Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Design, Synthesis and Evaluation of *N*-Aryl-Glyoxamide Derivatives as Structurally Novel Bacterial Quorum Sensing Inhibitors

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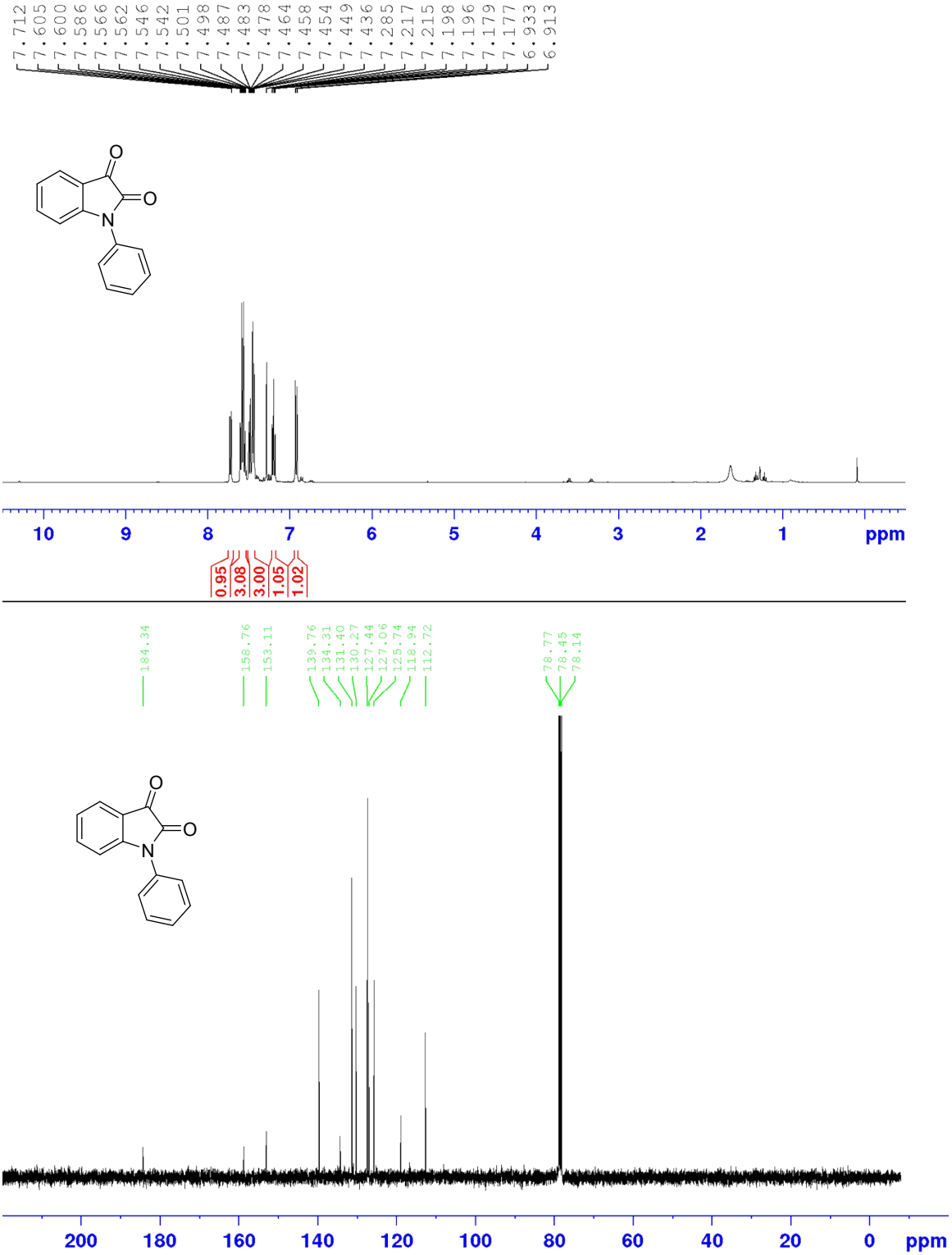
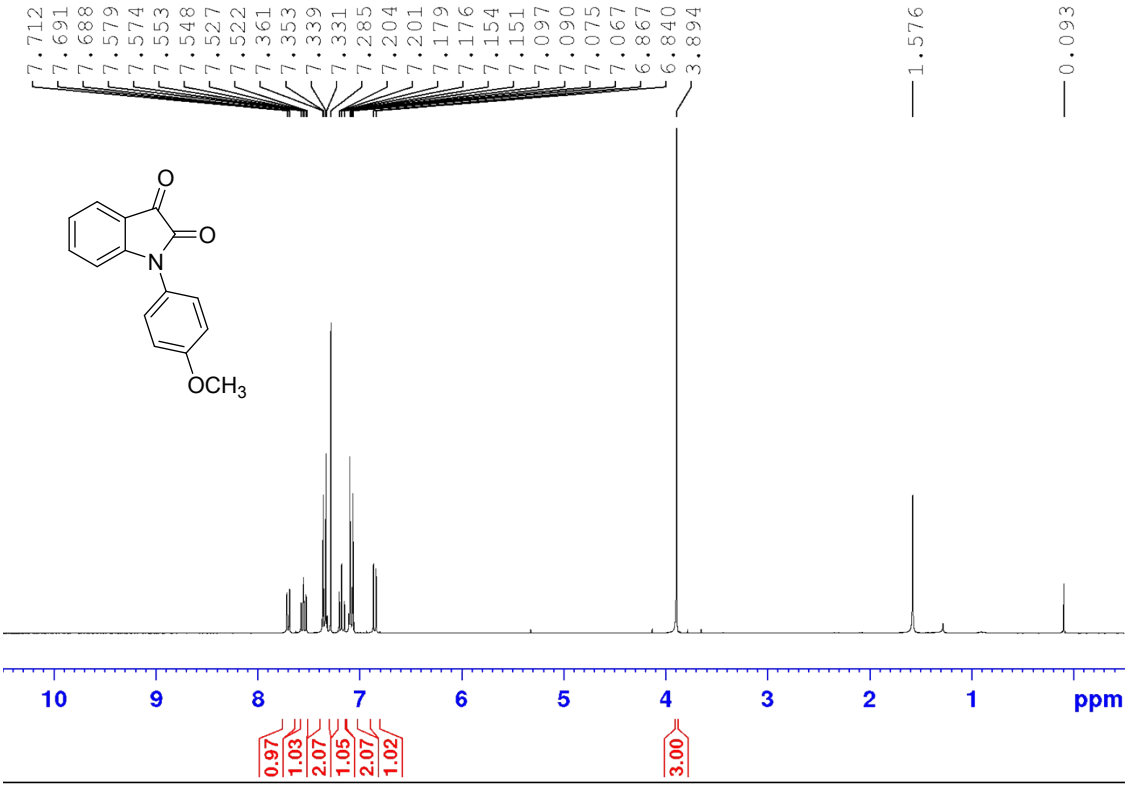
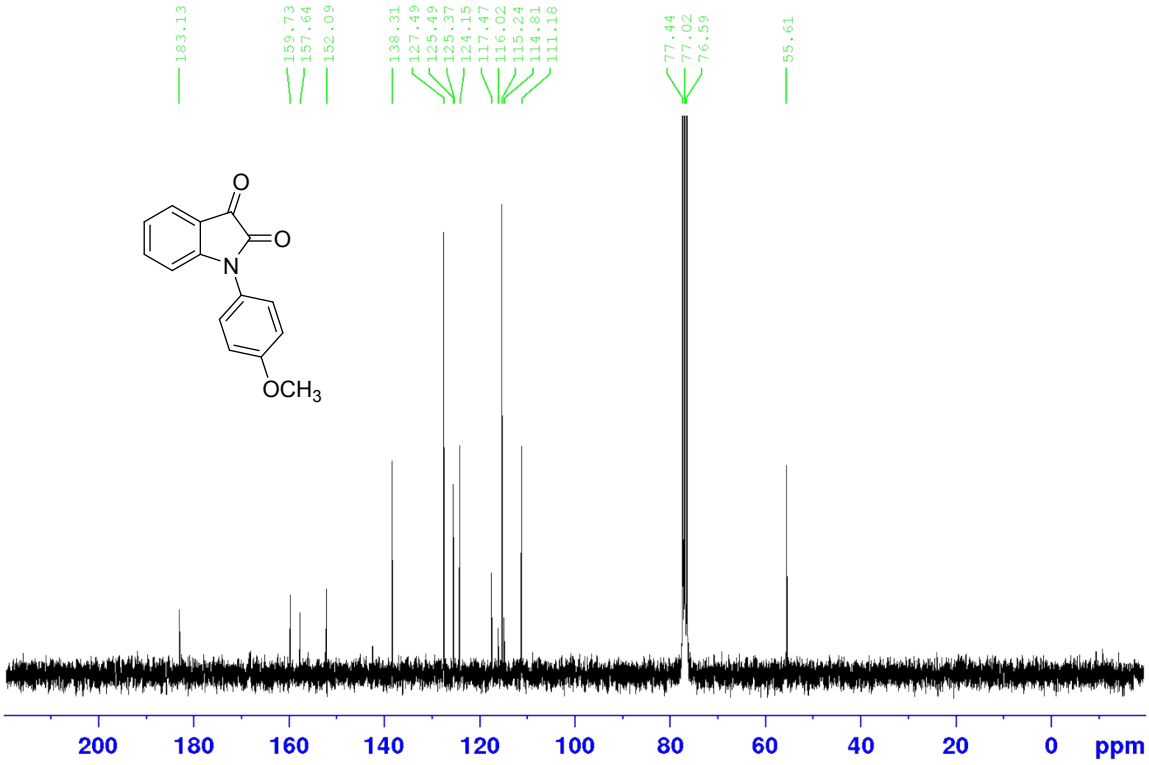
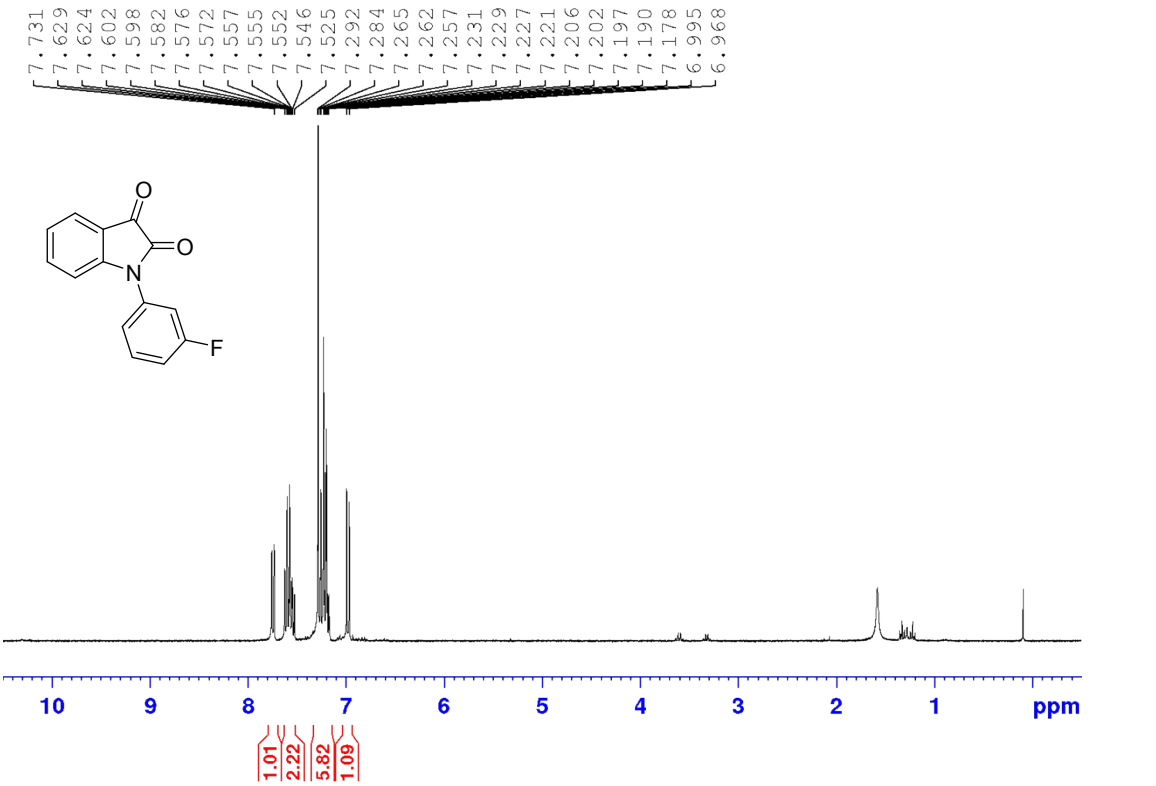


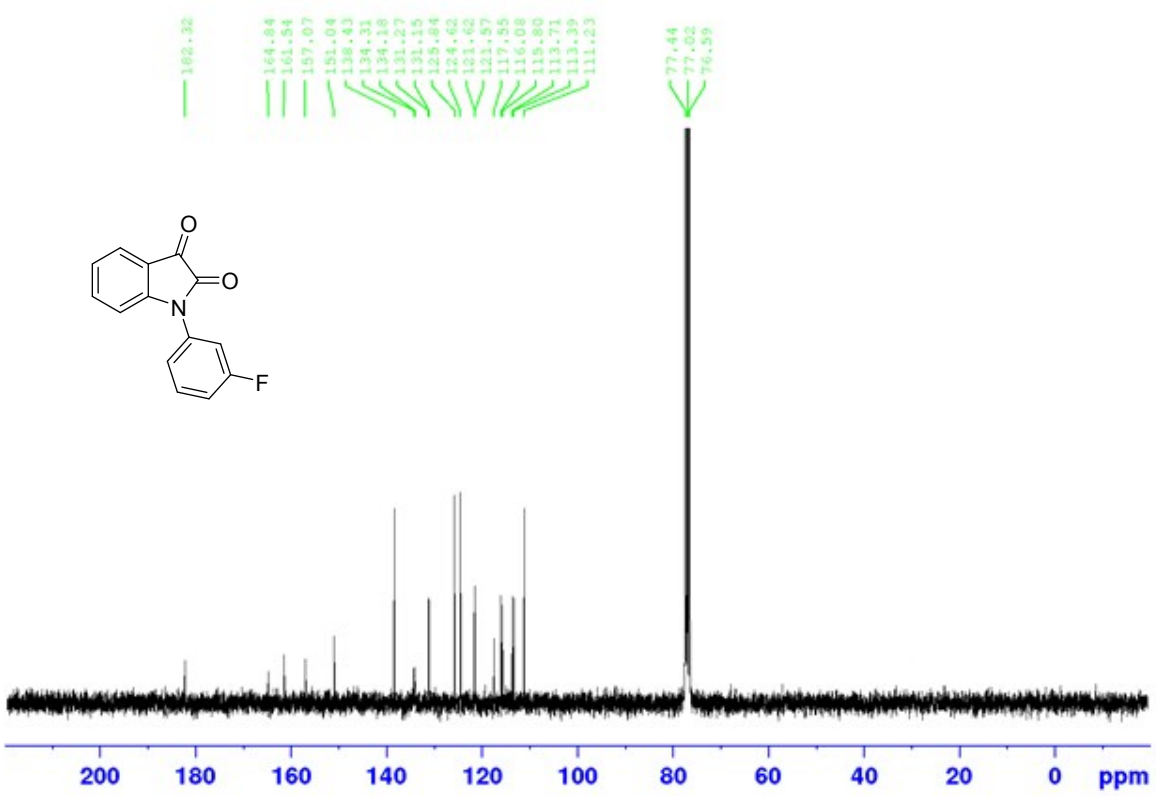
[1]HNMR and [13]CNMR spectra of 1-(4-methoxyphenyl) indoline-2,3-dione (**11**)



