

Supplementary Information

Synthesis, characterization, and screening for the antimicrobial activity of
2-(3-(2-cyano-2-(*p*-tolylamino)vinyl)-1*H*-indol-1-yl)-*N*-arylacetamide
derivatives

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Materials and methods

“All reagents were used without purification and directly purchased from Merck and Finar are of AR grade. Melting points were determined using open capillaries, and are uncorrected. To trace the completion of the reaction, thin-layer chromatography (TLC) was performed using a 0.2 mm precoated silica gel 60G F254 plate. The UV spectra (254 nm and 365 nm) was recorded by Perkin-Elmer UV spectrophotometer. The $^1\text{H-NMR}$ spectra were recorded on a Bruker Advance II (400 MHz) spectroscope after being processed in DMSO-d^6 . The chemical shifts are expressed as δ ppm against TMS as an internal standard. The FT-IR spectra of the compounds were recorded in KBr pellets using Bruker Alpha II IR spectroscope. The mass spectrometry data were recorded using Shimadzu GC-MS QP-2010 mass spectrometer”.

Spectroscopic Data for Synthesised Compounds

Mass Spectra

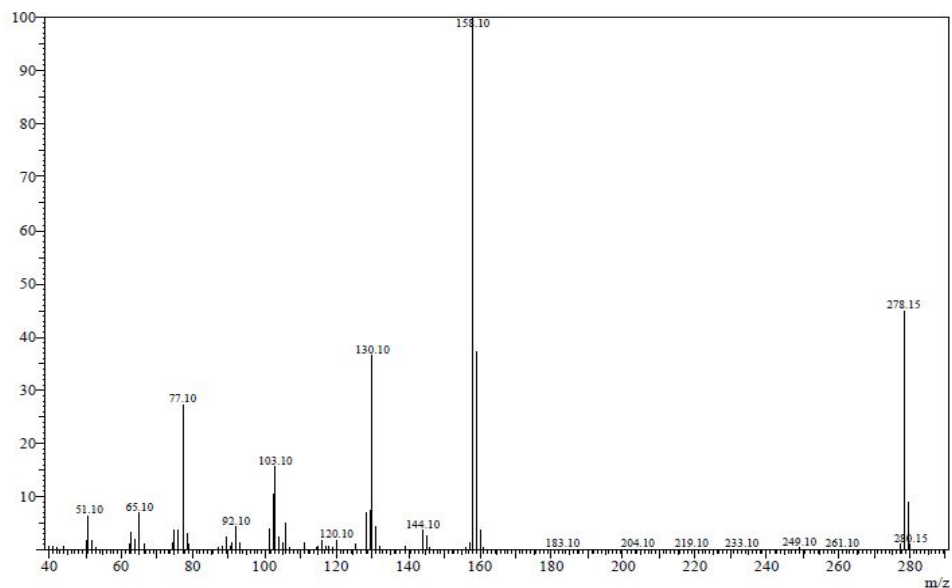


