

## Design, synthesis and biological activity of peptidyl $\beta$ -nitrostyrenes as Cysteine Protease Inhibitors against *Leishmania Donovanii*

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<sup>c</sup>Department of Chemistry, School of Chemical and Life Sciences, Jamia Hamdard, New Delhi, India;

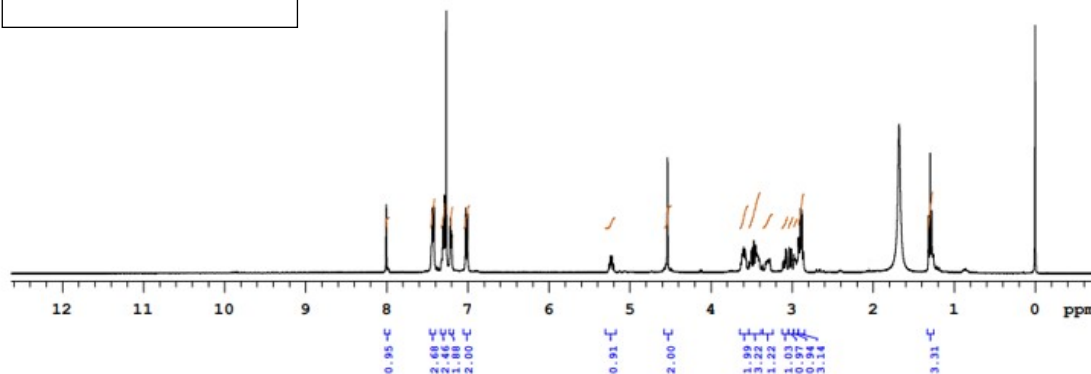
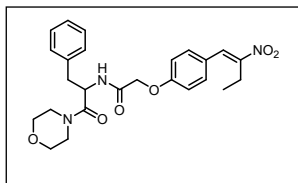
<sup>d</sup>Department of Biochemistry, School of Chemical and Life Sciences, Jamia Hamdard, New Delhi, India;

<sup>e</sup>Department of Biotechnology, School of Chemical and Life Sciences, Jamia Hamdard, New Delhi, India.

# Spectral Images

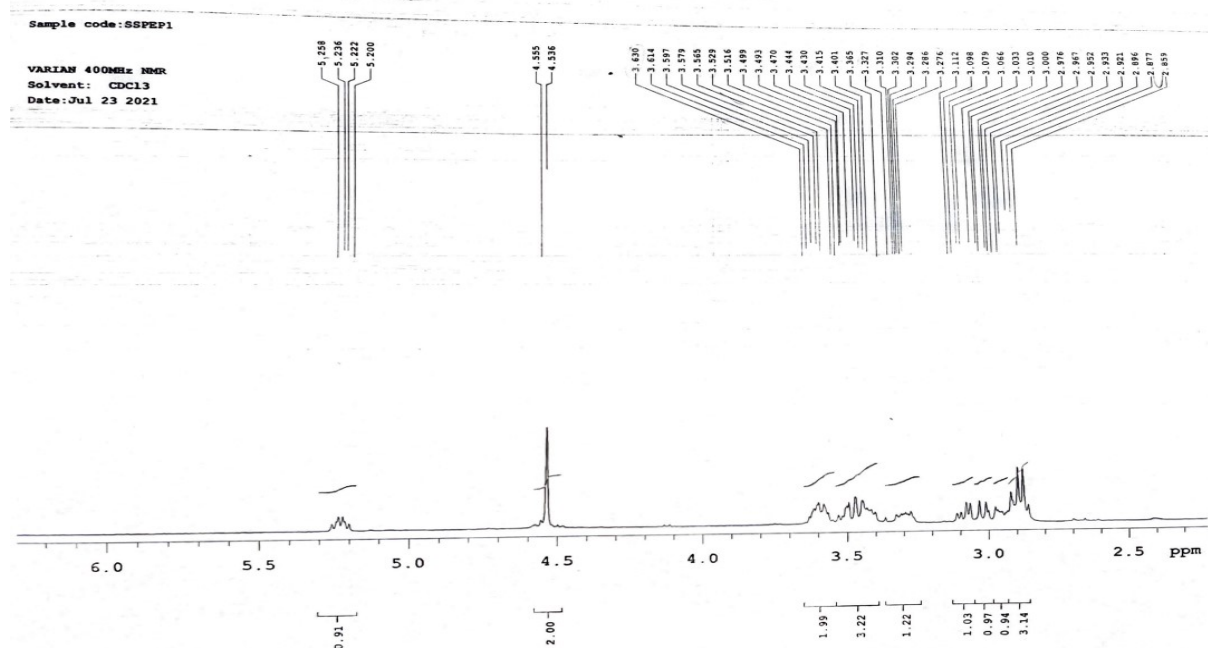
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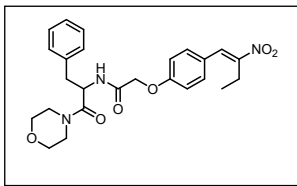
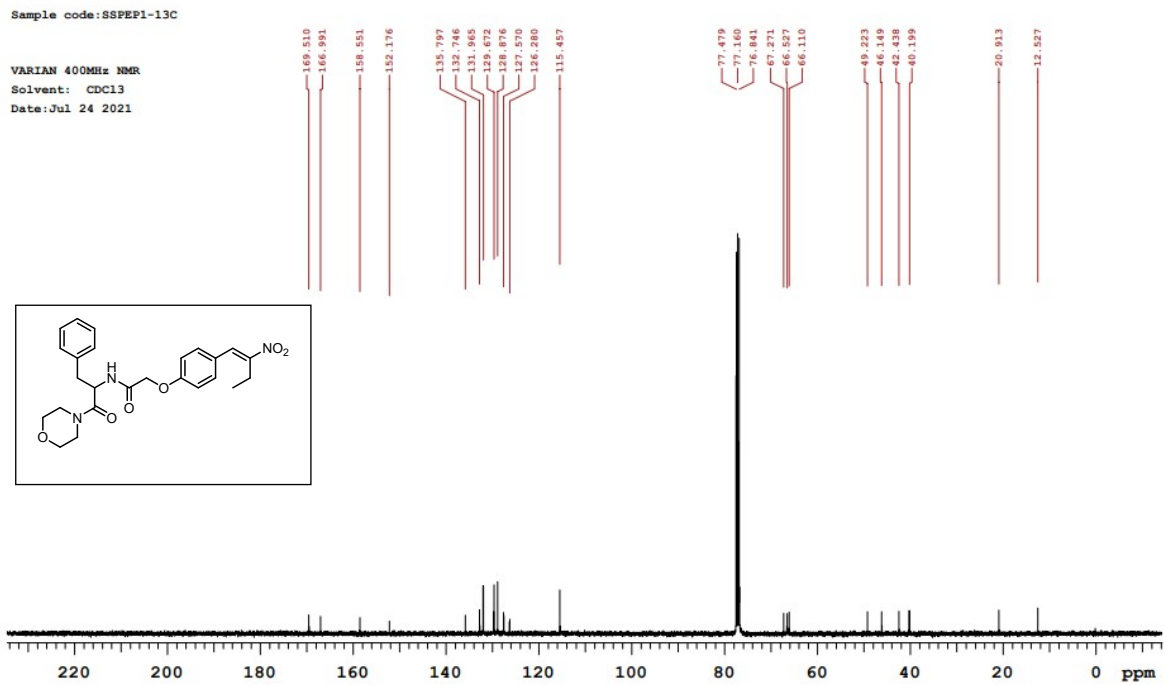
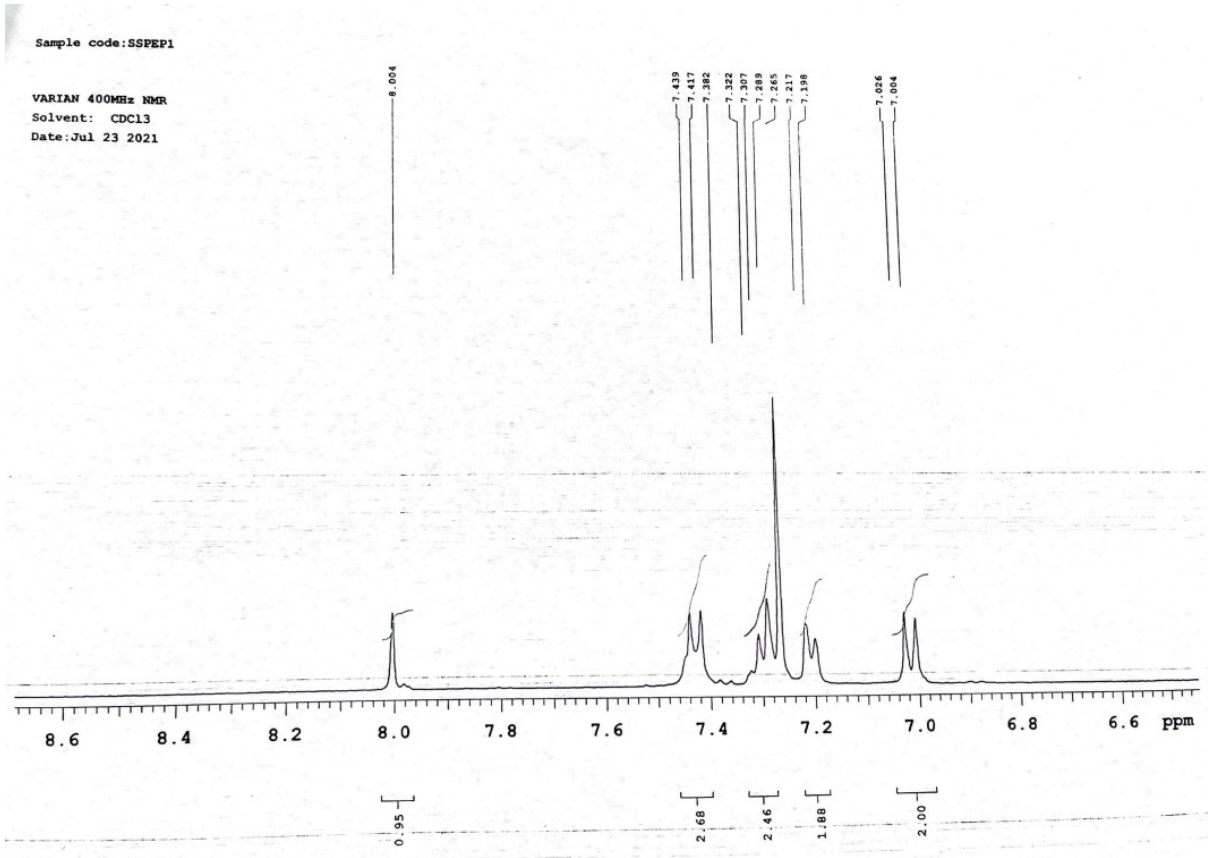
VARIAN 400MHz NMR  
Solvent: CDCl3  
Date:Jul 23 2021



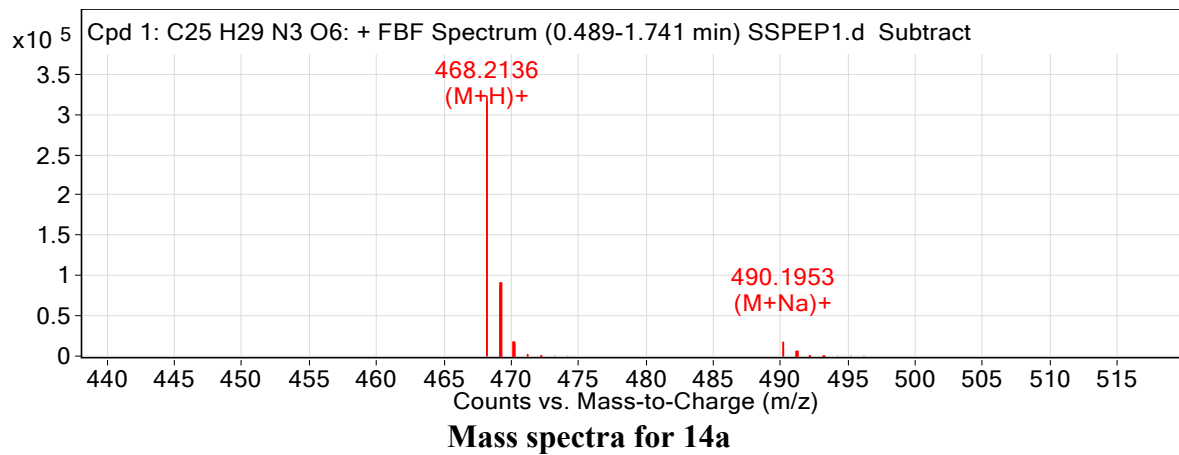
<sup>1</sup>H NMR spectra of the compound 14a

## Expanded:



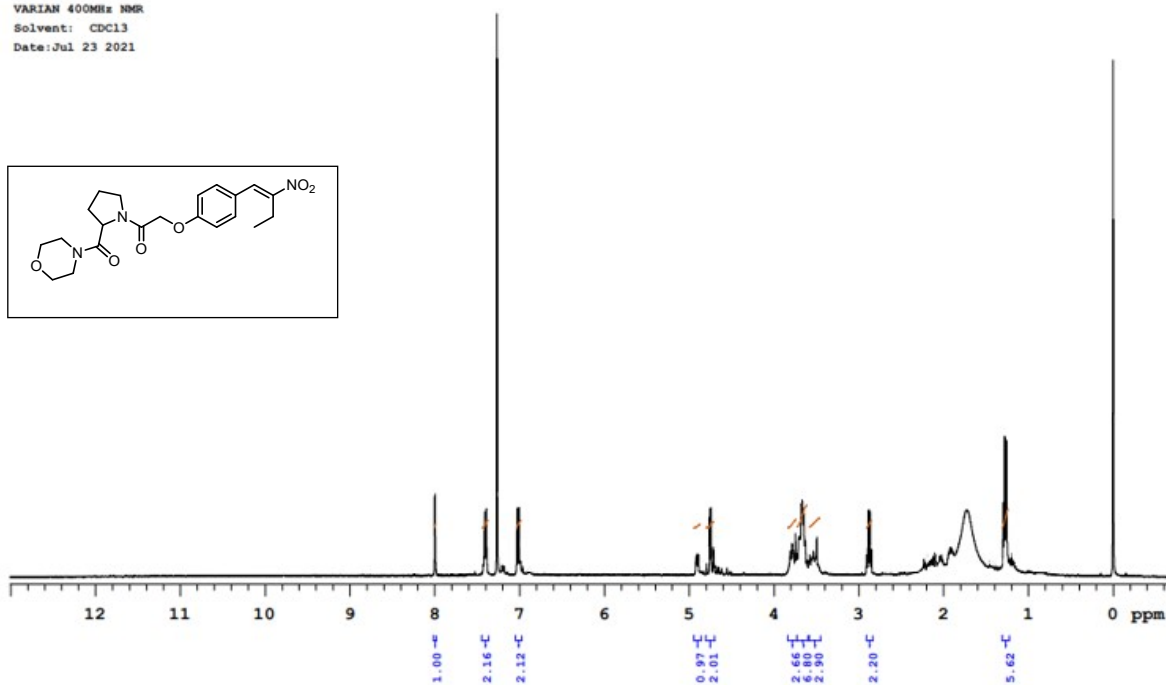
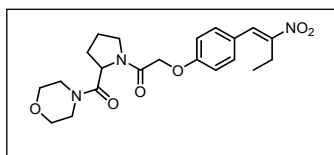


<sup>13</sup>C NMR spectra of the compound 14a



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Date: Jul 23 2021

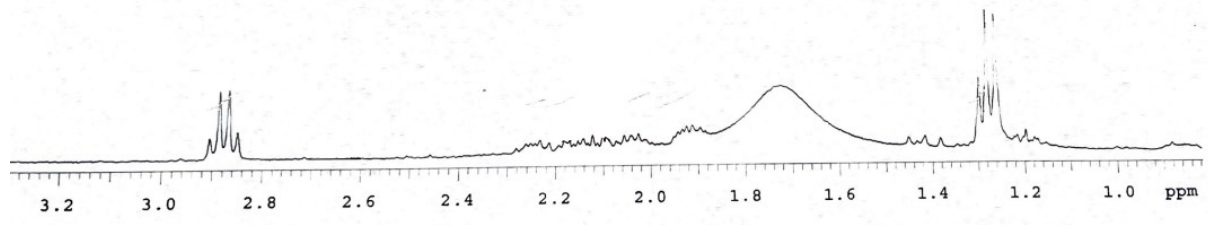
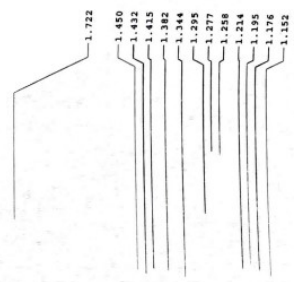
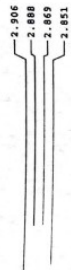


