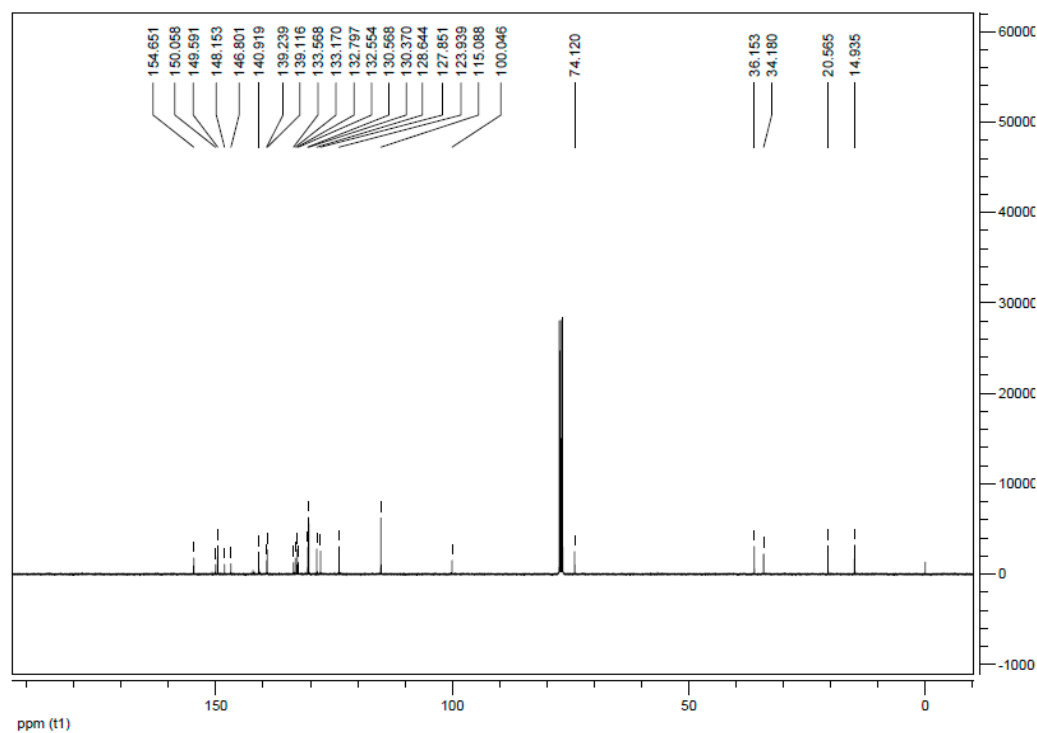


Figure S4. ¹³C-NMR of compound **9b** (100 MHz, CDCl₃).

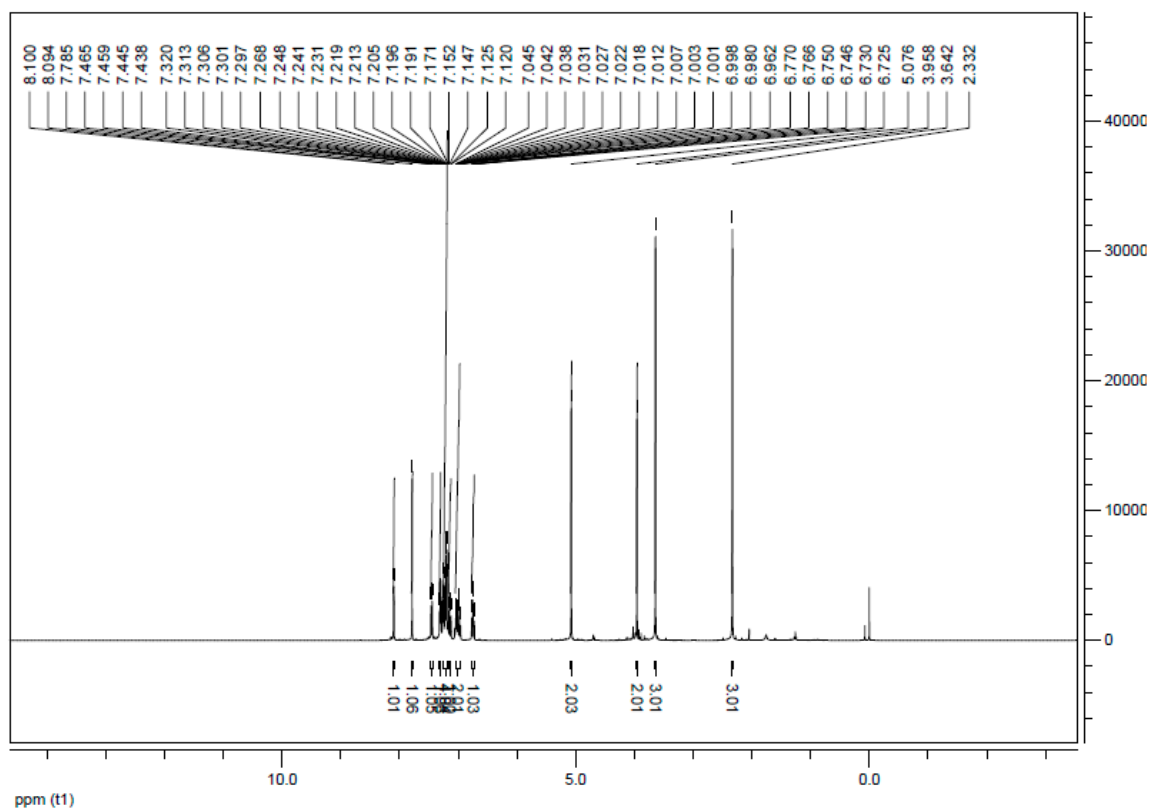


Figure S5. ¹H-NMR of compound **9c** (400 MHz, CDCl₃).

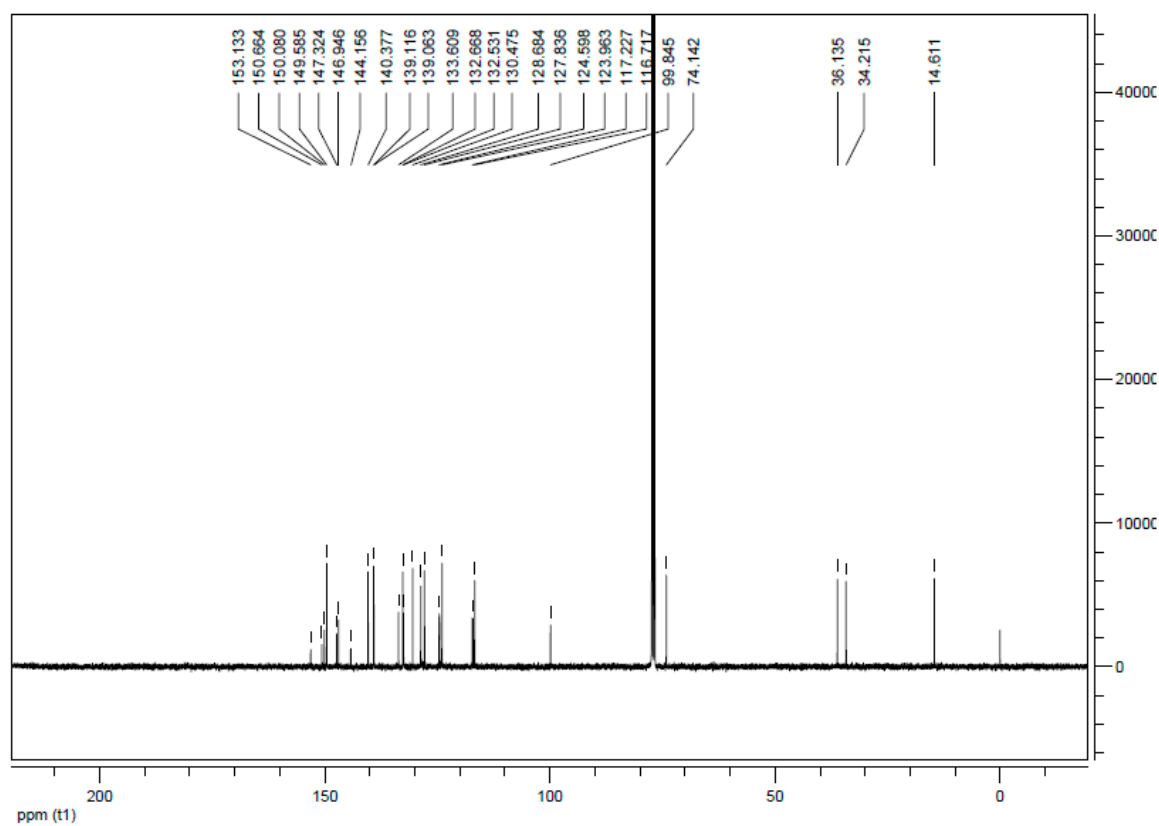


Figure S6. ¹³C-NMR of compound **9c** (100 MHz, CDCl₃).

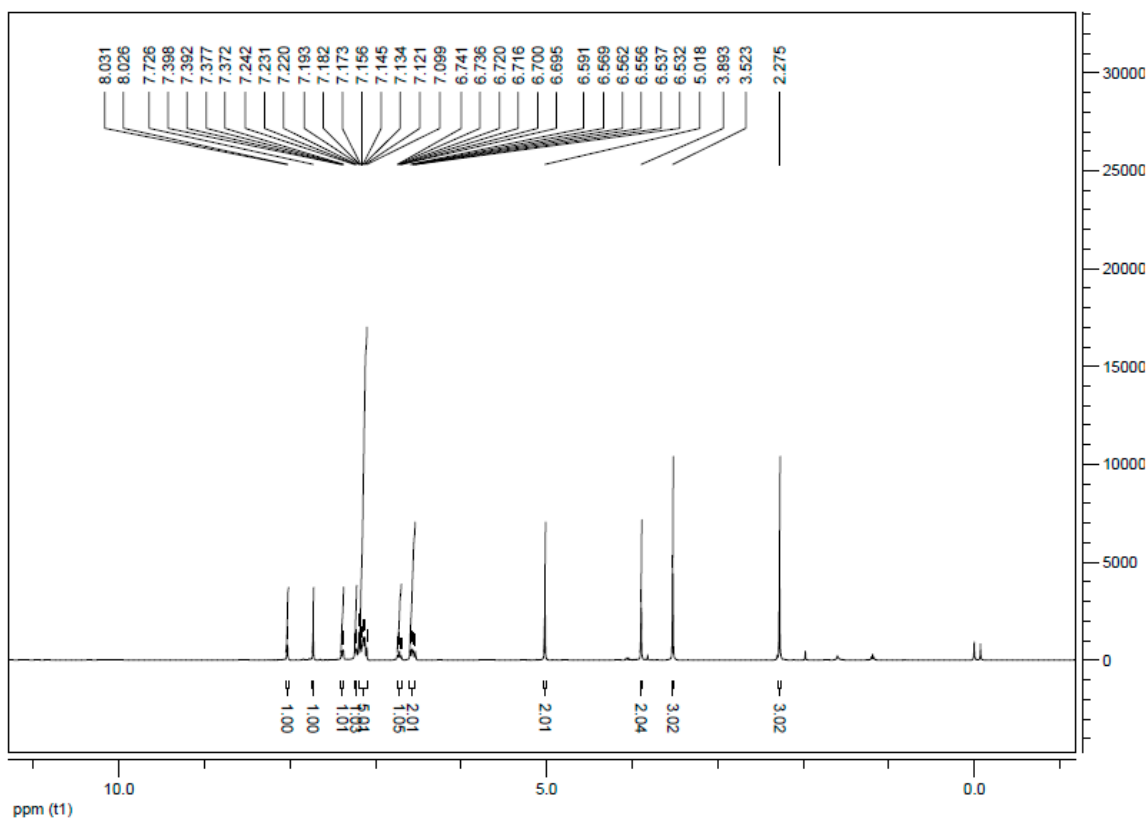


Figure S7. ¹H-NMR of compound **9d** (400 MHz, CDCl₃).

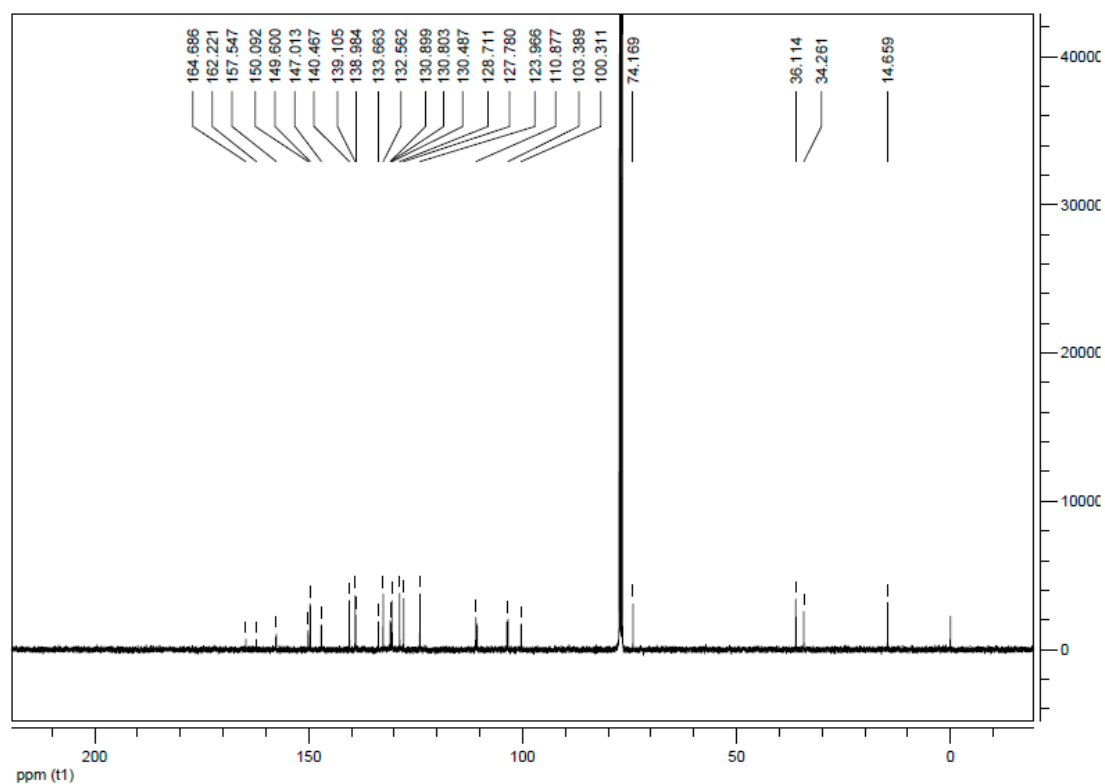


Figure S8. ¹³C-NMR of compound **9d** (100 MHz, CDCl₃).