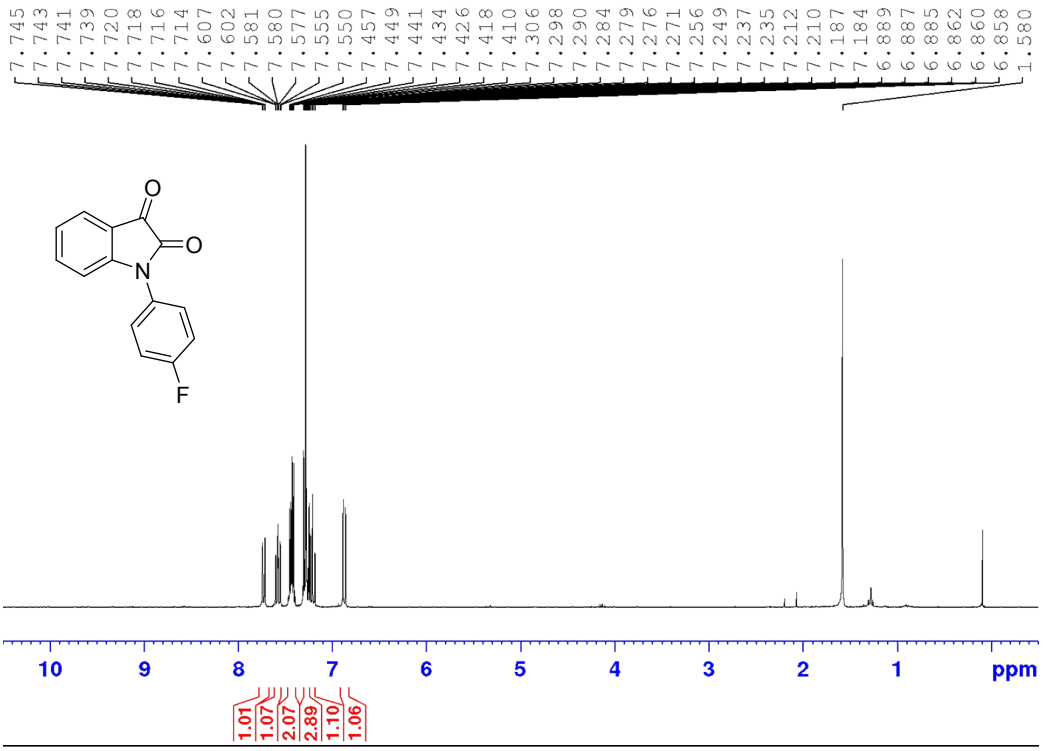


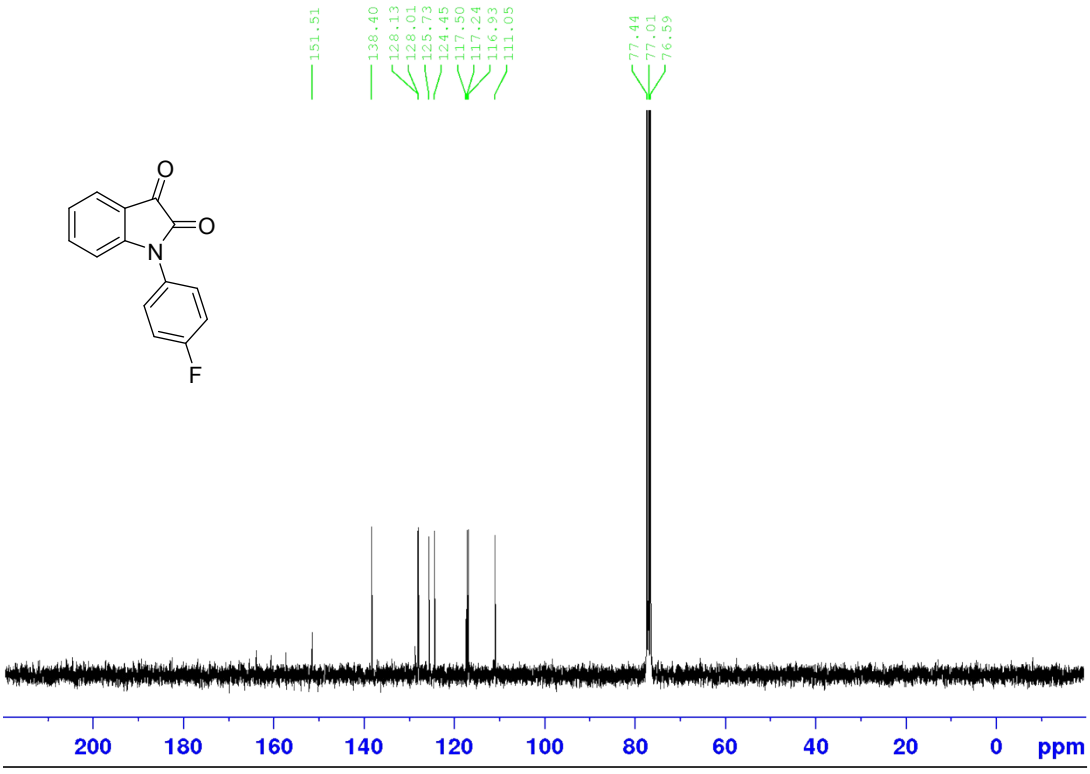
[1]HNMR and [13]CNMR spectra of 1-(3-fluorophenyl) indoline-2, 3-dione (**12**)



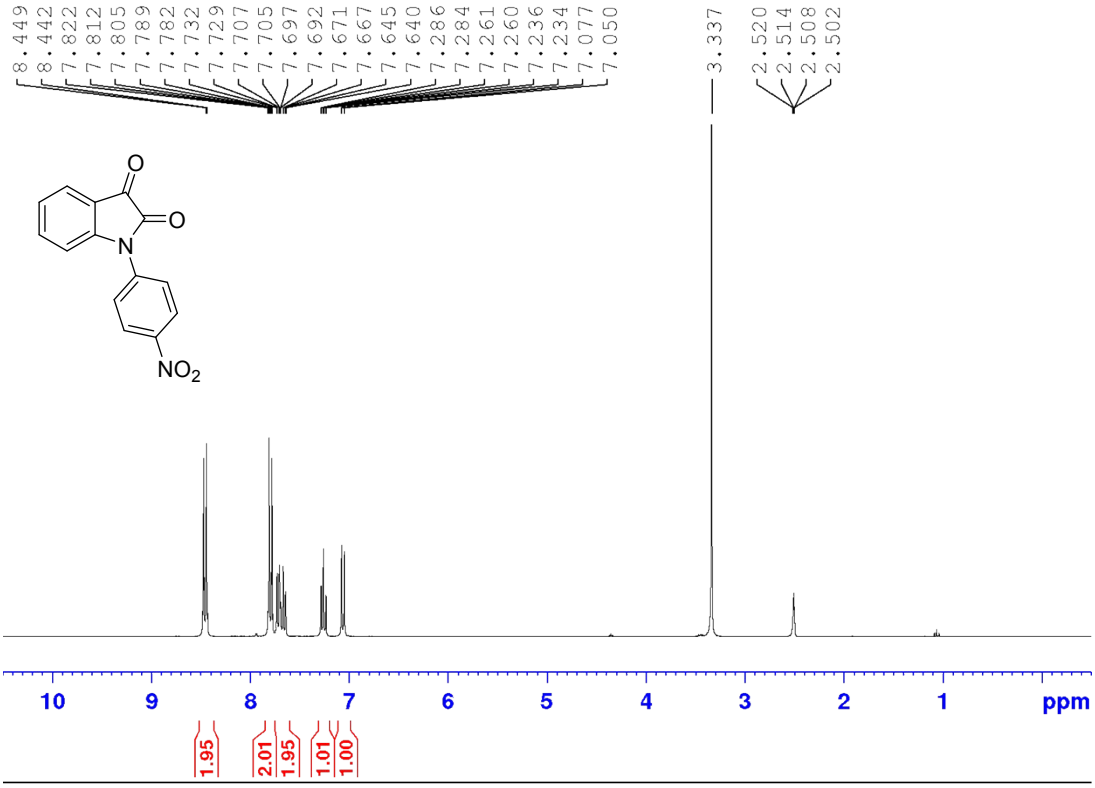


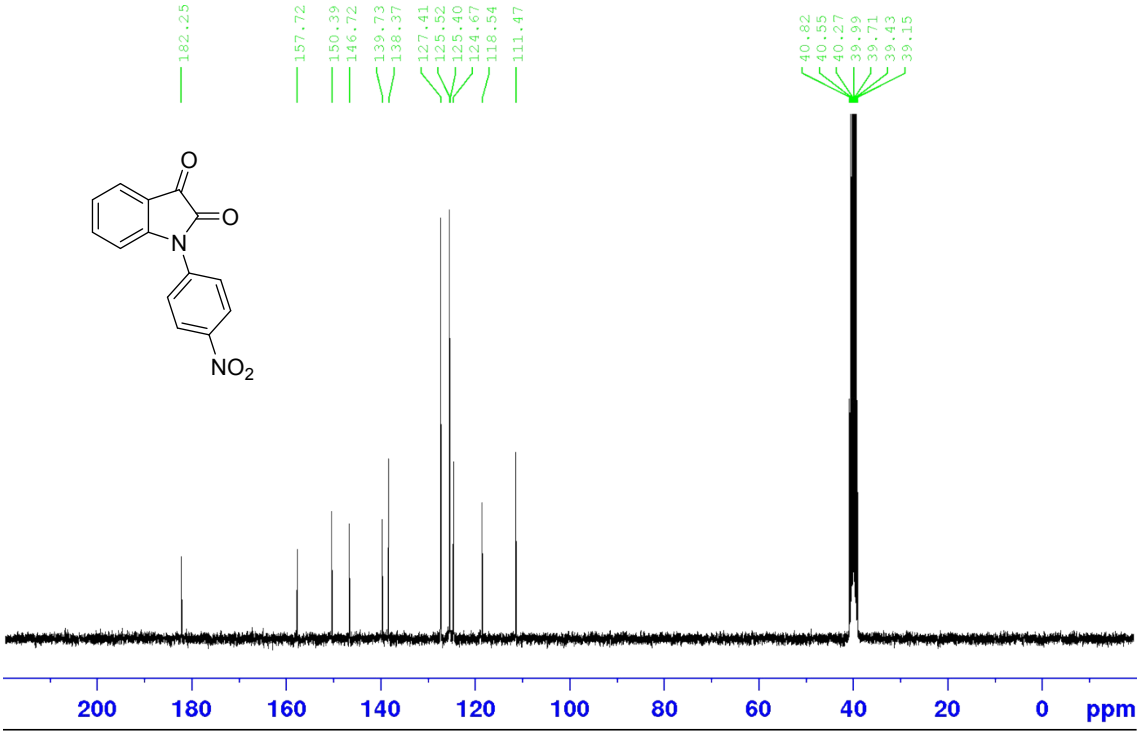
[1]HNMR and [13]CNMR spectra of 1-(4-fluorophenyl) indoline-2,3-dione (**13**)



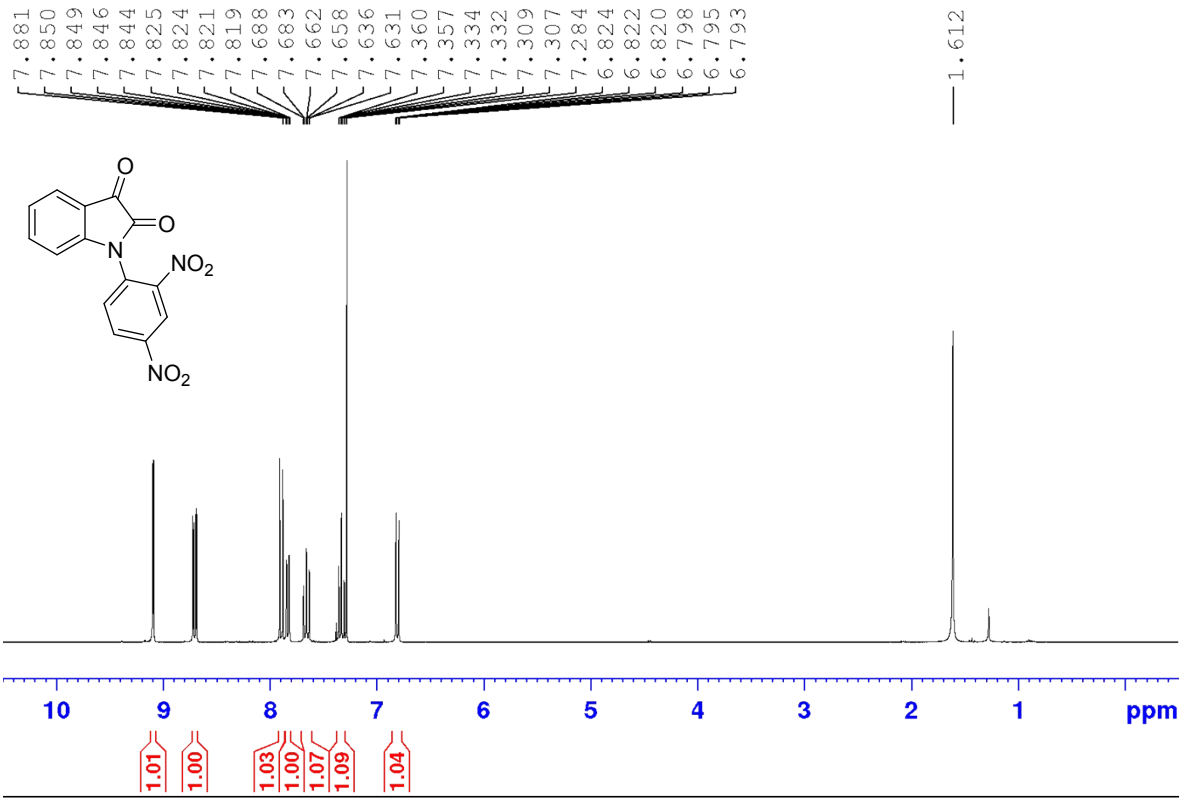


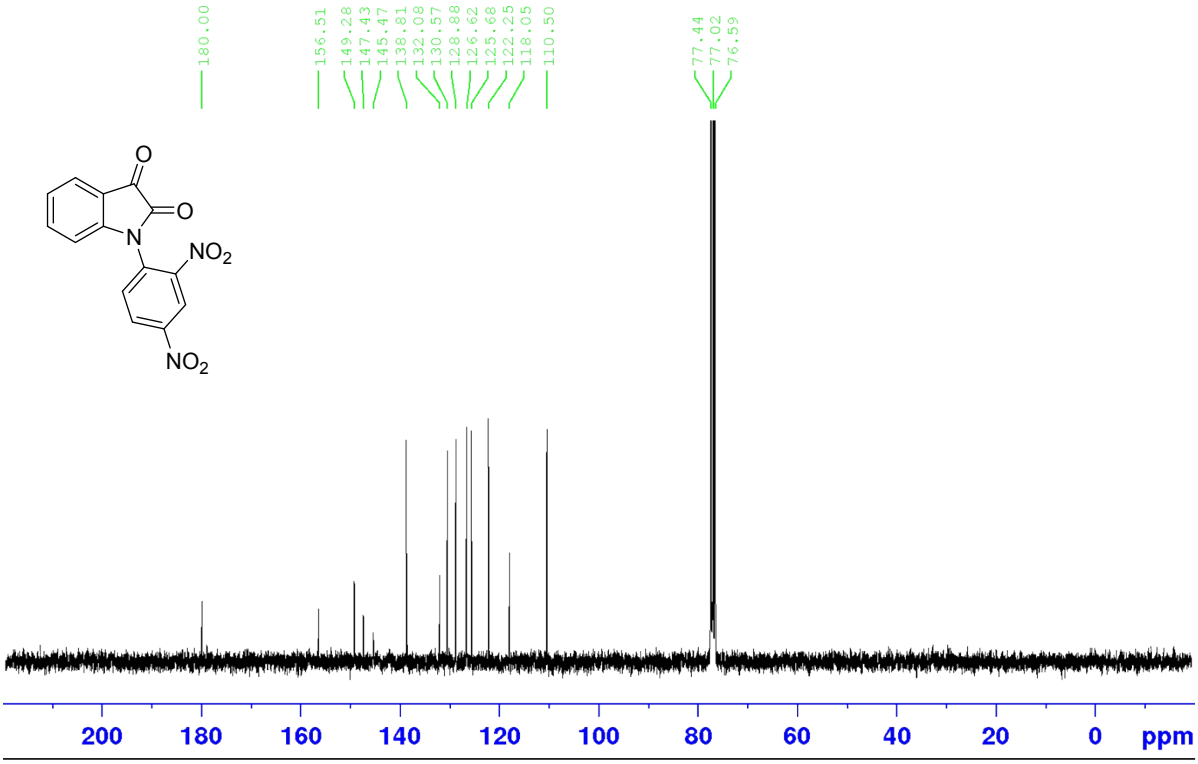
[1]HNMR and [13]CNMR spectra of 1-(4-nitrophenyl) indoline-2, 3-dione (**14**)