<sup>1</sup>H NMR spectra of the compound 14b

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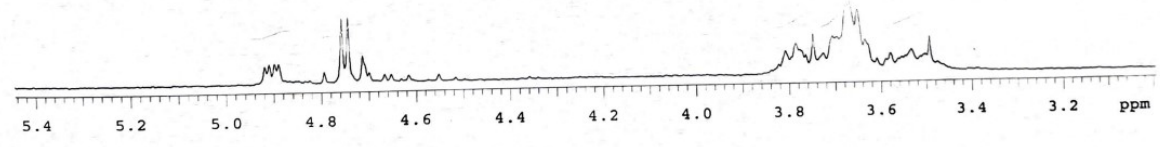
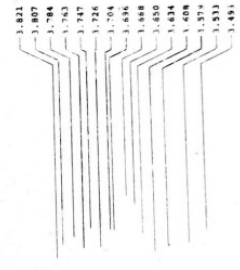
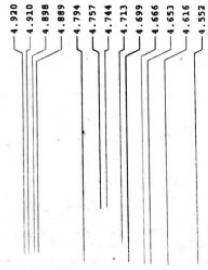
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Solvent: CDCl3  
Date:Jul 23 2021



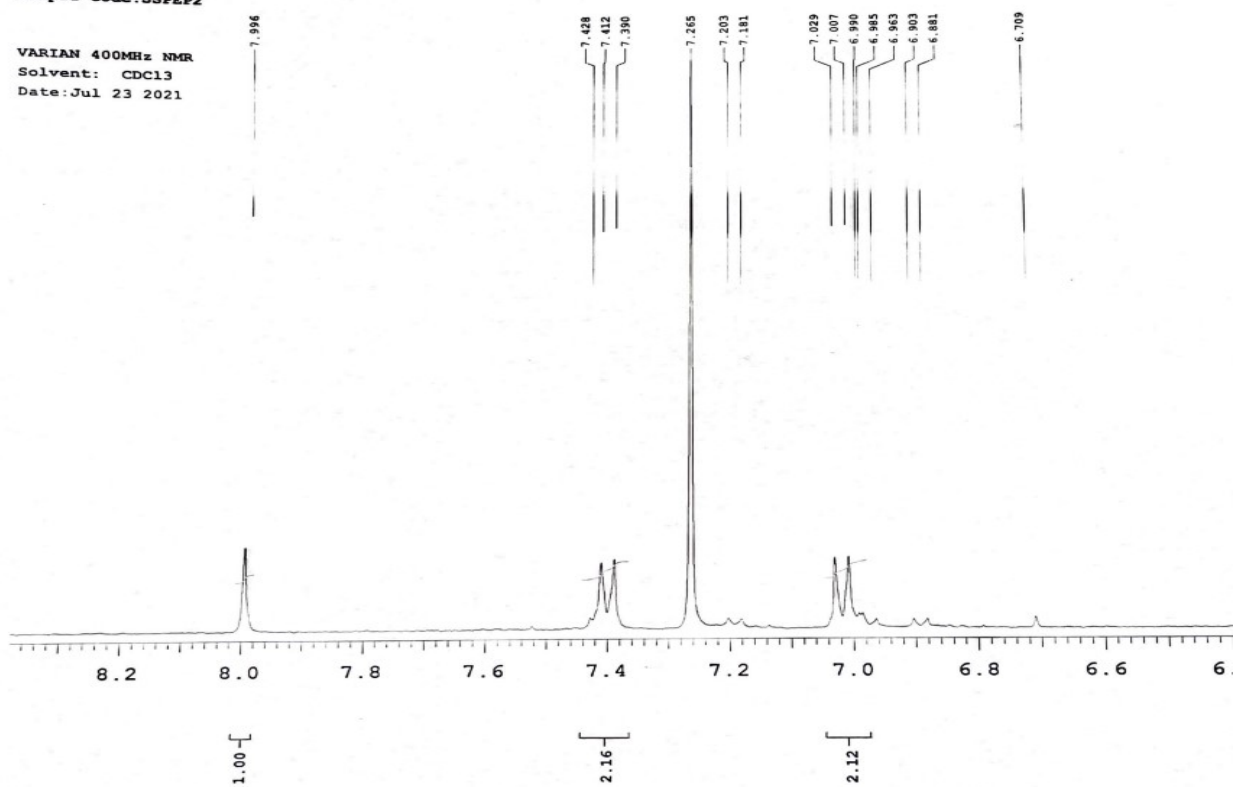
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Date:Jul 23 2021



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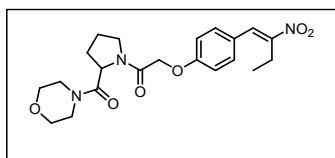
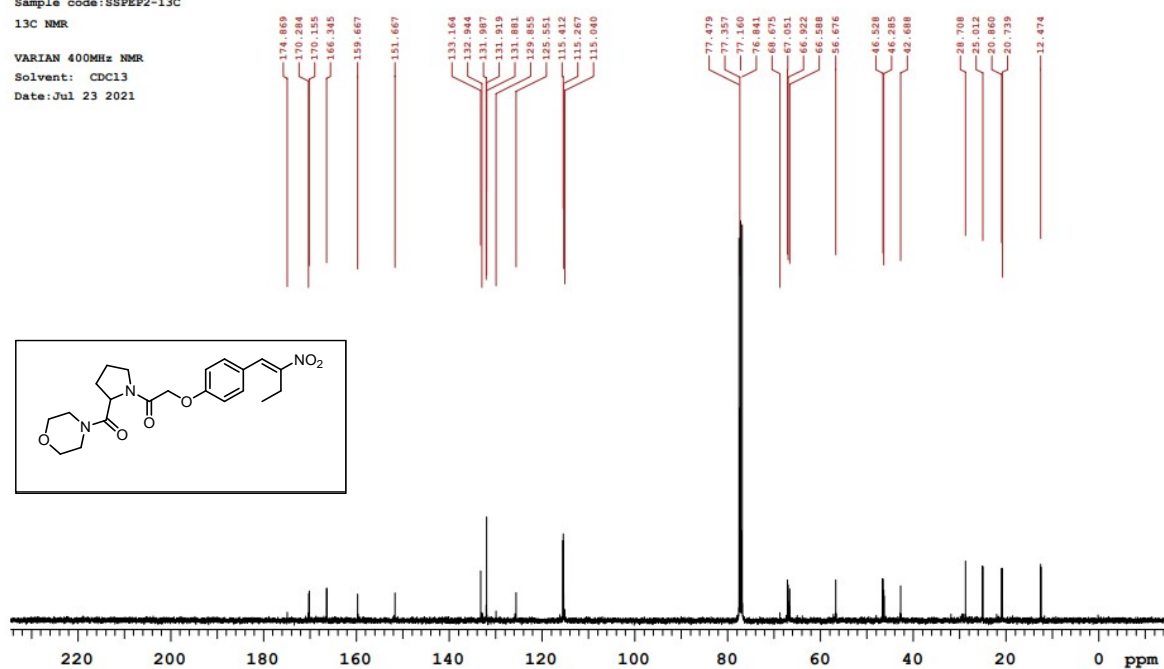
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Date:Jul 23 2021



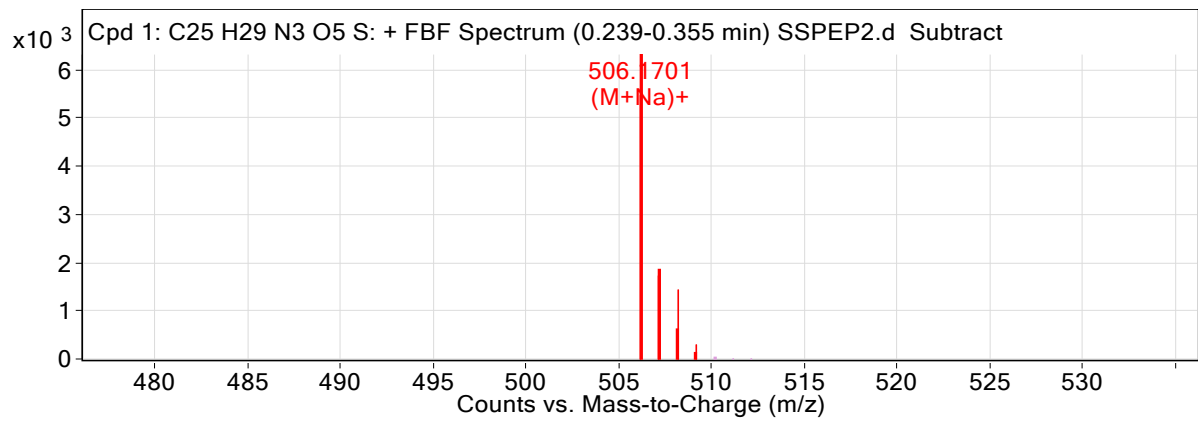
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<sup>13</sup>C NMR

VARIAN 400MHz NMR  
Solvent: CDCl3  
Date:Jul 23 2021



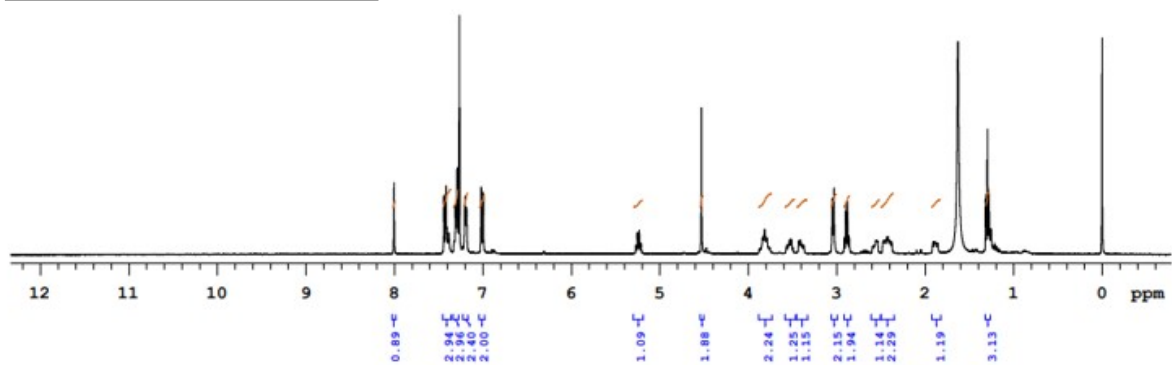
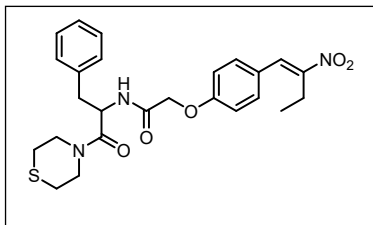
<sup>13</sup>C NMR spectra of the compound 14b



Mass spectra for the compound 14b

Sample code:SSPEP3

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Solvent: CDC13  
Date:Jul 23 2021

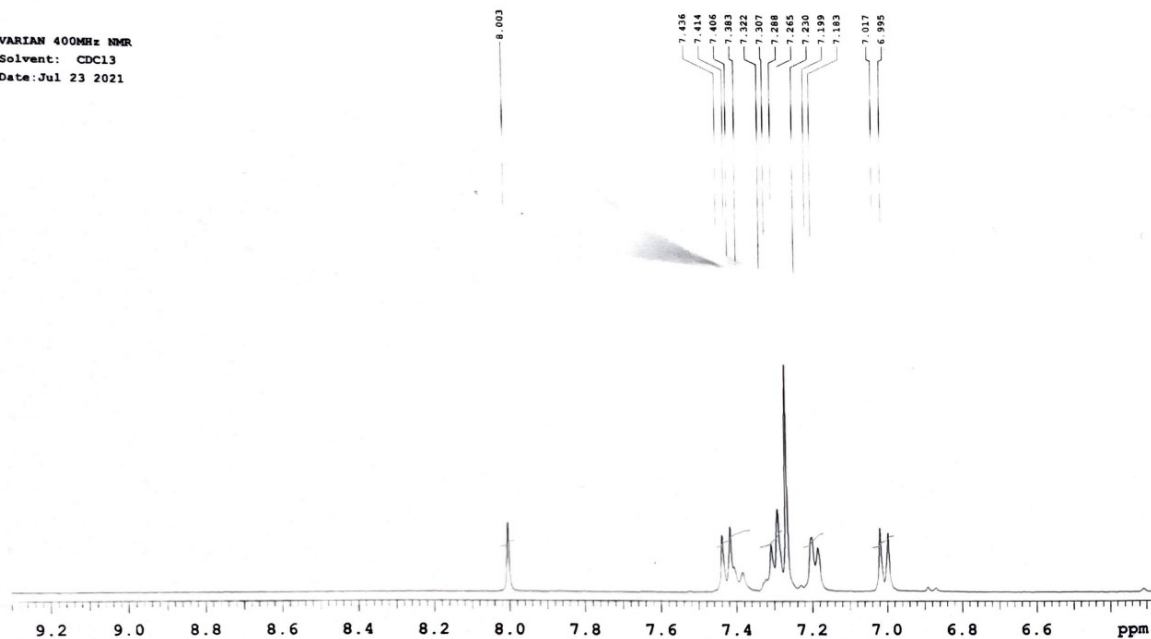


<sup>1</sup>H NMR spectra of the compound 14c

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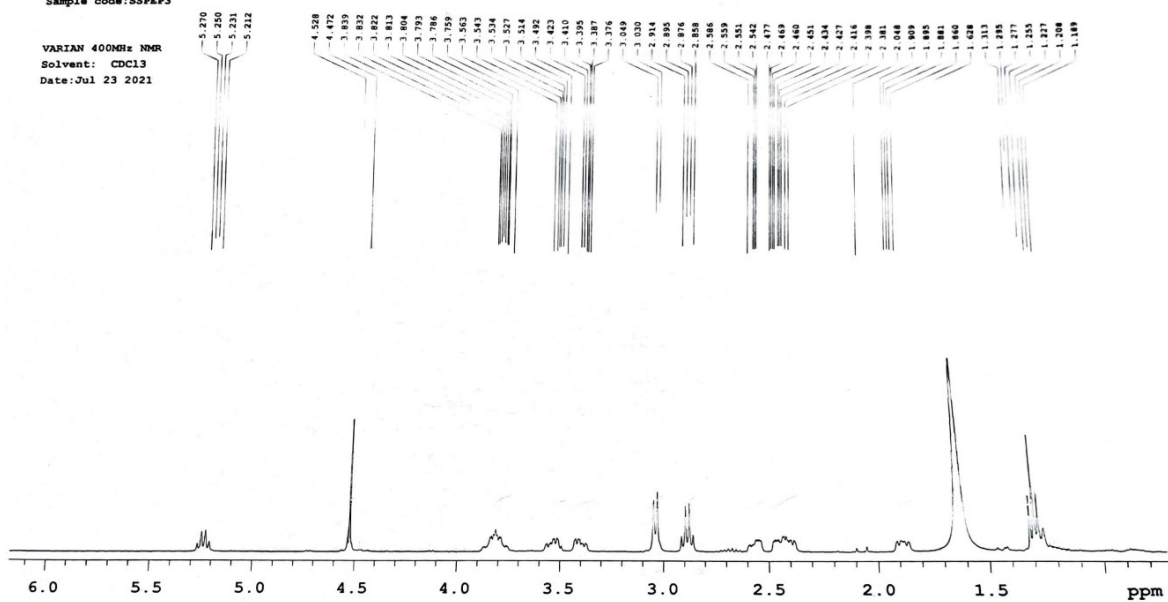
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Solvent: CDCl3  
Date:Jul 23 2021



Sample code:SSPEP3

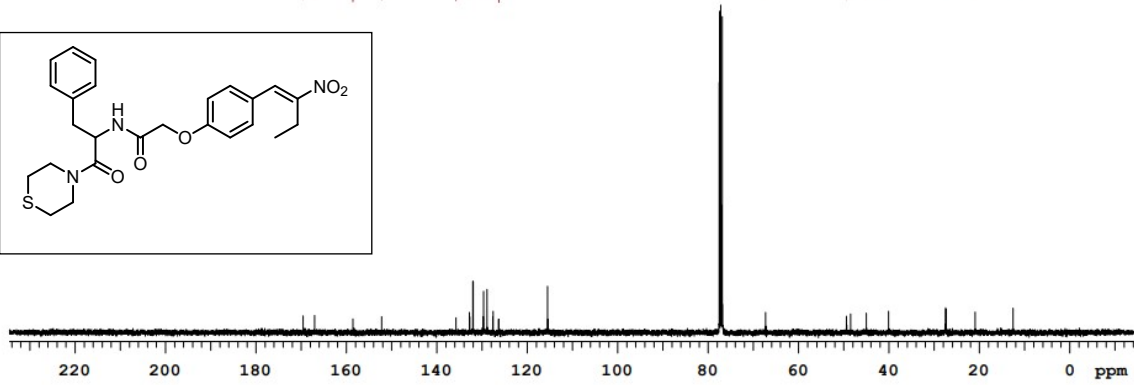
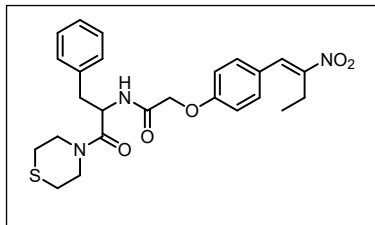
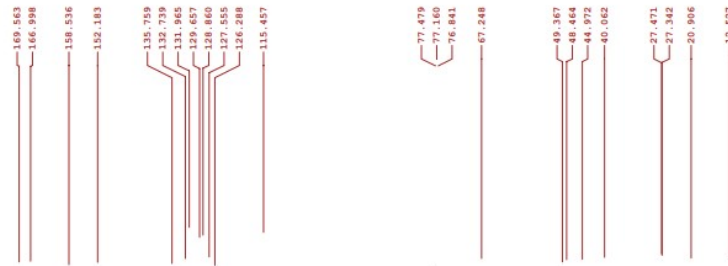
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Solvent: CDCl3  
Date:Jul 23 2021