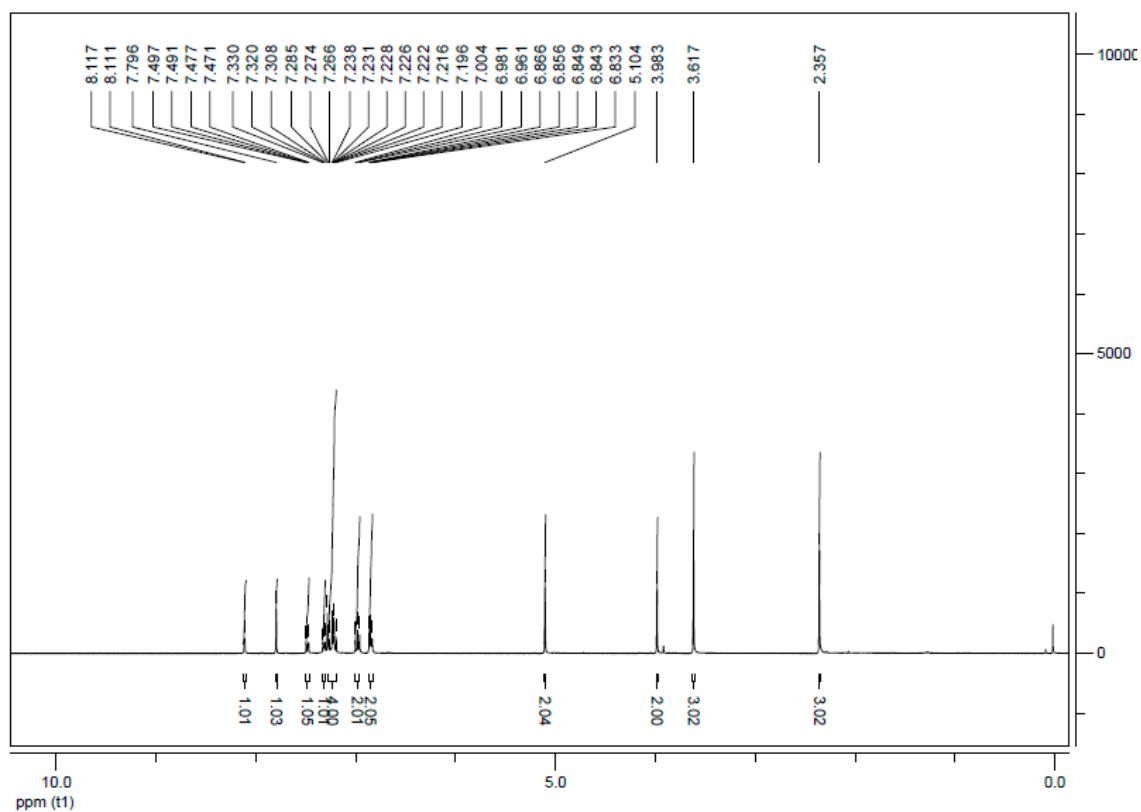


Figure S9. ¹H-NMR of compound **9e** (400 MHz, CDCl₃).

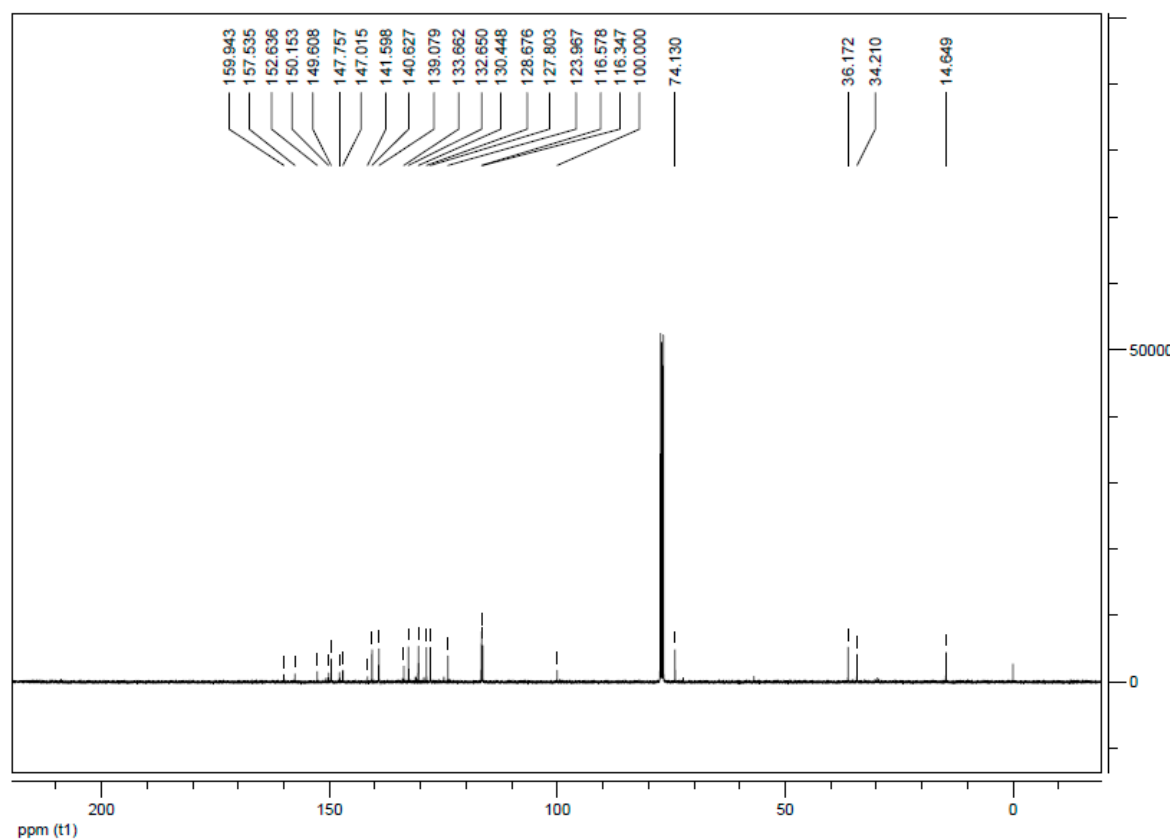


Figure S10. ¹³C-NMR of compound **9e** (100 MHz, CDCl₃).

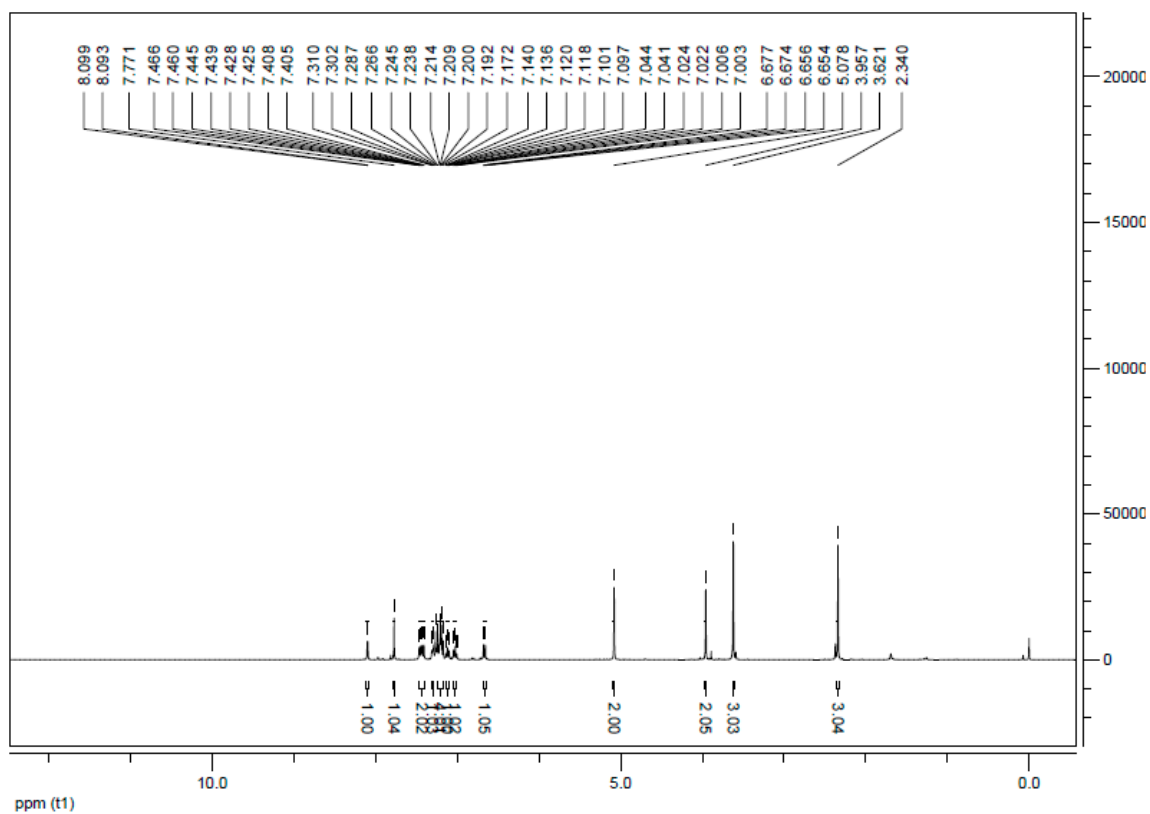


Figure S11. ¹H-NMR of compound **9f** (400 MHz, CDCl₃).

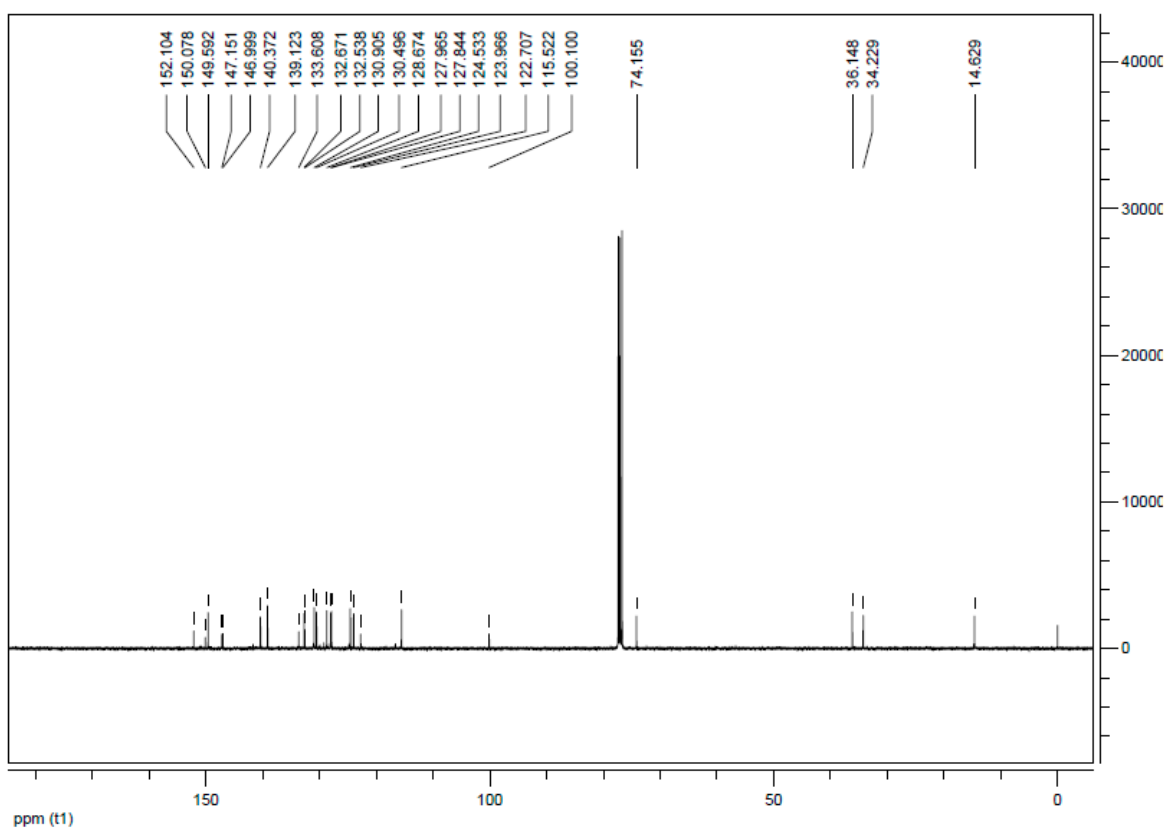


Figure S12. ¹³C-NMR of compound **9f** (100 MHz, CDCl₃).

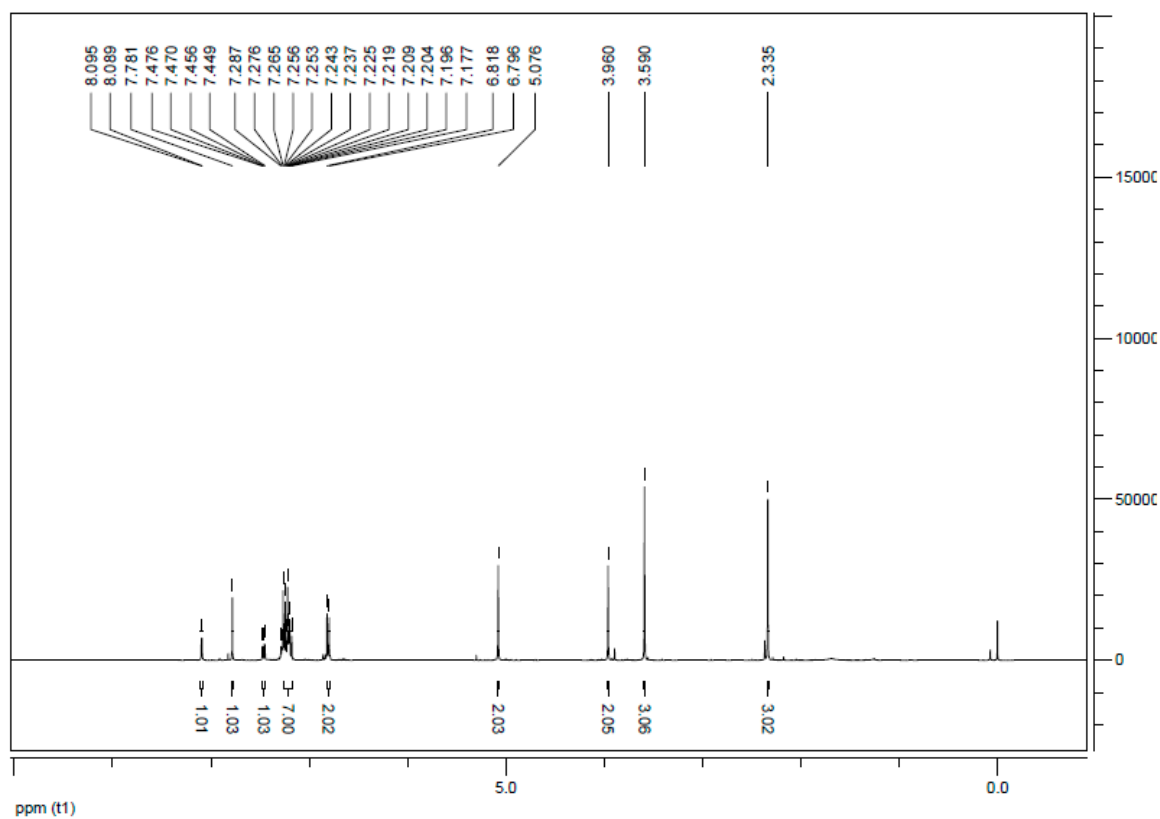


Figure S13. ¹H-NMR of compound **9g** (400 MHz, CDCl₃).

