

Supplementary material

Simple avarone mimetics as selective agents against multidrug resistant cancer cells

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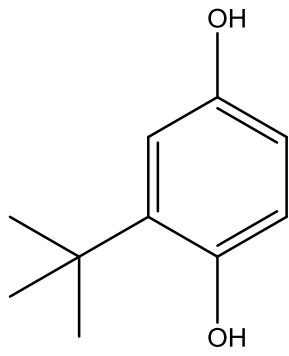
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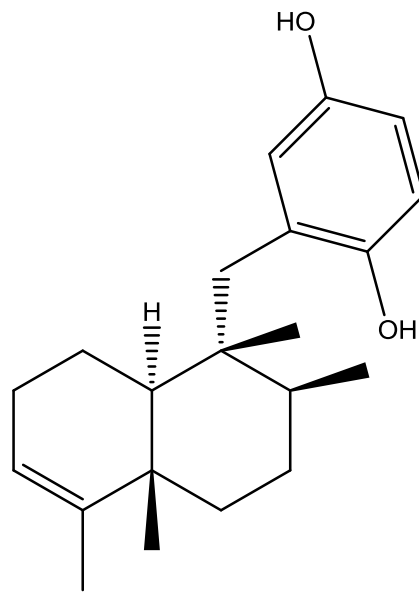
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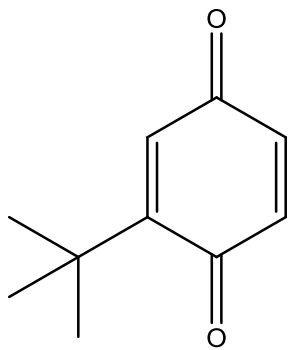
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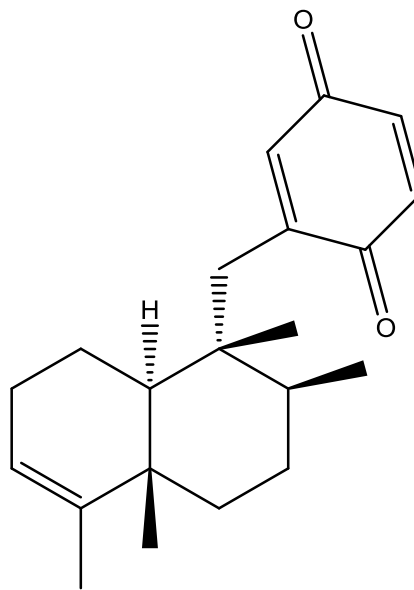
tert-Butylhydroquinone (TBHQ)



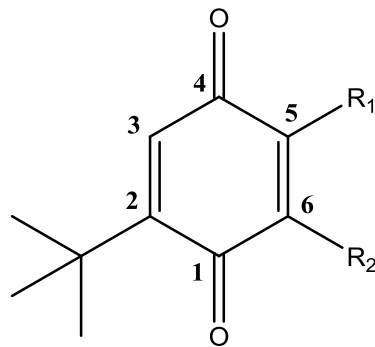
Avarol



1

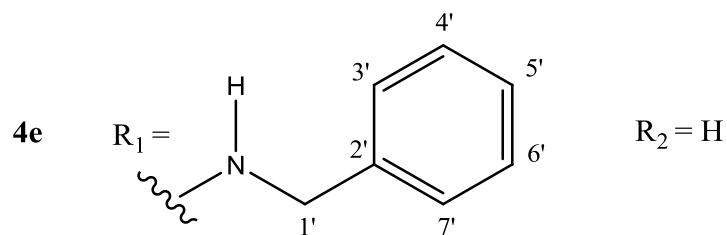
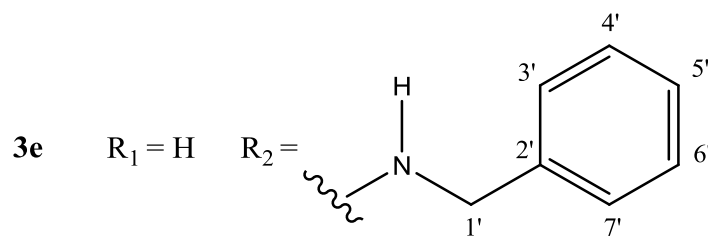
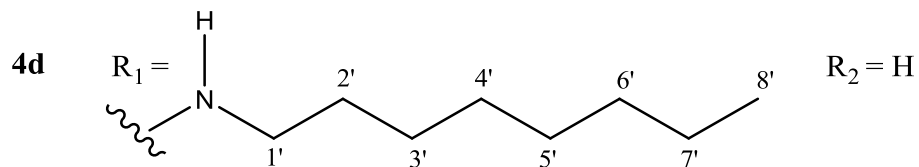
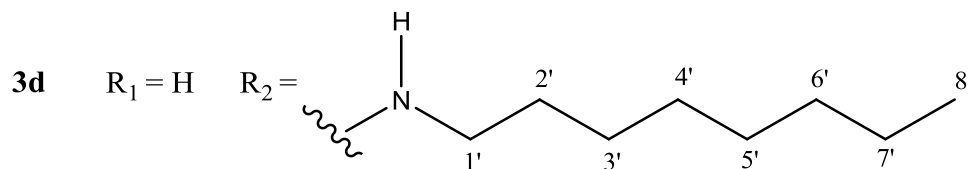
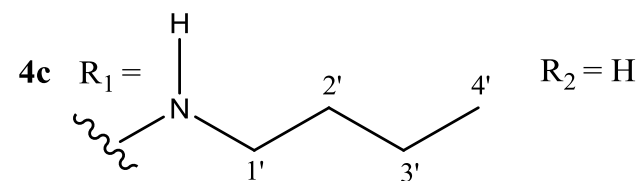
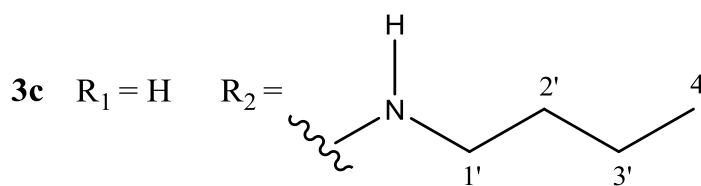
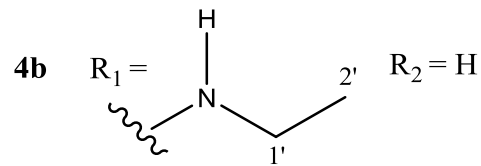
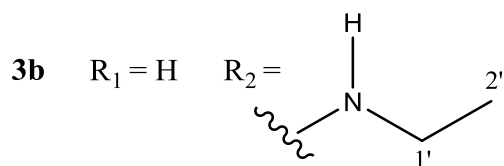


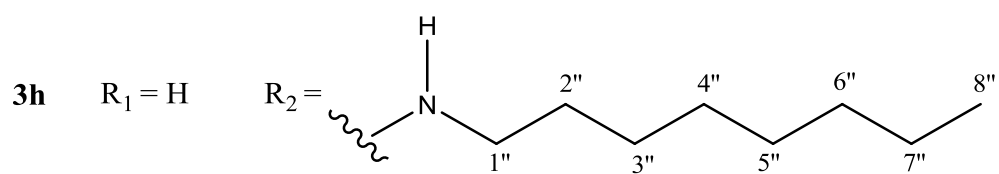
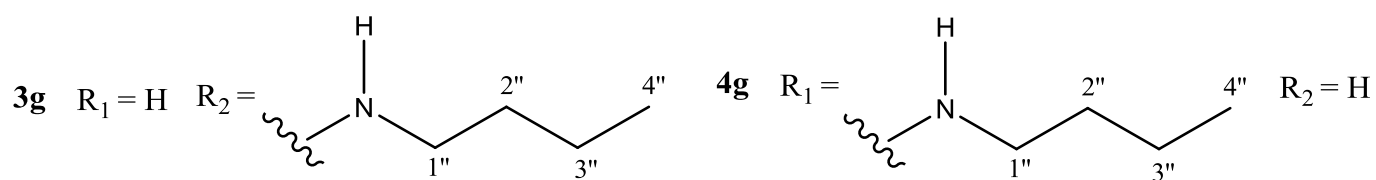
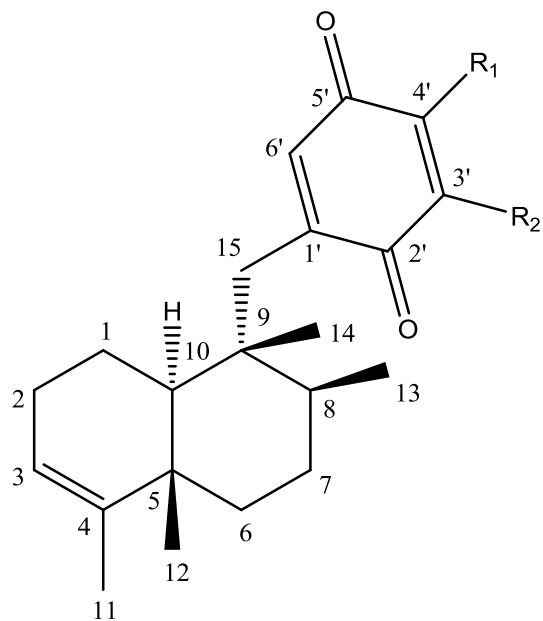
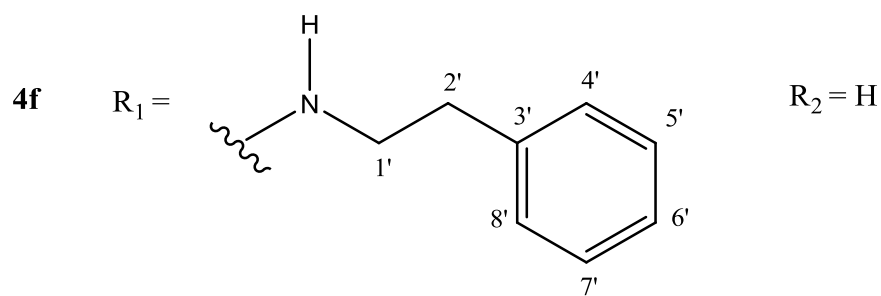
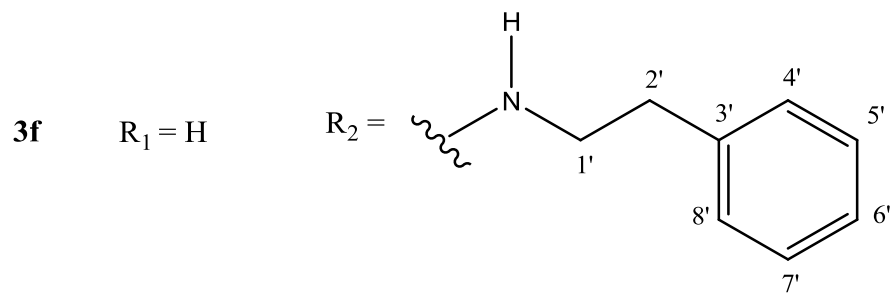
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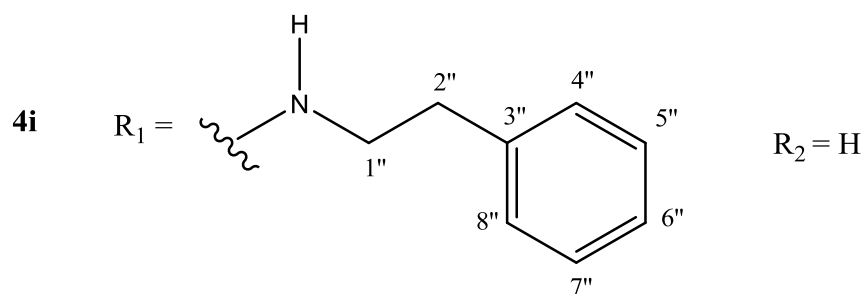
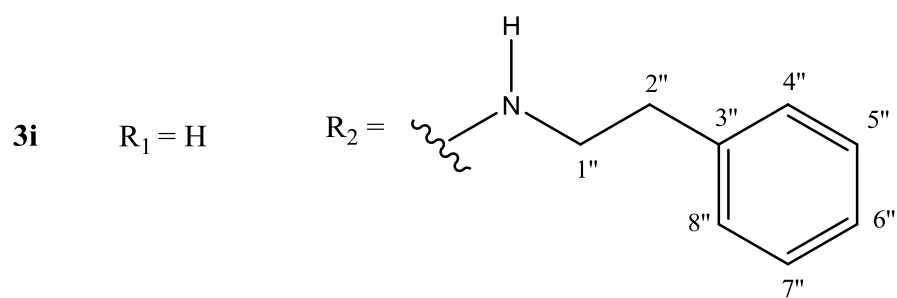
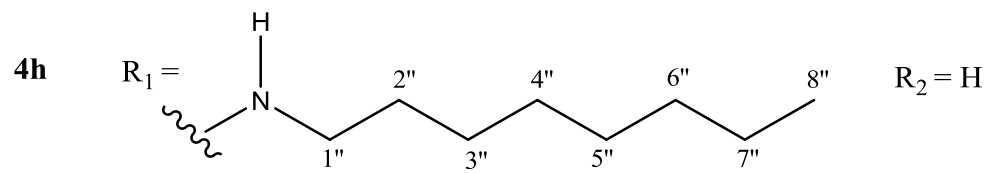


