Supplementary Information

Silica sulfuric acid catalyzed green synthesis of 1,2- dihydro-1-aryl naphtho[1,2-*e*][1,3]-oxazin-3-one and 1,2- dihydro-1-methyl naphtho[1,2-*e*][1,3]-oxazin-3-one as potent antibacterial agents

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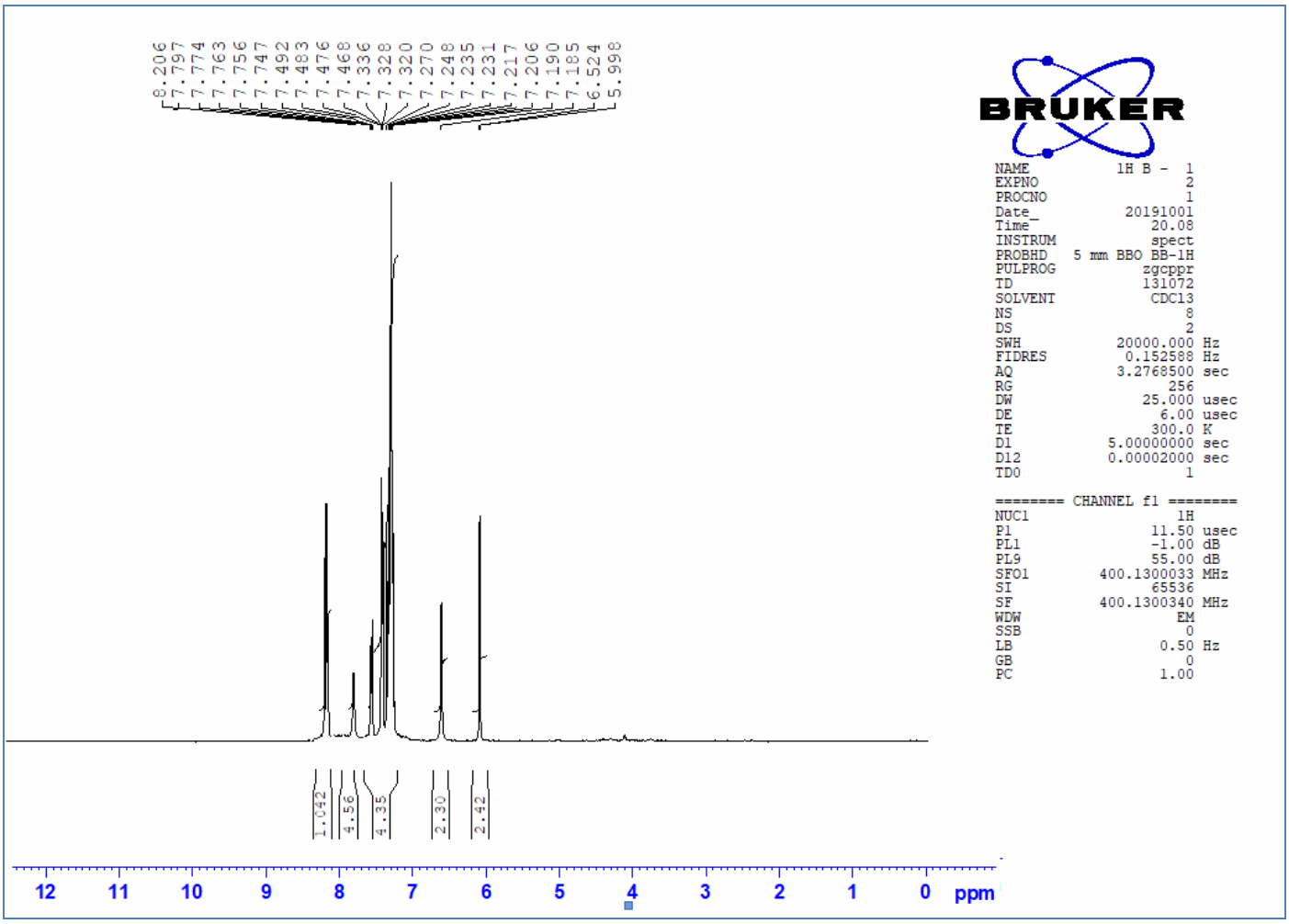
Received 27 February 2020; accepted (revised) 2 March 2021

Captions:

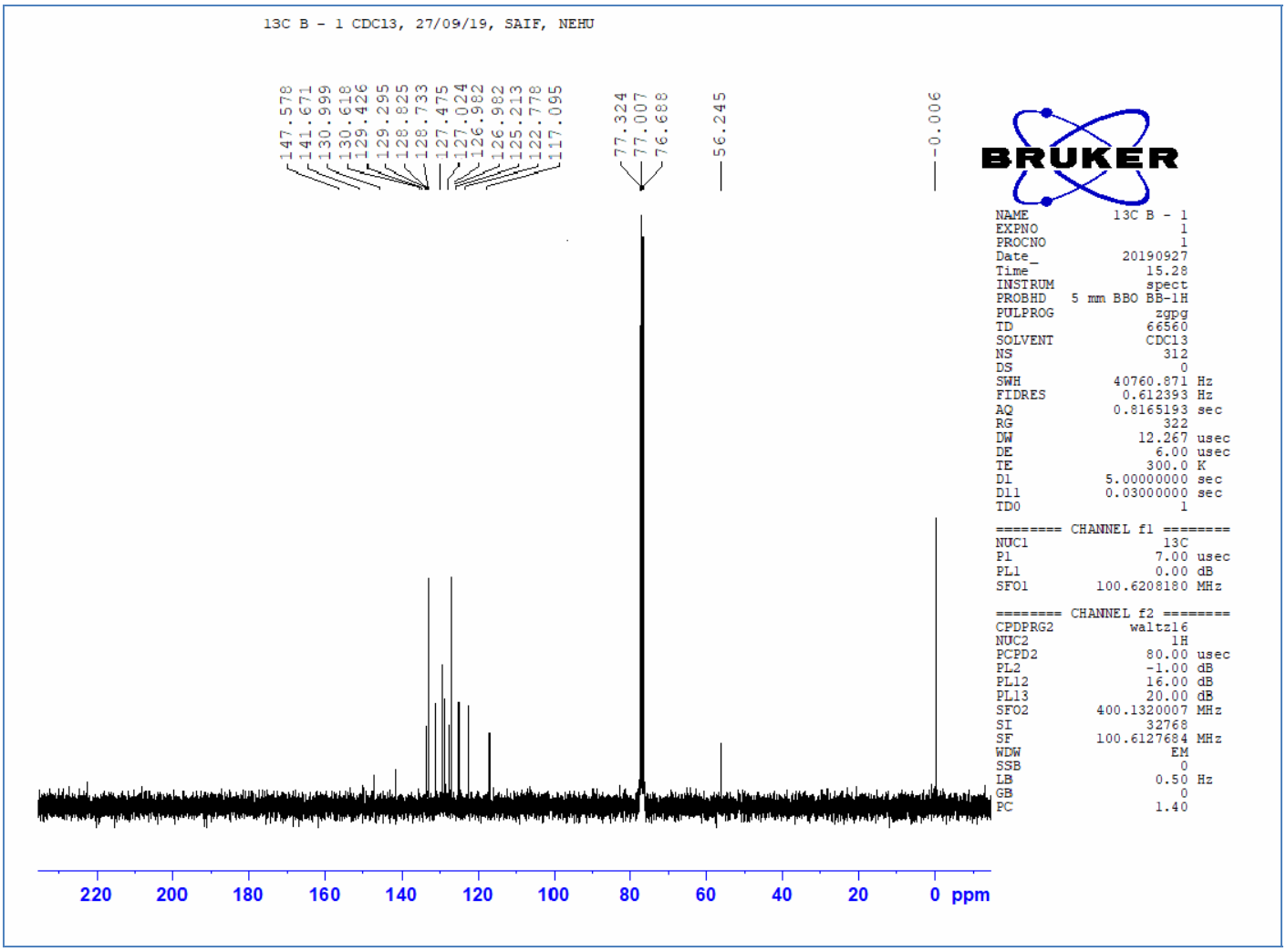
Materials and methods:

All reagents were purchased from Merck and used without purification. Reactions were carried out in Microwave Digester (Anton paar Monowave 400). Completion of the reaction and purity of compounds were checked on Aluminum coated TLC plates [60 F245 (E. Merck)]. n-hexane: ethyl acetate (3:2 V/V) used as mobile phase and it is visualized in UV chamber.Melting points were measured on Ikon melting point apparatus and compared with reported values of known compounds. IR spectra were recorded on FTIR spectrometer (Perkin Elmer 1725X, Model: Spectrum Two FT-IR). Mass spectra were recorded on mass spectrophotometer (Advion expressions). NMR spectra were recorded with a Bruker spectrometer at 400 MHz (1H NMR) and at 100 MHz (13C NMR) in $CDCl_3$ as solvent and with TMS as internal standard; and chemical shifts are expressed as d/ppm.

1H-NMR spectra of compound 4a



13C-NMR spectra of compound
4a:



Mass Spectra of compound 4a:

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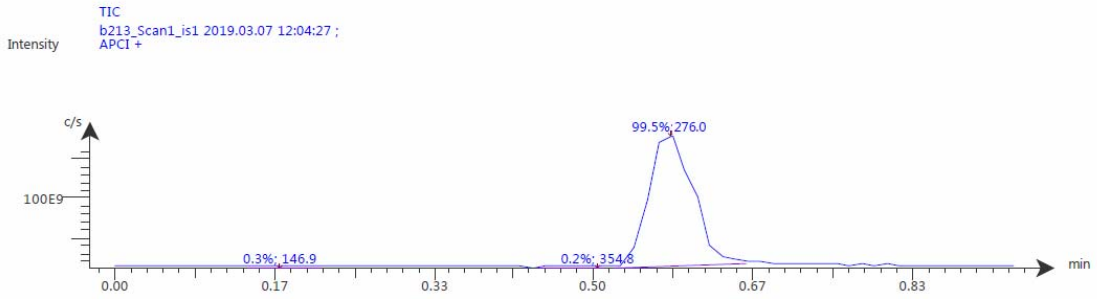

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
0.17	9E8	0.17	1.7E9	0.3	4.8	146.9	
0.50	6.3E8	0.50	1.2E9	0.2	0.6	354.8	
0.58	1.6E11	0.58	5.2E11	99.5	3.2	276.0	

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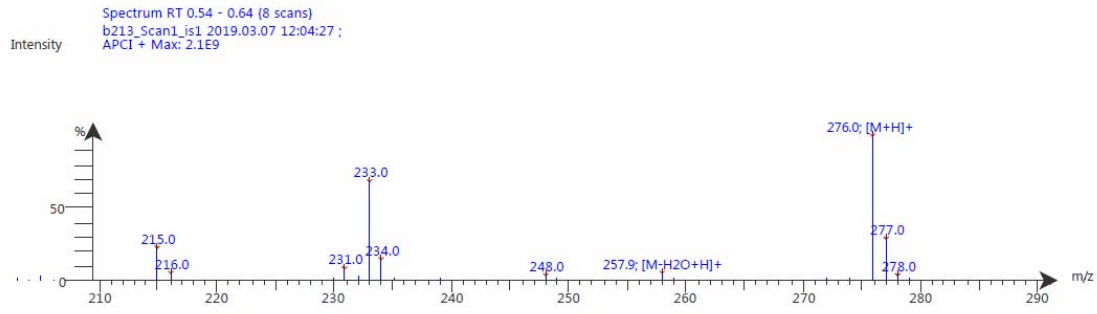
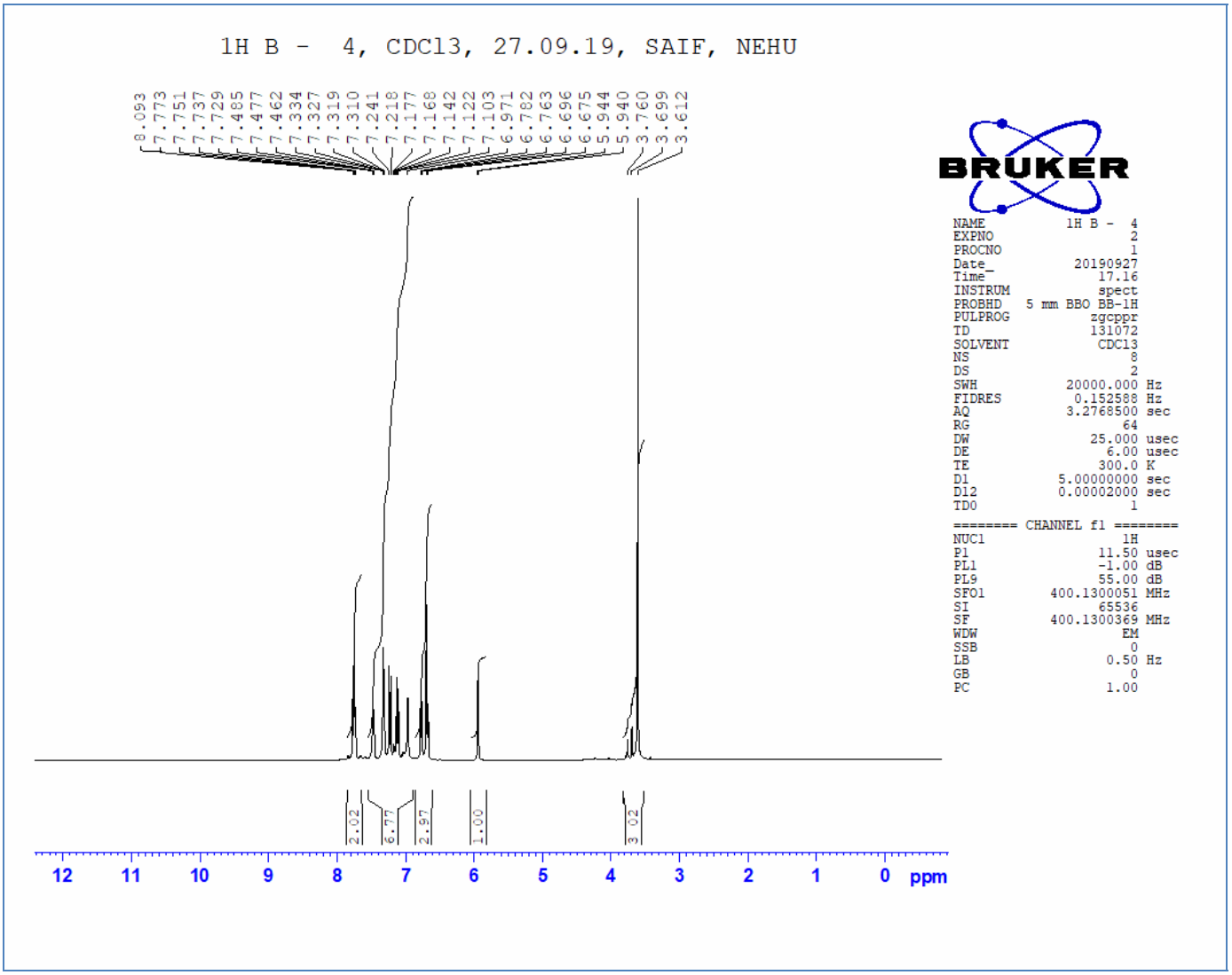
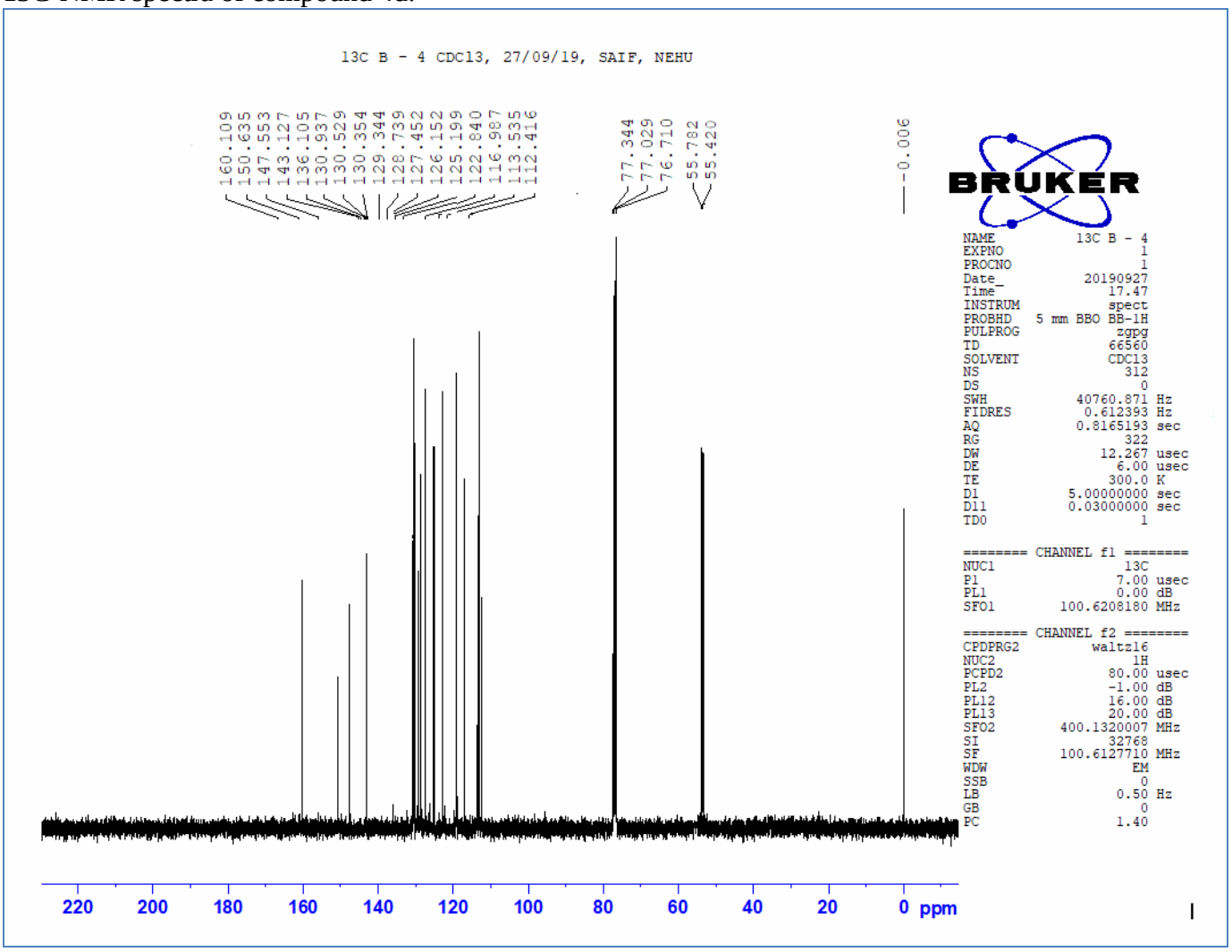