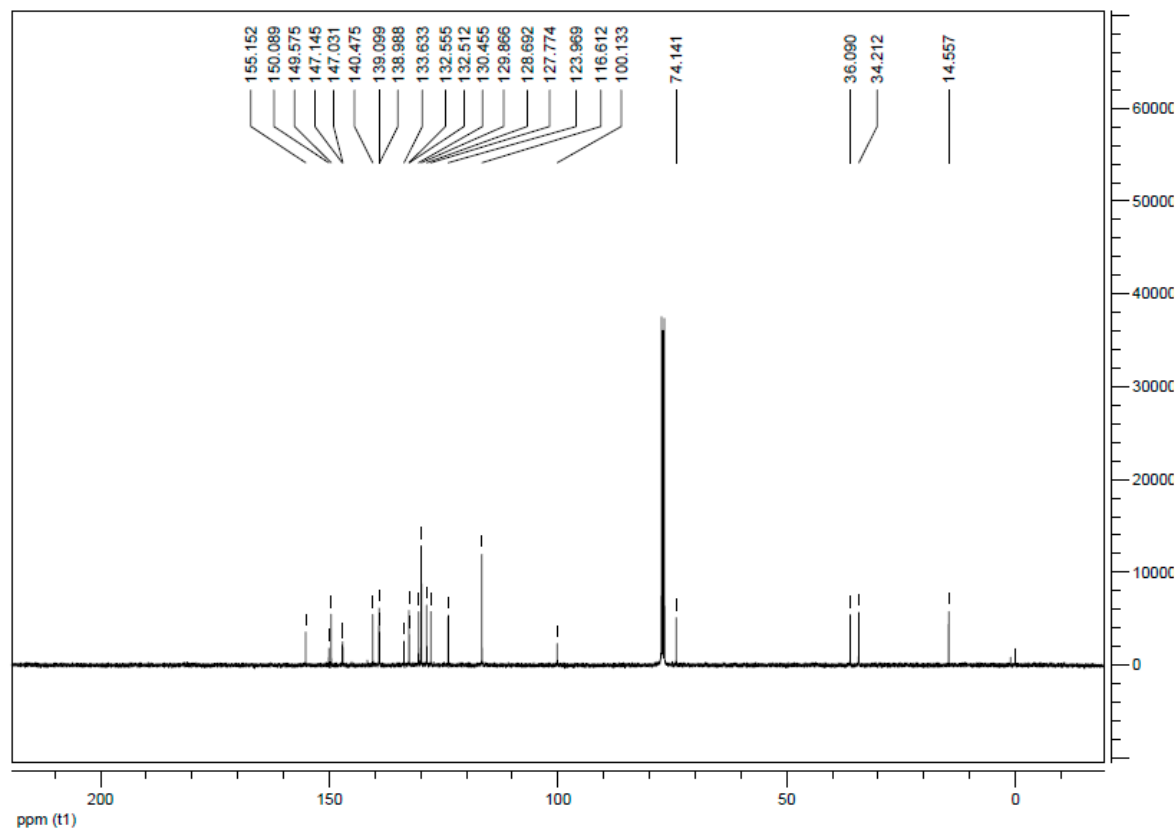


Figure S14. ¹³C-NMR of compound **9g** (100 MHz, CDCl₃).

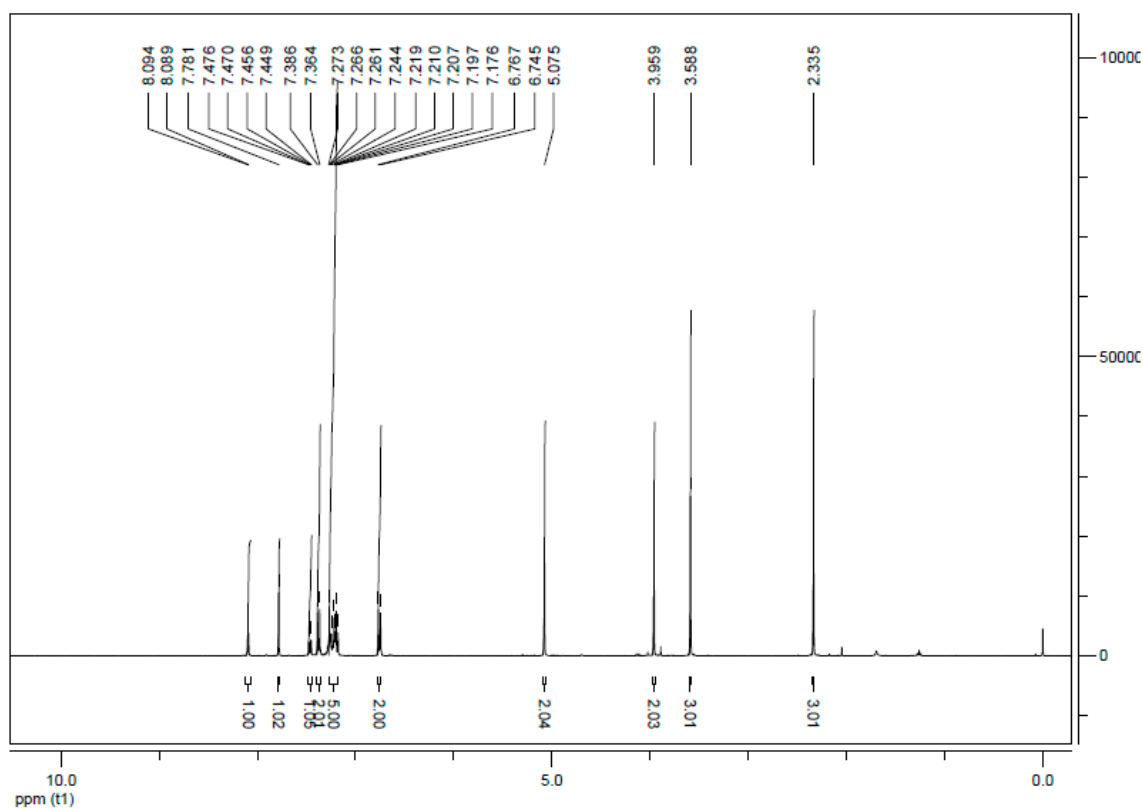


Figure S15. ¹H-NMR of compound **9h** (400 MHz, CDCl₃).

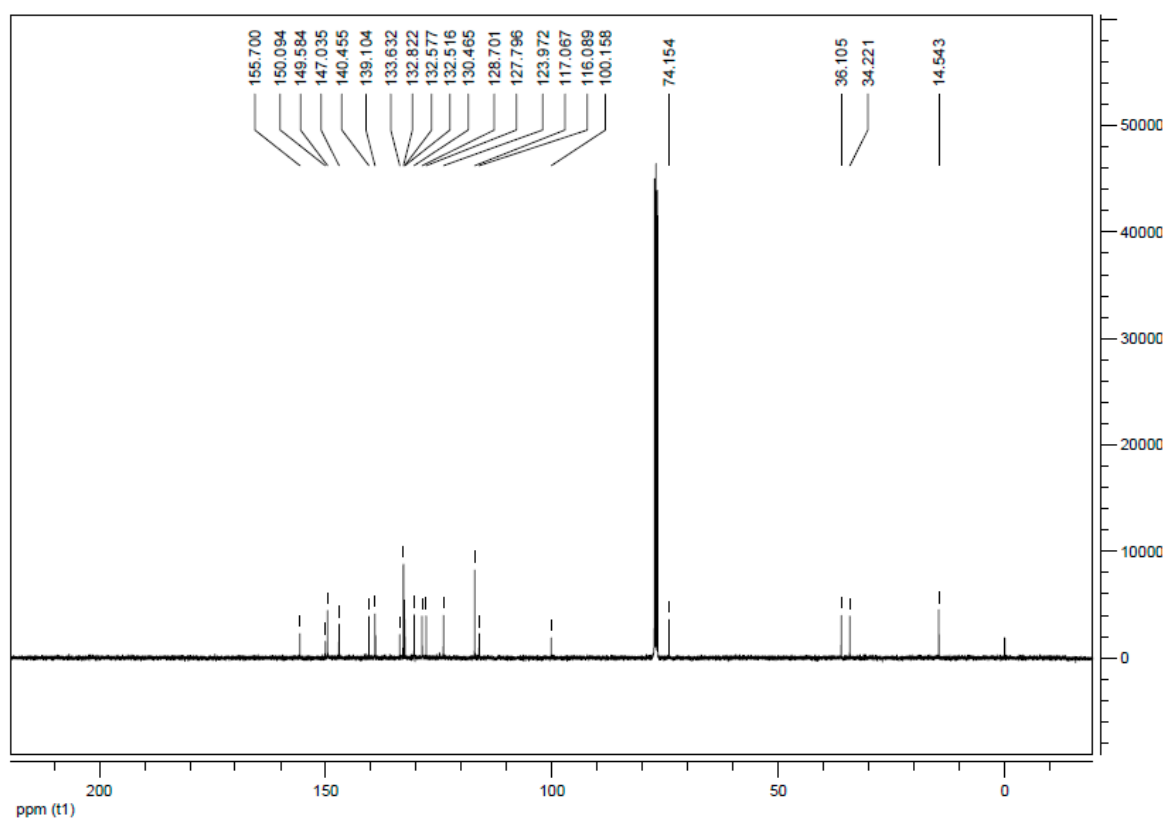


Figure S16. ¹³C-NMR of compound **9h** (100 MHz, CDCl₃).

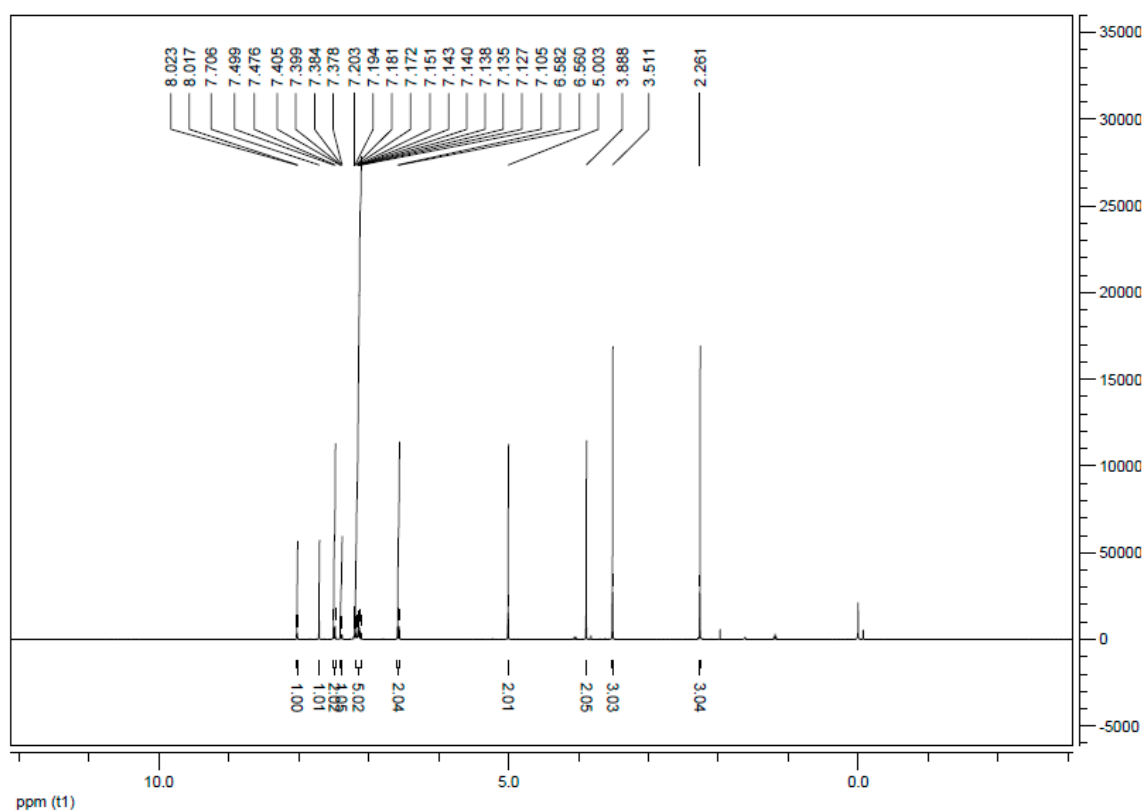


Figure S17. ¹H-NMR of compound **9i** (400 MHz, CDCl₃).

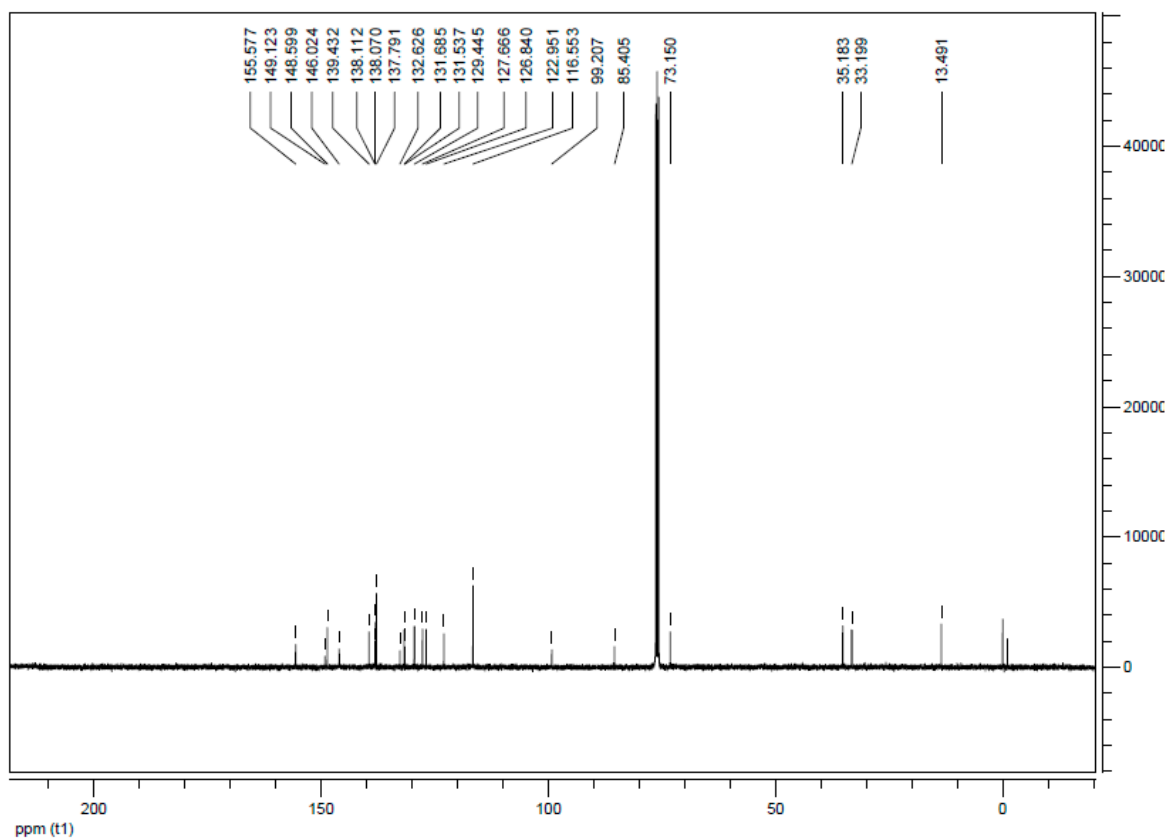


Figure S18. ¹³C-NMR of compound **9i** (100 MHz, CDCl₃).

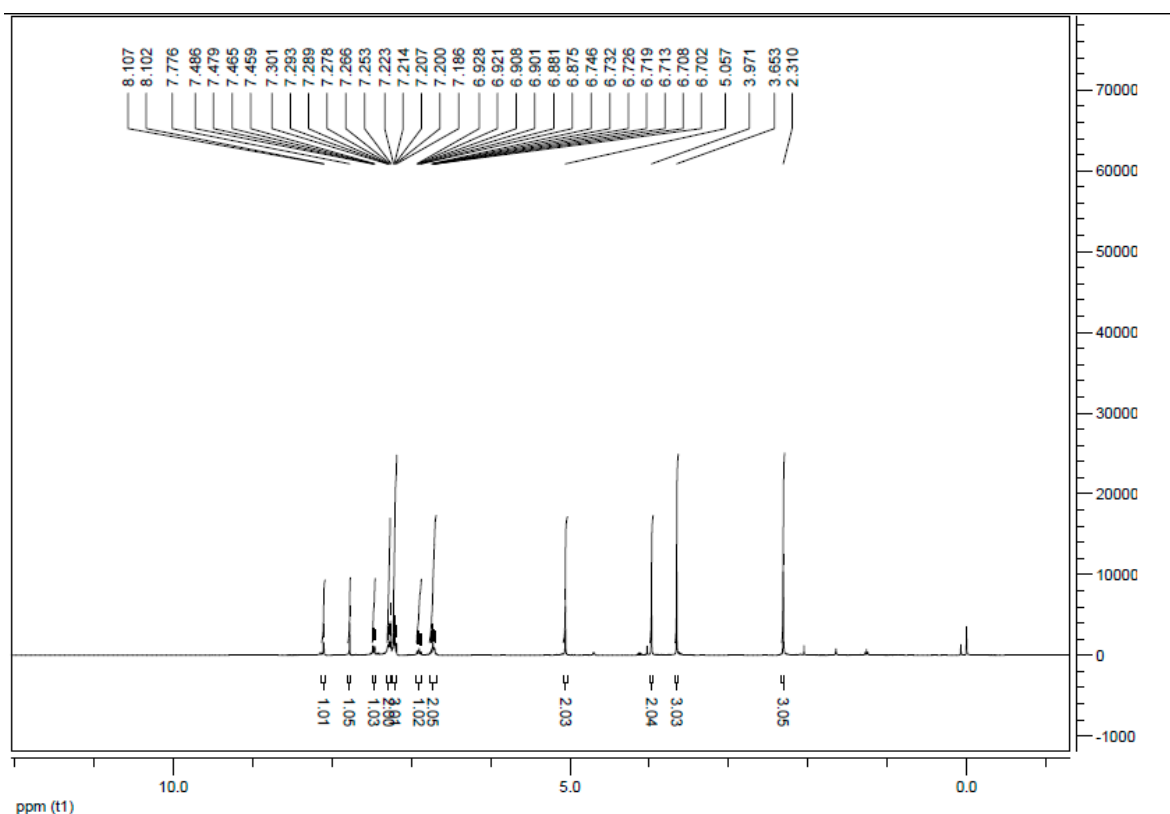


Figure S19. ¹H-NMR of compound **9j** (400 MHz, CDCl₃).

