

## SUPPLEMENTARY MATERIAL

### Synthesis, Biological Evaluation, and Molecular Docking Studies of New Nitro Vanillin Analogues as Anti-glycating Agents

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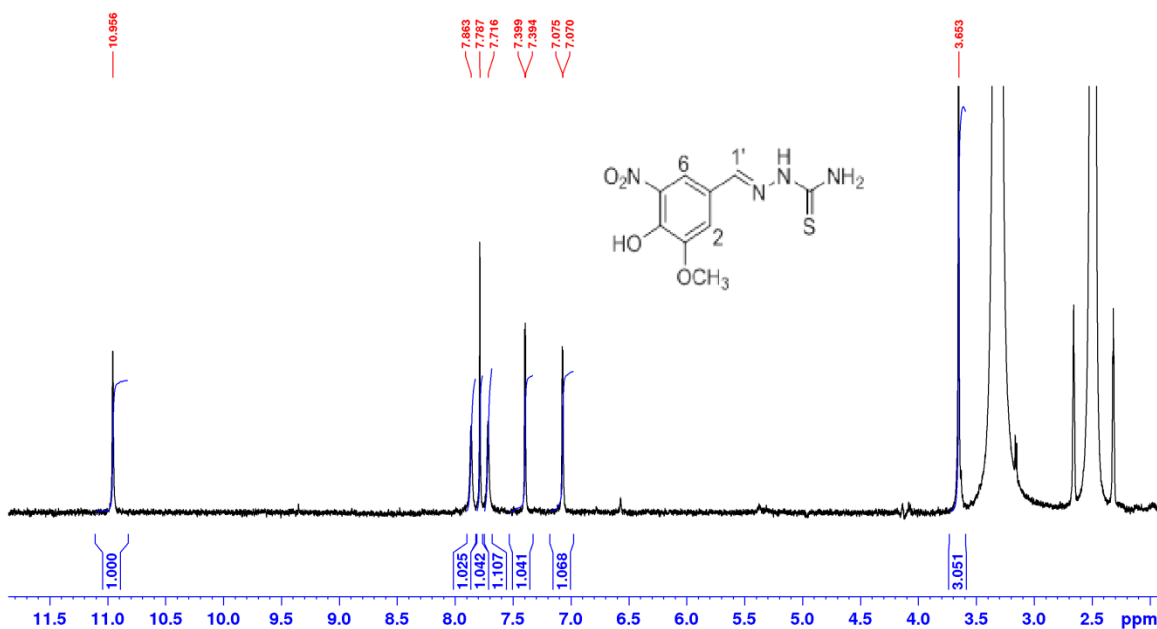
<sup>2</sup>Dr. Panjwani Center for Molecular Medicine and Drug Development, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75270, Pakistan.

<sup>3</sup>Laboratoire de Chimie des Matériaux, Faculté des Sciences, Université Mohammed Premier, 60000 Oujda, Morocco.

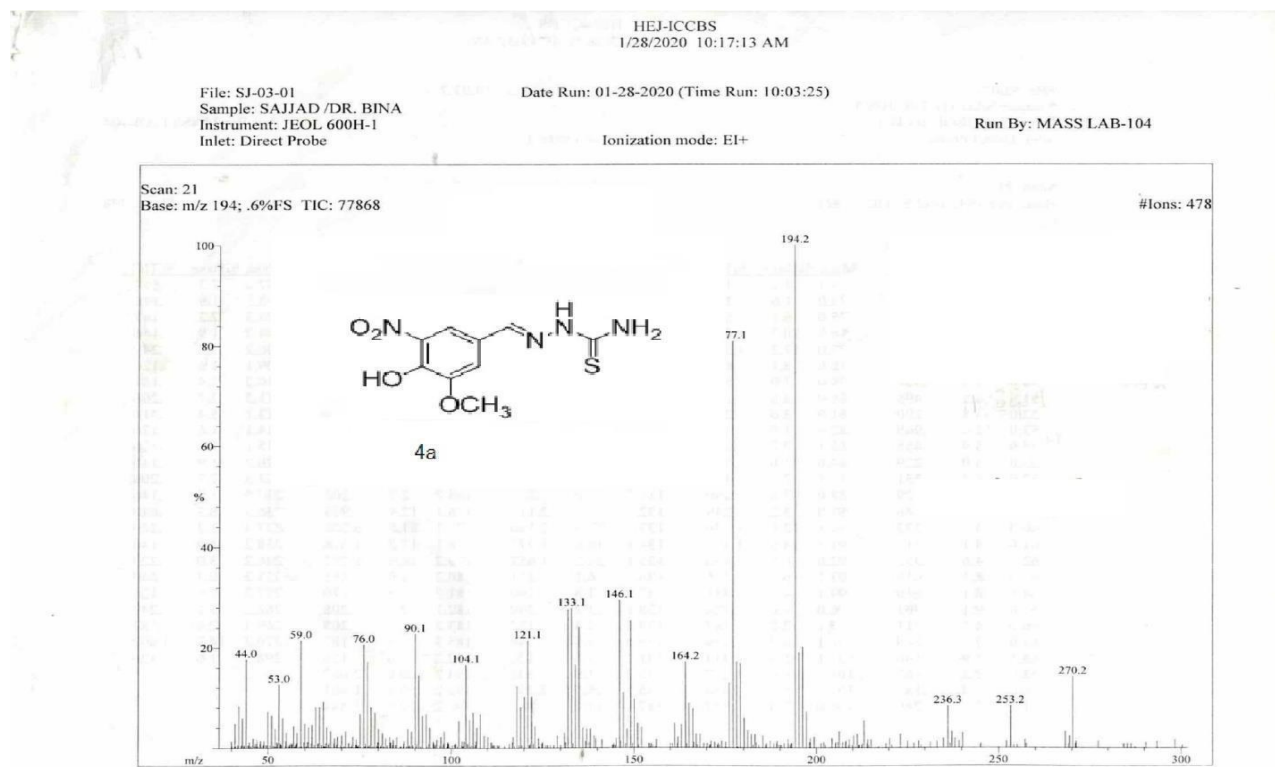
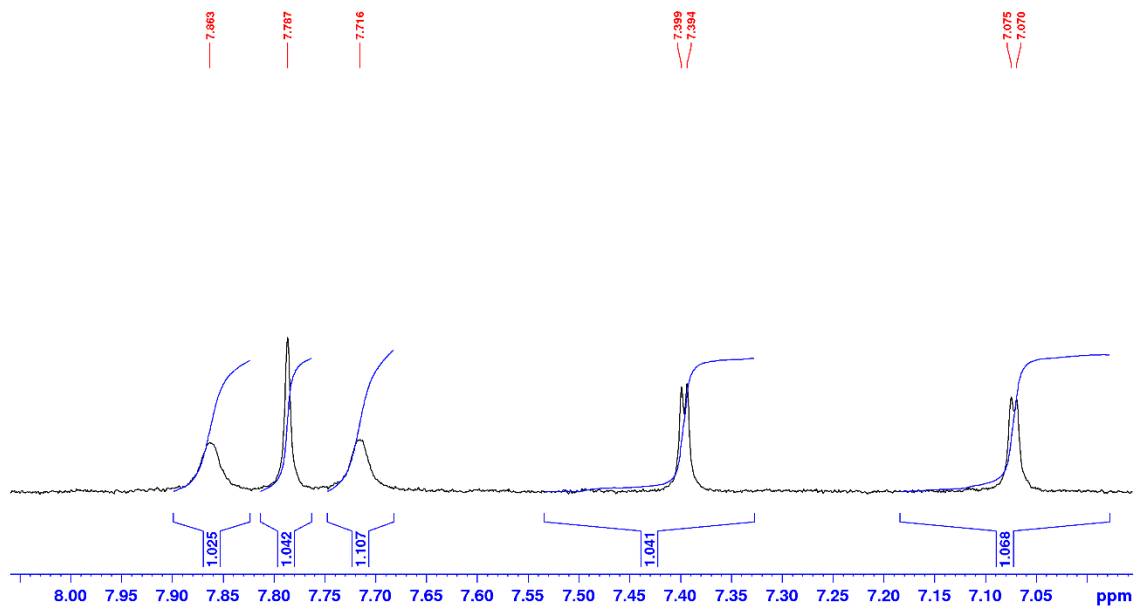
### <sup>1</sup>H-NMR, <sup>13</sup>C-NMR (BB) and Mass spectra of synthesized analogues

#### 4a-4o

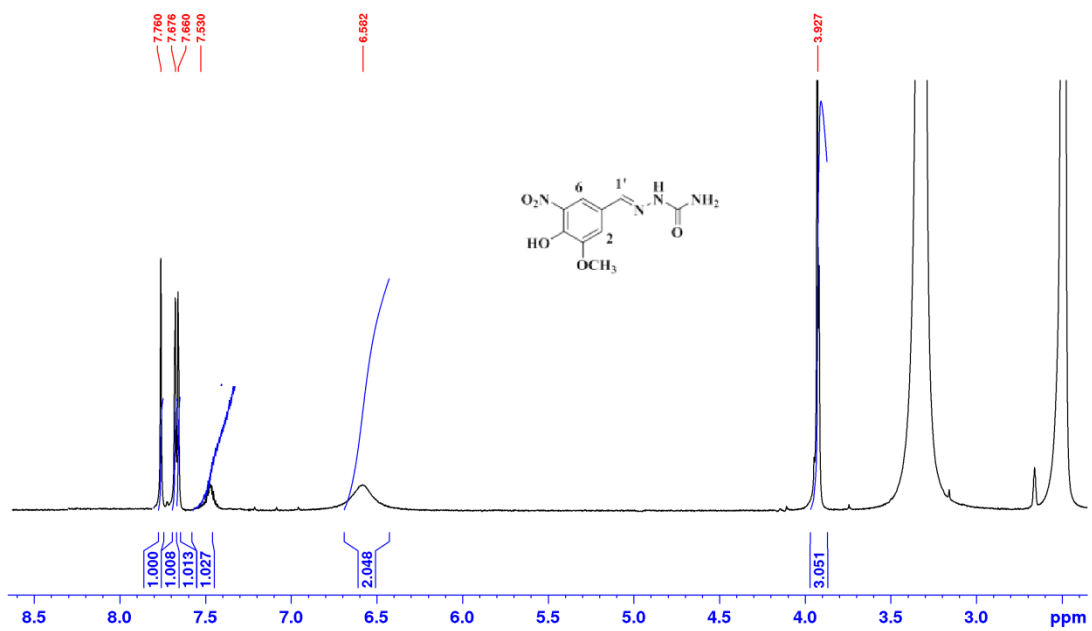
(4a)/DMSO  
<sup>1</sup>H



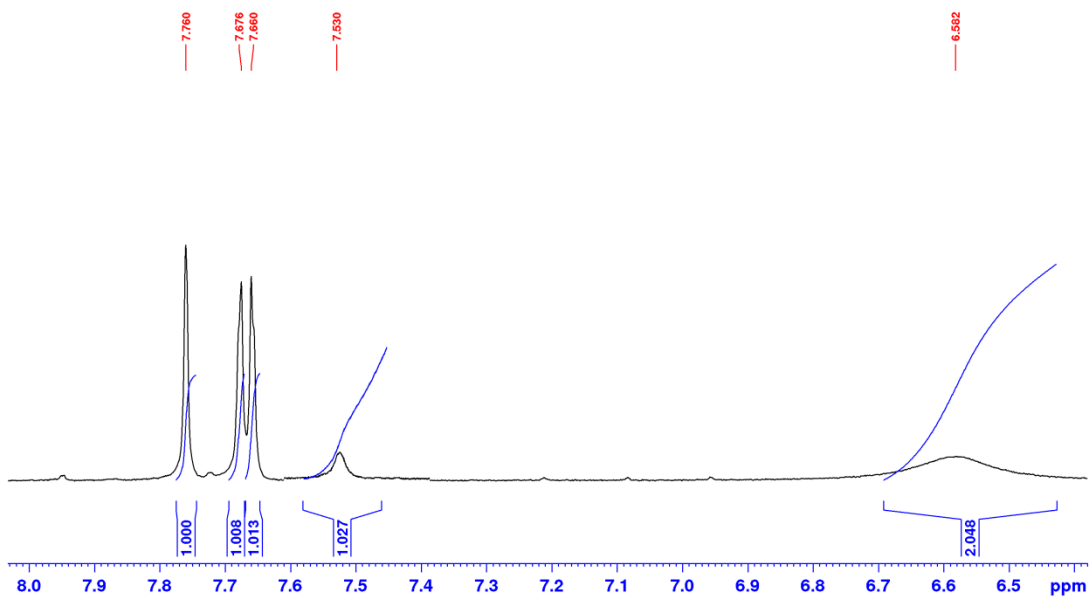
(4a)/DMSO  
1H



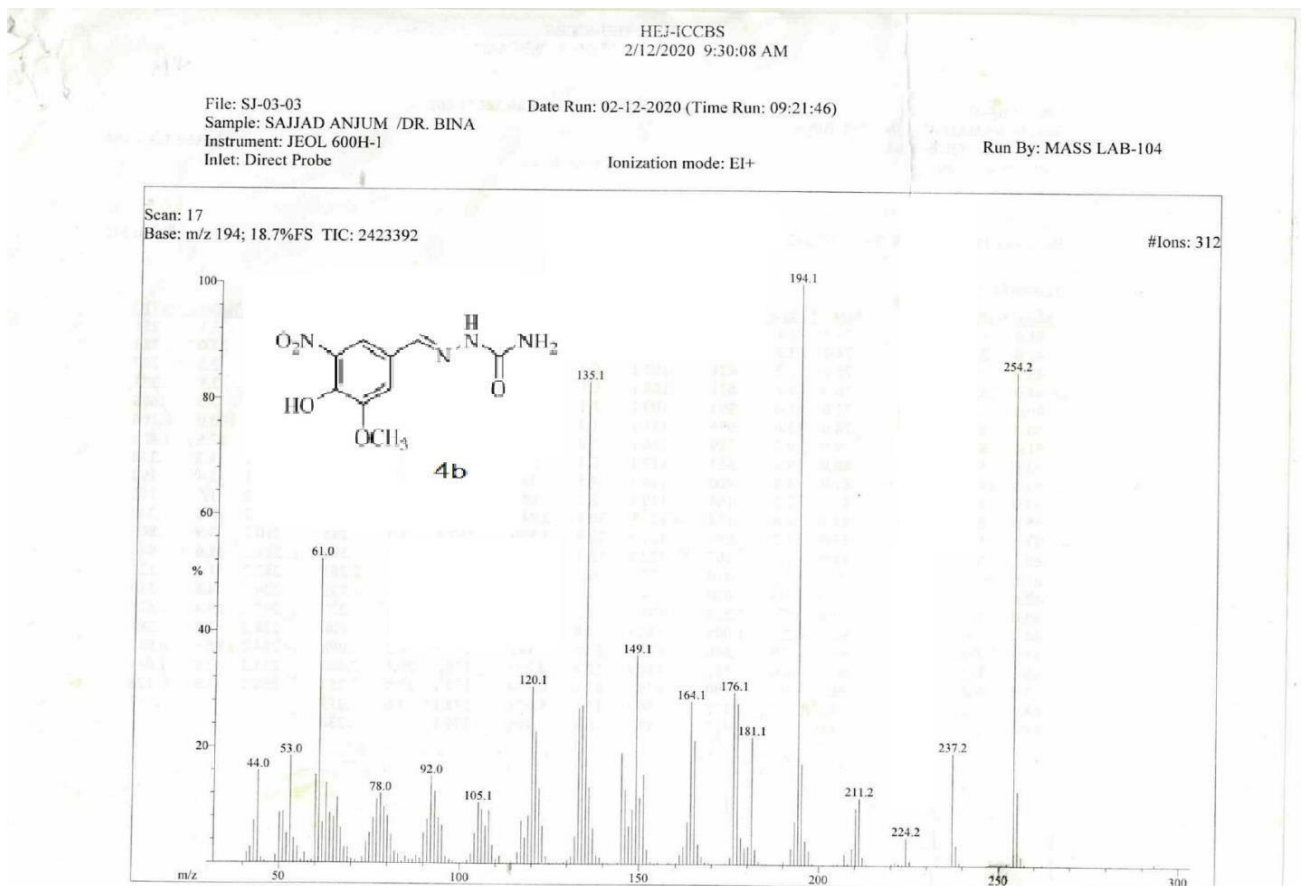
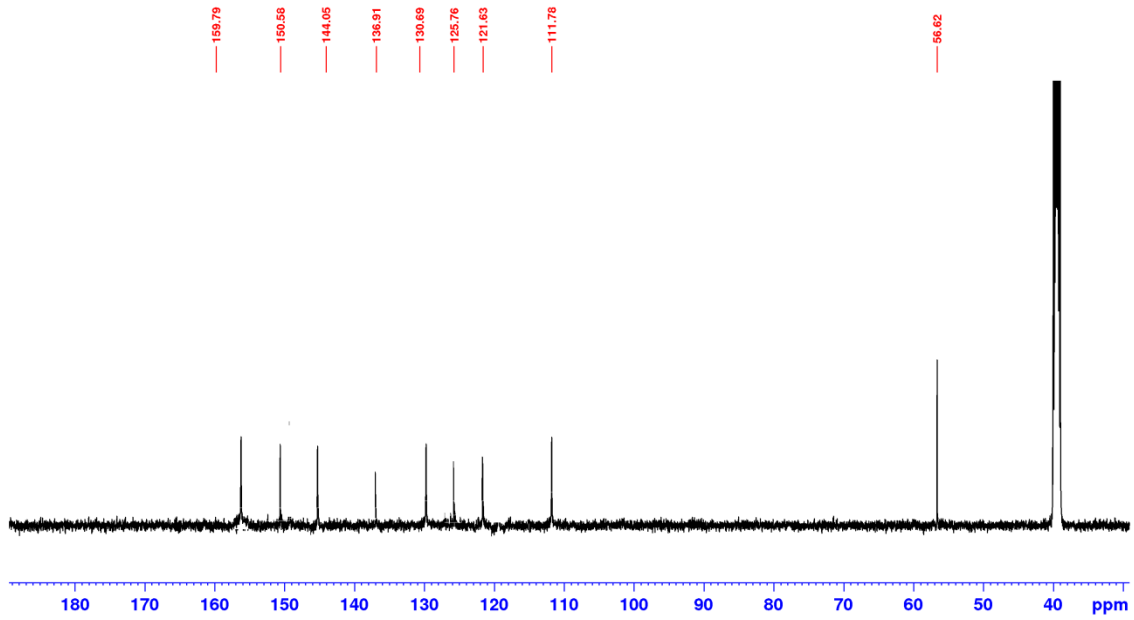
4b /DMSO/



