

Supplementary material

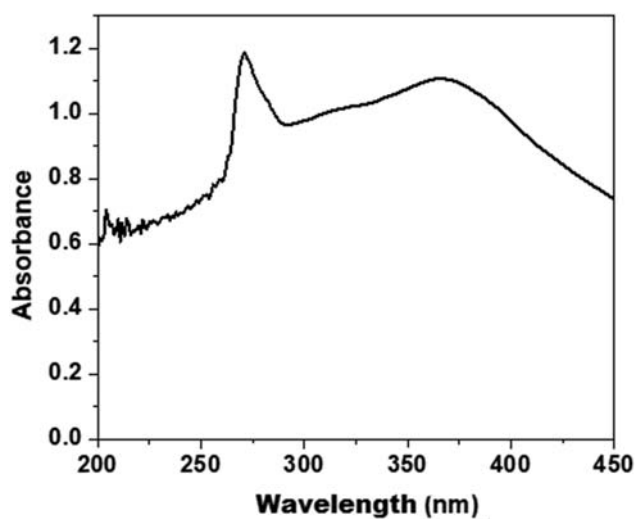


Figure 1: UV spectrum of compound 4a in methanol as solvent.

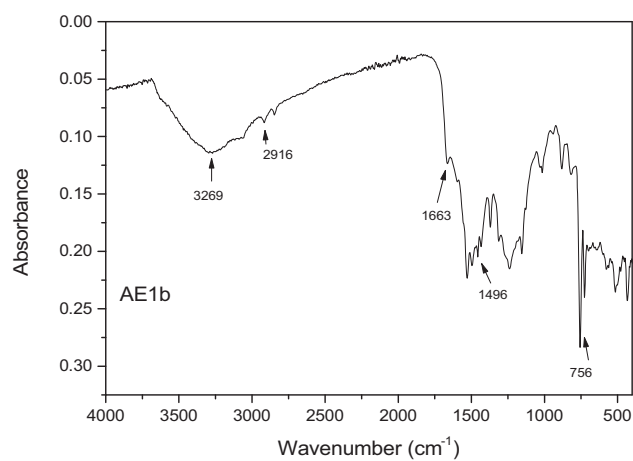


Figure 2: IR spectrum of compound 4a.

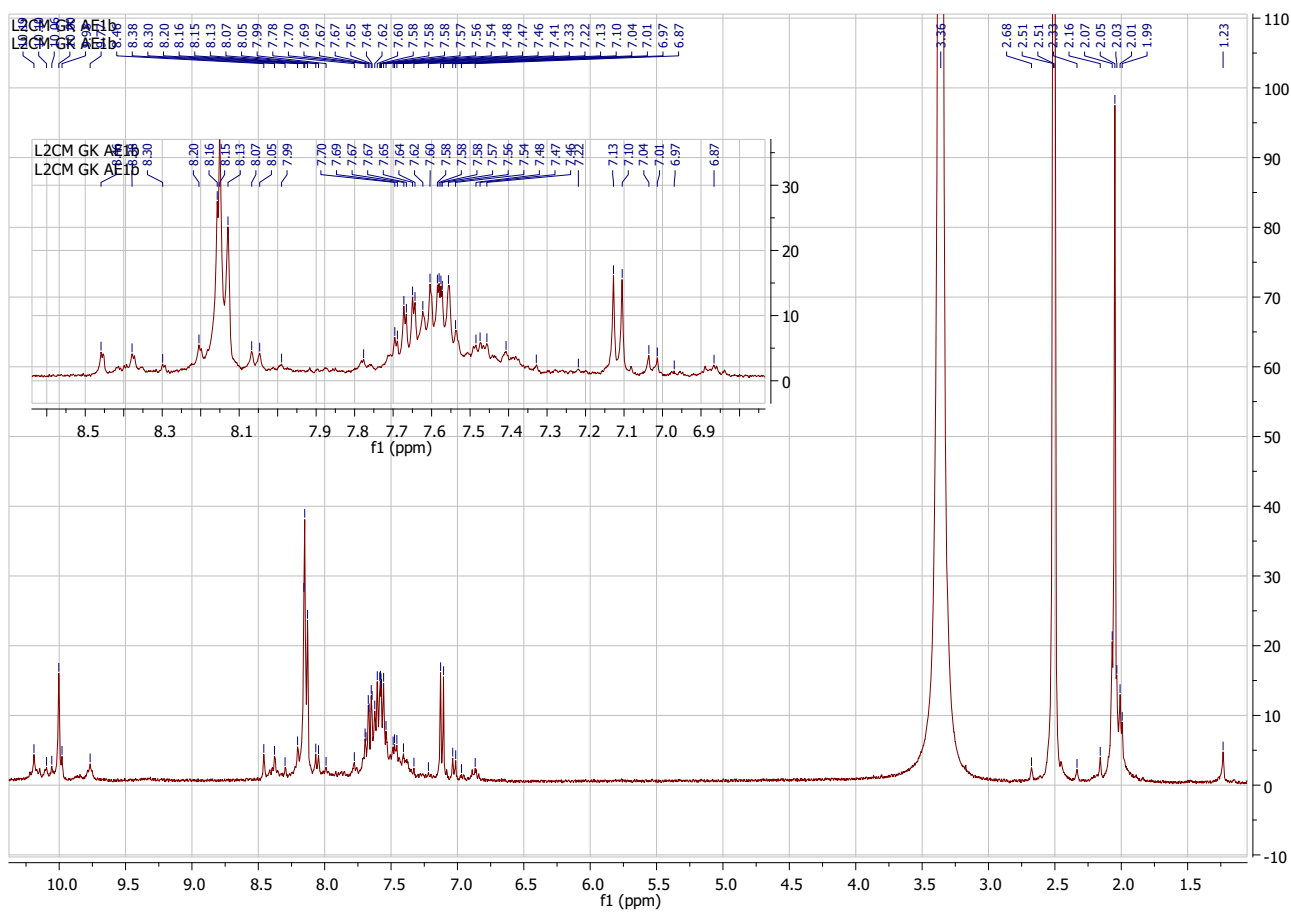


Figure 3: ^1H -NMR ($\text{DMSO}-d_6$, 400 MHz) spectrum of compound **4a**.

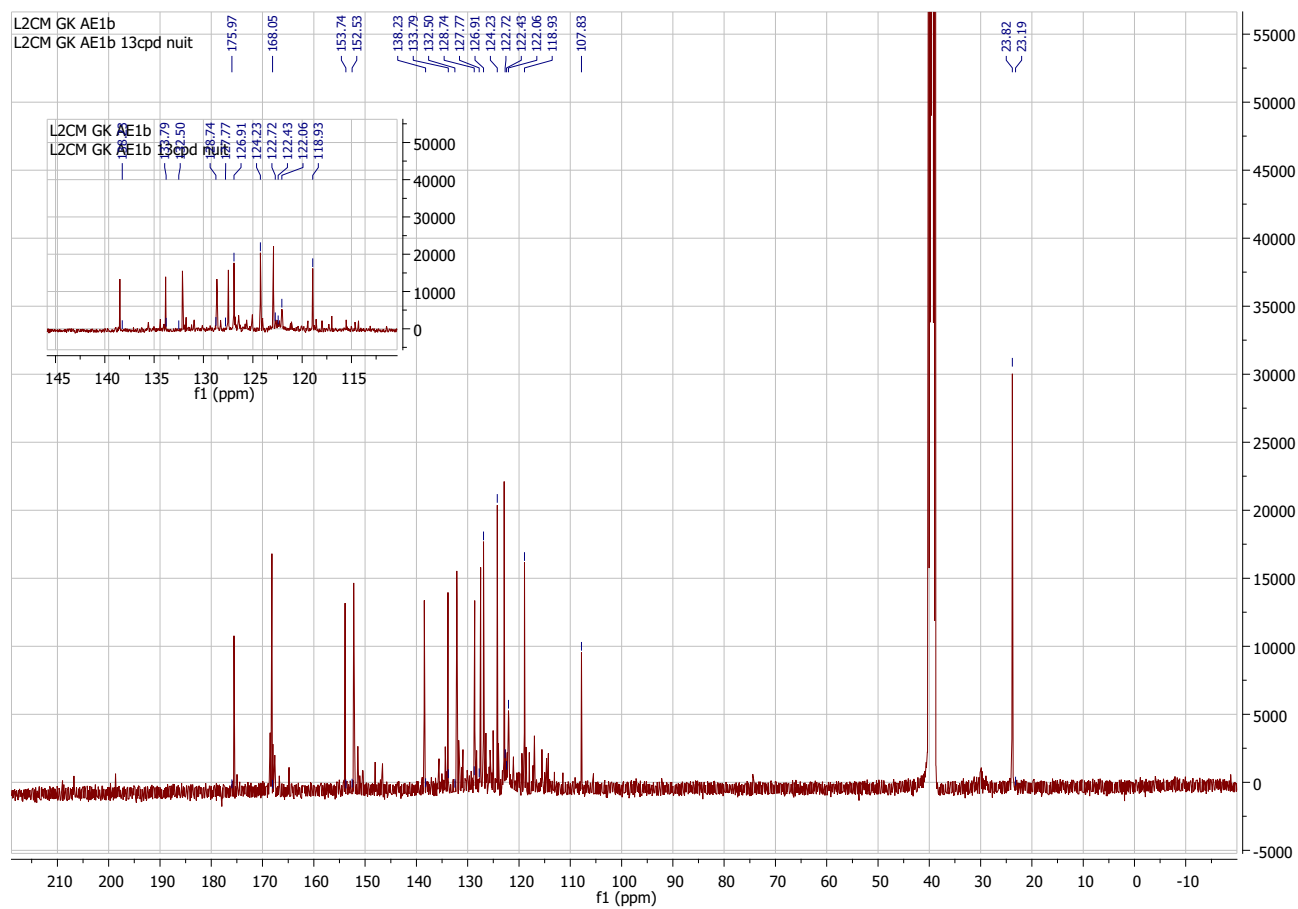


Figure 4: $^{13}\text{C}(\text{H})$ -NMR ^1H ($\text{DMSO-}d_6$, 100 MHz) of compound **4a**.