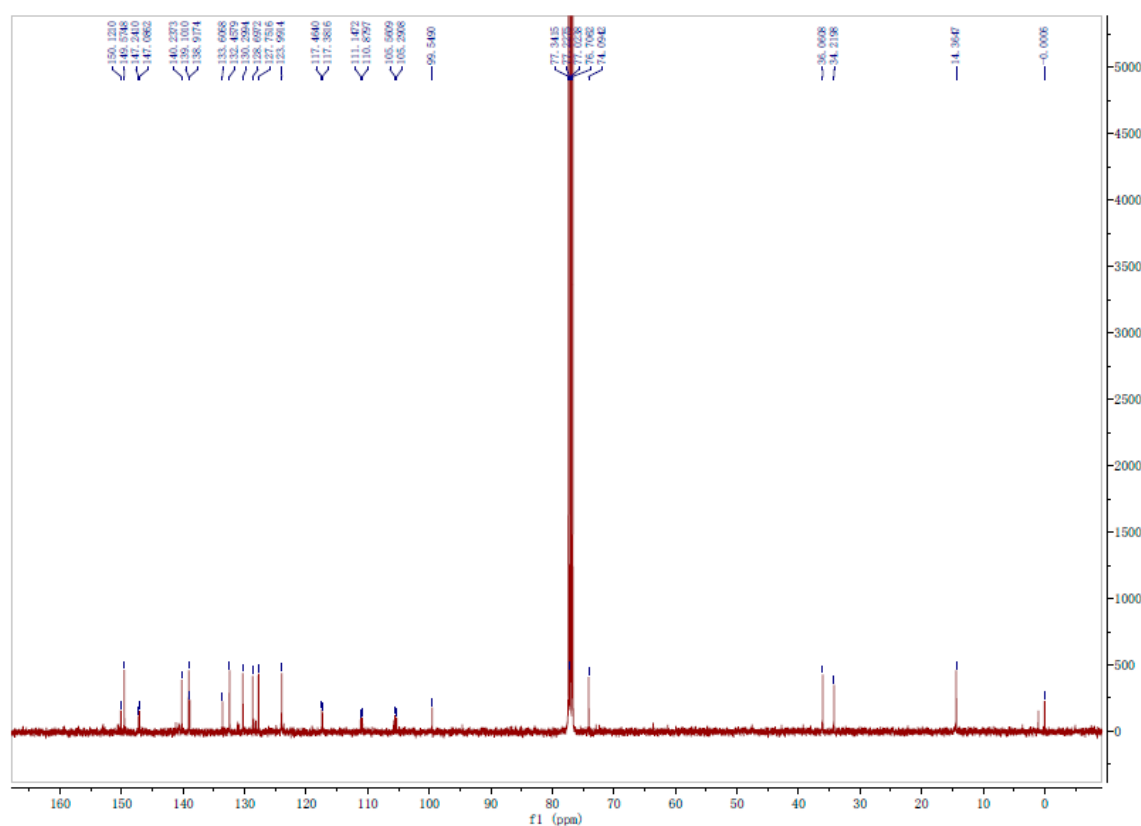


Figure S20. ¹³C-NMR of compound **9j** (100 MHz, CDCl₃).

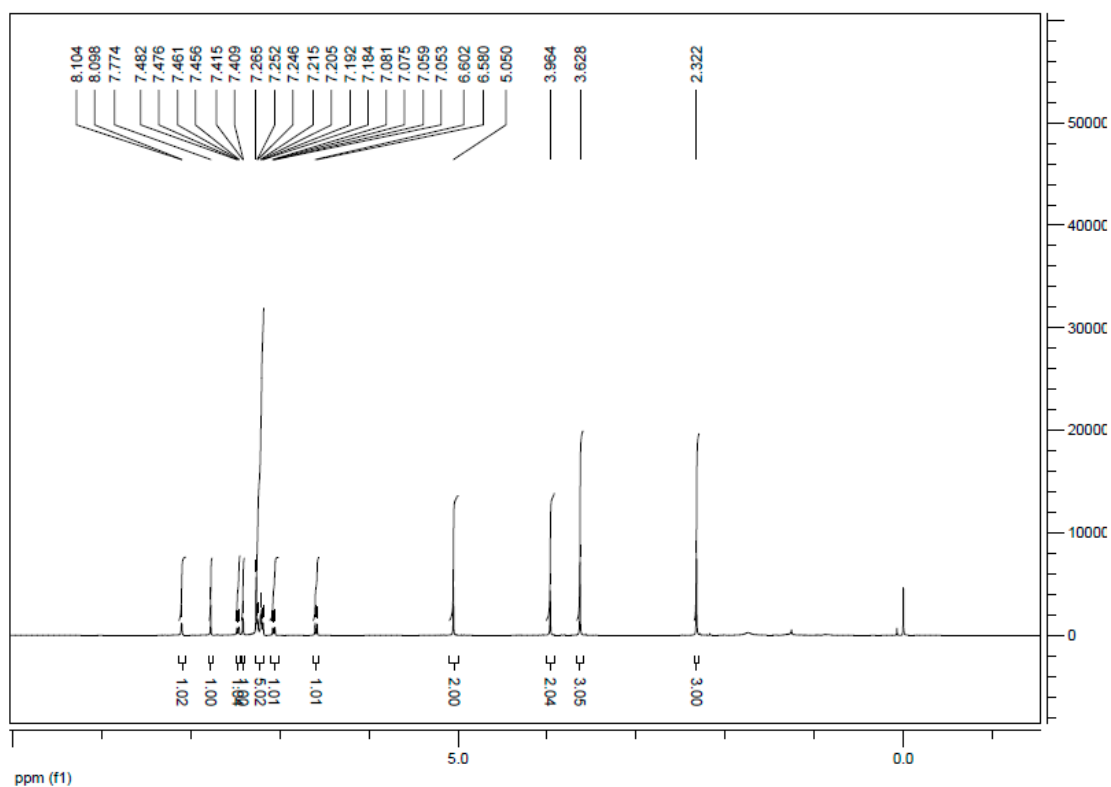


Figure S21. ¹H-NMR of compound **9k** (400 MHz, CDCl₃).

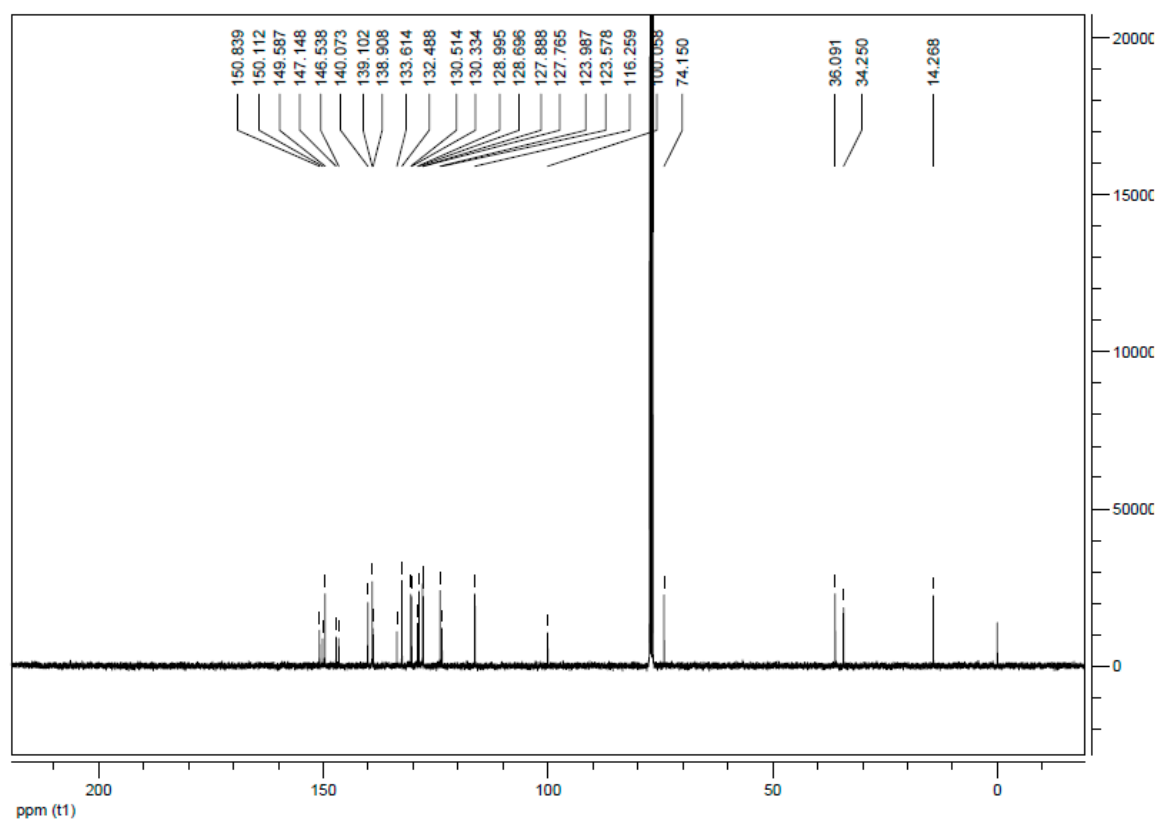


Figure S22. ¹³C-NMR of compound **9k** (100 MHz, CDCl₃).

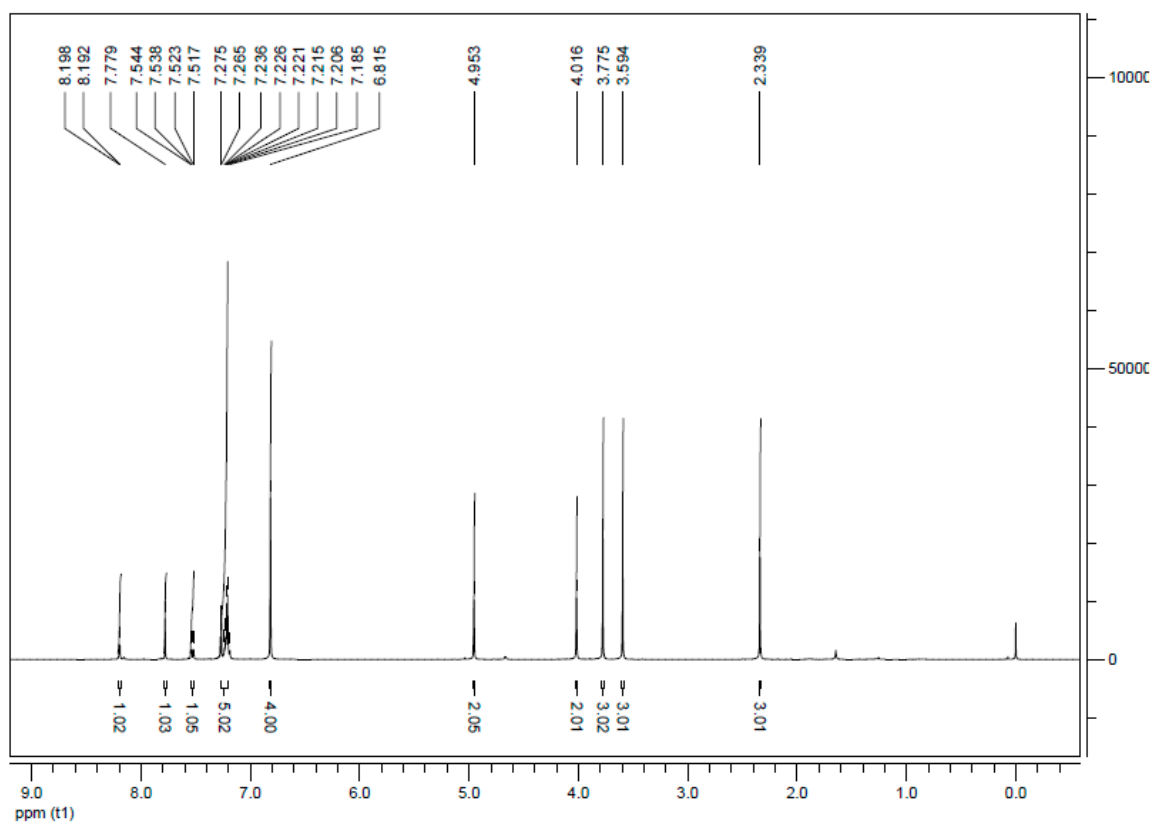


Figure S23. ¹H-NMR of compound **9l** (400 MHz, CDCl₃).