Fig-1: Mass Spectra of compound 4a

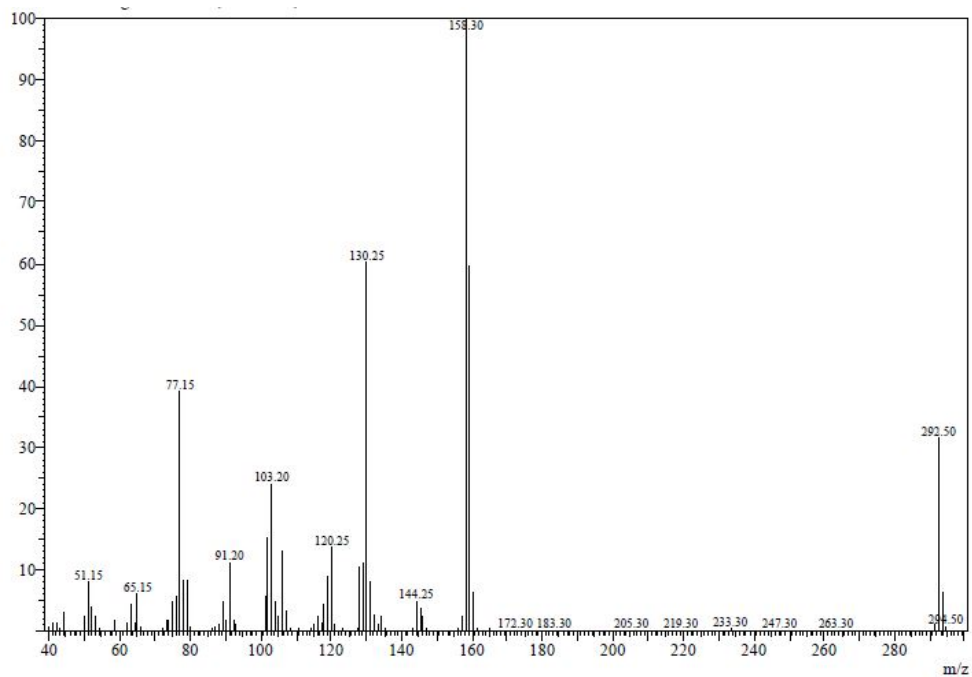


Fig-2: Mass Spectra of compound 4b

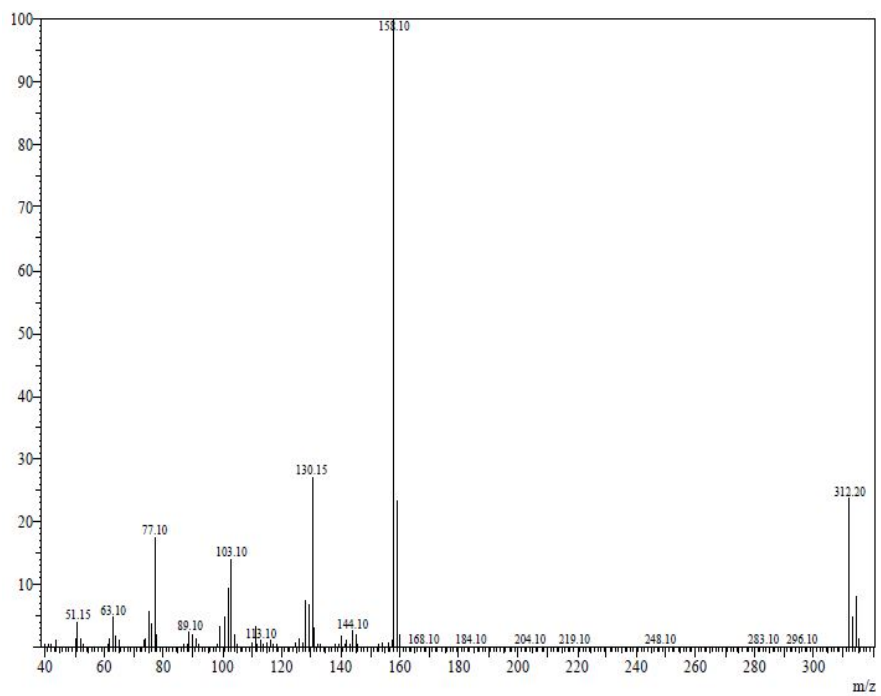


Fig-3: Mass Spectra of compound 4c

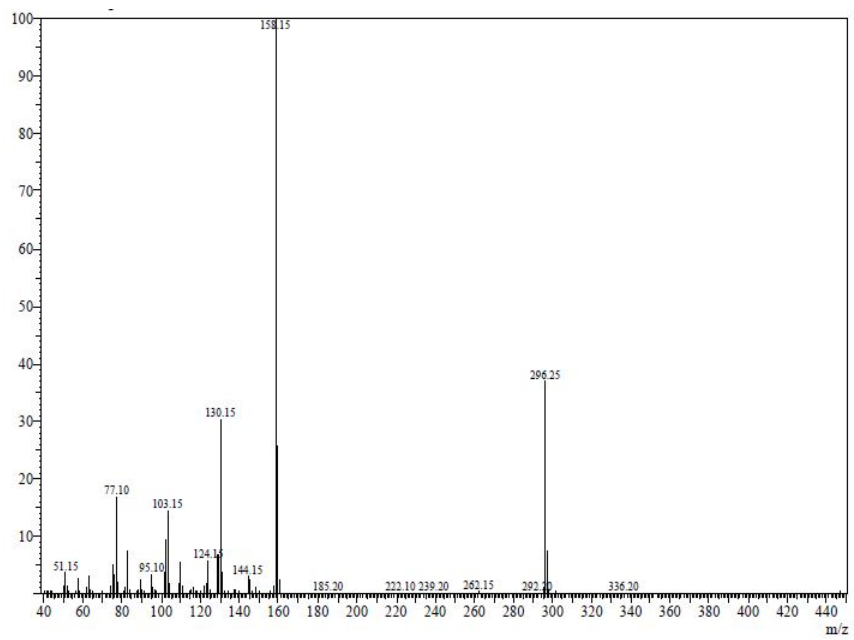


Fig-4: Mass Spectra of compound 4d

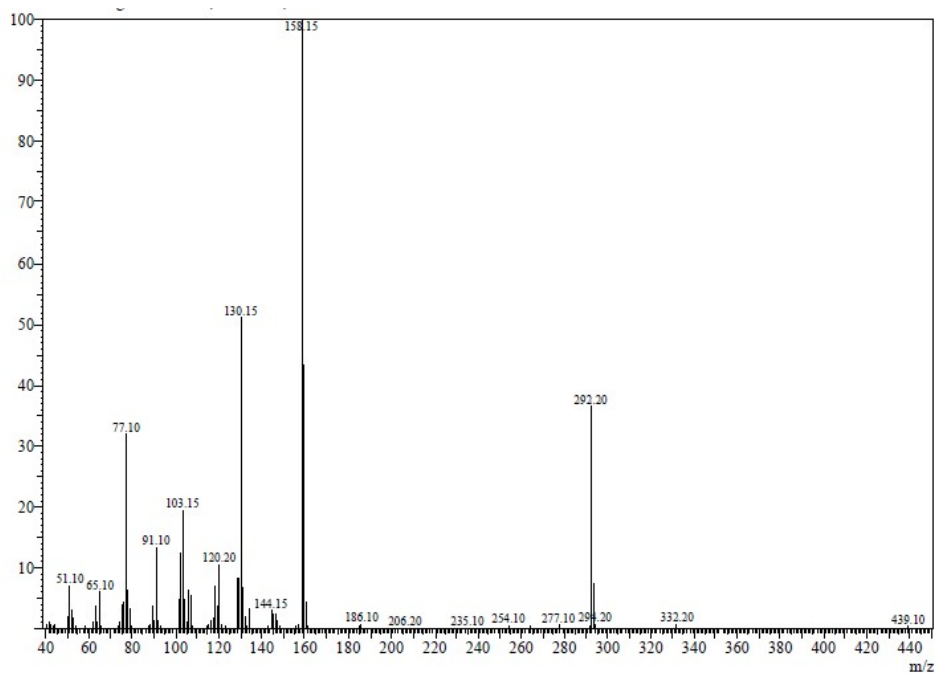


Fig-5: Mass Spectra of compound 4e

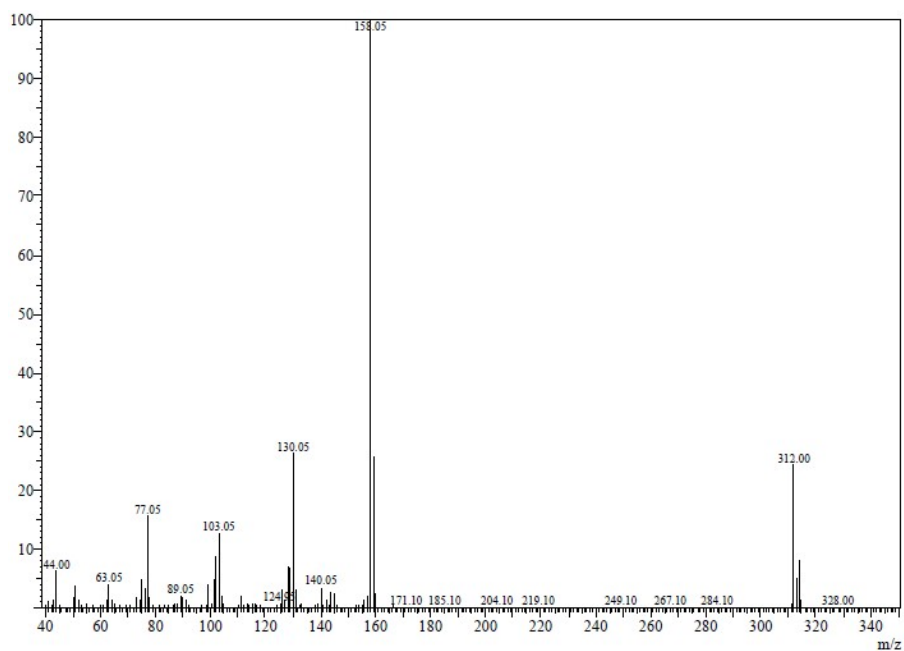