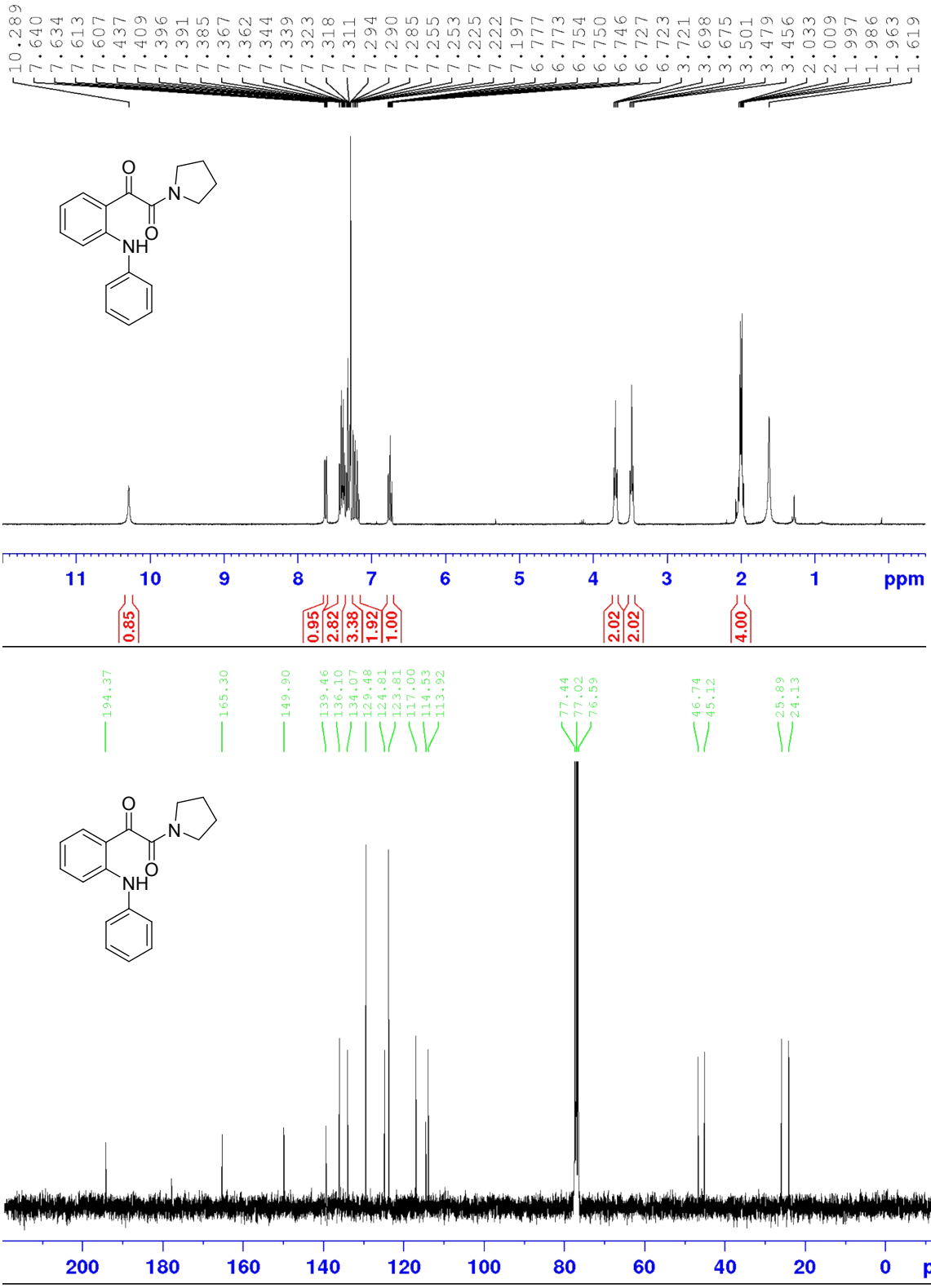


[1]HNMR and [13]CNMR spectra of 1-(2,4-dinitrophenyl)indoline-2,3-dione (**15**)

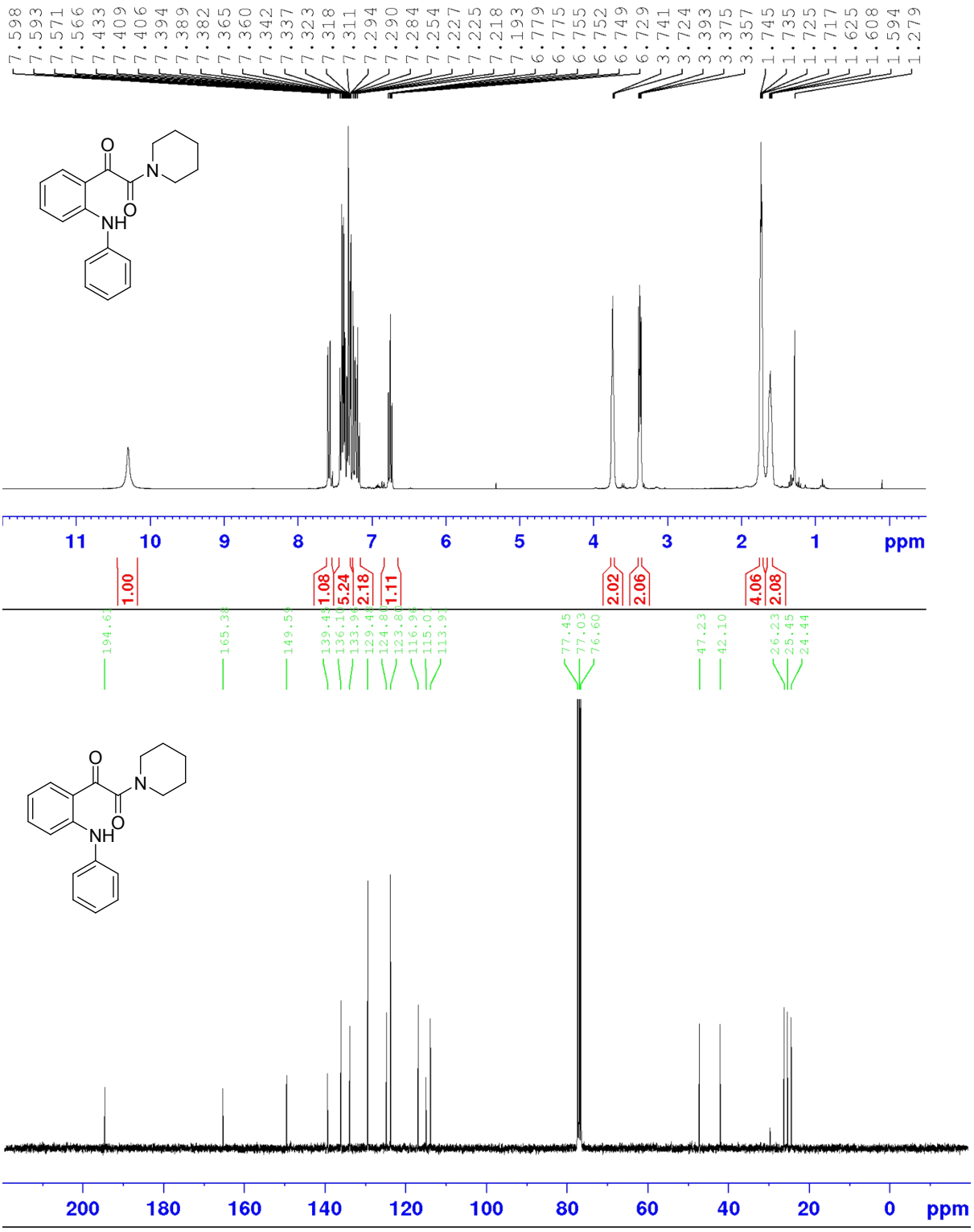




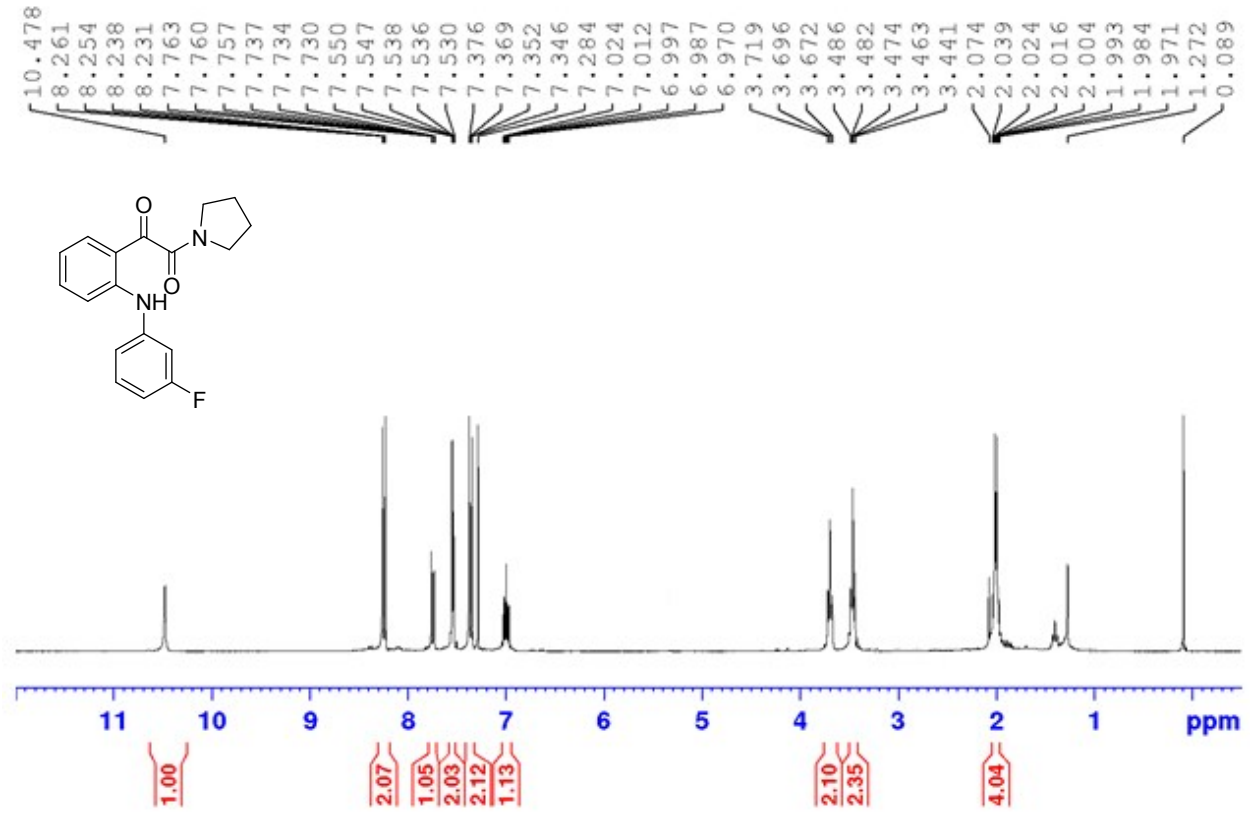
[1]HNMR and [13]CNMR spectra of 1-(2-(phenylamino) phenyl)-2-(pyrrolidin-1-yl) ethane-1,2-dione (**16**)

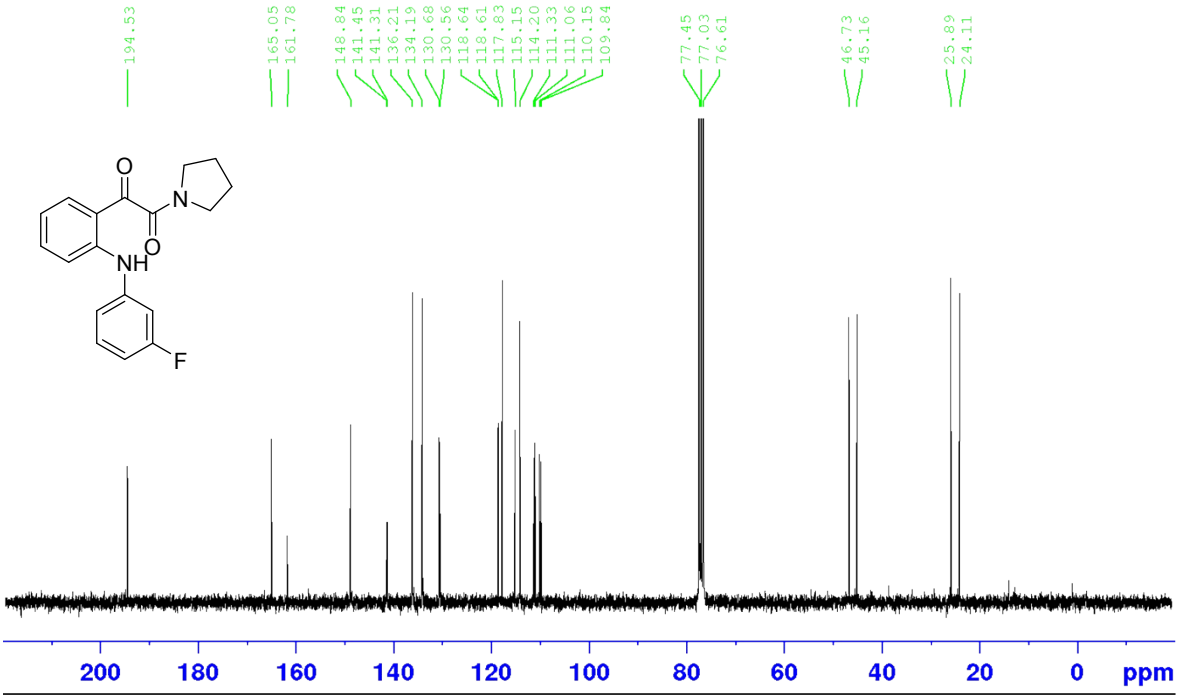


[1]HNMR and [13]CNMR spectra of 1-(2-(phenylamino)phenyl)-2-(piperidin-1-yl)ethane-1,2-dione (**17**)



[1]HNMR and [13]CNMR spectra of 1-(2-((3-fluorophenyl)amino)phenyl)-2-(pyrrolidin-1-yl)ethane-1,2-dione (**18**)





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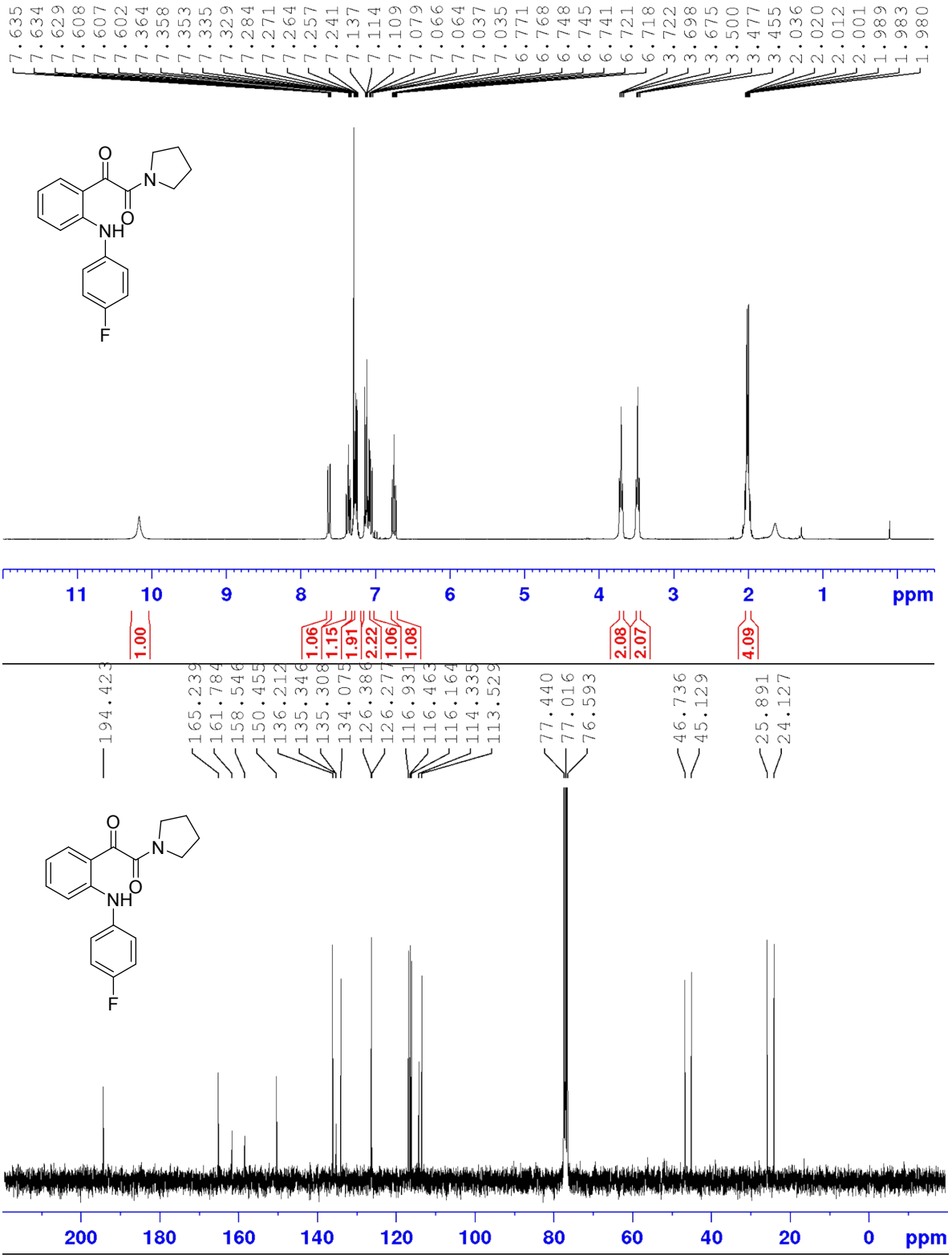
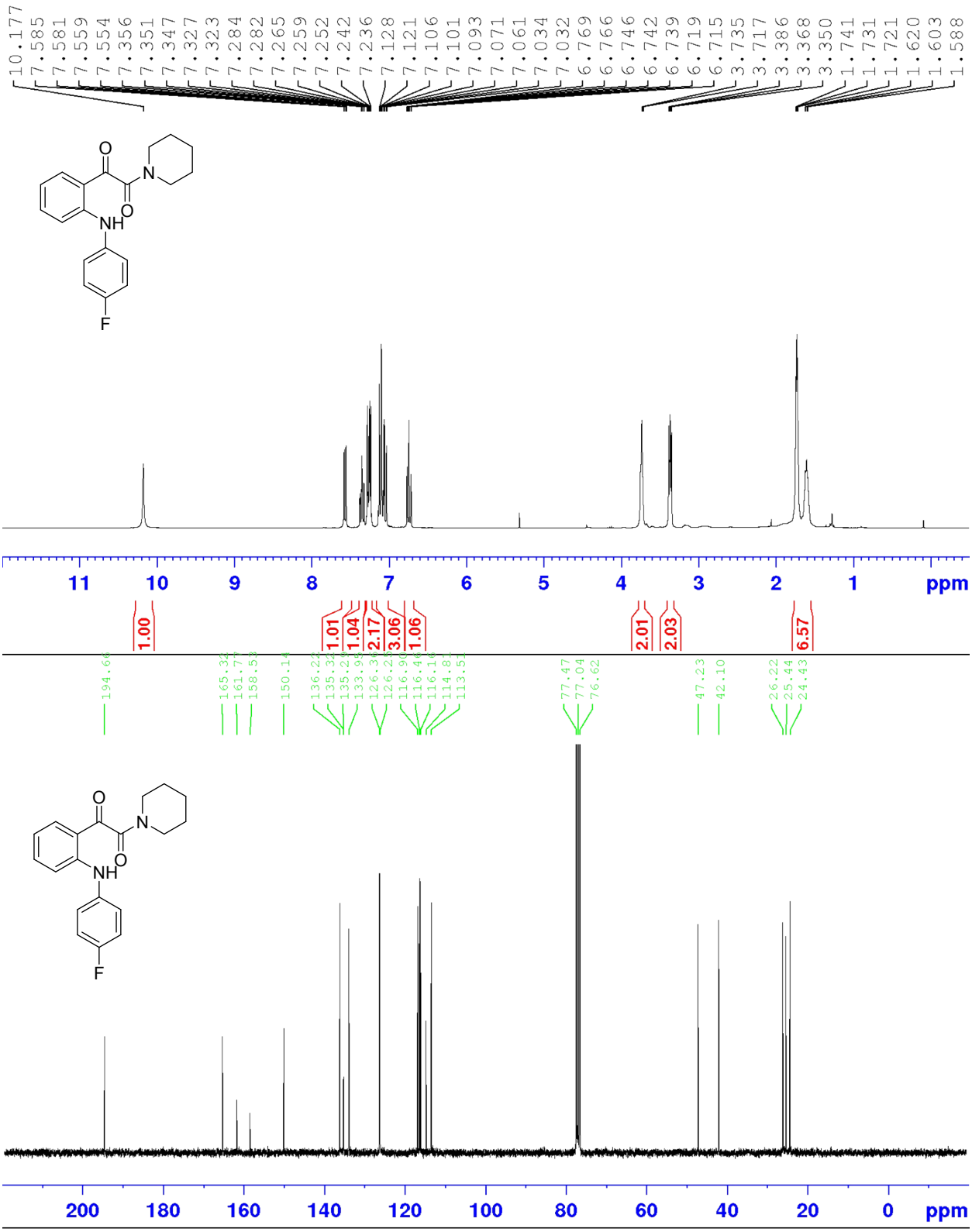