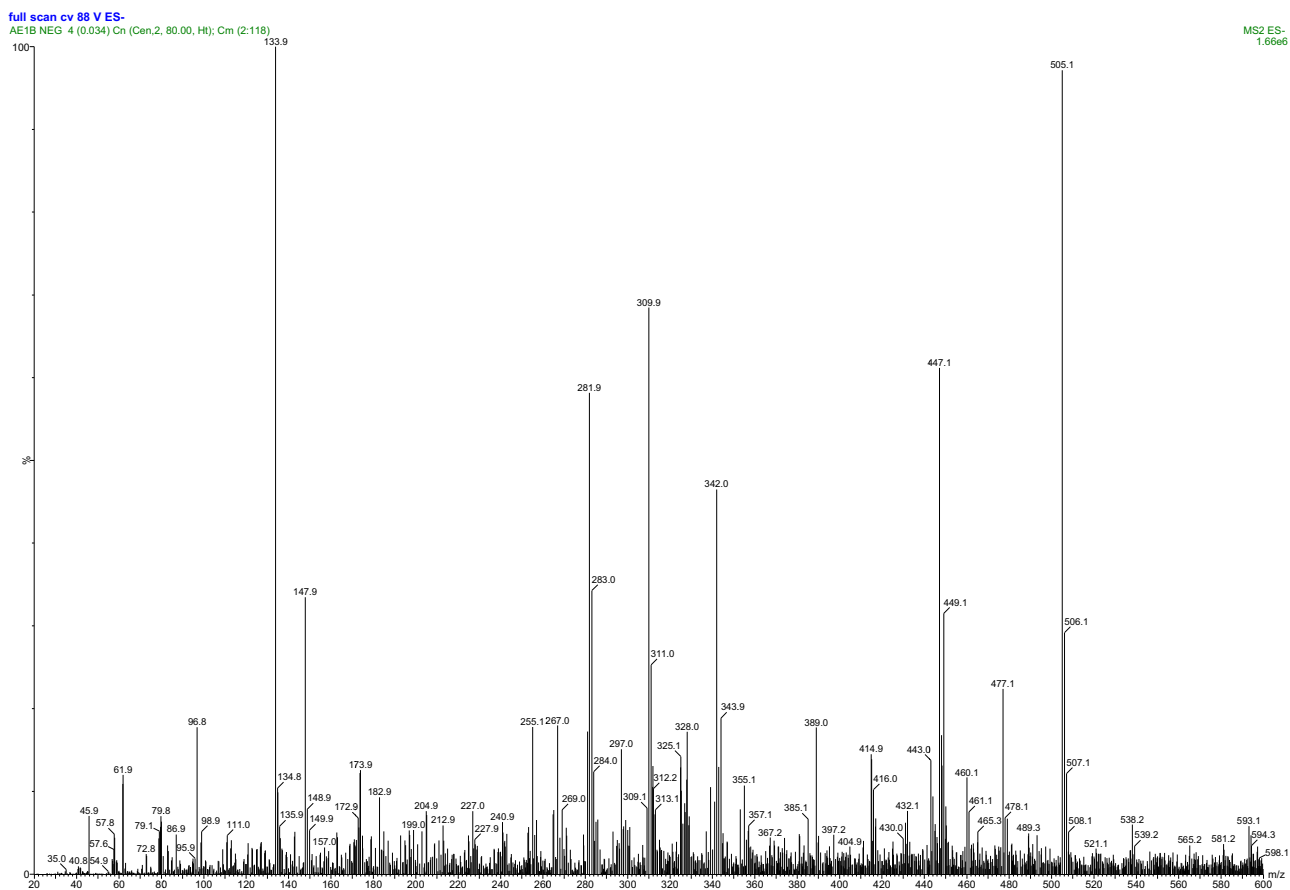


Figure 5: HRMS ESI-Positive mode of compound 4a.

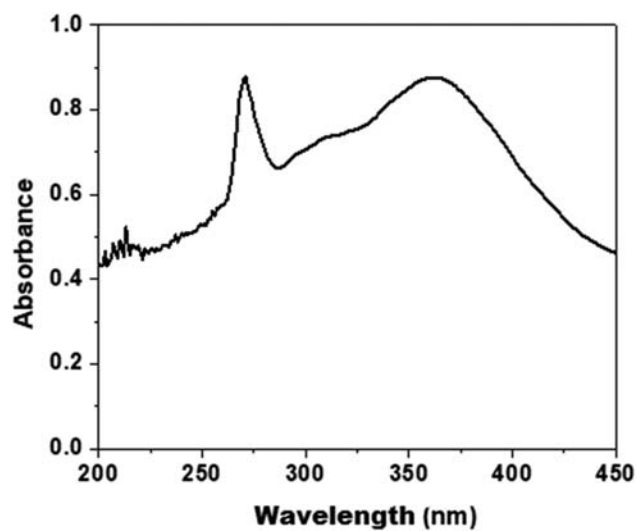


Figure 6: UV spectrum of compound 4a' in methanol as solvent.

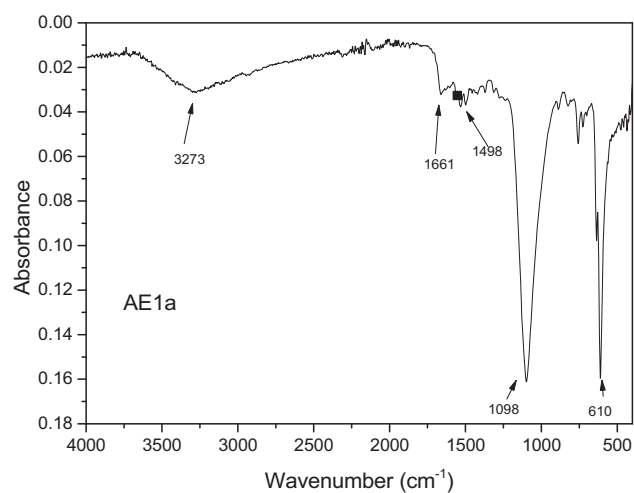


Figure 7: IR spectrum of compound 4a'.

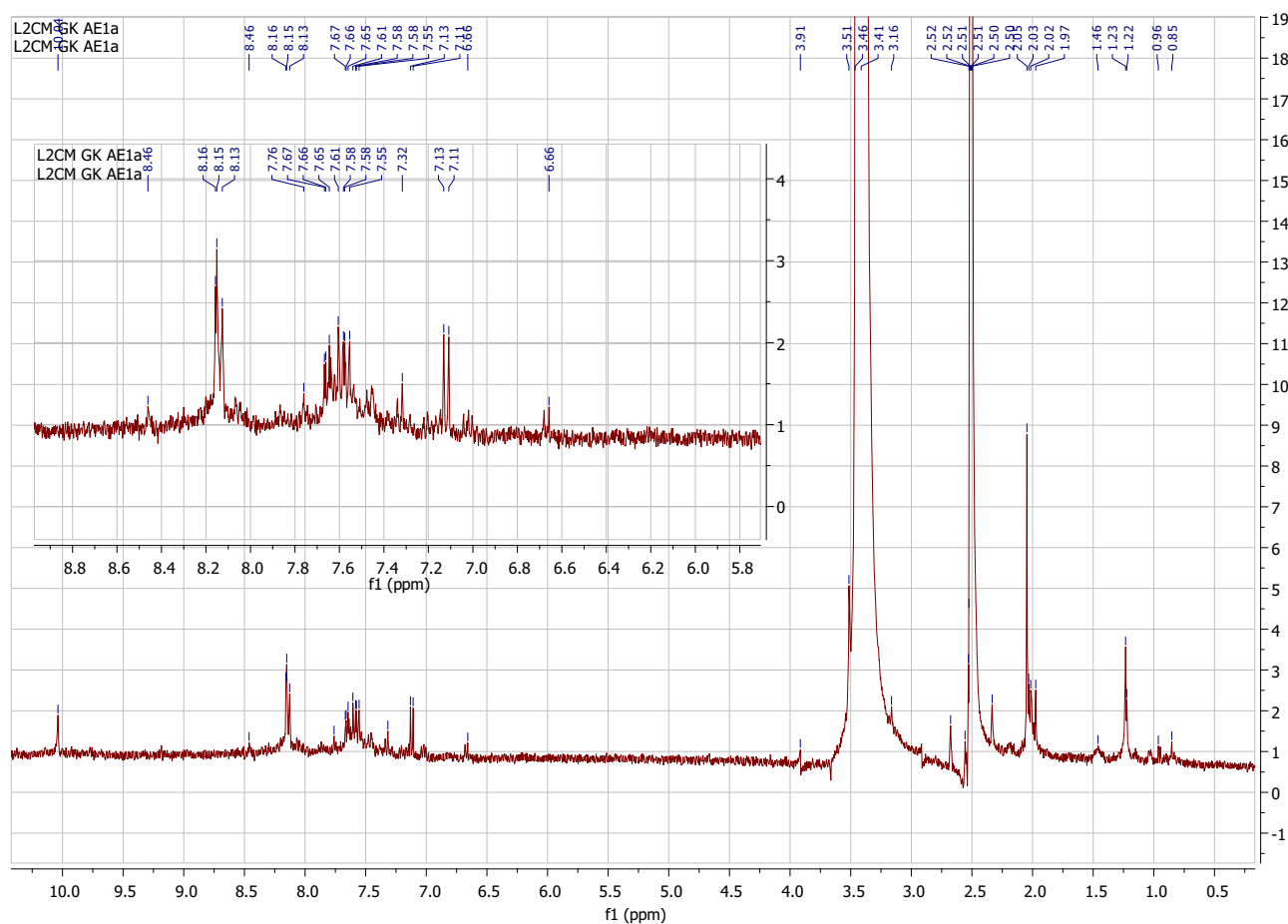


Figure 8: 1H-NMR (DMSO-d₆, 400 MHz) spectrum of compound 4a'.