Fig-6: Mass Spectra of compound 4f

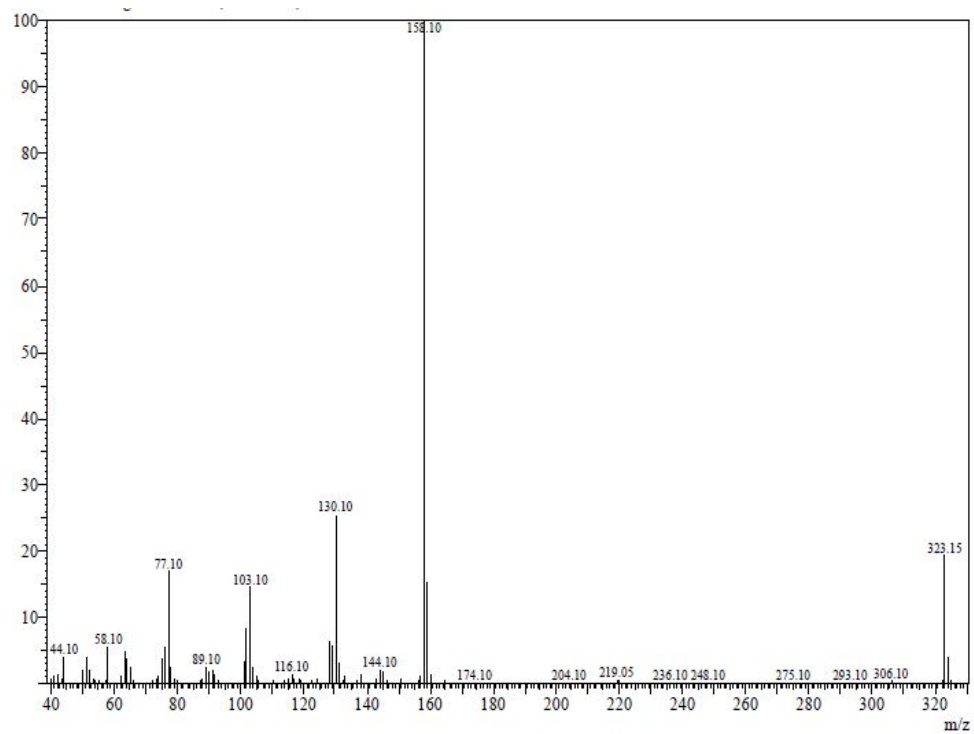


Fig-7: Mass Spectra of compound 4g

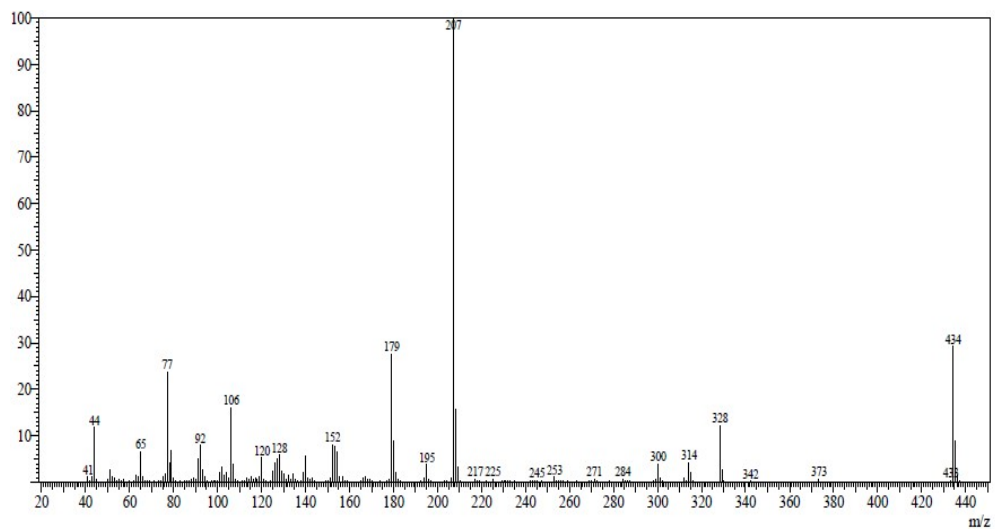


Fig-8: Mass Spectra of compound 5a

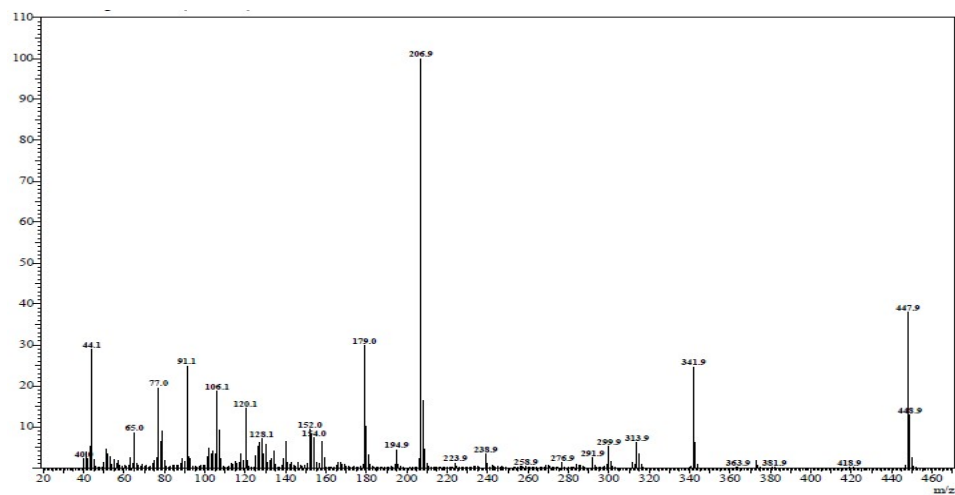


Fig-9: Mass Spectra of compound 5b

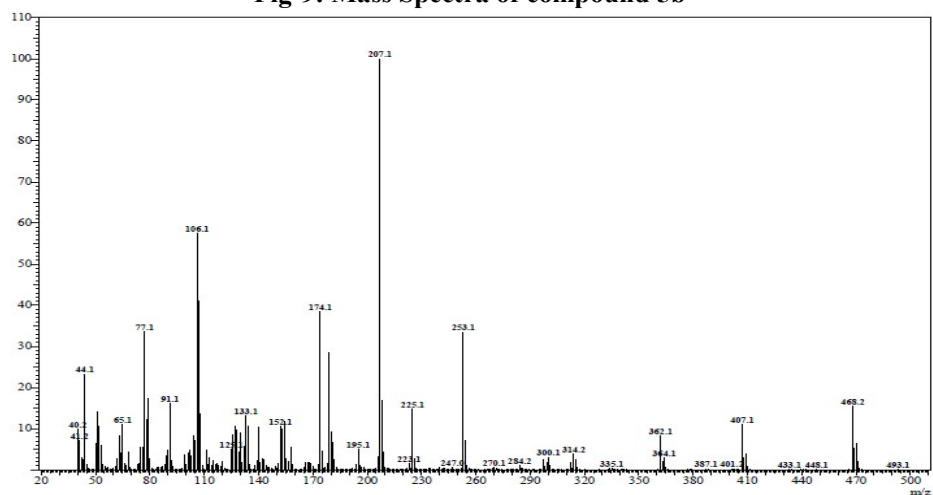


Fig-10: Mass Spectra of compound 5c

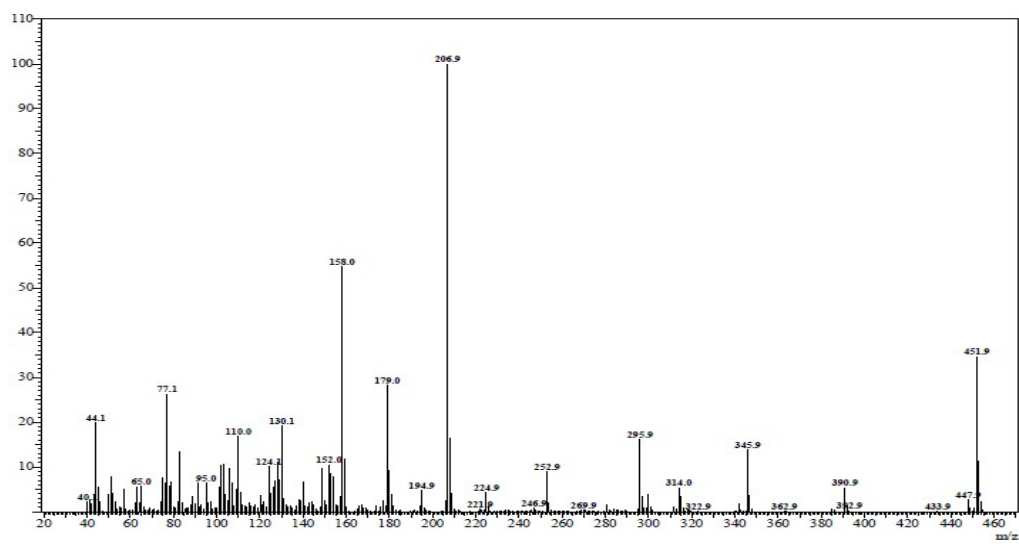