3a $R_1 = H$ $R_2 = NHMe$

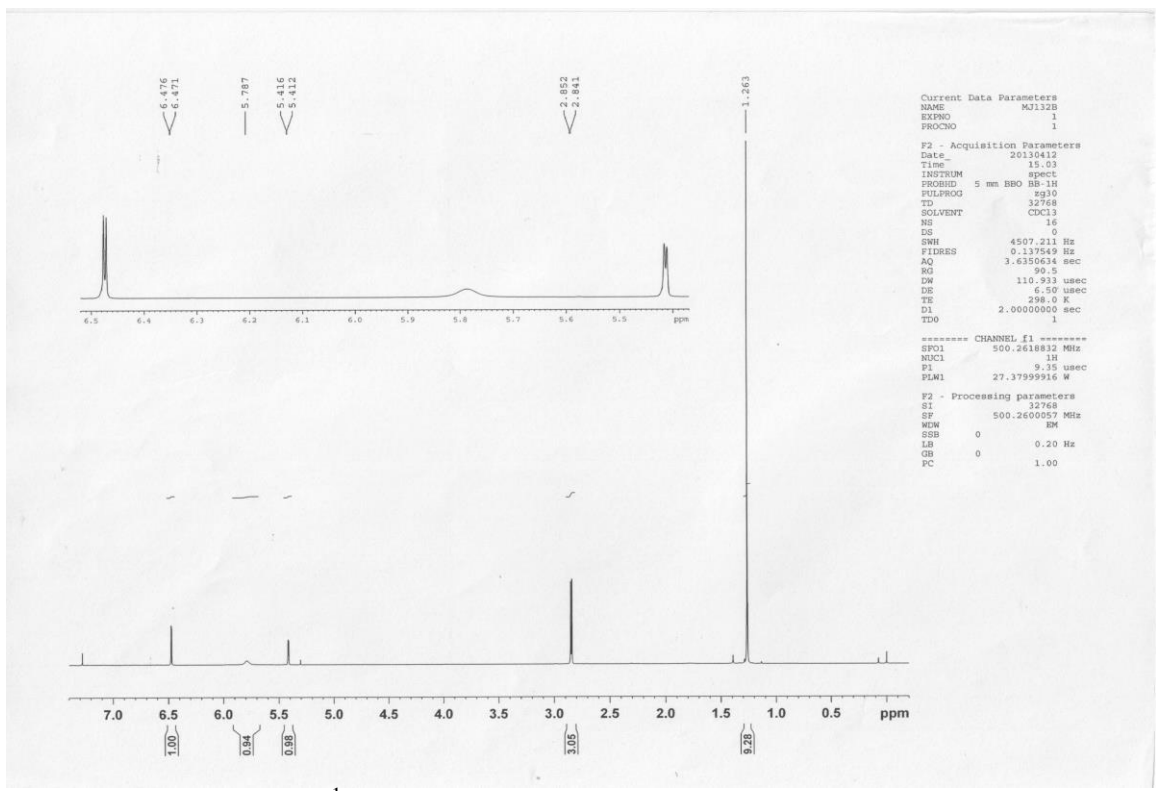
4a $R_1 = NHMe$ $R_2 = H$



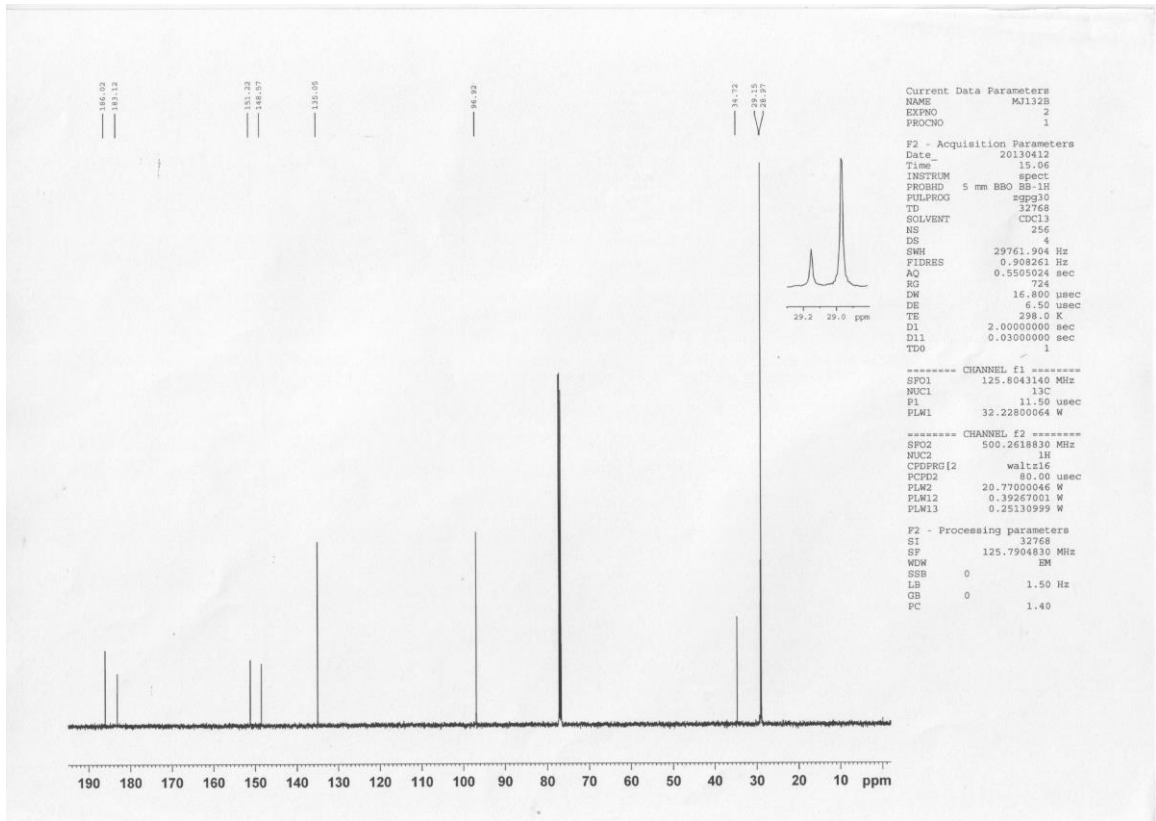




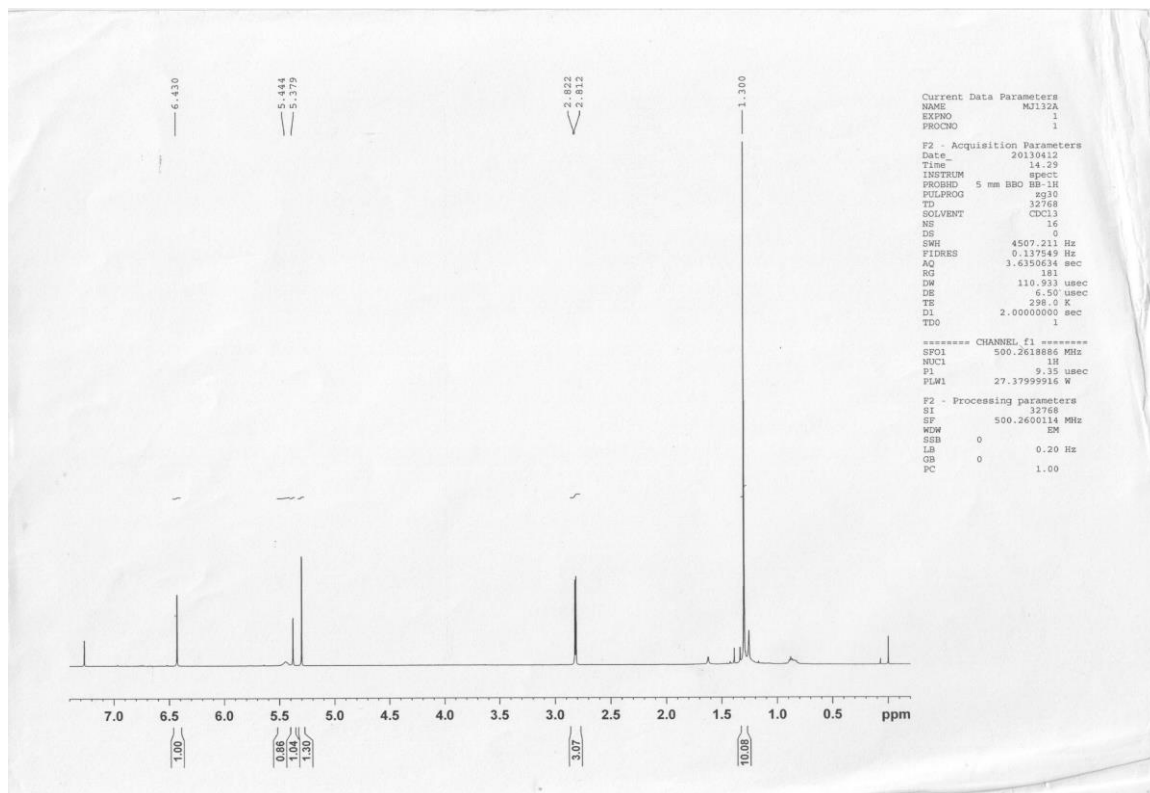
Scheme S1



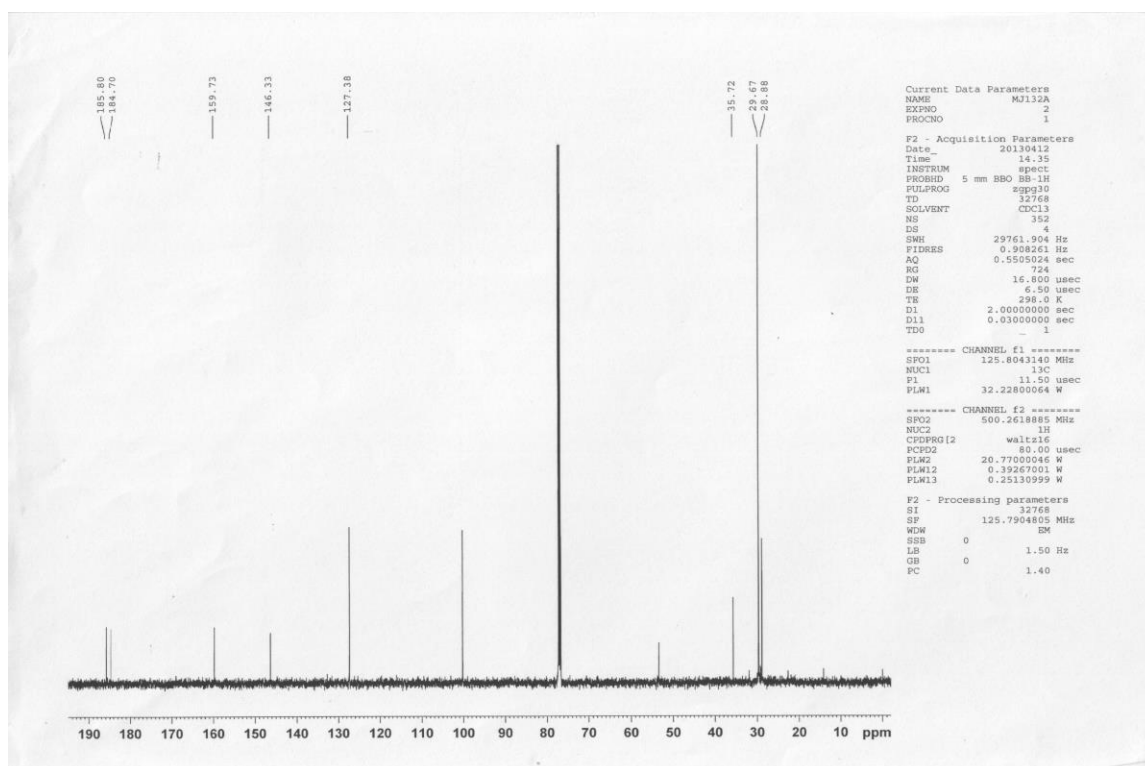
¹H NMR spectrum of compound **3a**



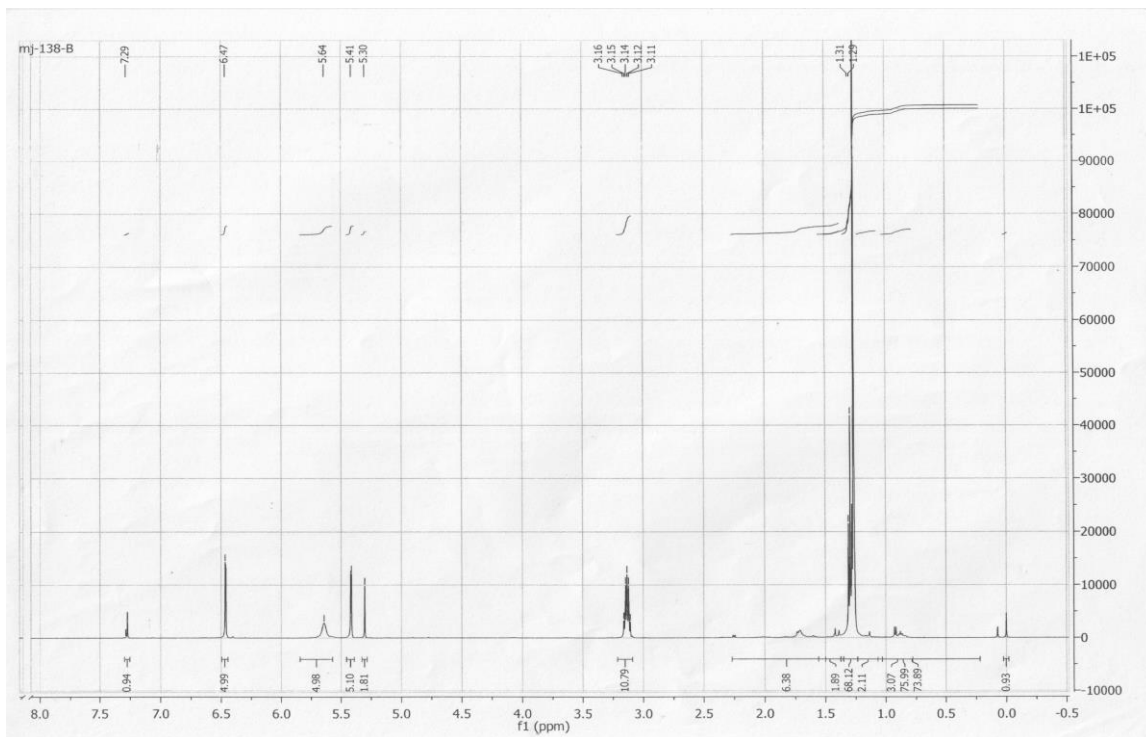
¹³C NMR spectrum of compound **3a**



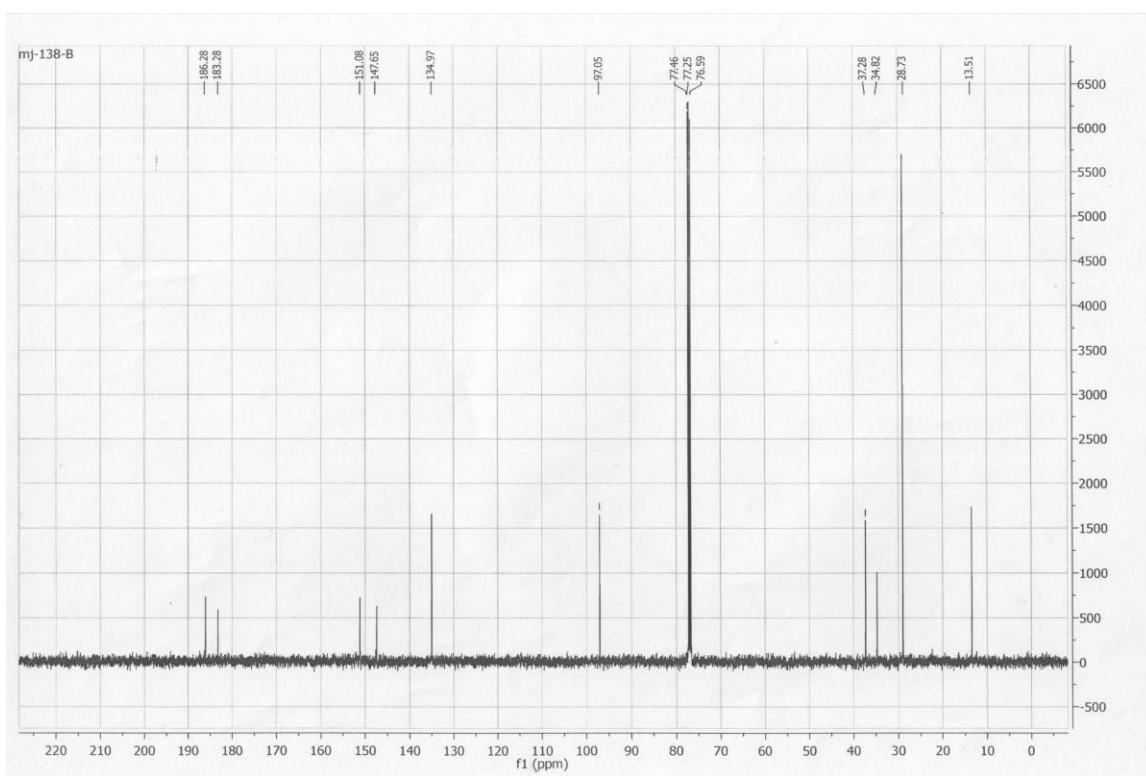
¹H NMR spectrum of compound **4a**



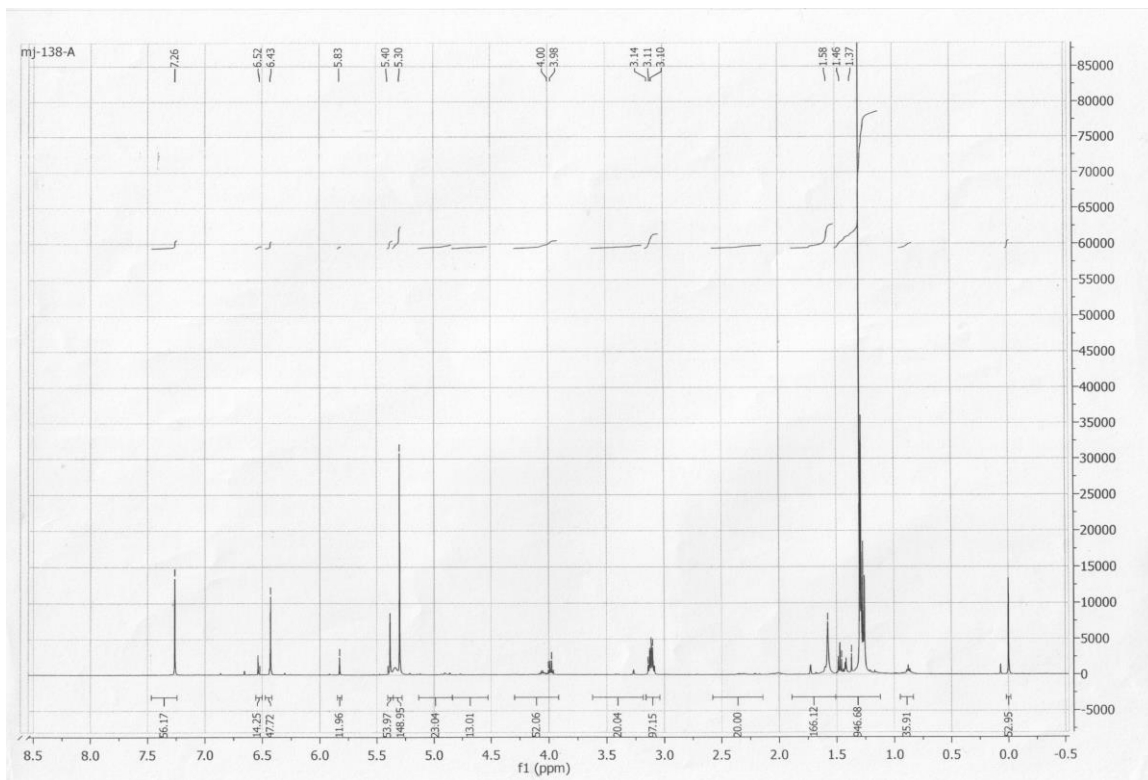
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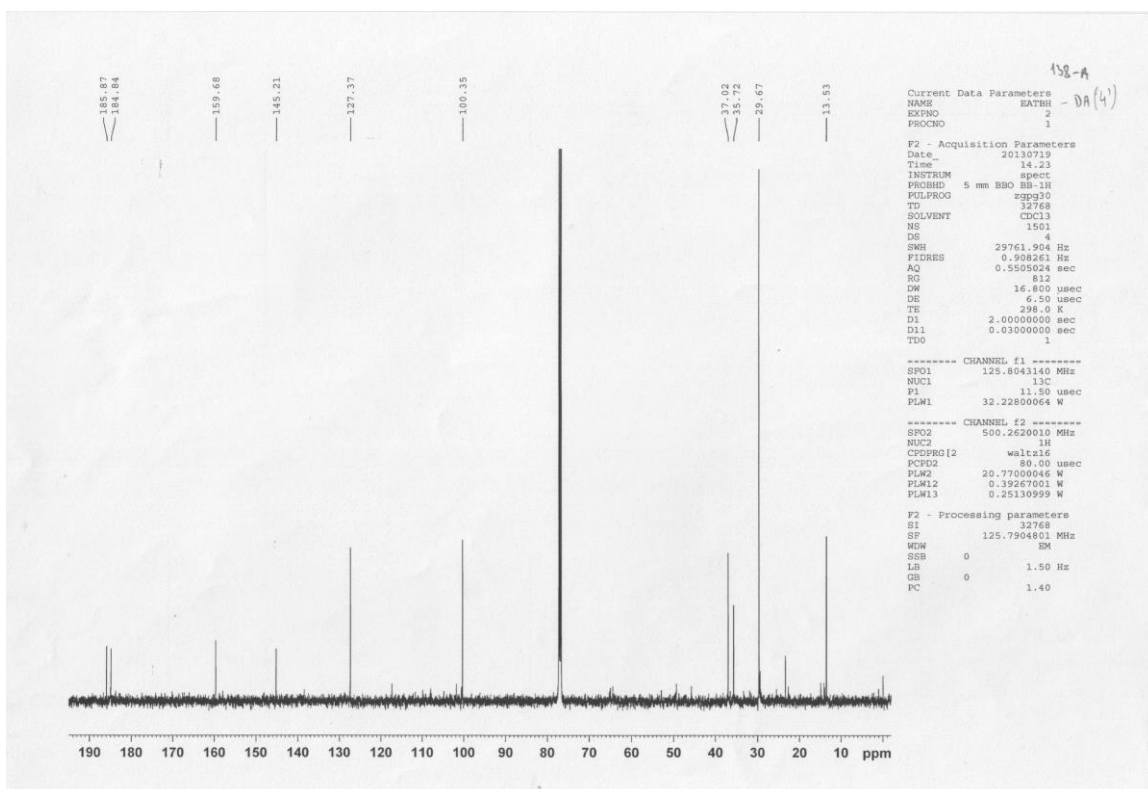
¹H NMR spectrum of compound 3b