1H-NMR spectra of compound
4d:



13C-NMR spectra of compound 4d:



Mass Spectra of compound 4d:

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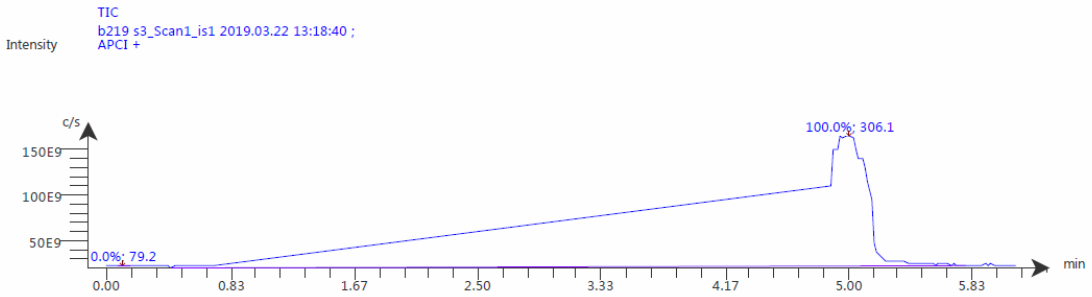

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
0.10	5.4E8	0.10	1.1E9	0.0	3.7	79.2	
4.95	1.4E11	5.01	1.3E13	100.0	60.6	306.1	