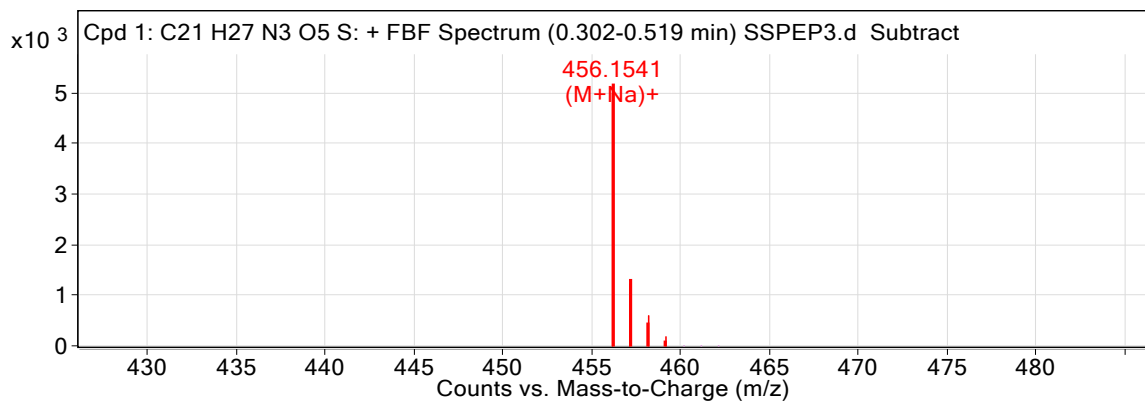


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Solvent: CDCl3  
Date: Jul 24 2021



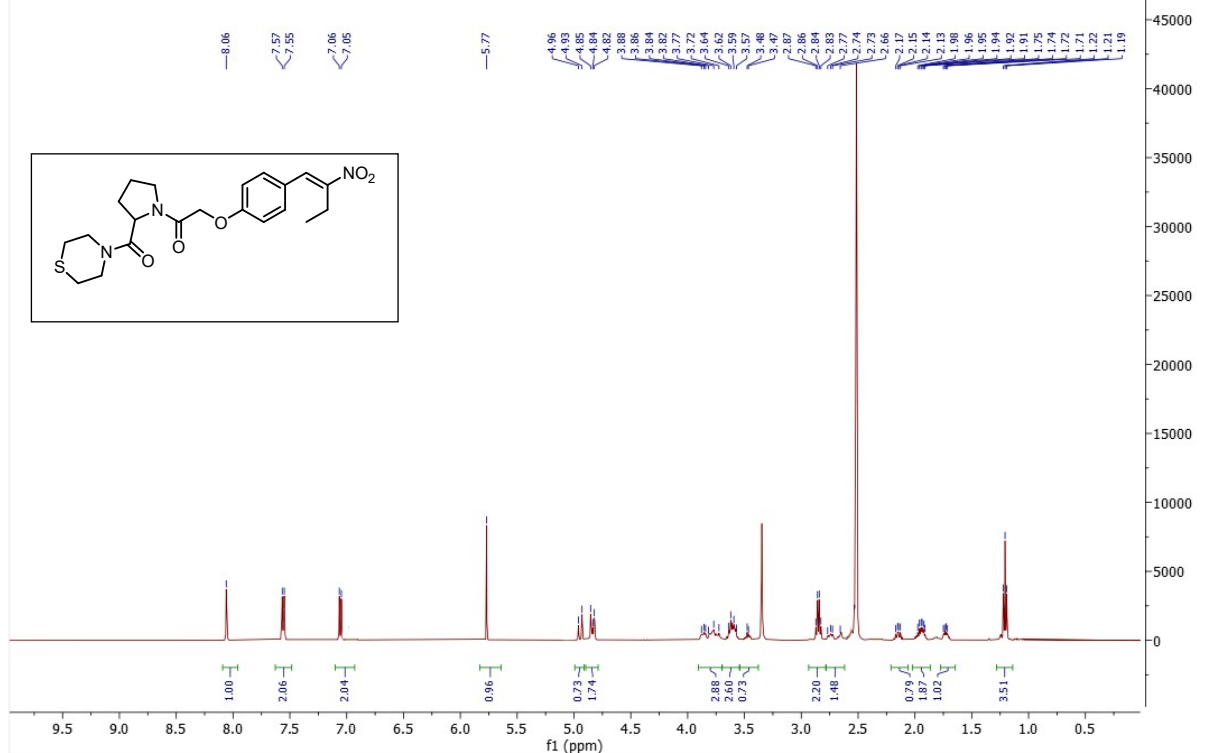
<sup>13</sup>C NMR spectra of the compound 14c



Mass spectra for the compound 14c

M

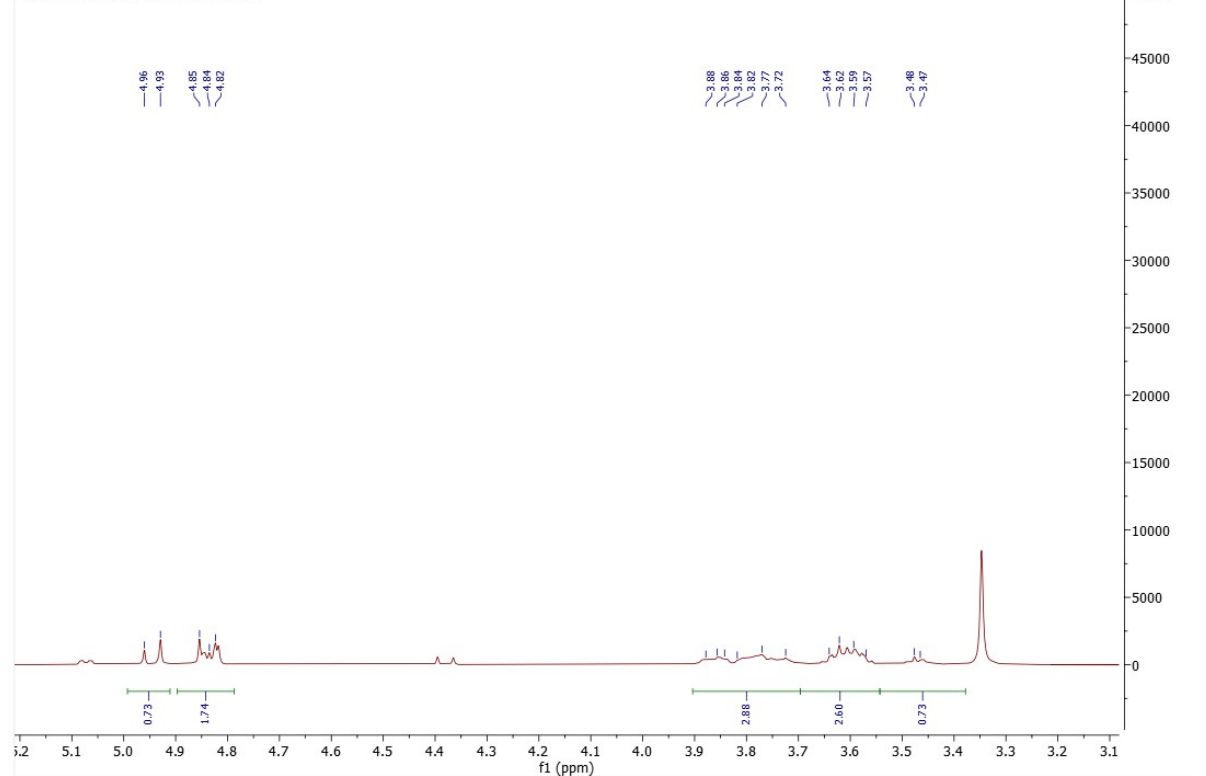
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SSPEP-7  
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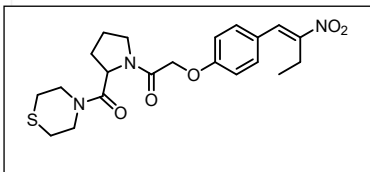
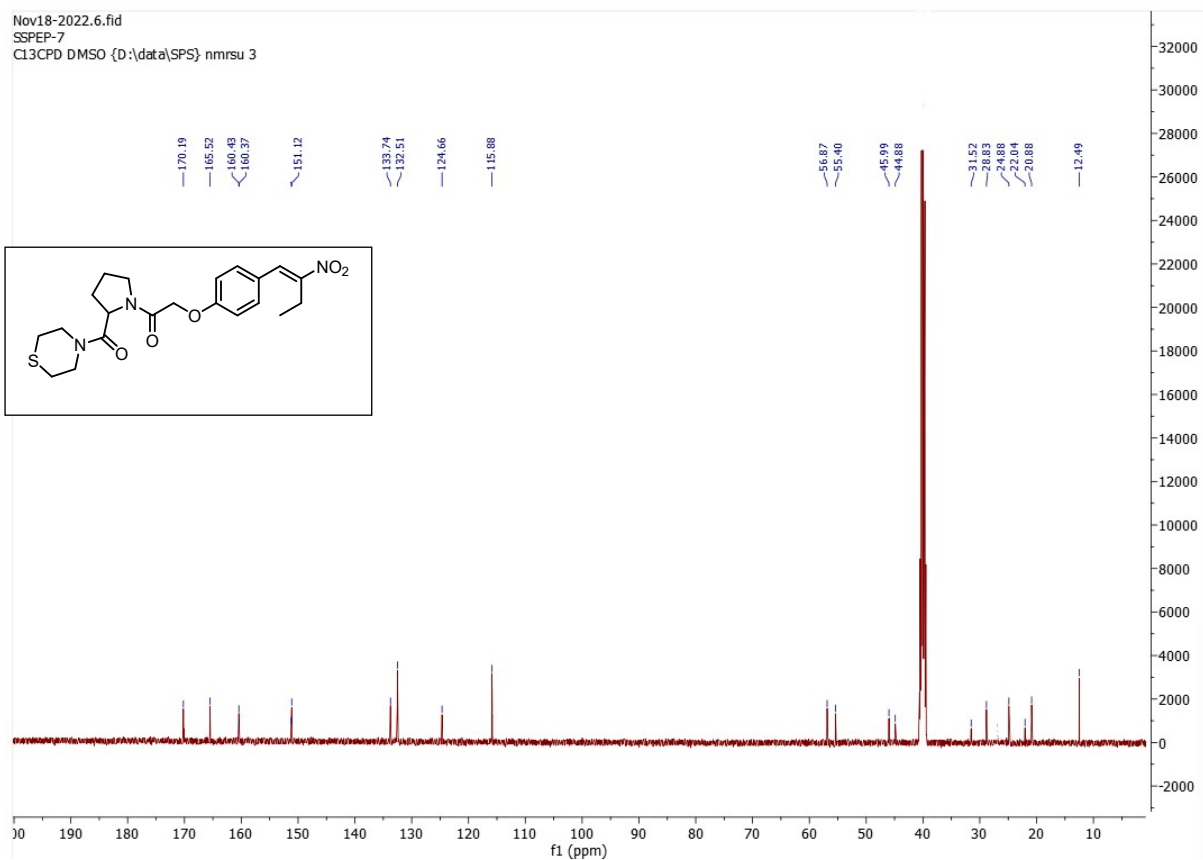
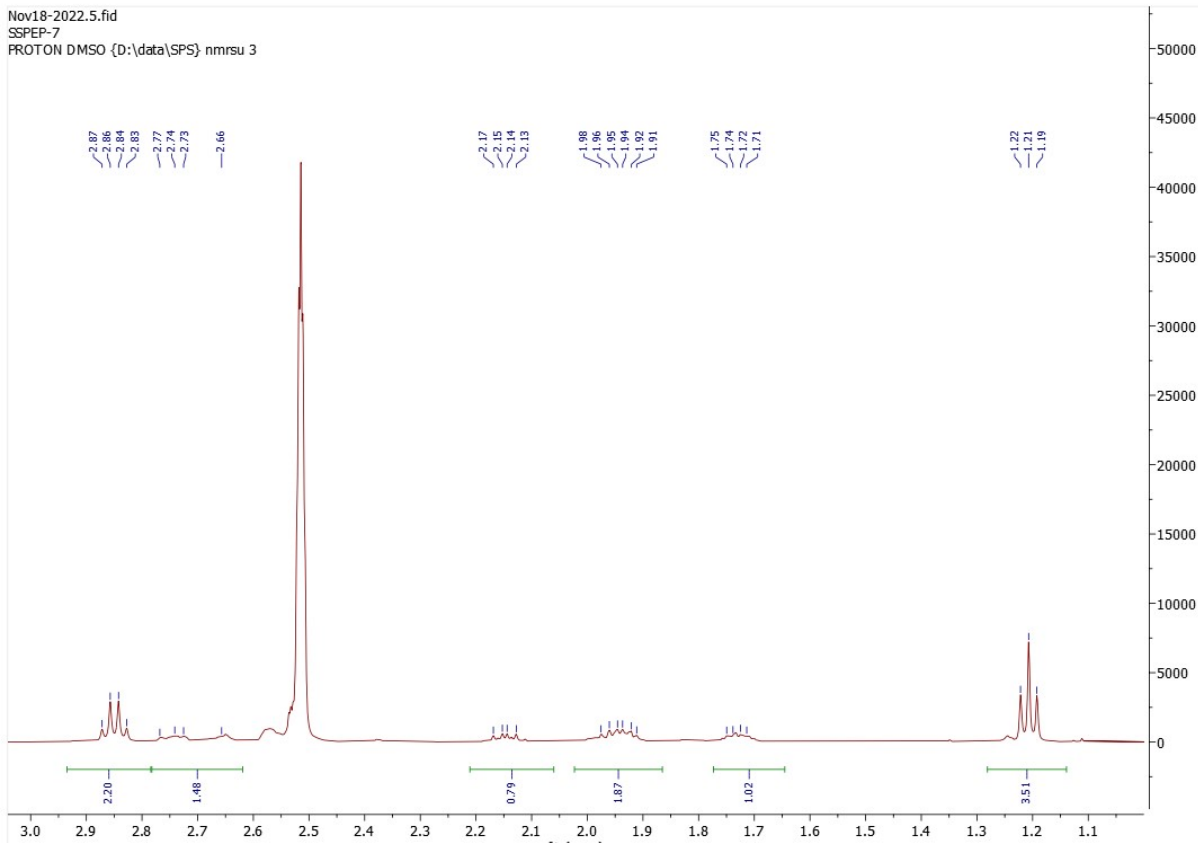


**<sup>1</sup>H NMR spectra of the compound 14d**

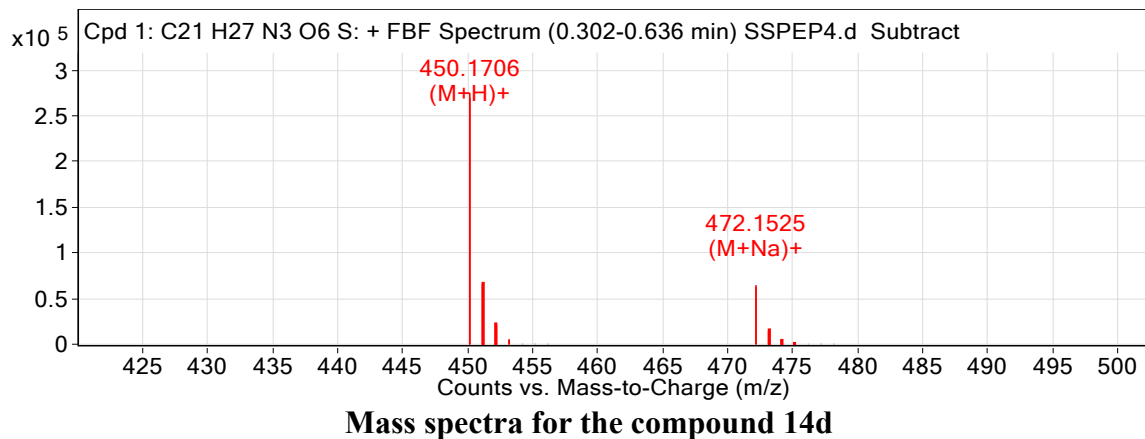
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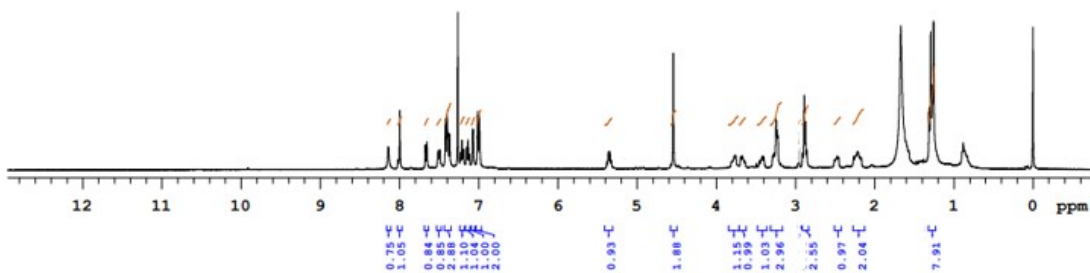
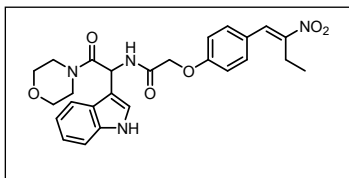