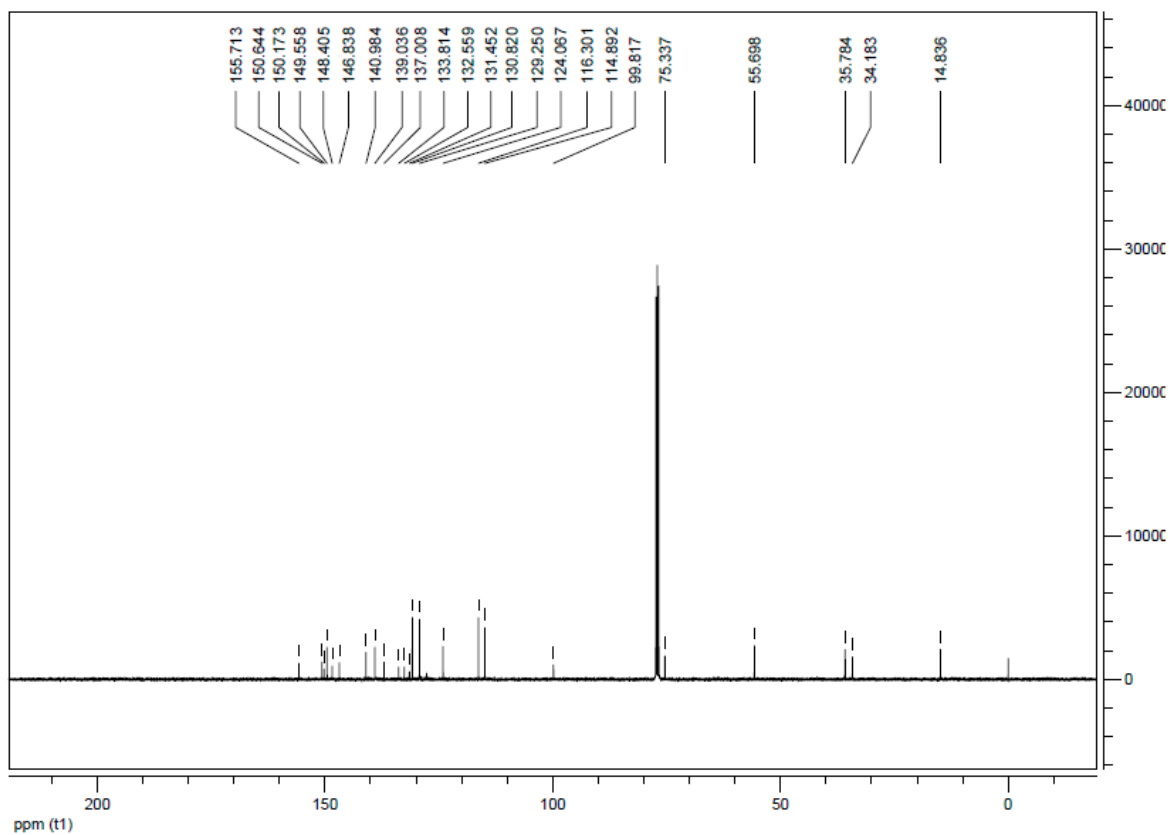
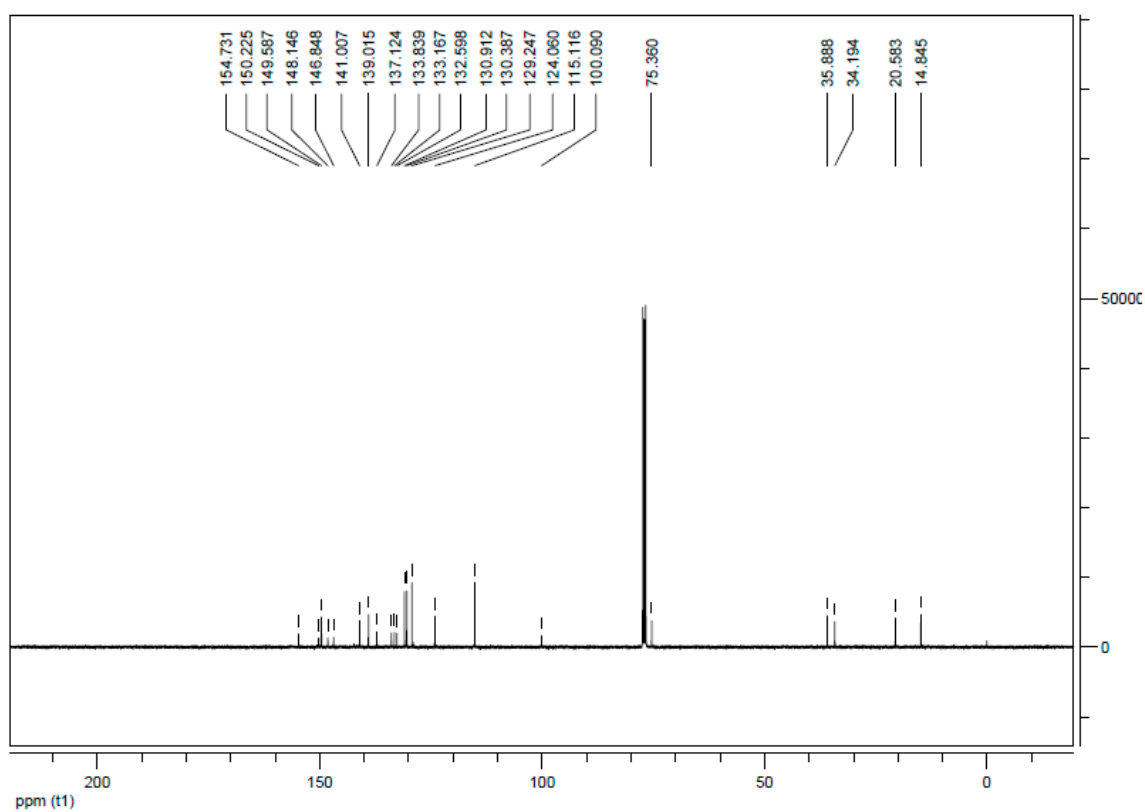
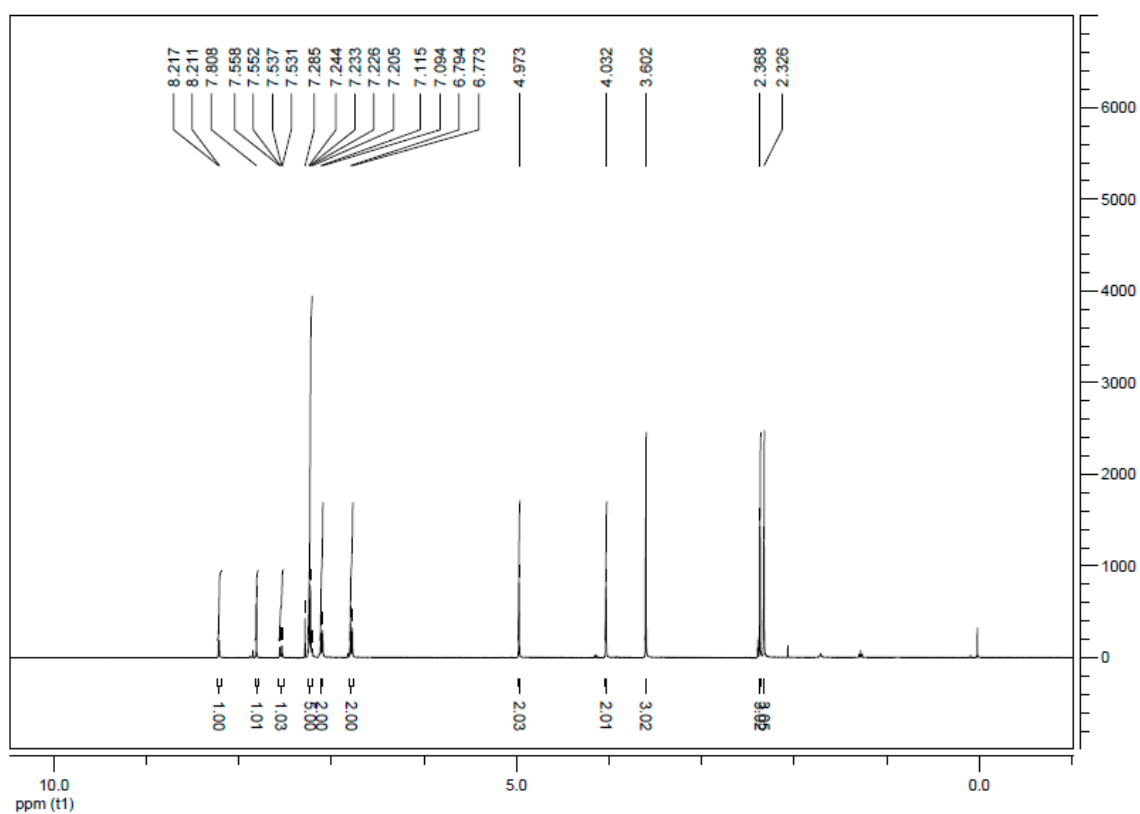


Figure S24. ¹³C-NMR of compound **9l** (100 MHz, CDCl₃).



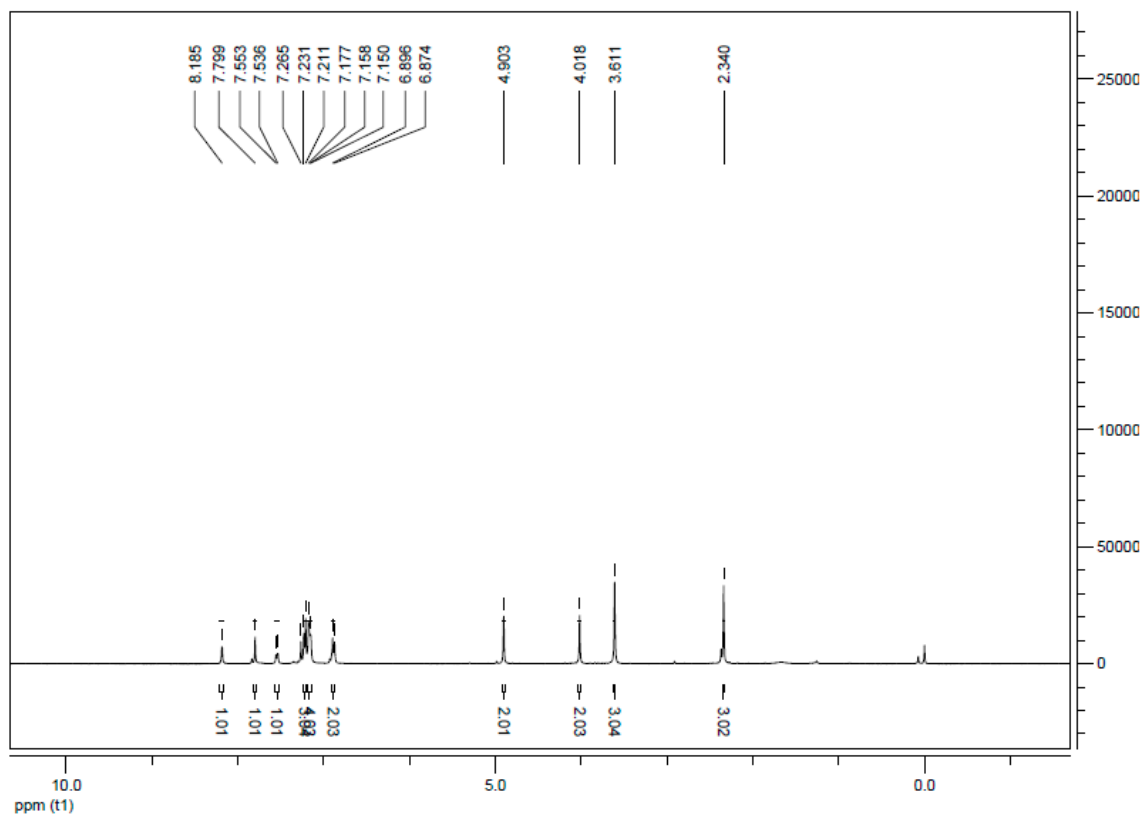


Figure S27. ¹H-NMR of compound 9n (400 MHz, CDCl₃).

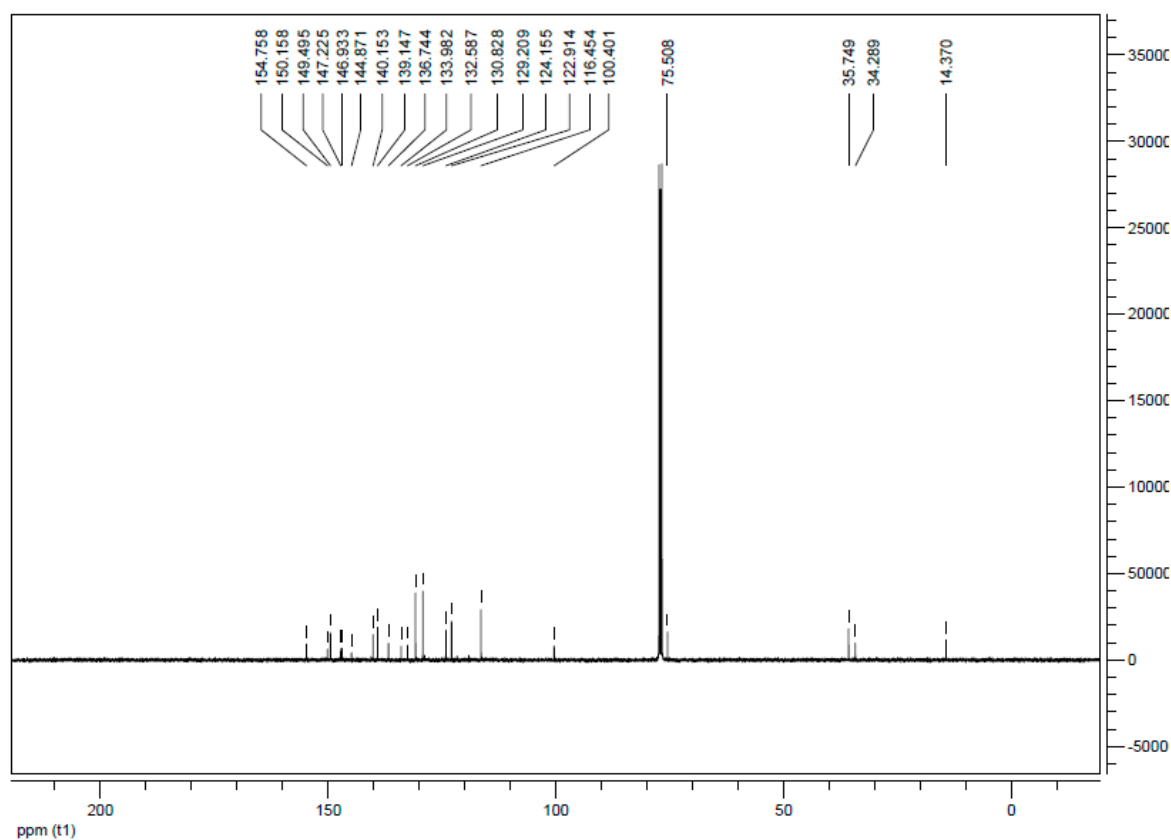


Figure S28. ¹³C-NMR of compound 9n (100 MHz, CDCl₃).

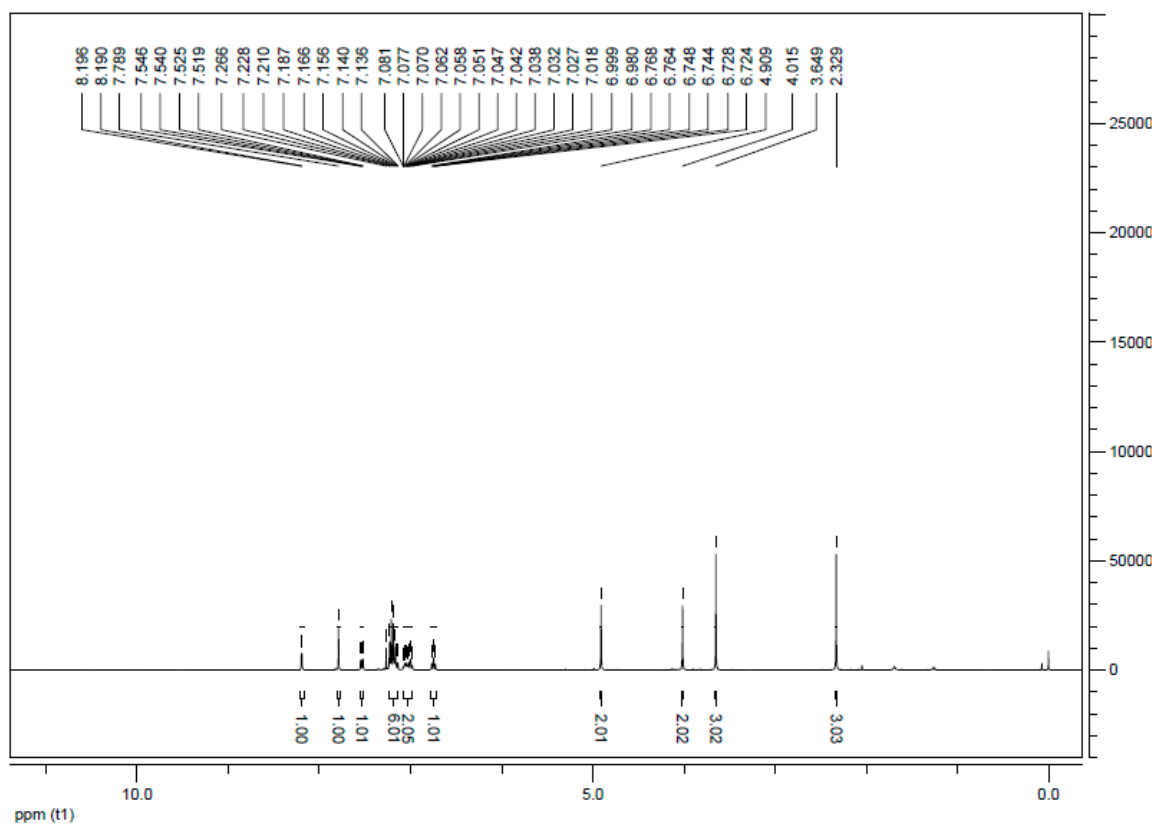


Figure S29. ¹H-NMR of compound **9o** (400 MHz, CDCl₃).