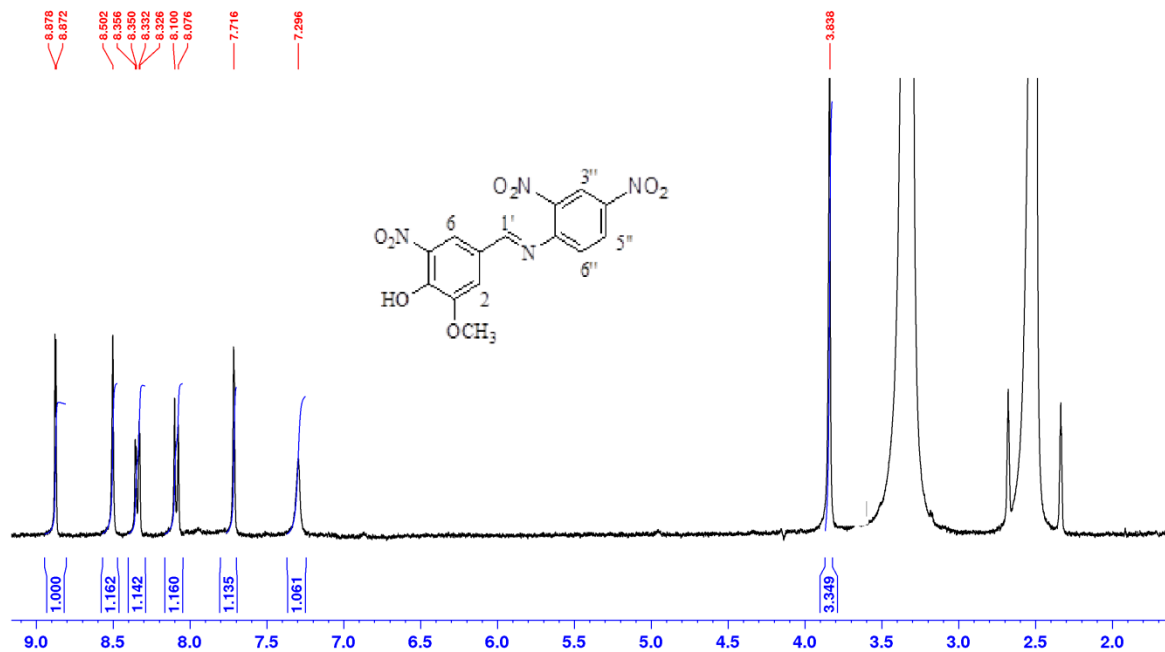
4b /DMSO/



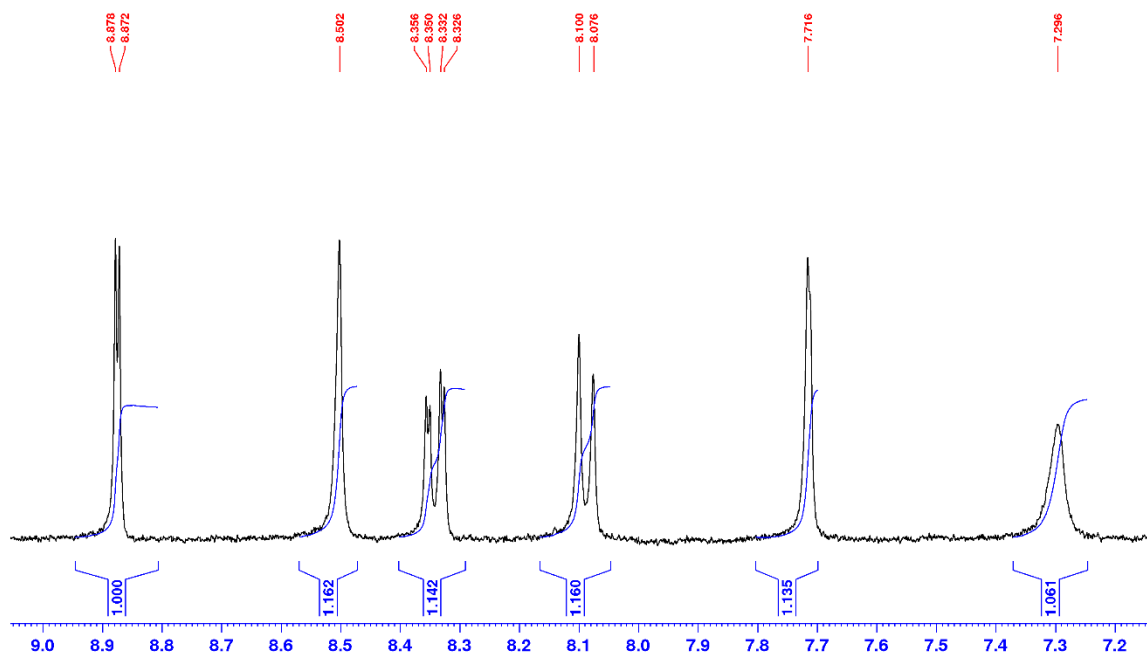
4b/ DMSO  
BB



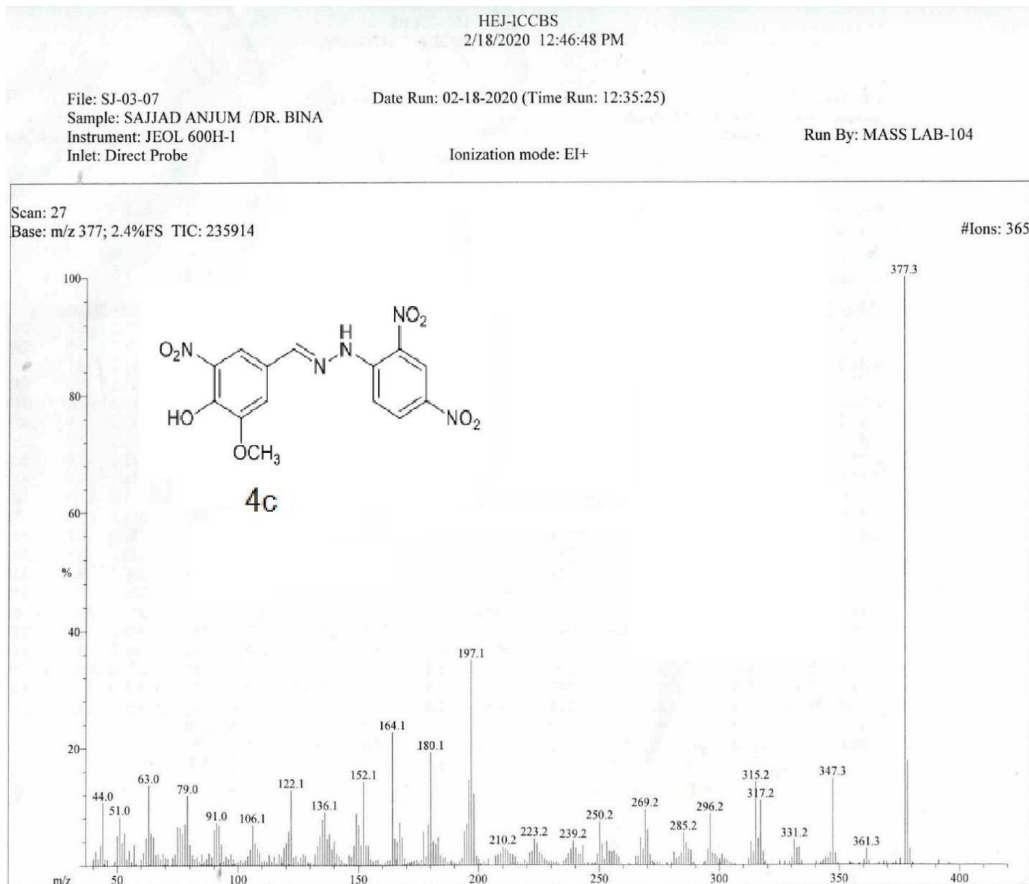
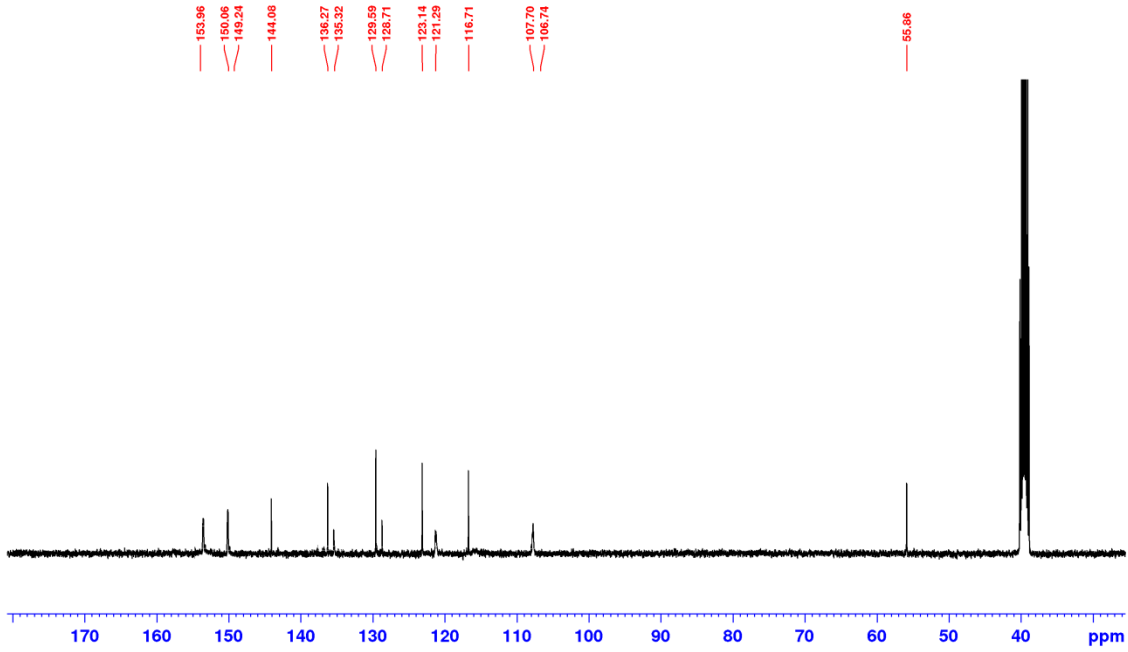
(4c)/DMSO  
1H  
300K