**<sup>13</sup>C NMR spectra of the compound 14d**



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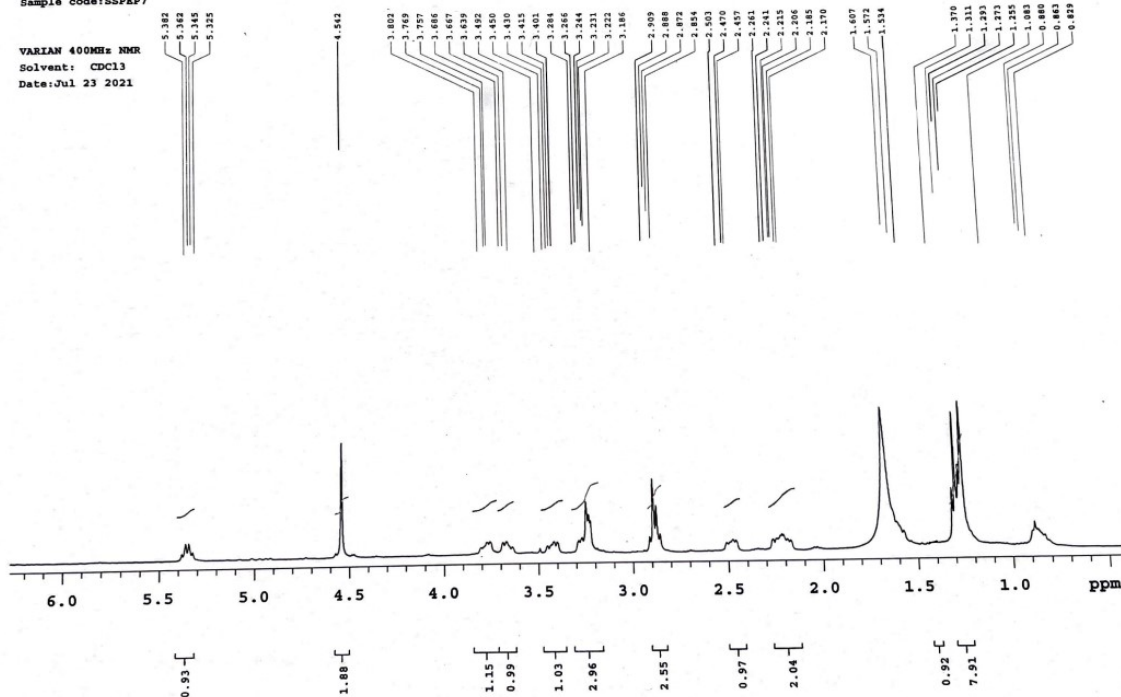
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 Date:Jul 23 2021



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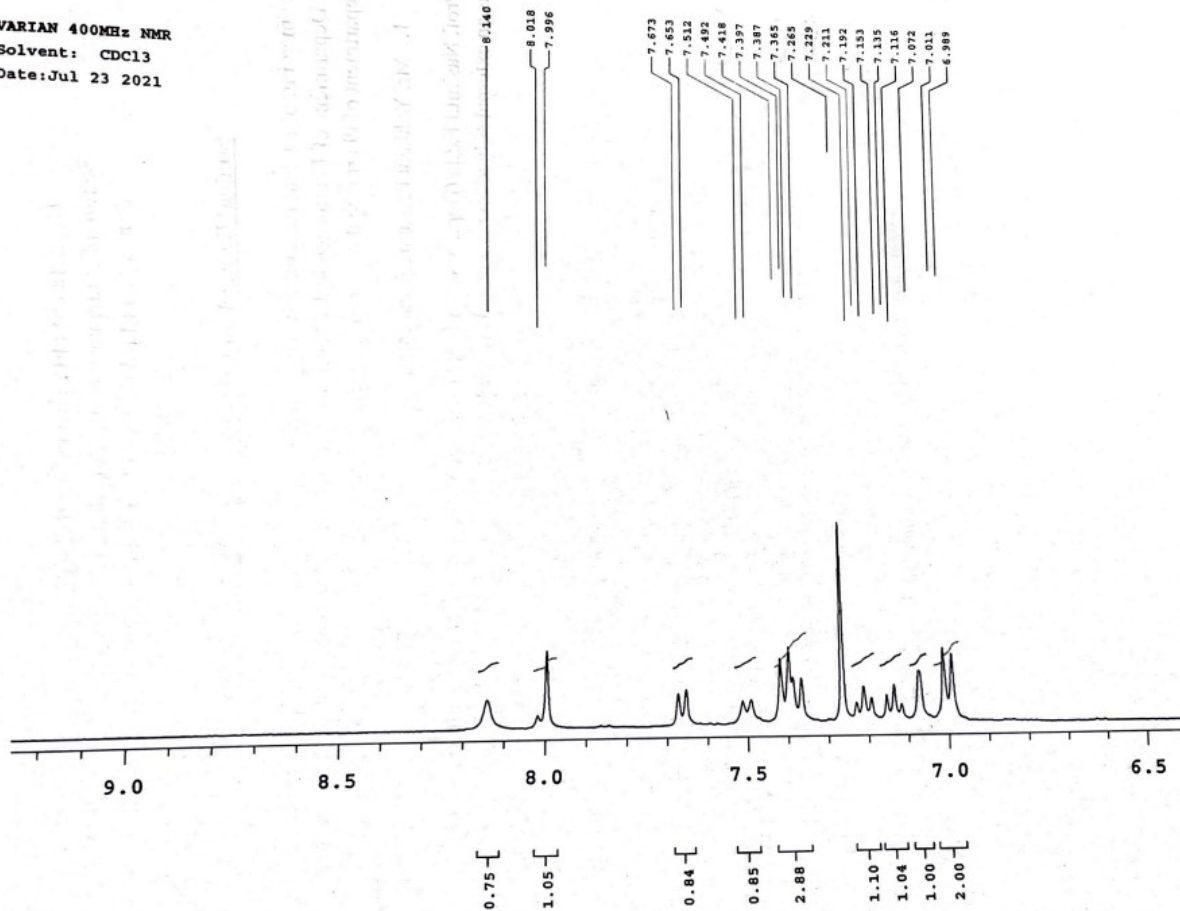
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Date:Jul 23 2021



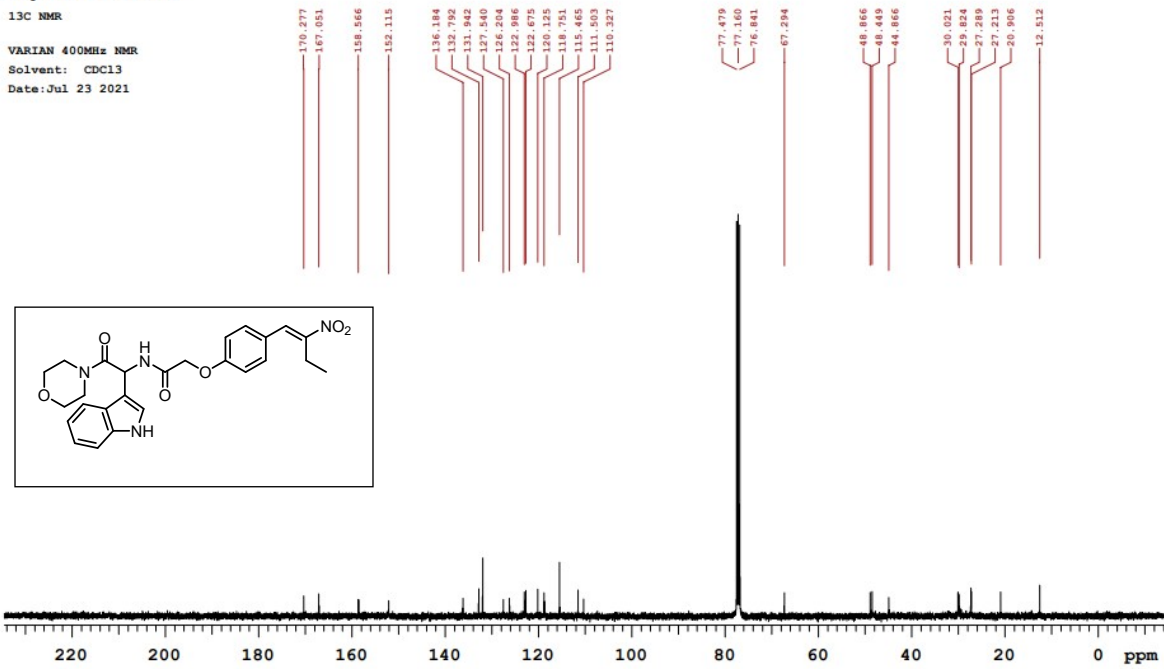
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Date:Jul 23 2021

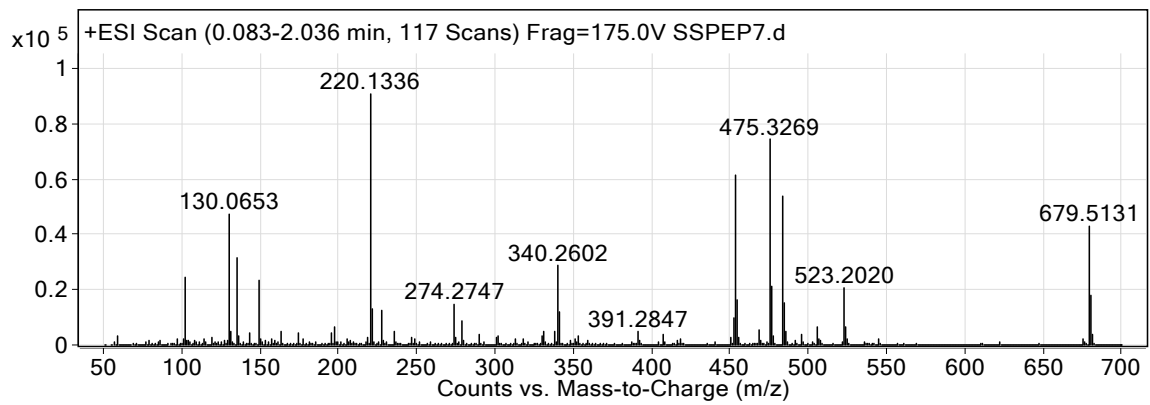


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13C NMR

VARIAN 400MHz NMR  
Solvent: CDCl3  
Date:Jul 23 2021



**<sup>13</sup>C NMR spectra of the compound 14e**



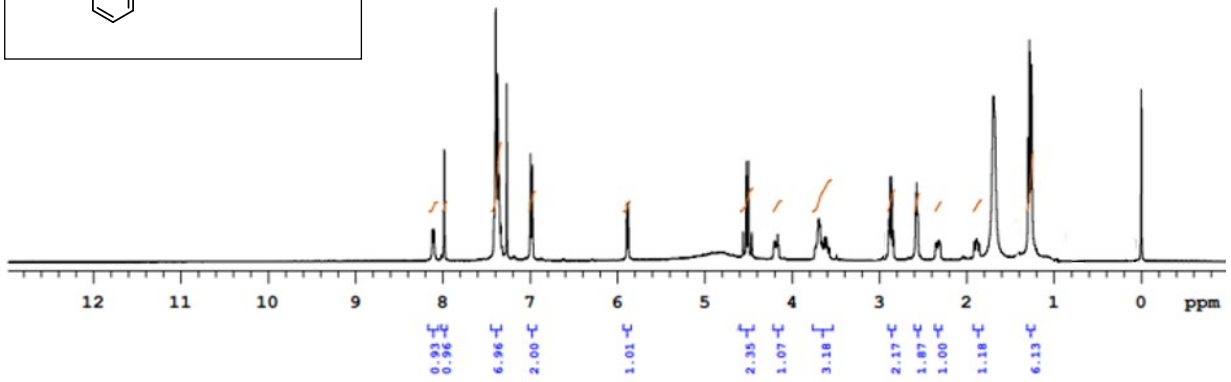
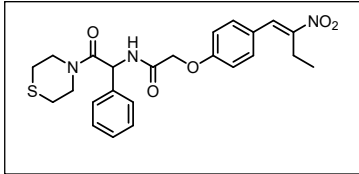
**Mass spectra for the compound 14e**

Sample code:SSPEP12

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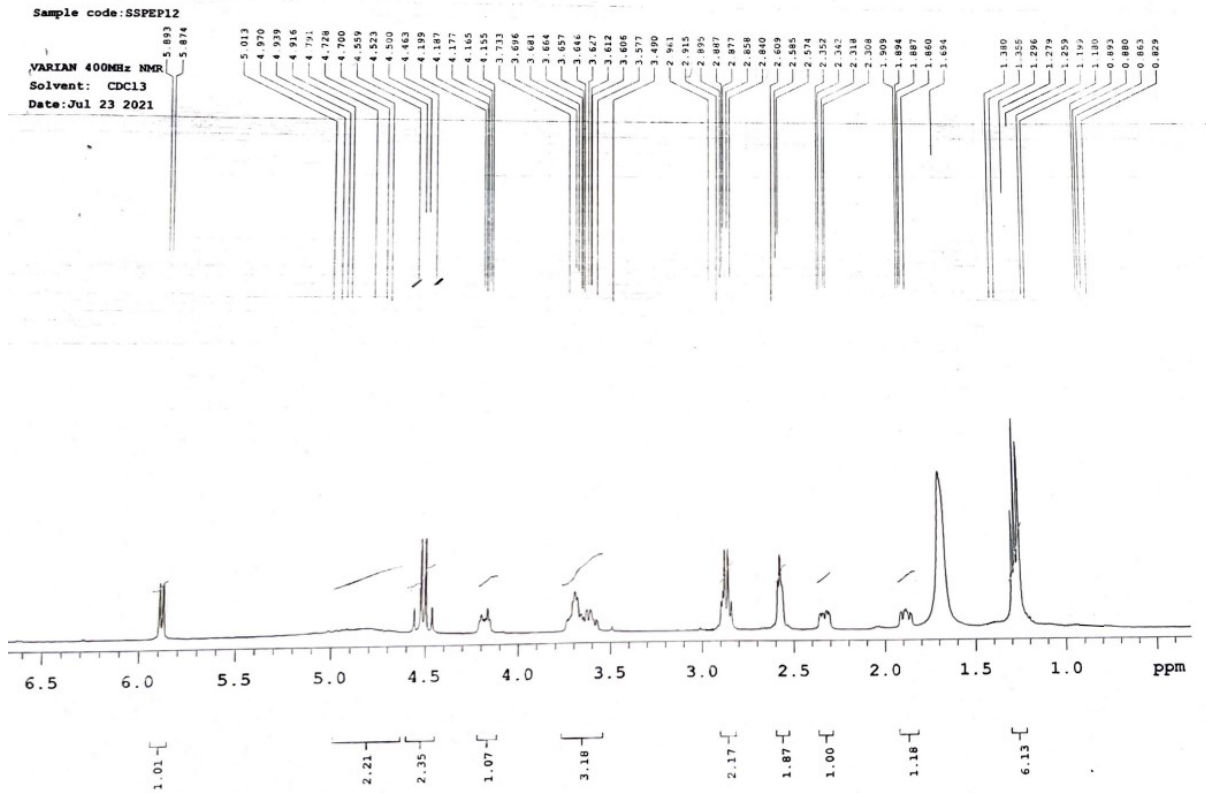
Solvent: CDCl3