Fig-11: Mass Spectra of compound 5d

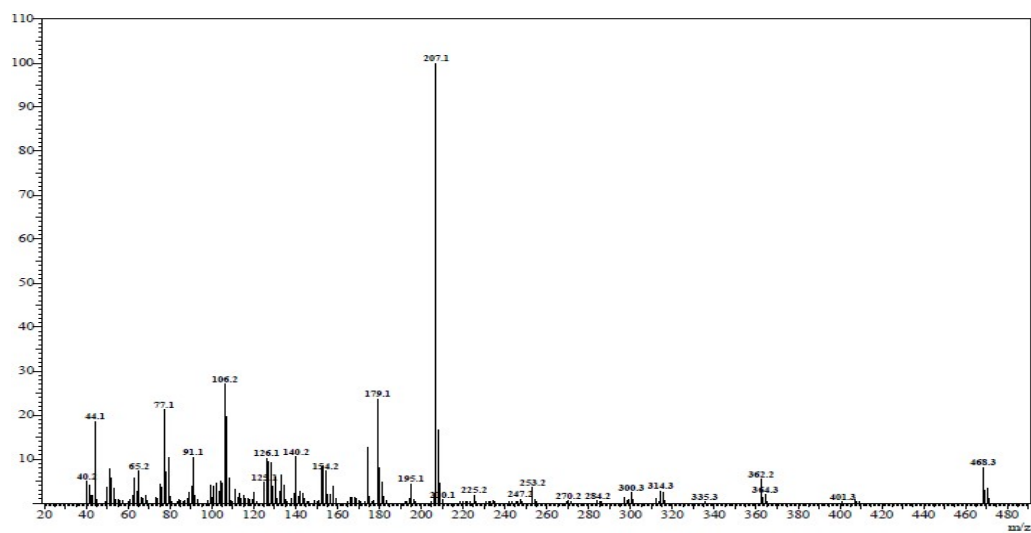


Fig-12: Mass Spectra of compound 5f

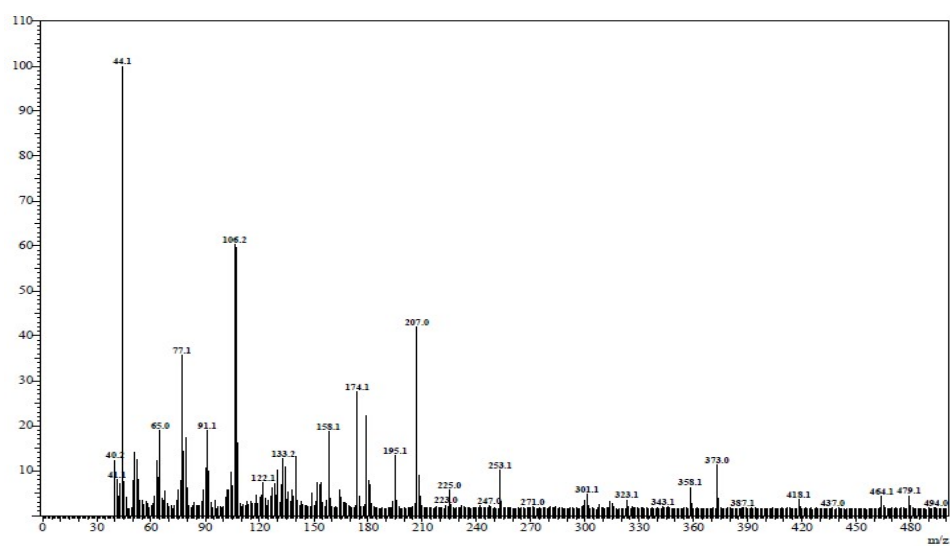


Fig-13: Mass Spectra of compound 5g

IR Spectra

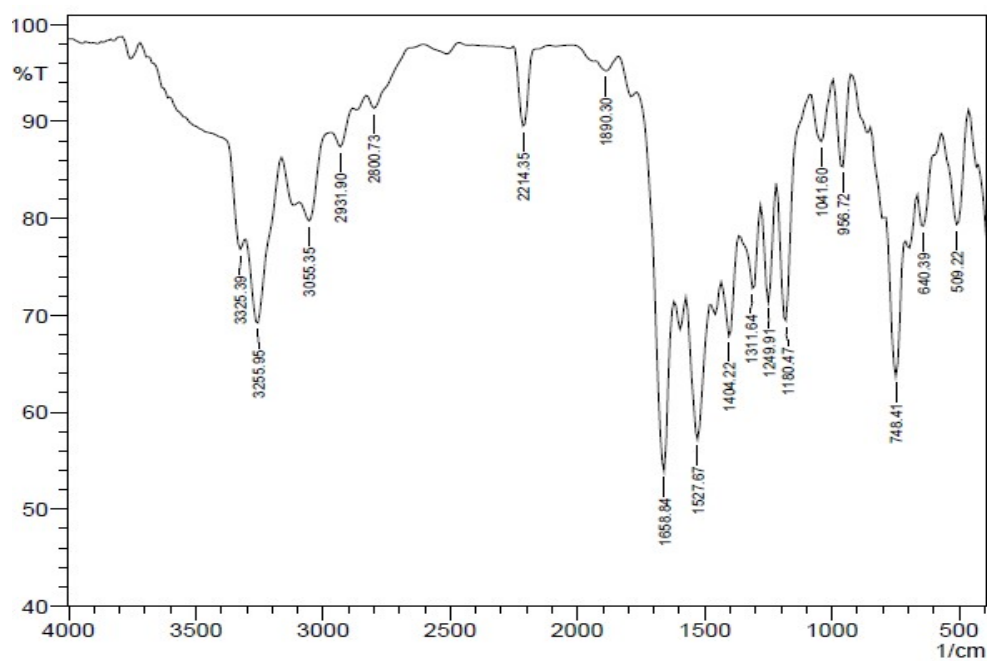


Fig-14: IR Spectra of compound 5a

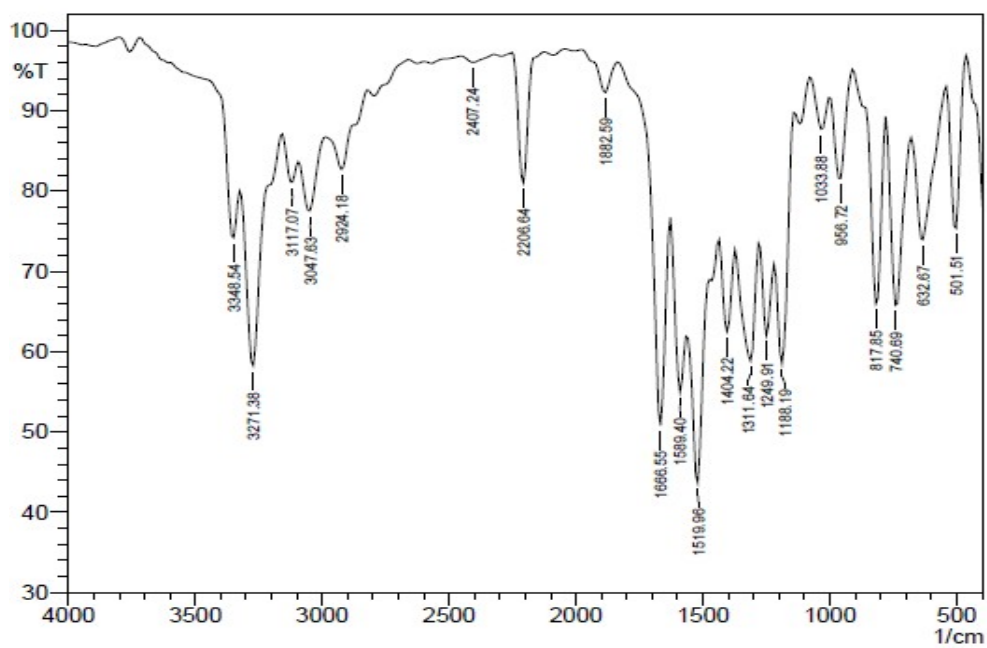


Fig-15: IR Spectra of compound 5b

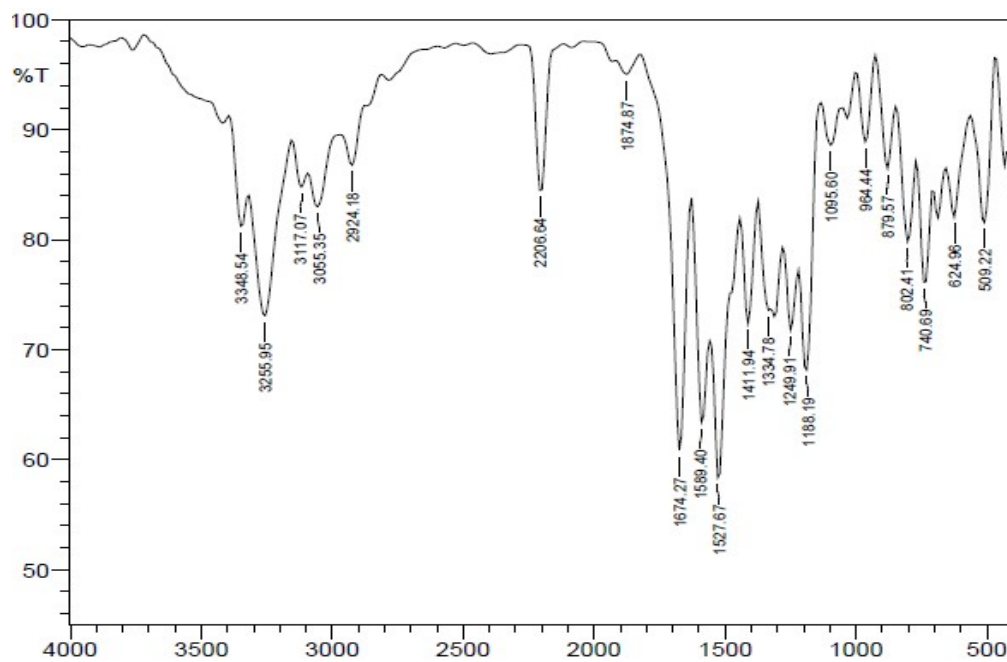