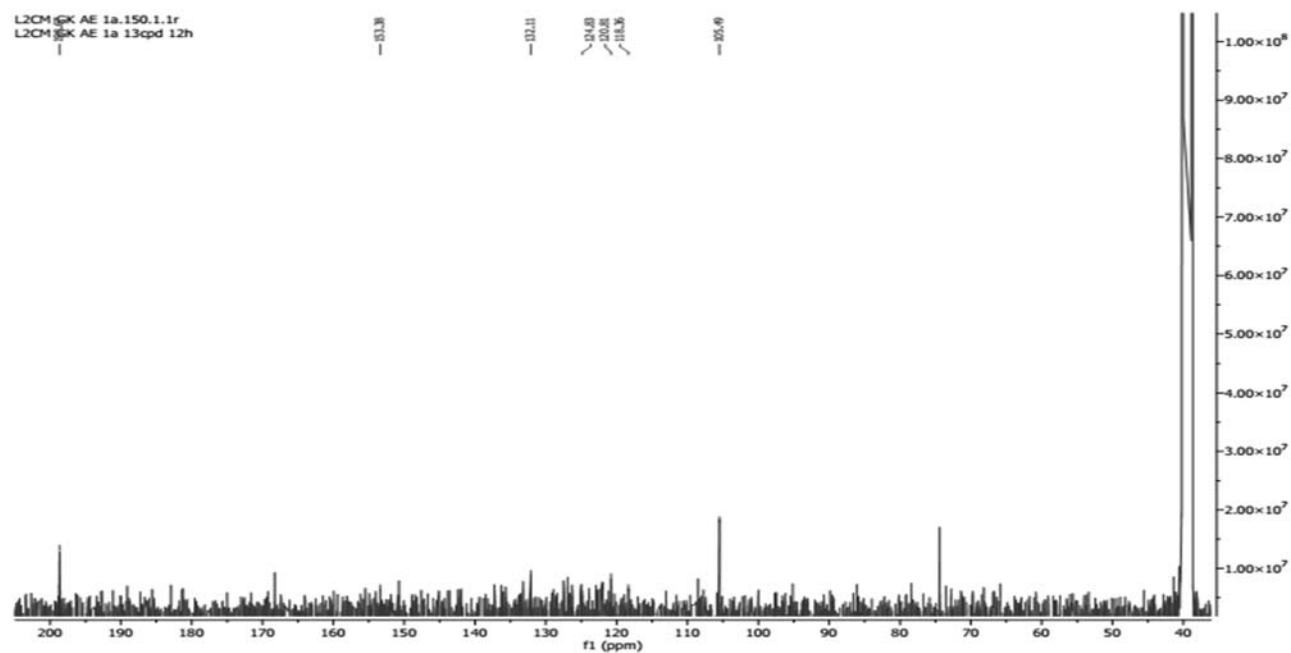
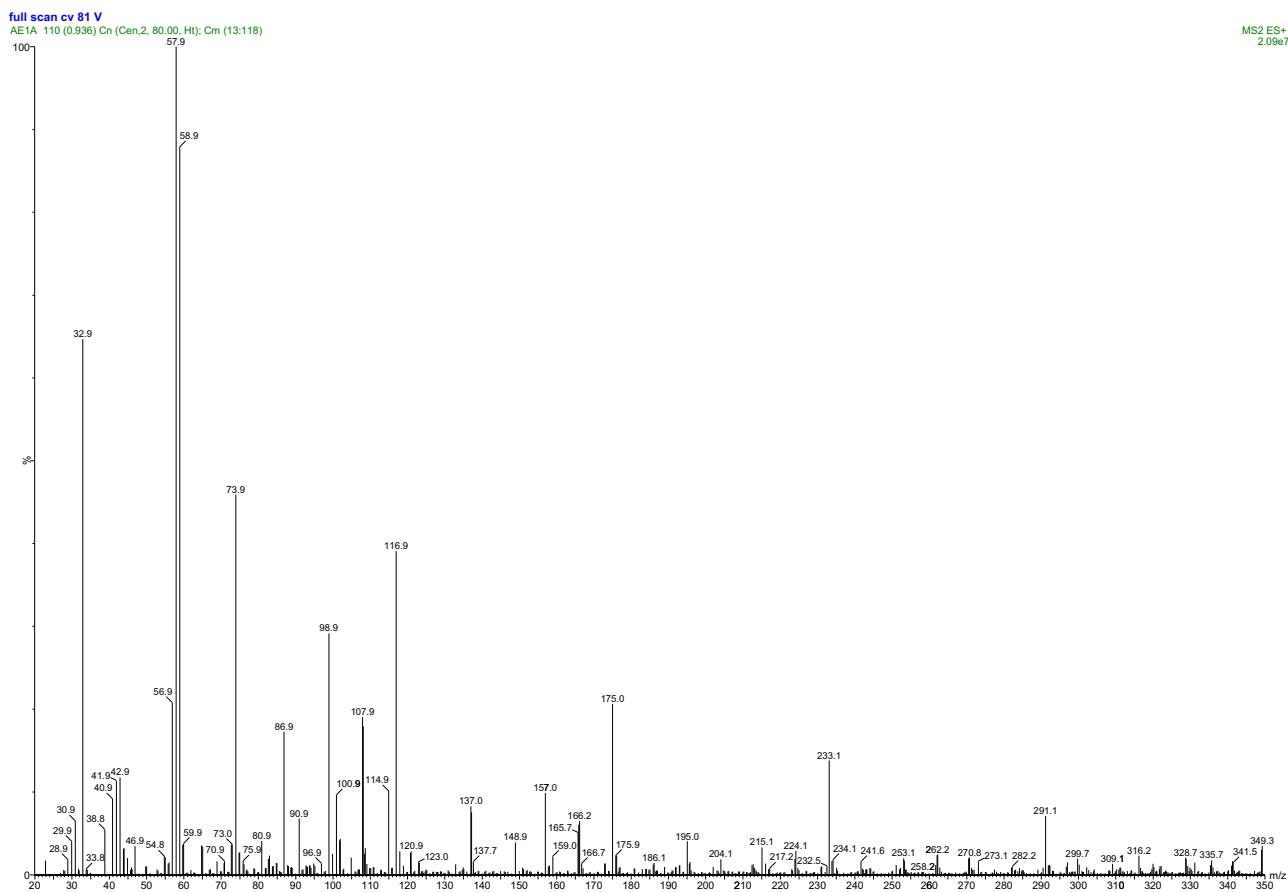
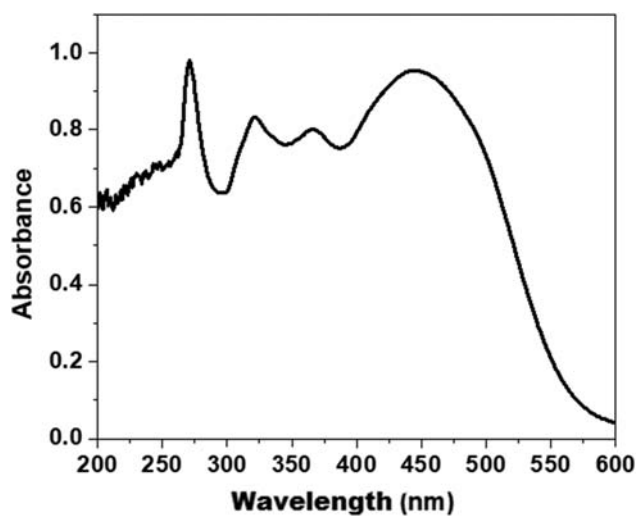
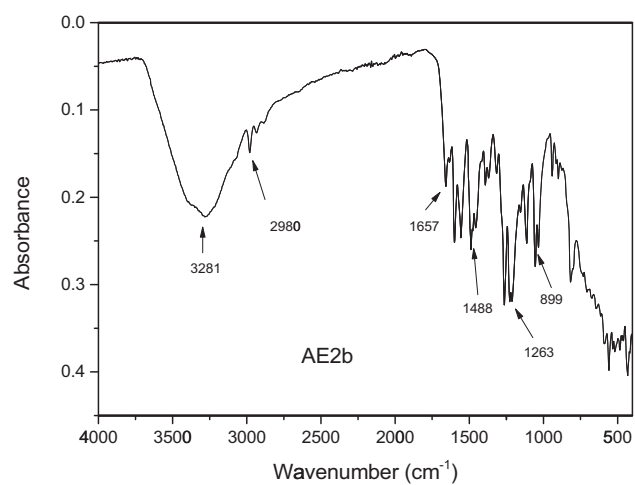


Figure 9: 13C-NMR (DMSO-d₆, 100 MHz) spectrum of compound 4a'.

Figure 10: HRMS ESI-Positive mode of compound **4a'**.Figure 11: UV spectrum of compound **4b** in methanol as solvent.Figure 12: IR spectrum of compound **4b**.