Date:Jul 23 2021



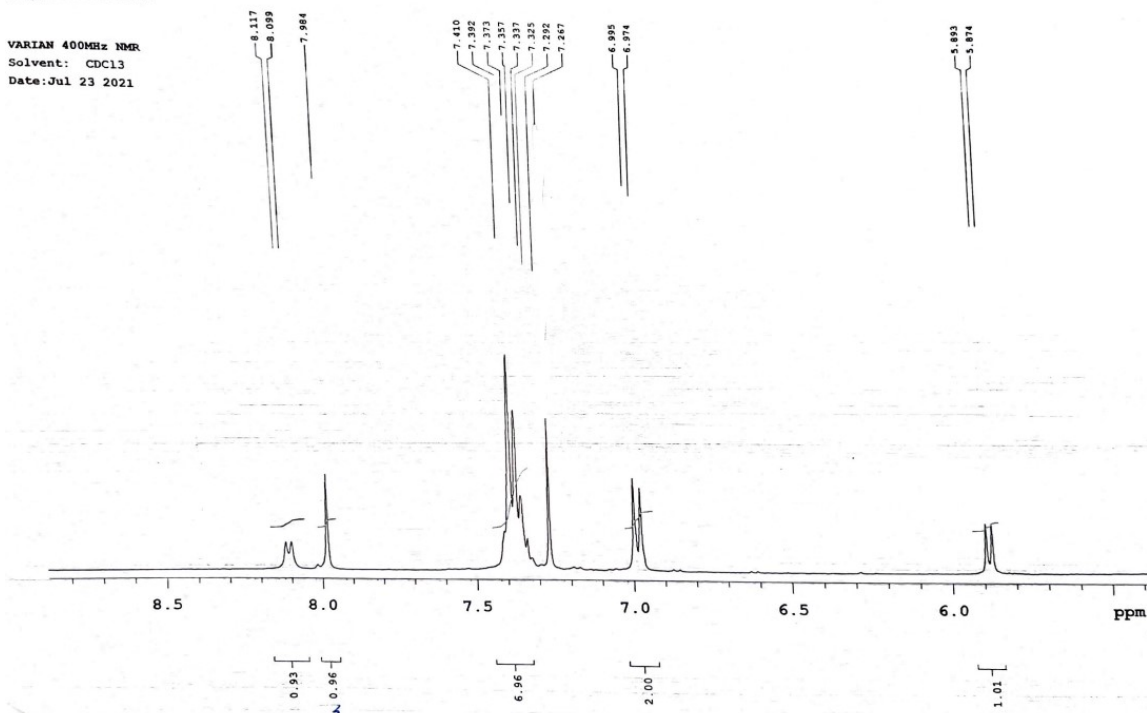
<sup>1</sup>H NMR spectra of the compound 14f

Expanded:



Sample code:SSPEP12

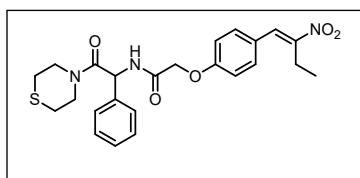
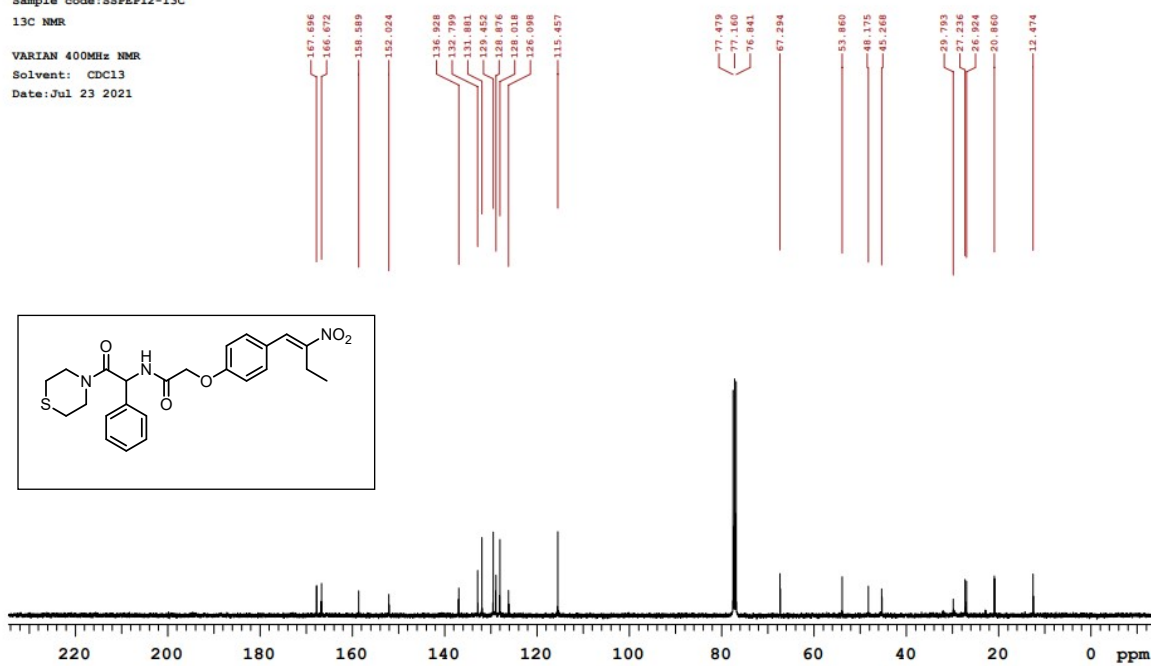
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Date:Jul 23 2021



Sample code:SSPEP12-13C

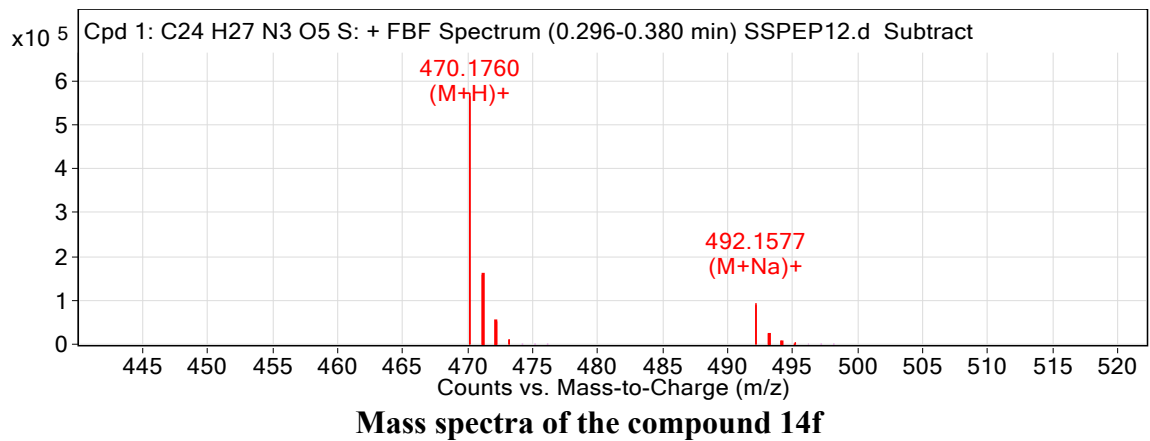
<sup>13</sup>C NMR

VARIAN 400MHz NMR  
Solvent: CDCl3  
Date:Jul 23 2021



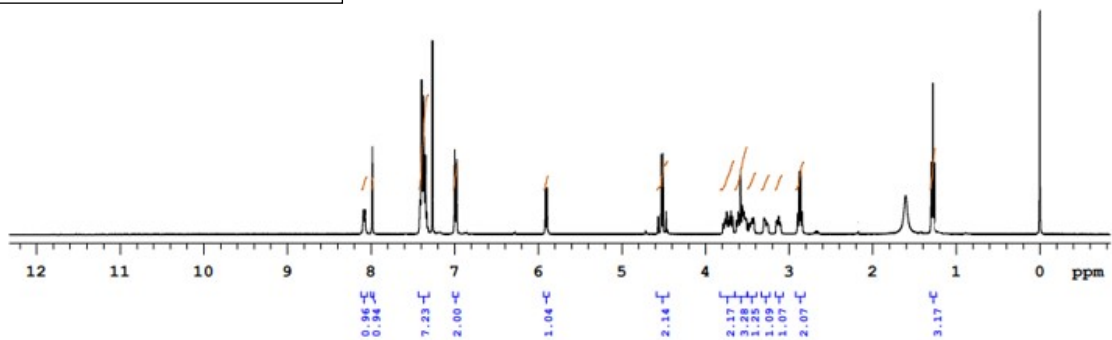
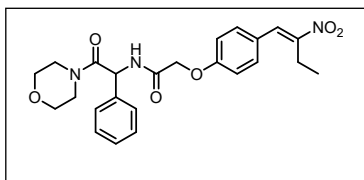
<sup>13</sup>C NMR spectra of the compound 14f





Sample code:SSPEP13

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Solvent: CDCl<sub>3</sub>  
Date:Jul 23 2021

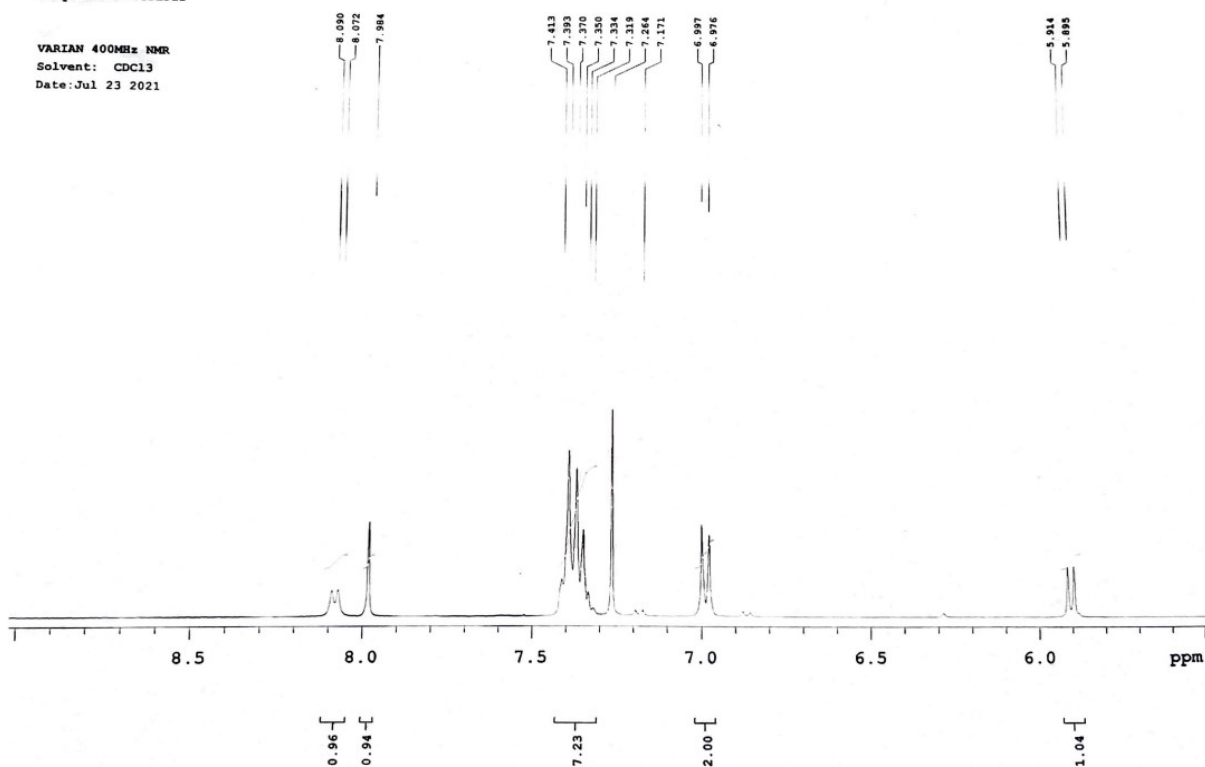


<sup>1</sup>H NMR spectra of the compound 14g

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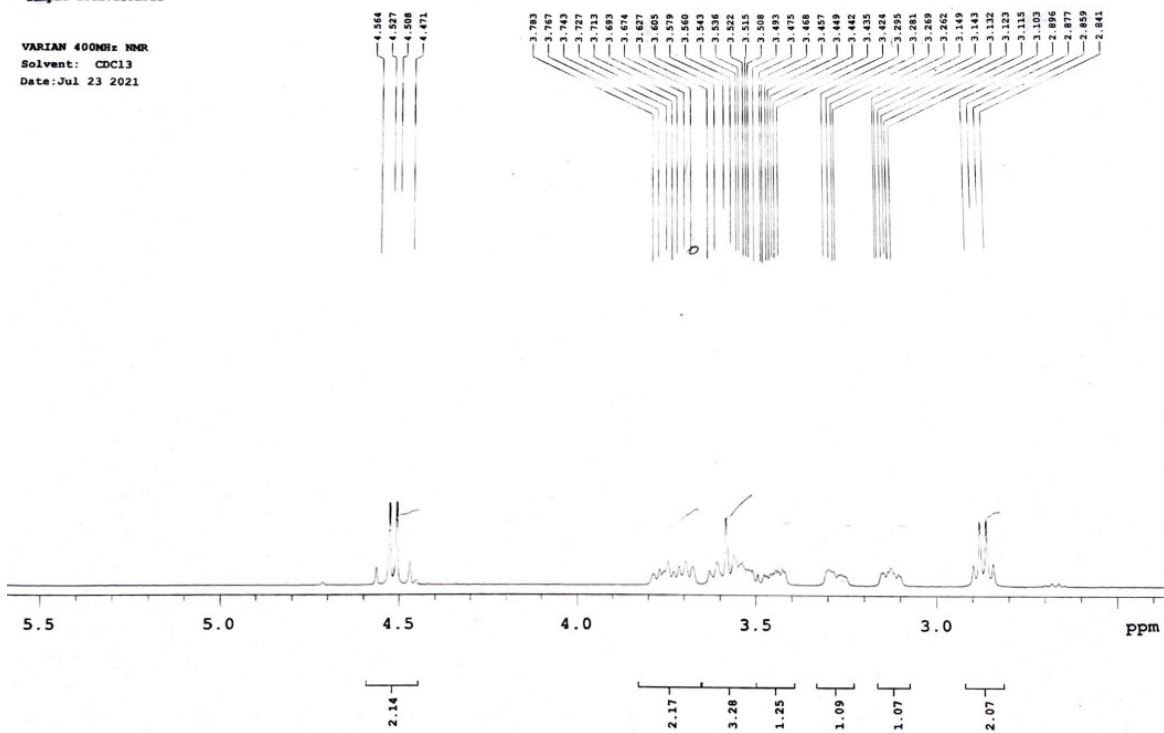
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Solvent: CDCl3  
Date:Jul 23 2021



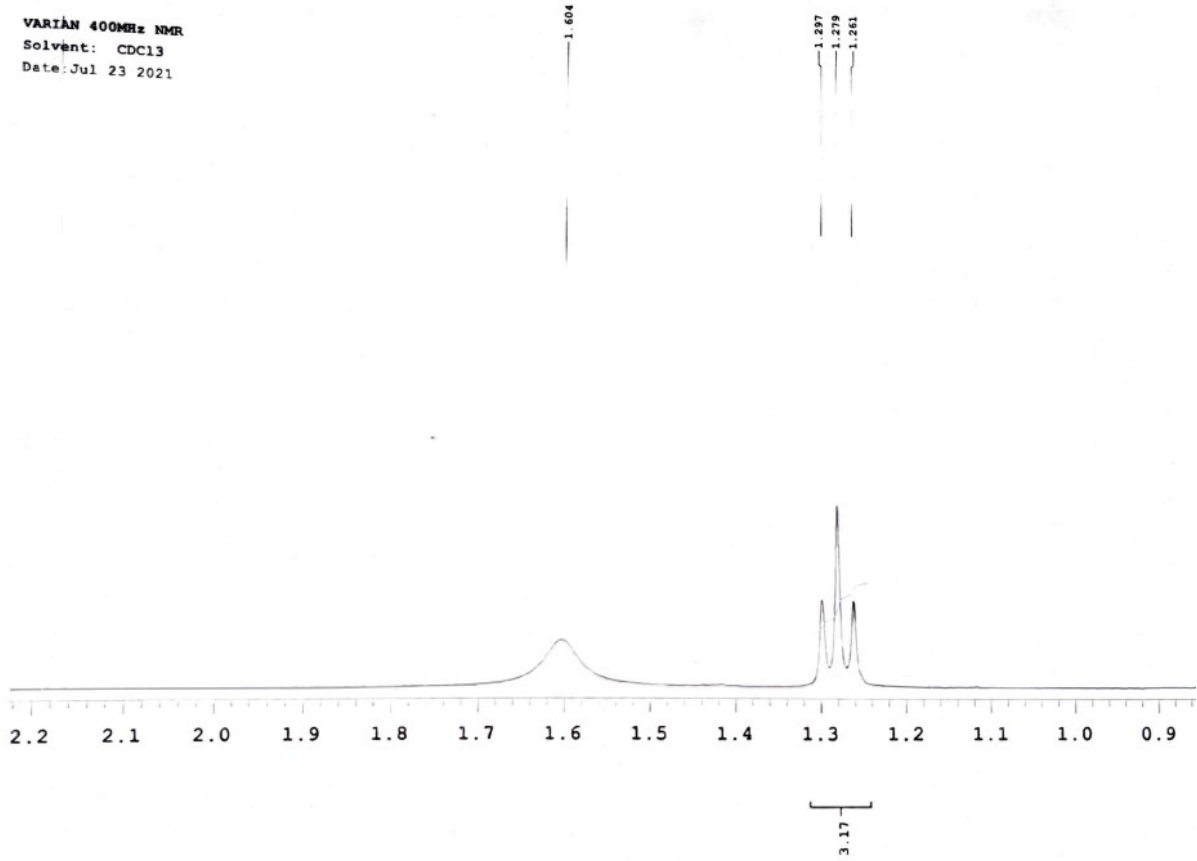
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Date:Jul 23 2021



