

Synthesis and biological evaluation of new substituted Hantzsch thiazole derivatives from environmentally benign one-pot synthesis using silica supported tungstosilicic acid as reusable catalyst

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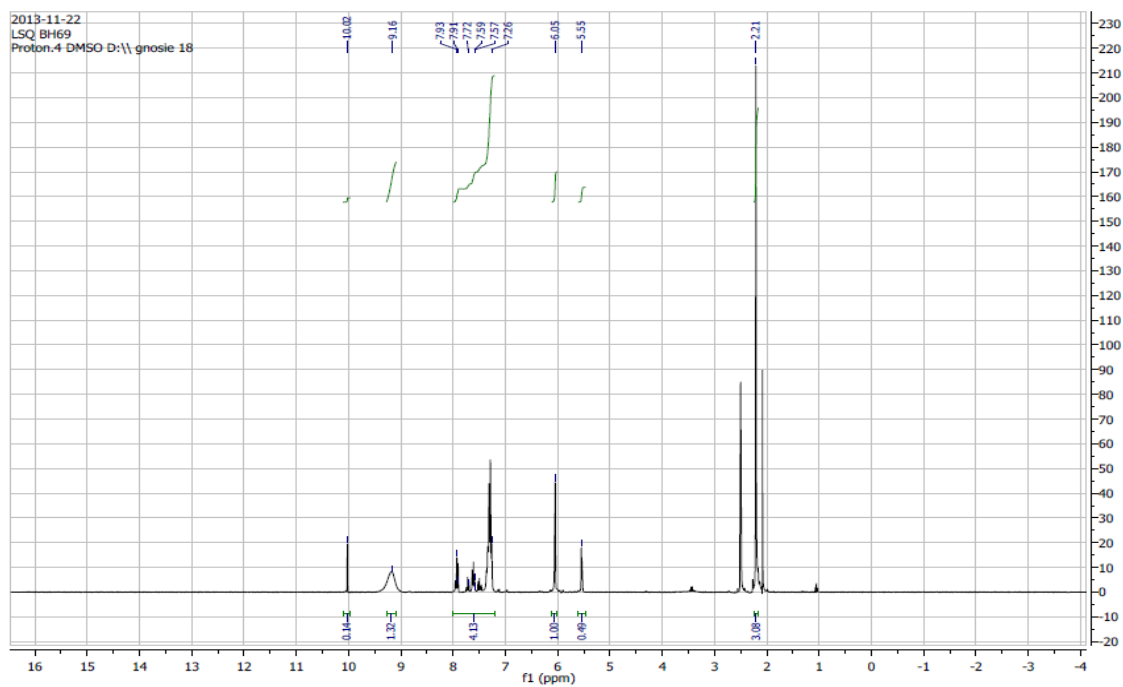
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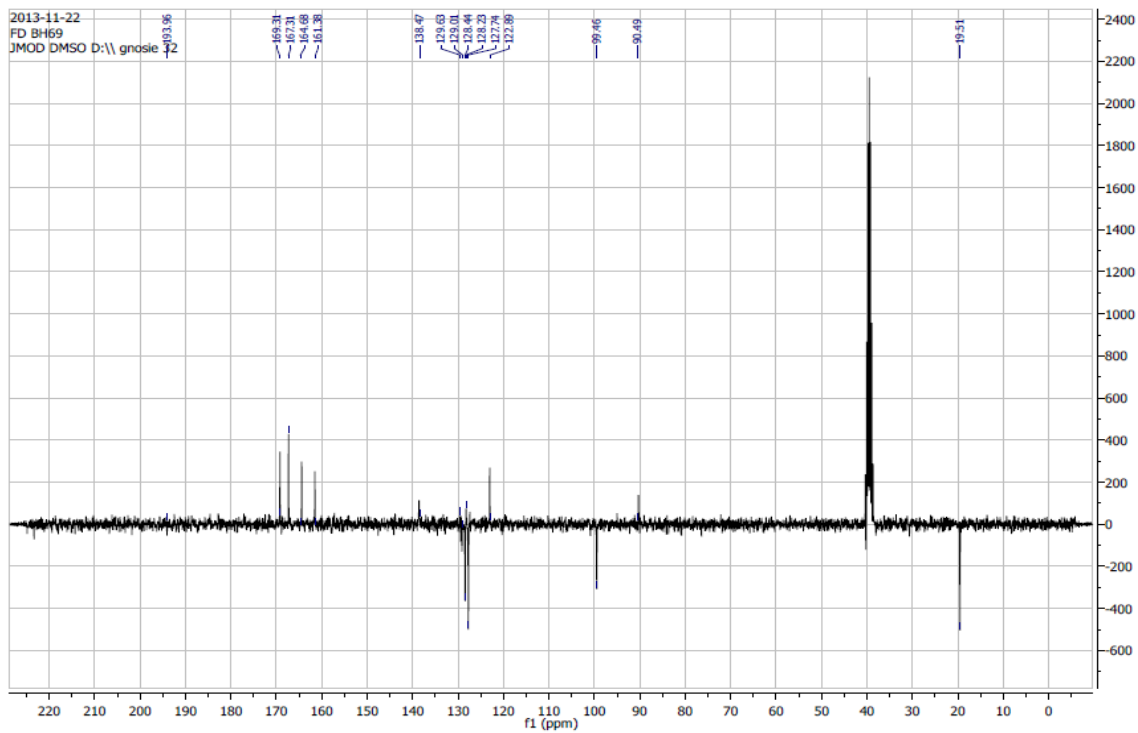
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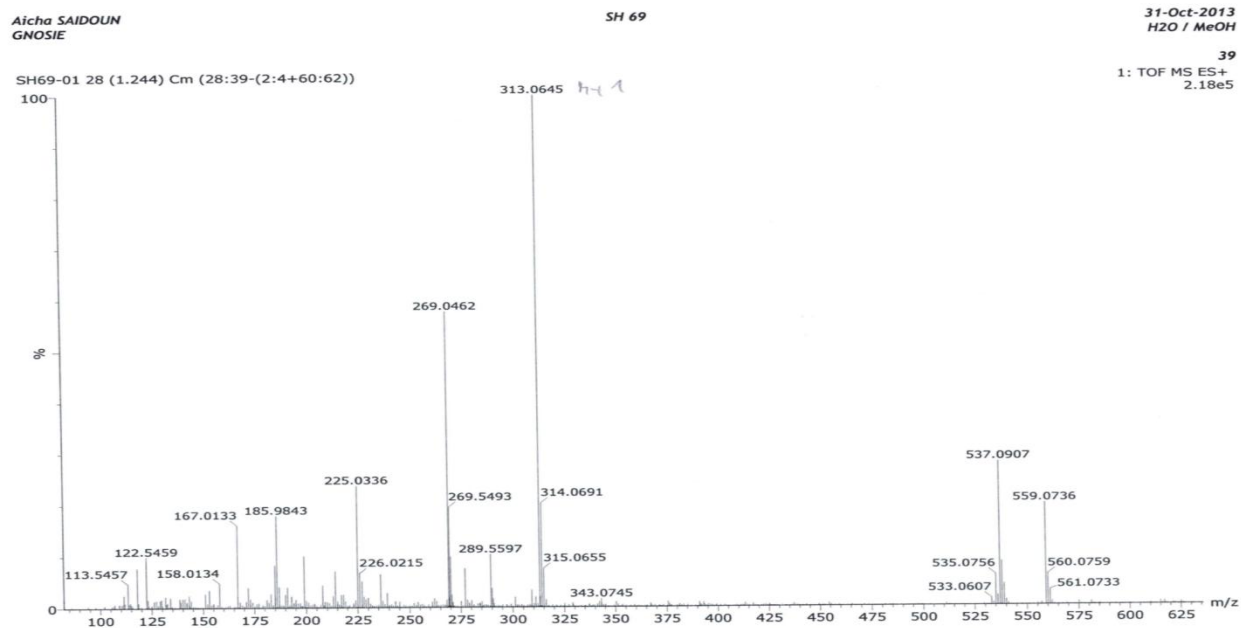
¹H NMR SPECTRA OF COMPOUND 4a:



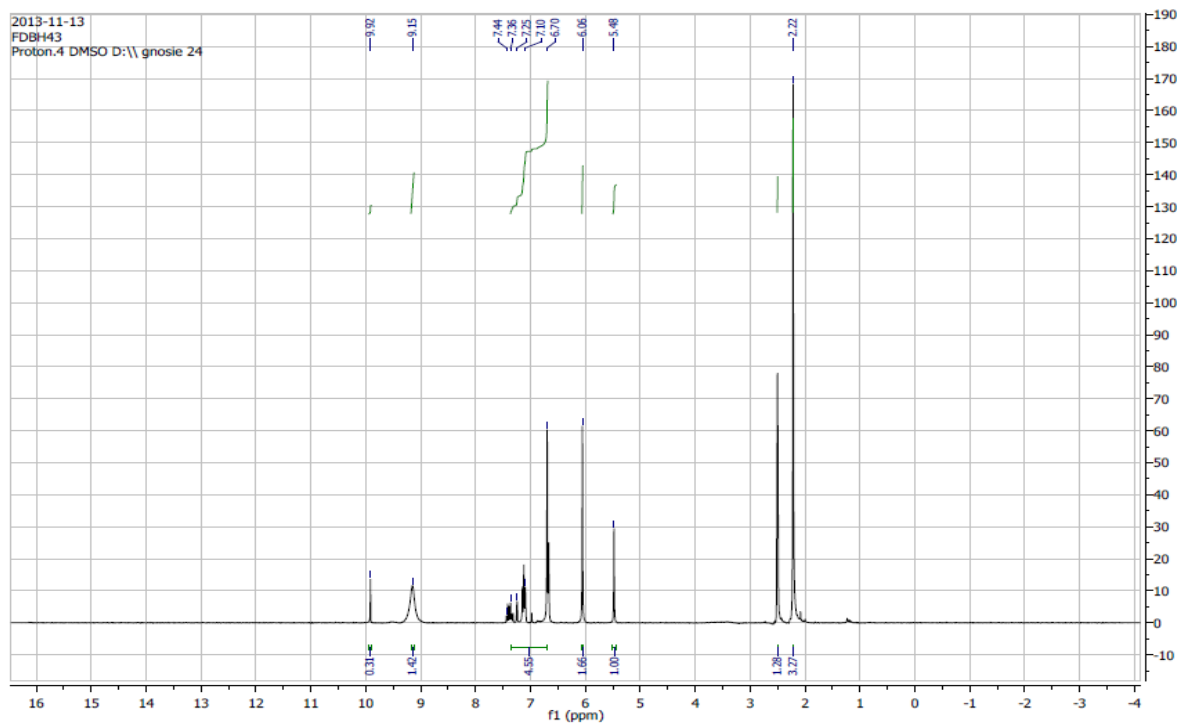
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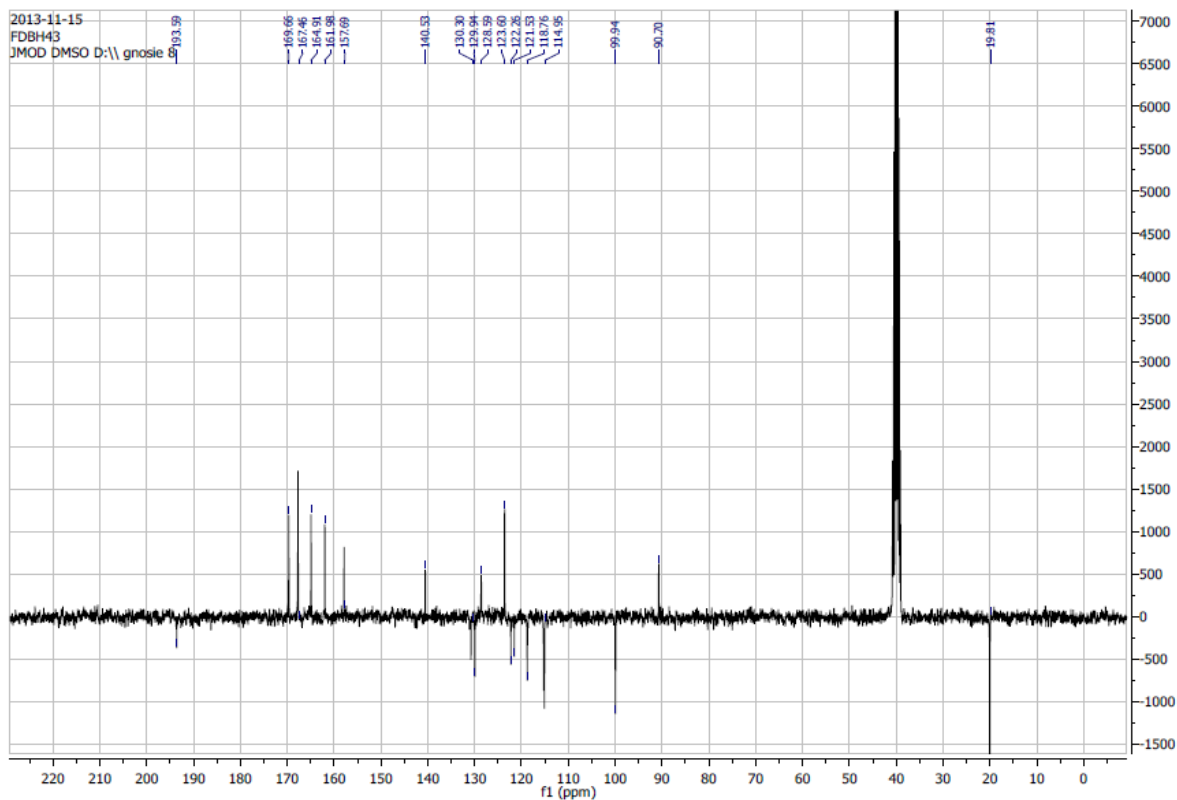
MASS SPECTRA OF COMPOUND 4a:



¹H NMR SPECTRA OF COMPOUND 4b:



¹³C NMR SPECTRA OF COMPOUND 4b:



Aicha SAIDOUN
GNOSIE

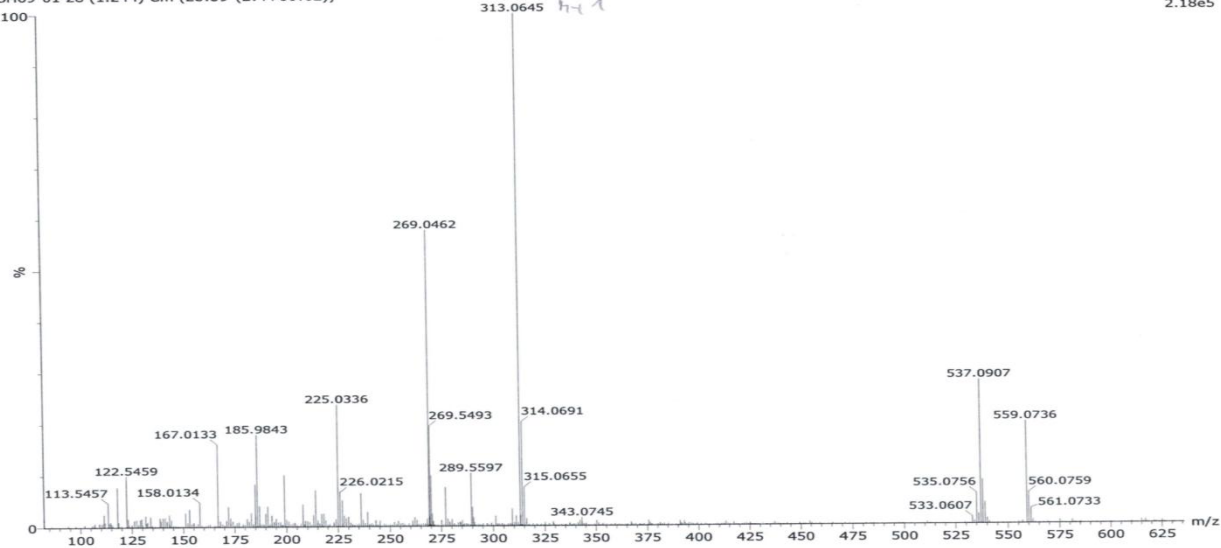
SH 69

31-Oct-2013
H2O / MeOH

39

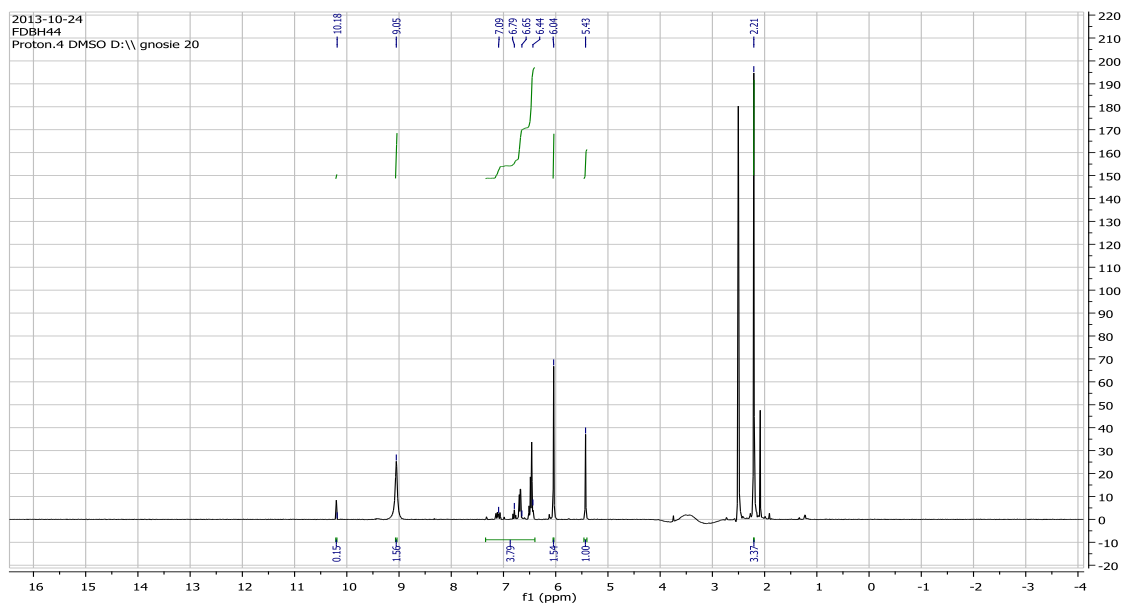
1: TOF MS ES+
2.18e5

SH69-01 28 (1.244) Cm (28:39-(2:4+60:62))

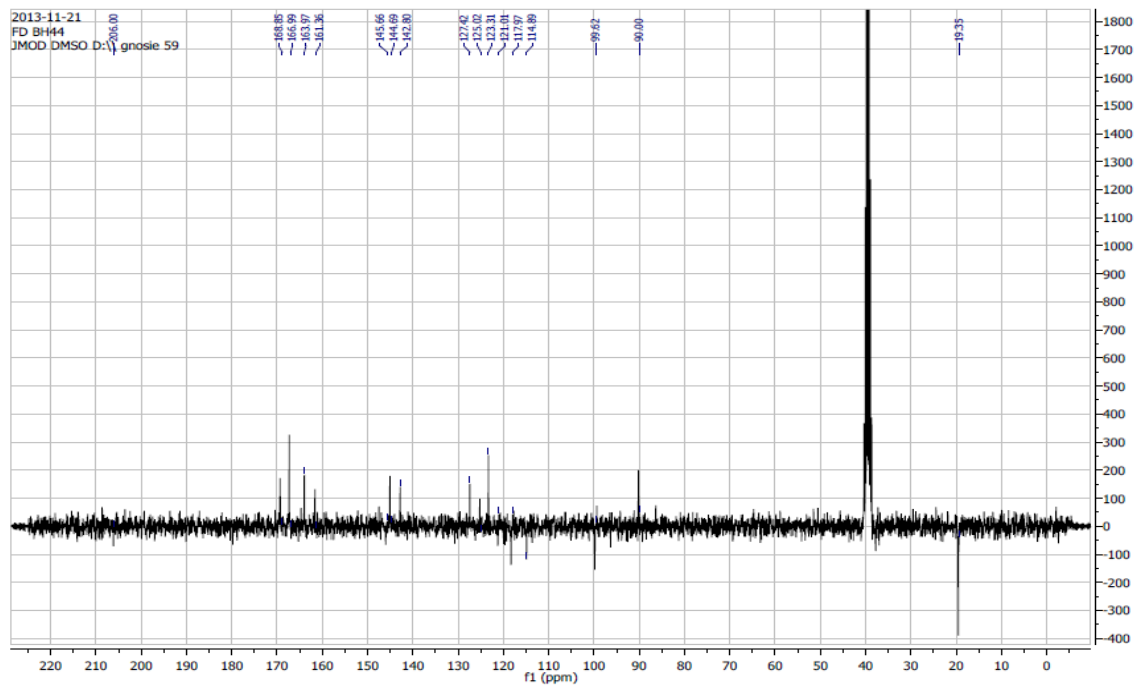


MASS SPECTRA OF COMPOUND 4b:

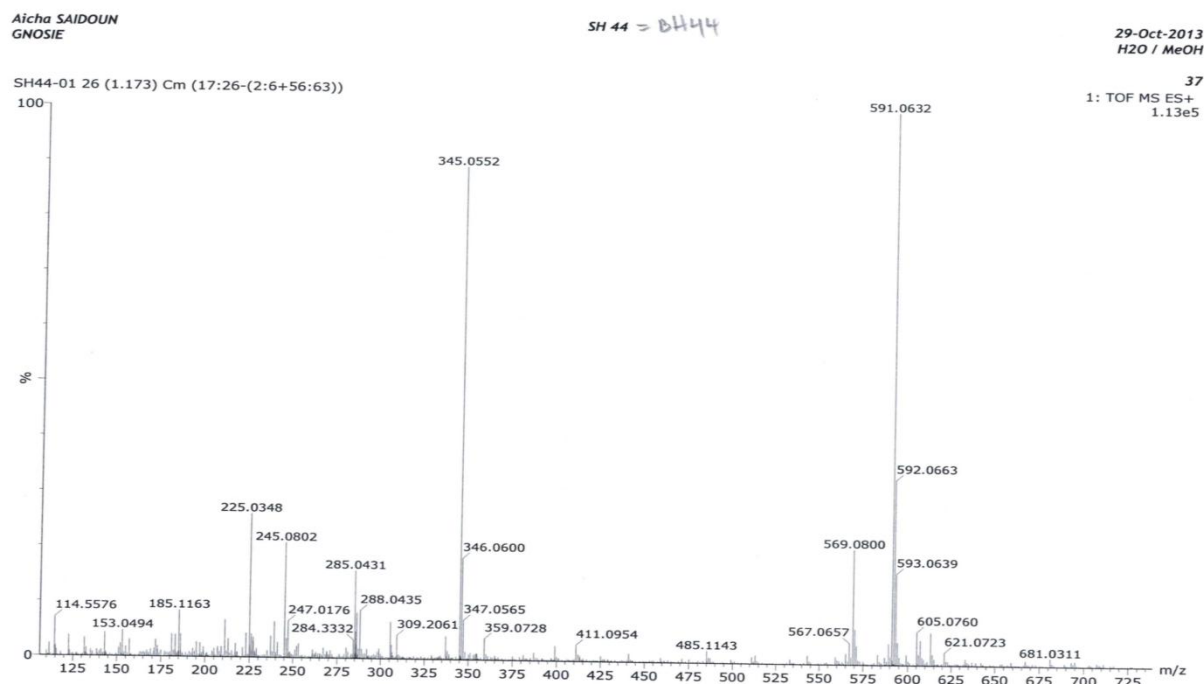
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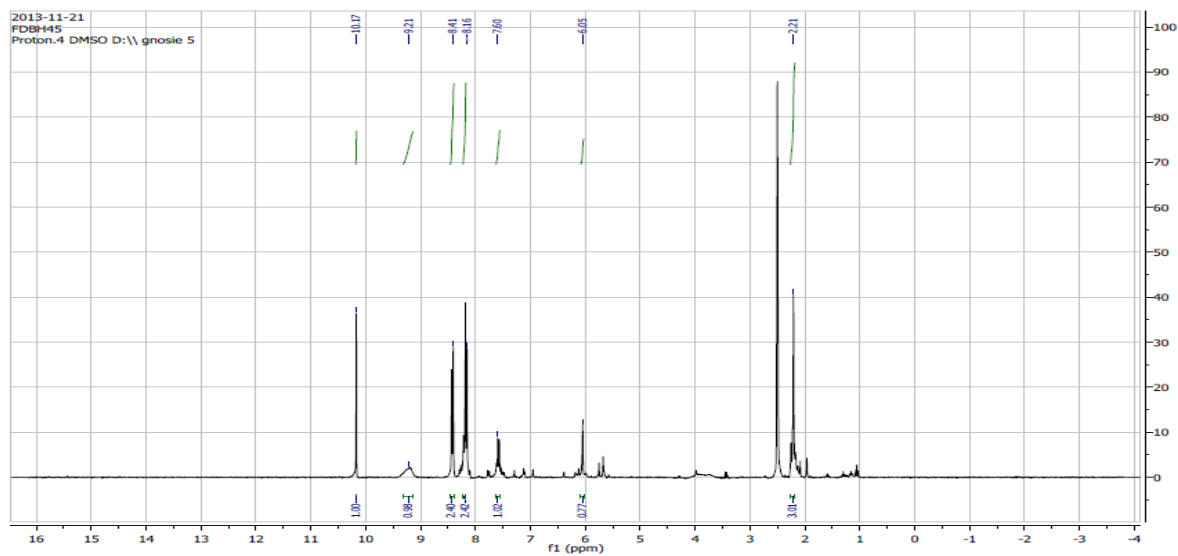
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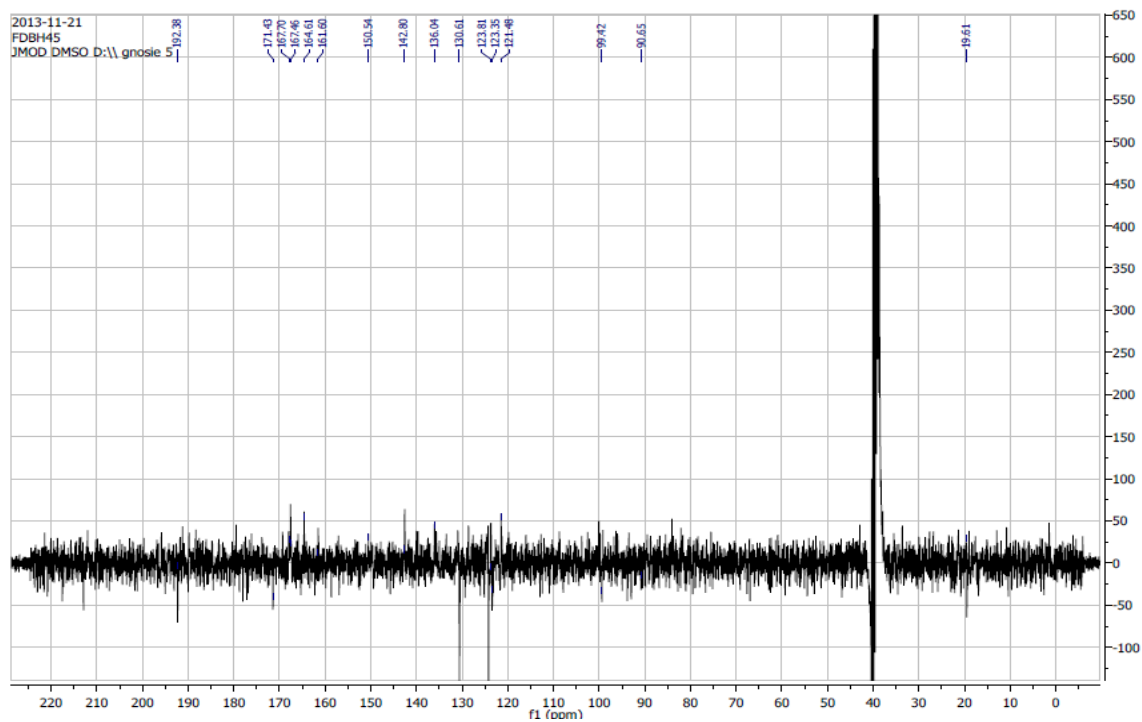
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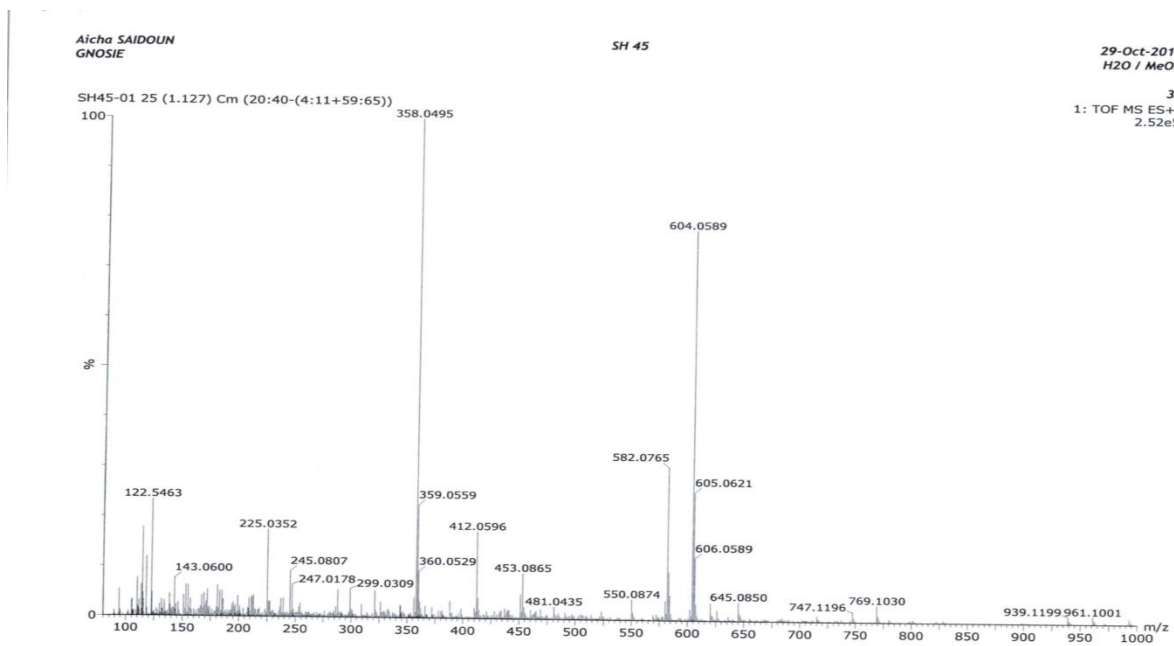
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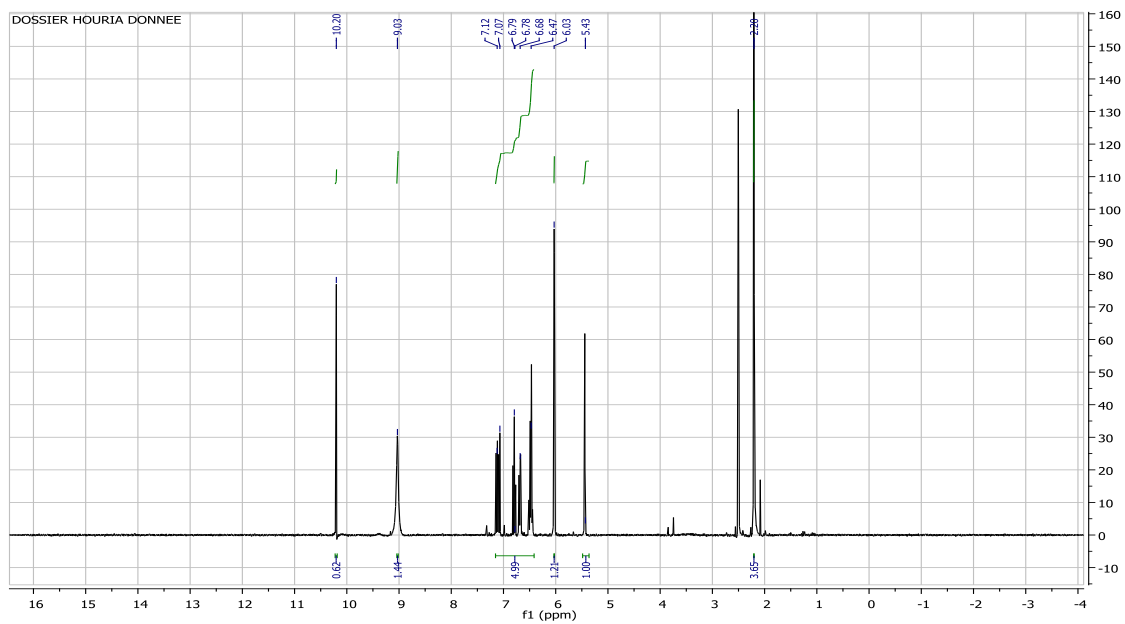
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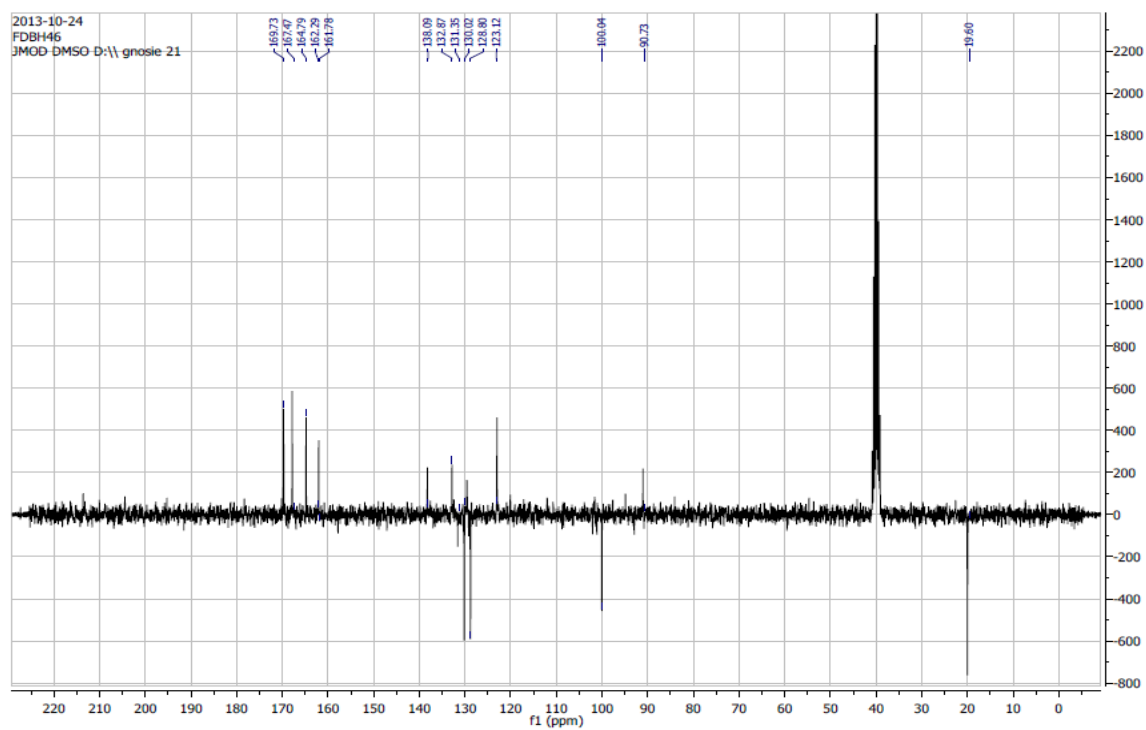
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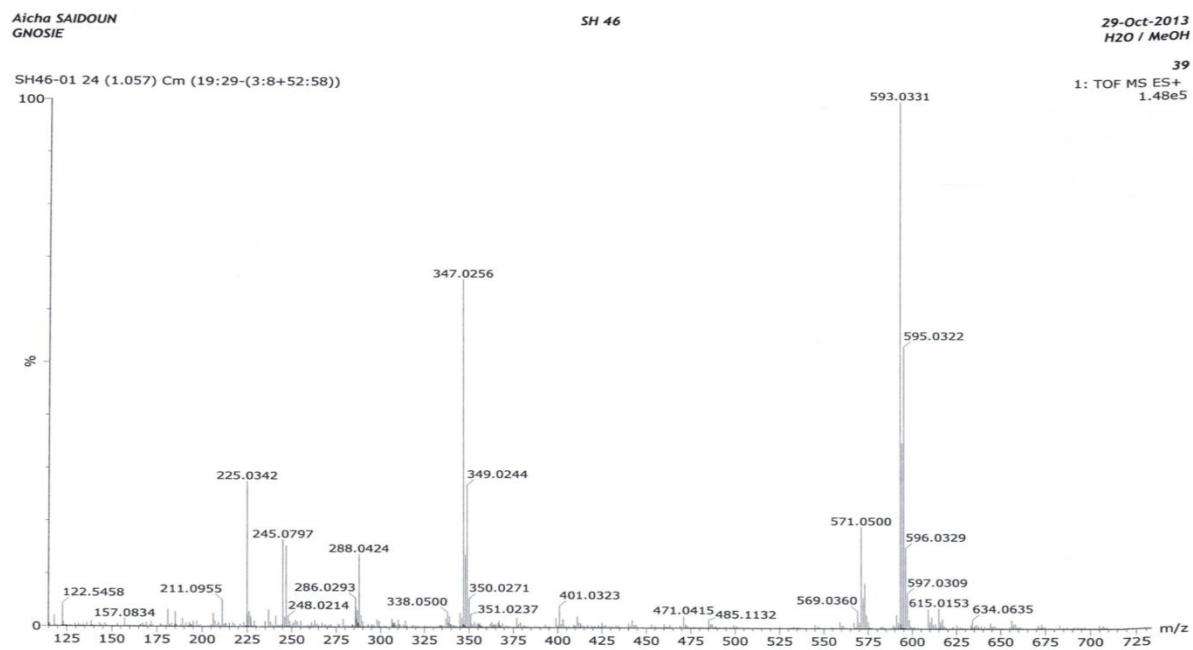
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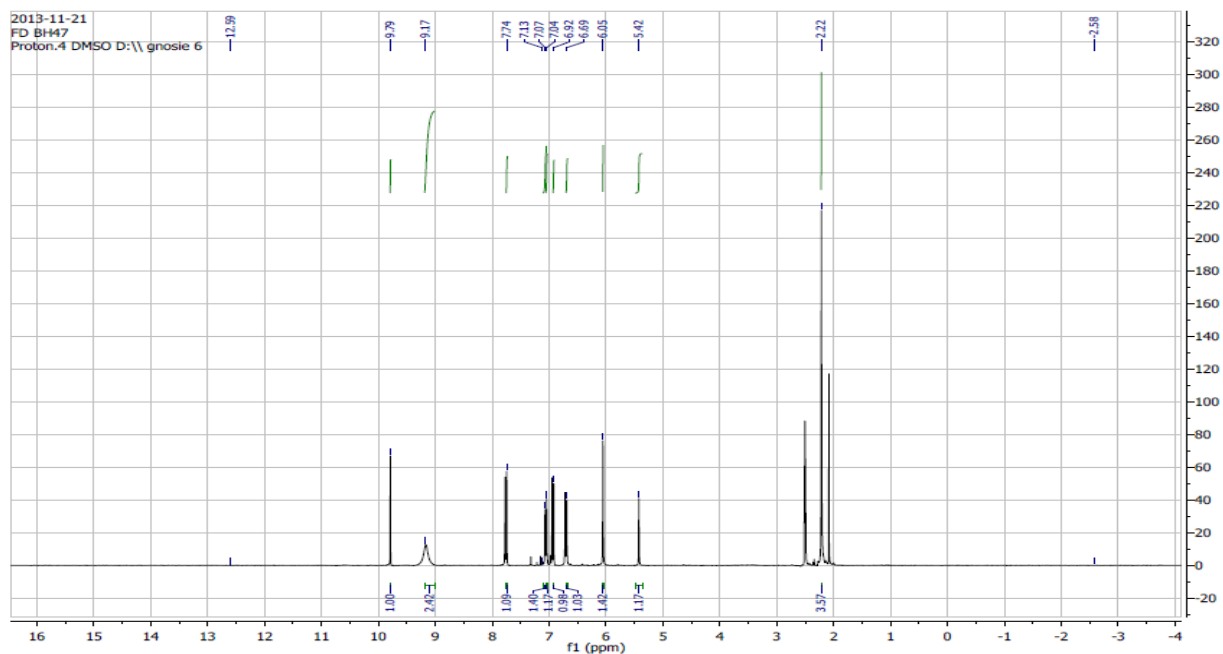
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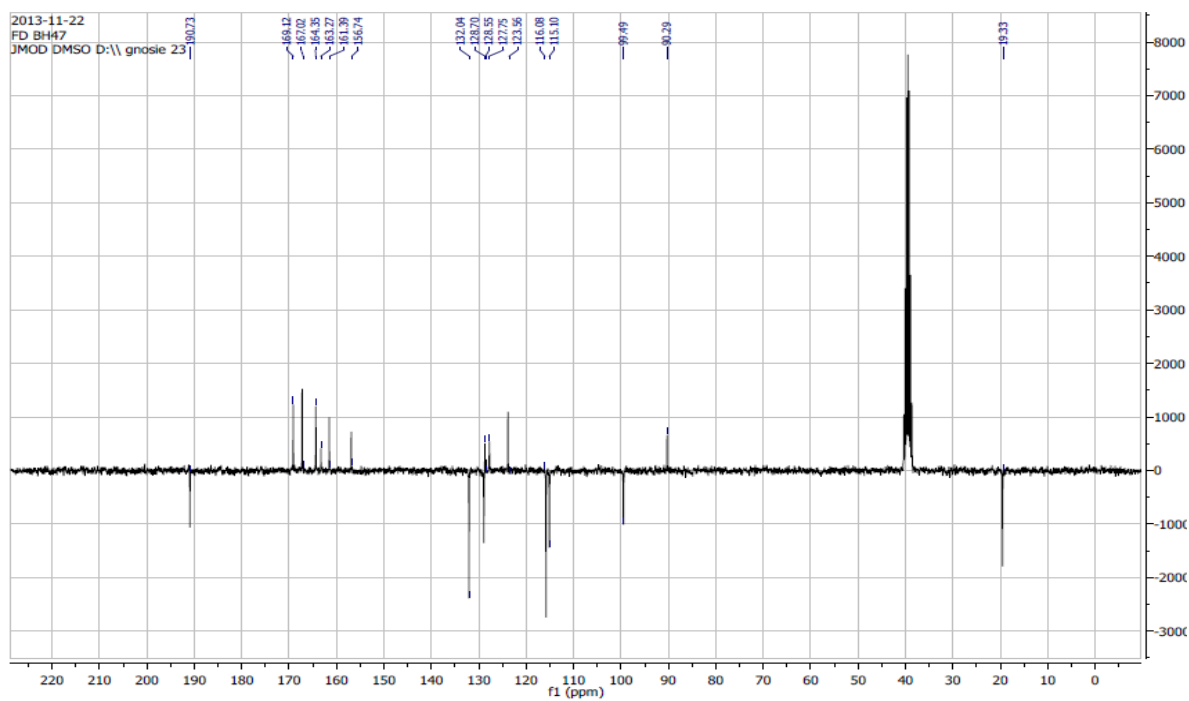
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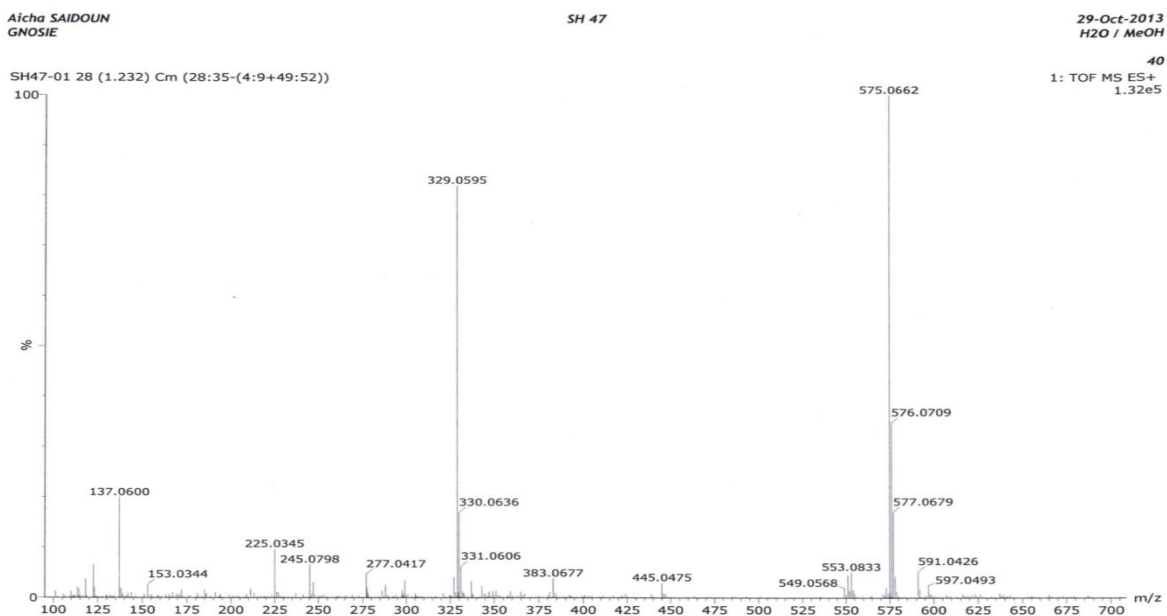
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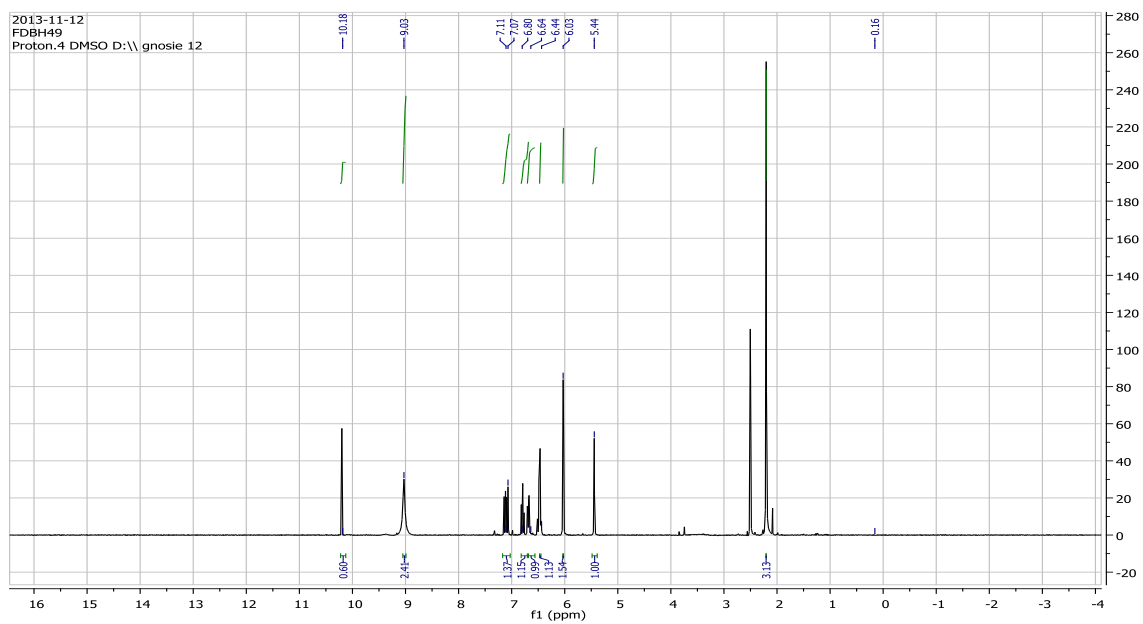
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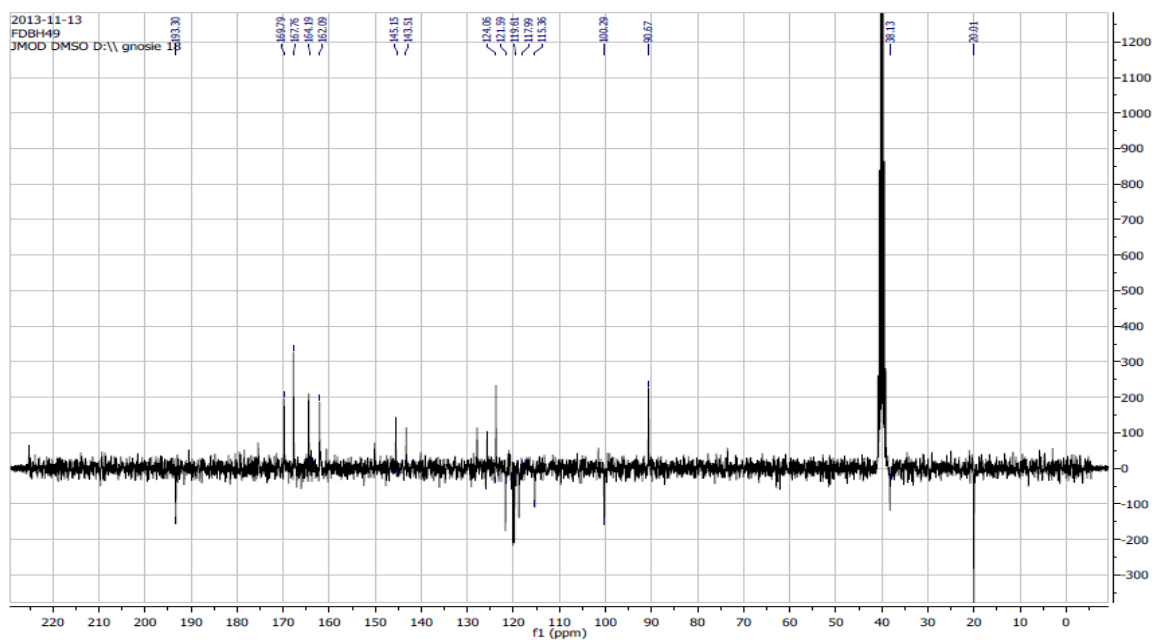
MASS SPECTRA OF COMPOUND 4f:



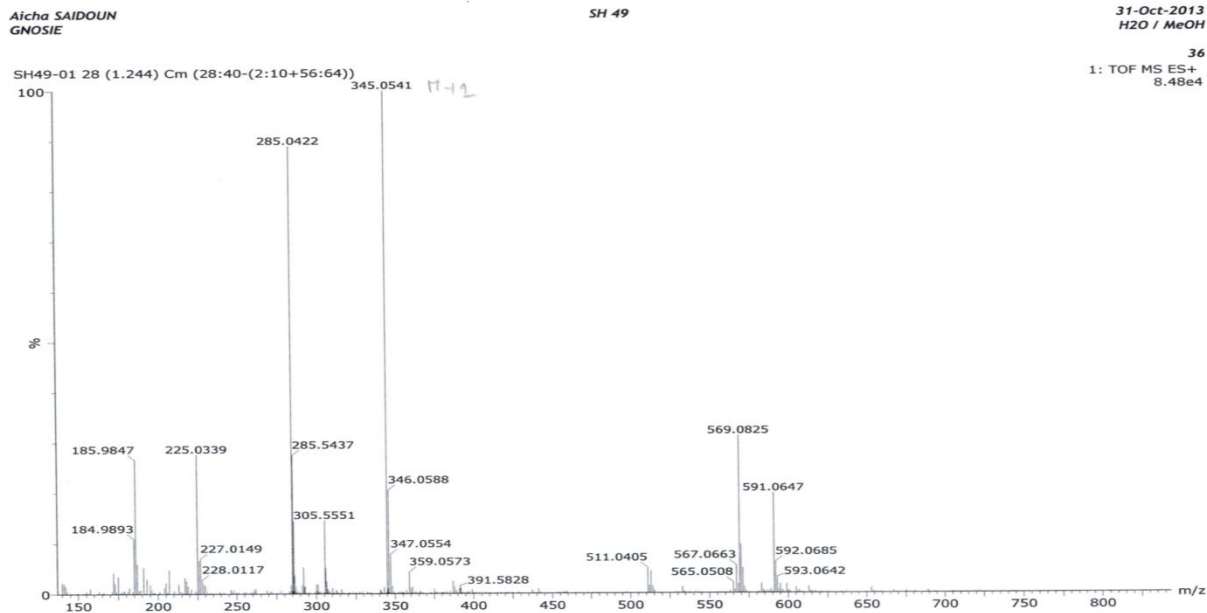
¹H NMR SPECTRA OF COMPOUND 4g:



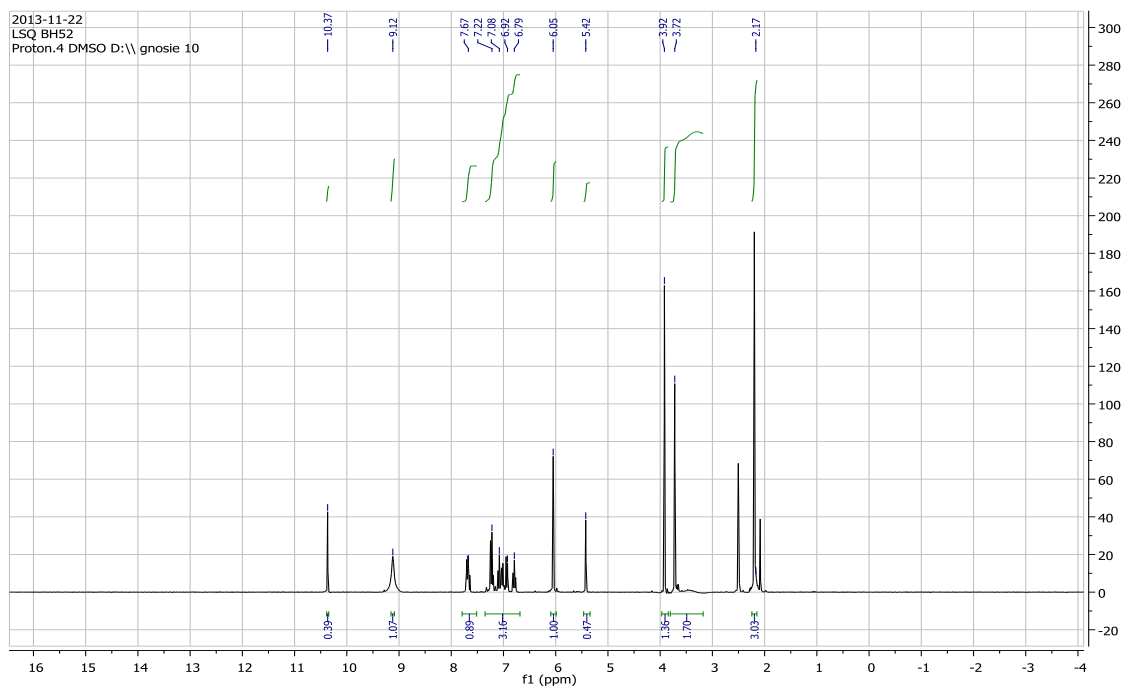
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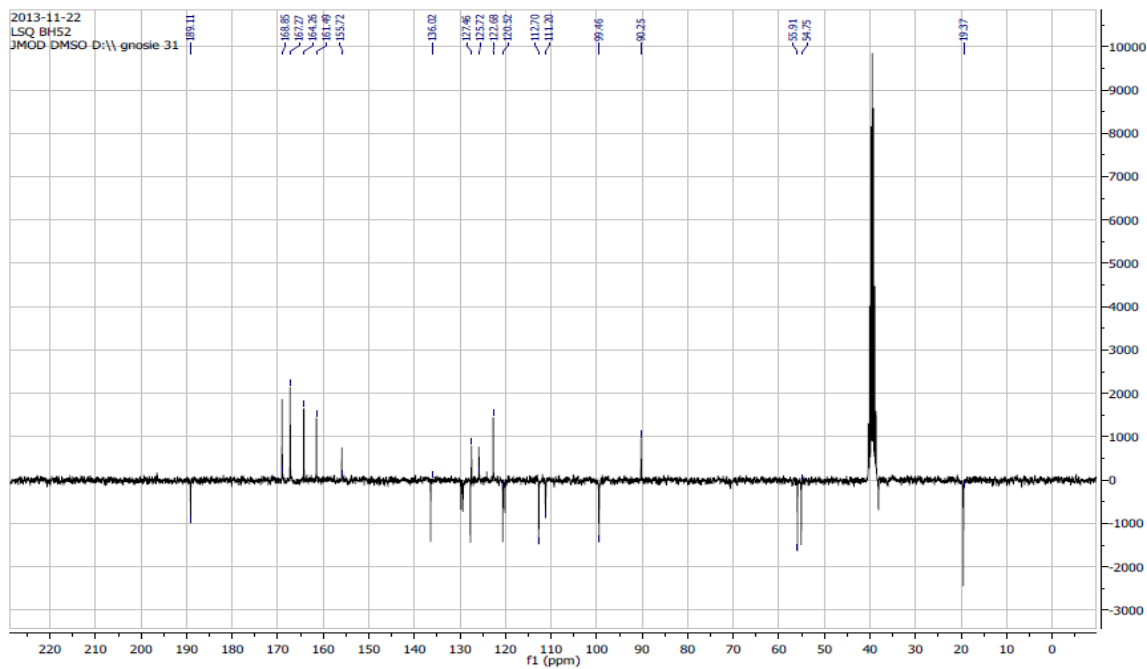
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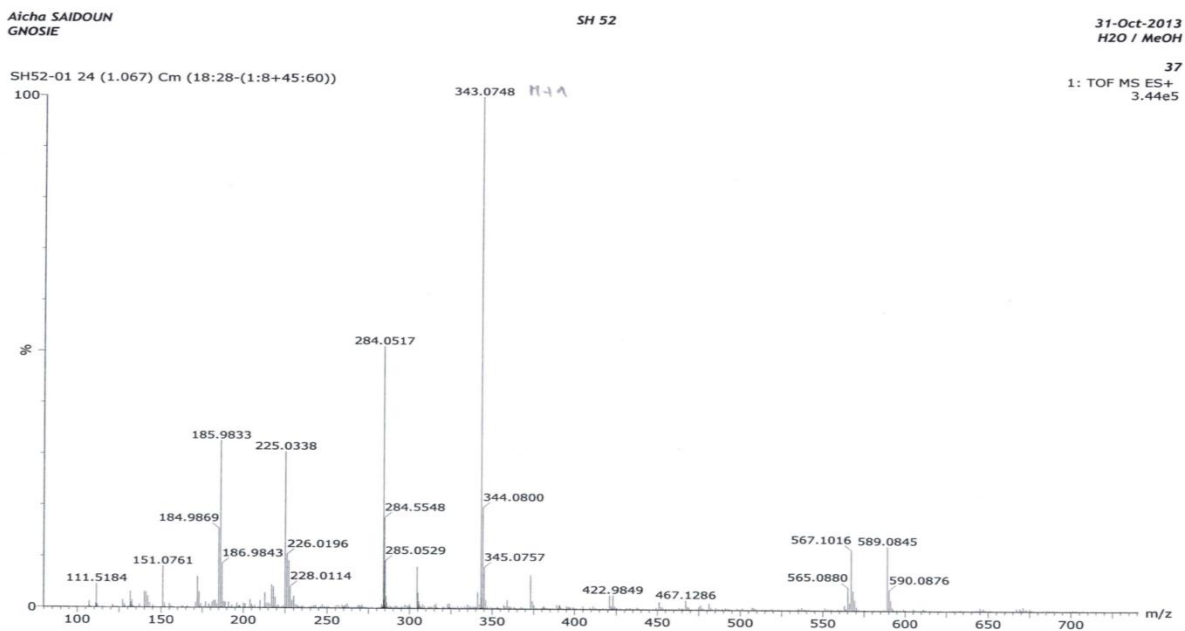
¹H NMR SPECTRA OF COMPOUND 4h:



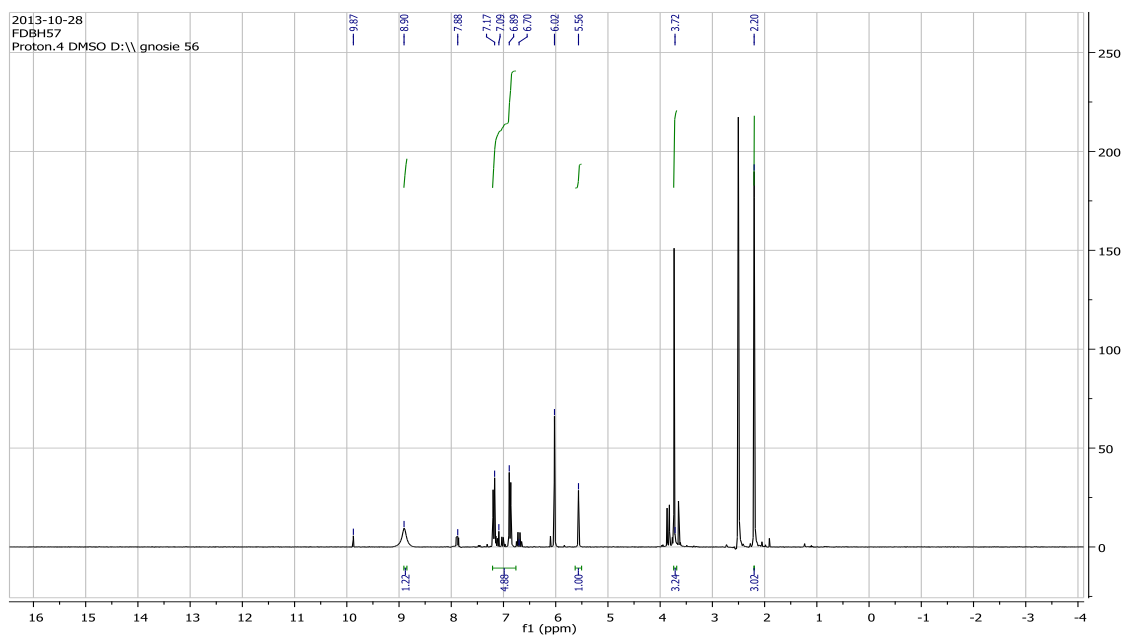
¹³C NMR SPECTRA OF COMPOUND 4h:



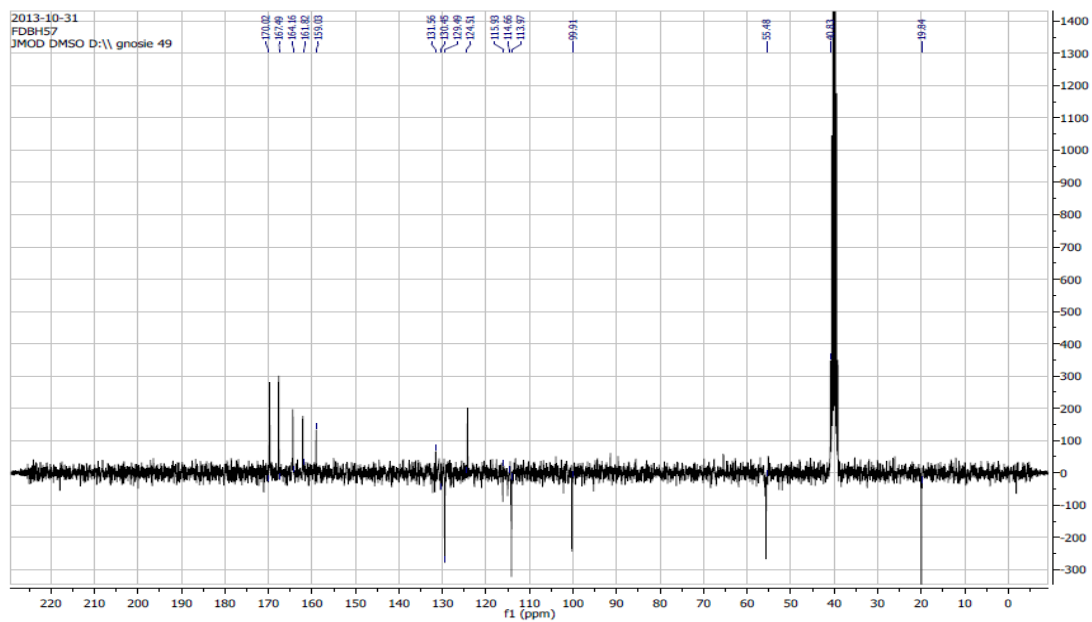
MASS SPECTRA OF COMPOUND 4h:



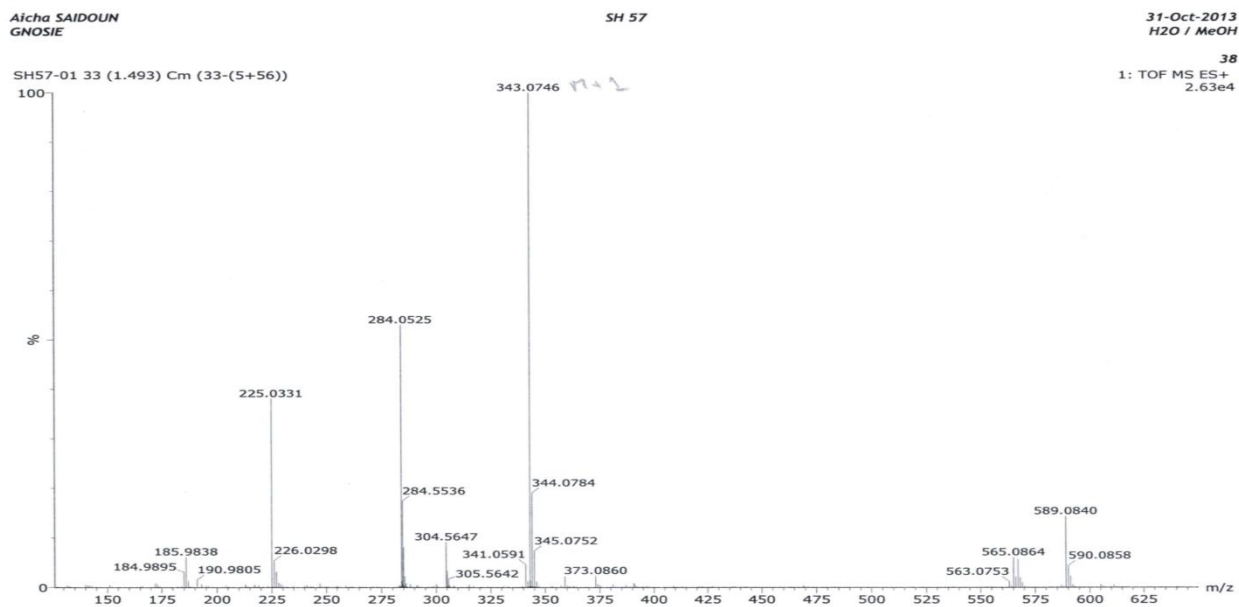
¹H NMR SPECTRA OF COMPOUND 4i:



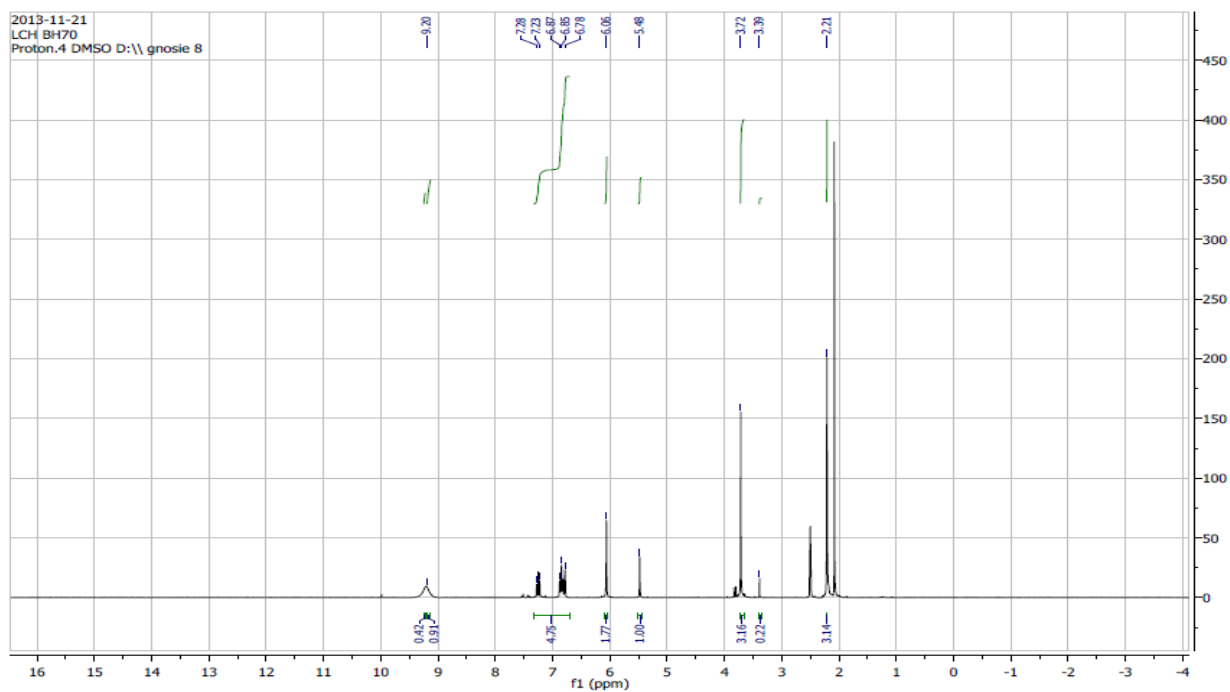
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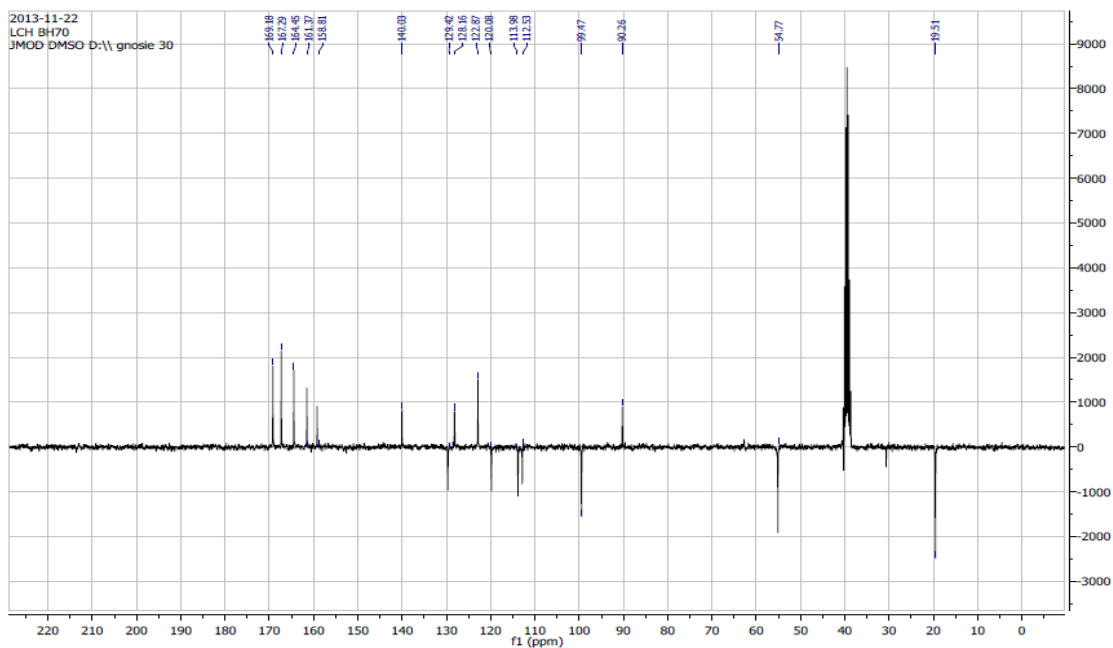
MASS SPECTRA OF COMPOUND 4i:



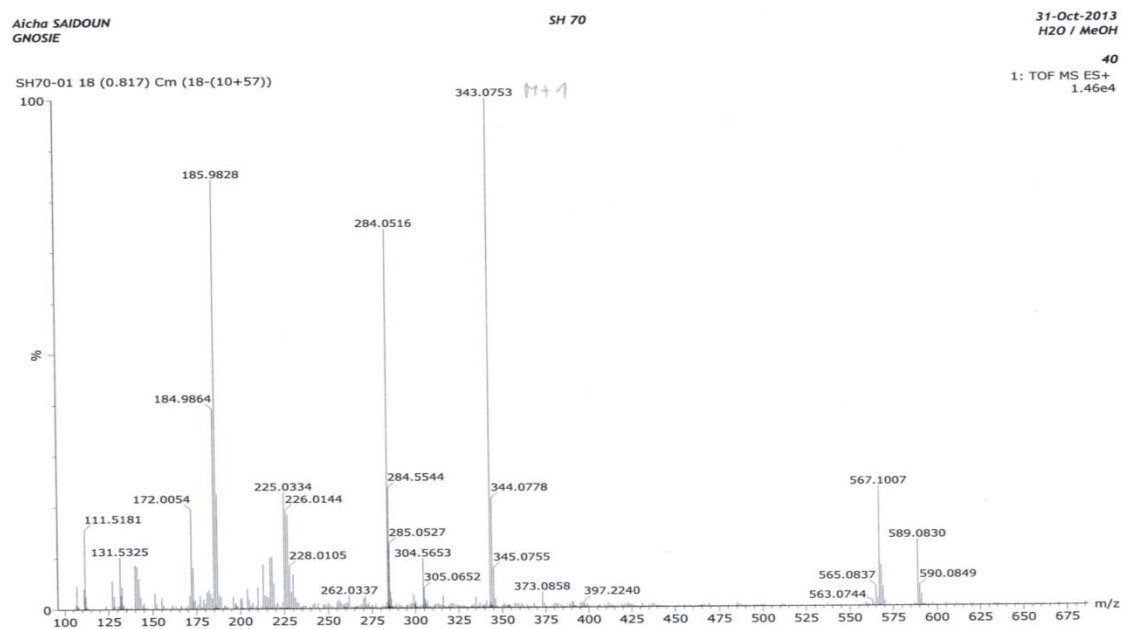
¹H NMR SPECTRA OF COMPOUND 4j:



¹³C NMR SPECTRA OF COMPOUND 4j:

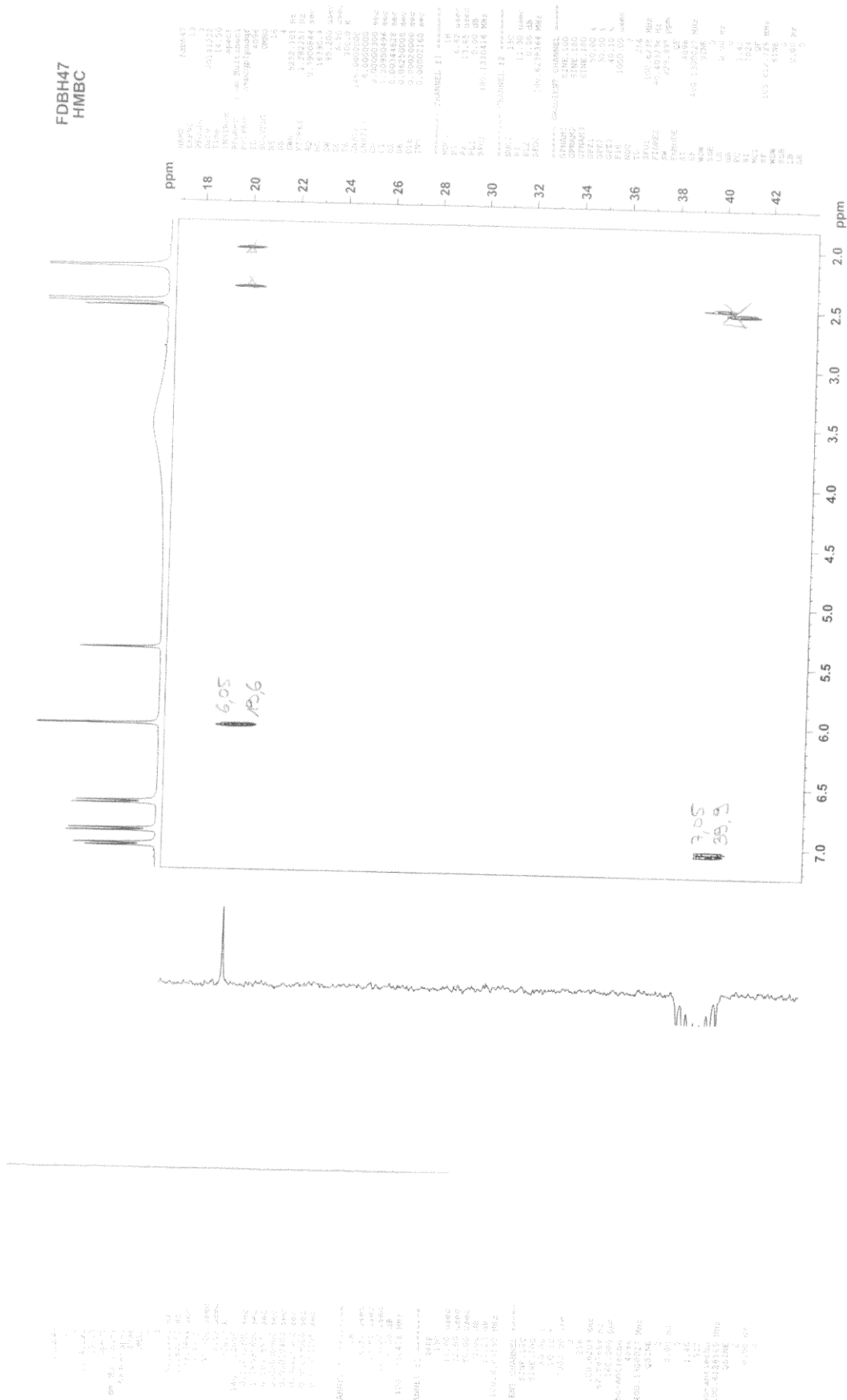


MASS SPECTRA OF COMPOUND 4j:



Peak	v(F1) [ppm]	v(F1) [Hz]	Intensity [abs]
22	12.8043	5123.3846	32699.12
23	10.5772	4232.2951	254122.00
1	9.7833	3914.5919	10182119.12
24	9.5183	3808.5574	199400.38
2	9.1672	3668.0718	2895515.88
3	7.7651	3107.0495	8205069.75
4	7.7438	3098.5267	8345437.75
5	7.0621	2829.7581	6546644.00
6	7.0407	2817.1953	7649246.75
7	6.9421	2777.7425	8107618.75
8	6.9208	2769.2197	7917422.12
9	6.7118	2685.5926	7705741.25
10	6.6905	2677.0698	7264160.12
11	6.0513	2421.3067	14822250.62
12	5.4170	2167.5042	7440566.25
13	3.7154	1486.6430	994943.50
14	3.5308	1412.7790	1280745.12
15	3.3231	1329.6720	943793.25
16	3.3048	1322.3496	907707.38
17	3.1675	1267.4118	574622.38
18	3.1492	1260.0894	543541.50
19	2.5389	1015.8901	7807249.12
20	2.4999	1000.2850	31398129.88
21	2.2108	884.6074	42438570.75

HMBC OF COMPOUND 4f:



FDBH47
HMBC