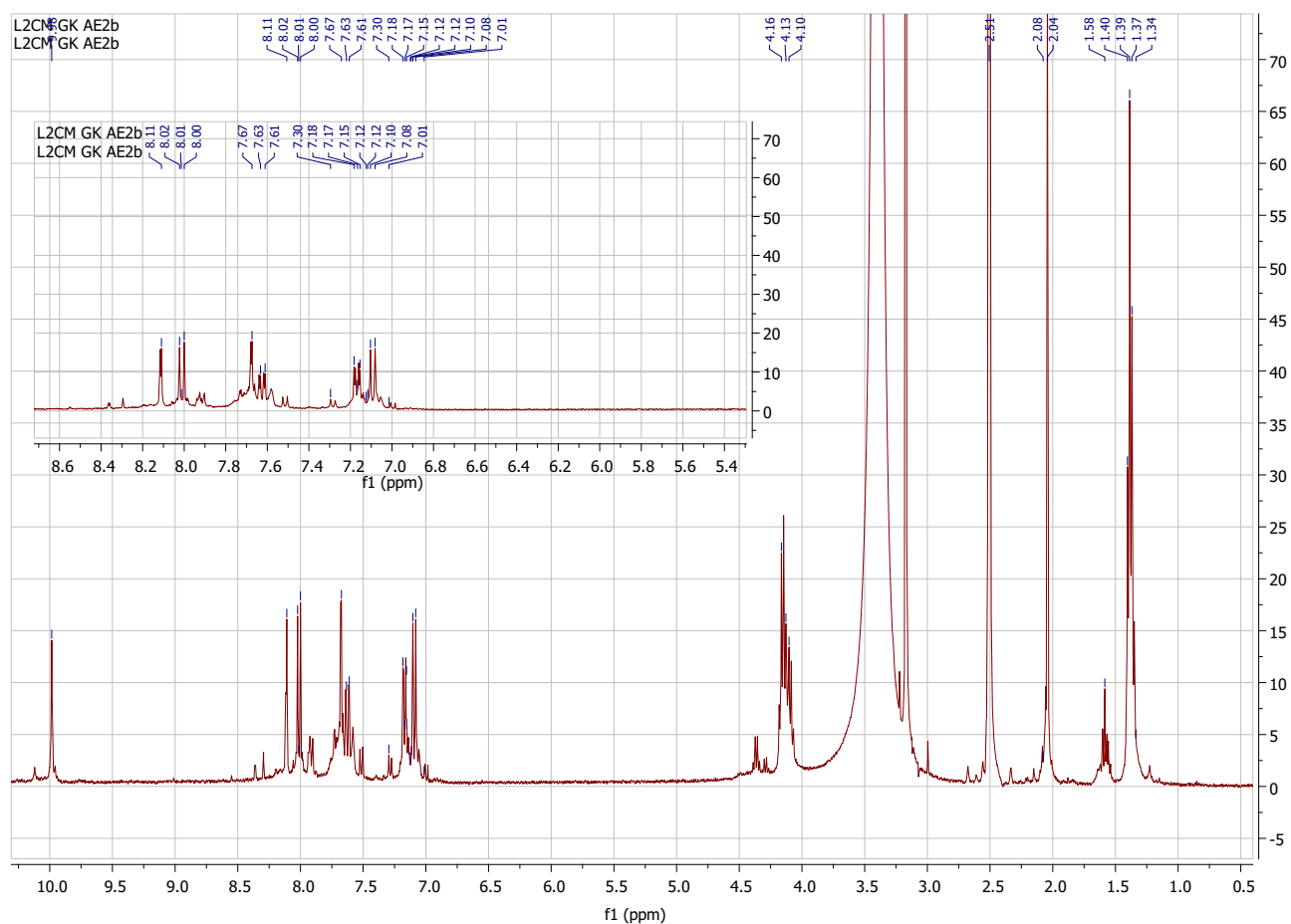


Figure 13: ^1H -NMR ($\text{DMSO}-d_6$, 400 MHz) spectrum of compound **4b**.

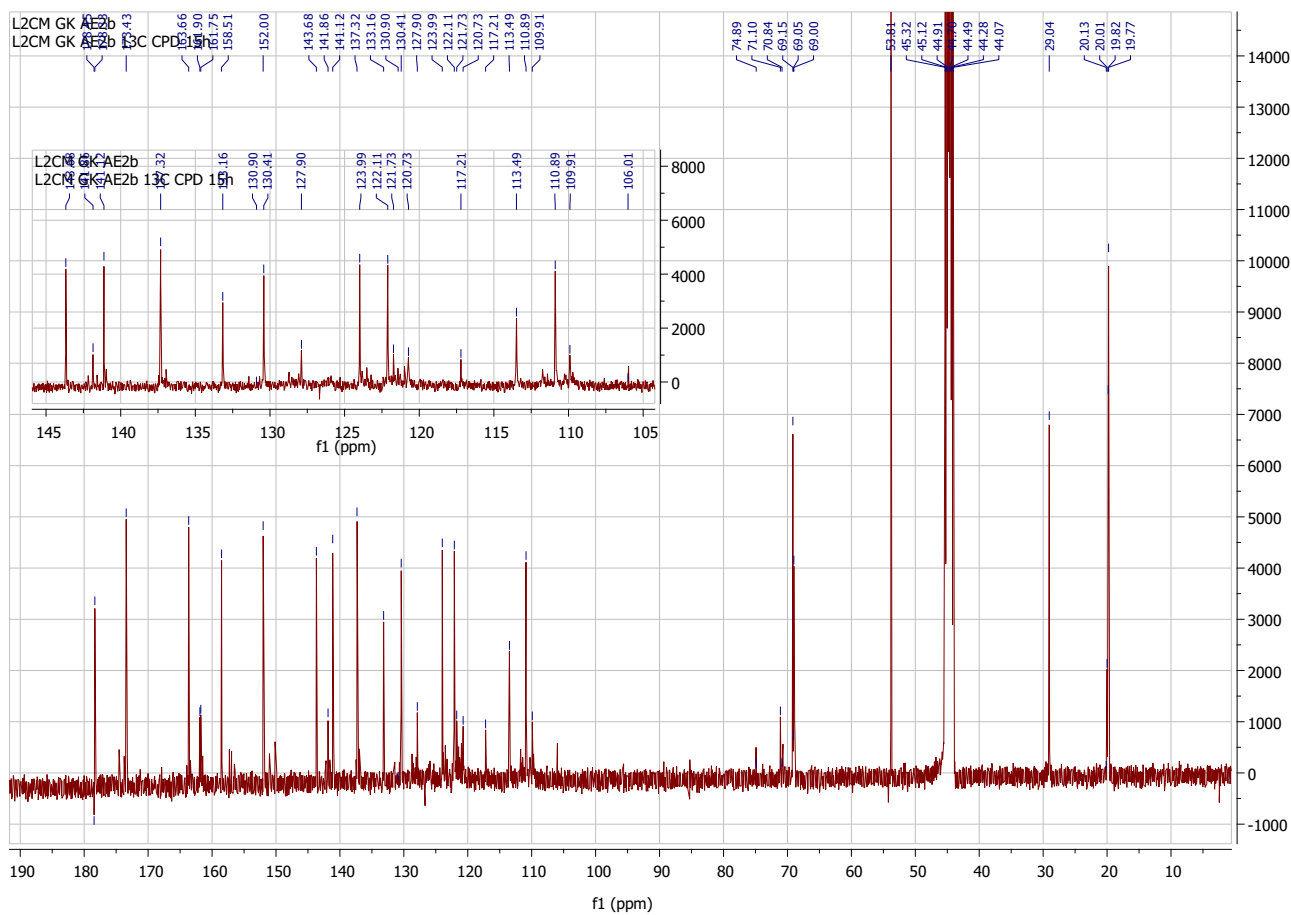


Figure 14: ^{13}C (H)-NMR ^1H ($\text{DMSO}-d_6$, 100 MHz) of compound **4b**.

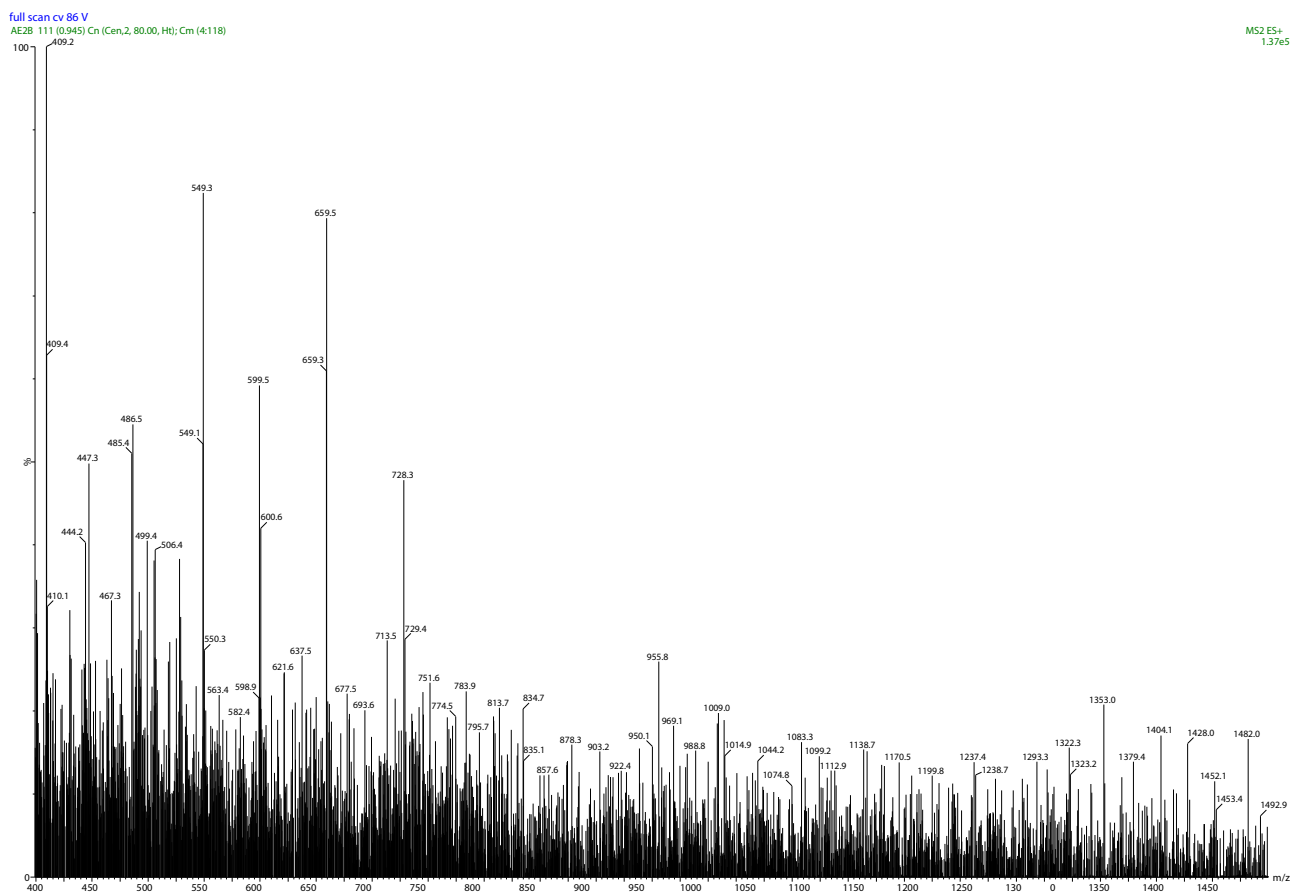


Figure 15: HRMS ESI-Positive mode of compound 4b.