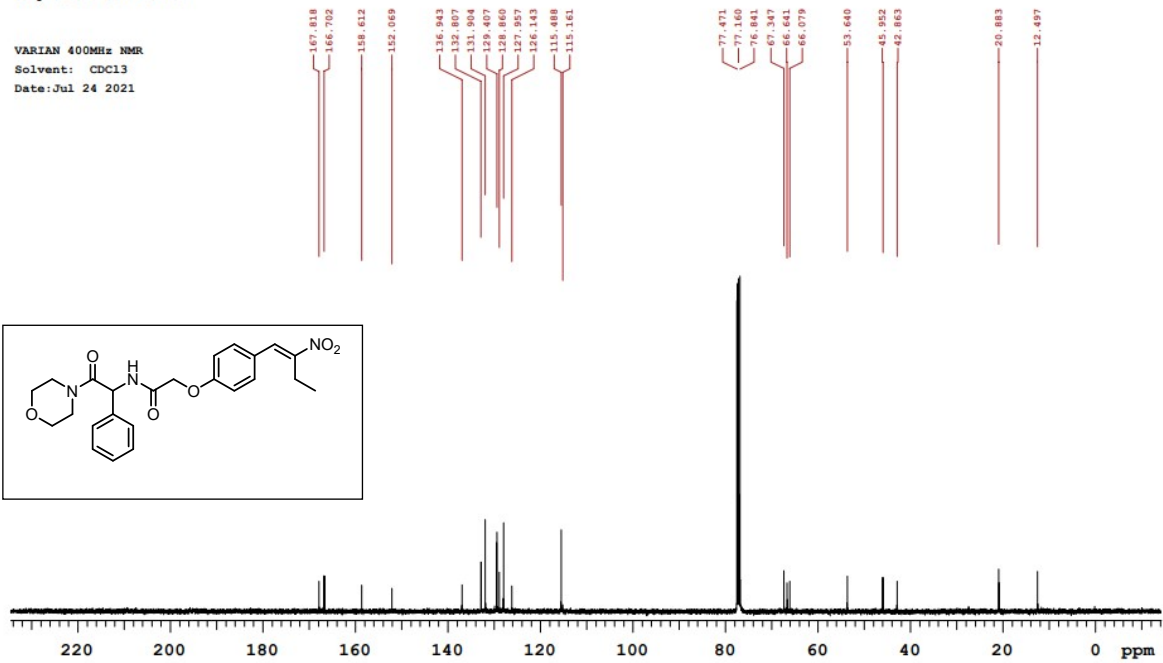
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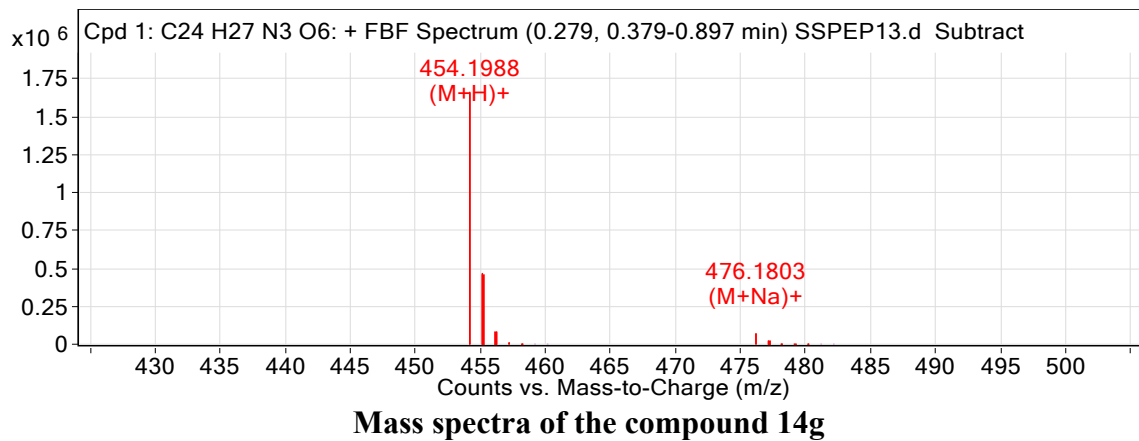


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Date: Jul 24 2021

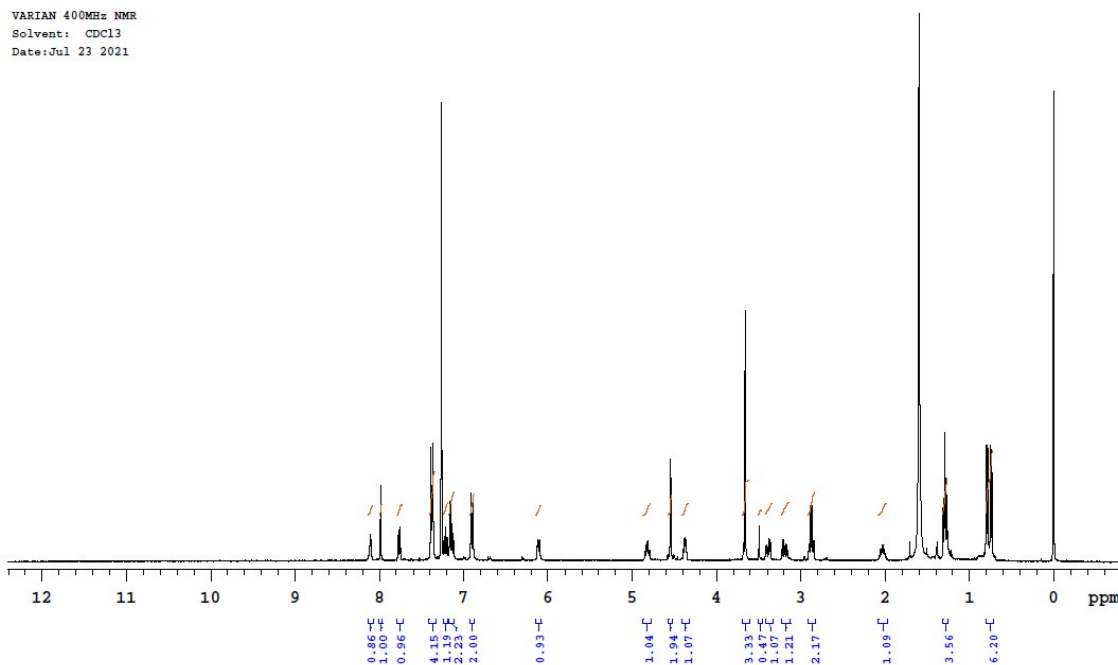


<sup>13</sup>C NMR spectra of the compound 14g



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Date:Jul 23 2021

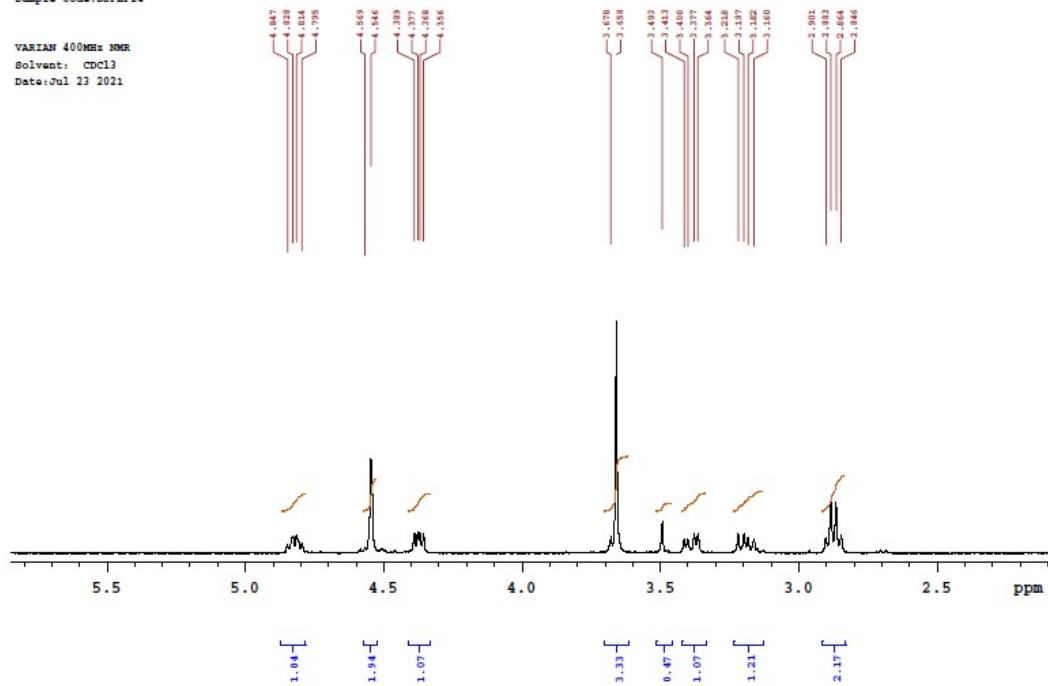


<sup>1</sup>H NMR for the compound 14h

# Expanded:

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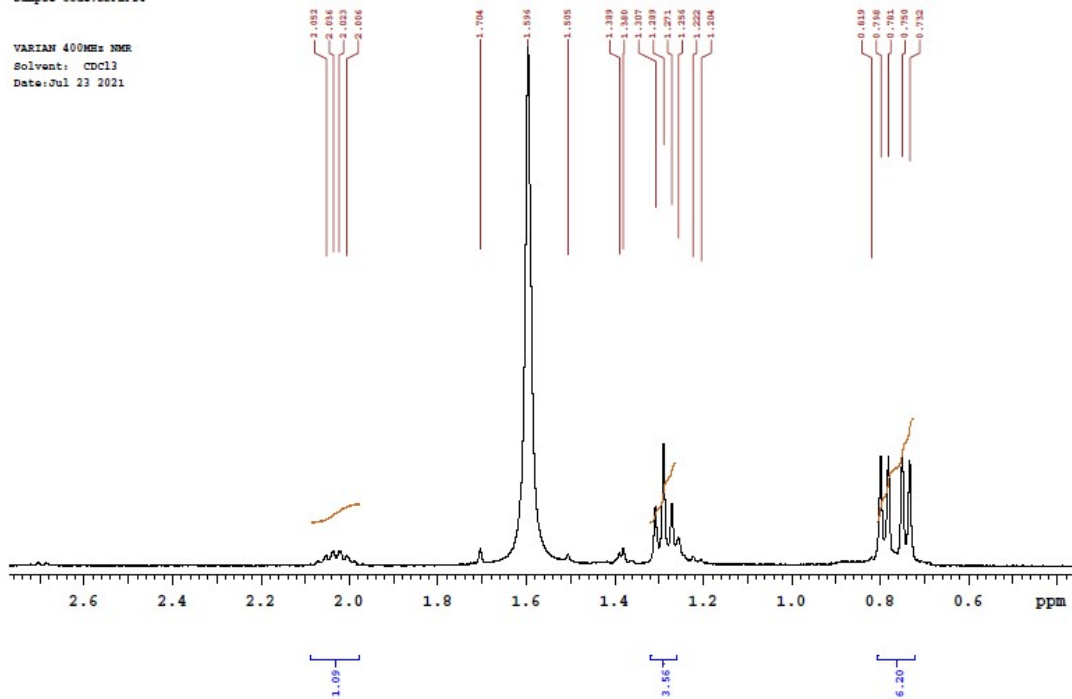
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Date: Jul 23 2021



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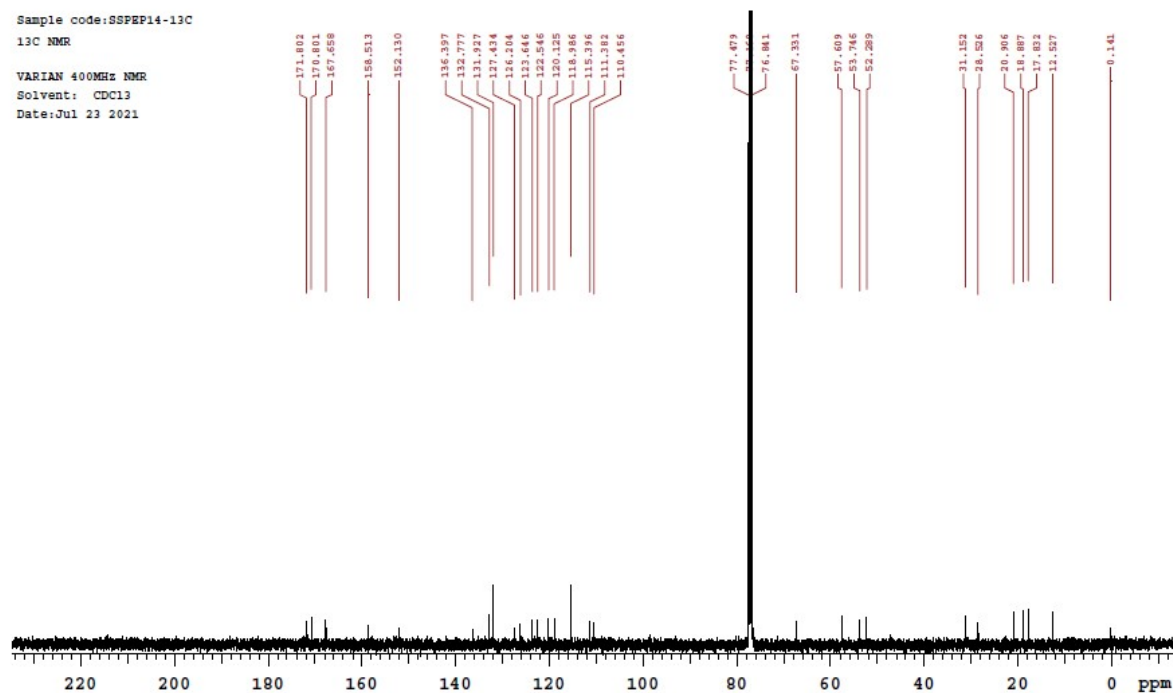
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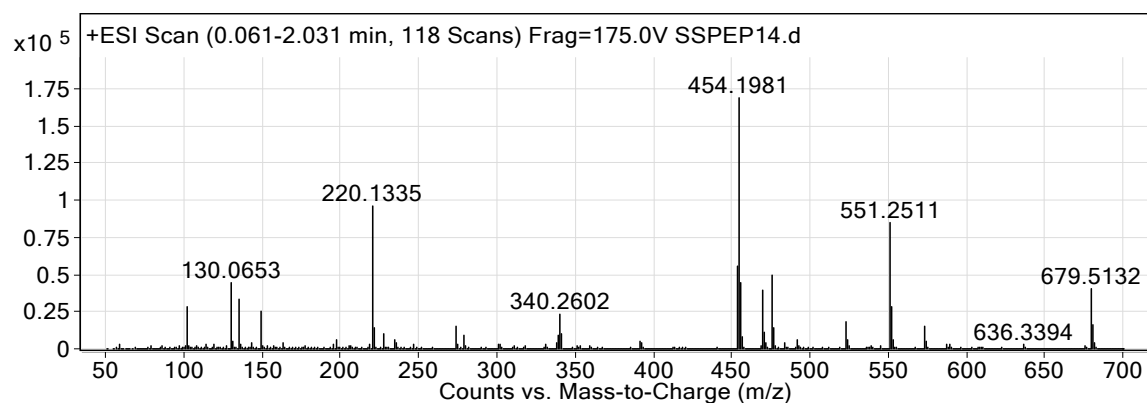


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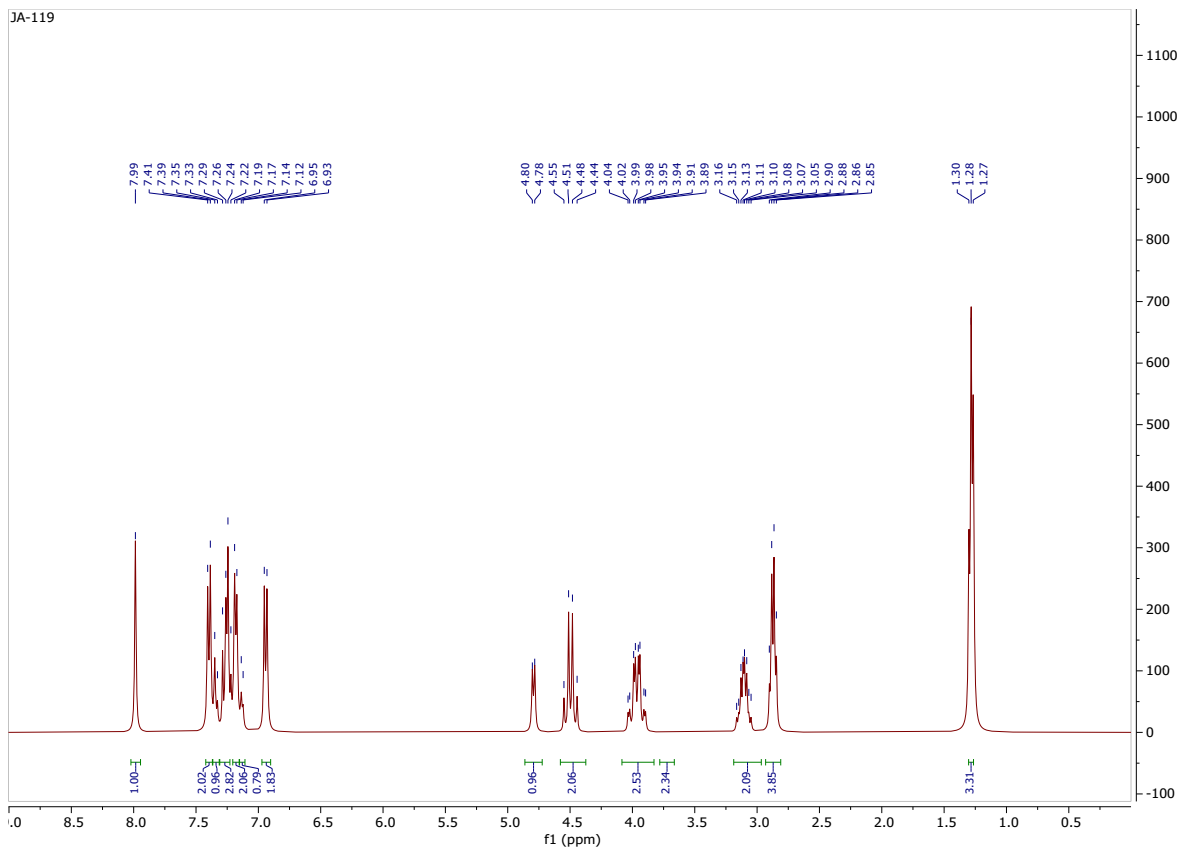
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Solvent: CDCl3  
Date:Jul 23 2021