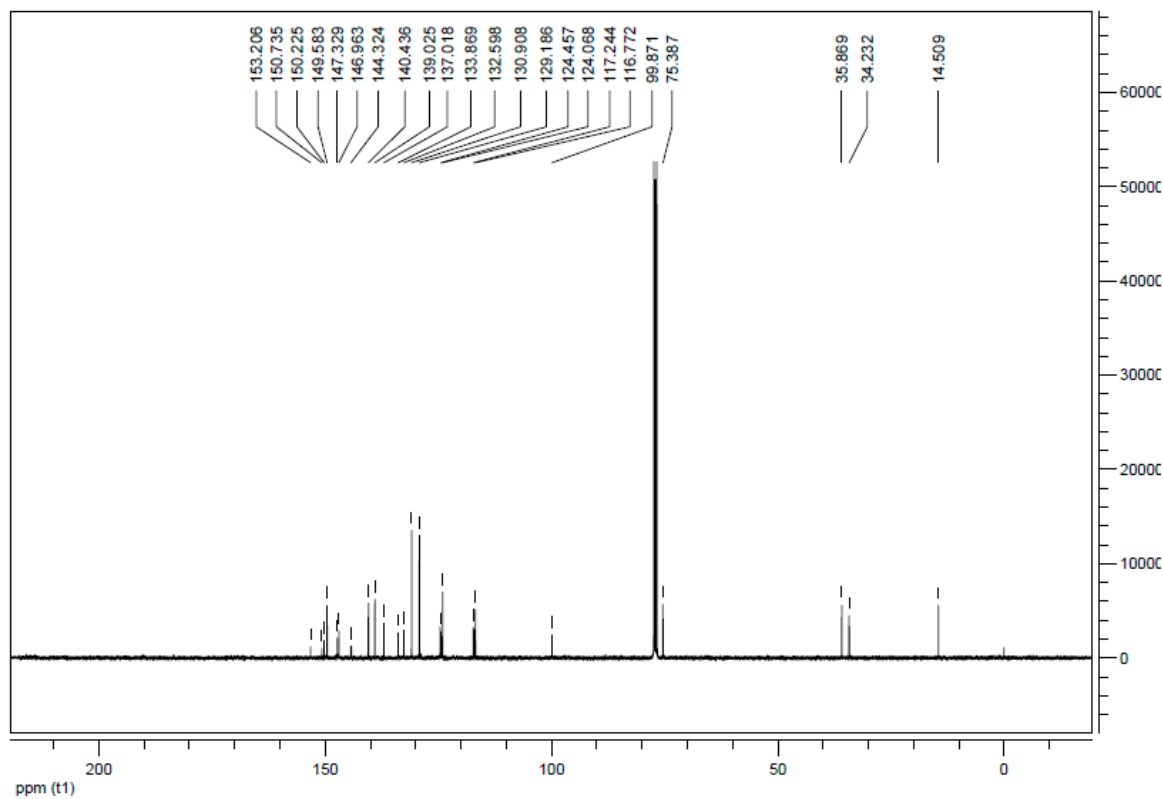


Figure S30. ¹³C-NMR of compound **9o** (100 MHz, CDCl₃).

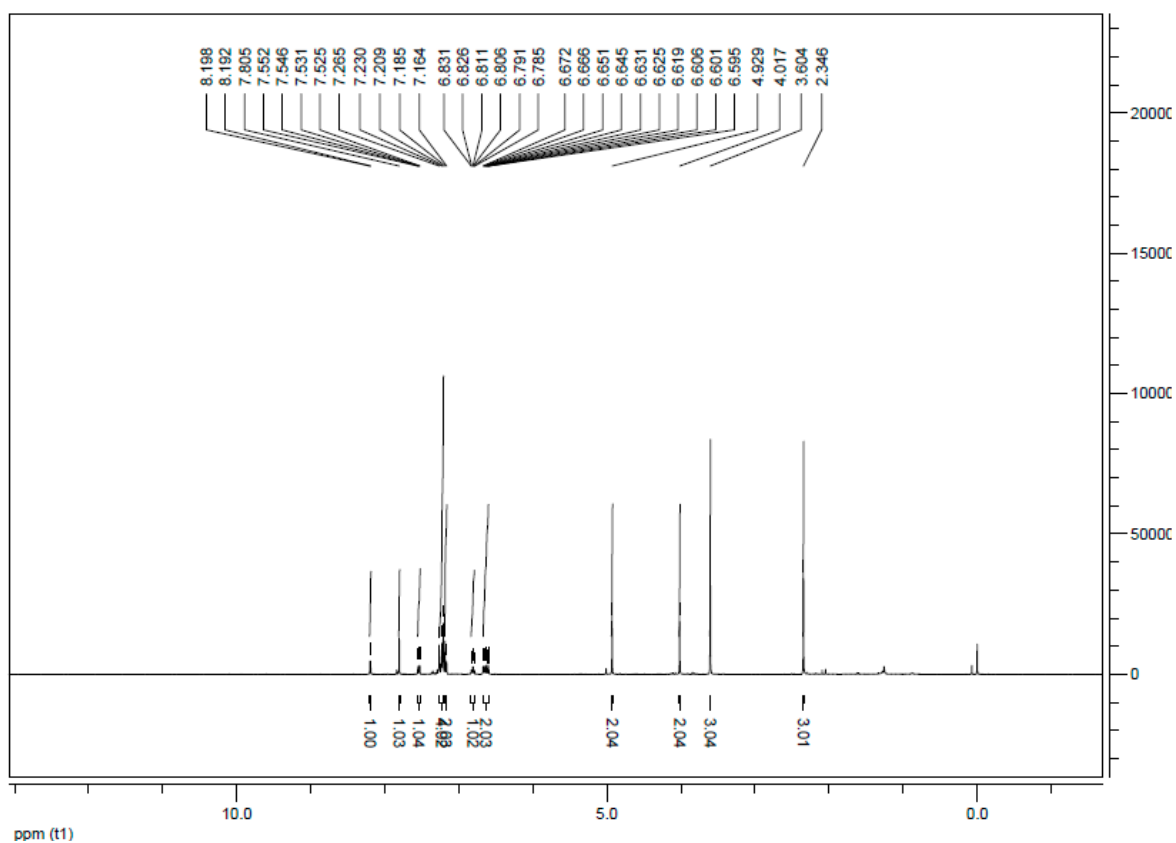


Figure S31. ¹H-NMR of compound **9p** (400 MHz, CDCl₃).

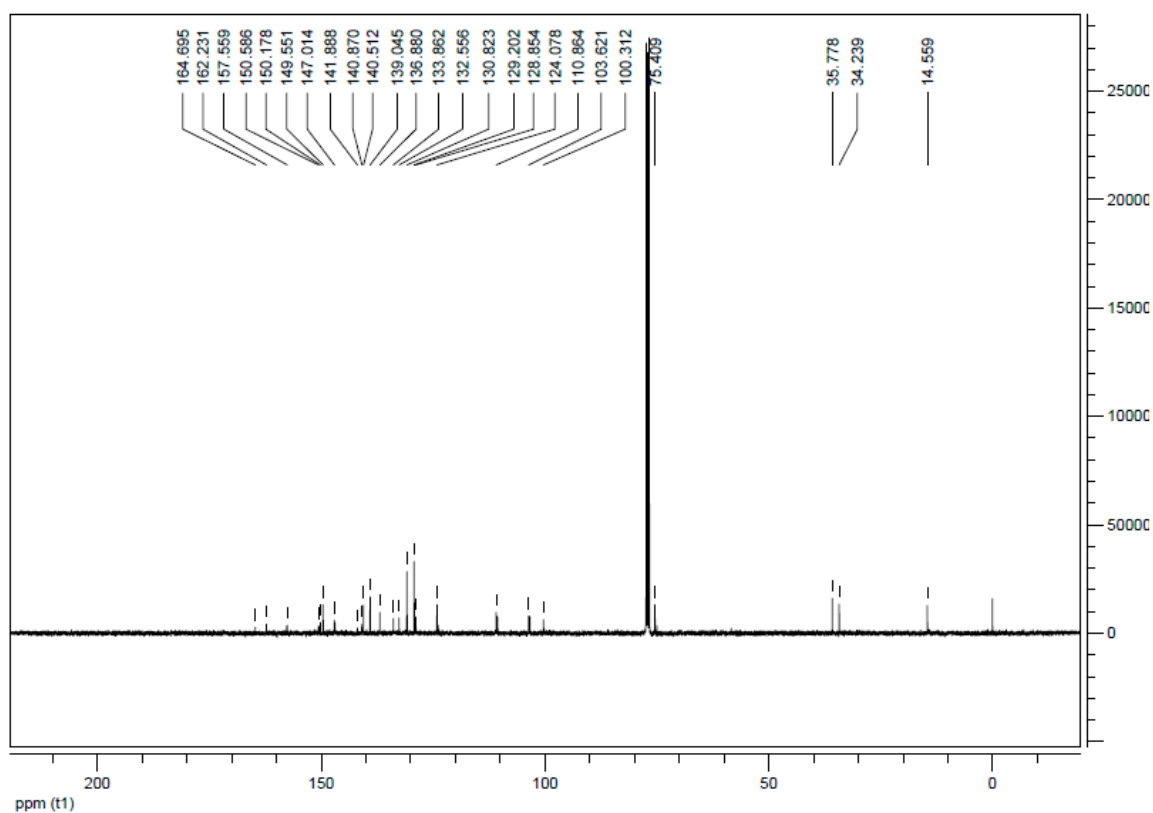


Figure S32. ¹³C-NMR of compound **9p** (100 MHz, CDCl₃).

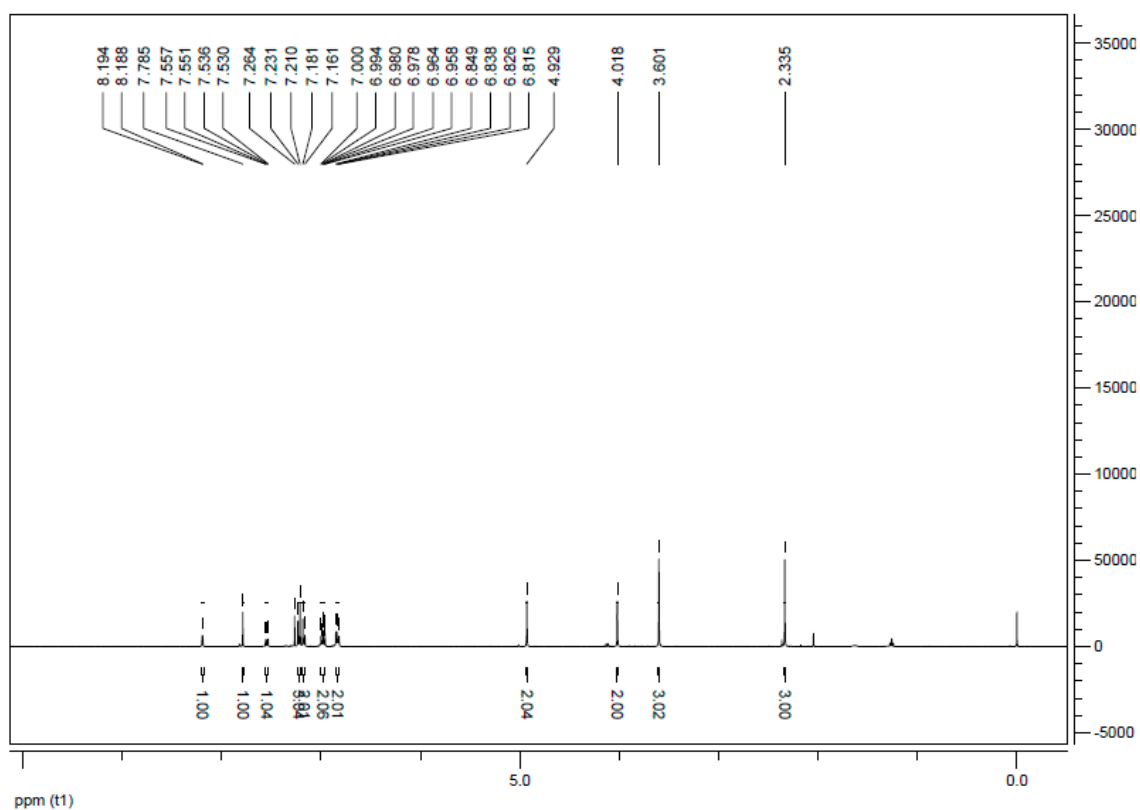


Figure S33. ¹H-NMR of compound **9q** (400 MHz, CDCl₃).

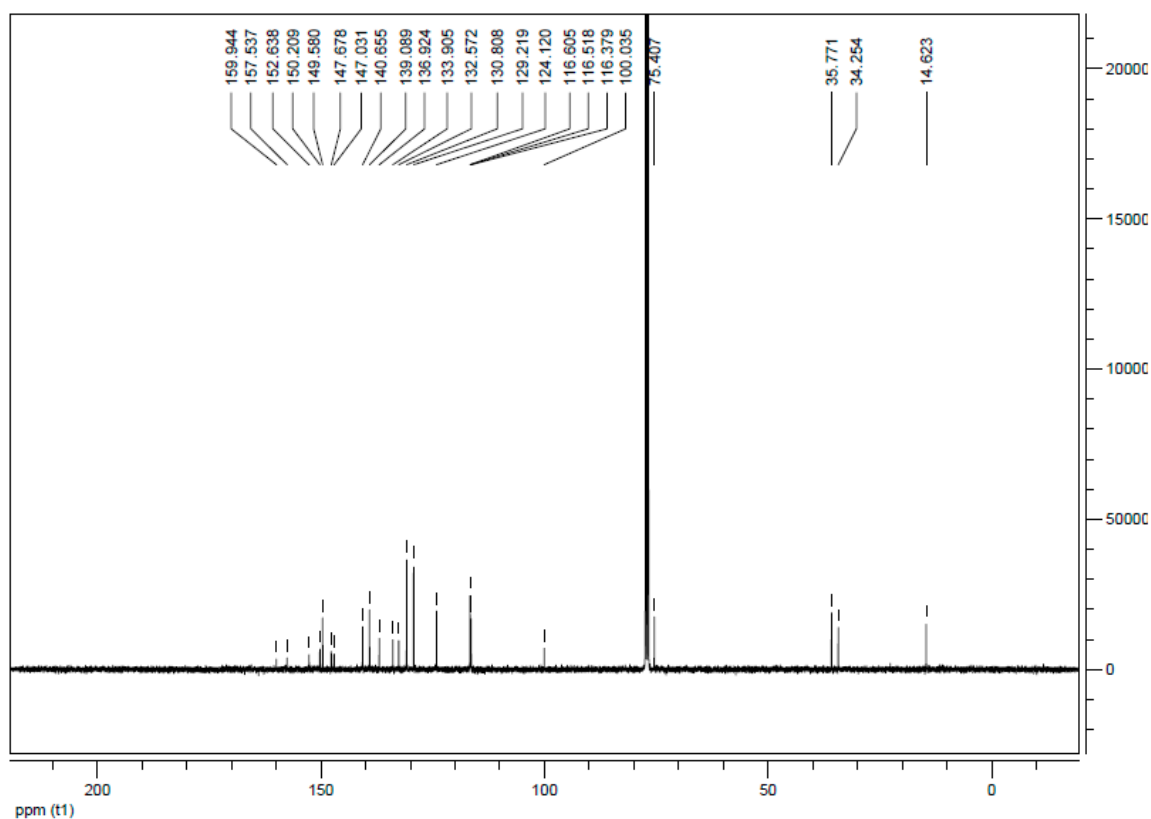


Figure S34. ¹³C-NMR of compound **9q** (100 MHz, CDCl₃).