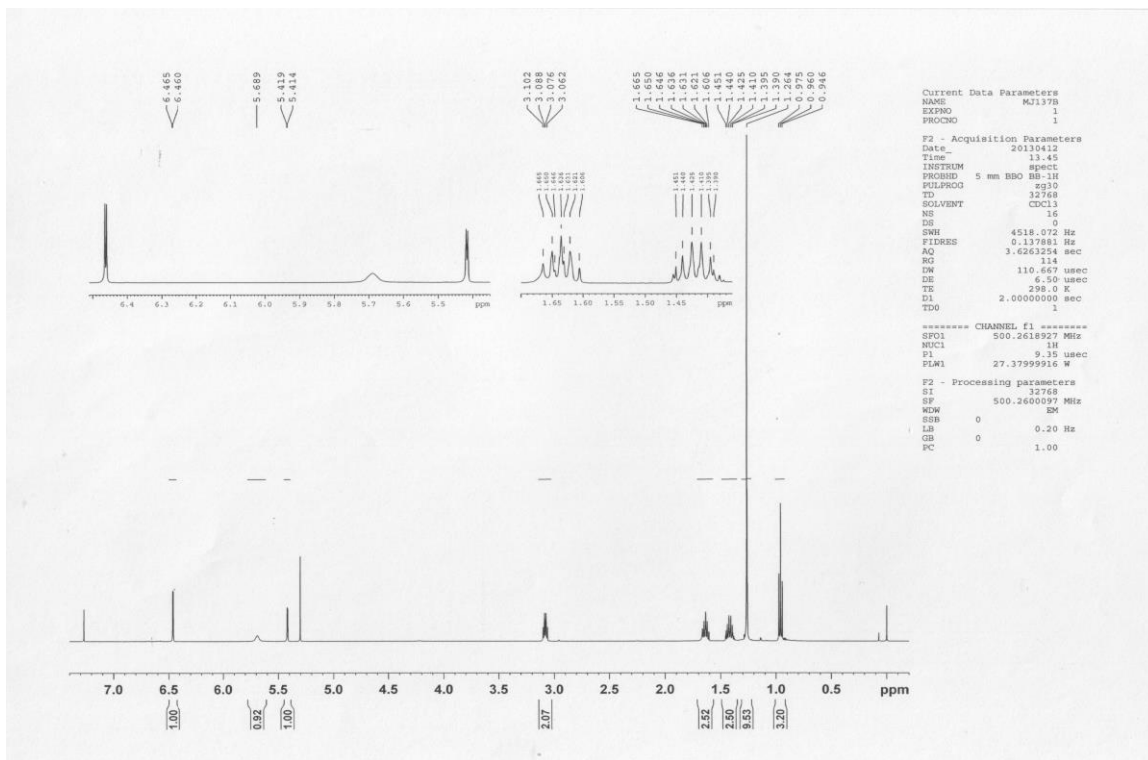
¹³C NMR spectrum of compound 3b



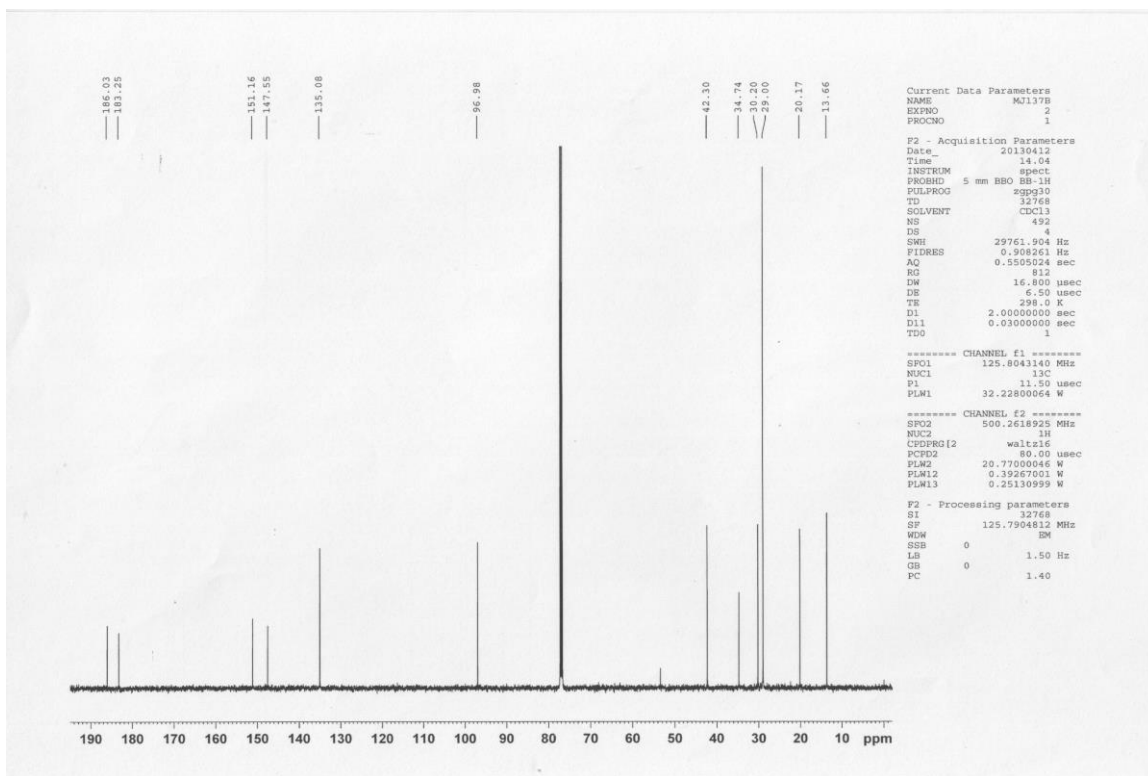
¹H NMR spectrum of compound **4b**



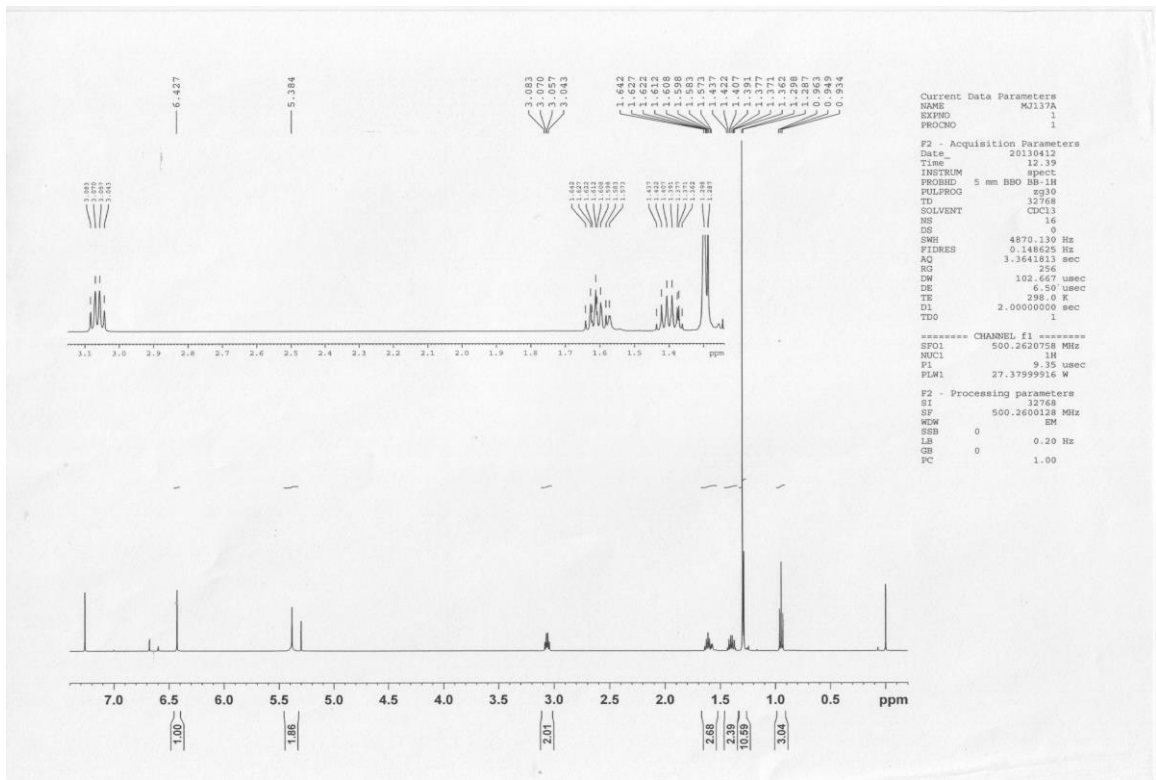
¹³C NMR spectrum of compound **4b**



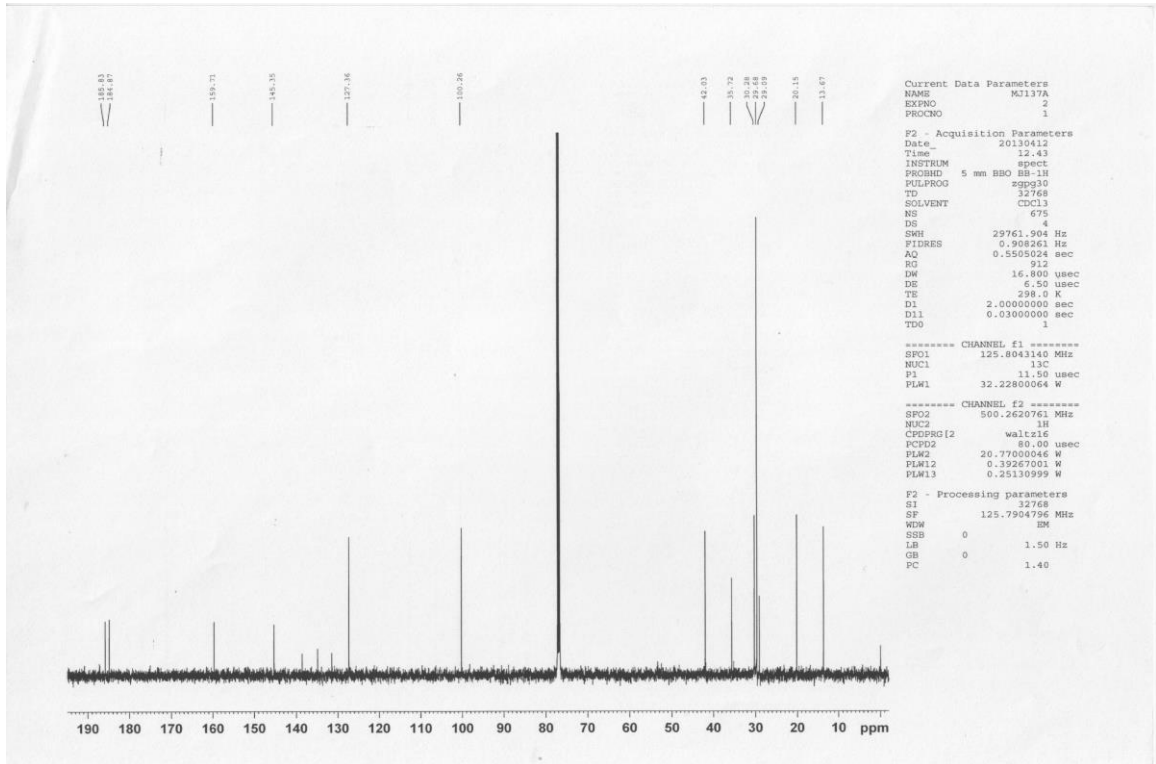
¹H NMR spectrum of compound 3c



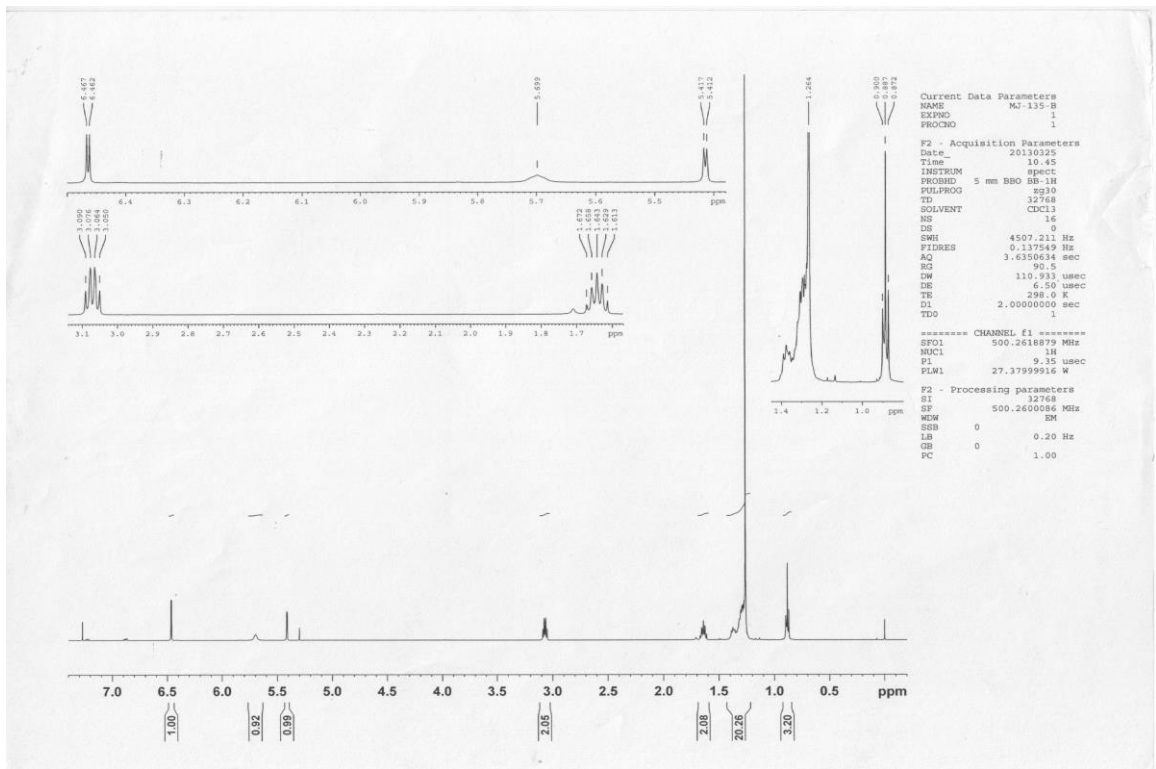
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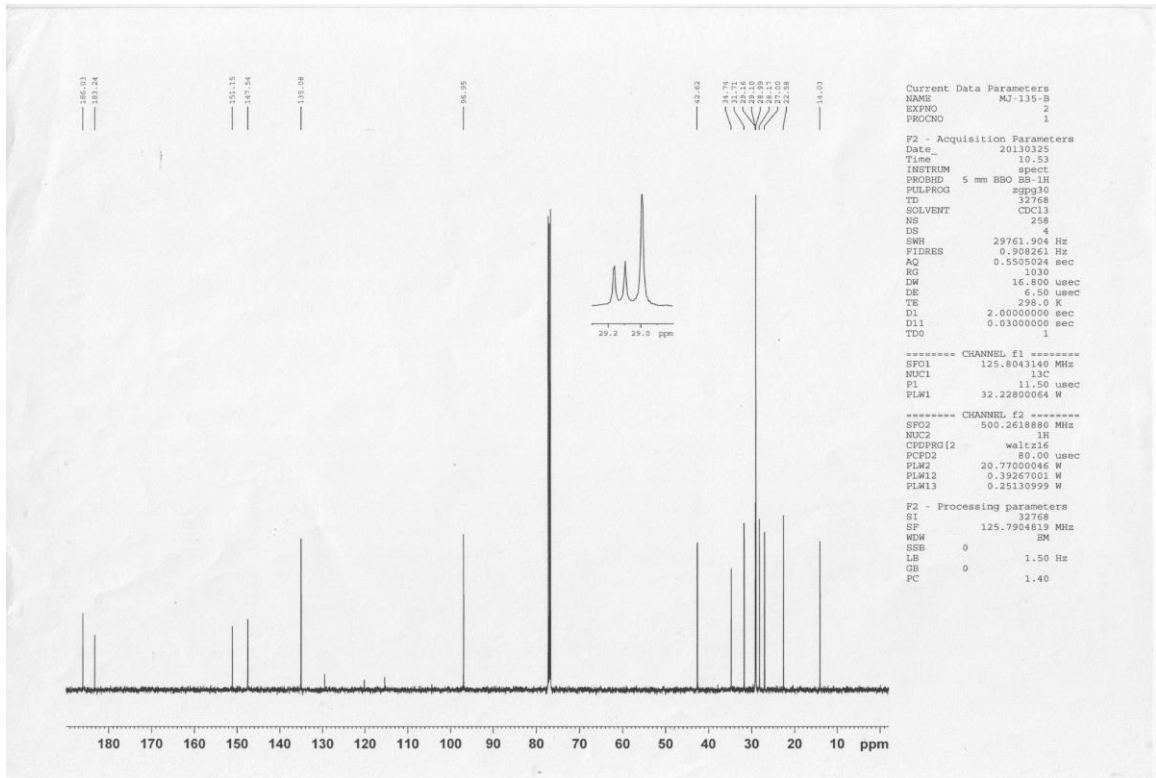
^1H NMR spectrum of compound **4c**