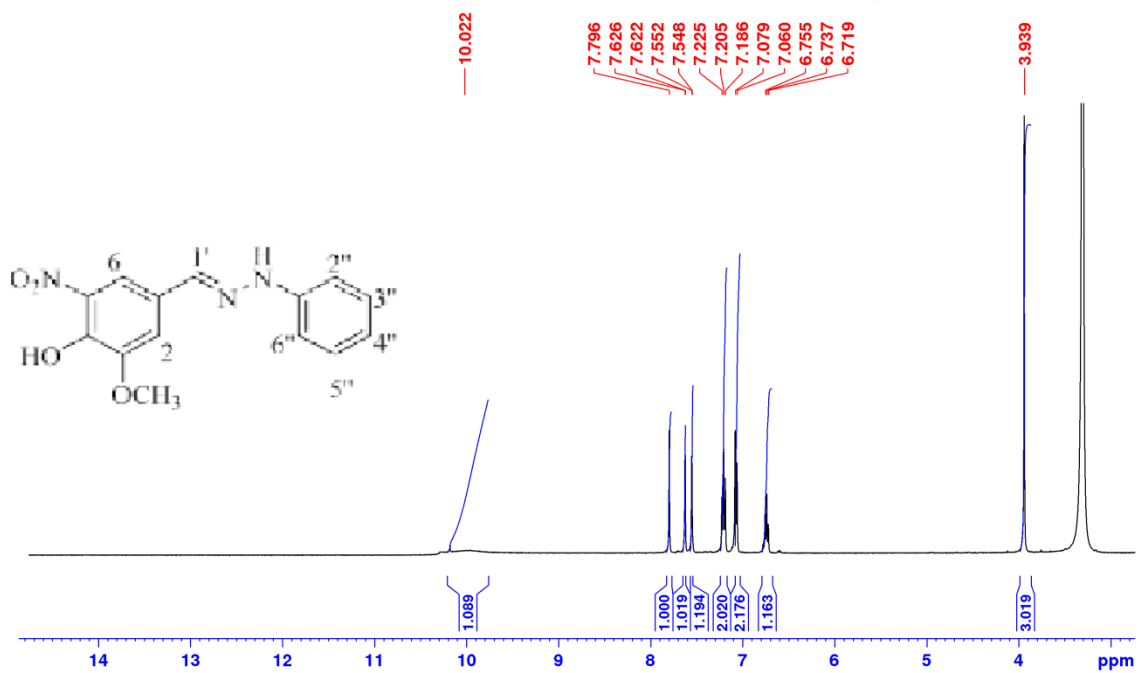
(4c)/DMSO  
1H  
300K



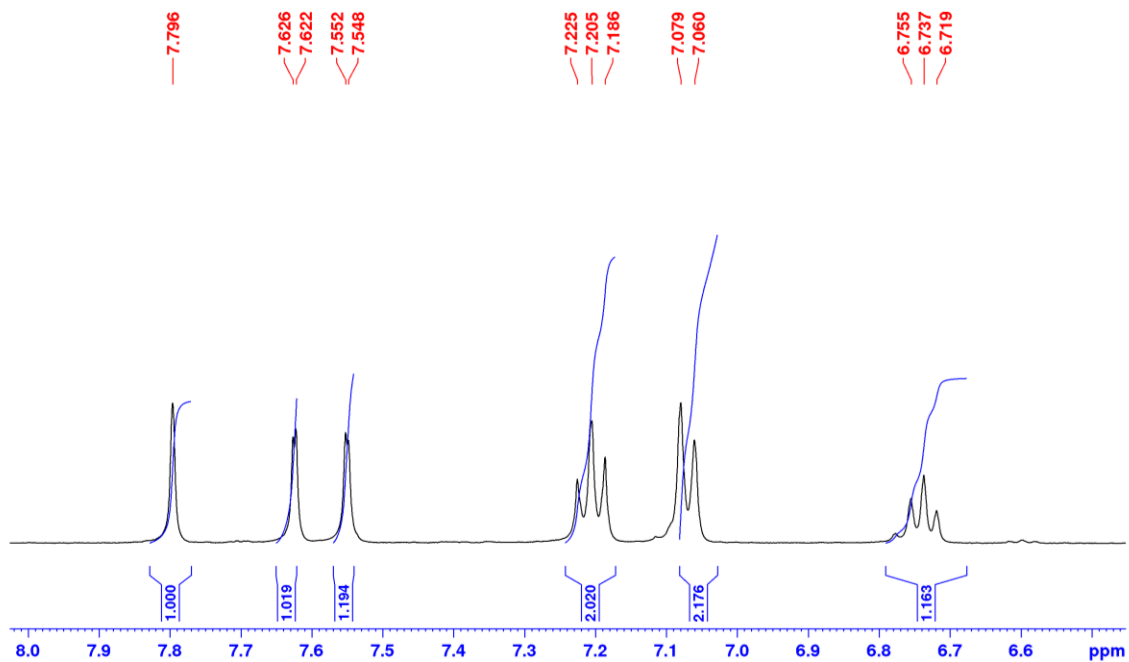
4c  
BB



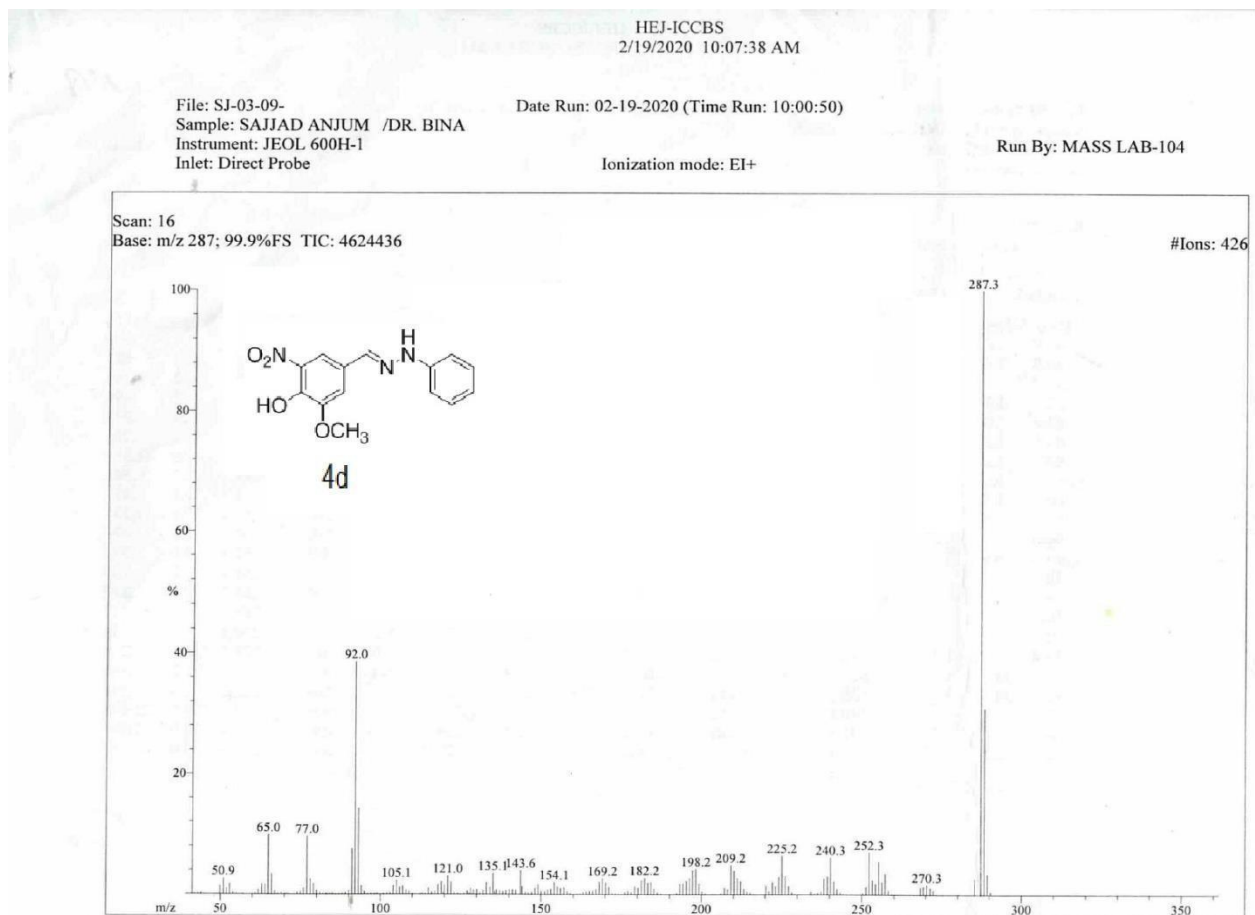
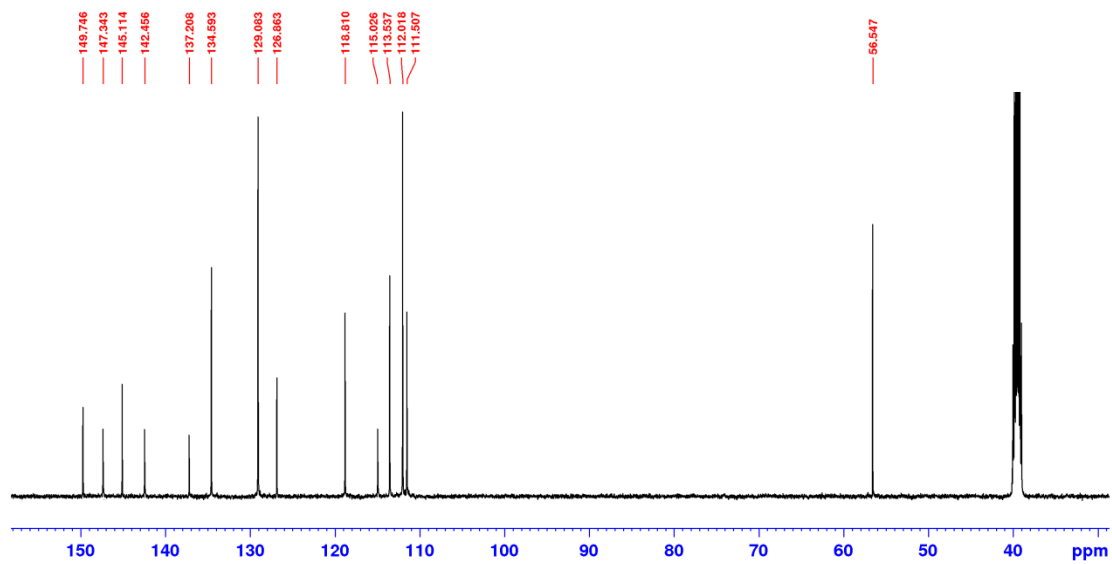
4d /Dmsd/  
1H 300K



Sajjad/Dr,Bina/SJ-03-09/Dmsd/  
1H  
300K

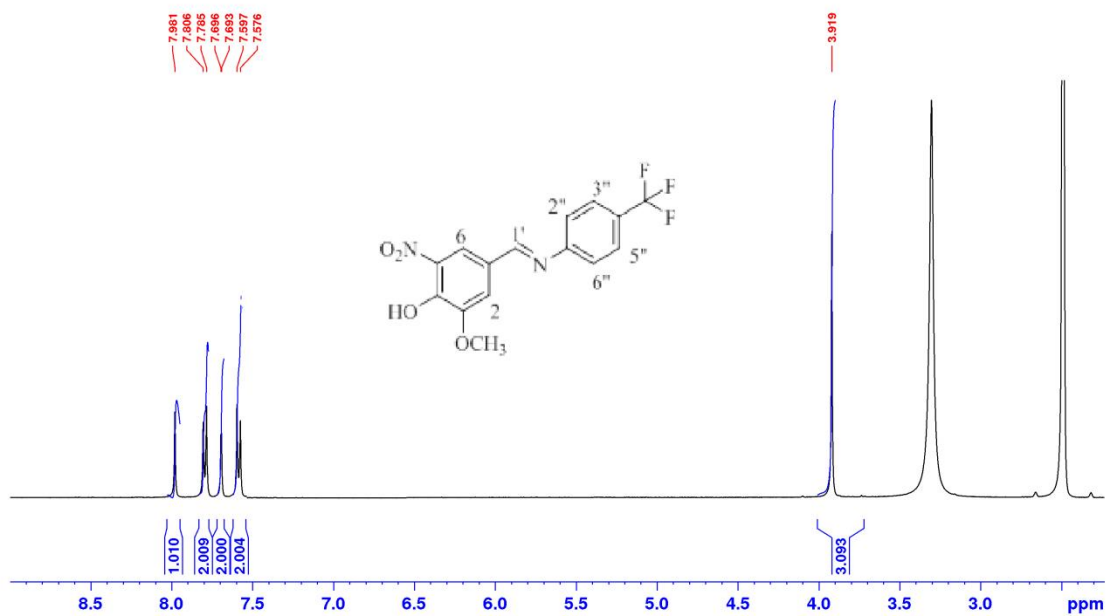


4d / DMSO  
BB

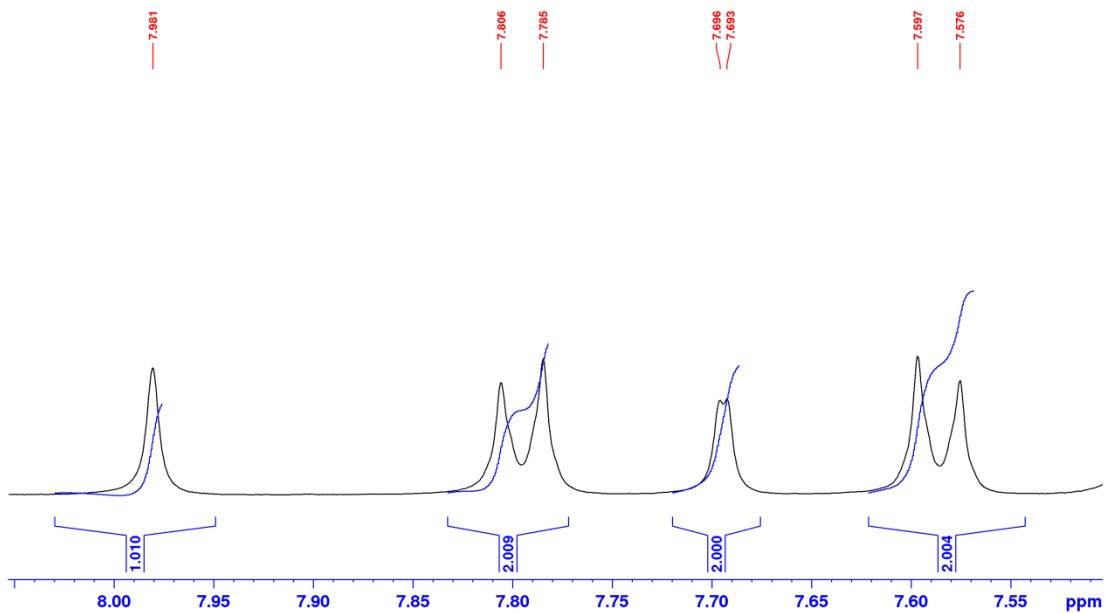




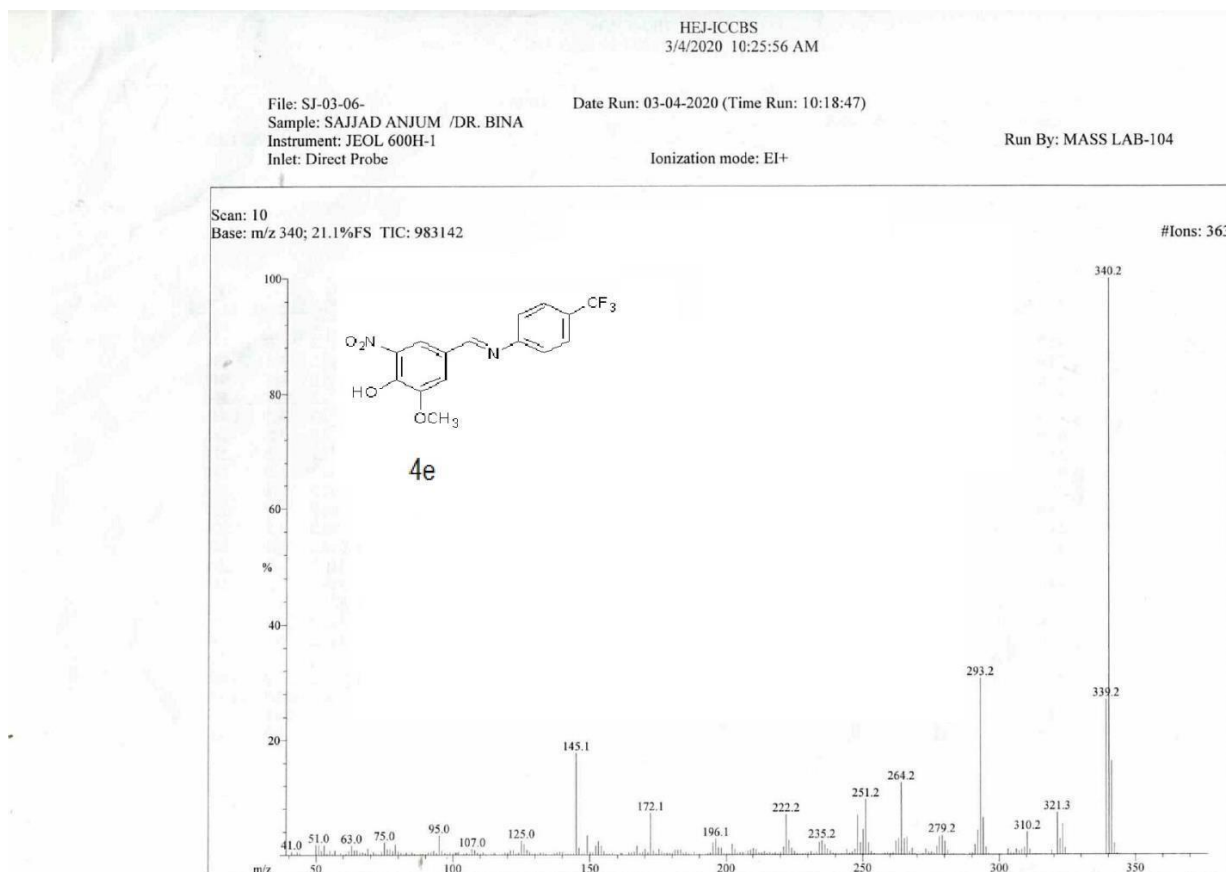
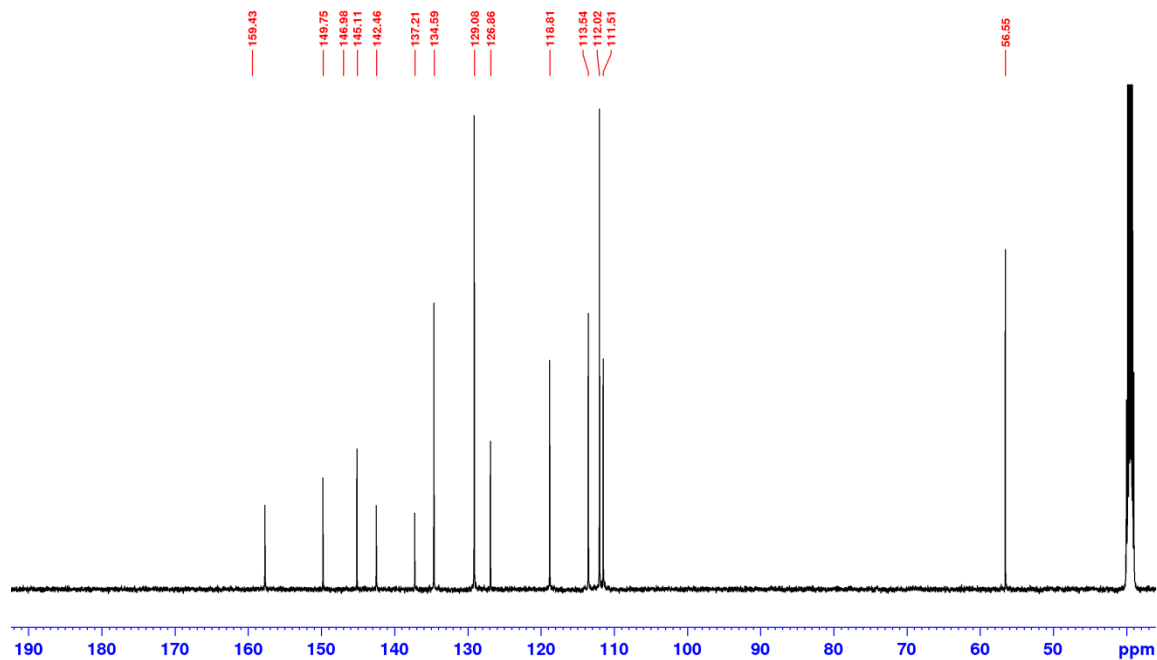
(4e)/DMSO/