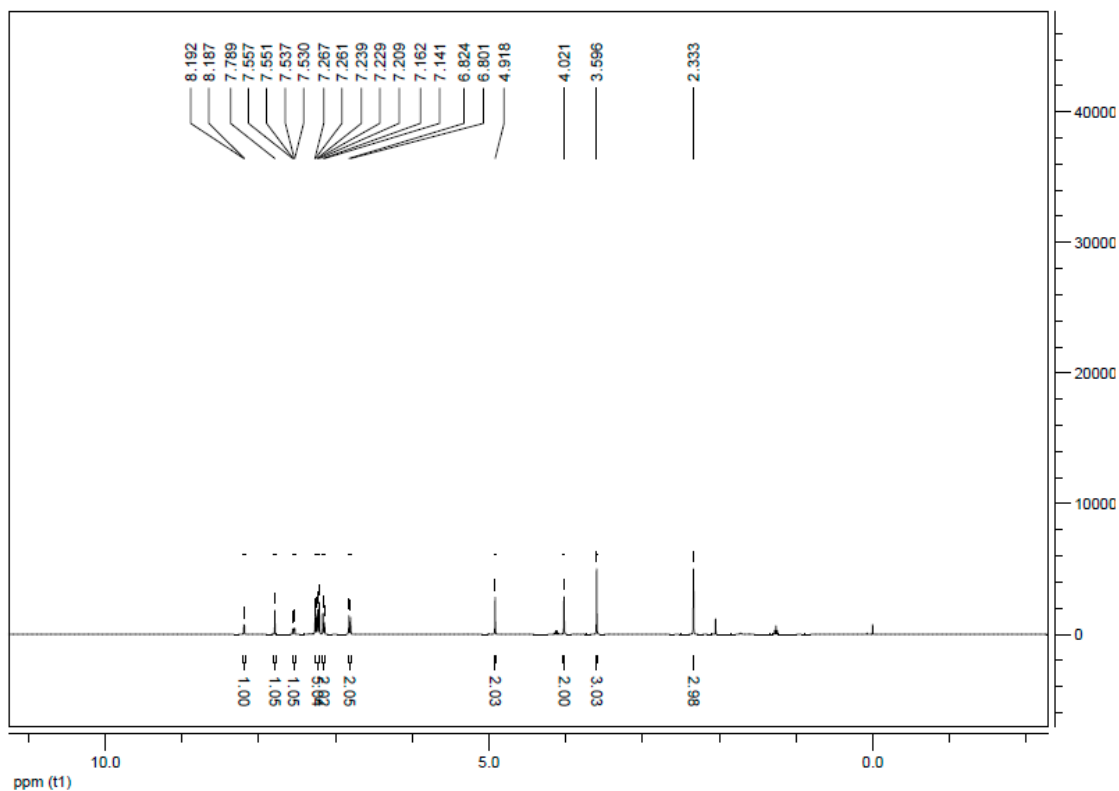


Figure S35. ¹H-NMR of compound 9r (400 MHz, CDCl₃).

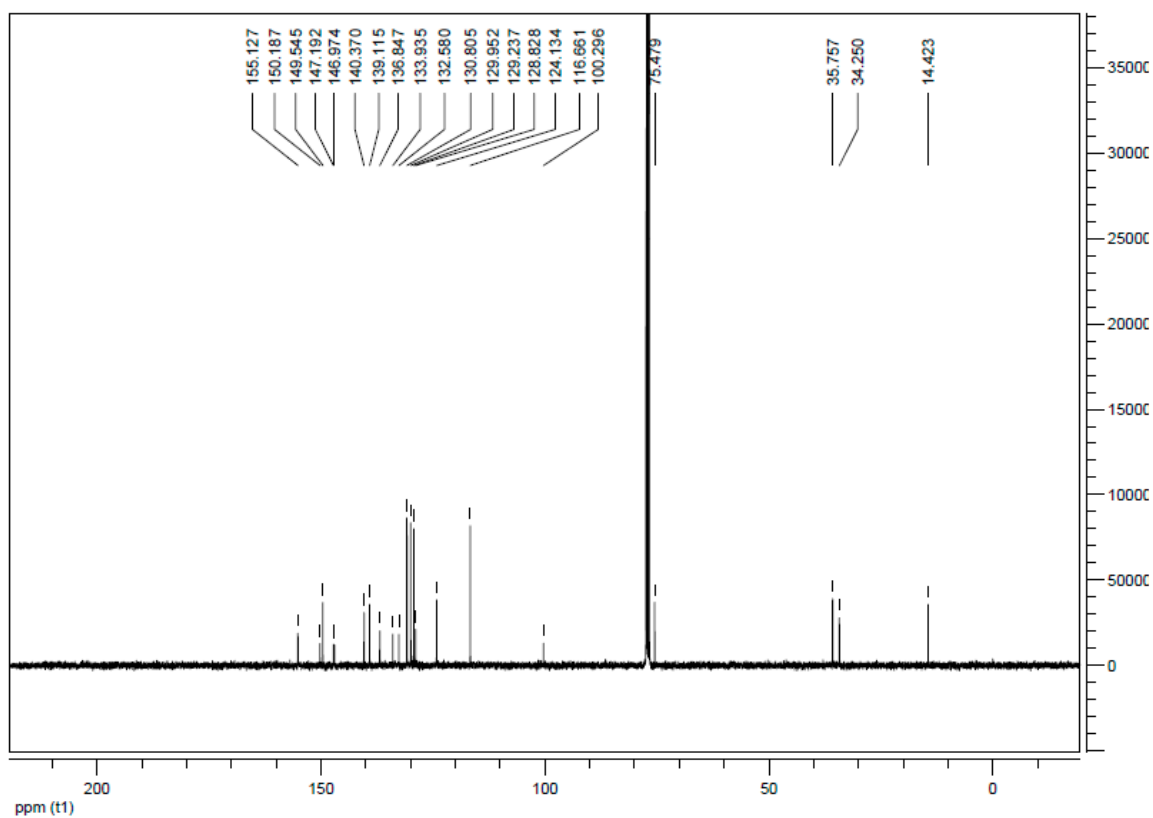


Figure S36. ¹³C-NMR of compound 9r (100 MHz, CDCl₃).

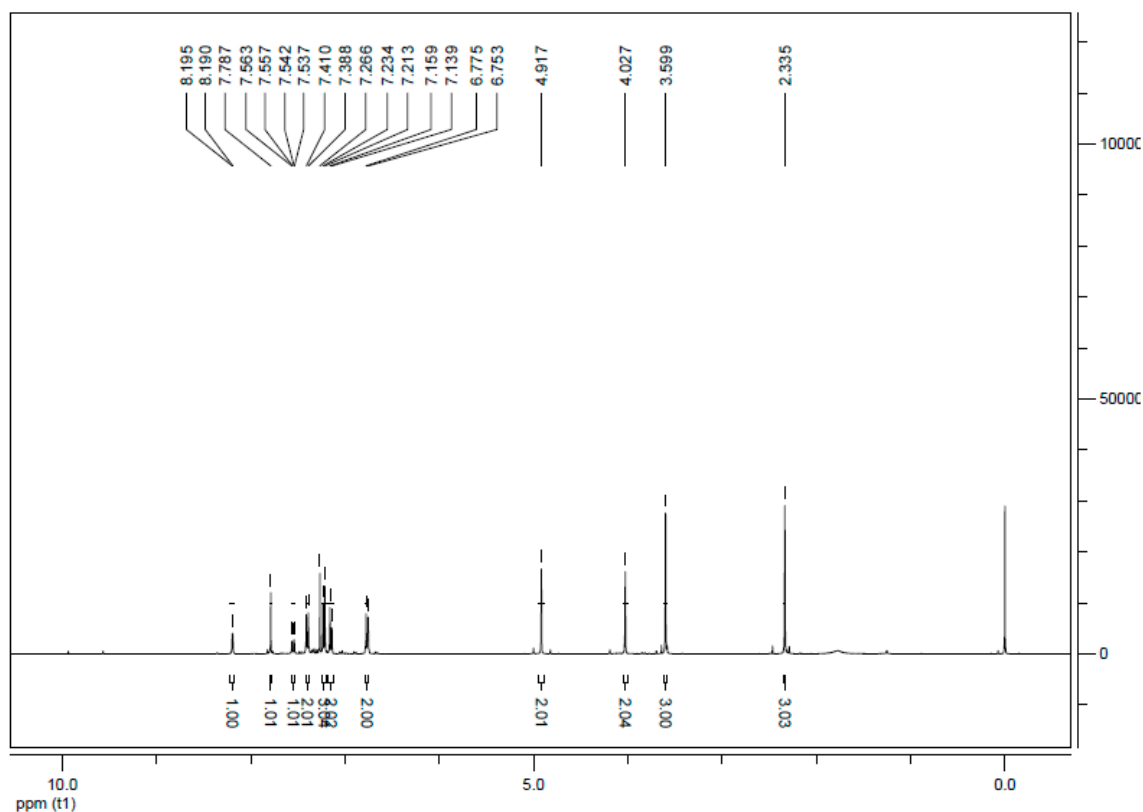


Figure S37. ¹H-NMR of compound 9s (400 MHz, CDCl₃).

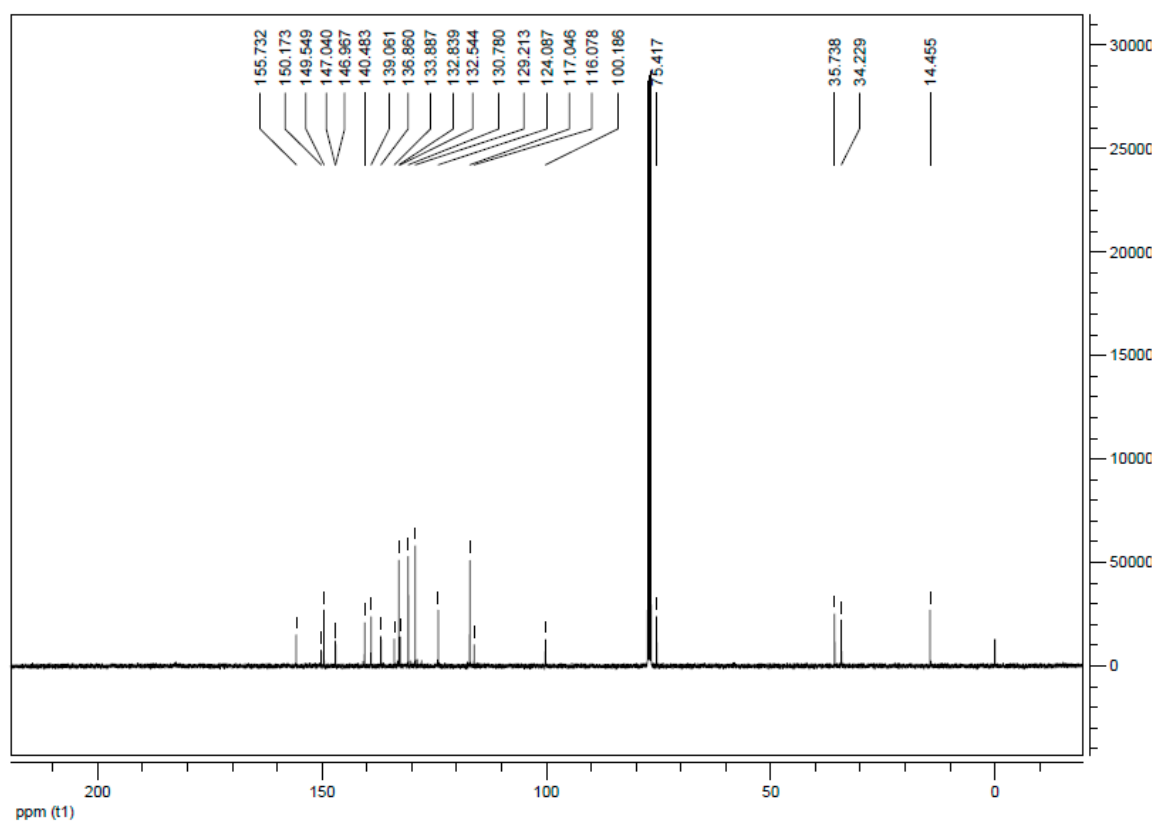


Figure S38. ¹³C-NMR of compound 9s (100 MHz, CDCl₃).

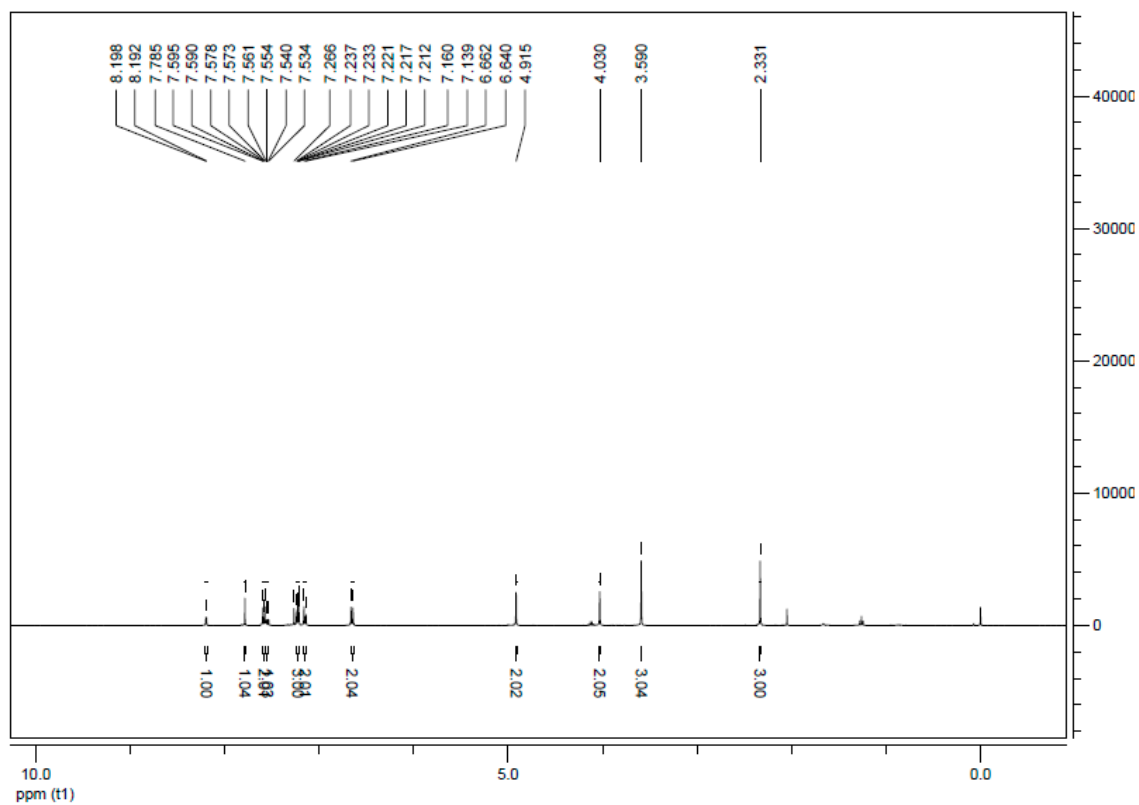


Figure S39. ^1H -NMR of compound **9t** (400 MHz, CDCl_3).