[1]HNMR and [13]CNMR spectra of 1-(2-((4-fluorophenyl)amino)phenyl)-2-(piperidin-1-yl)ethane-1,2-dione (**20**)



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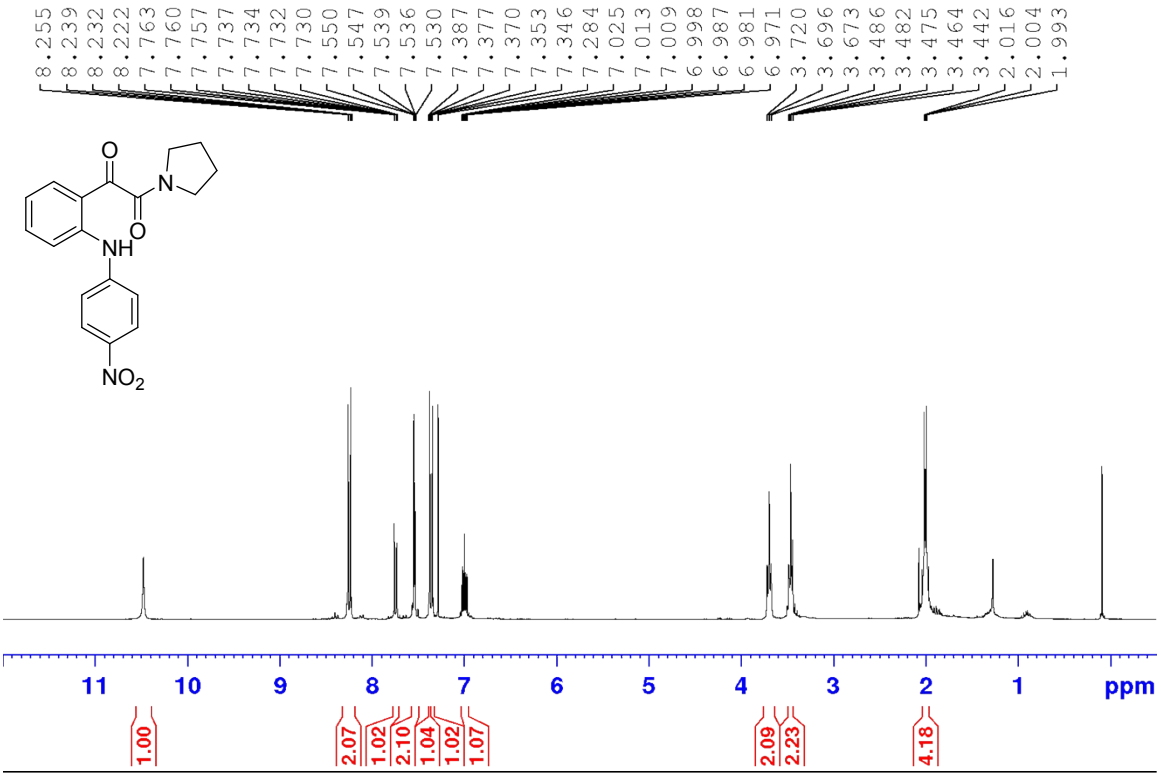

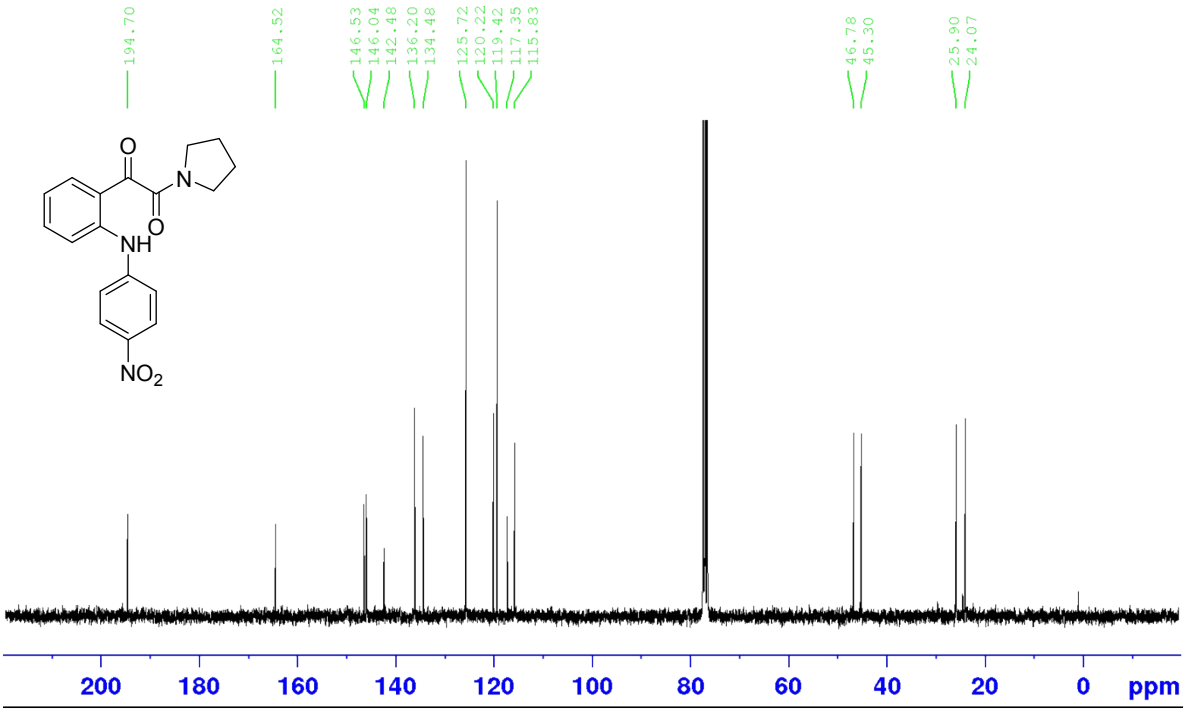

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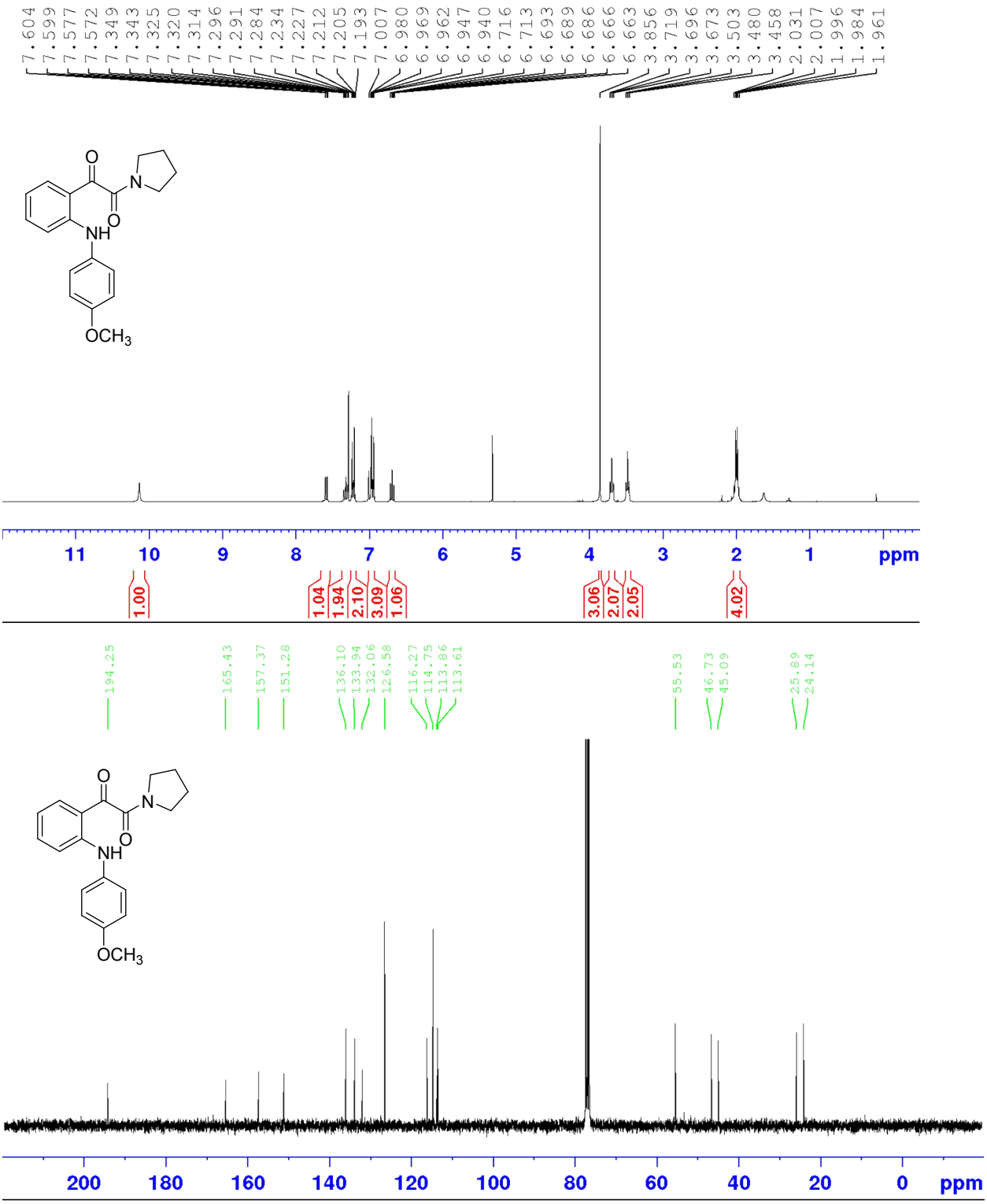

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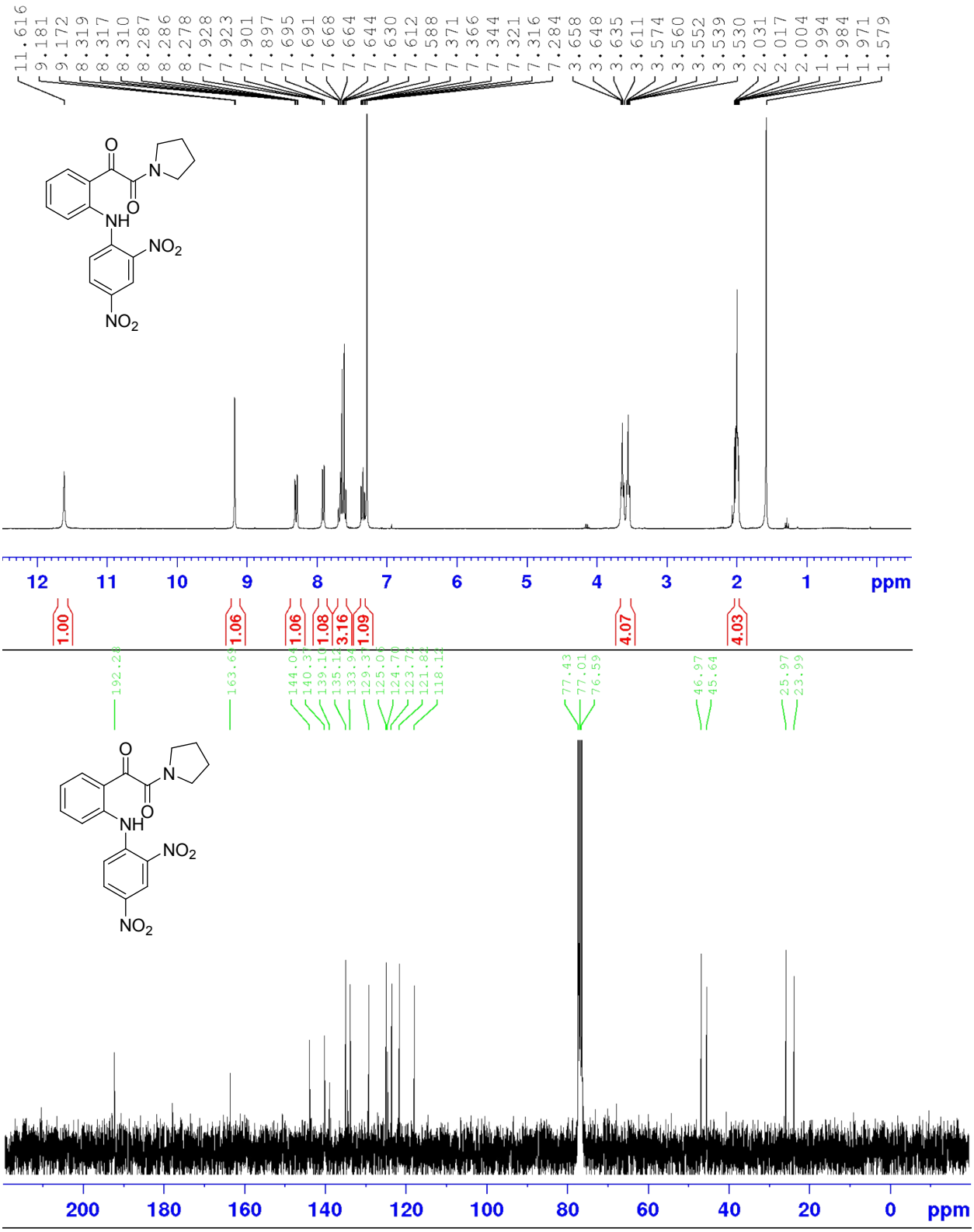