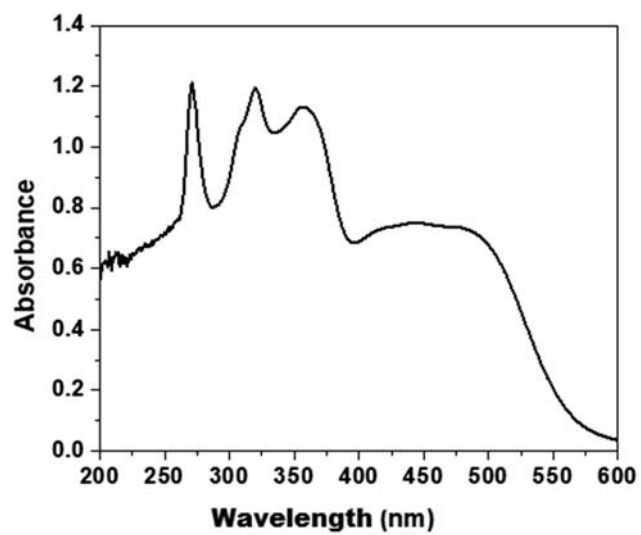


Figure 16: UV spectrum of compound 4b' in methanol as solvent.

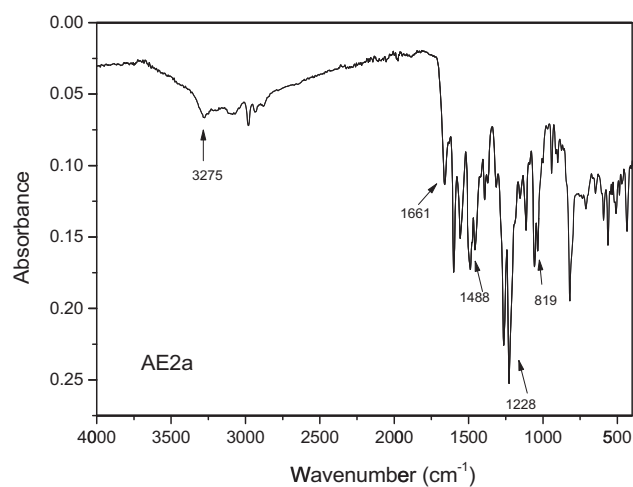


Figure 17: IR spectrum of compound 4b'.

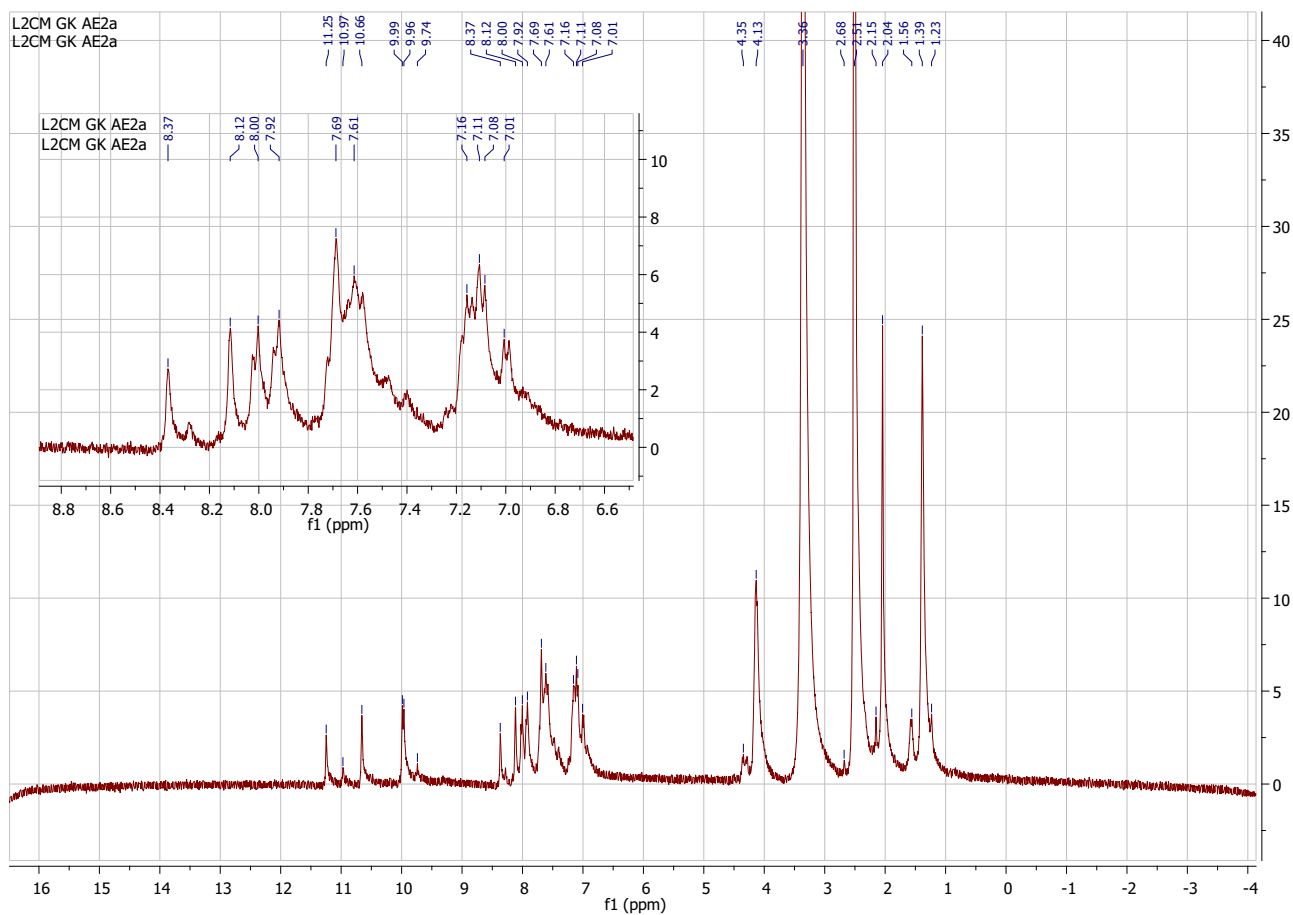
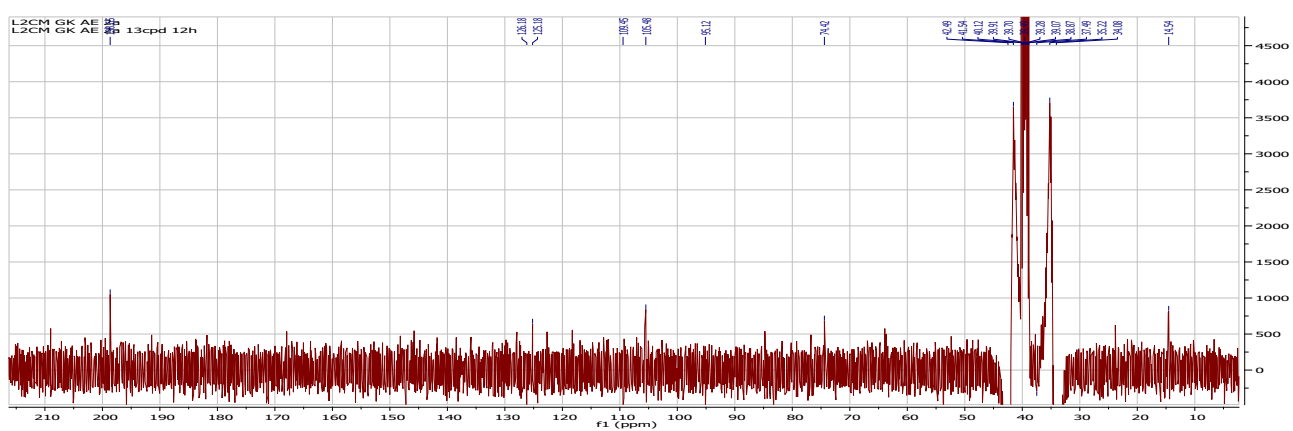


Figure 18: ^1H -NMR ($\text{DMSO}-d_6$, 400 MHz) spectrum of compound **4b'**.