Fig-16: IR Spectra of compound 5c

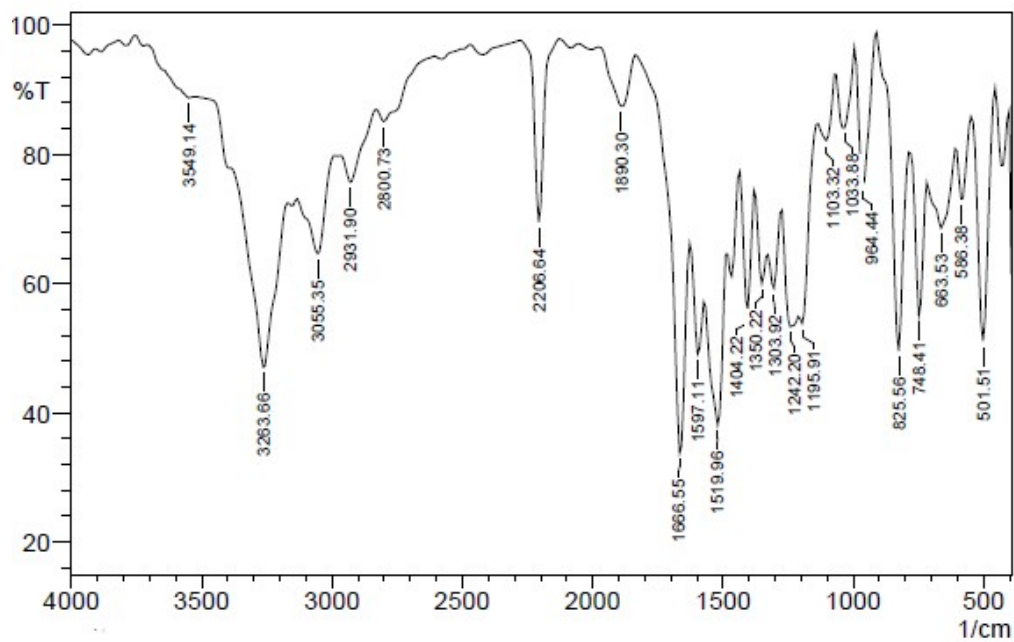


Fig-17: IR Spectra of compound 5d

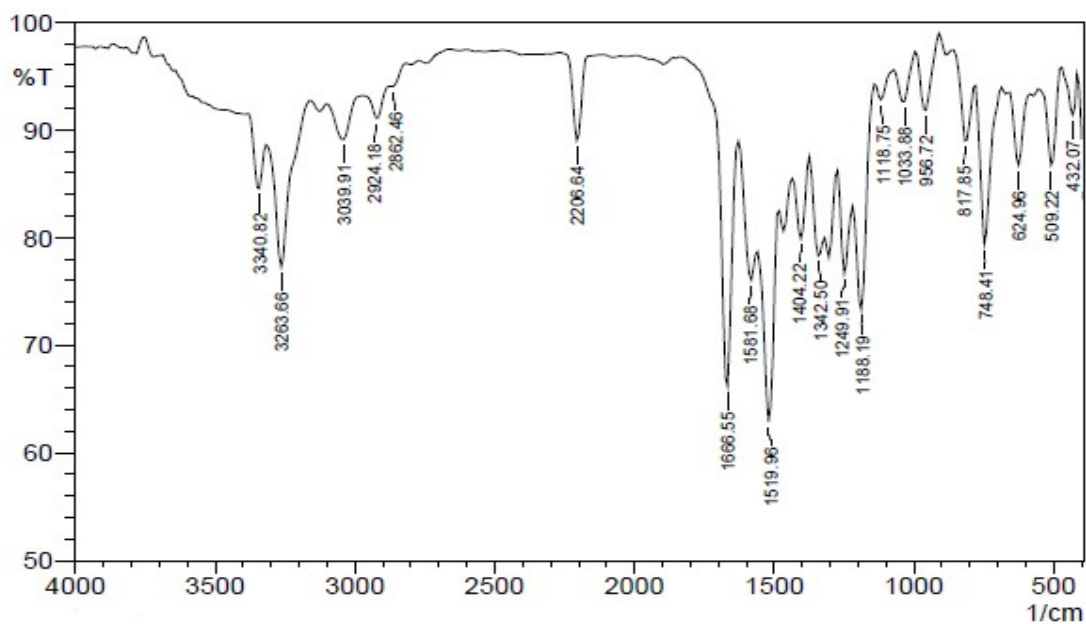


Fig-18: IR Spectra of compound 5e

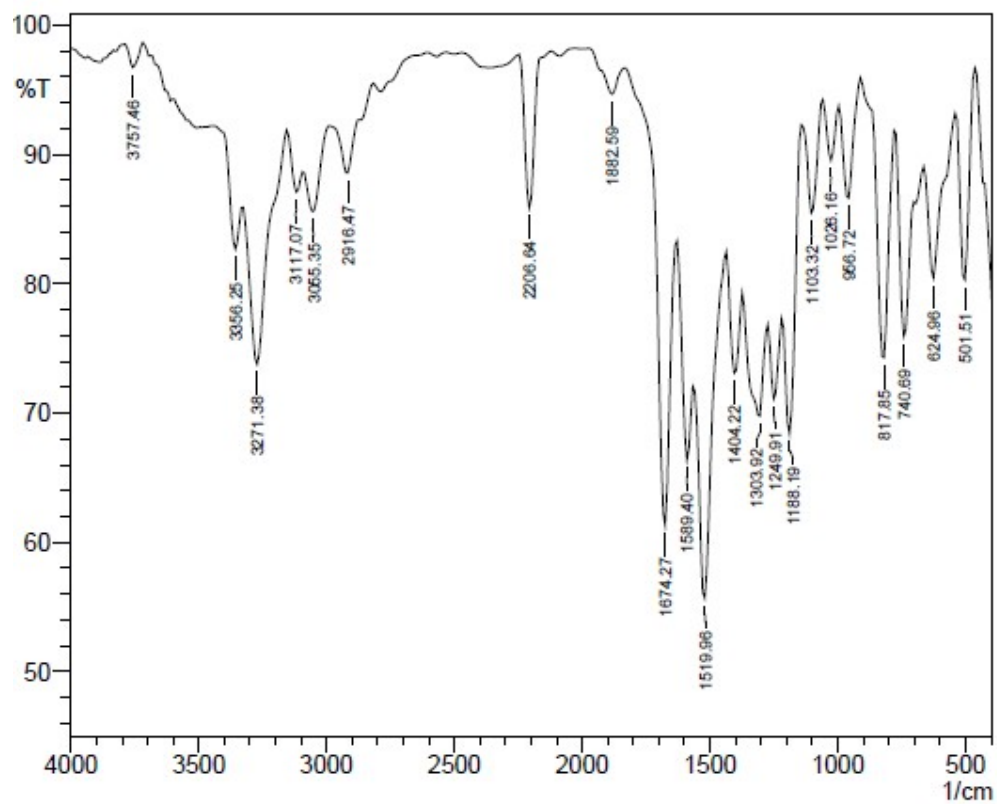


Fig-19: IR Spectra of compound 5f

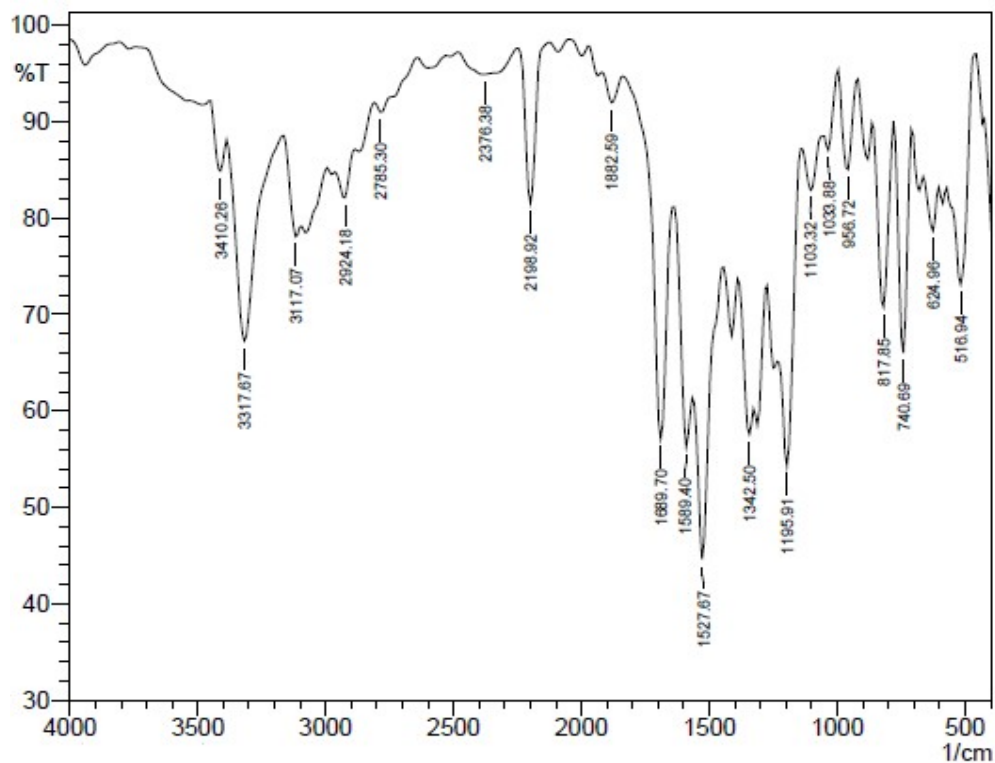


Fig-20: IR Spectra of compound 5g

¹H NMR spectra

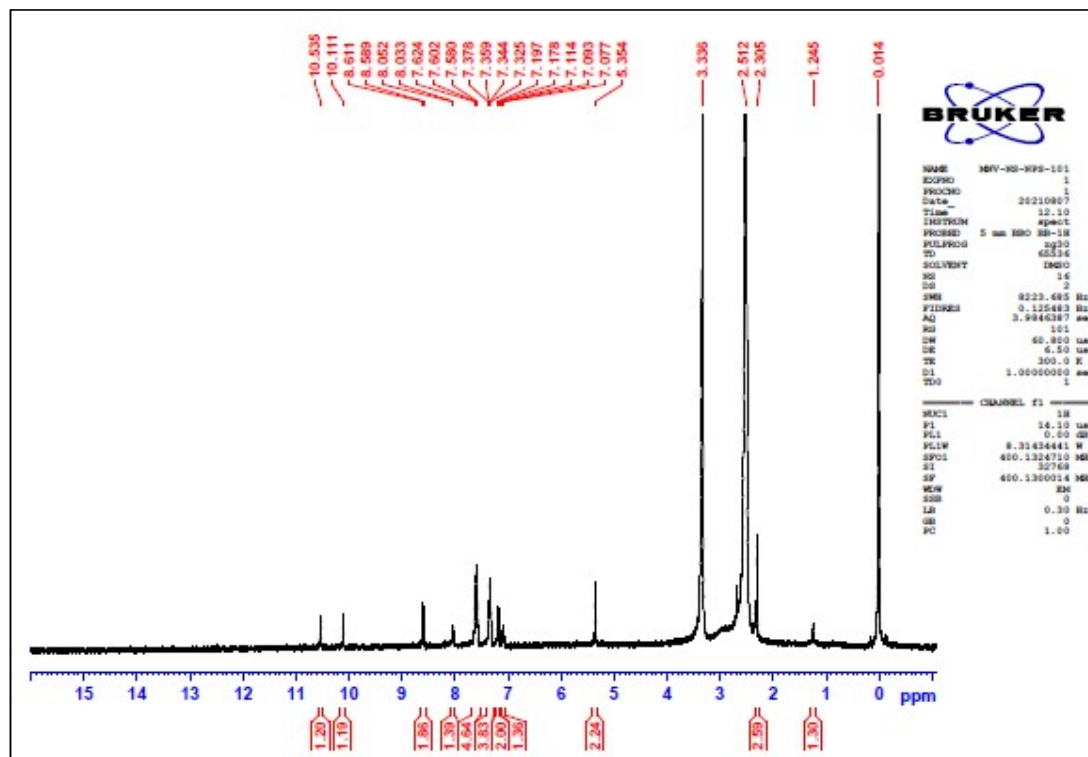