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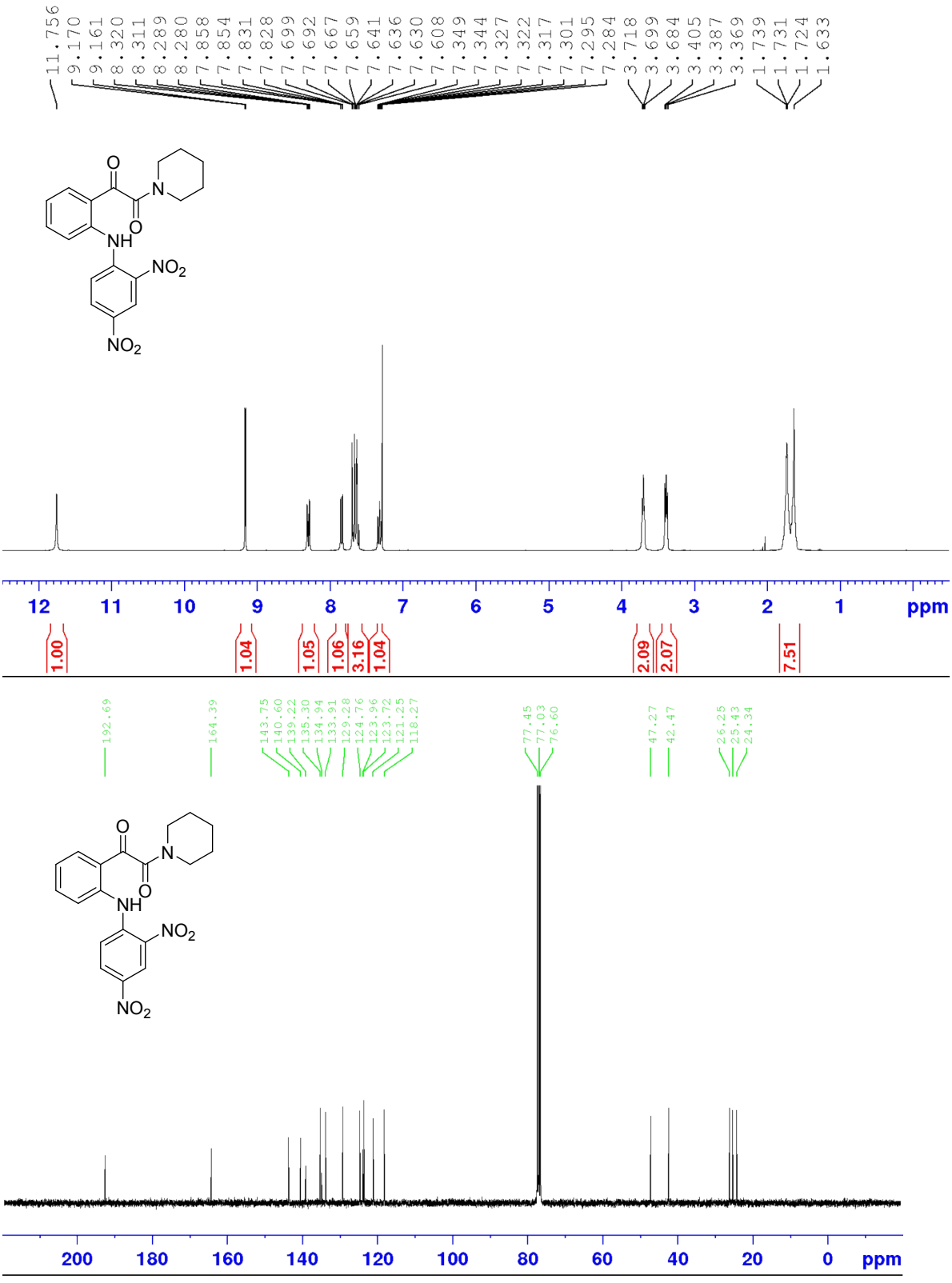

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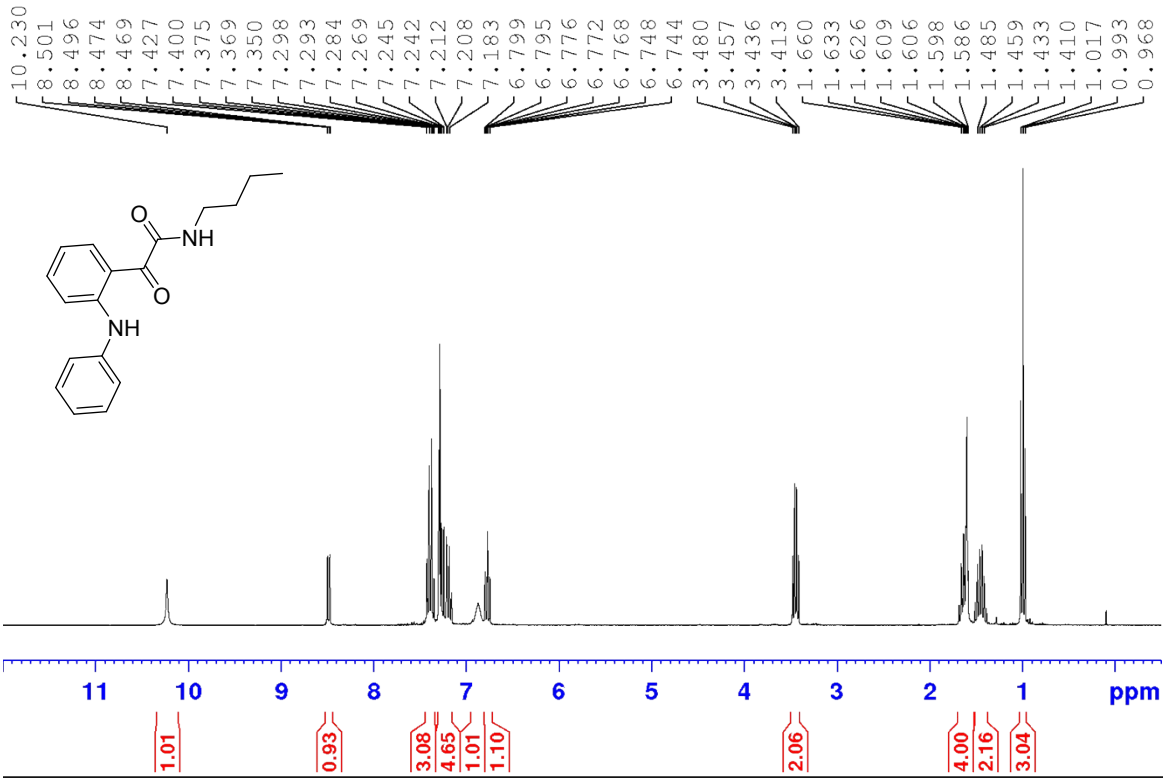

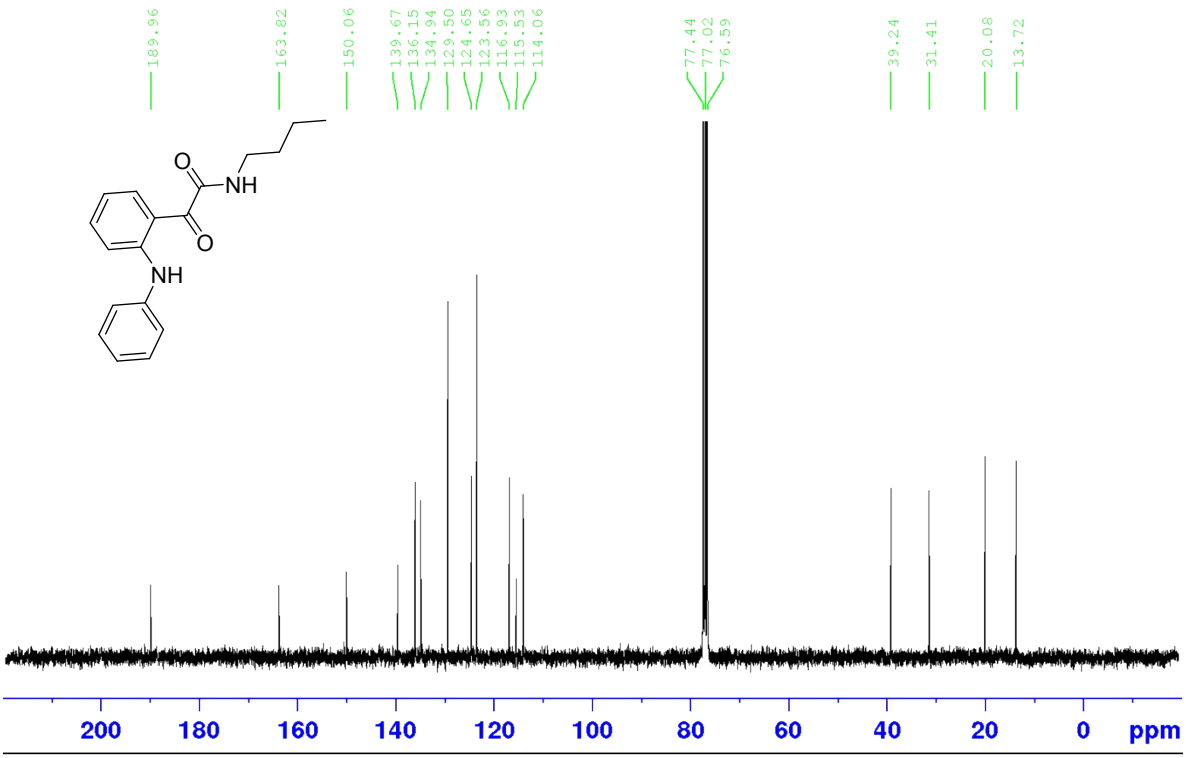

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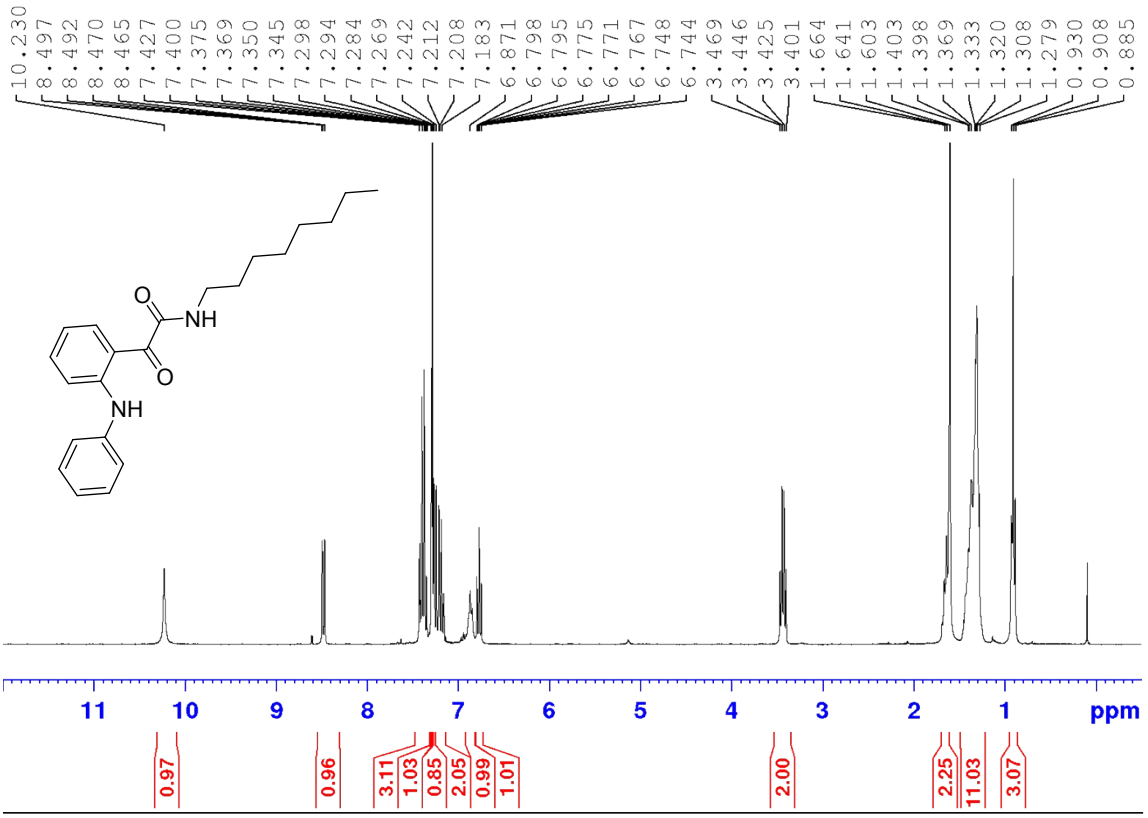