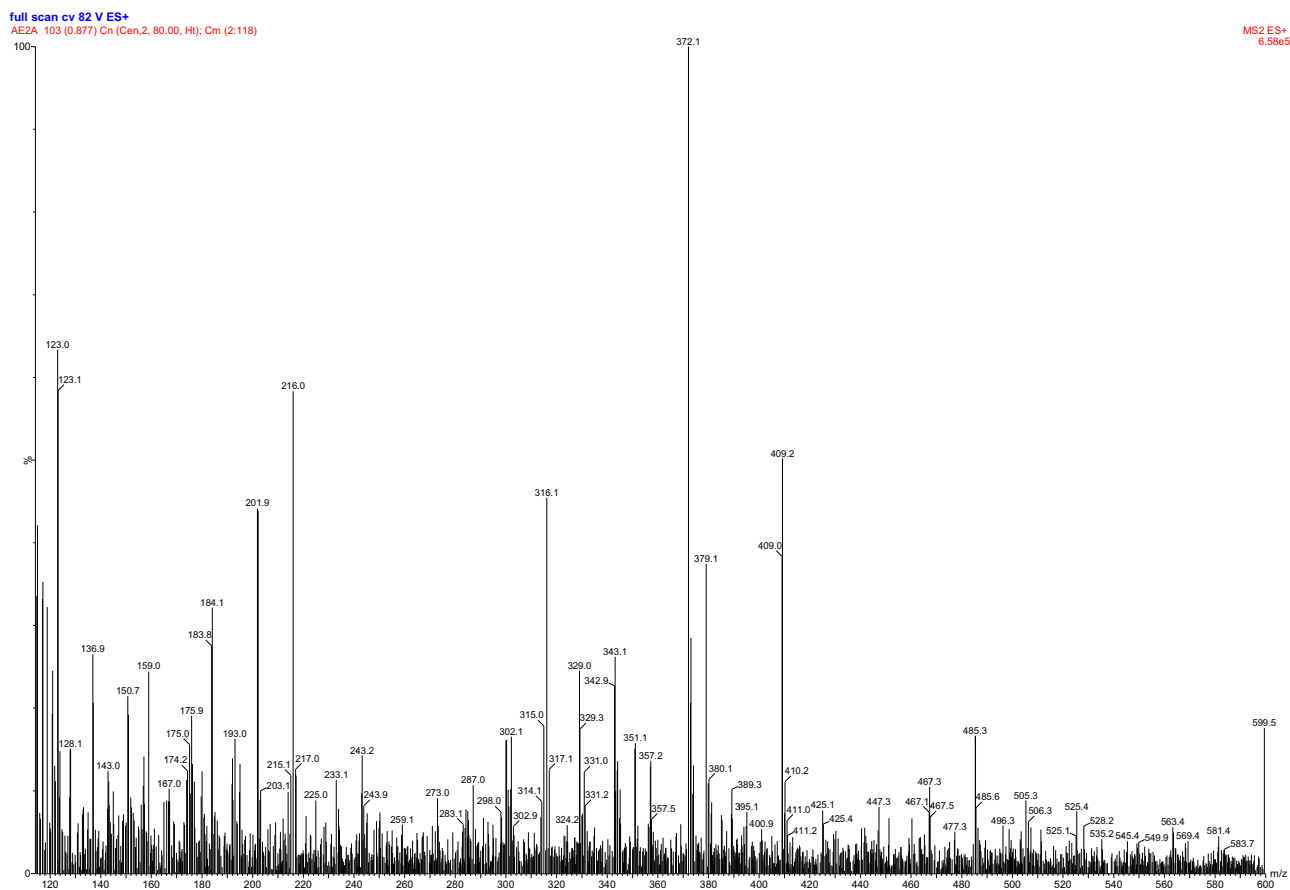


Figure 20: HRMS ESI-Positive mode of compound 4b'.

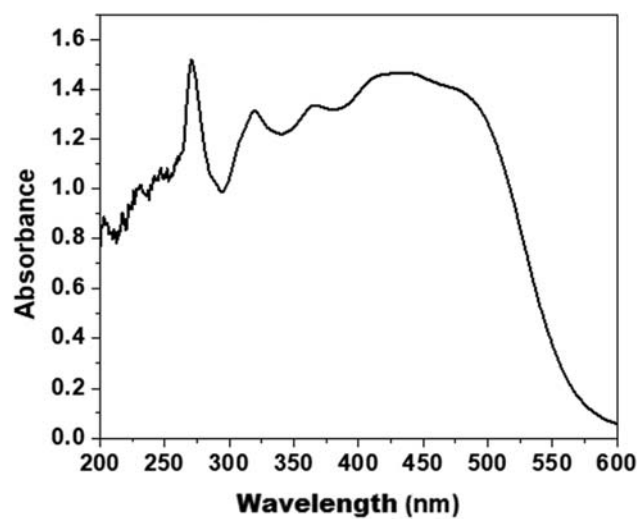


Figure 21: UV spectrum of compound 4c in methanol as solvent.

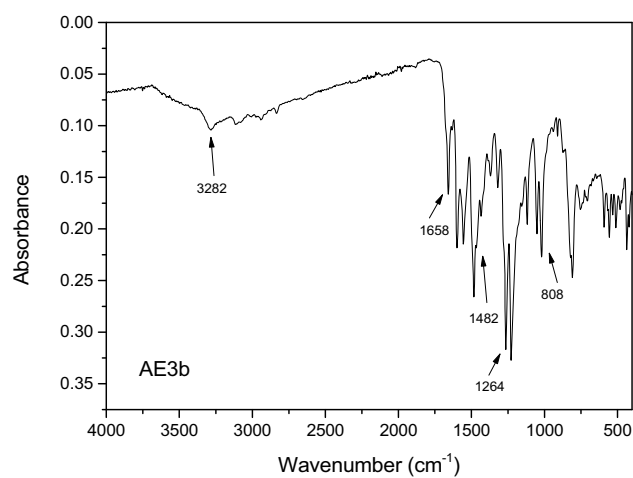


Figure 22: IR spectrum of compound 4c.

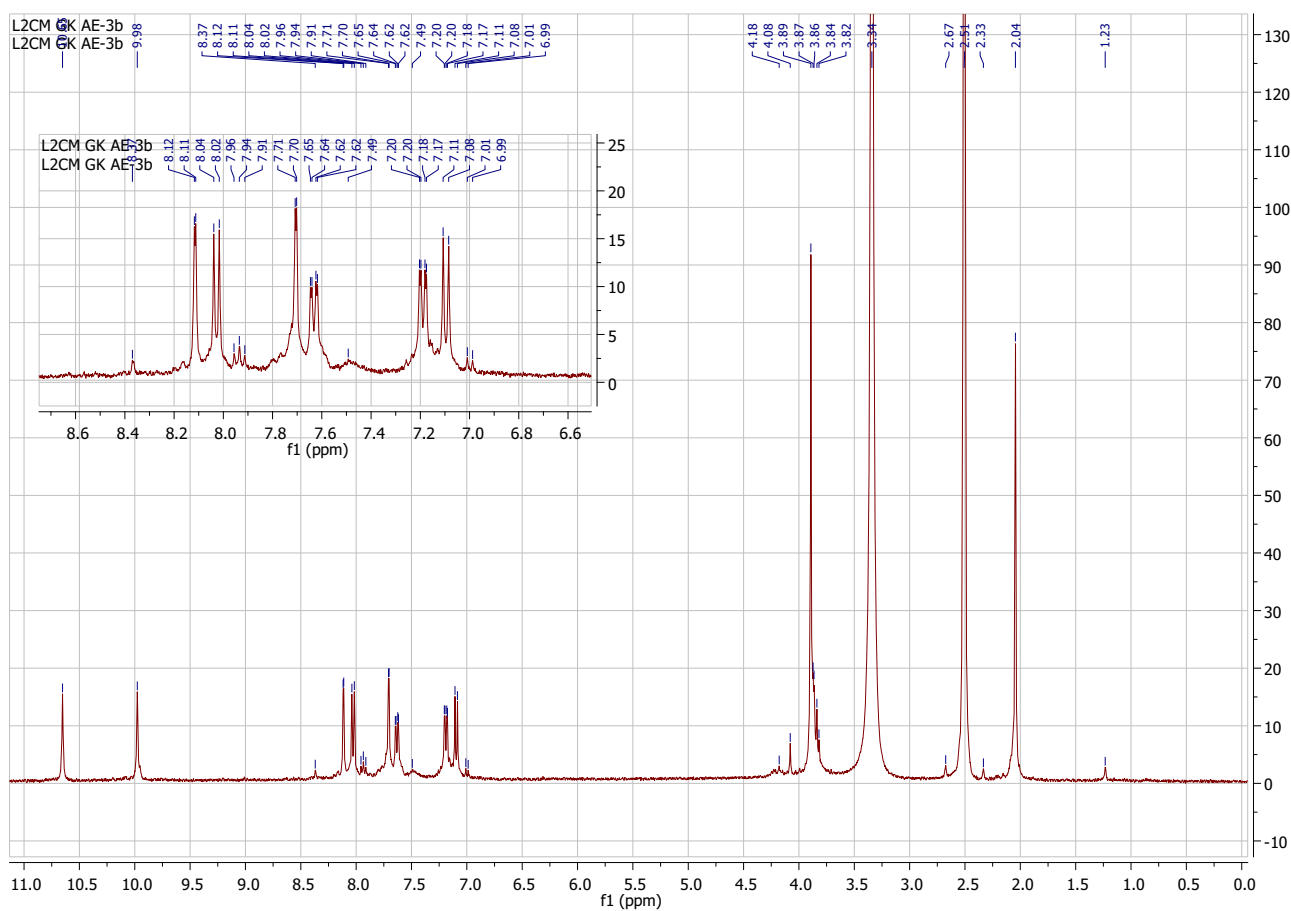


Figure 23: ^1H -NMR ($\text{DMSO}-d_6$, 400 MHz) spectrum of compound **4c**.