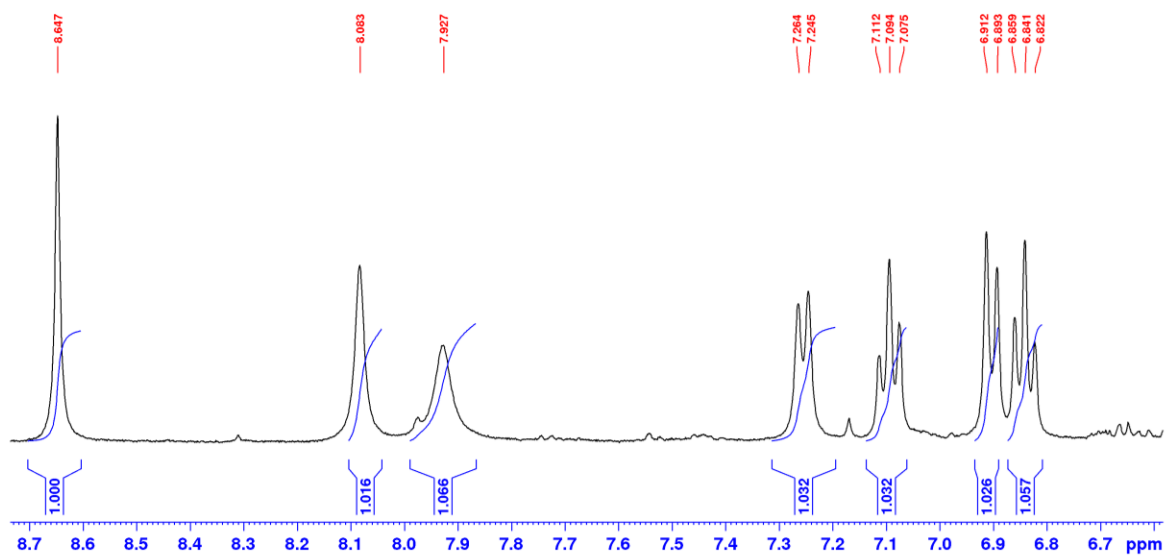
(4e)/DMSO/



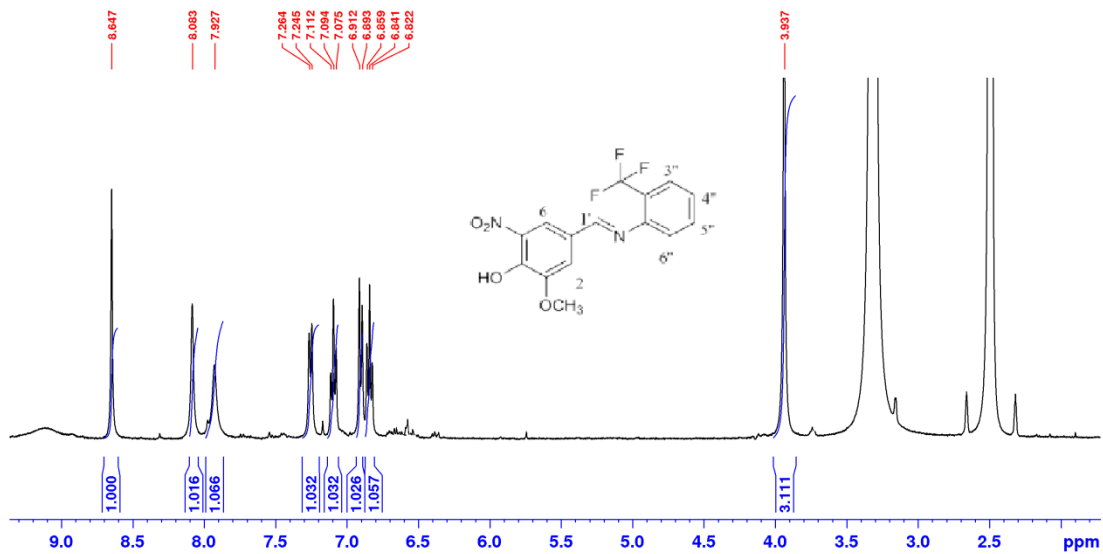
4e / DMSO  
BB



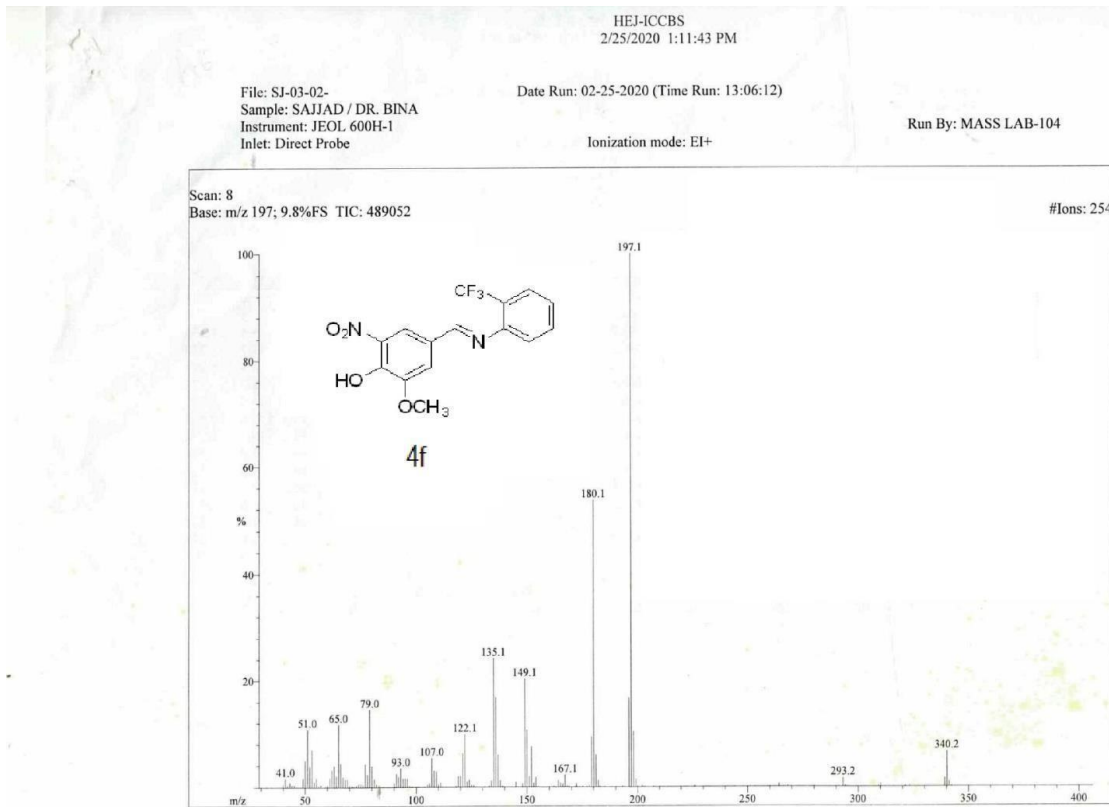
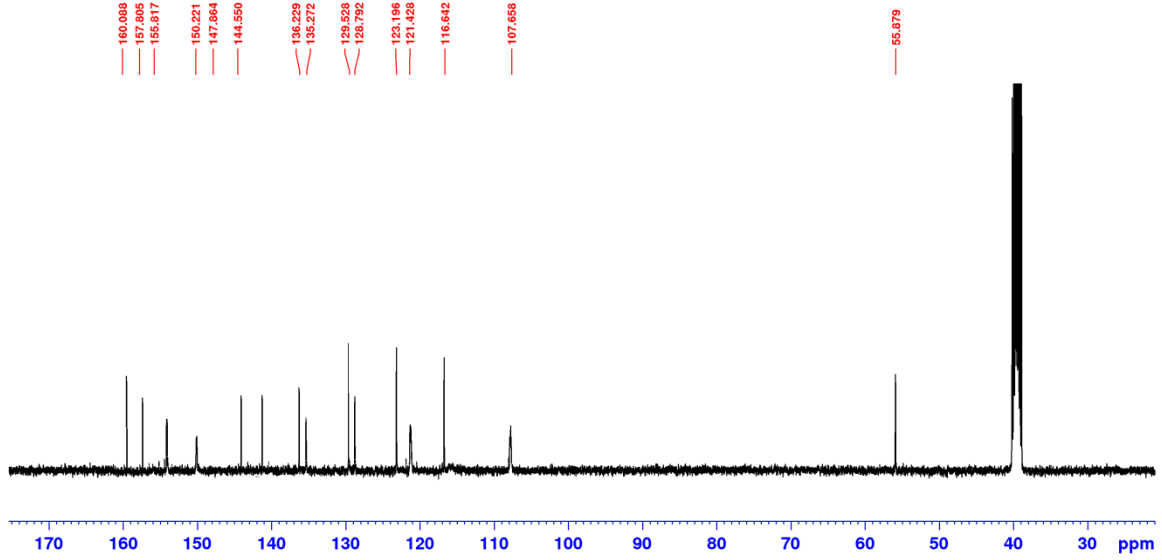
(4f)/Dmsd/  
1H/



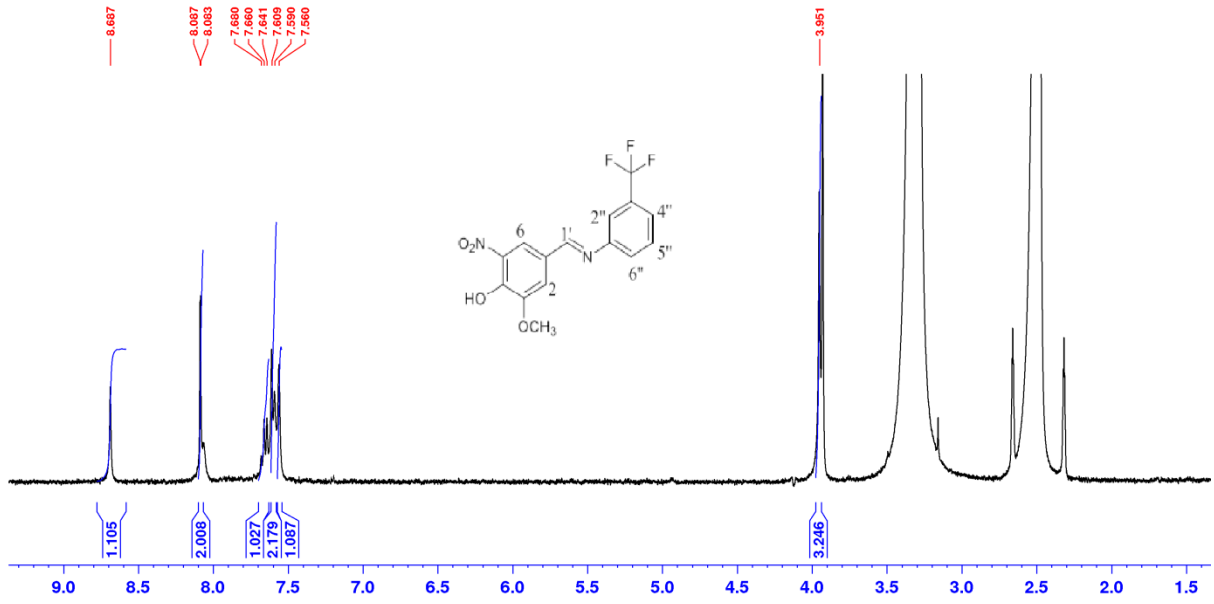
(4f)/Dmsd/  
1H/



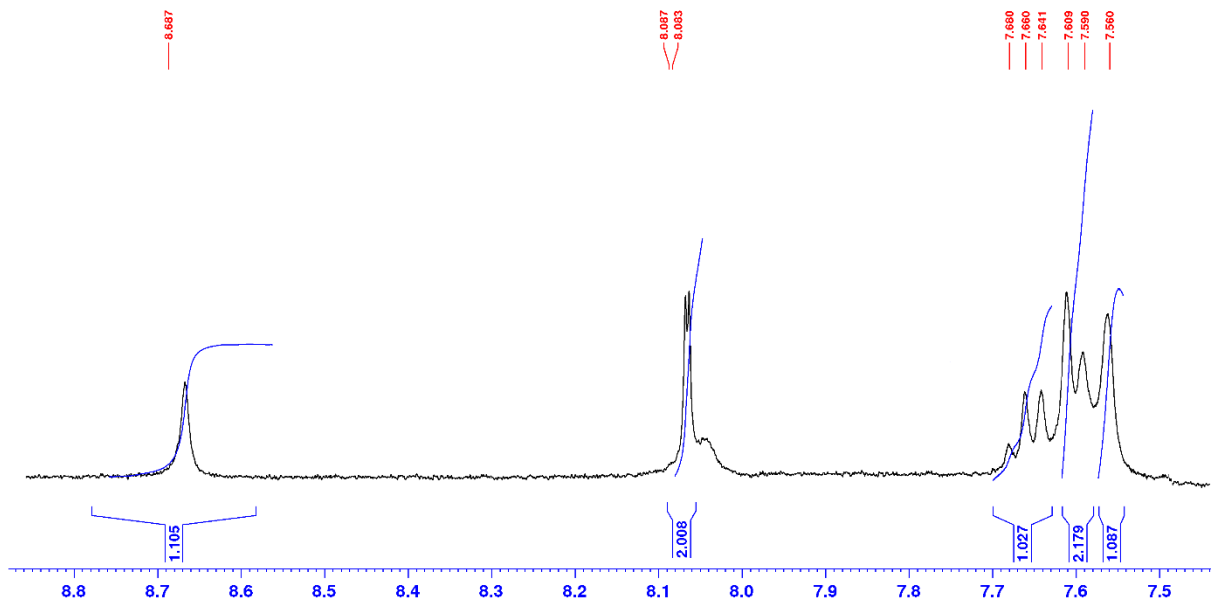
4f  
BB



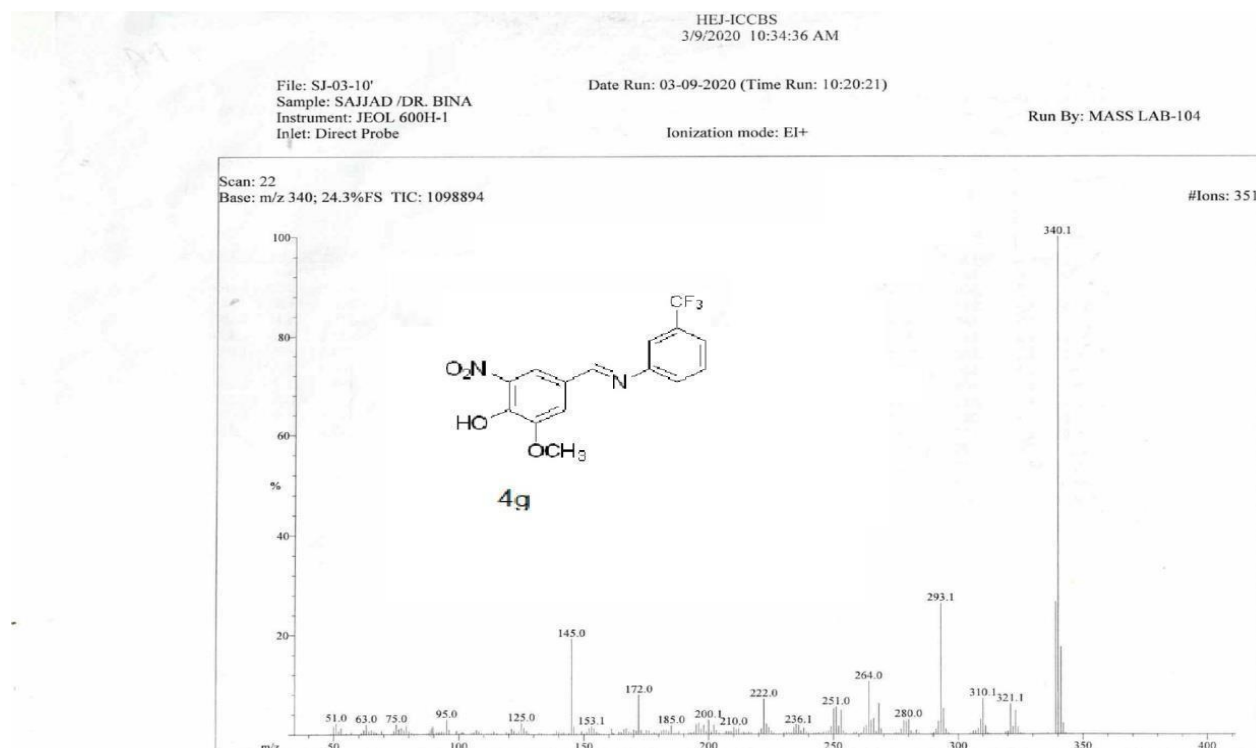
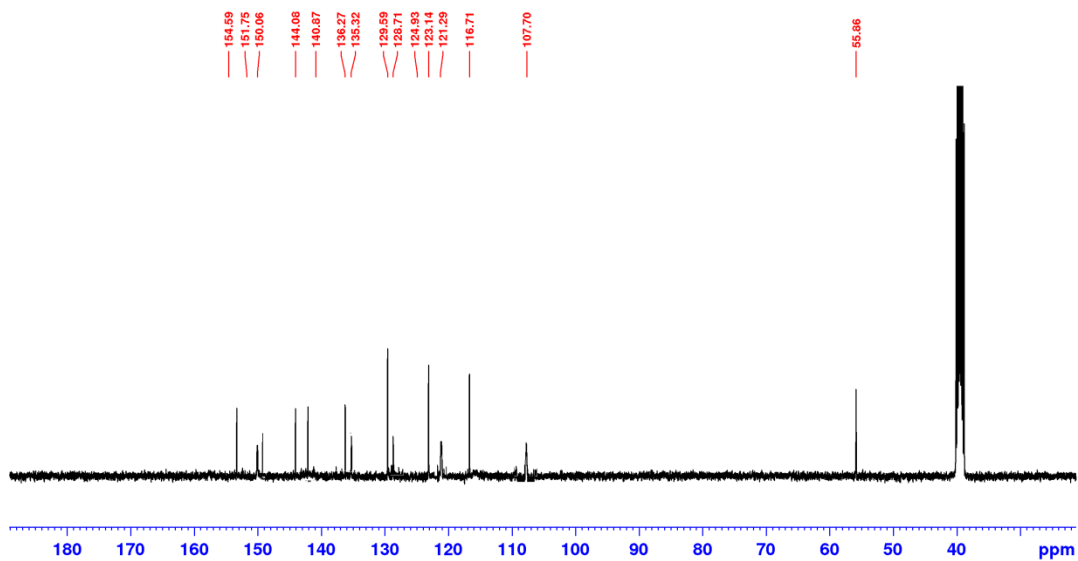
4g Dmsd/  
300K