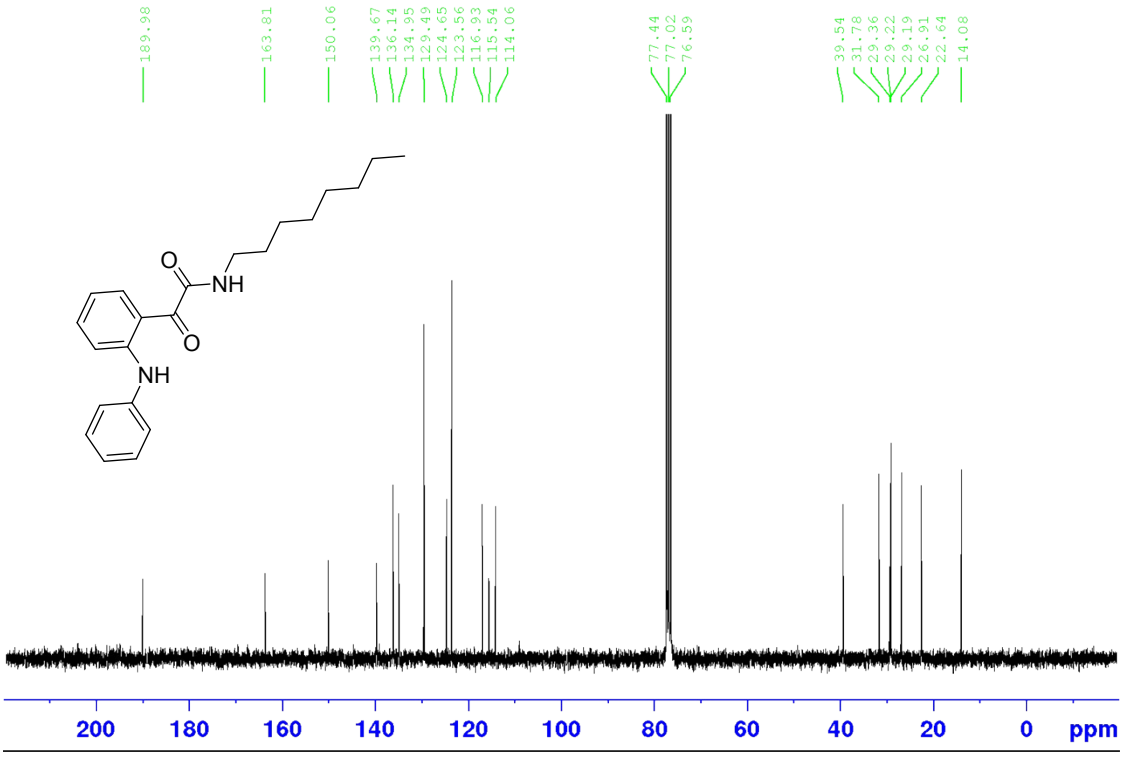

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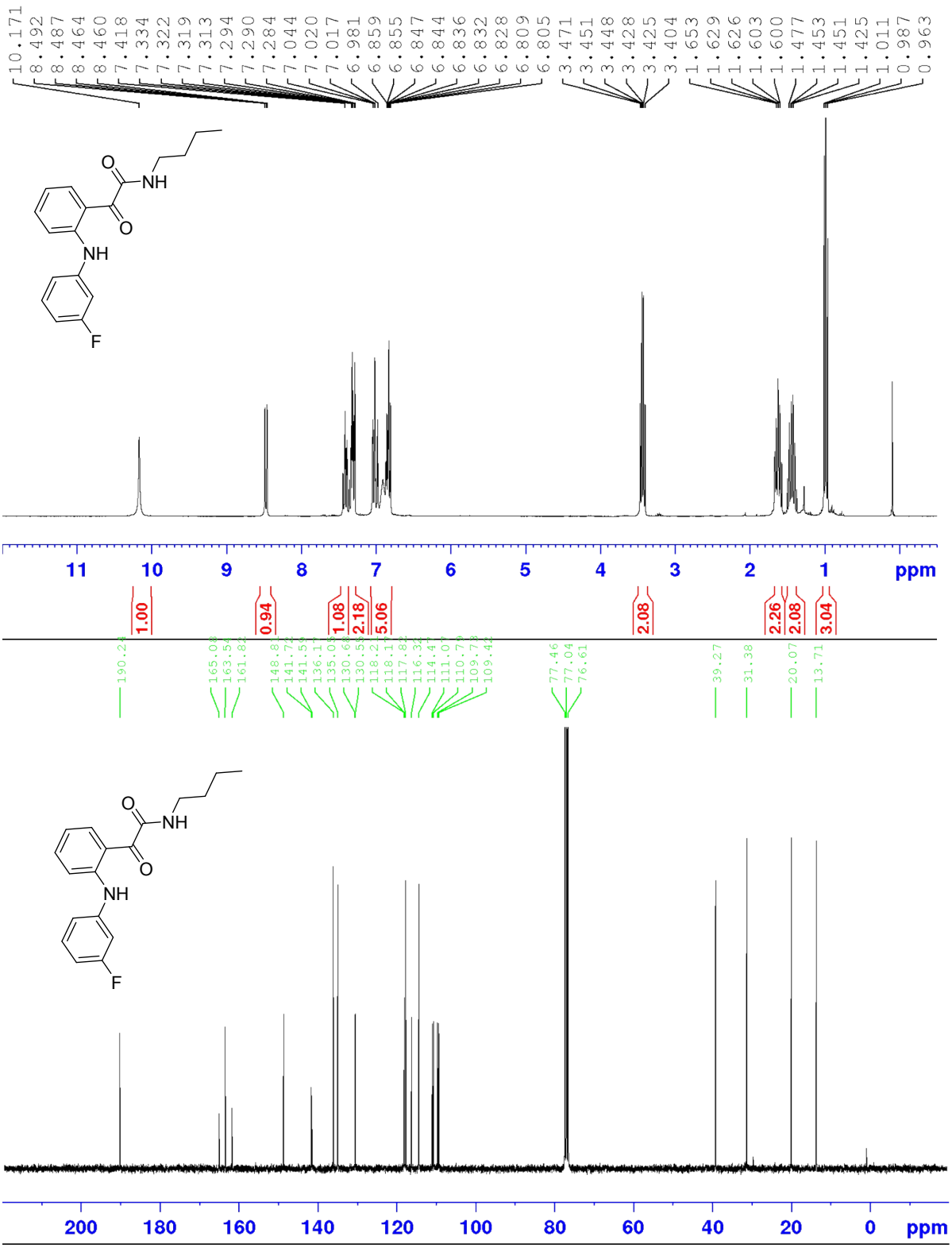
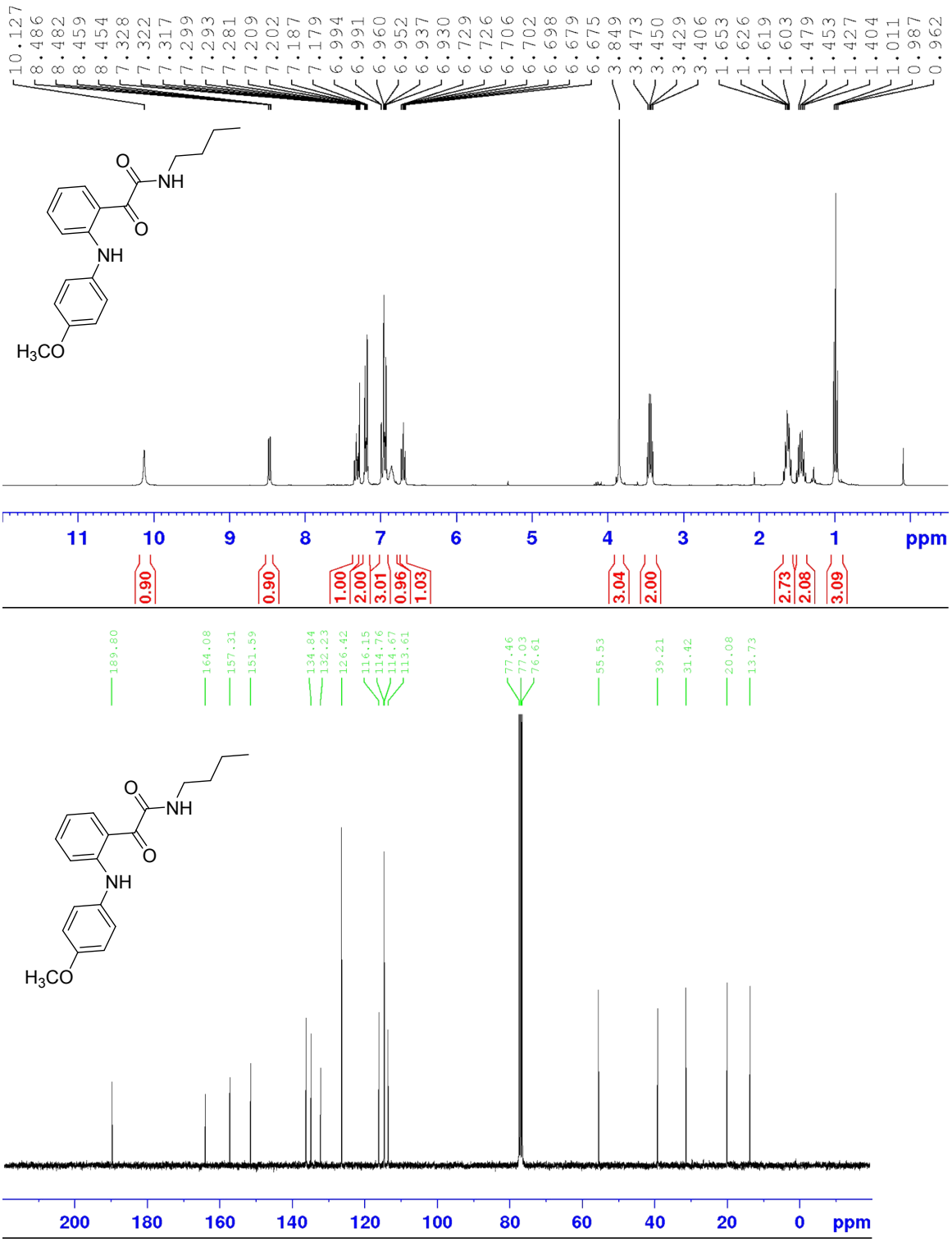
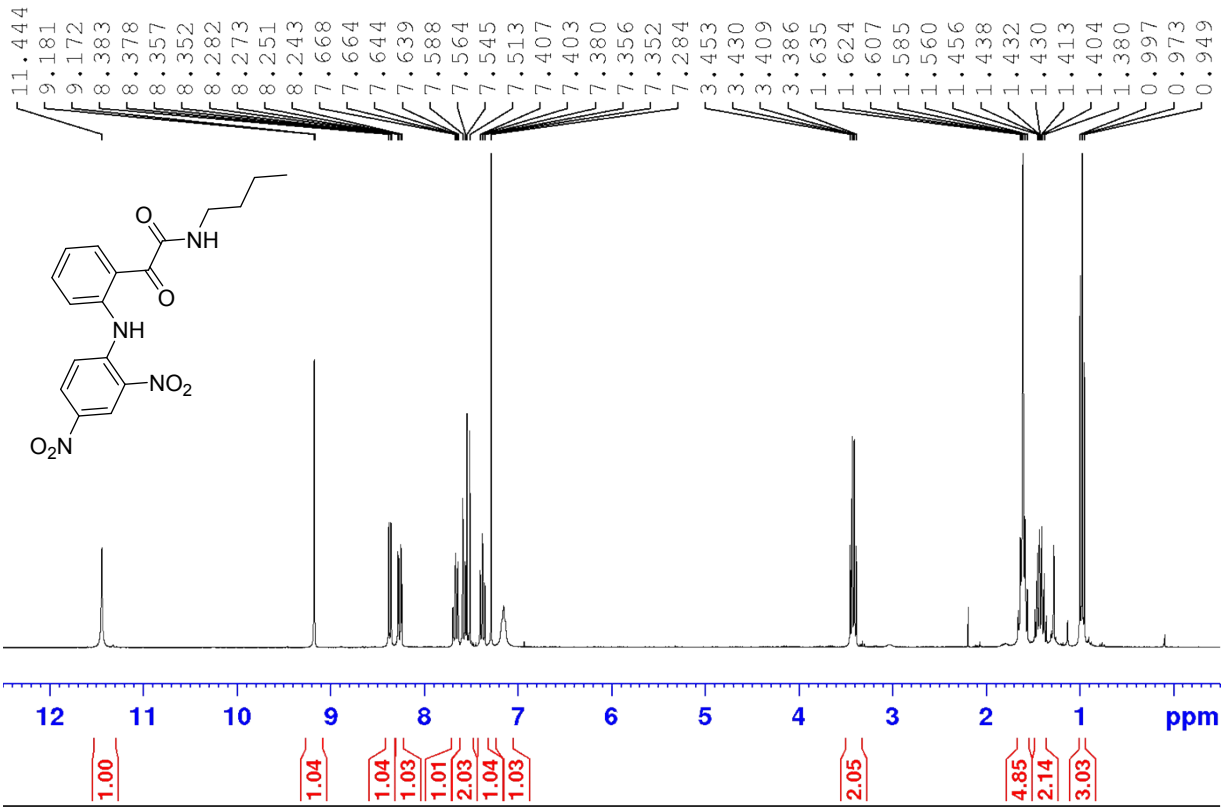
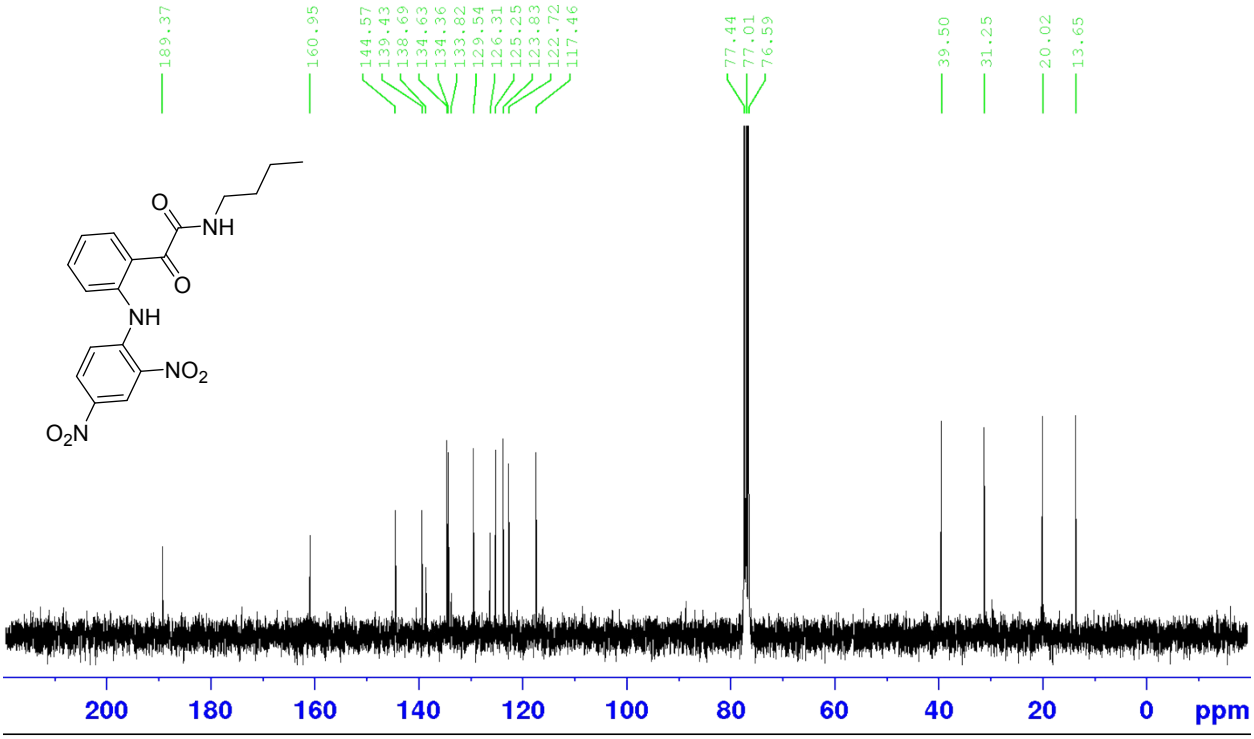


[1]HNMR and [13]CNMR spectra of *N*-butyl-2-(2-((4-methoxyphenyl)amino)phenyl)-2-oxoacetamide (**28**)

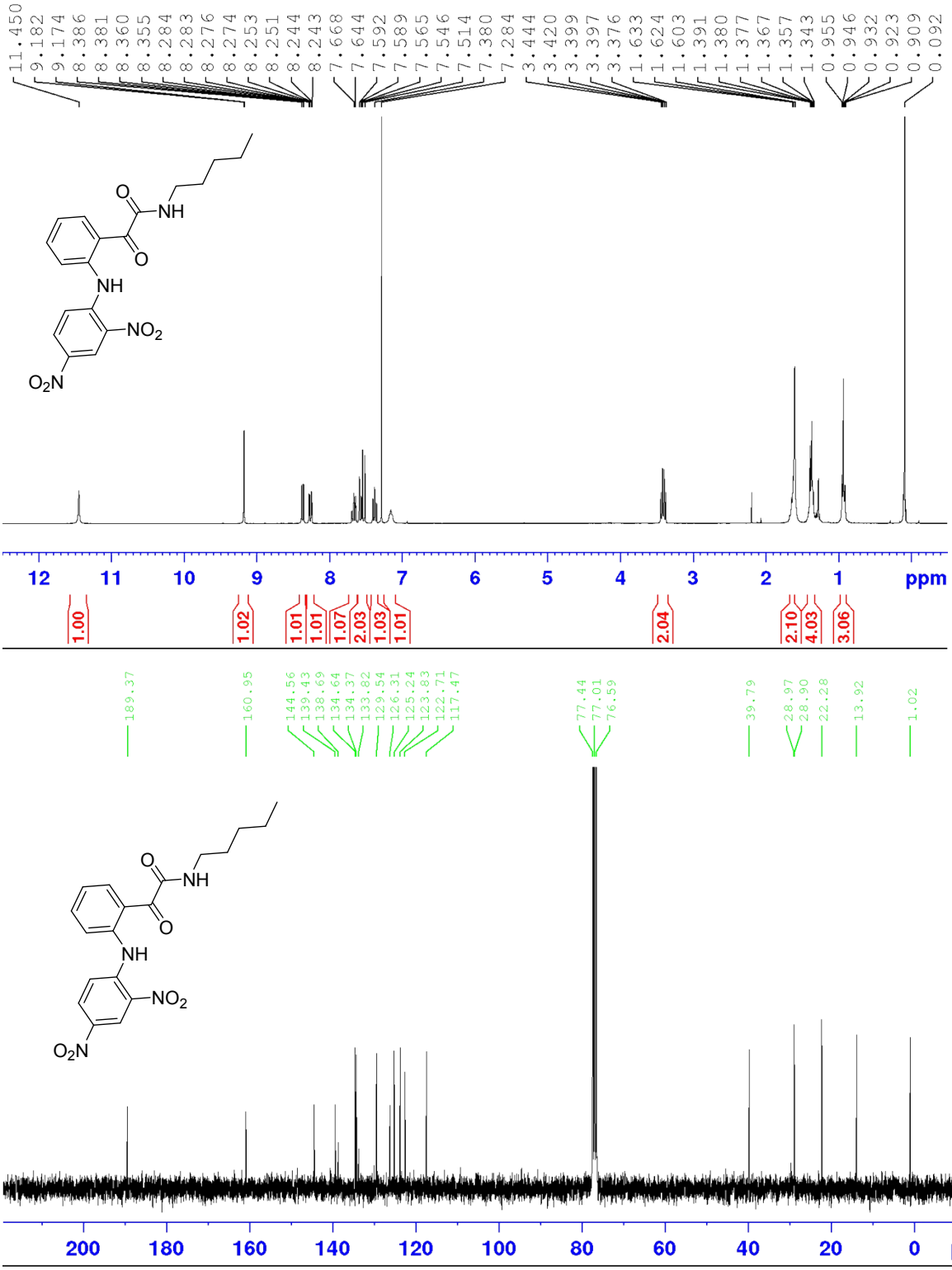


[1]HNMR and [13]CNMR spectra of *N*-butyl-2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetamide (**29**)