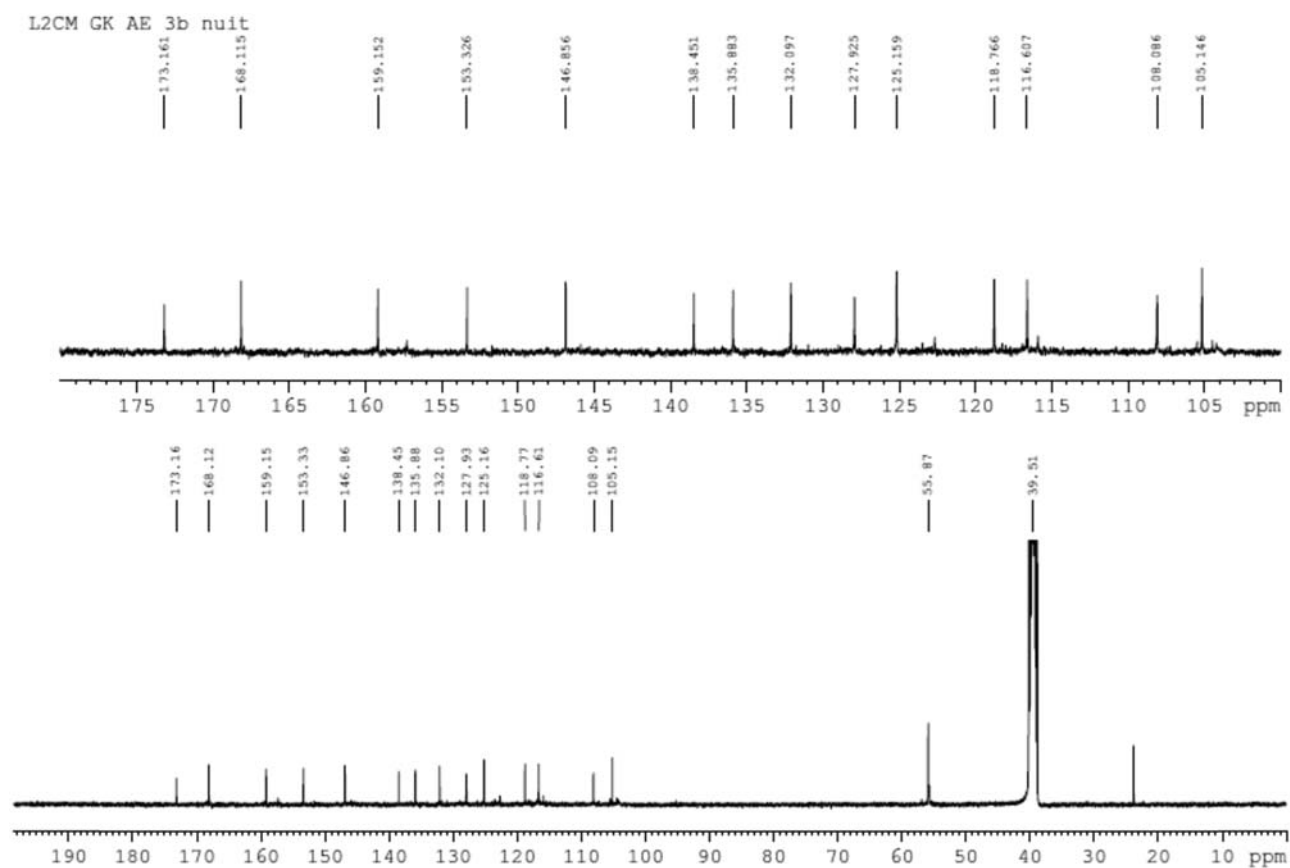
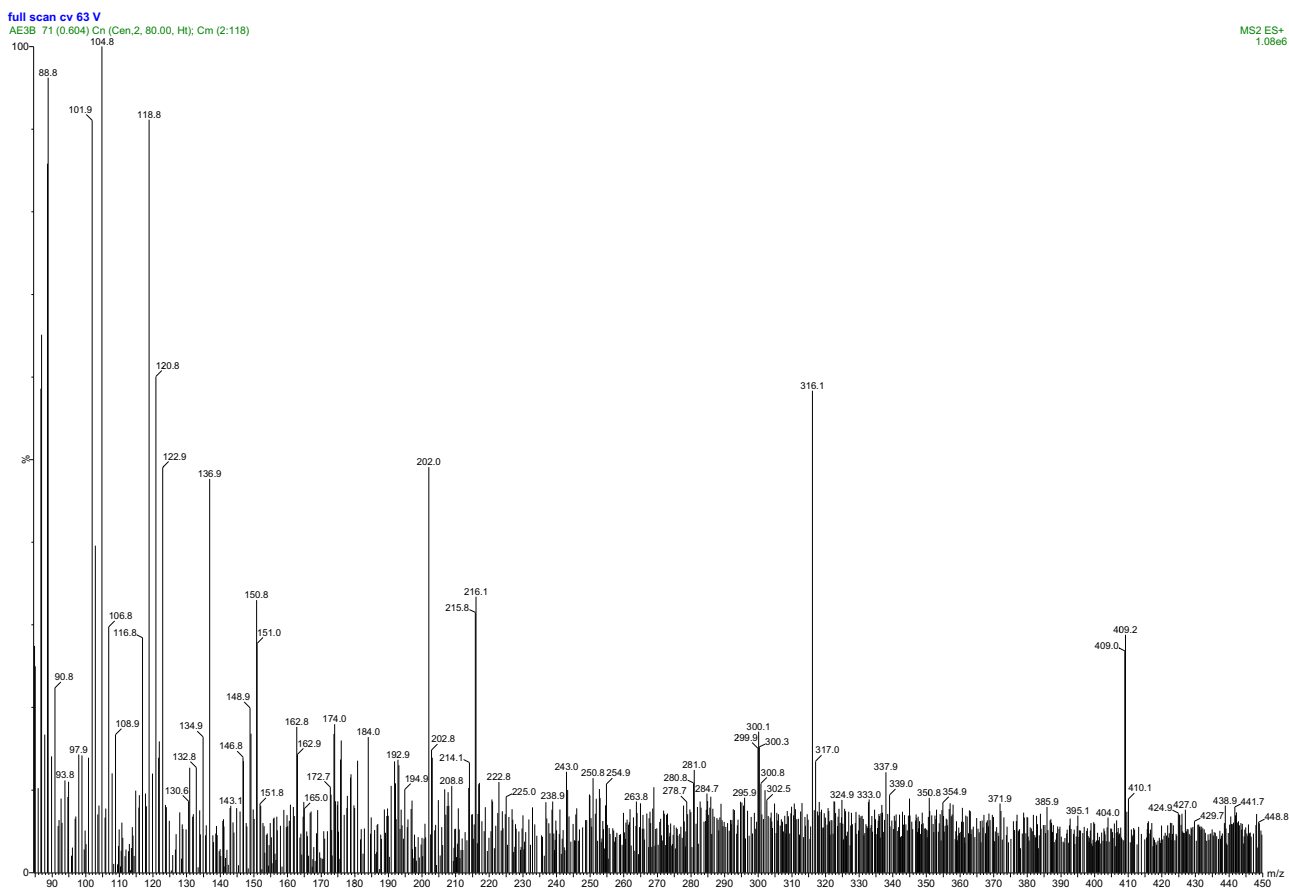
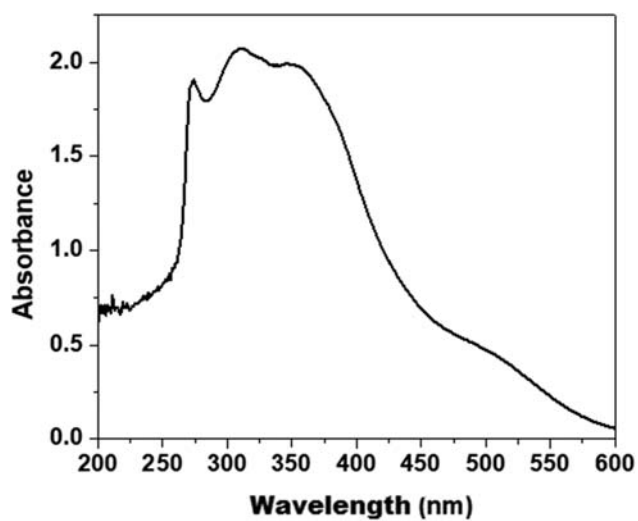
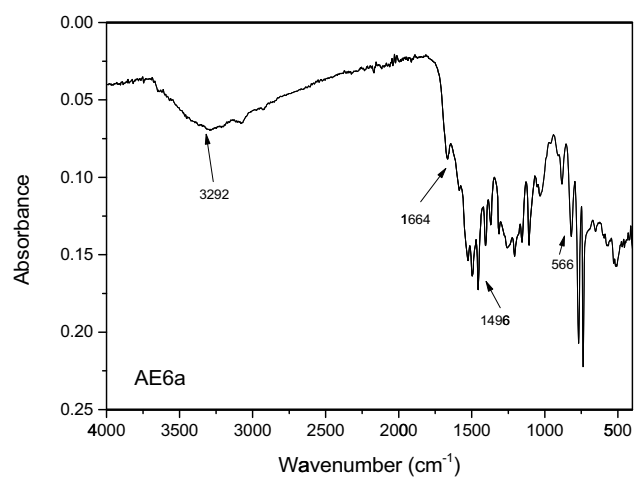


Figure 24: $^{13}\text{C}(\text{H})$ -NMR ^1H ($\text{DMSO}-d_6$, 100 MHz) of compound **4c**.

Figure 25: HRMS ESI-Positive mode of compound **4c**.Figure 26: UV spectrum of compound **4d** in methanol as solvent.Figure 27: IR spectrum of compound **4d**.