**13C NMR spectra of the compound 14h**

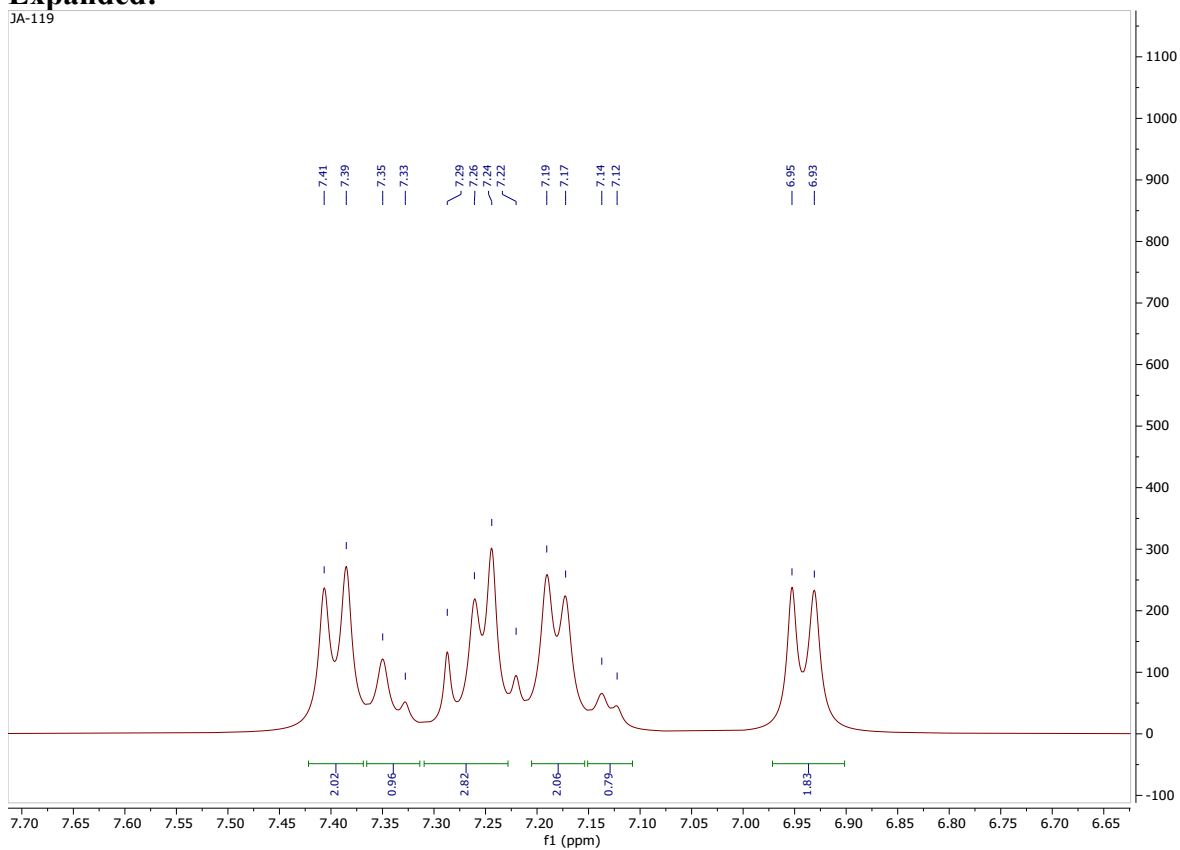


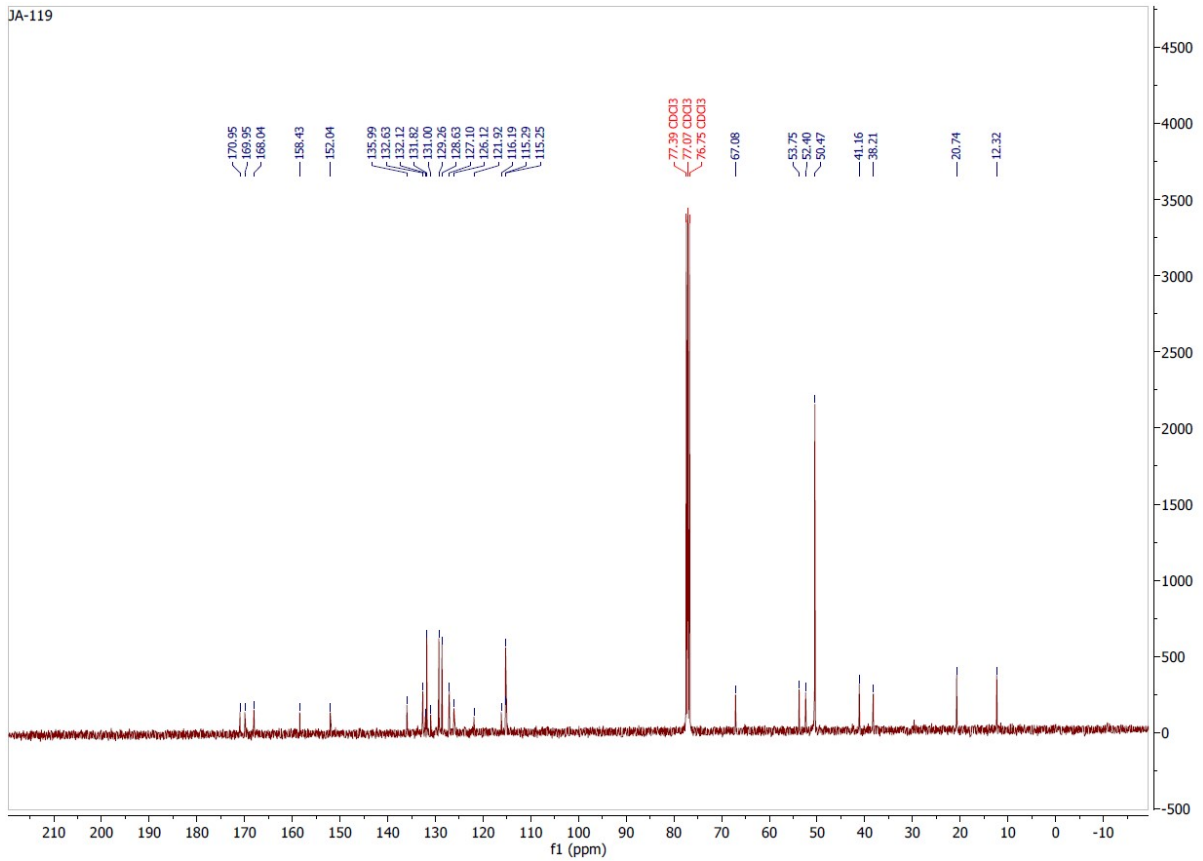
**Mass spectra for the compound 14h**



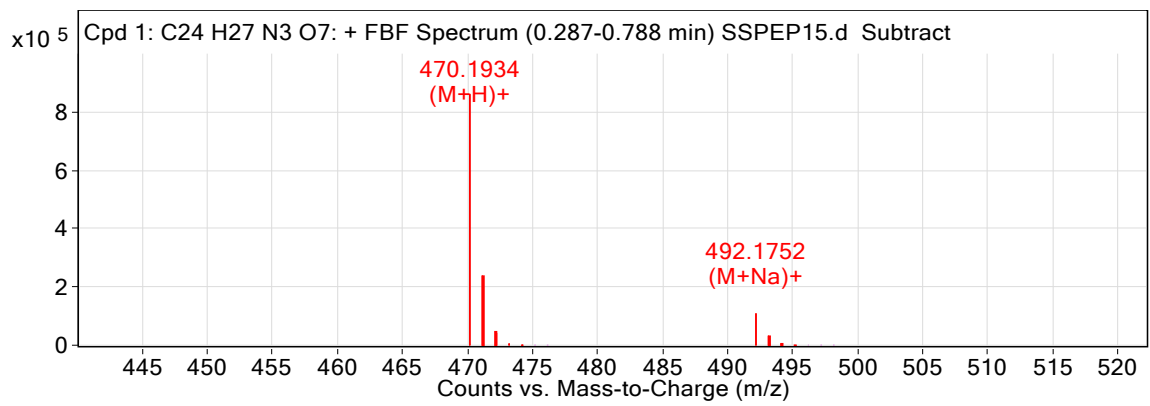
**<sup>1</sup>H NMR spectra of the compound 14i**