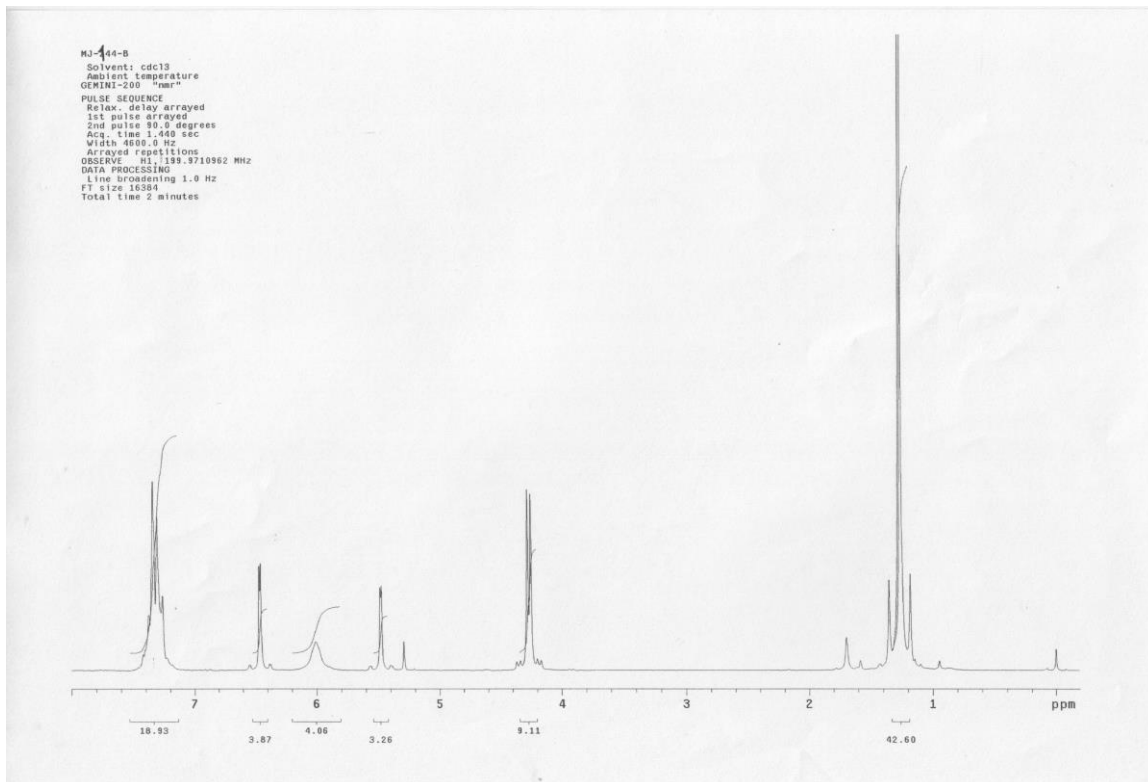
^{13}C NMR spectrum of compound **4c**



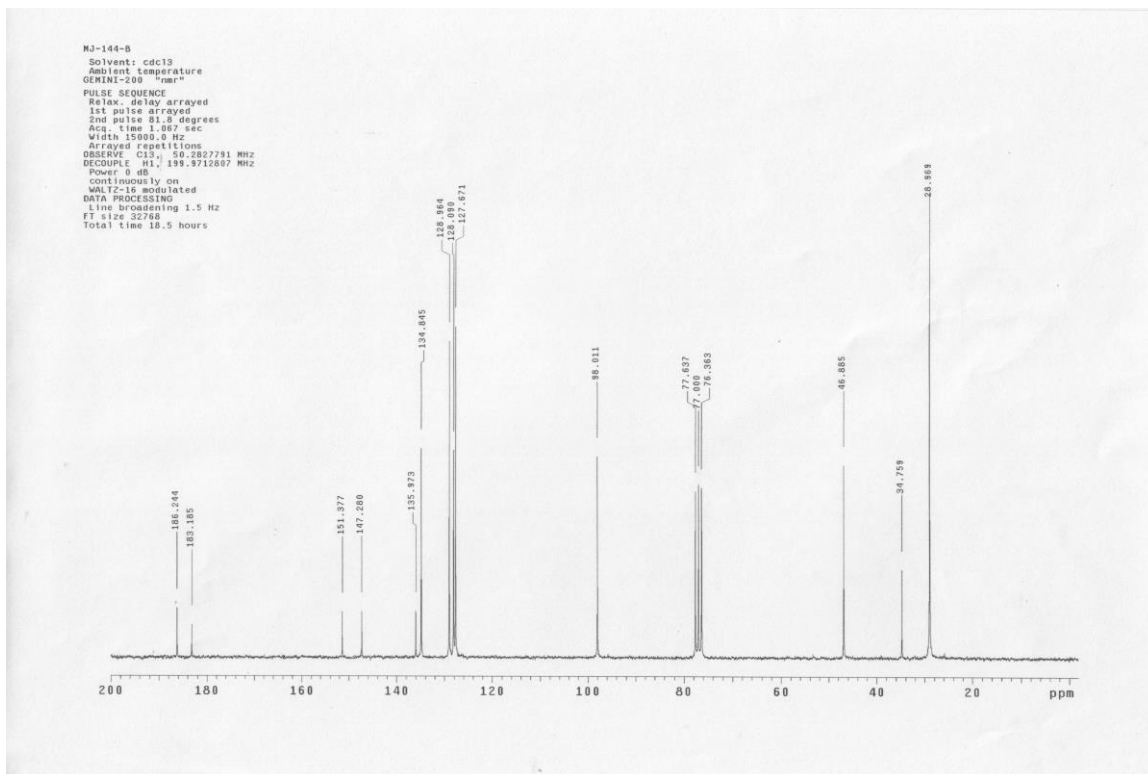
^1H NMR spectrum of compound **3d**



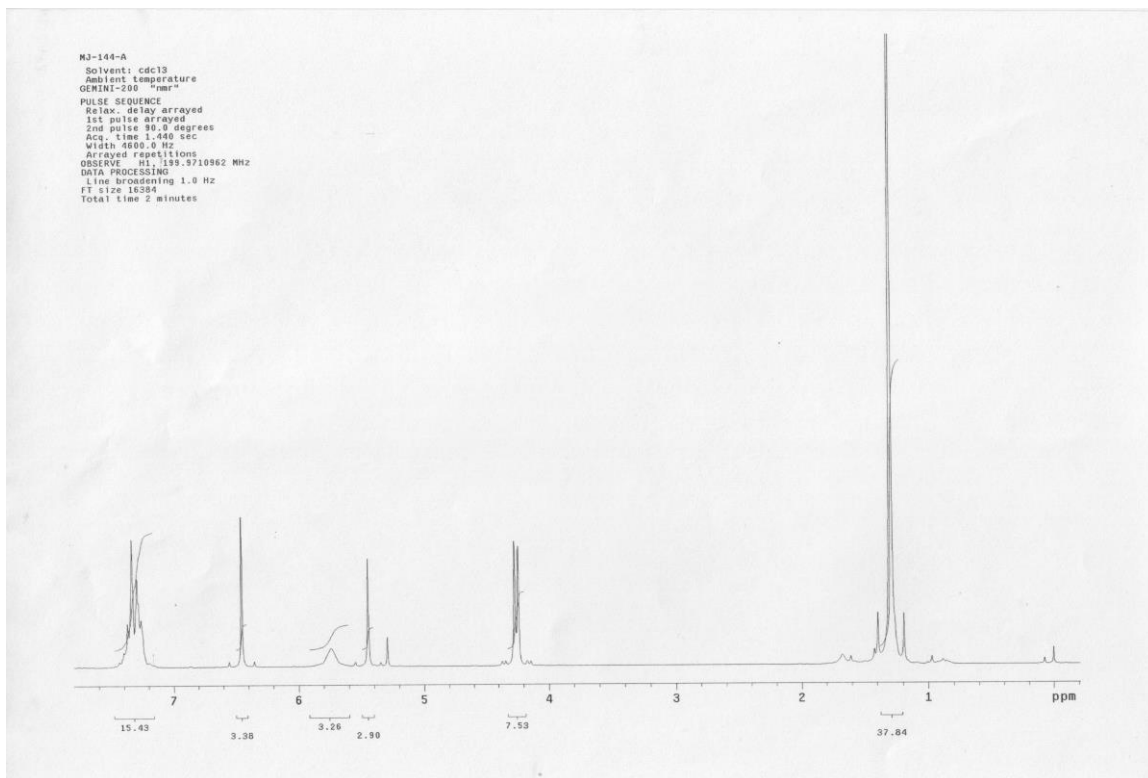
^{13}C NMR spectrum of compound **3d**



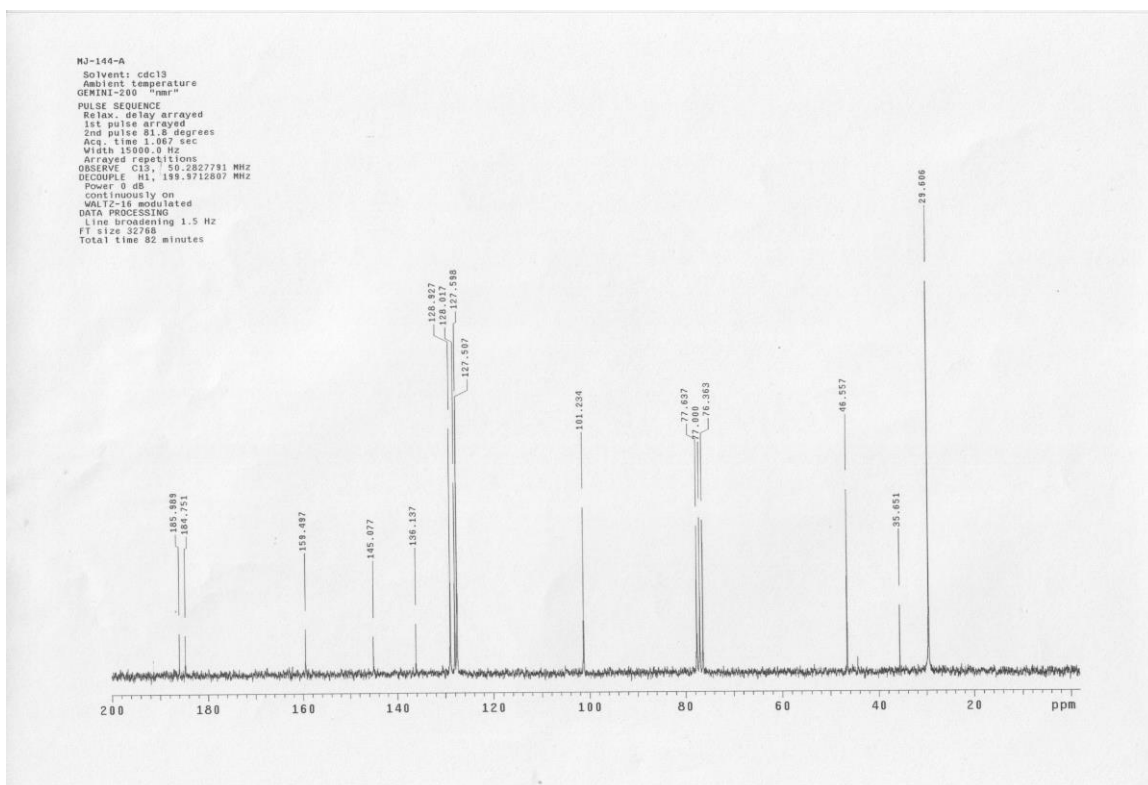
^1H NMR spectrum of compound **3e**



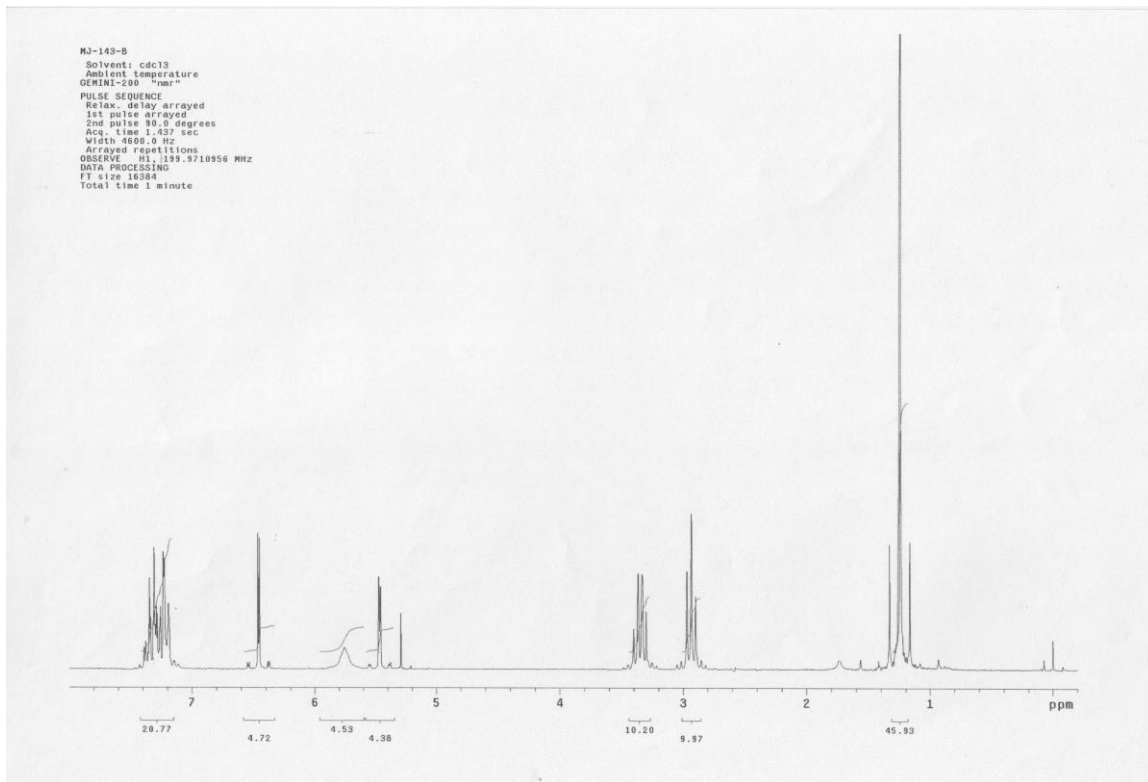
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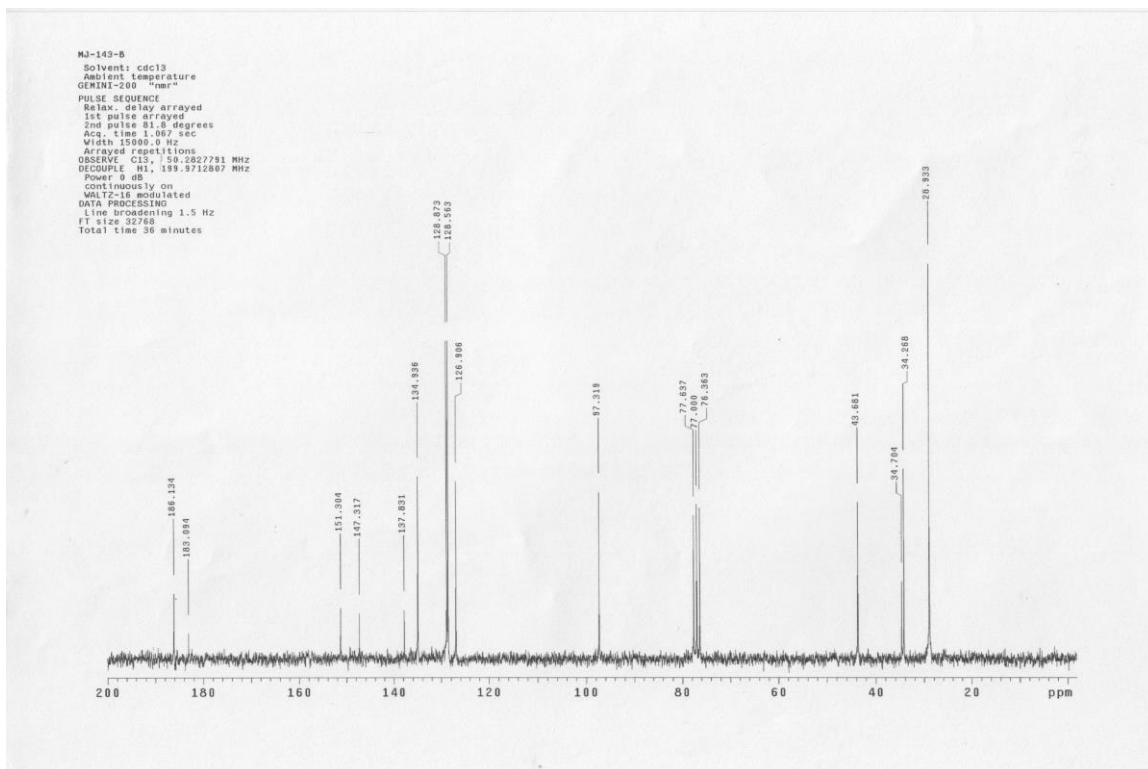
^1H NMR spectrum of compound **4e**