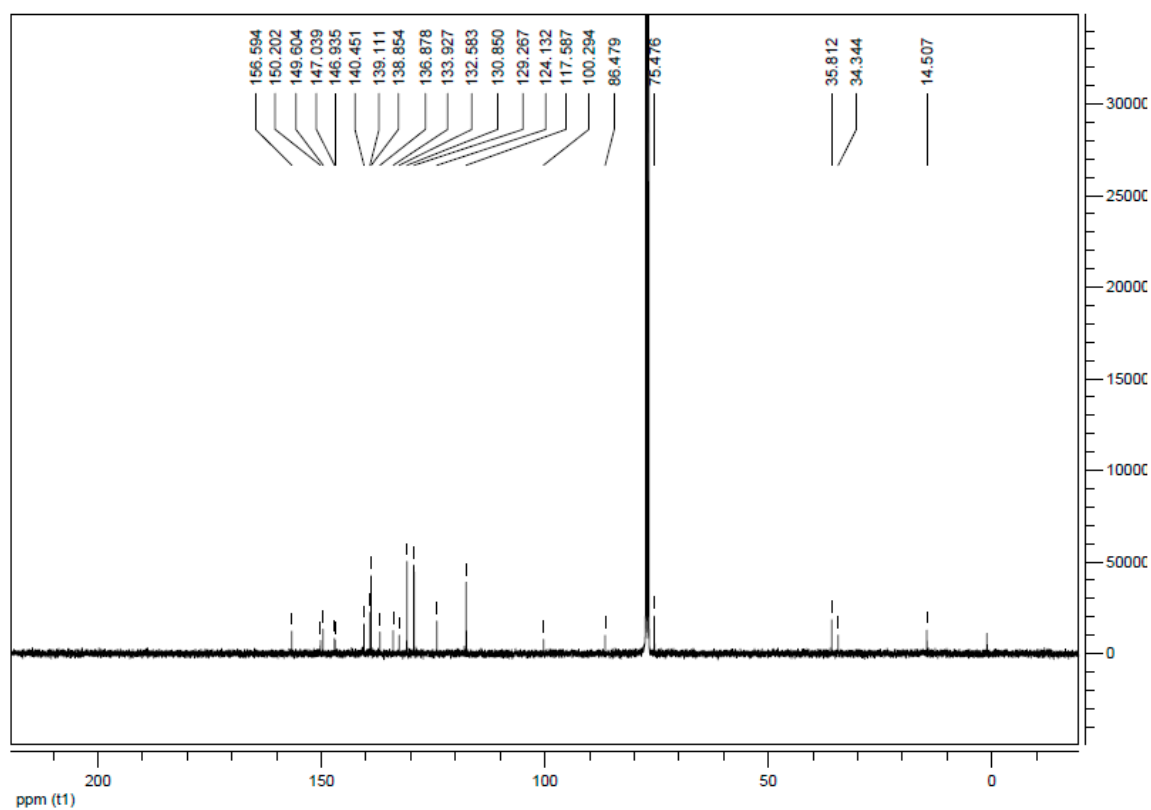


Figure S40. ^{13}C -NMR of compound **9t** (100 MHz, CDCl_3).

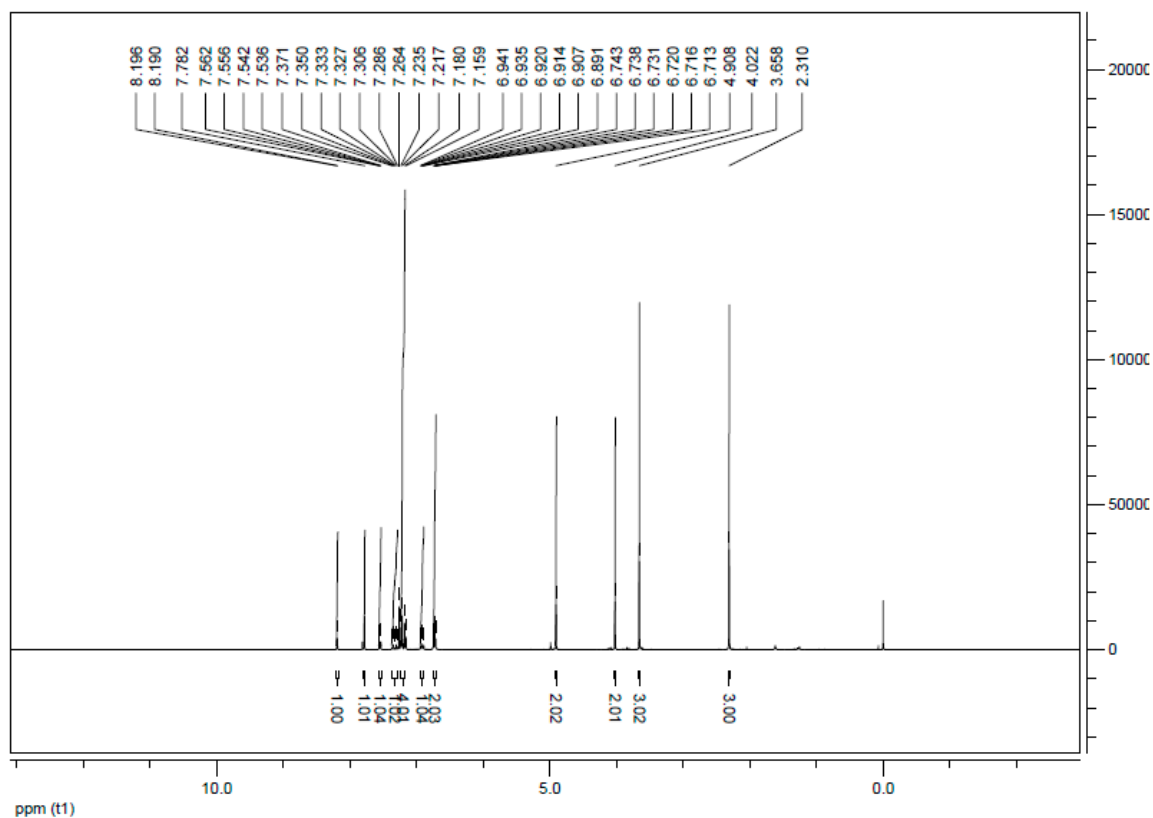


Figure S41. ^1H -NMR of compound **9u** (400 MHz, CDCl_3).

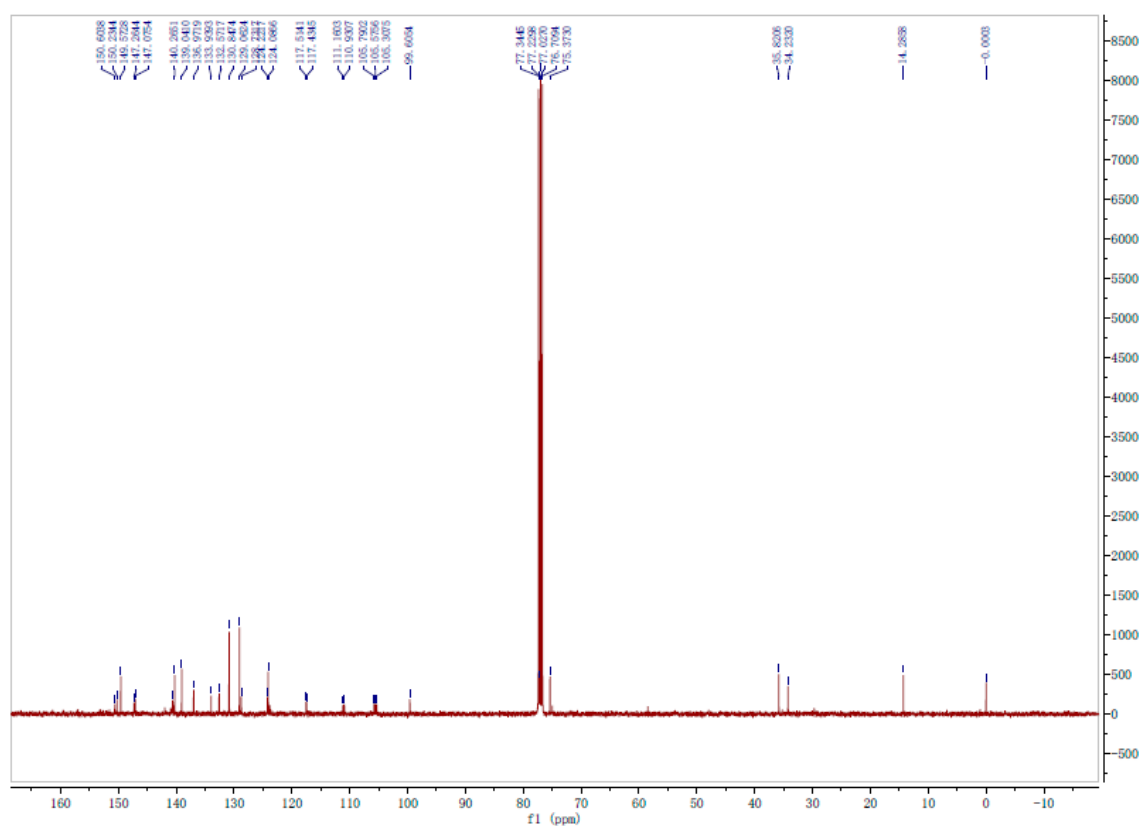


Figure S42. ^{13}C -NMR of compound **9u** (100 MHz, CDCl_3).

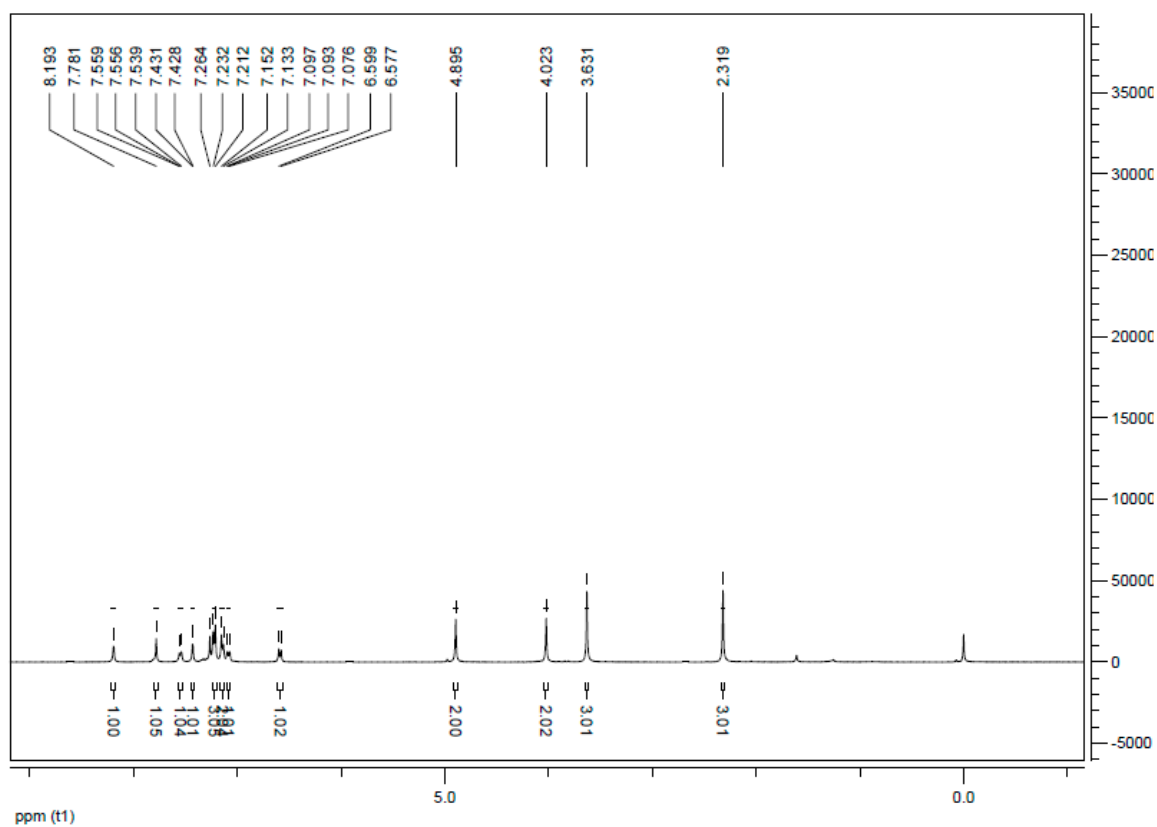


Figure S43. ¹H-NMR of compound **9v** (400 MHz, CDCl₃).

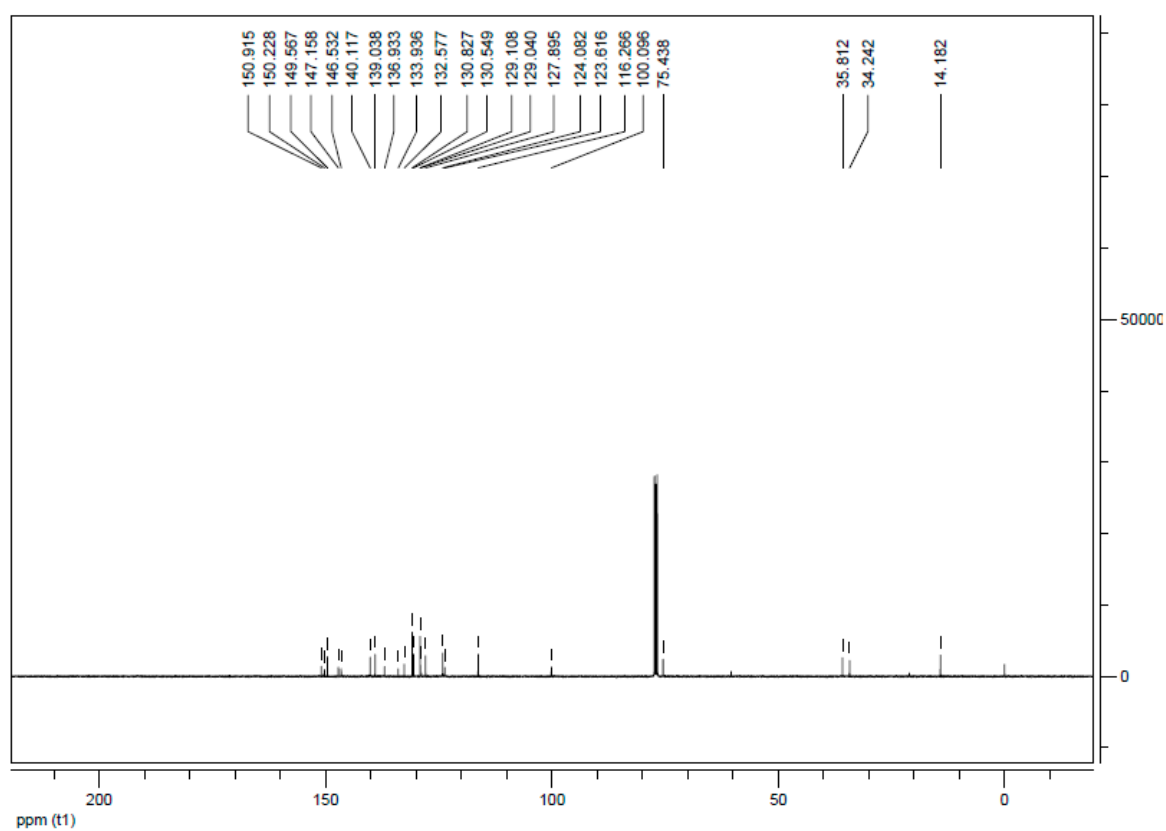


Figure S44. ¹³C-NMR of compound **9v** (100 MHz, CDCl₃).

13C NMR spectrum of compound 10. The x-axis is labeled 'ppm (t1)' and ranges from 0 to 200. The y-axis represents intensity, with a scale from 0 to 35000. The spectrum shows a large peak at 101.611 ppm, a smaller peak at 75.464 ppm, and several peaks in the aromatic region between 120 and 155 ppm. Other peaks are visible at 35.876, 21.007, 20.573, and 15.087 ppm.

Chemical Shift (ppm)
154.757
150.214
149.568
148.072
147.507
140.823
139.034
137.056
135.122
133.904
133.101
132.593
130.908
130.337
129.651
129.240
128.908
124.073
122.125
115.315
101.611
75.464
35.876
21.007
20.573
15.087

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