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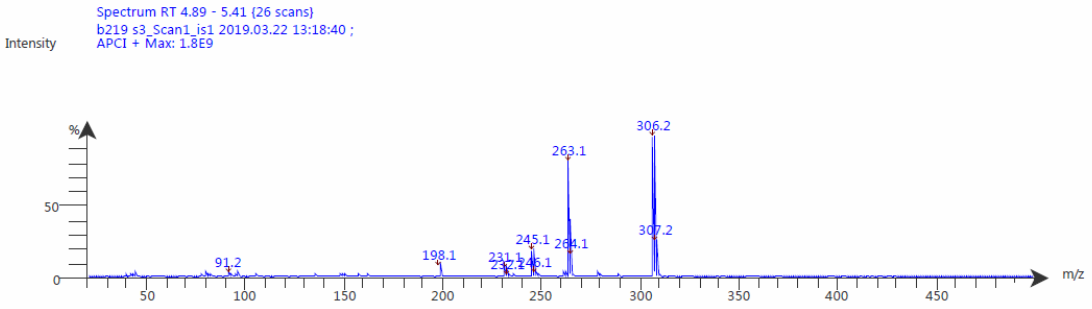
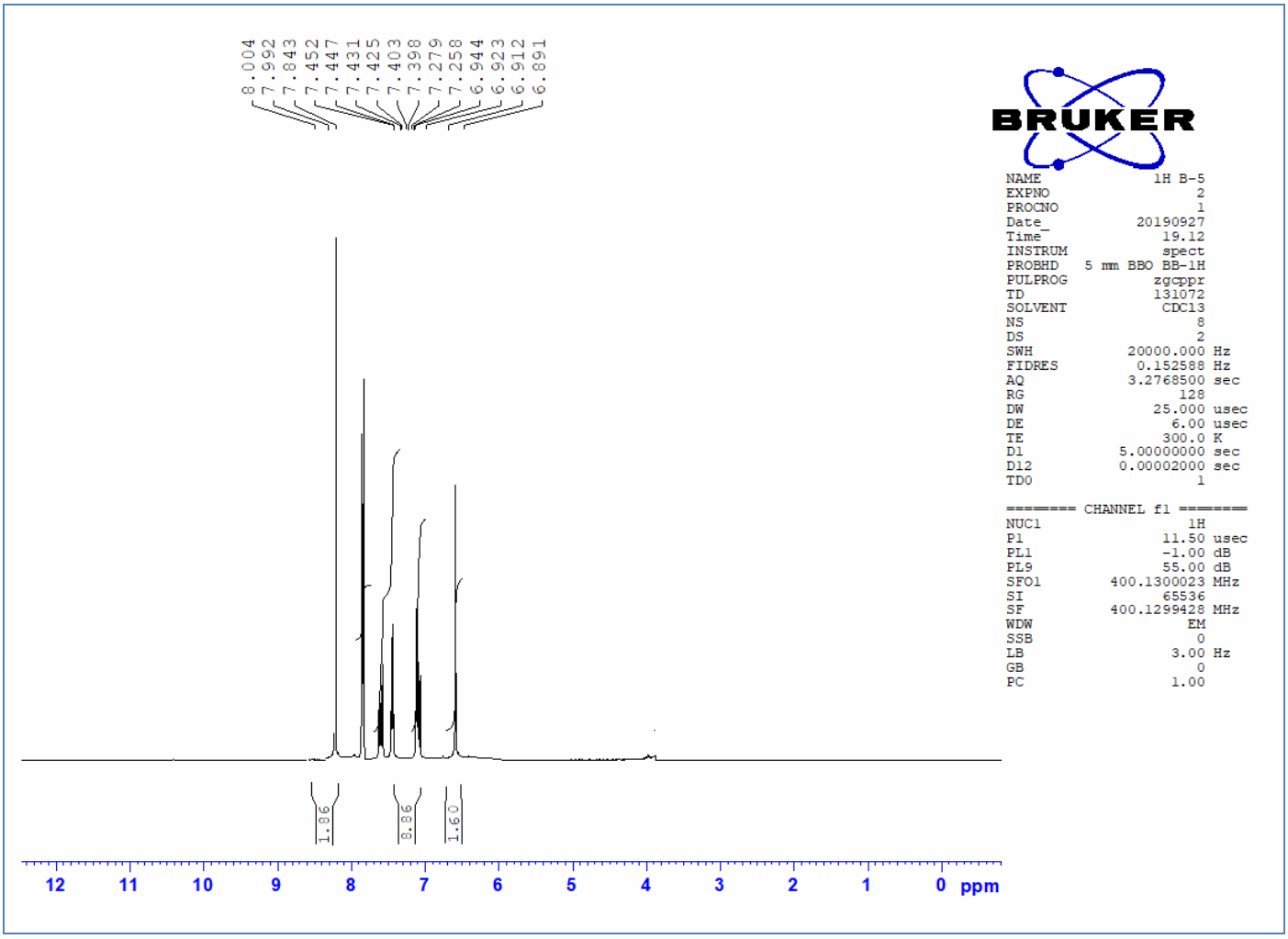
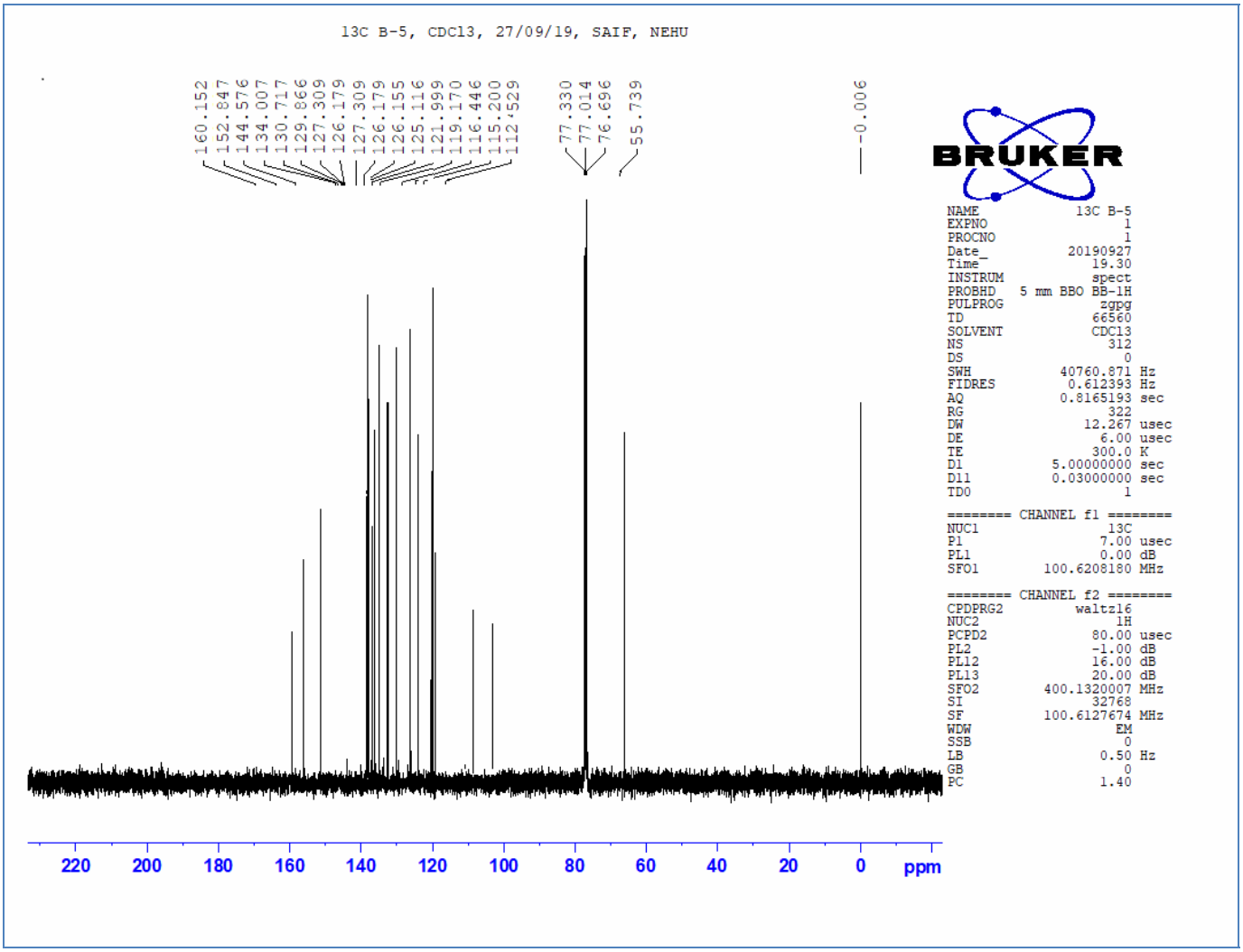


1H-NMR spectra of compound
4e:



13C-NMR spectra of compound
4e:



Mass Spectra of compound 4e:

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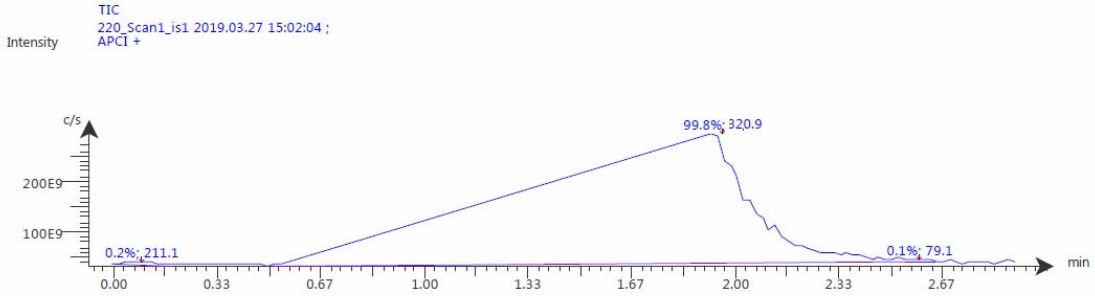

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
1.93	2.6E11	1.96	1.3E13	99.8	46.6	320.9	
2.59	2.8E9	2.59	8.1E9	0.1	2.3	79.1	

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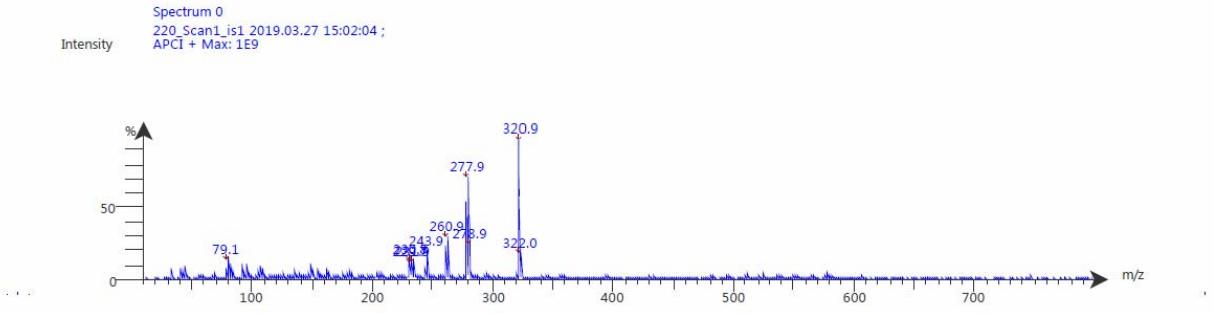
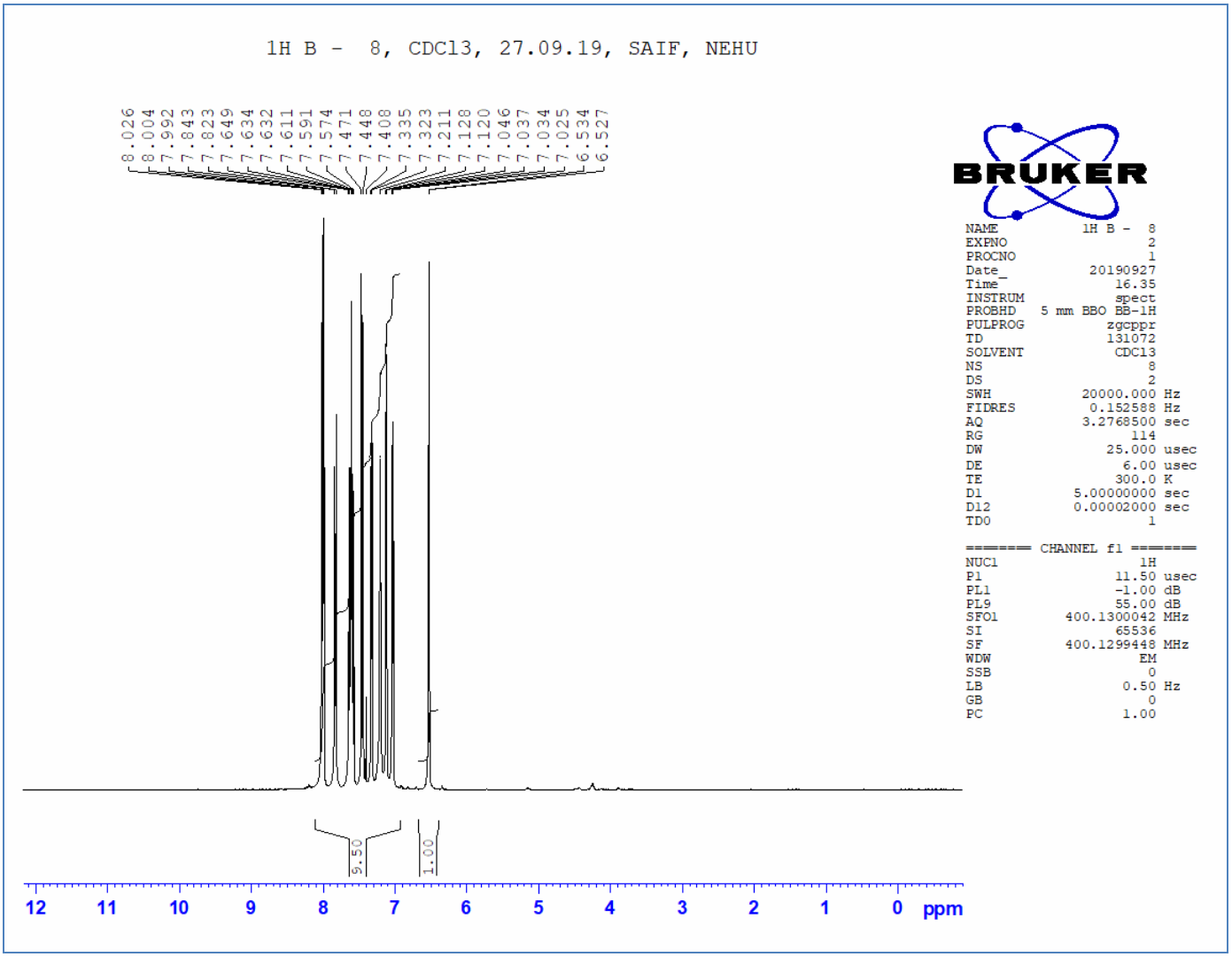
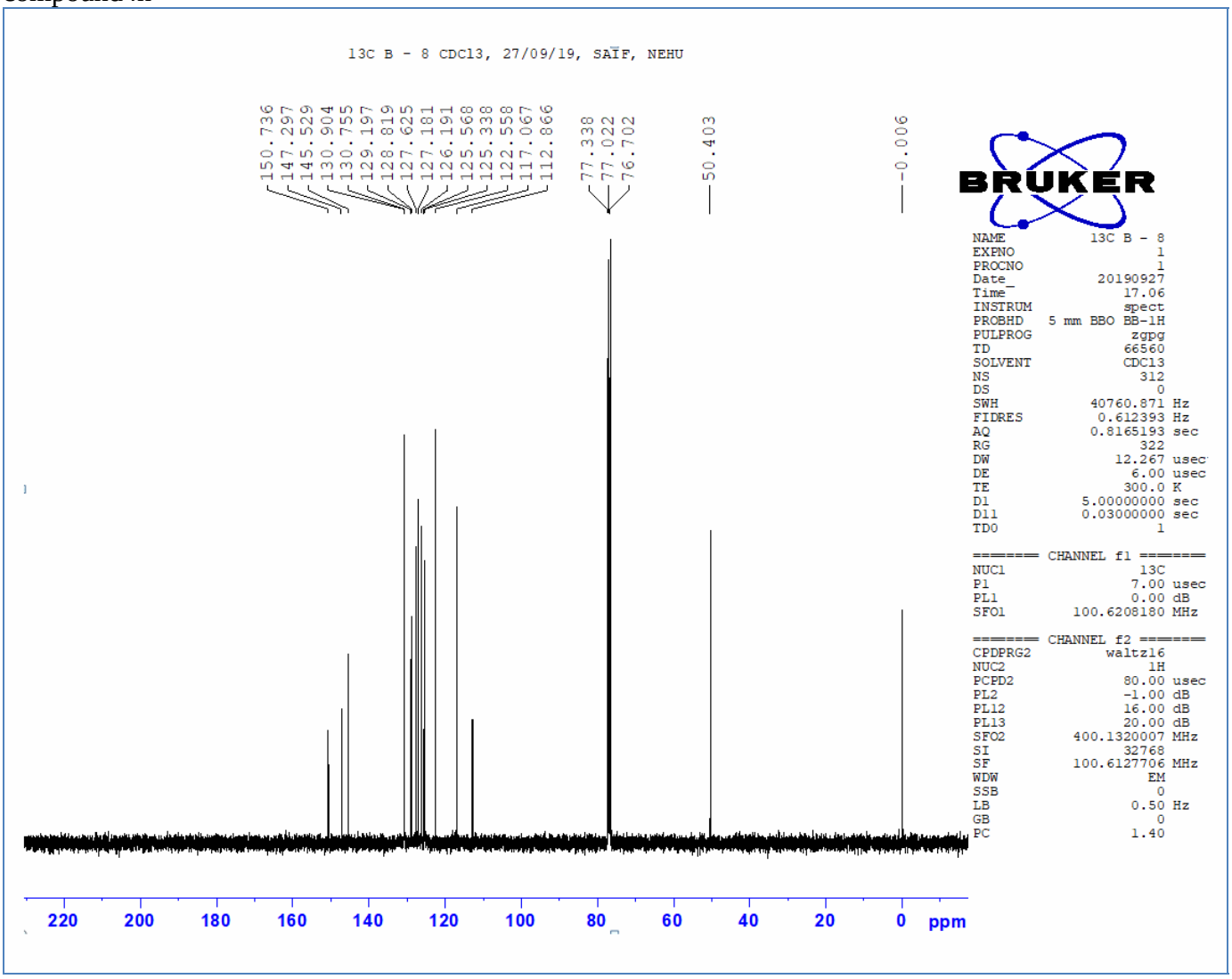