Fig-21: ¹H-NMR spectra of 5a

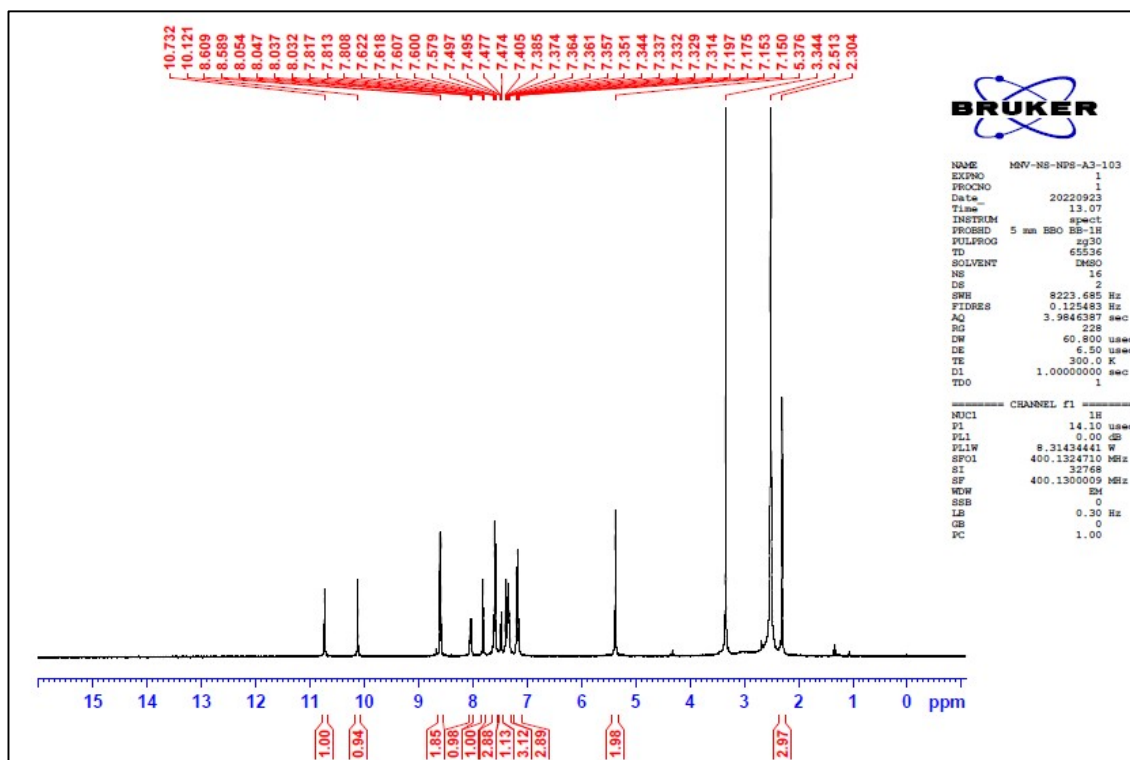


Fig-22: ¹H-NMR spectra of 5c

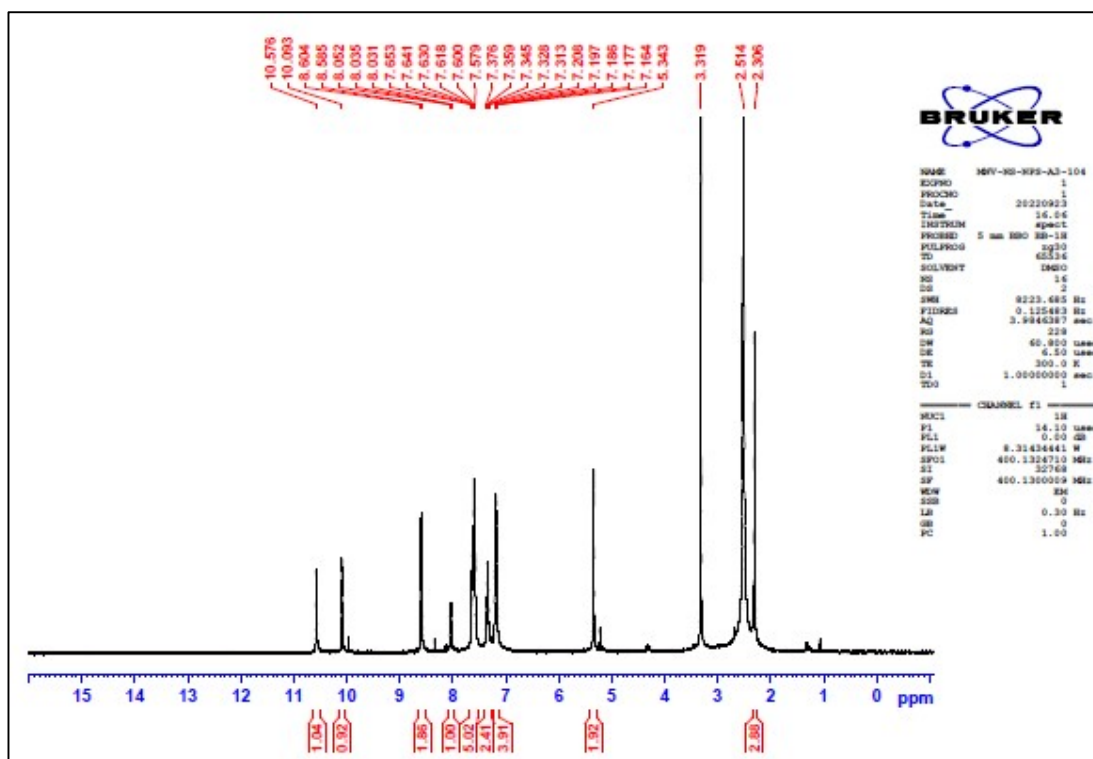


Fig-23: ¹H-NMR spectra of 5d

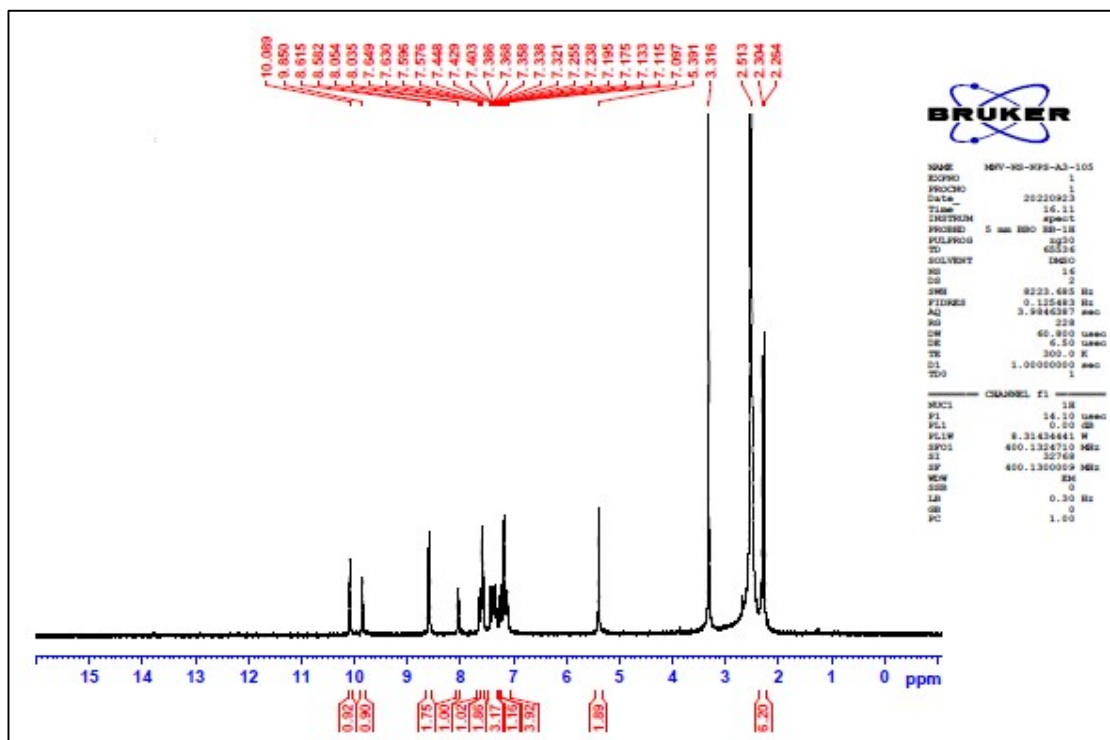


Fig-24: ¹H-NMR spectra of 5e

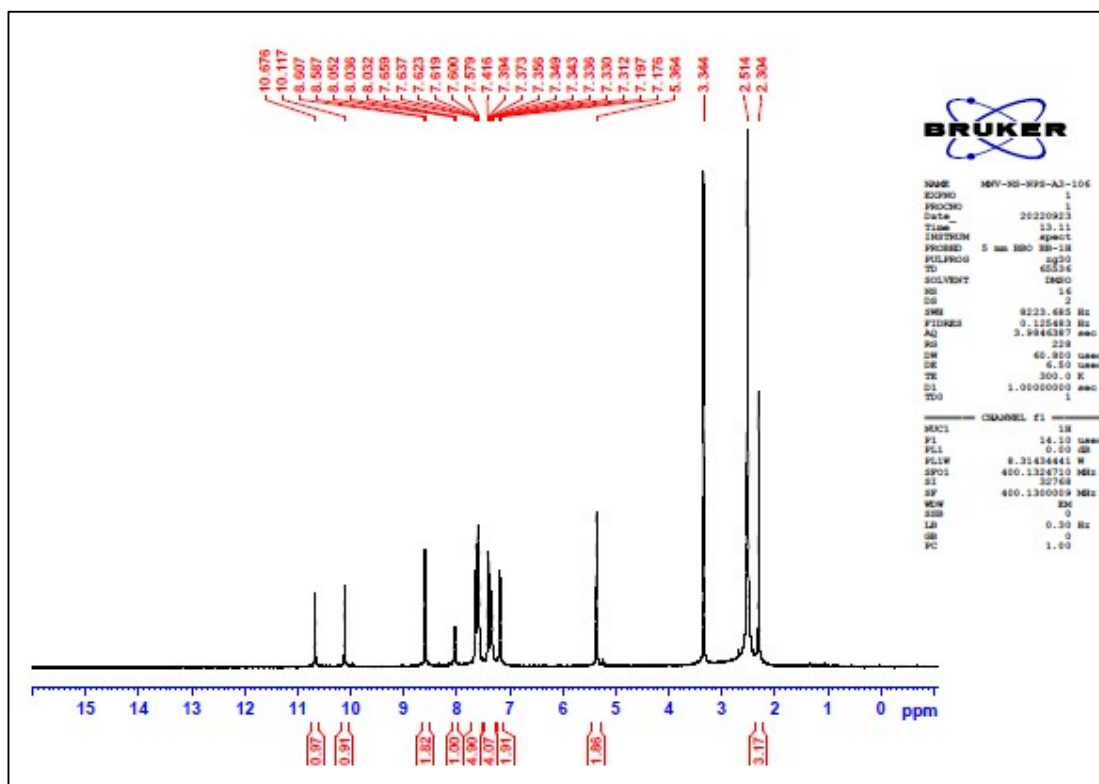


Fig-25: ¹H-NMR spectra of 5f

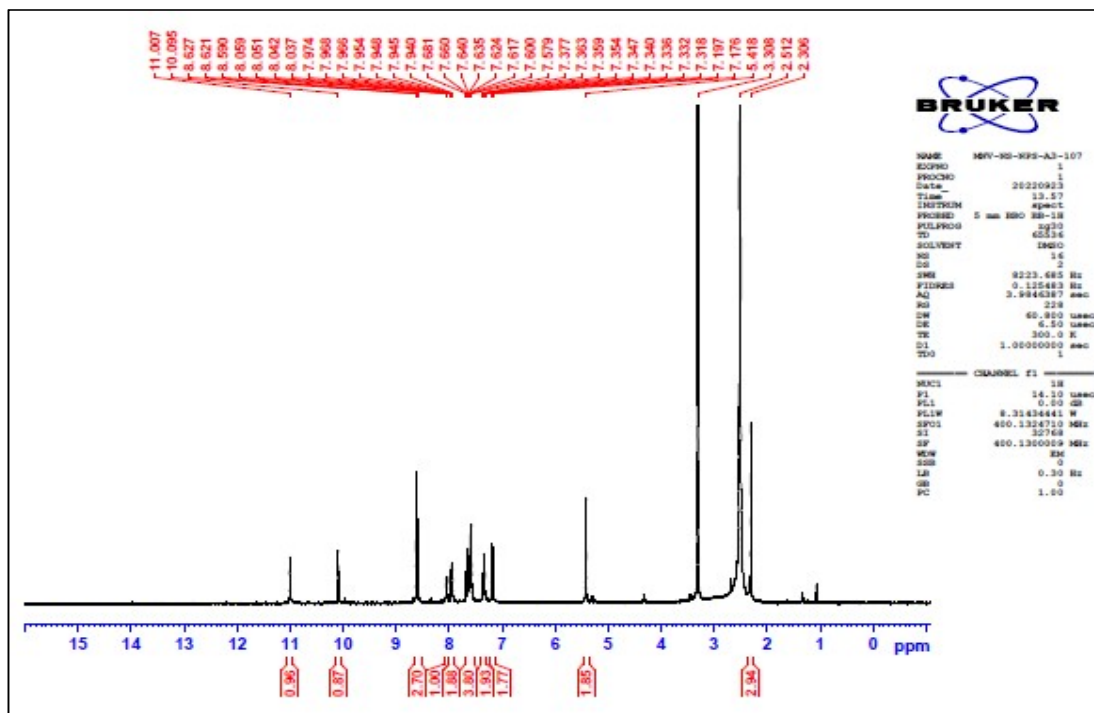


Fig-26: ¹H-NMR spectra of 5g