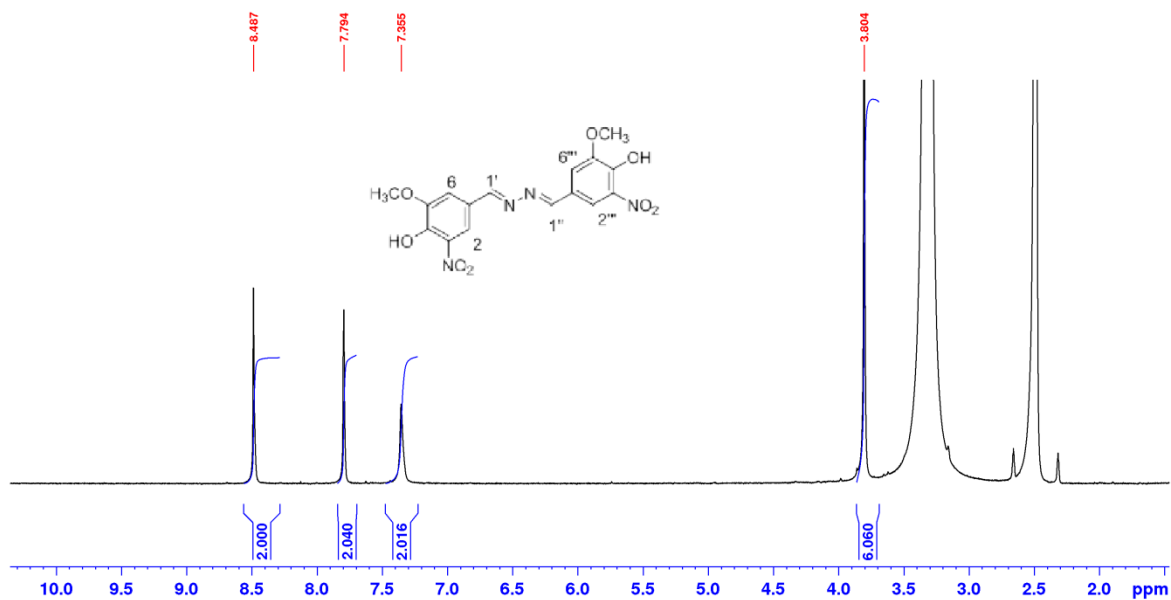
Sajjad/Dr,Bina/SJ-03-10/Dmsd/  
1H  
300K



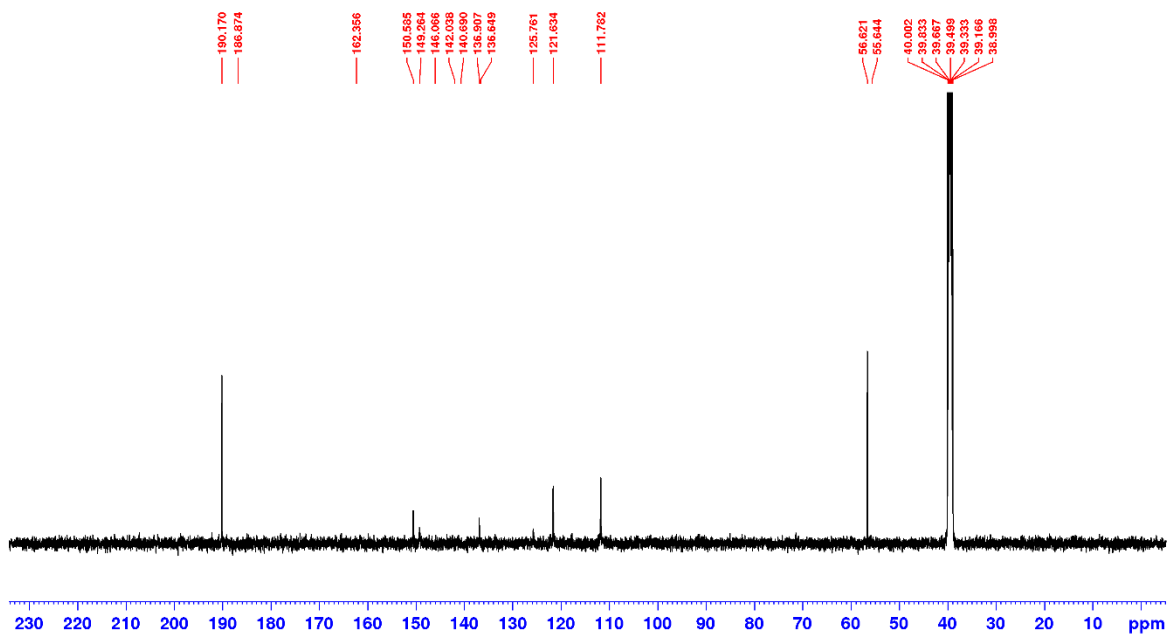
4g  
BB



(4h)Dmsd/  
1H  
300K



4h / DMSO  
BB



File: SJ-03-05  
Sample: SAJJAD ANJUM /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

Date Run: 02-17-2020 (Time Run: 09:44:20)

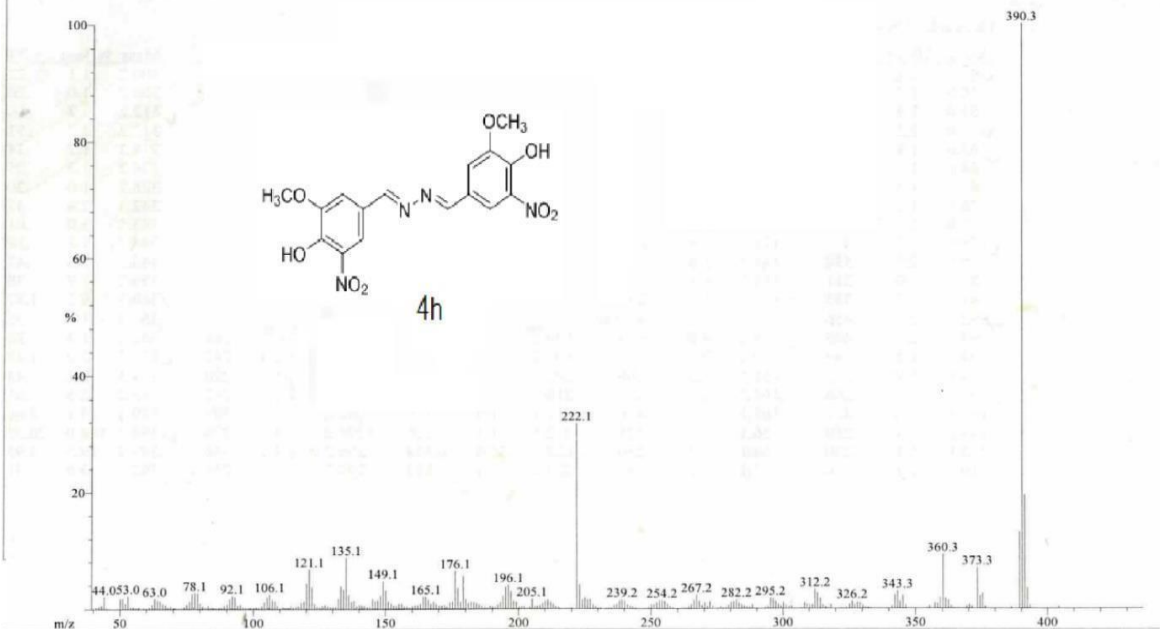
Ionization mode: EI+

Run By: MASS LAB-104

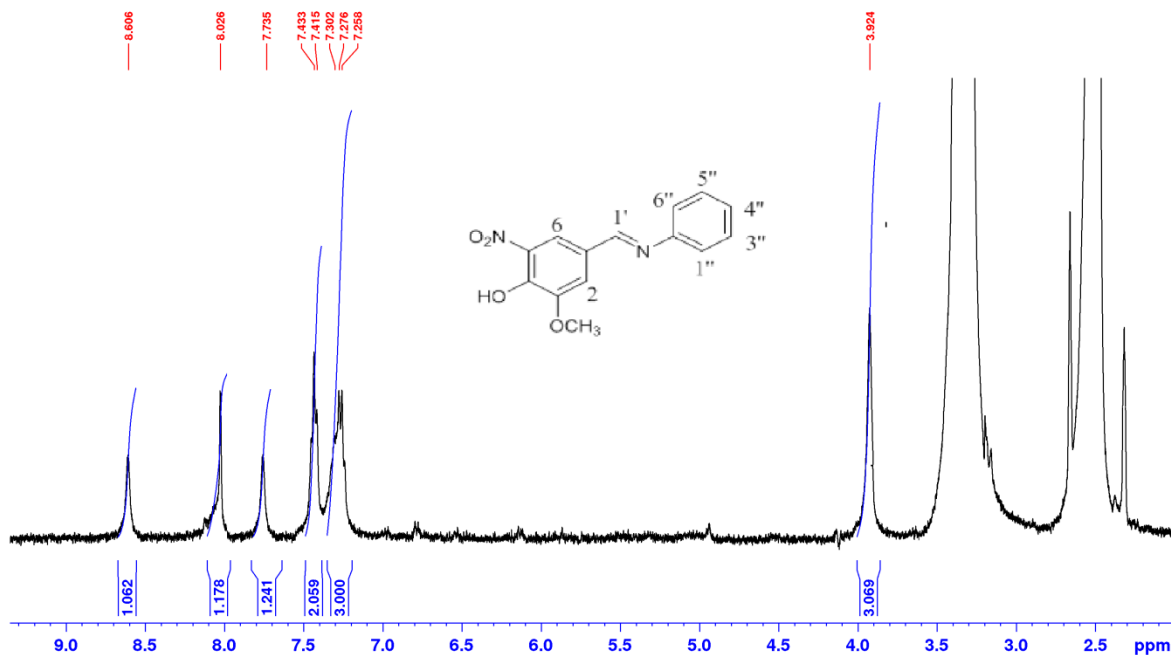
Scan: 27

Base: m/z 390; 31.1%FS TIC: 1607970

#Ions: 433

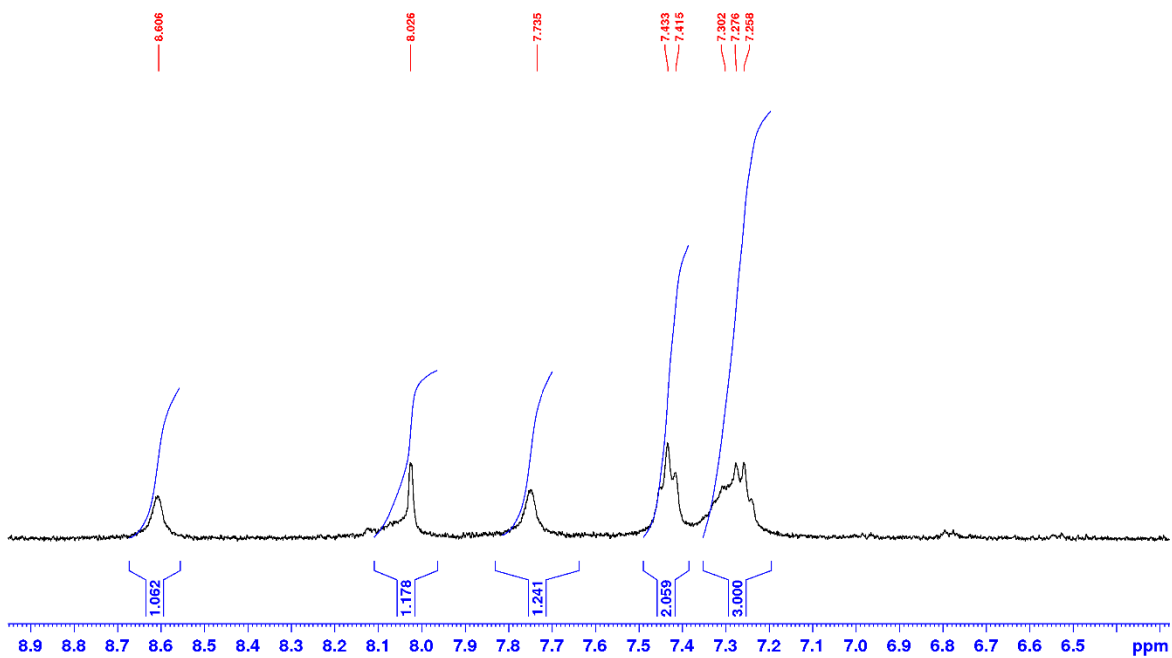


(4)DmsO  
1H  
300K

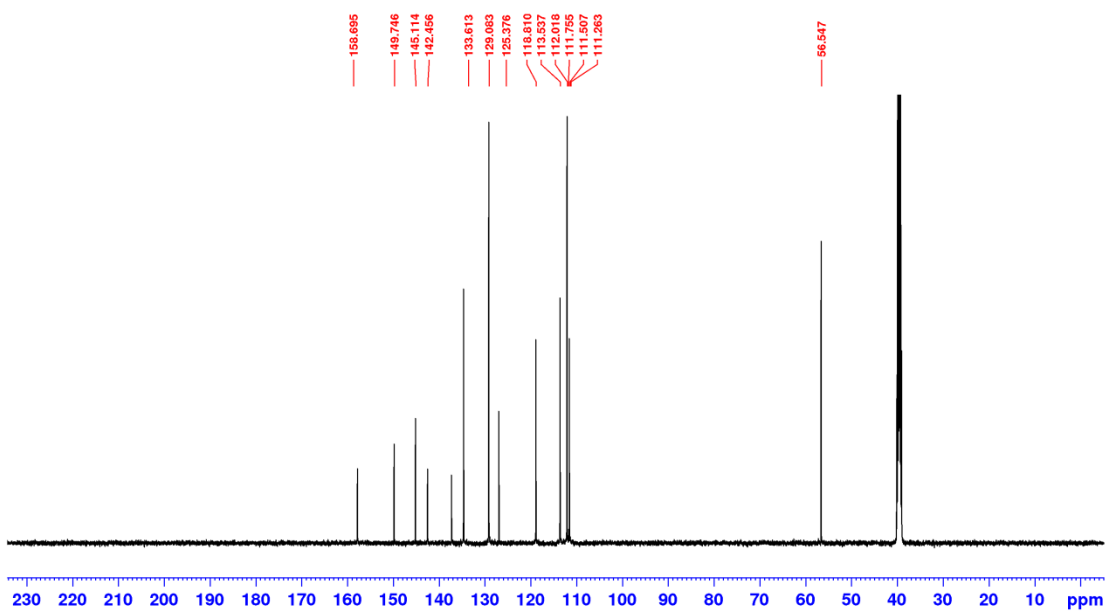




(4)DmsO  
1H  
300K



4i / DMSO  
BB



File: SJ-03-12-  
Sample: SAJJAD /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

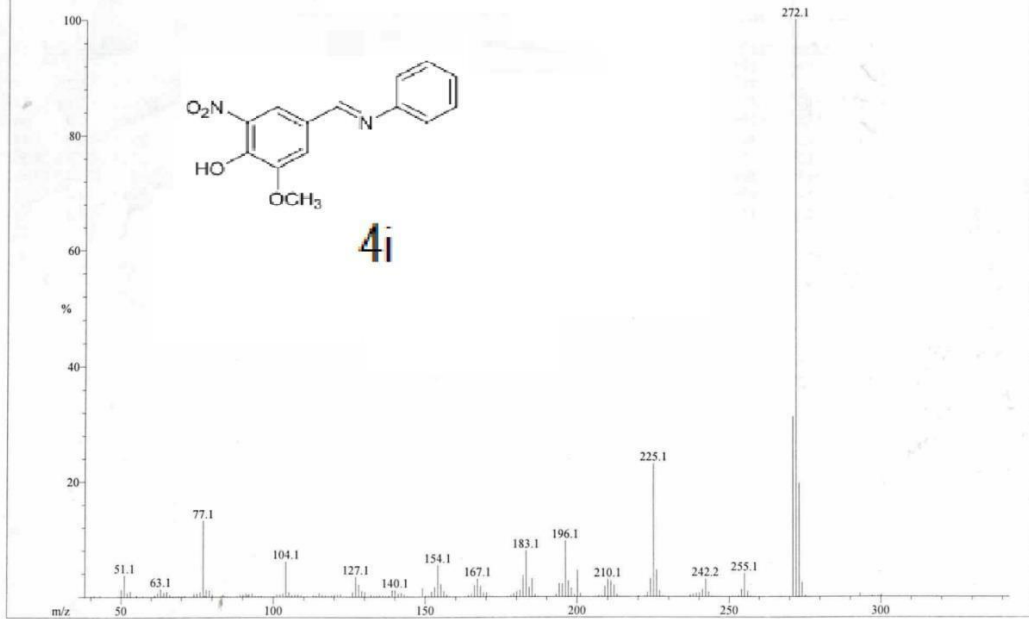
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Ionization mode: EI+