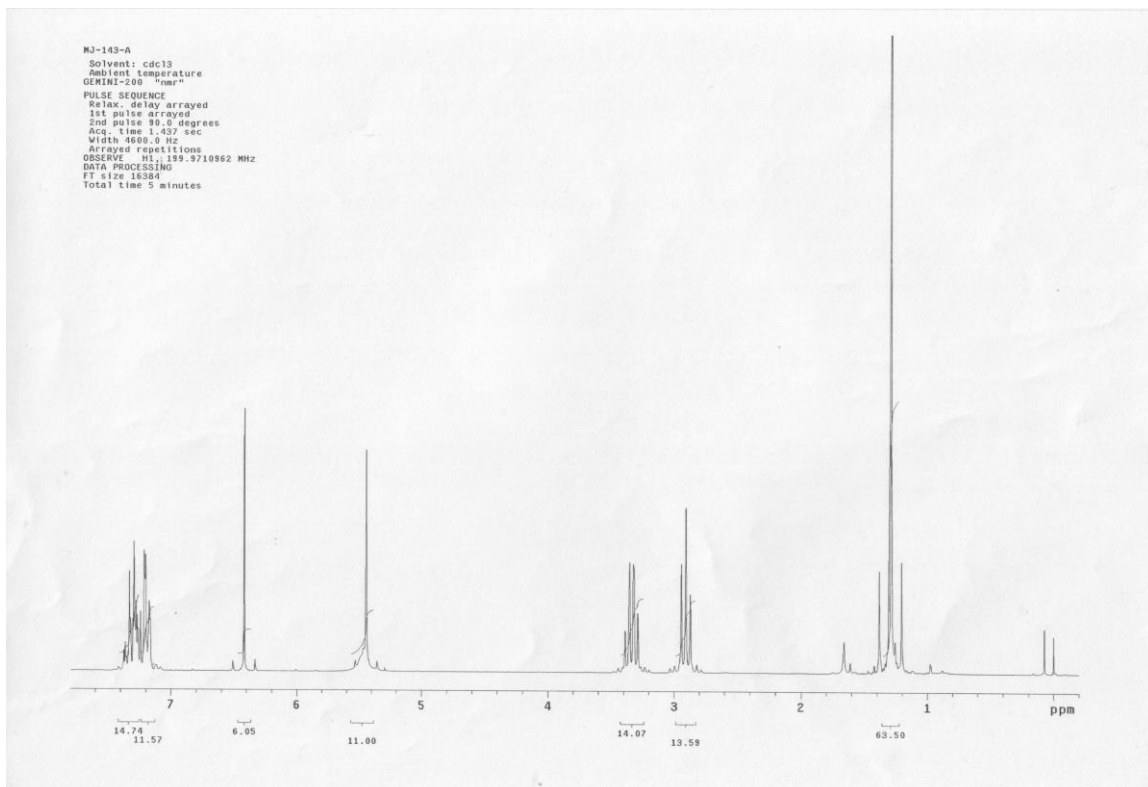
^{13}C NMR spectrum of compound **4e**



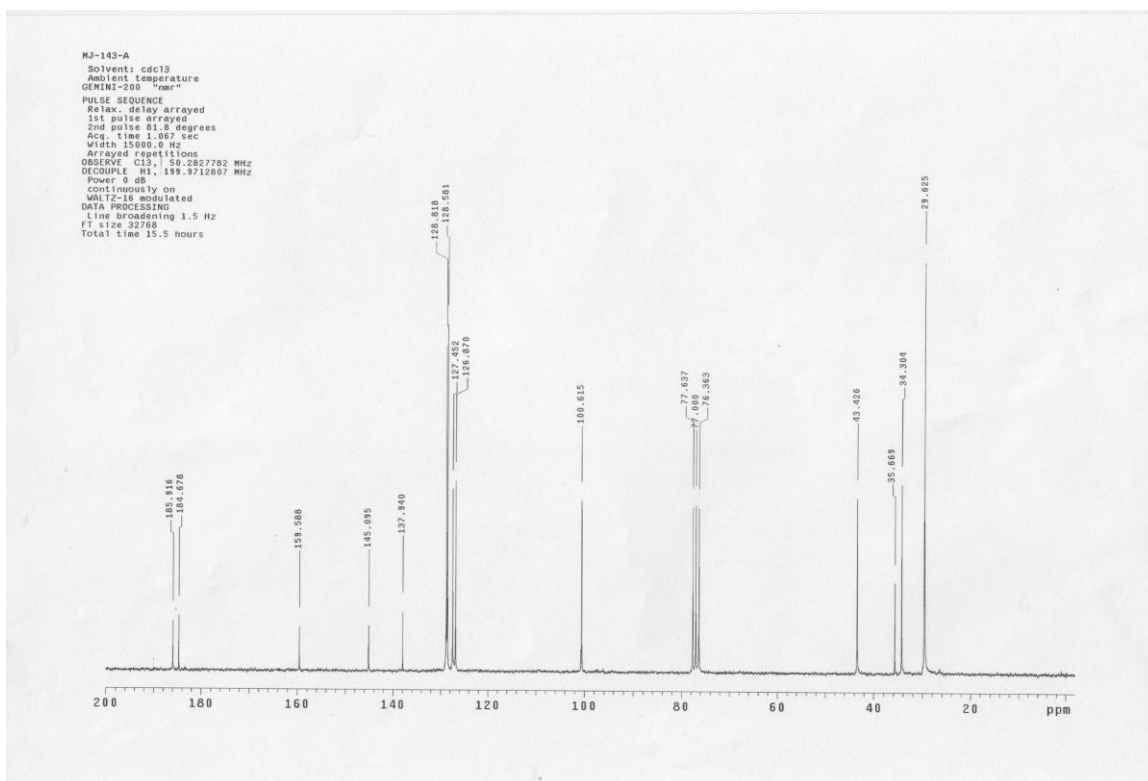
^1H NMR spectrum of compound **3f**



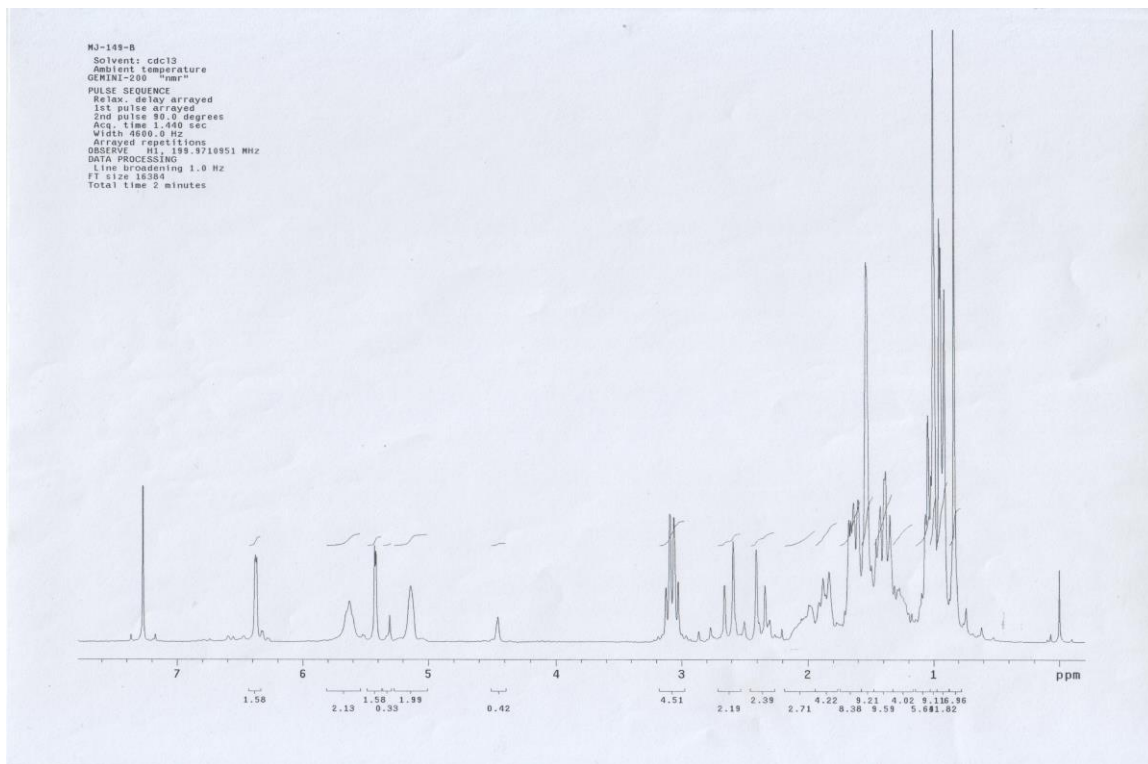
^{13}C NMR spectrum of compound **3f**



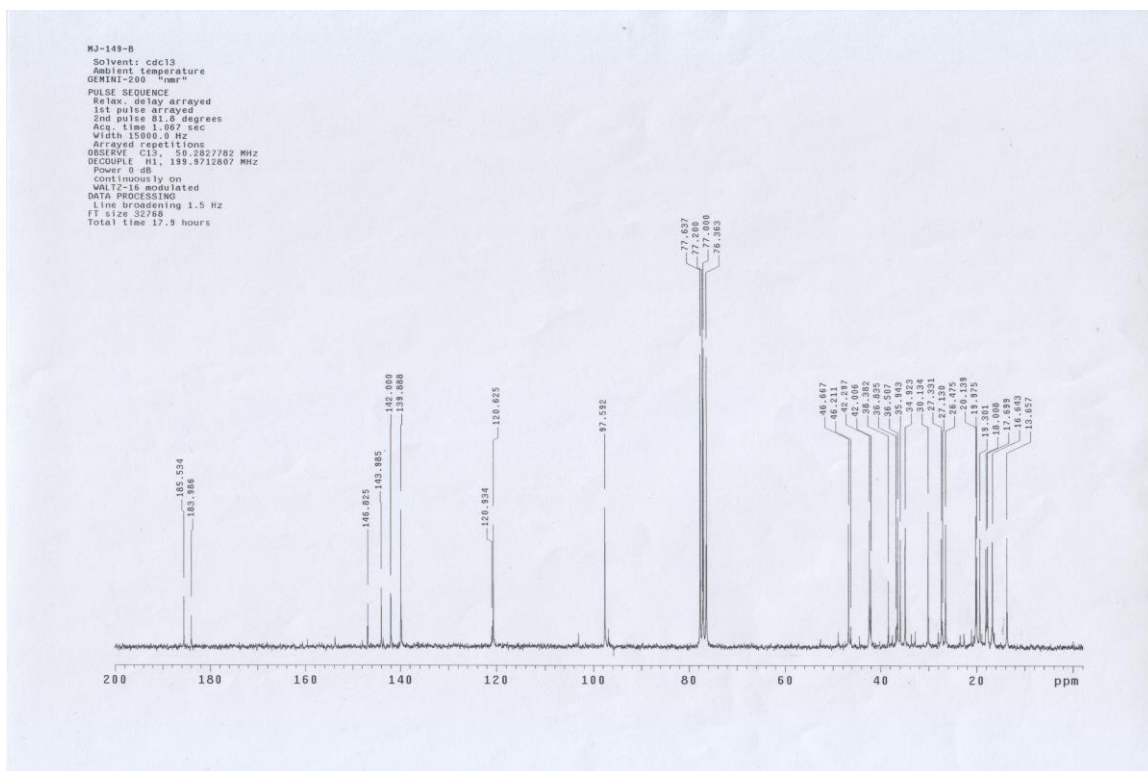
^1H NMR spectrum of compound **4f**



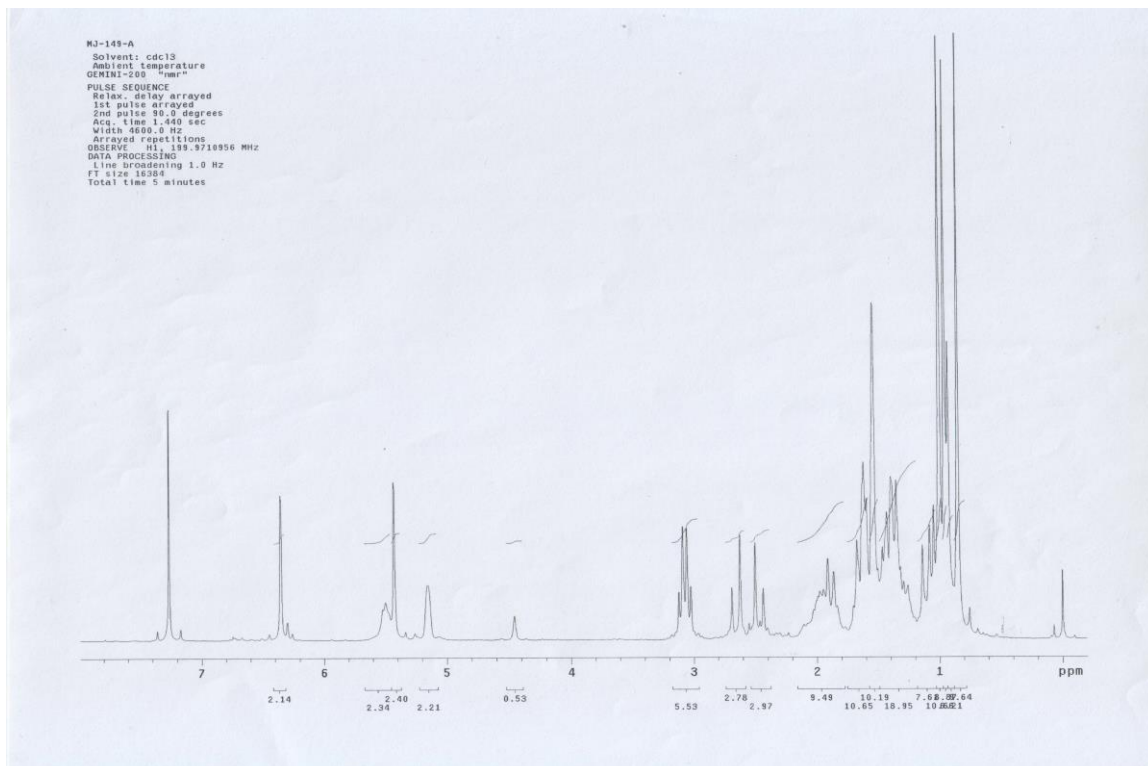
^{13}C NMR spectrum of compound **4f**



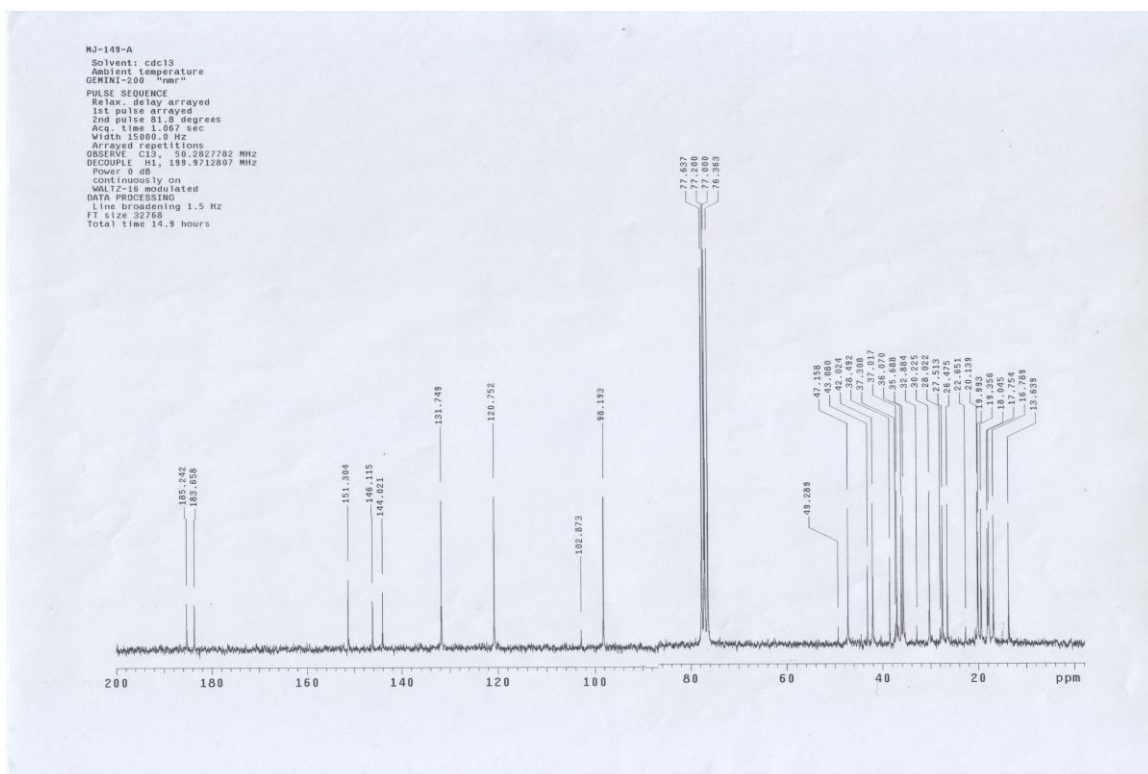
^1H NMR spectrum of compound **3g**