1H-NMR spectra of compound
4h



13C-NMR spectra of
compound4h



Mass Spectra of compound
4h

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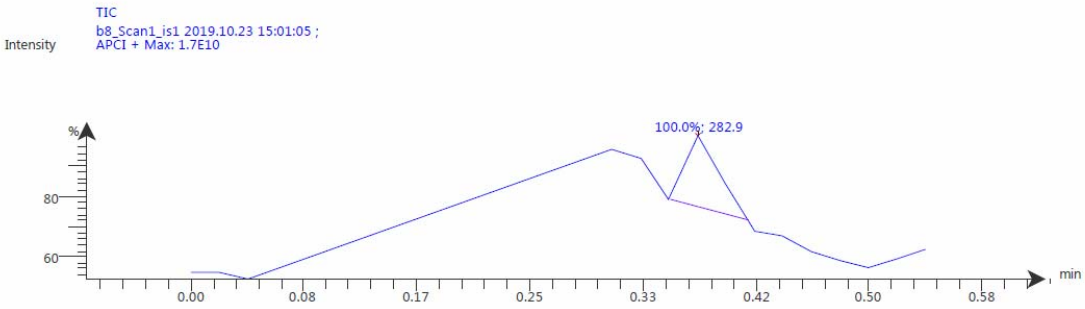

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
0.37	4E9	0.37	6.8E9	100.0	1.6	282.9	