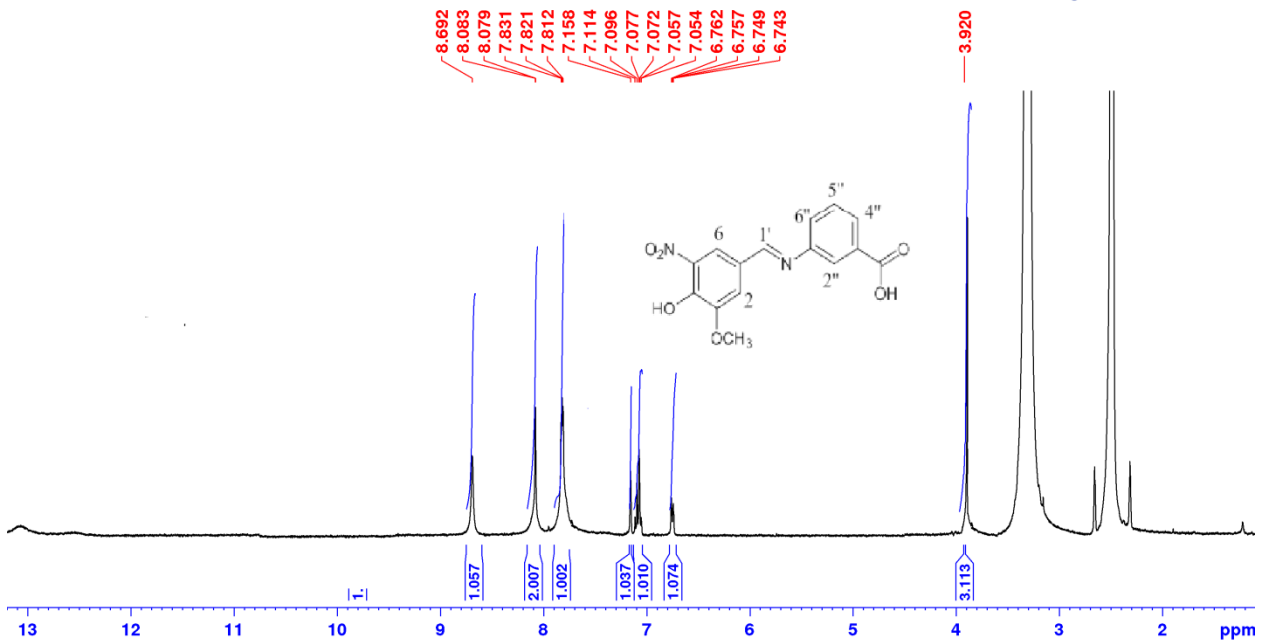
Run By: MASS LAB-104

Scan: 12  
Base: m/z 272; 73.9%FS TIC: 2726196

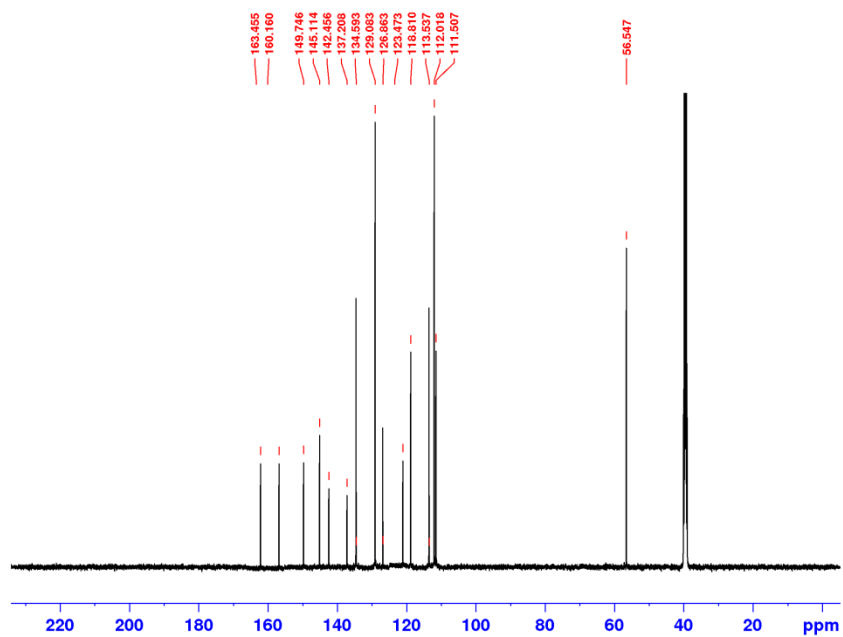
#Ions: 378



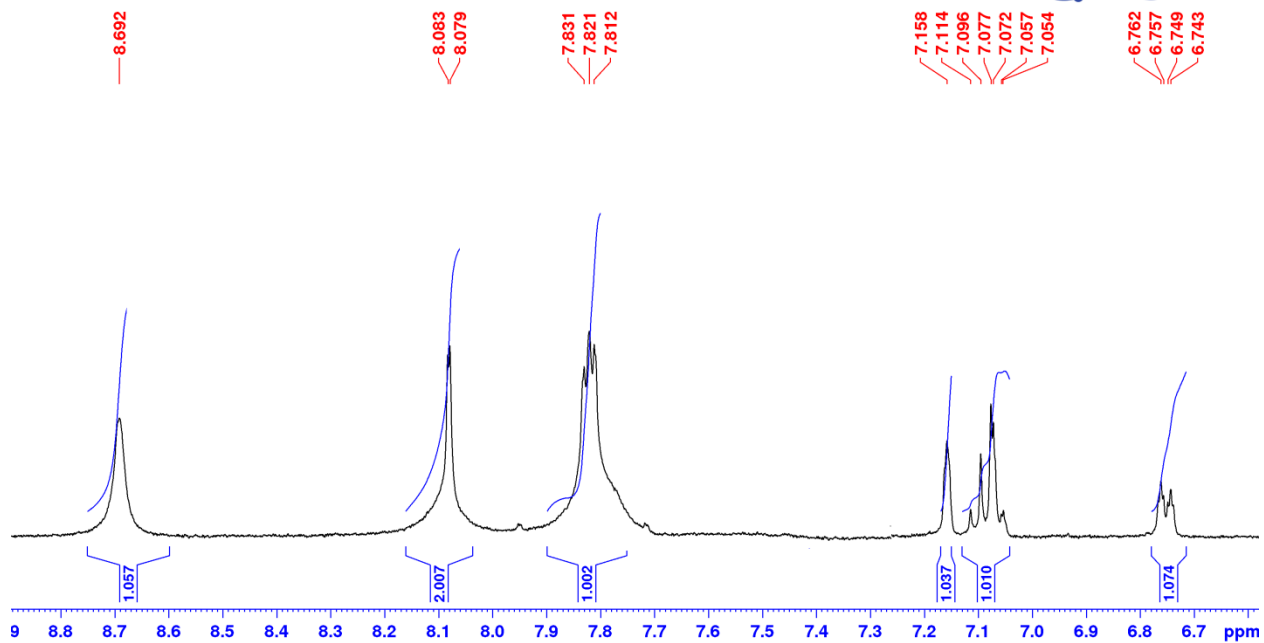
(4j)/Dmsd  
1H  
300K



4J/ DMSO  
BB



(4j)/DmsO  
1H  
300K



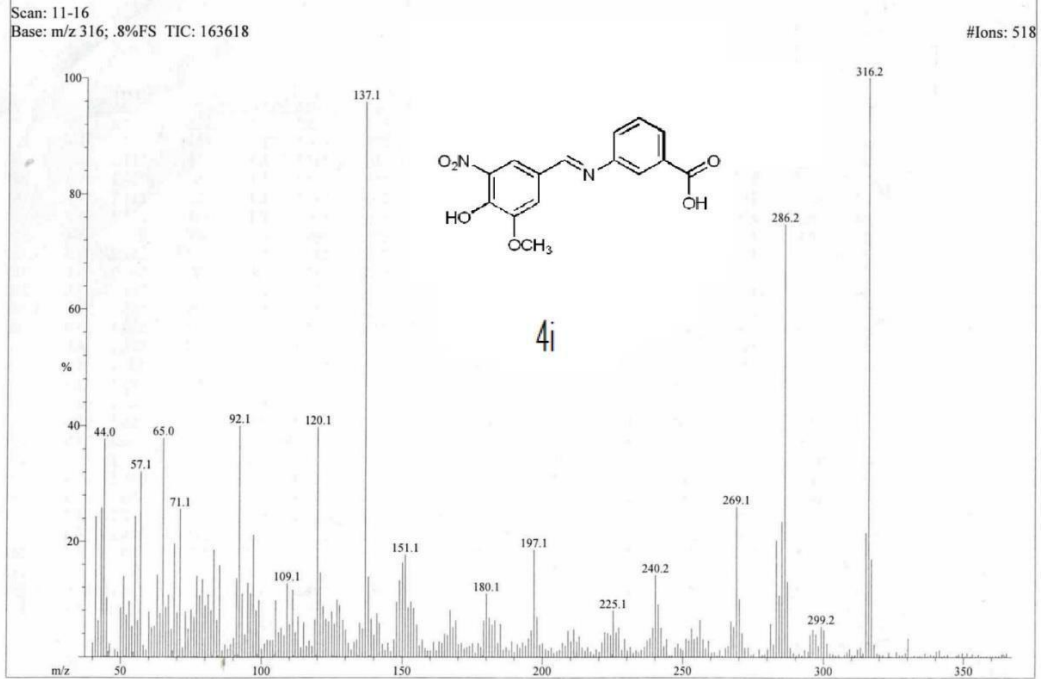
HEJ-ICCBS  
3/16/2020 3:36:54 PM

File: SJ-03-13  
Sample: SAJJAD ANJUM /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

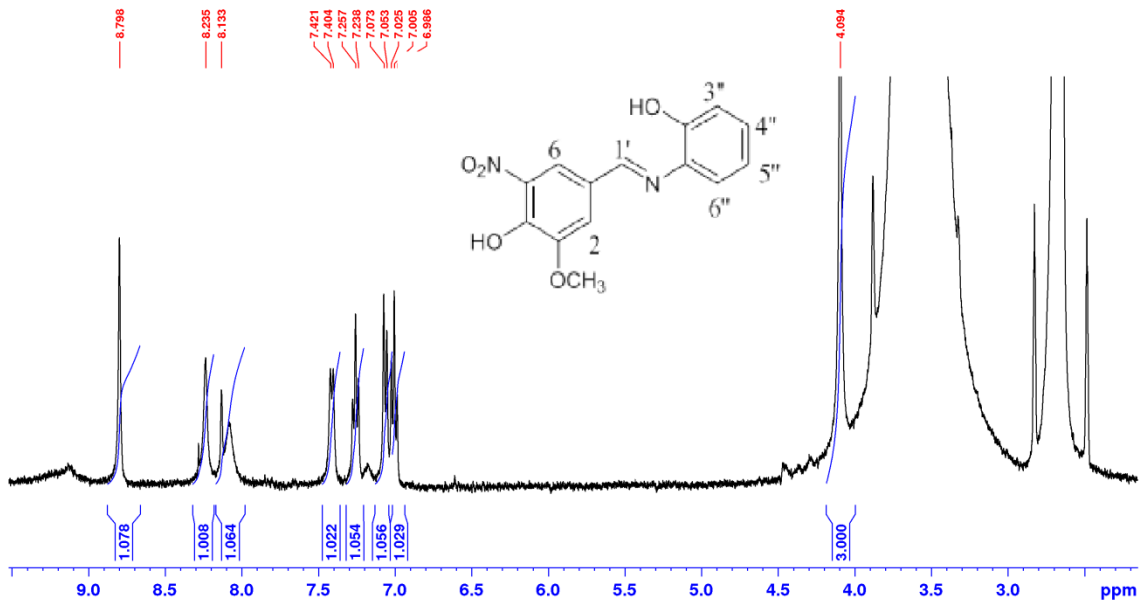
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Ionization mode: EI+

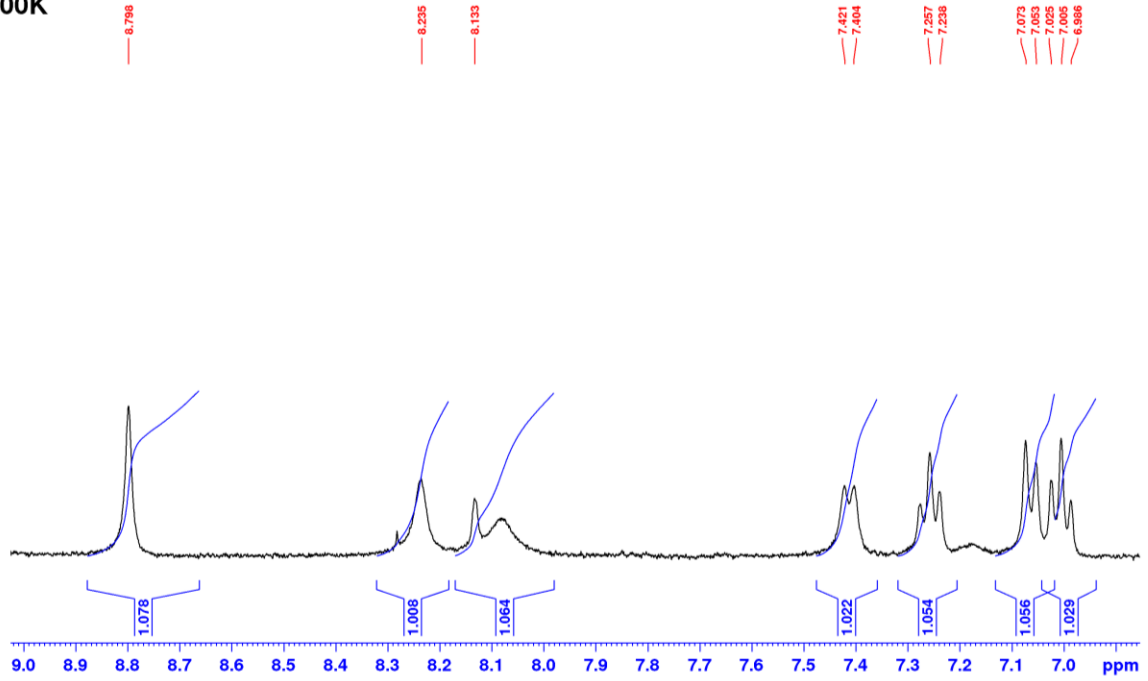
Run By: MASS LAB-104



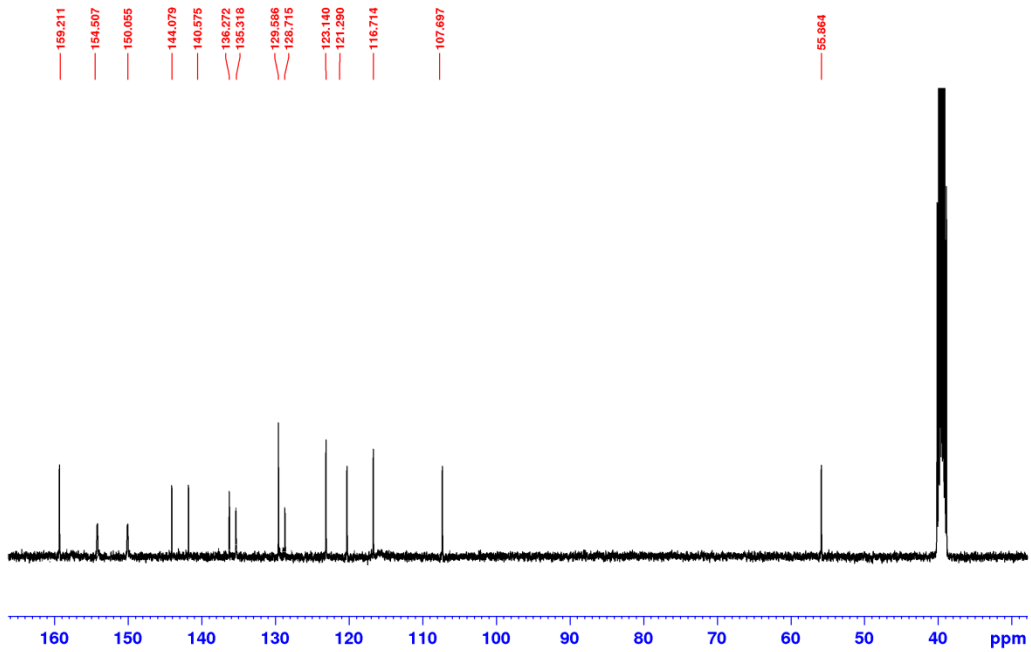
(4k) DMSO  
1H  
300K



(4k) DMSO  
1H  
300K



4K  
BB



HEJ-ICCBS  
2/24/2020 10:14:04 AM

File: SJ-03-16  
Sample: SAJJAD /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

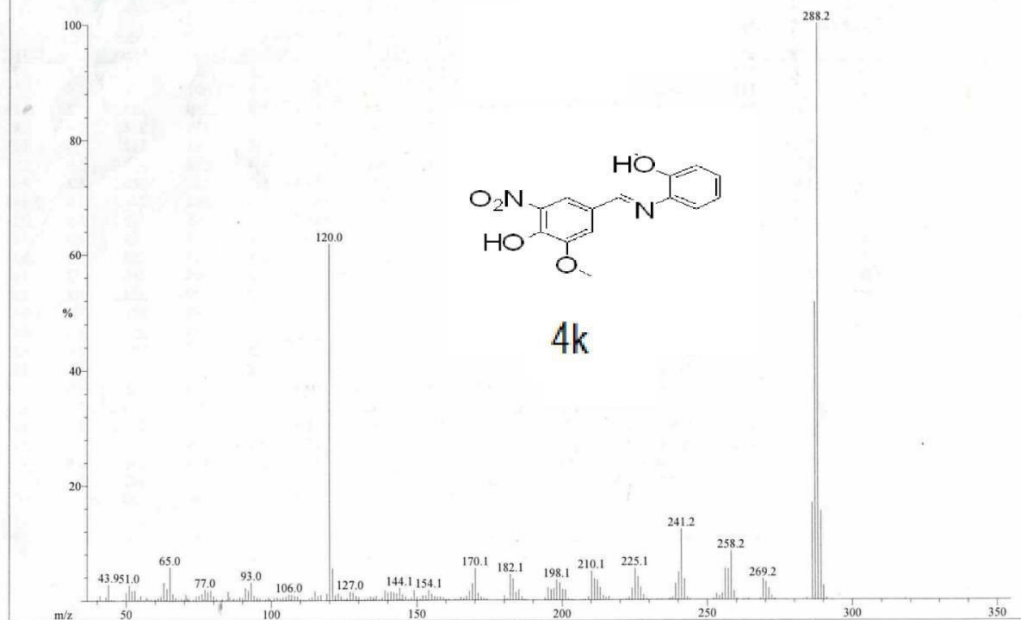
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Run By: MASS LAB-104