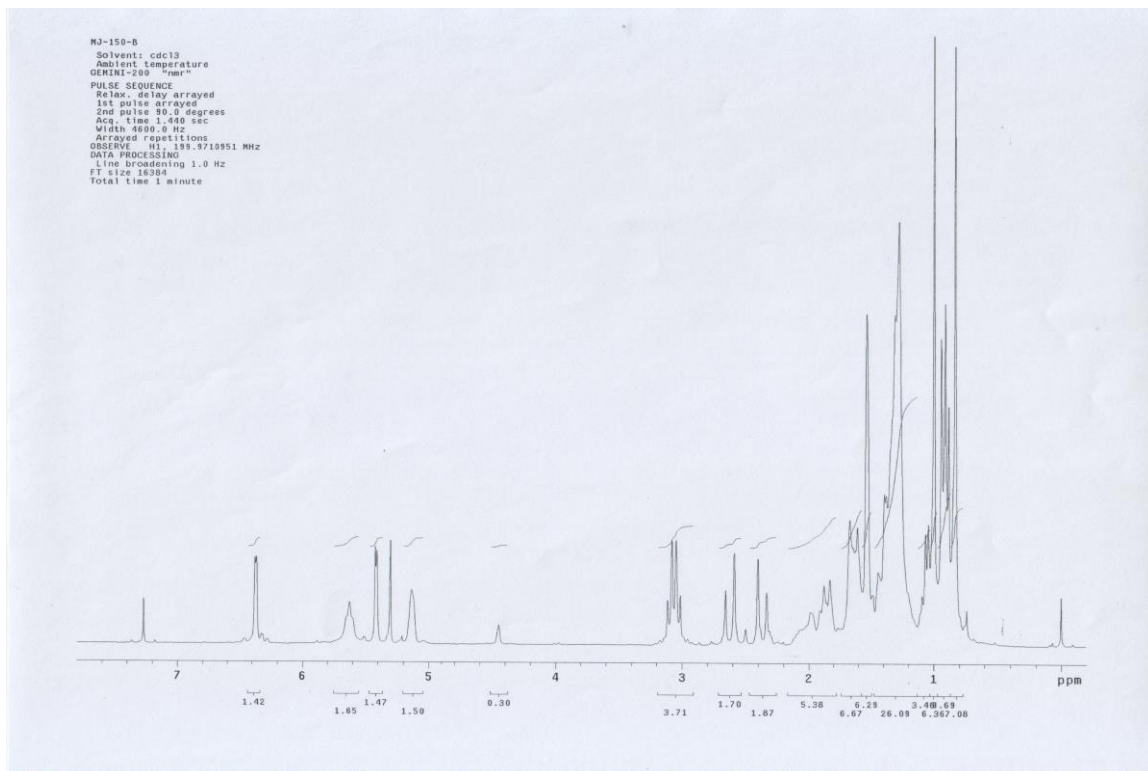
^{13}C NMR spectrum of compound **3g**



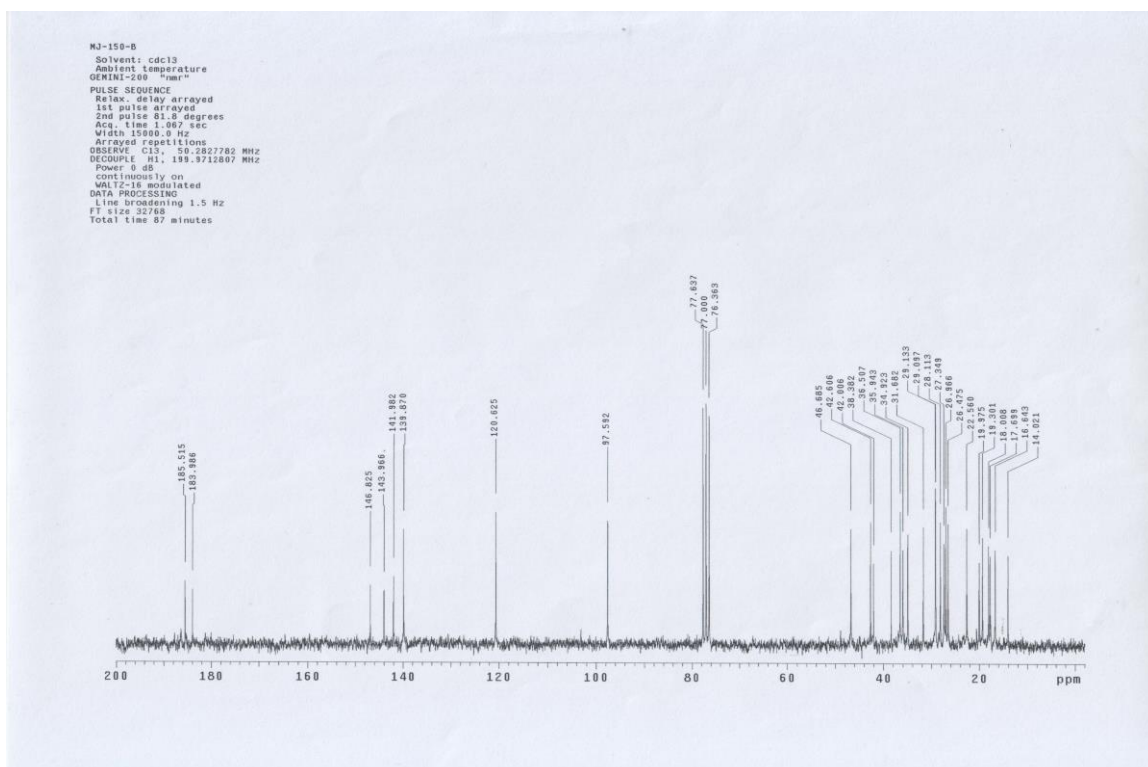
^1H NMR spectrum of compound **4g**



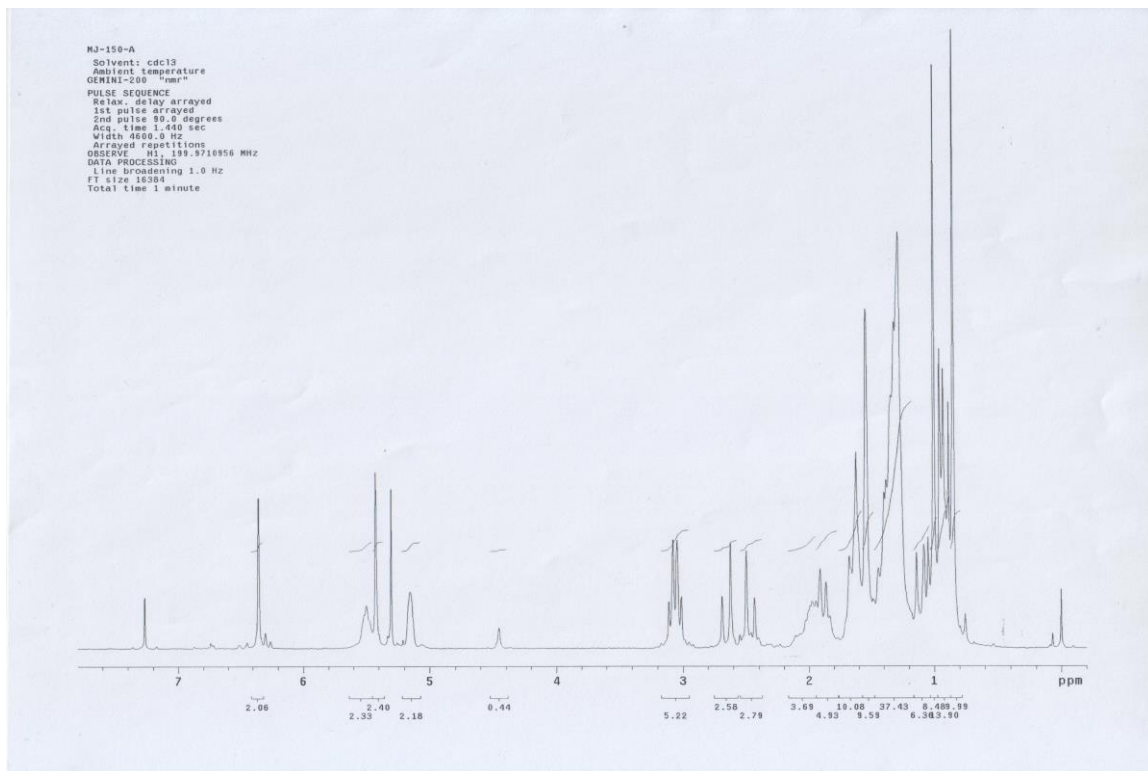
^{13}C NMR spectrum of compound **4g**



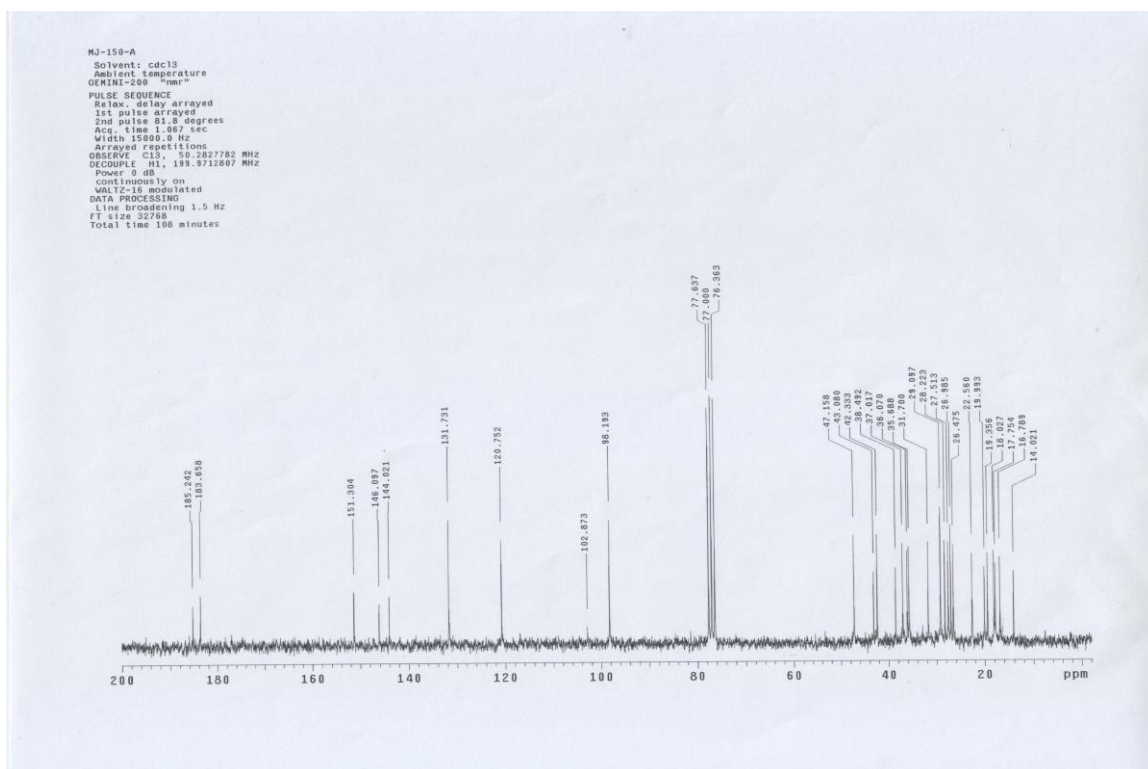
^1H NMR spectrum of compound **3h**



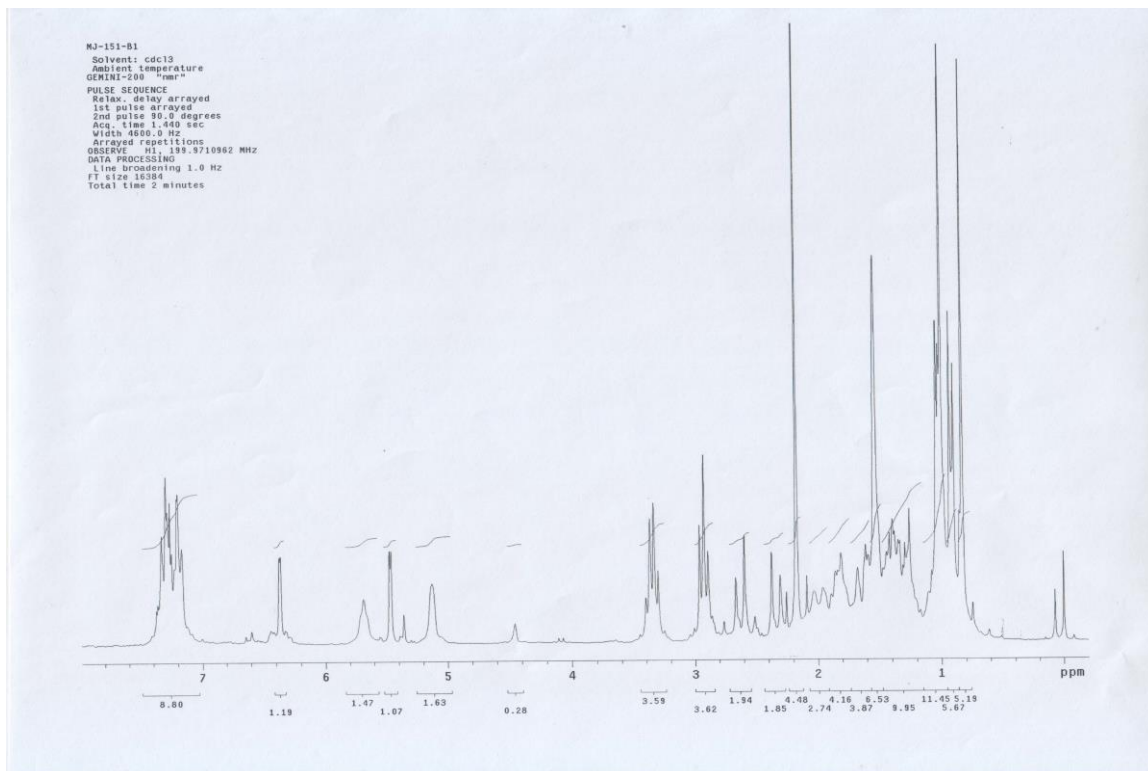
^{13}C NMR spectrum of compound **3h**



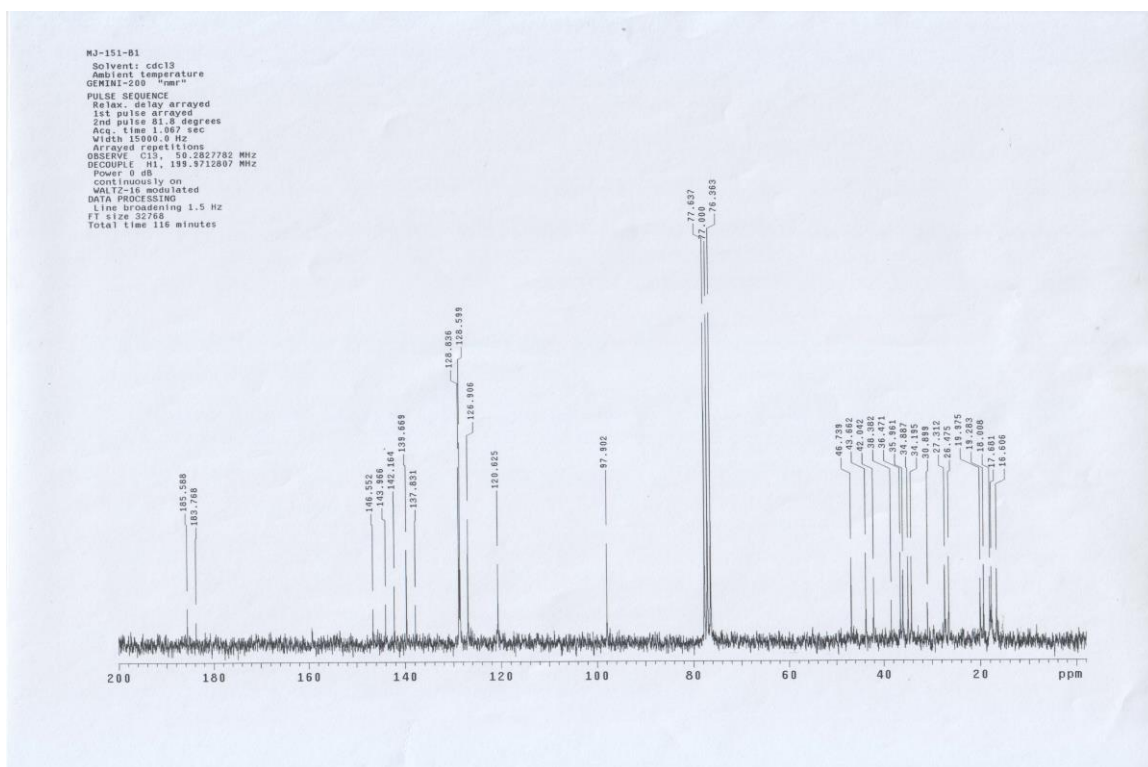
^1H NMR spectrum of compound **4h**



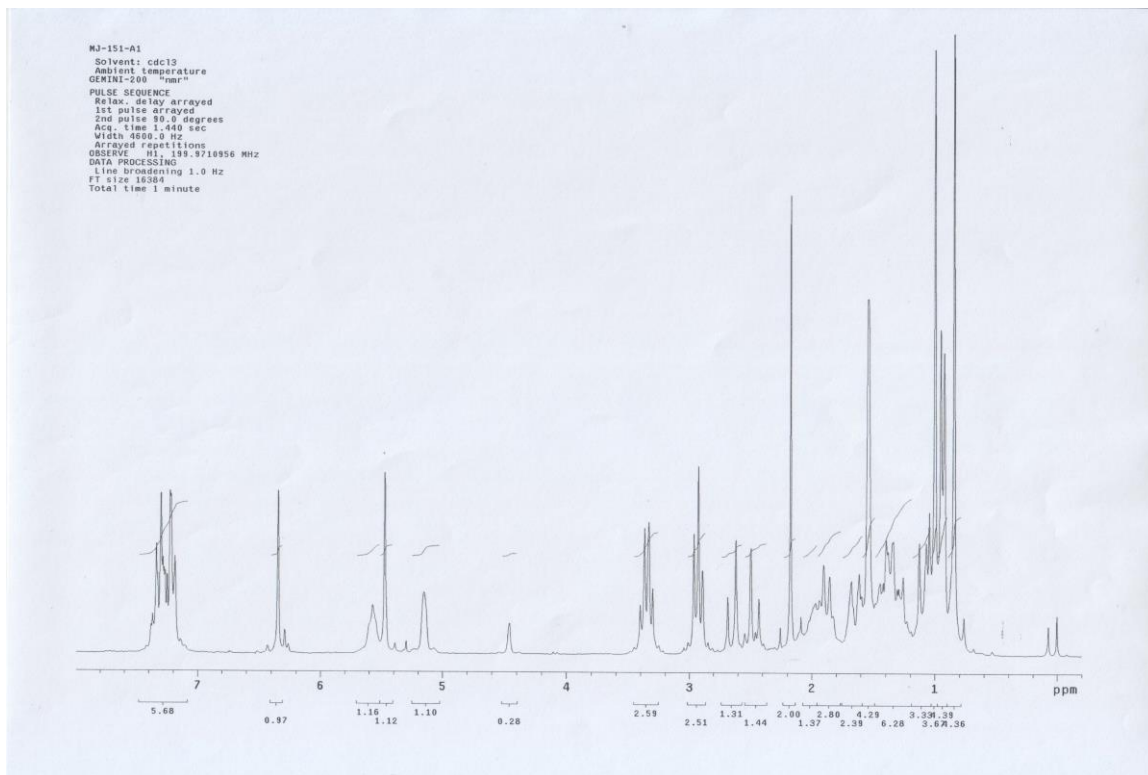