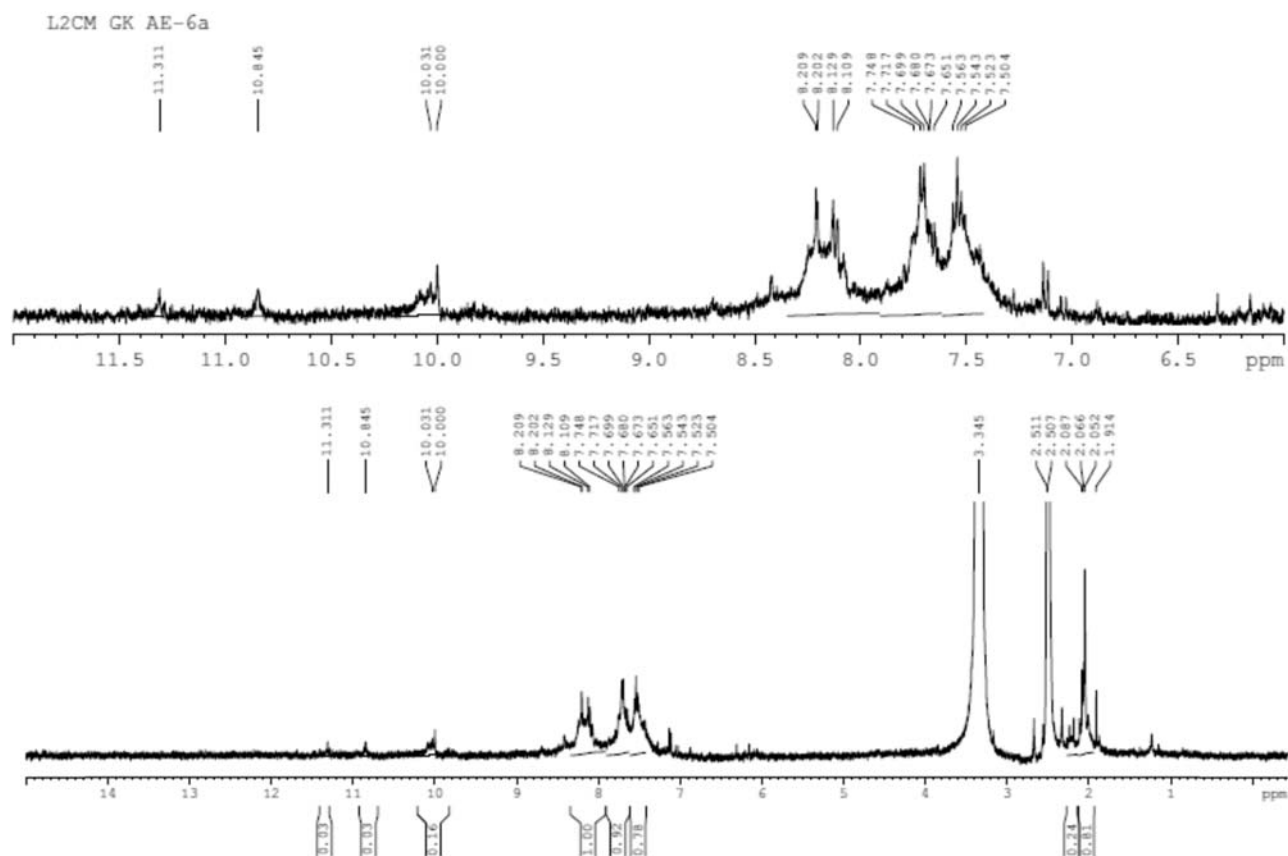


Figure 28: ^1H -NMR ($\text{DMSO}-d_6$, 400 MHz) spectrum of compound 4d.

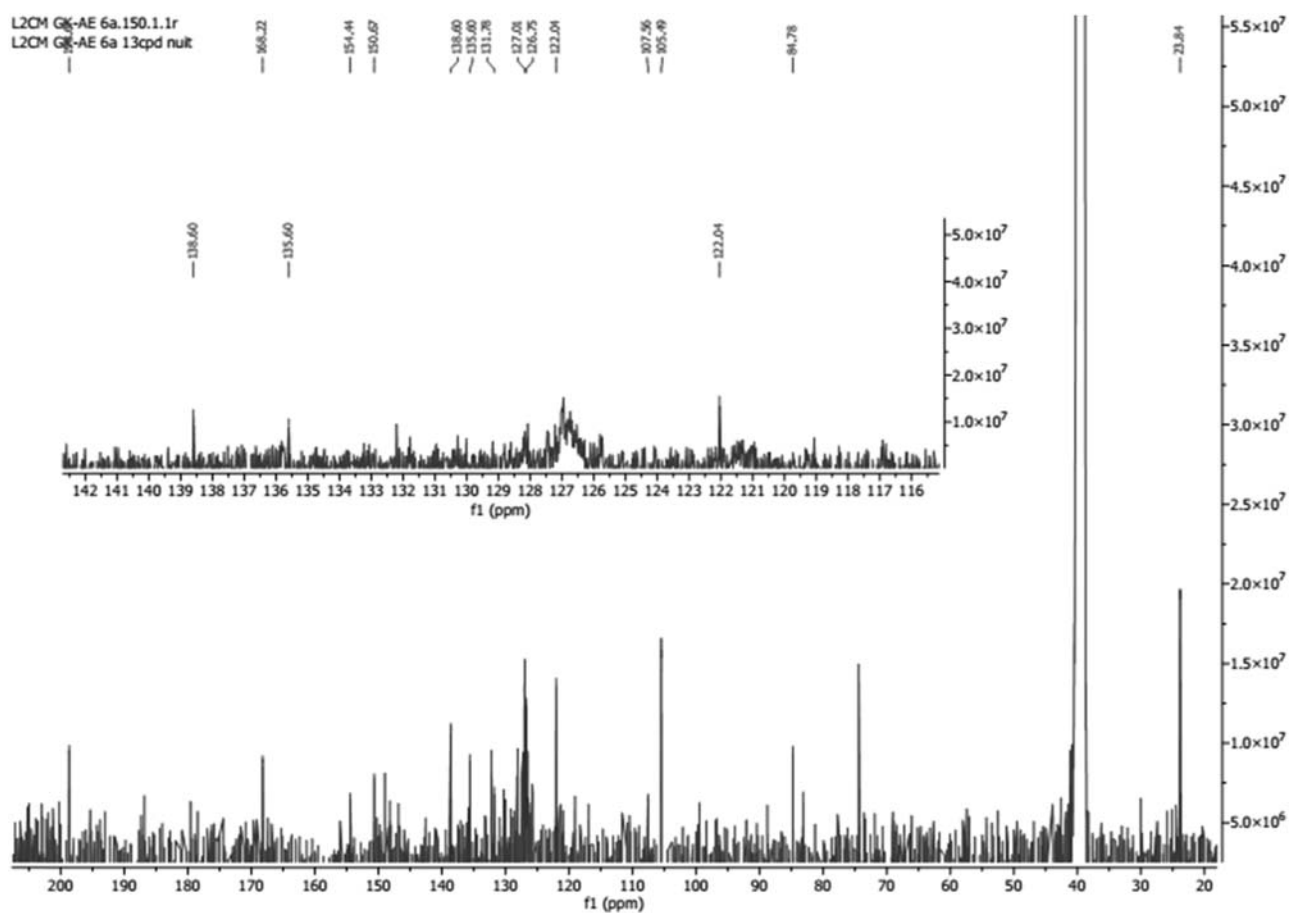


Figure 29: $^{13}\text{C}(\text{H})$ -NMR ^1H ($\text{DMSO}-d_6$, 100 MHz) of compound **4d**.

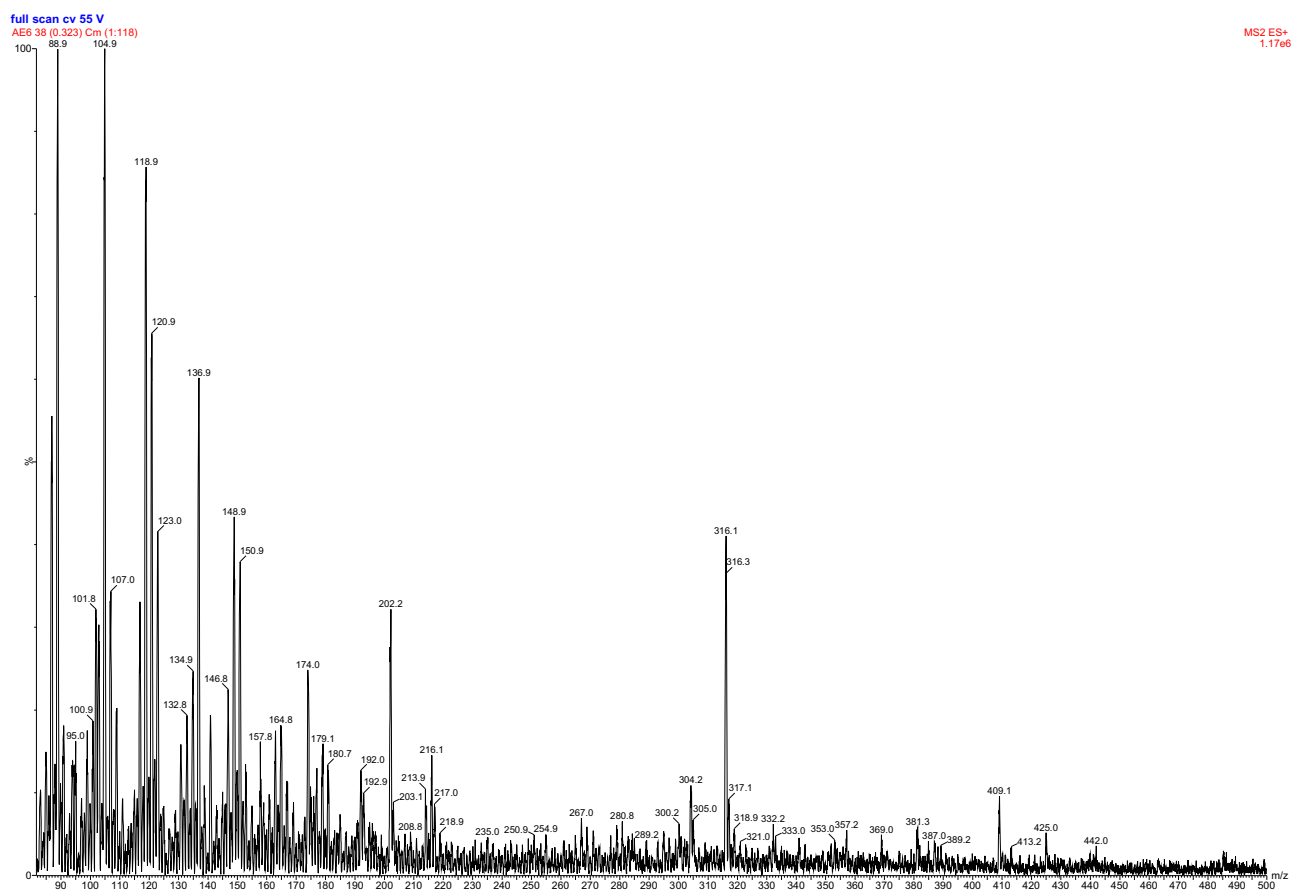


Figure 30: HRMS ESI-Positive mode of compound 4d.