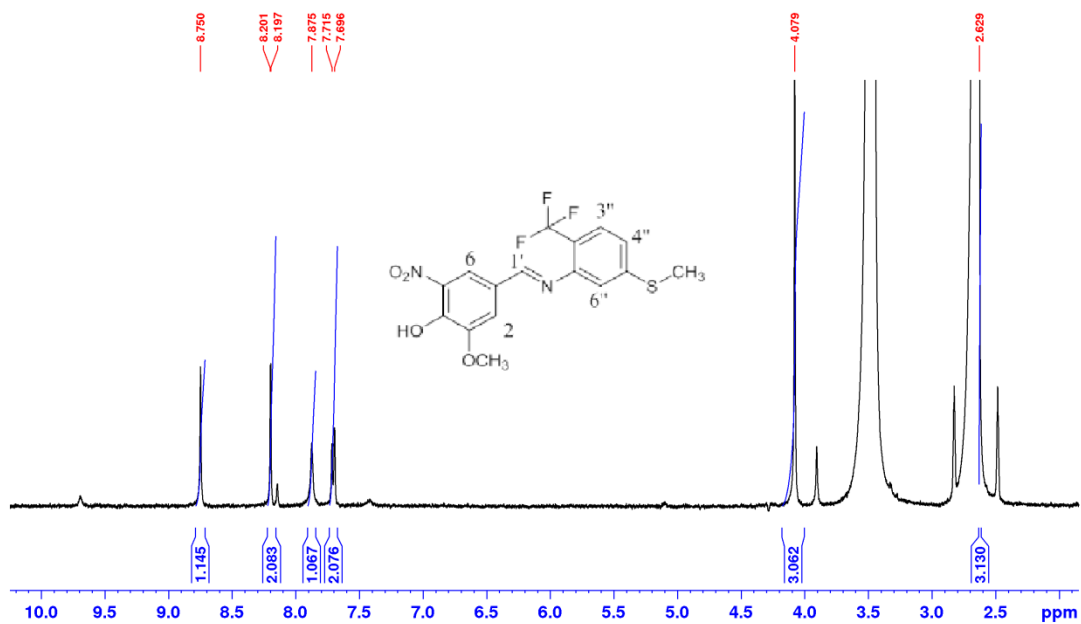
Ionization mode: EI+

Scan: 19  
Base: m/z 289; 6.1%FS TIC: 320966

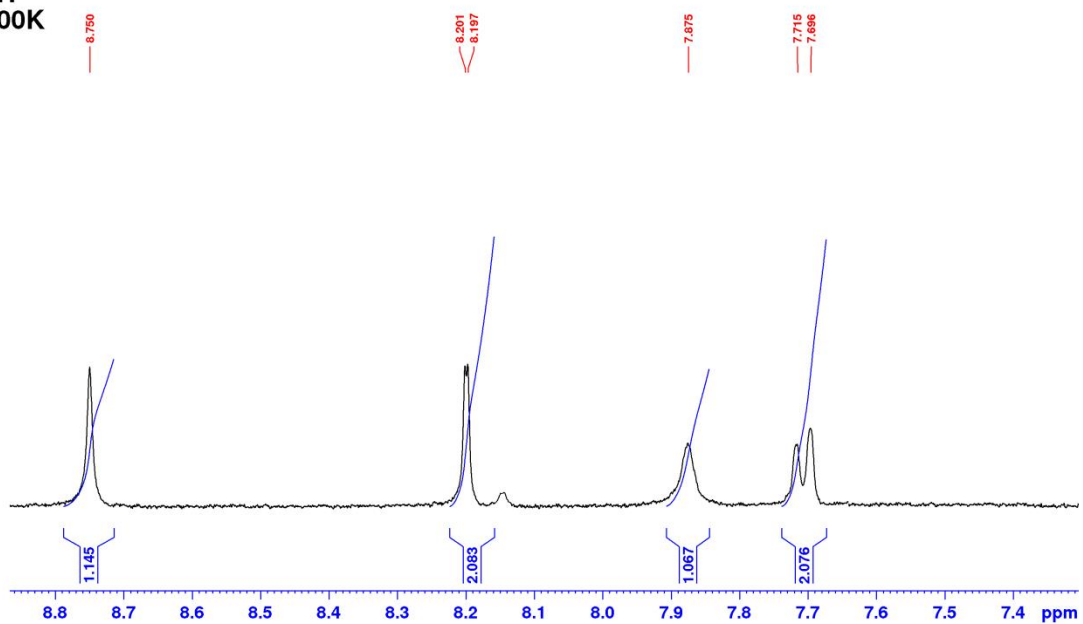
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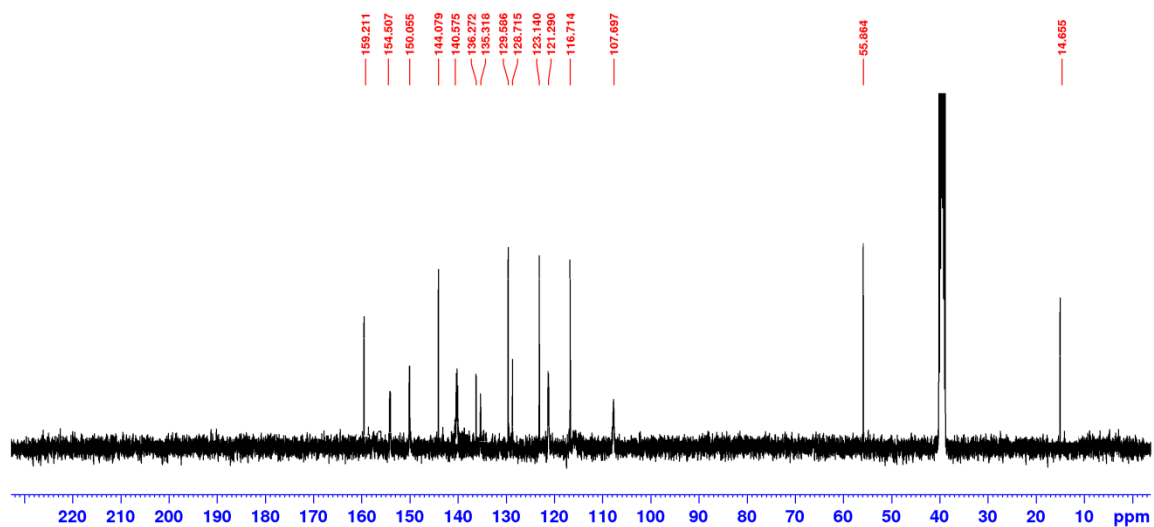
4I/ DMSO  
1H  
300K



4I/ DMSO  
1H  
300K



4I  
BB



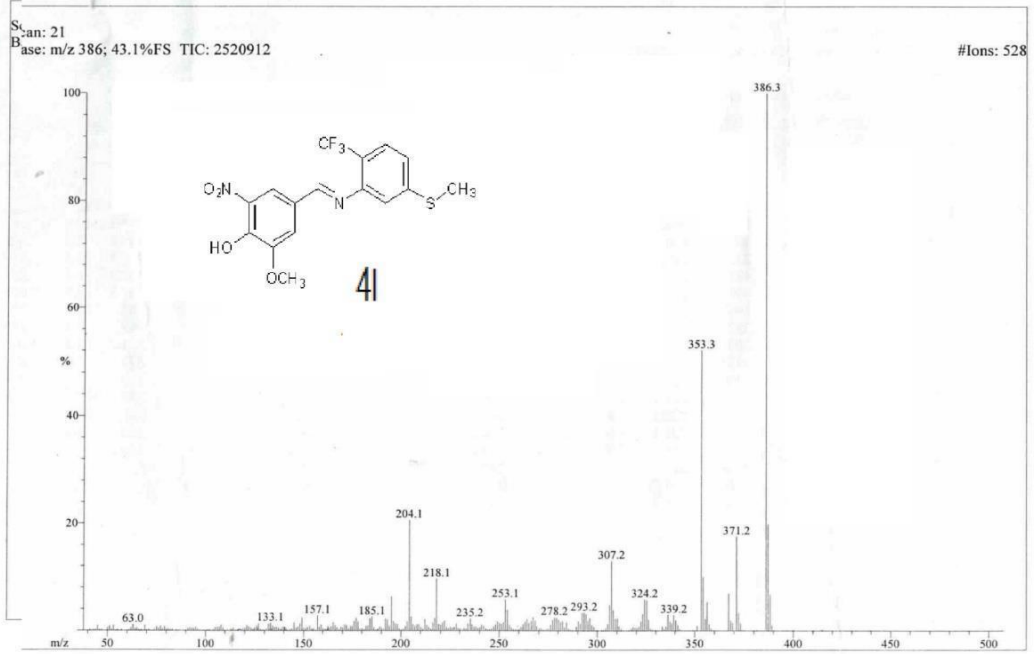
HPLCGRS...  
2/29/2020 11:40:40 AM

File: SJ-03-17-  
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Instrument: JEOL 600H-1  
Inlet: Direct Probe

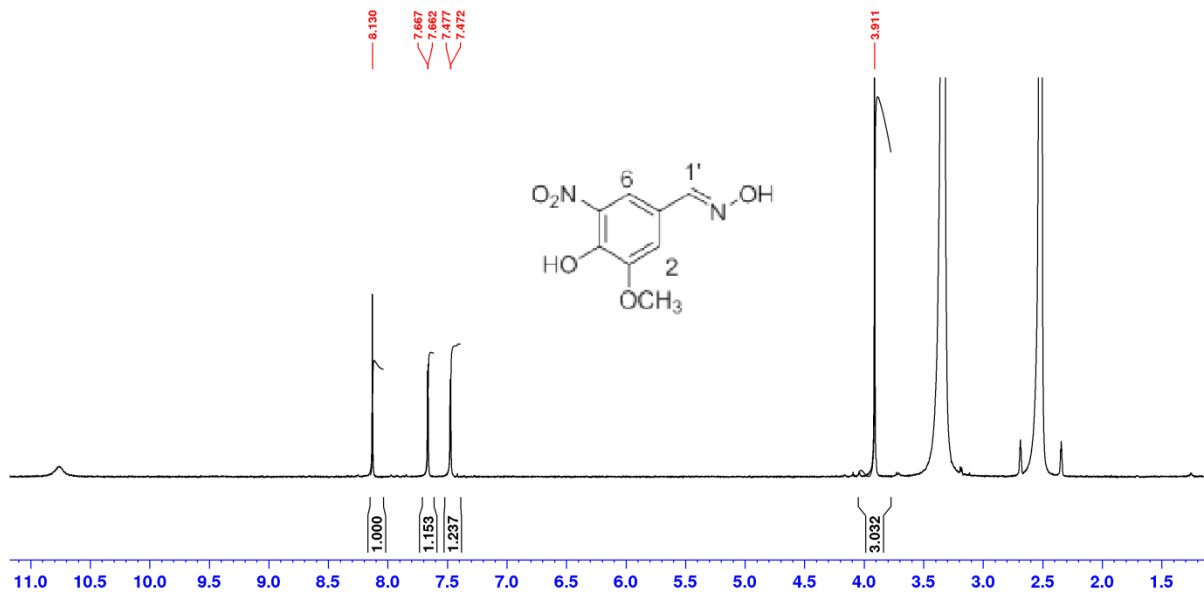
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Run By: MASS LAB-104

Ionization mode: EI+

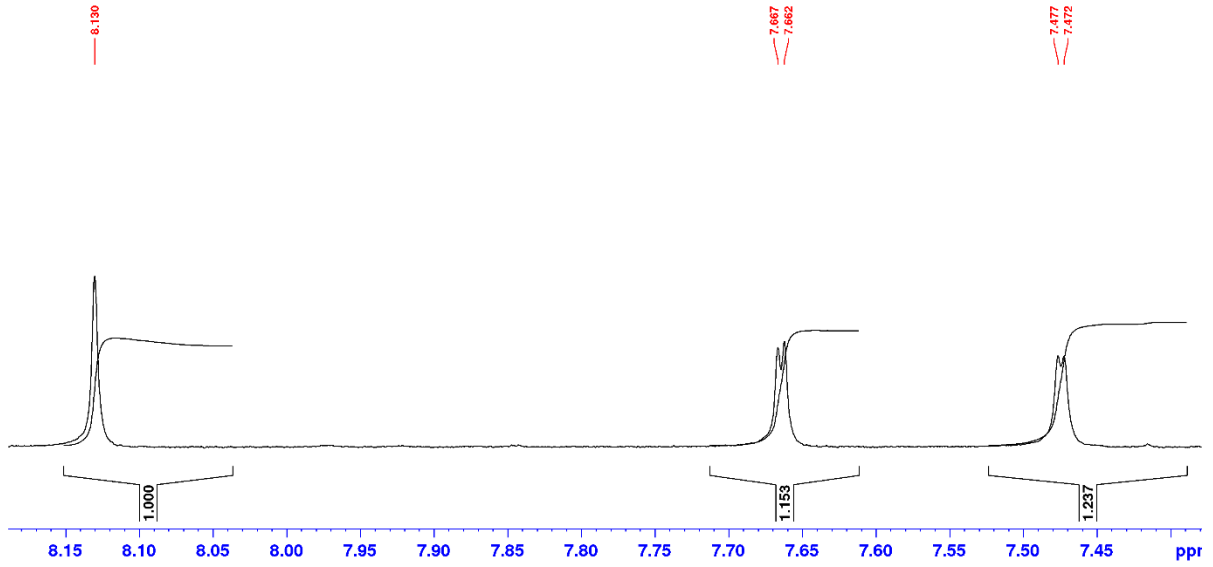


(4m)/DMSO/  
1H  
300K

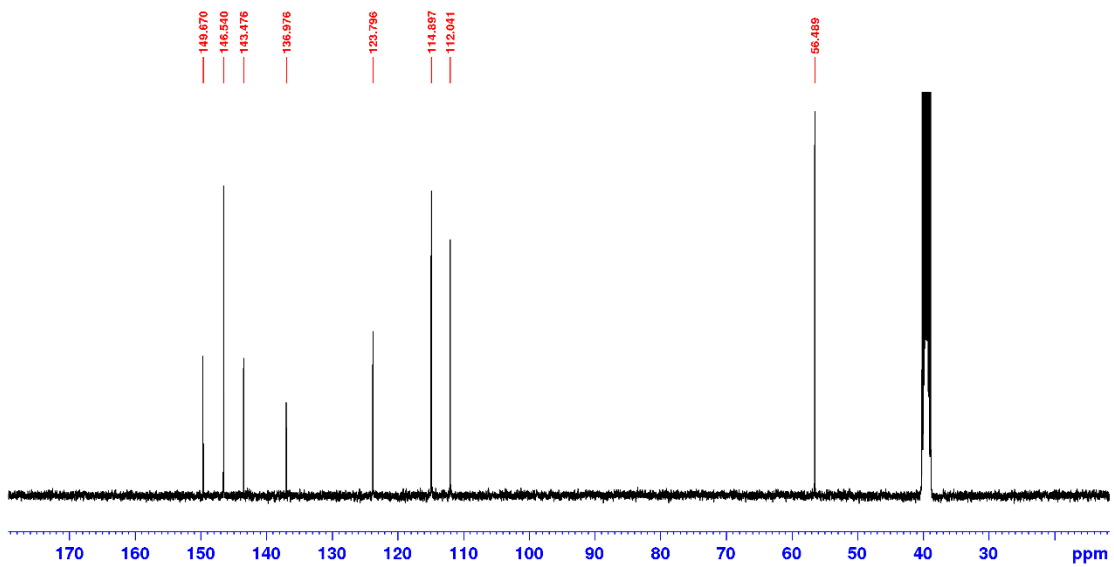




(4m)/DMSO/  
1H  
300K



4m / DMSO  
BB



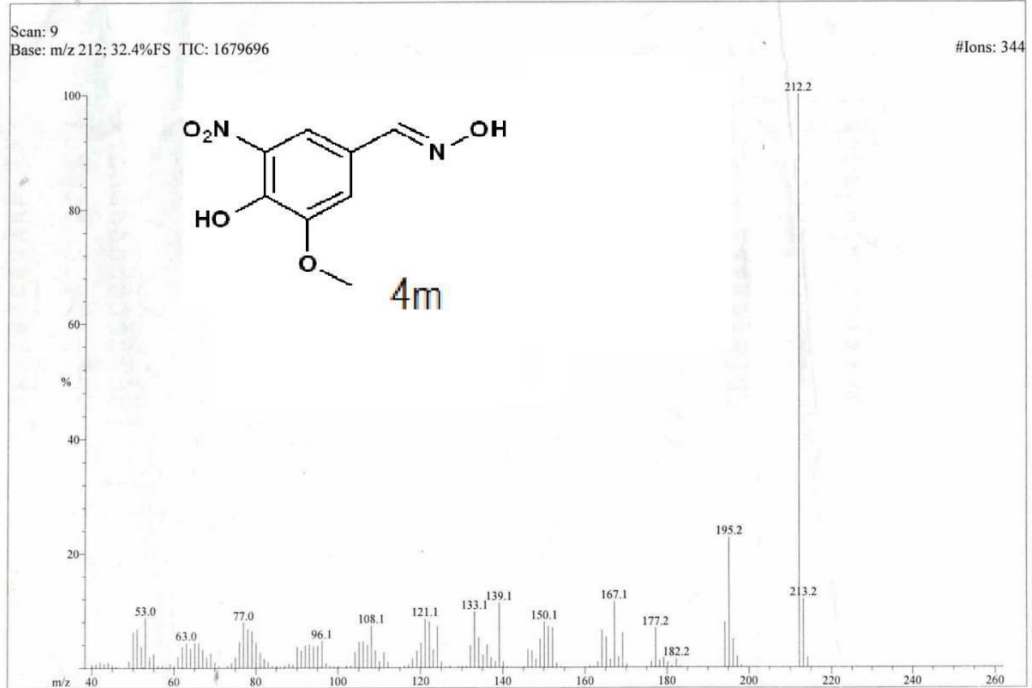
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Sample: SAJJAD ANJUM /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