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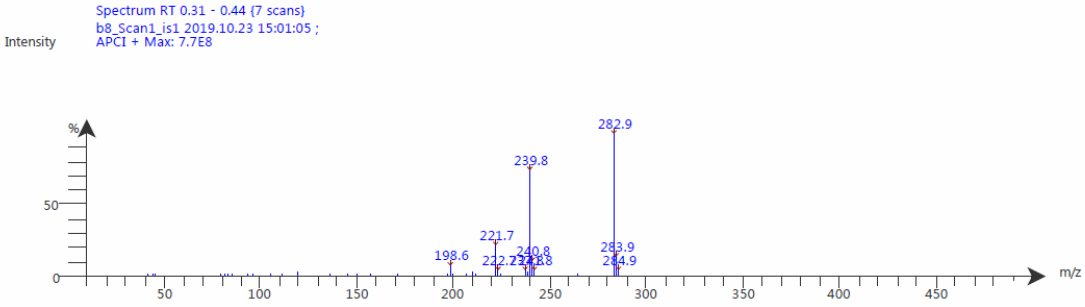
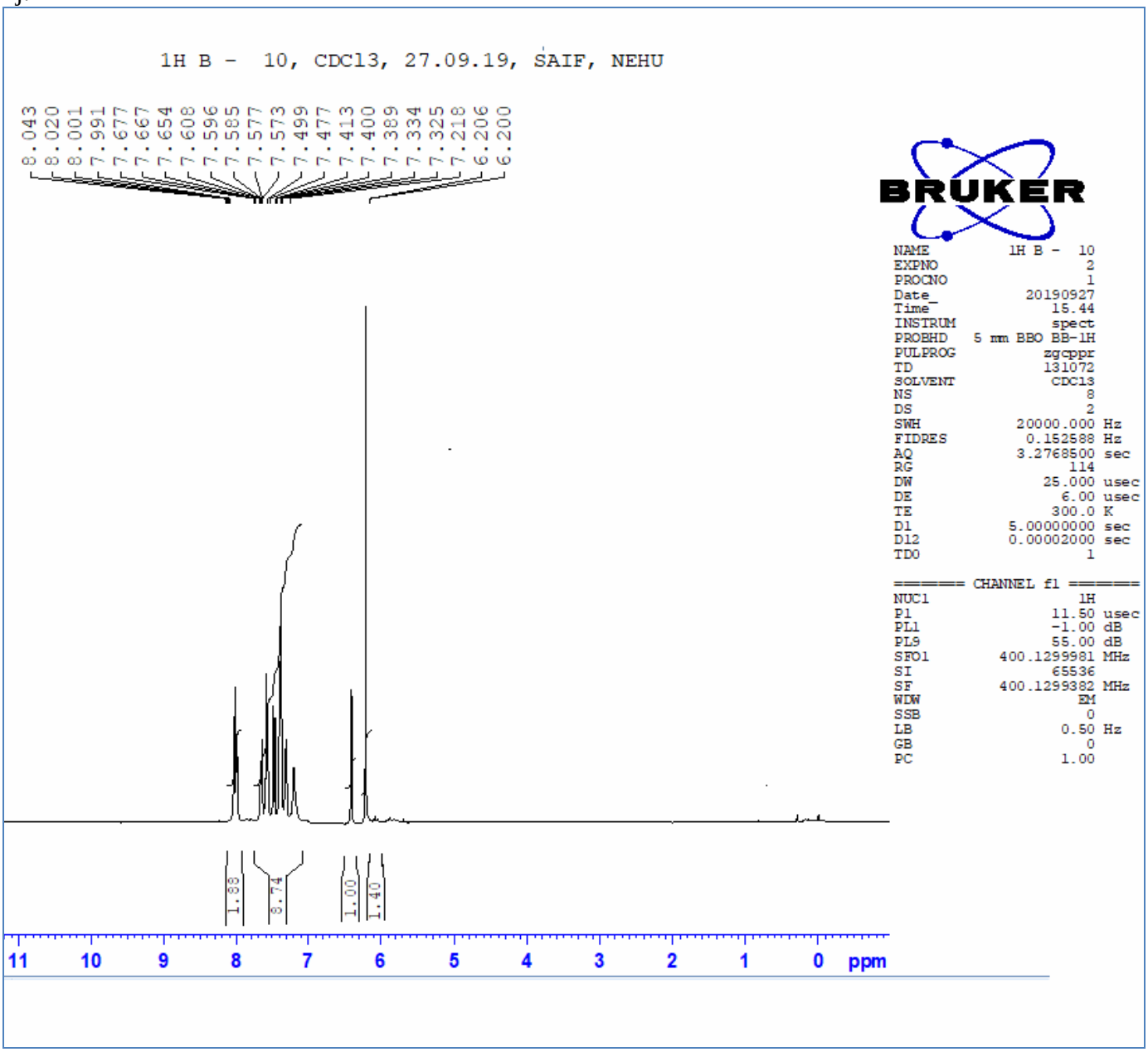
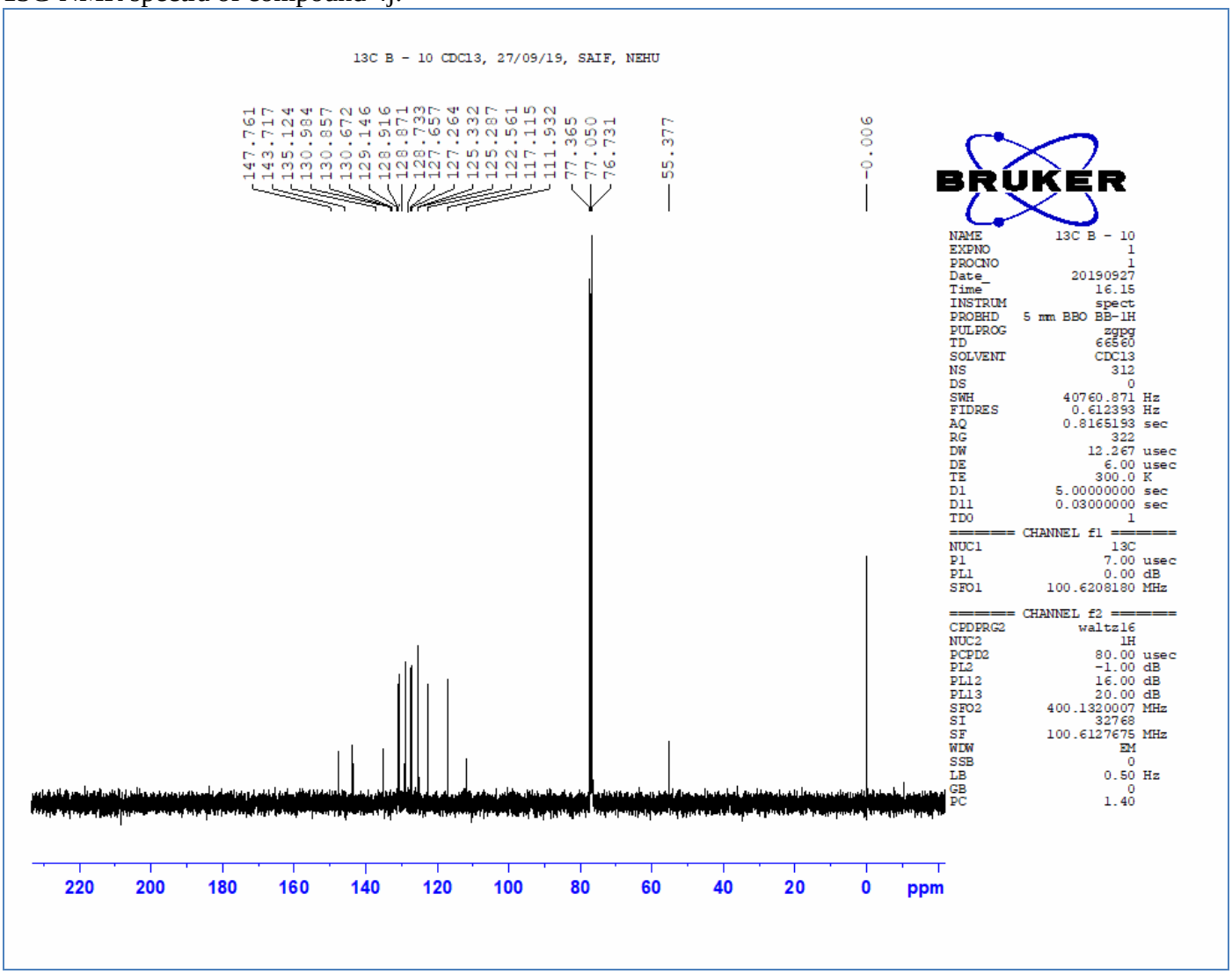


1H-NMR spectra of compound
4j:



13C-NMR spectra of compound 4j:



Mass Spectra of compound 4j:

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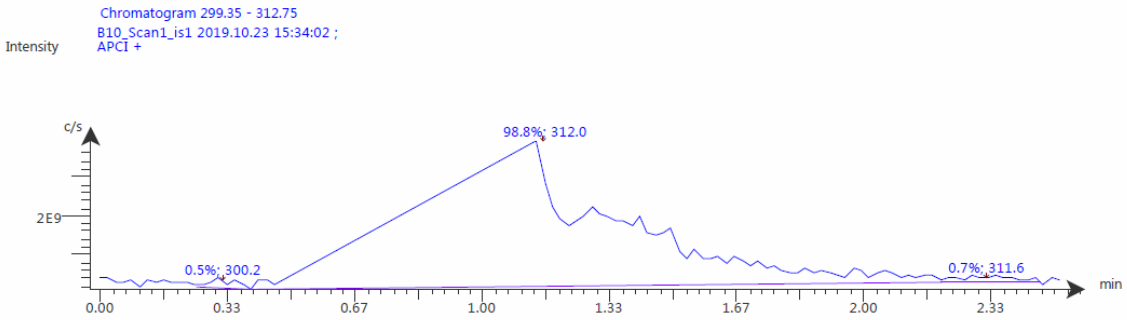

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
0.31	1.9E8	0.32	7E8	0.5	2.0	300.2	
1.14	3.7E9	1.16	1.3E11	98.8	23.7	312.0	

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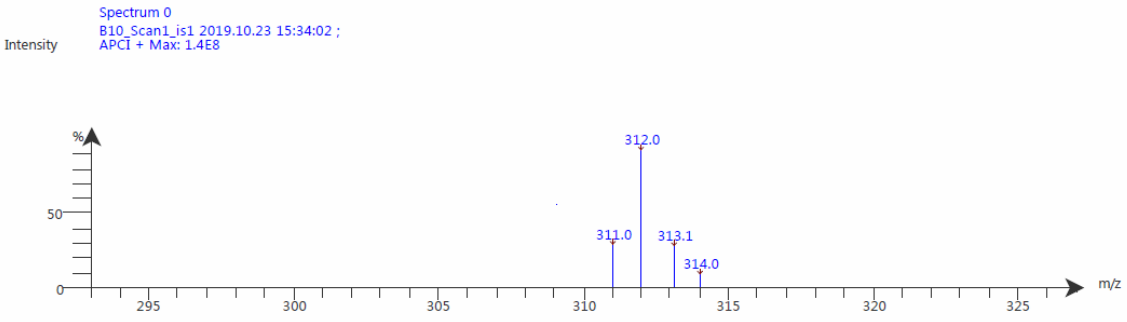