**Expanded:**



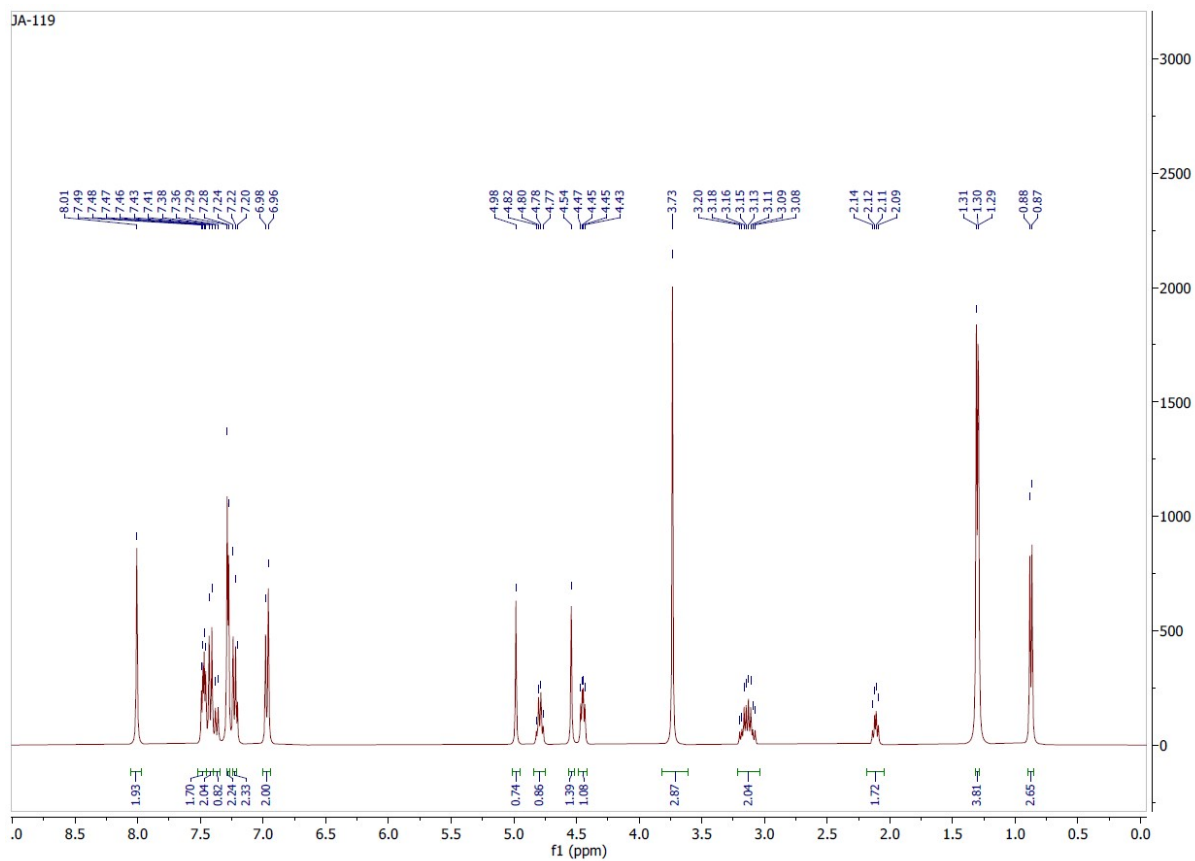


**<sup>13</sup>C NMR spectra of compound 14i**

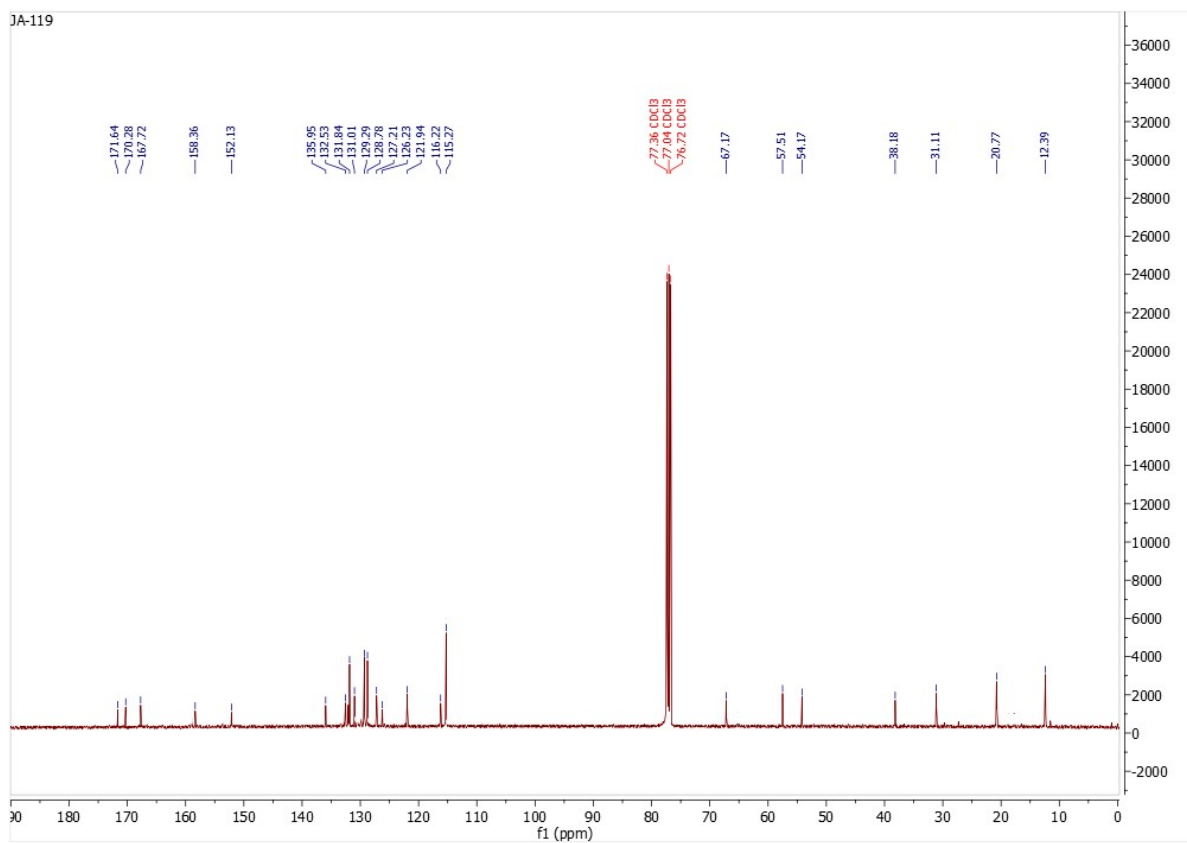


**Mass spectra for the compound 14i**

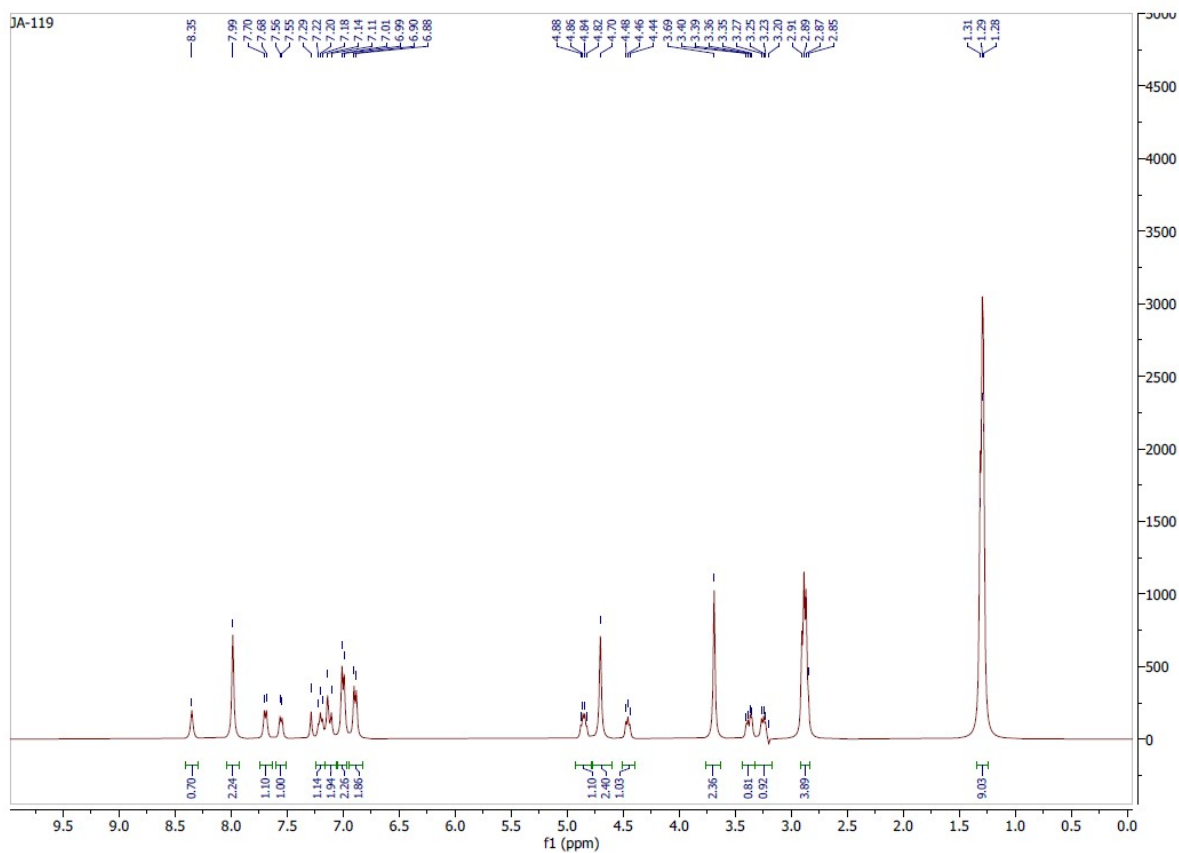
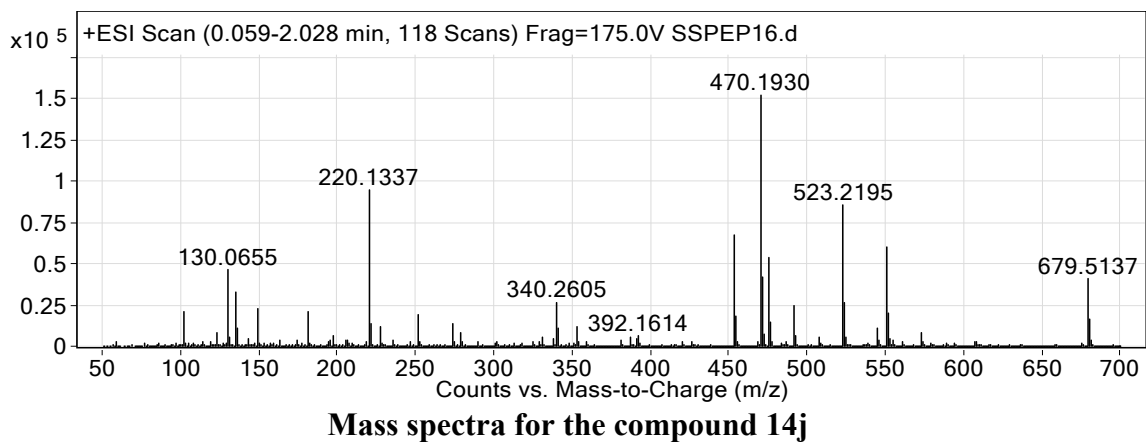


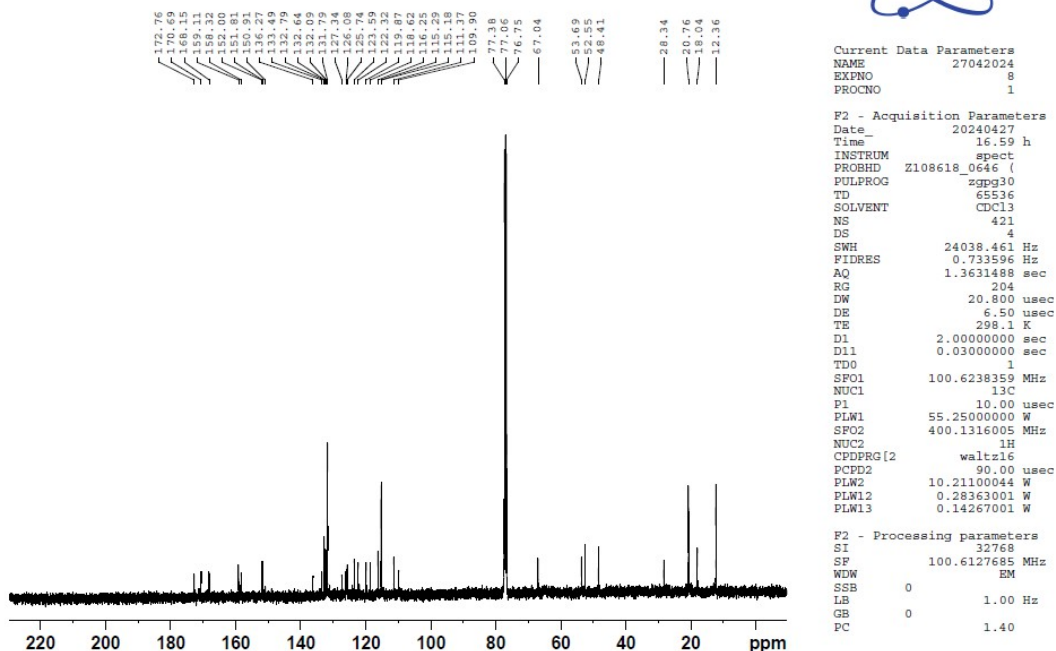


**<sup>1</sup>H NMR spectra of compound 14j**

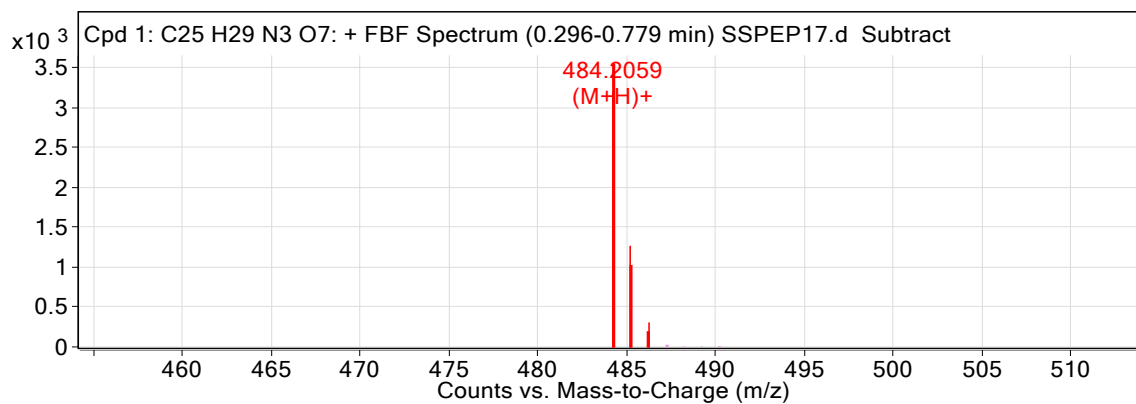


**<sup>13</sup>C spectra of compound 14j**



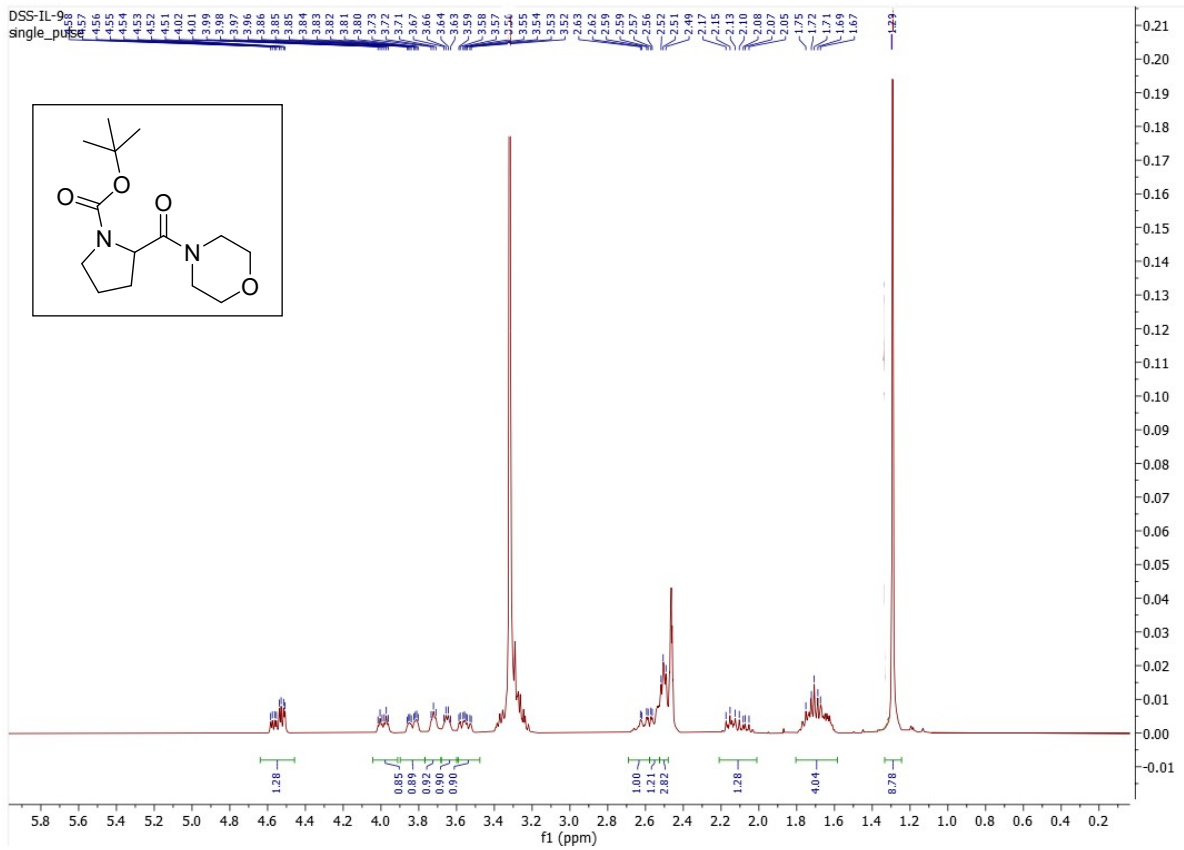
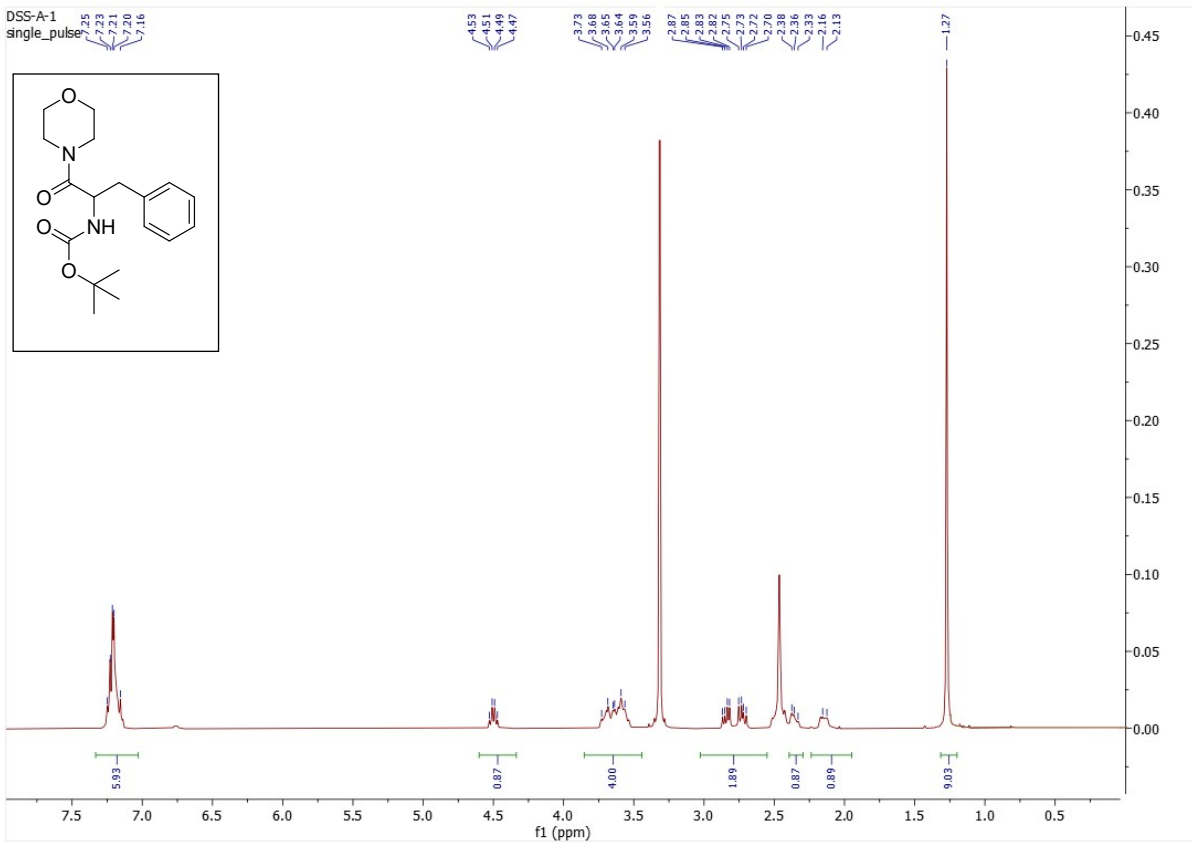


<sup>13</sup>C NMR spectra for compound 14k



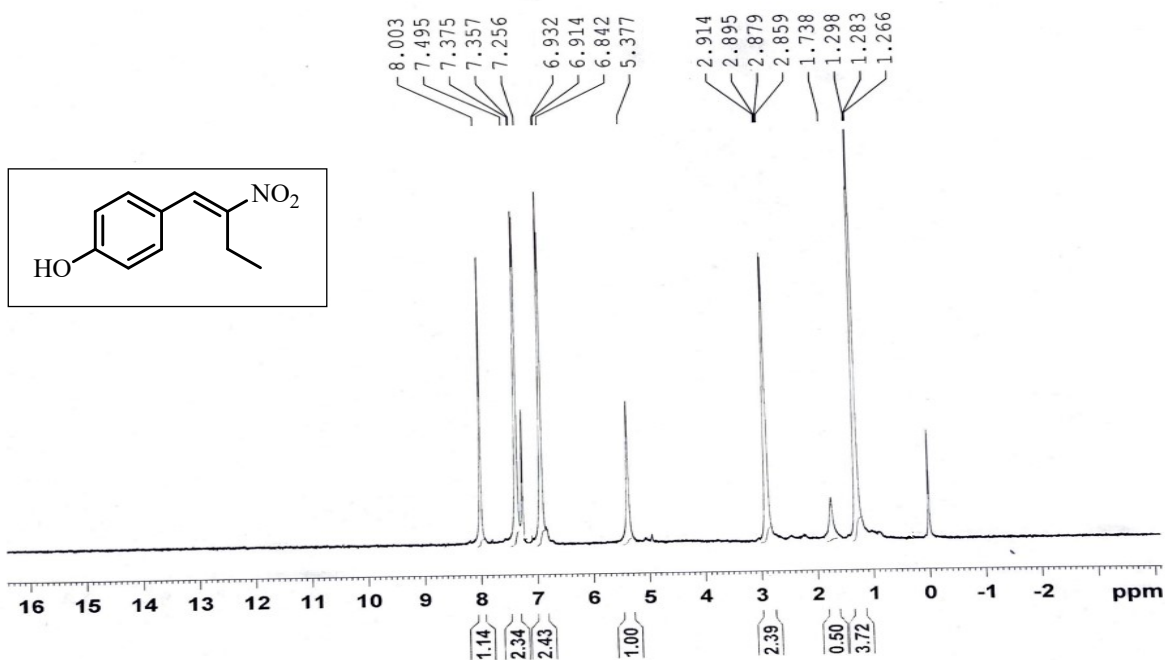
Mass spectra for the compound 14k

# NMR Spectra for starting materials:



# Compound 10:

FR JH SNS S SHAFI SS 51



# Compound 11

ss3 dms0