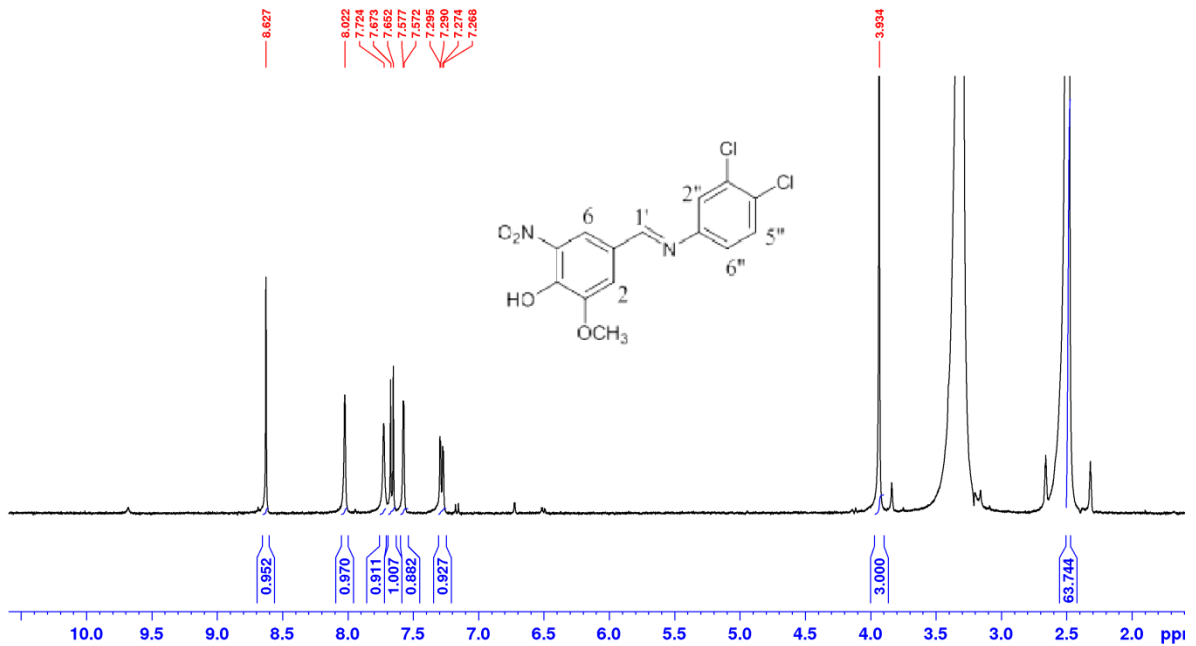
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Ionization mode: EI+

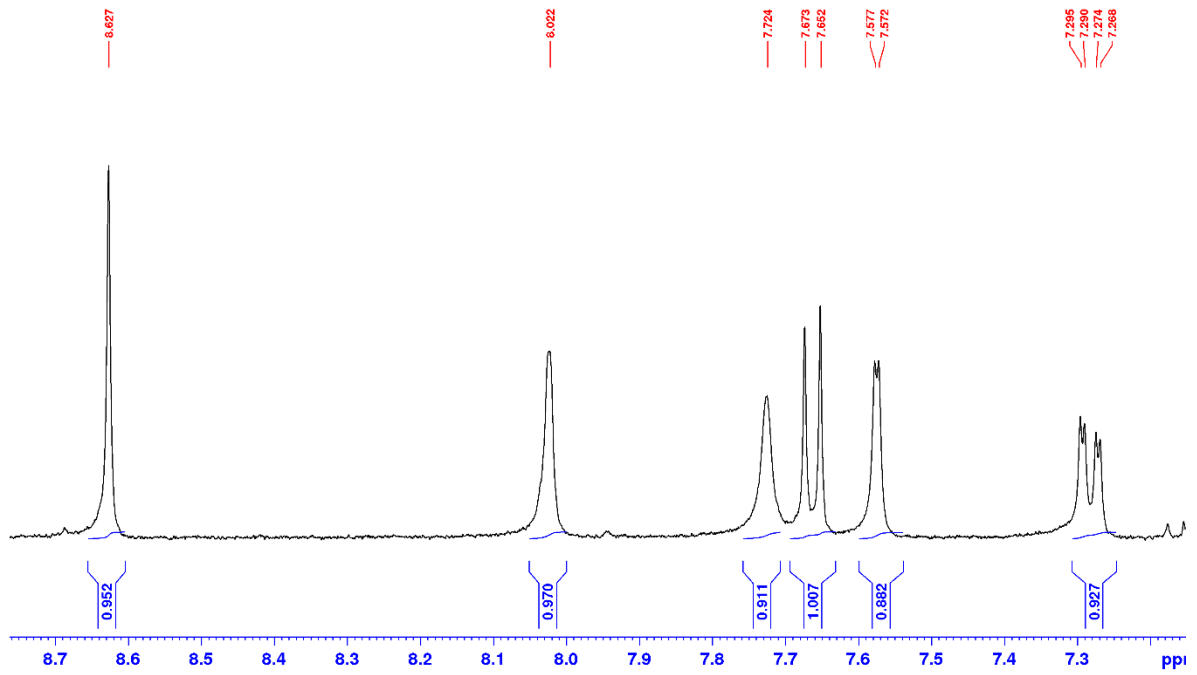
Run By: MASS LAB-104



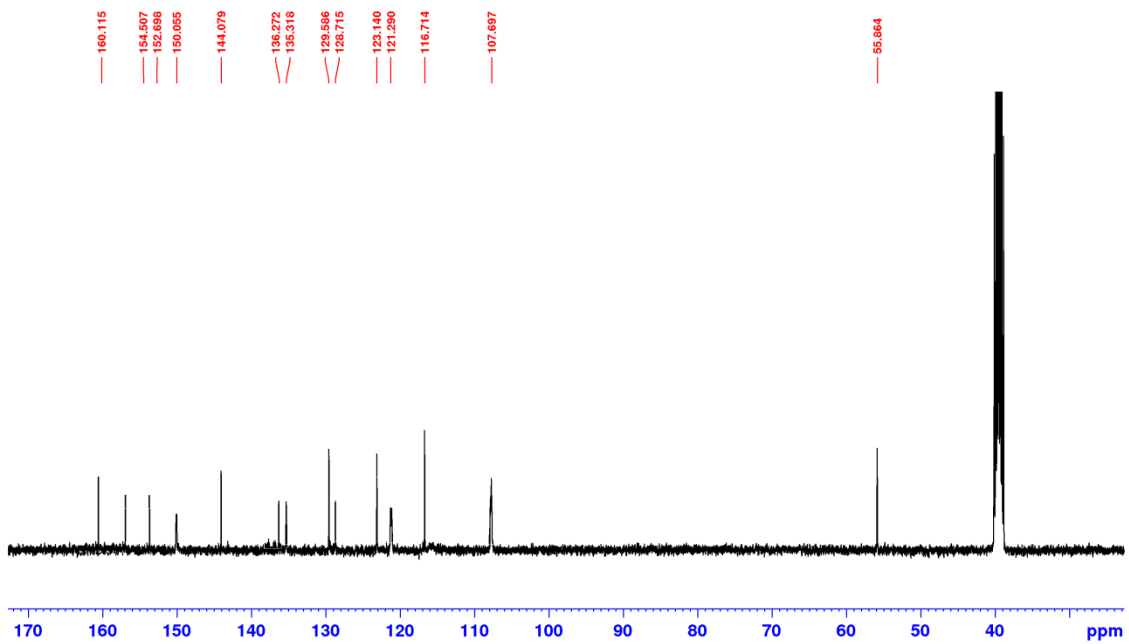
(4n) /DMSO/  
1H  
200K



(4n) /DMSO/  
1H  
200M



4n  
BB

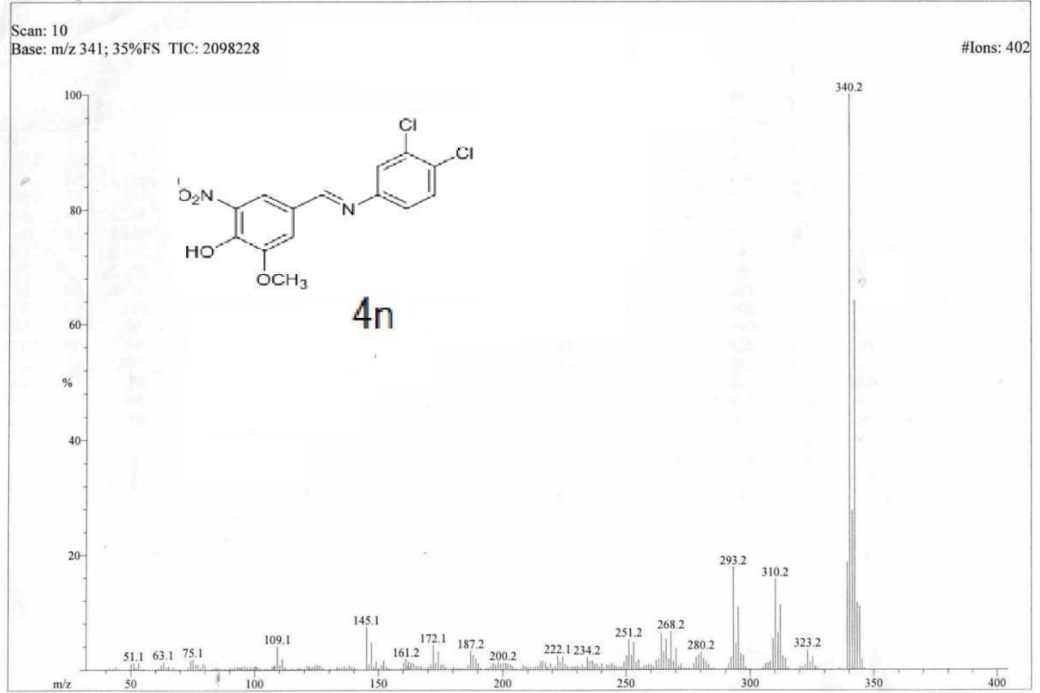


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Instrument: JEOL 600H-1  
Inlet: Direct Probe

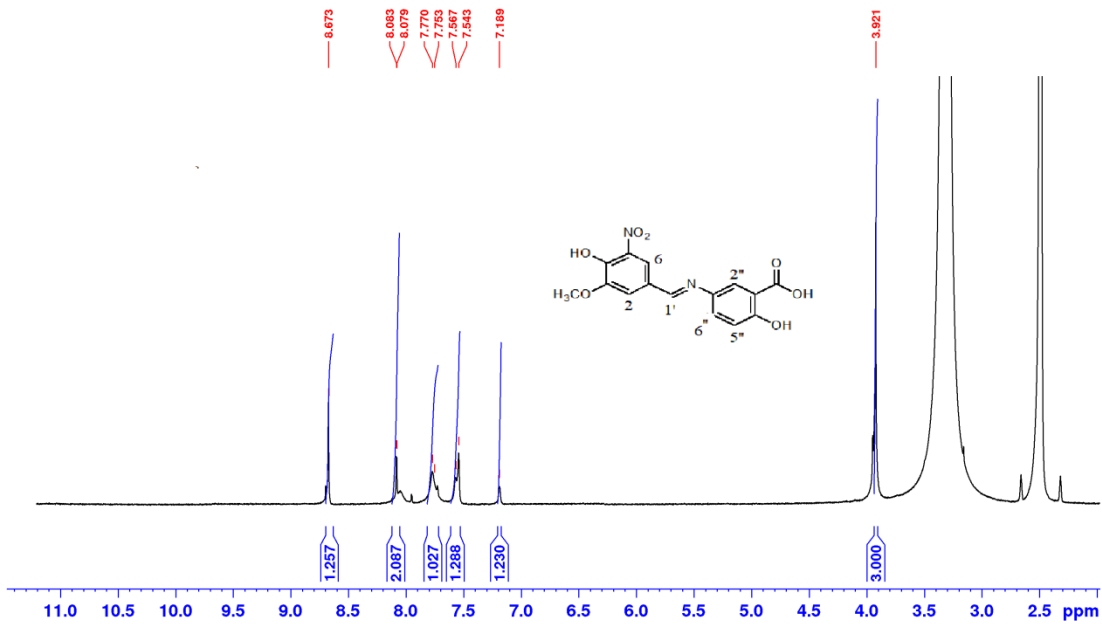
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Ionization mode: EI+

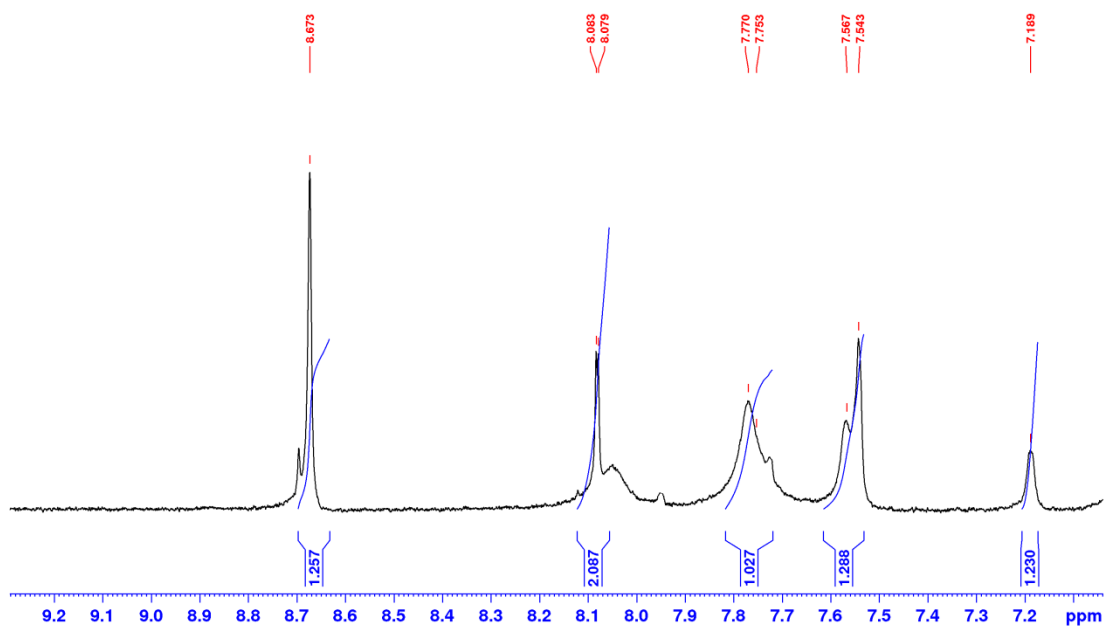
Run By: MASS LAB-104



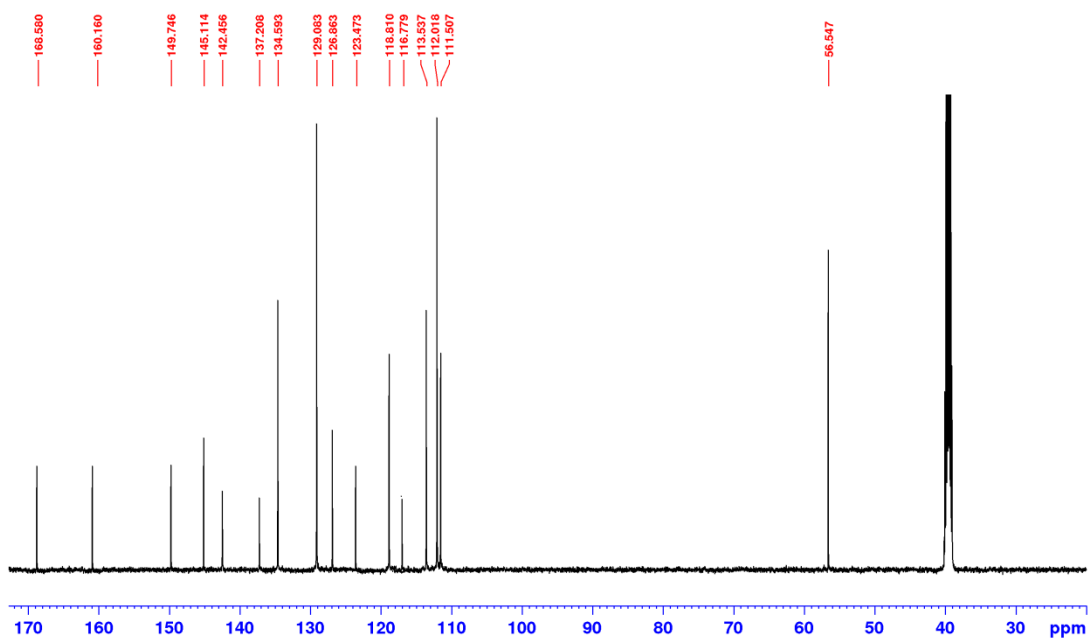
4o/DMSO/  
1H  
300K



4o/Dmsol/  
1H  
300K



4o /DMSO  
BB



File: SJ-03-32  
Sample: SAJJAD ANJUM /DR. BINA  
Instrument: JEOL 600H-1  
Inlet: Direct Probe

Date Run: 03-24-2020 (Time Run: 09:43:30)

Run By: MASS LAB-104

Ionization mode: EI+