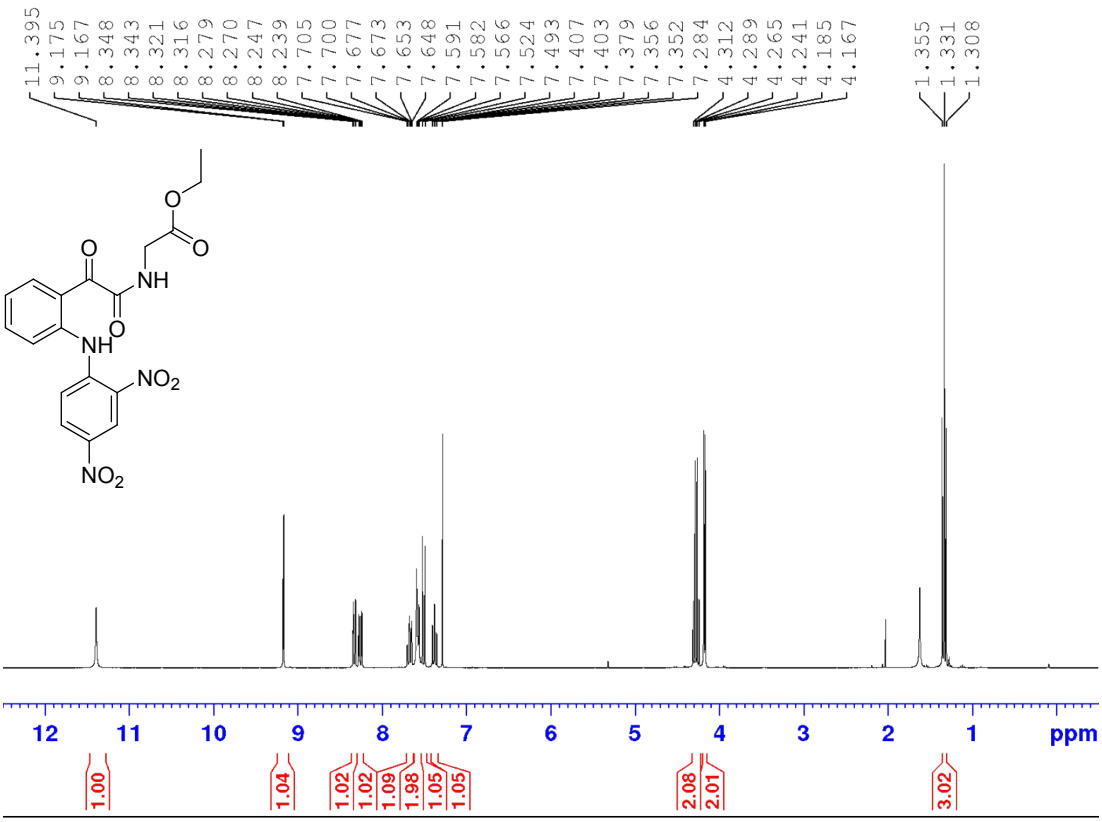


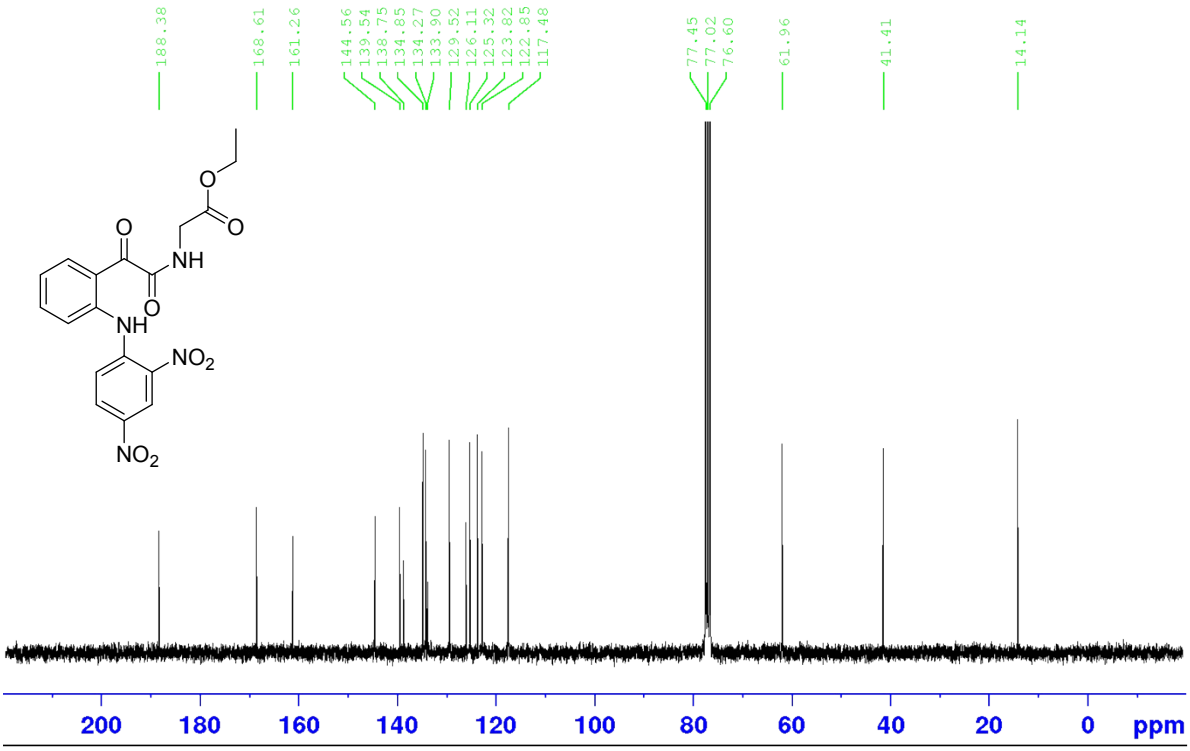


[1]HNMR and [13]CNMR spectra of 2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxo-*N*-pentylacetamide (**30**)

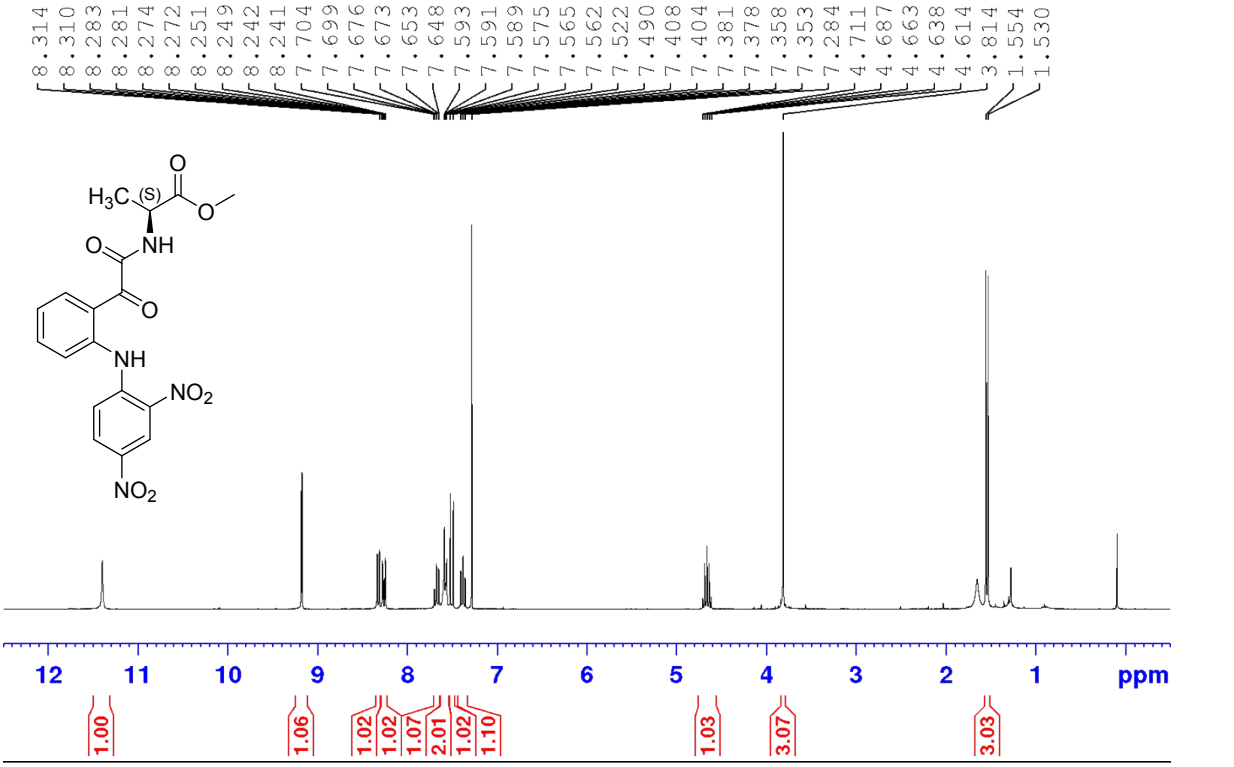


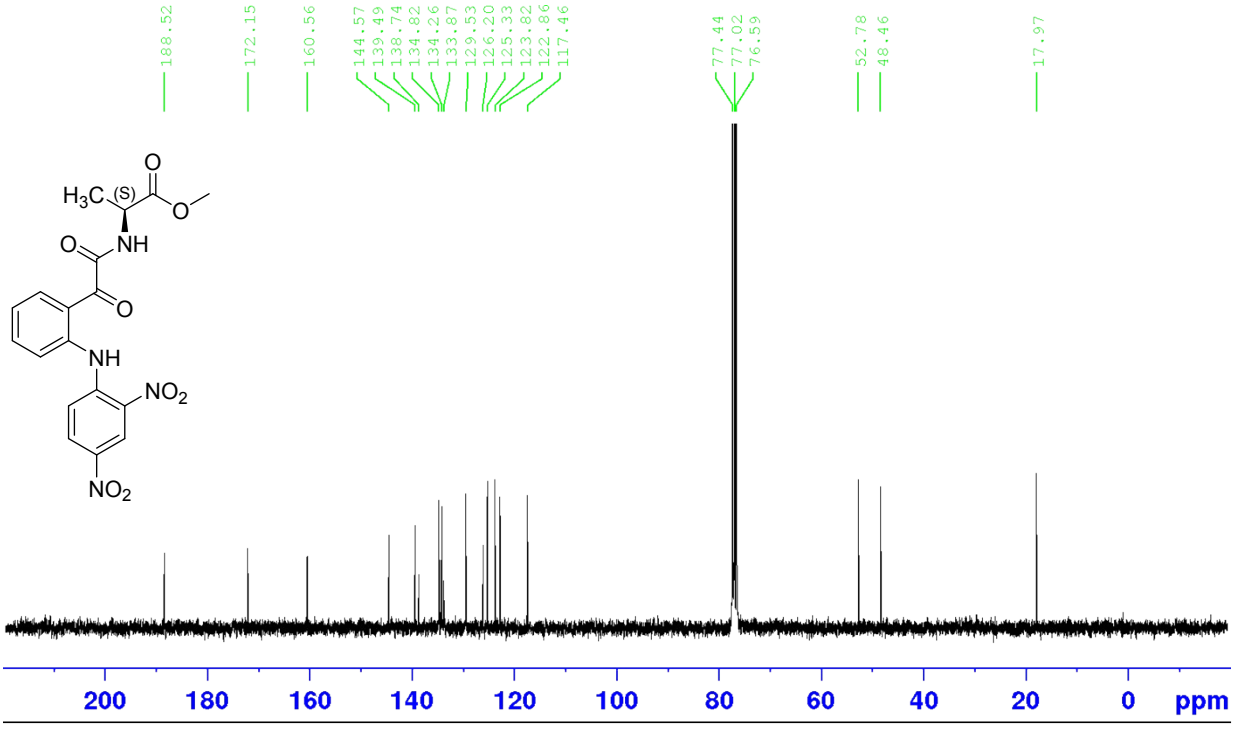
[1]HNMR and [13]CNMR spectra of Ethyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)glycinate(**31**)



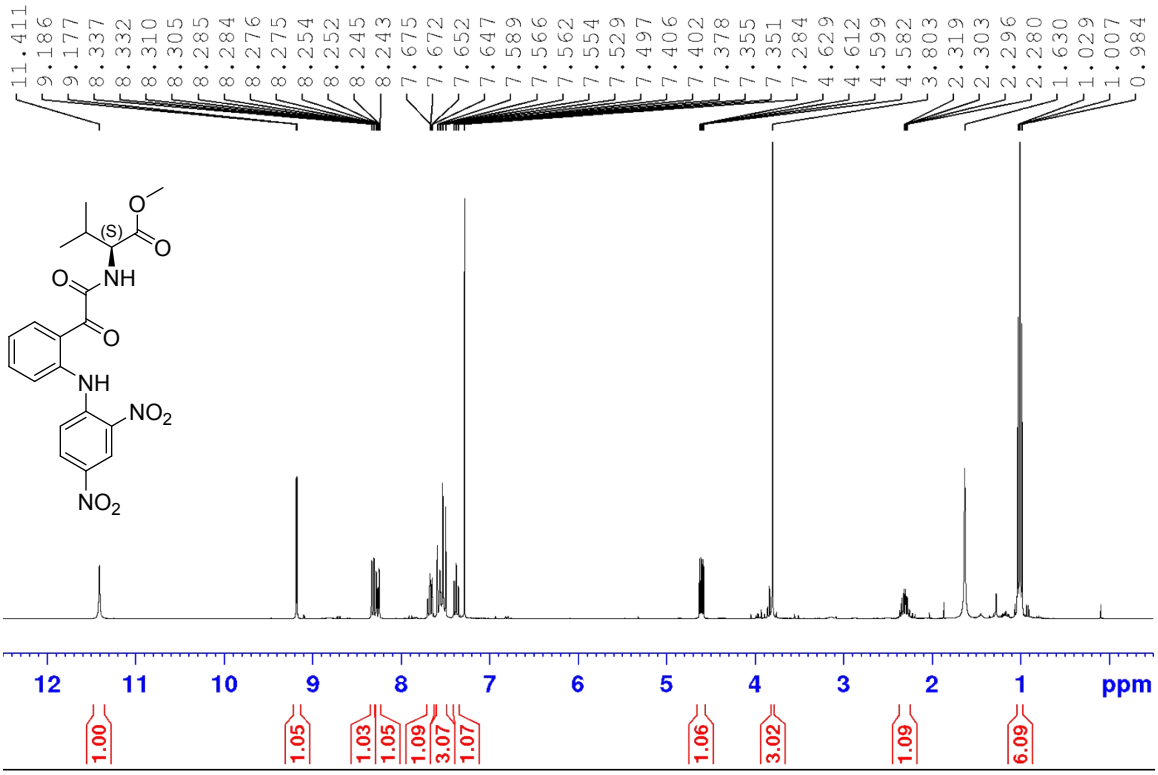


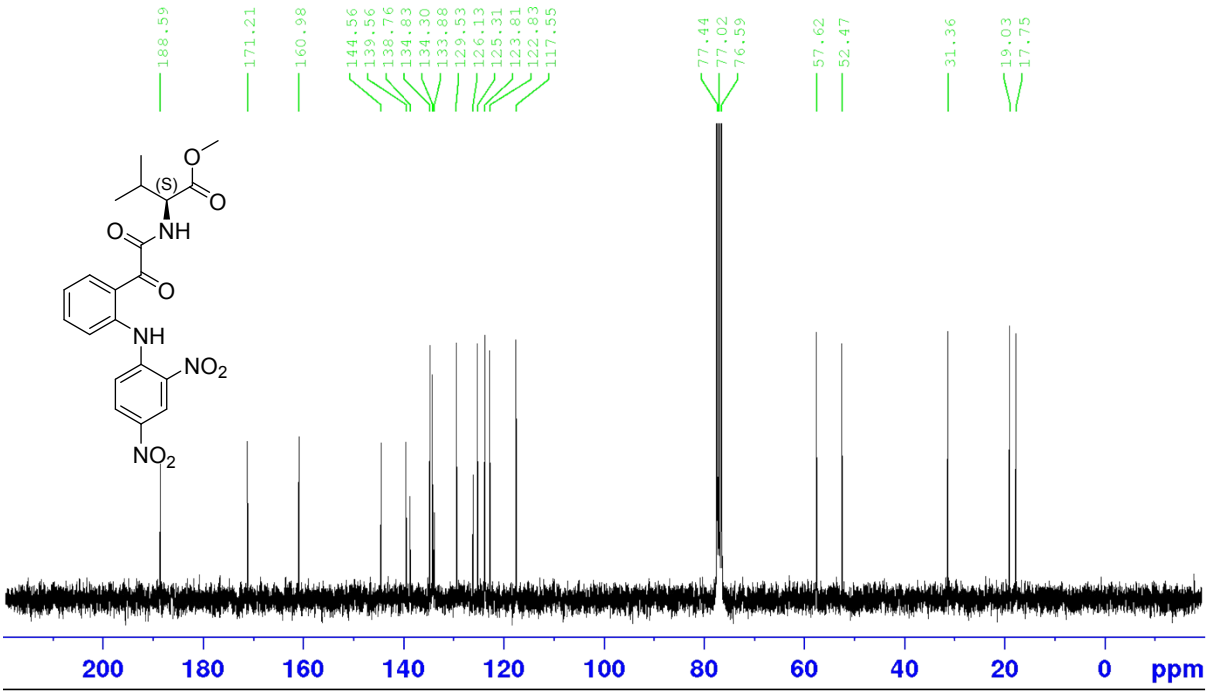
[1]HNMR and [13]CNMR spectra of Methyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)-L-alaninate (**32**)