^{13}C NMR spectrum of compound **4h**



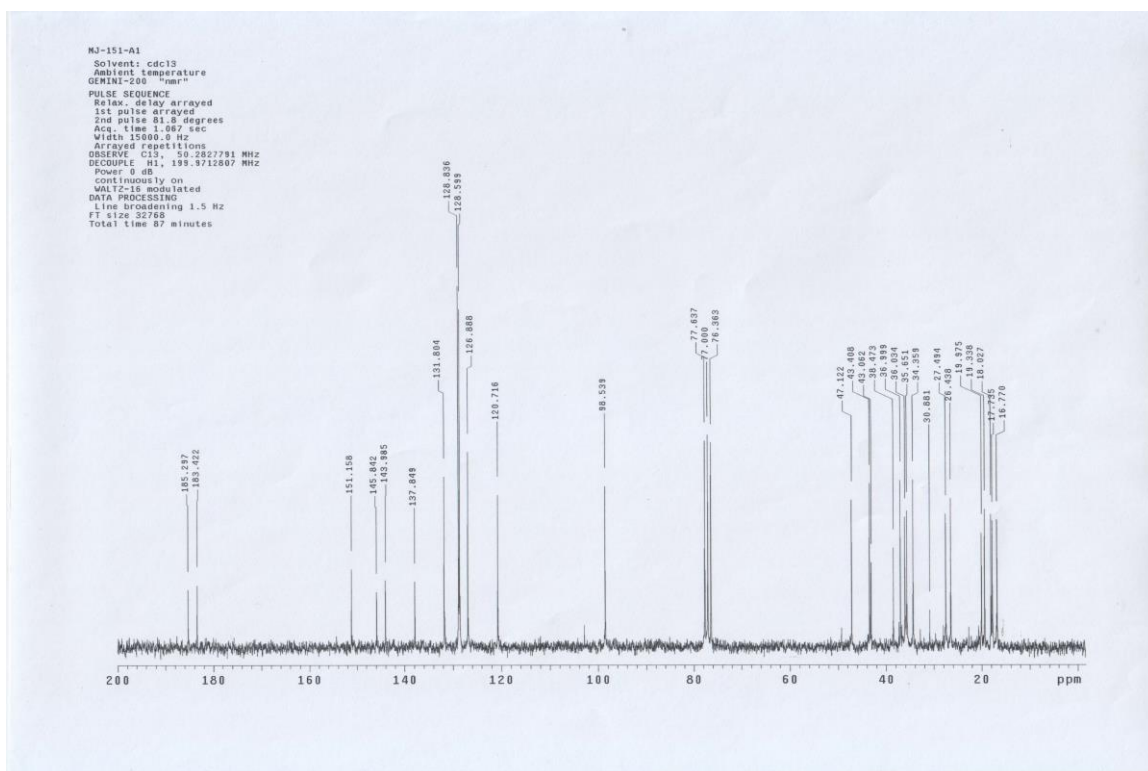
^1H NMR spectrum of compound **3i**



^{13}C NMR spectrum of compound **3i**



^1H NMR spectrum of compound **4i**



^{13}C NMR spectrum of compound **4i**

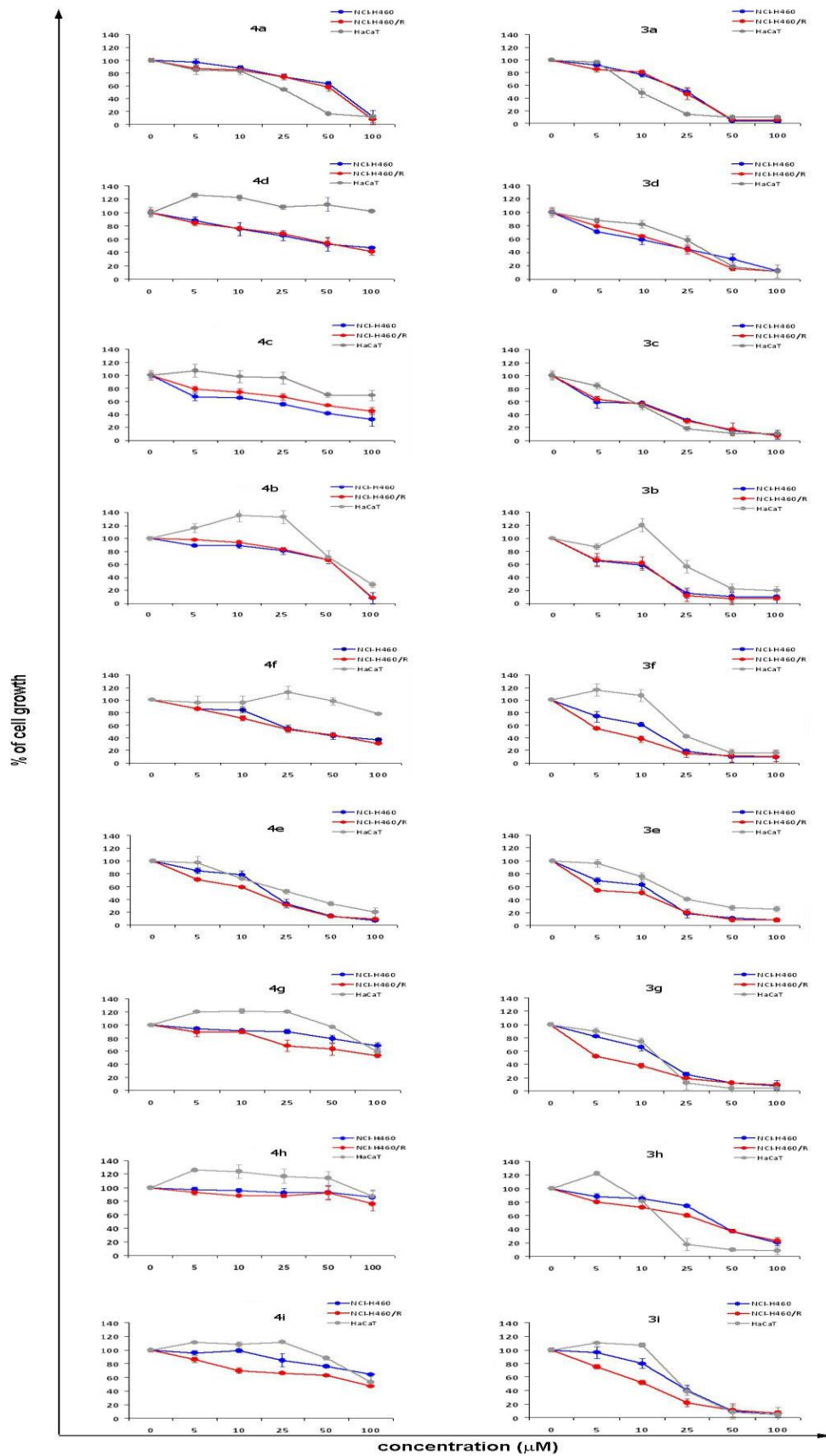
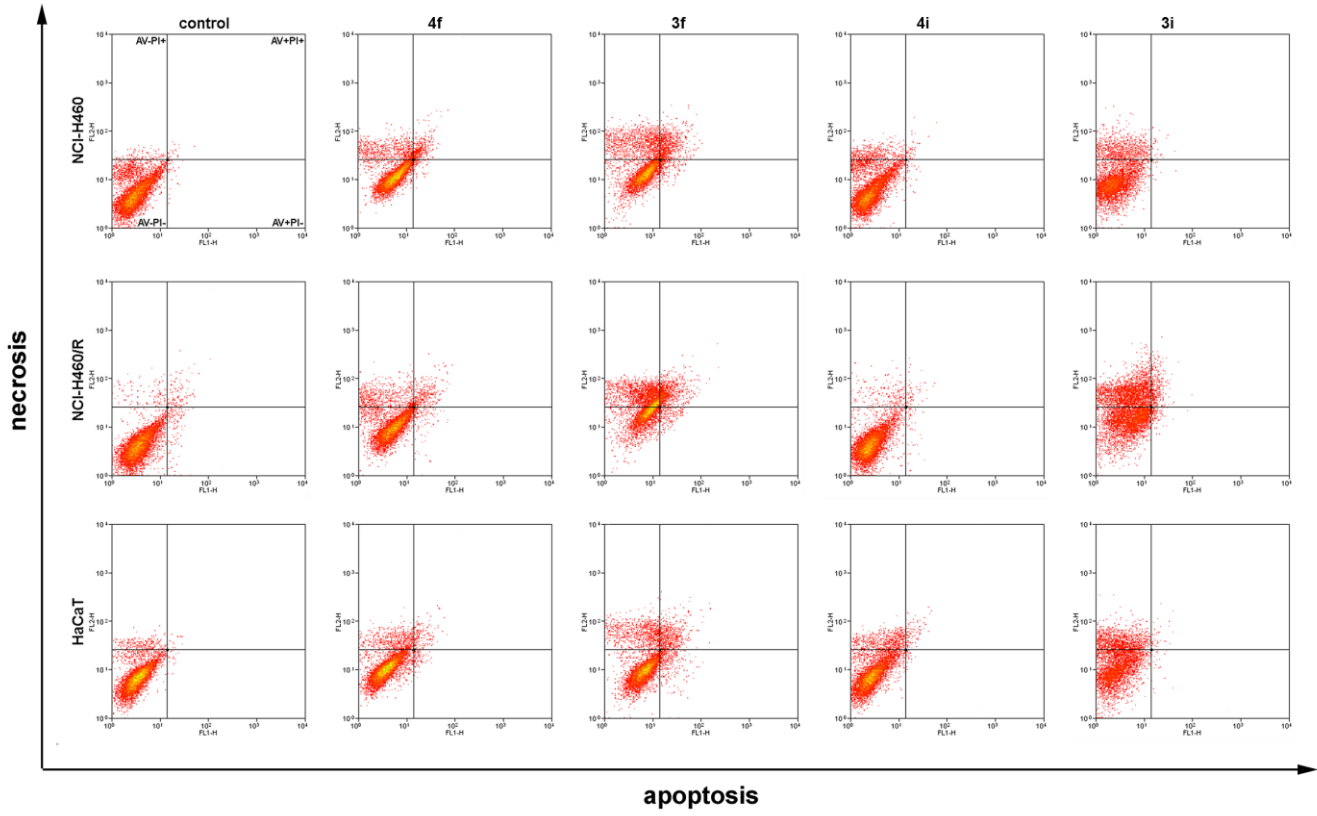
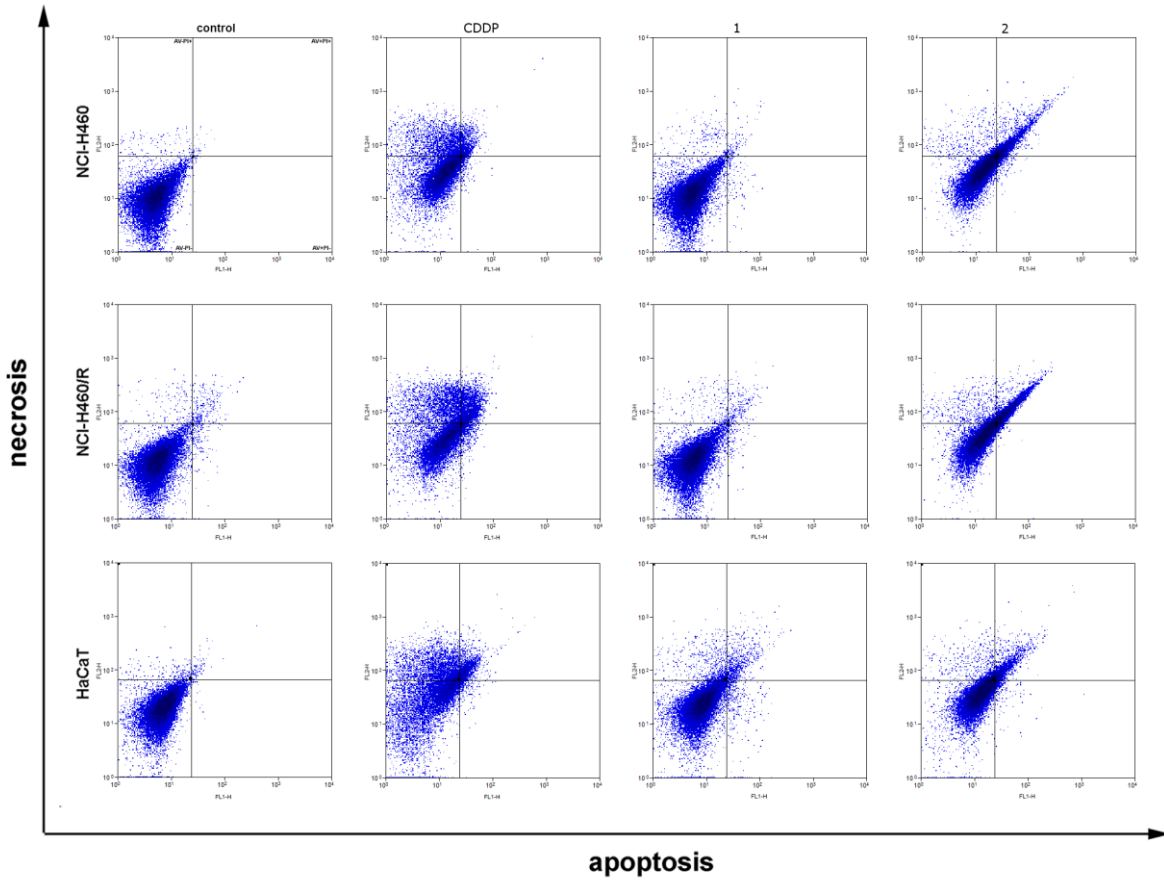


Figure S1. Cell growth inhibition by avarone, TBQ and their derivatives. Inhibitory potential of 18 compounds was studied in NCI-H460, NCI-H460/R and HaCaT cells after 72 h using MTT assay.