Mass Spectra of compound
4m:

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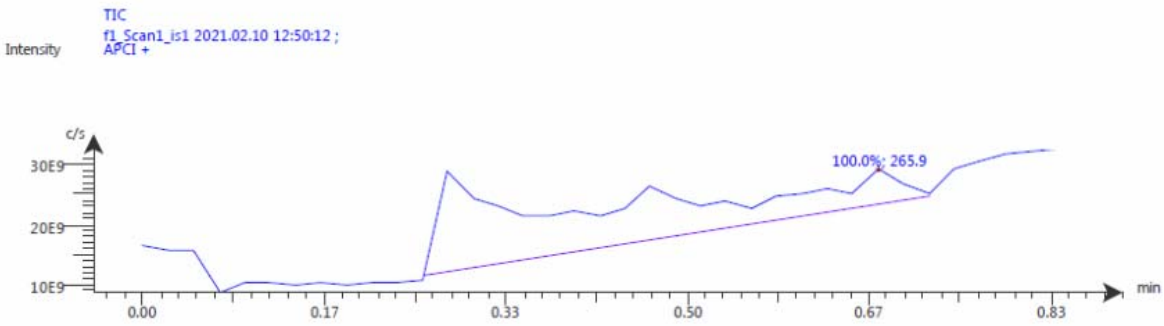

Time (Peak Maximum M:S/Minutes)	Maximum Intensity (c/s)	Time (Peak Centroid M:S/Minutes)	Peak Area	% Peak Area	Peak Resolution	Base Peak Mass (m/z)	Label
0.68	5.5E9	0.68	1.5E11	100.0	2.5	265.9	

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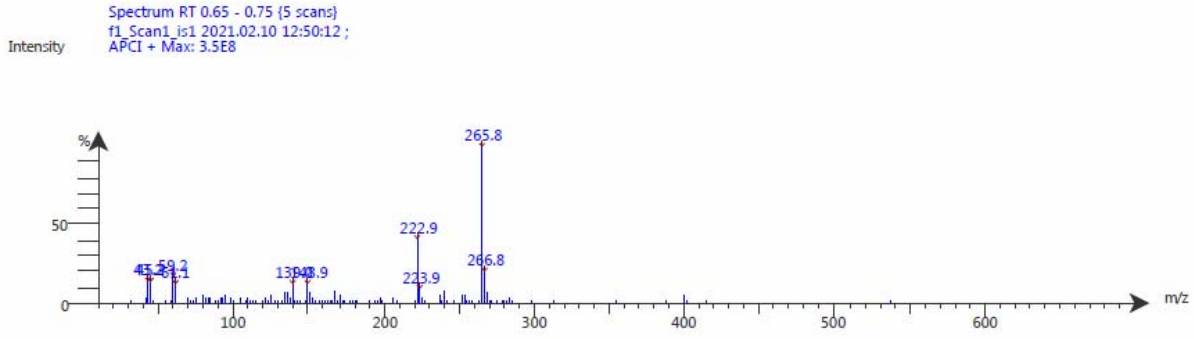
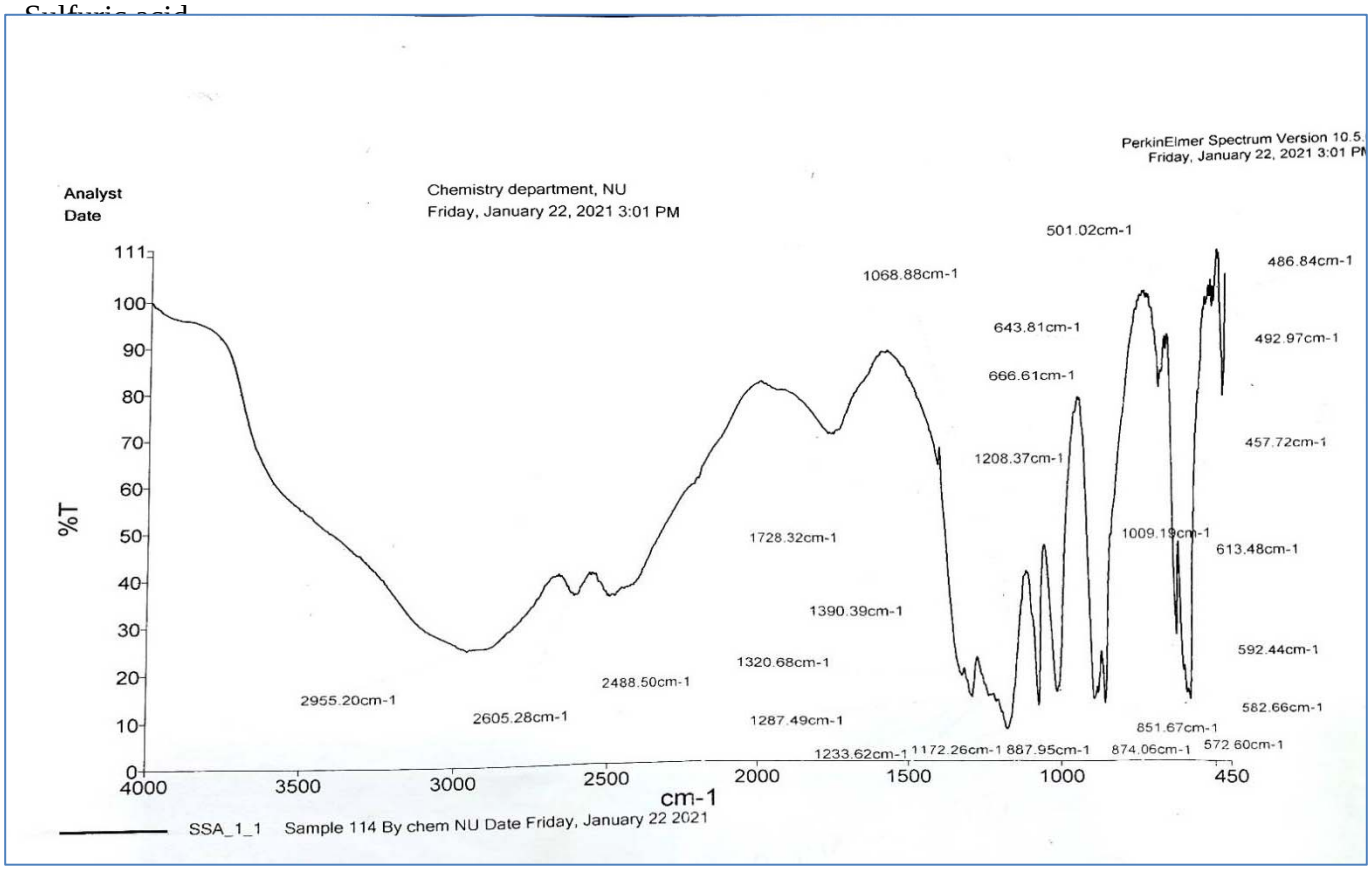


1. Mass Spectra of compound

   4n:

FTIR Spectra of Silica Sulfuric acid



FTIR Spectra of Silica gel