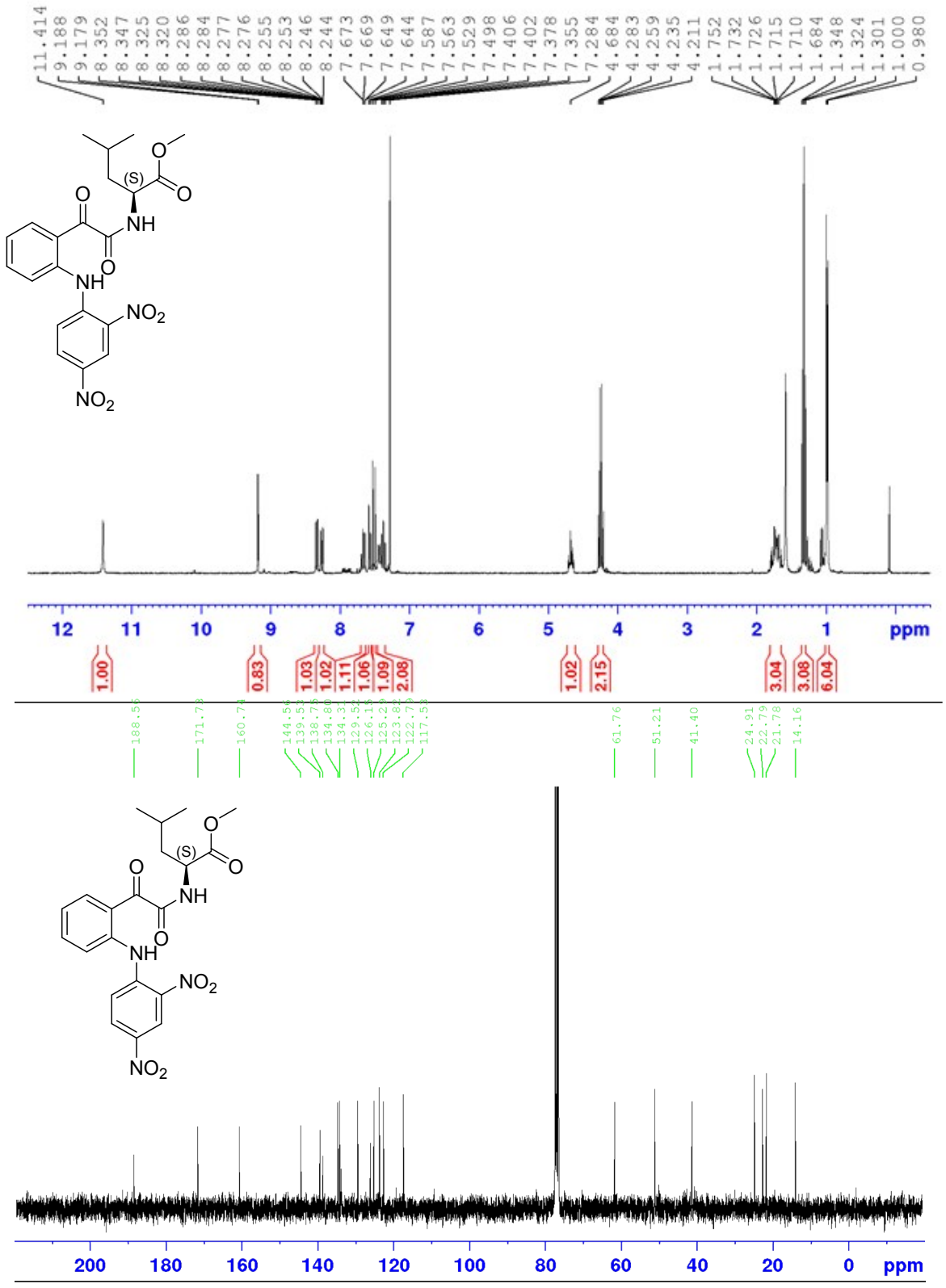


[1]HNMR and [13]CNMR spectra of Methyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)-L-valinate (**33**)

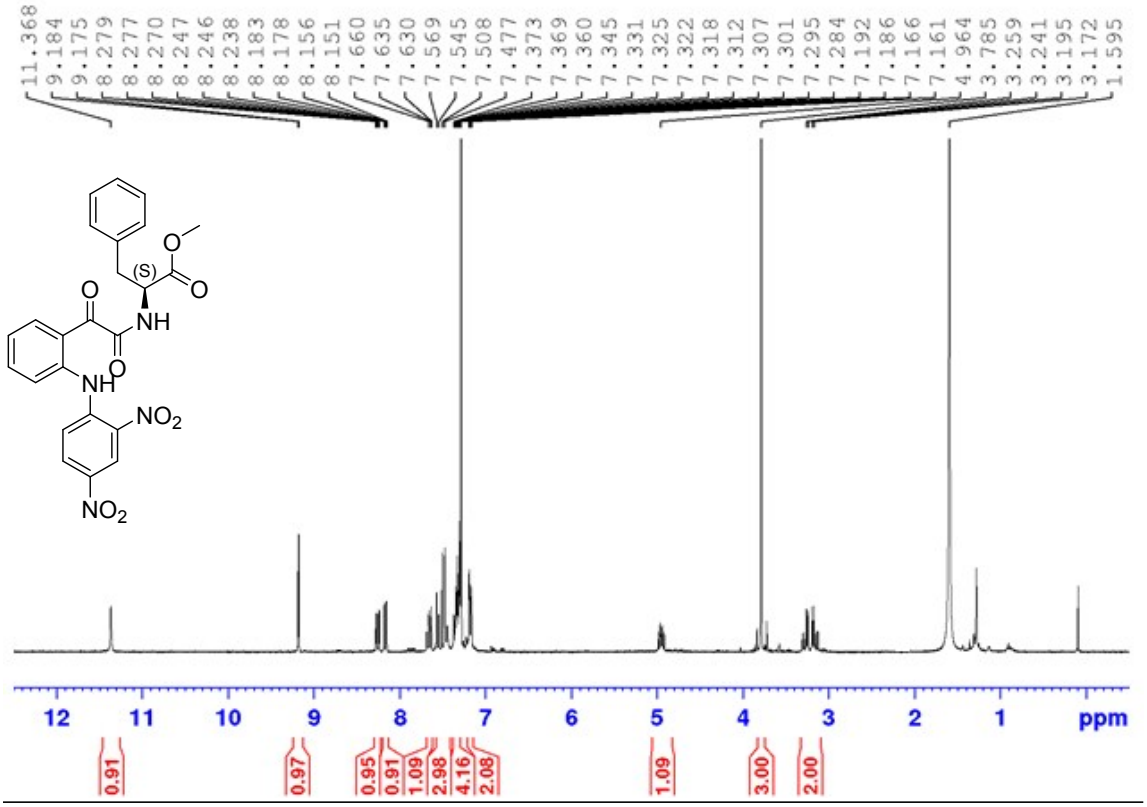


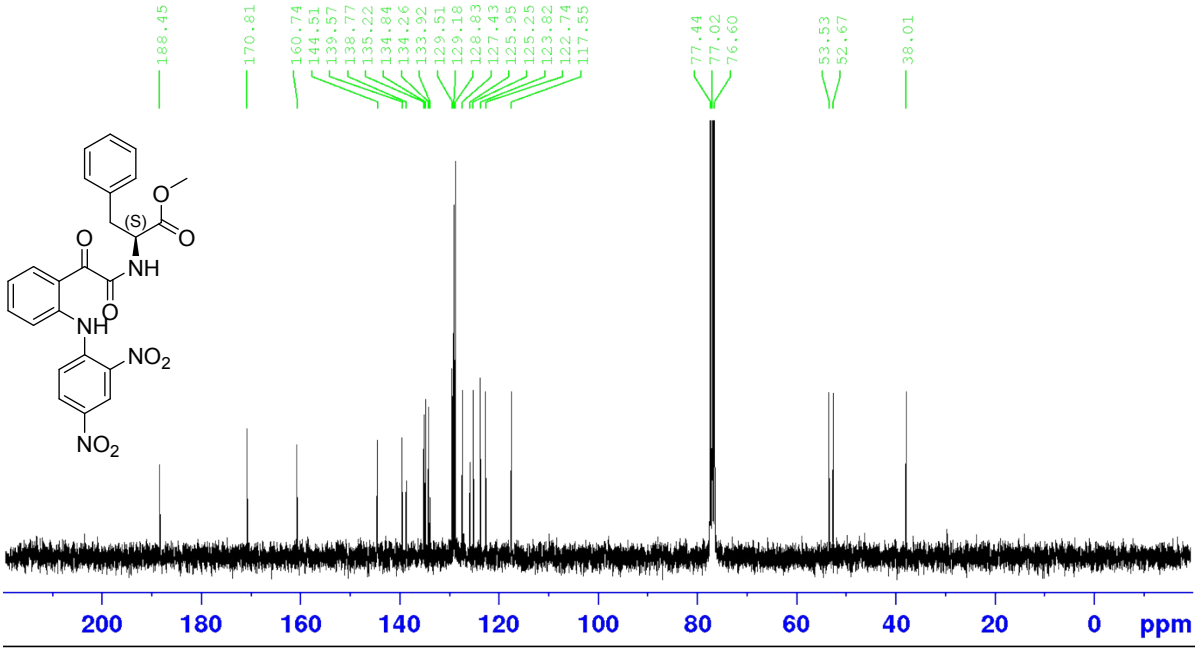


[1]HNMR and [13]CNMR spectra of Methyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)-L-leucinate (**34**)

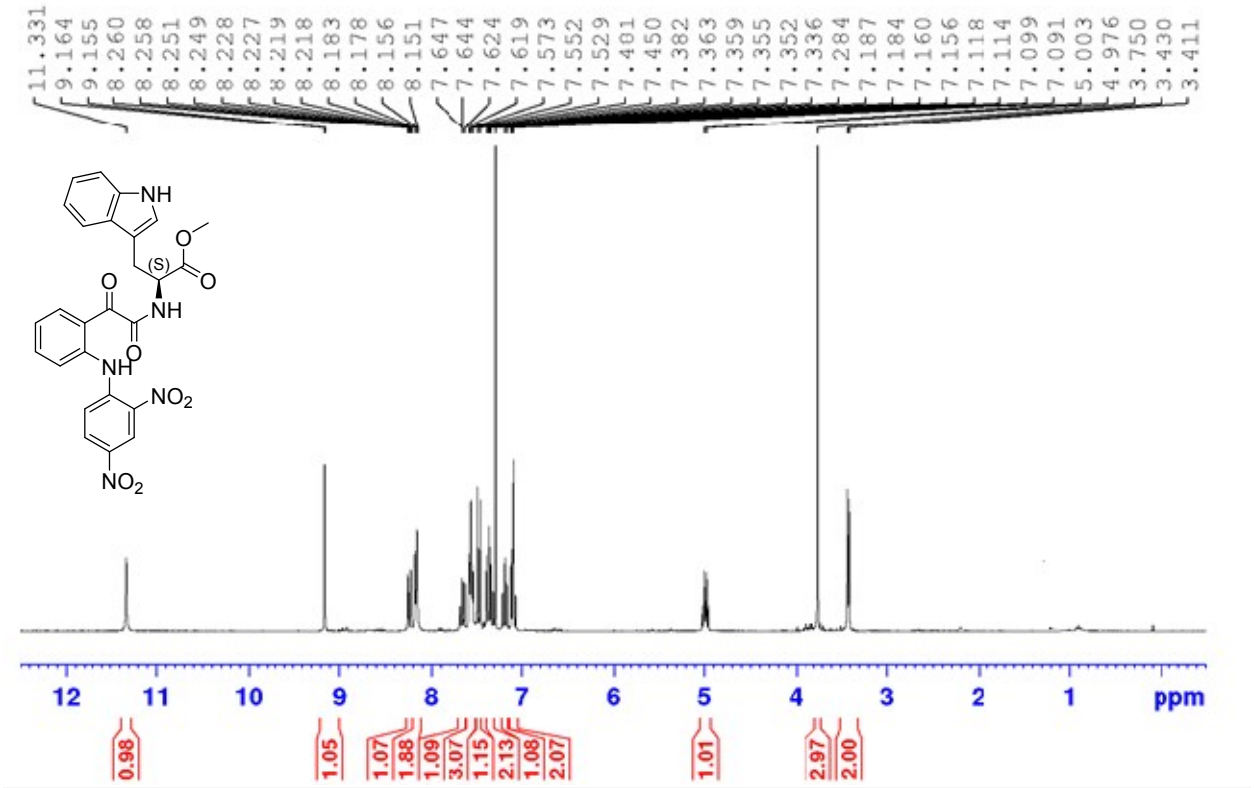


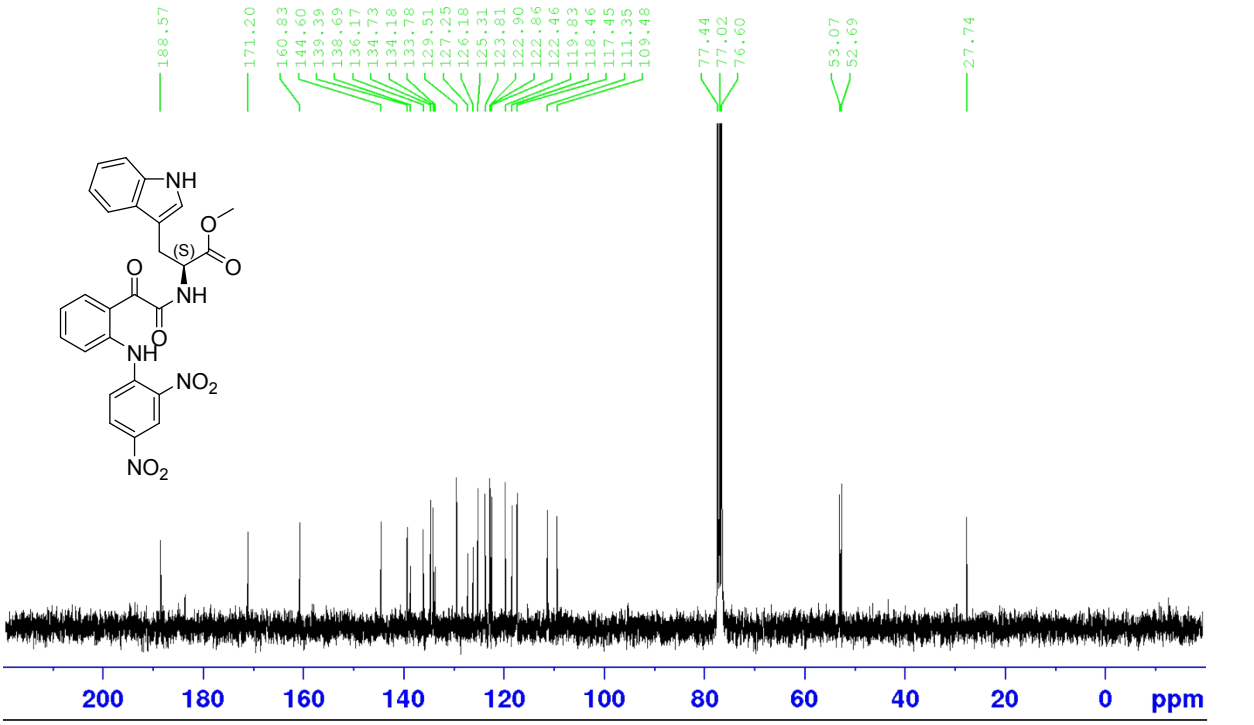
[1]HNMR and [13]CNMR spectra of Methyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)-L-phenylalaninate (**35**)





[1]HNMR and [13]CNMR spectra of Methyl (2-(2-((2,4-dinitrophenyl)amino)phenyl)-2-oxoacetyl)-L-tryptophanate (**36**)





Optical Density (OD) Measurements

Table 1: Growth inhibition by the synthesized compounds against the PAMH602 and *E. coli* MT102 strains at three different concentrations.

Compound	PAMH602			*E. coli* MT102		
	Concentration (μM)					
	250	125	62.5	250	125	62.5
16	0	0	0	4.6±8.2	2.8±1.1	0
17	0	0	0	14.9±1.3	4.2±0.3	1.7±0.2
18	1.3±1.2	0	0	17.2±5.2	4±0.7	0
19	0	0	0	14.8±6.8	4±0.6	0
20	0	0	0	17.8±6.0	8.1±1.8	0
21	0	0	0	20.6±3.7	18.6±2.5	12.1±1.2
22	0	0	0	15.4±5.8	0	5.6±1.0
23	0	0	0	20.6±3.7	18.6±2.5	12.1±1.2
24	0	0	0	8.9±2.1	0	0
25	0	0	0	3.6±5.7	0	0
26	0.1±0.9	0	0	12.7±3.4	0	0
27	8.3±3.0	5.2±2.5	0	17.2±5.2	4.0±0.7	0
28	0	0	0	5.1±2.1	0	0
29	0	0	0	19.3±3.5	19.5±1.1	11±0.9
30	0	0	0	17.9±2.1	13.2±1.5	9.8±0.8
31	0	0	0	18.1±2.3	1.6±0.7	-1.6±0.6
32	0	0	0	22.5±1.4	0.6±0.4	0
33	0	0	0	37±2.4	9.9±2.4	6.1±0.8
34	3.3±2.6	0.8±1.6	0	26.1±6.7	5.2±0.8	0
35	0	0	0	12.2±4.4	0	0
36	1.2±2.2	0	0	26.4±1.1	2.3±1.5	0
Fu-30	51.9±0.2	36.9±1.6	4.3±0.6	98.8±11.7	99.7±0.3	75.6±0.5

Growth inhibition ± standard deviation of mean from at least two independent experiments. Compounds tested thrice in triplicate. 0 = No growth inhibition.