A**B**

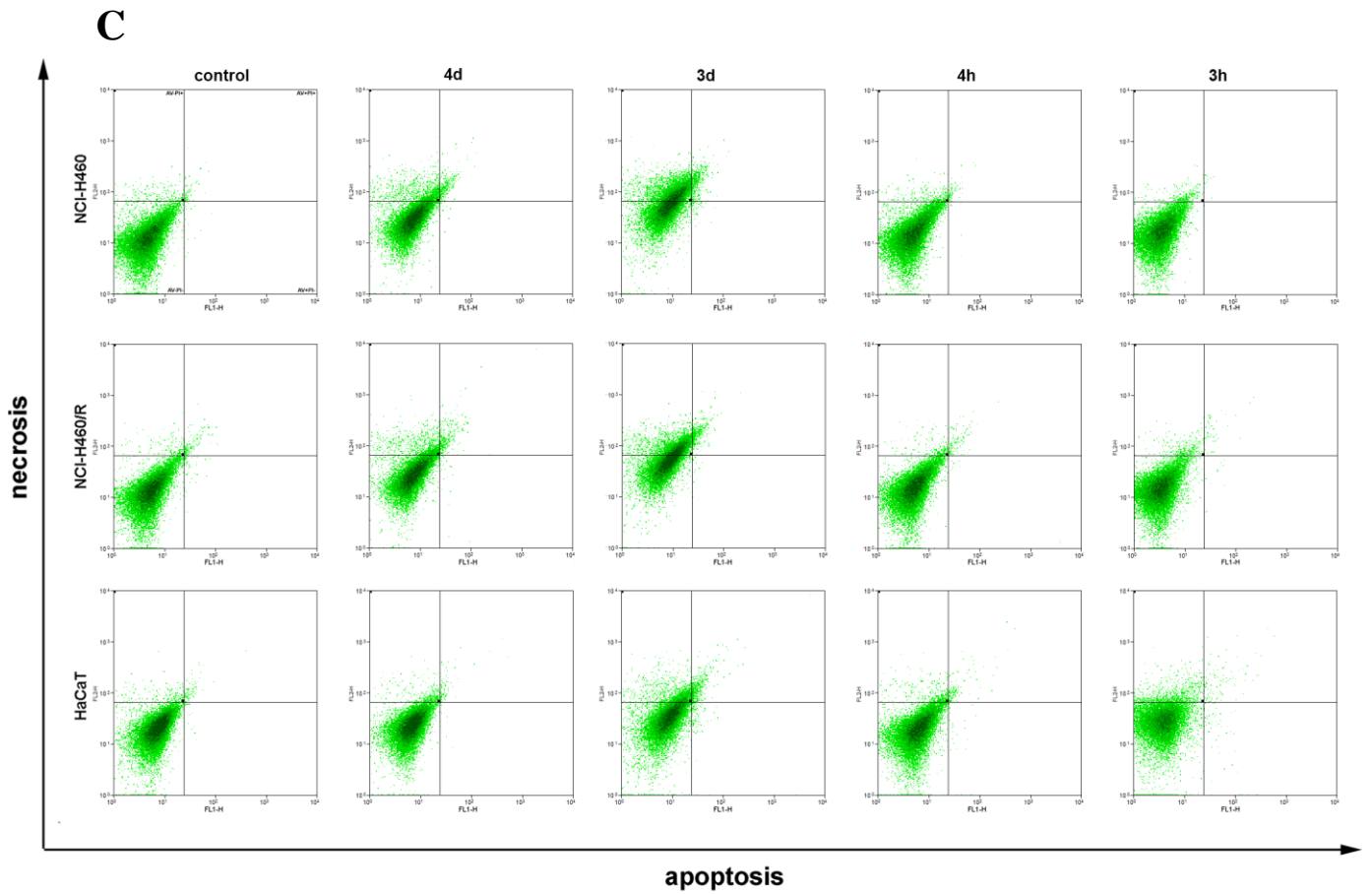


Figure S2 (A, B, C). Cell death induction by avarone, TBQ, their quinone mimetics and CDDP . The type of cell death investigated in NCI-H460, NCI-H460/R and HaCaT cells after 72 h by flow cytometry (AV/PI staining). The assay distinguishes viable cells (AV-PI-), apoptotic cells (AV+PI-), late apoptotic and necrotic cells (AV+PI+) and secondary necrotic or dead cells (AV-PI+).