

## Supporting Information

### **Electrochemical synthesis of diverse sulfonamide derivatives depending on the potential electrode and their antimicrobial evaluation**

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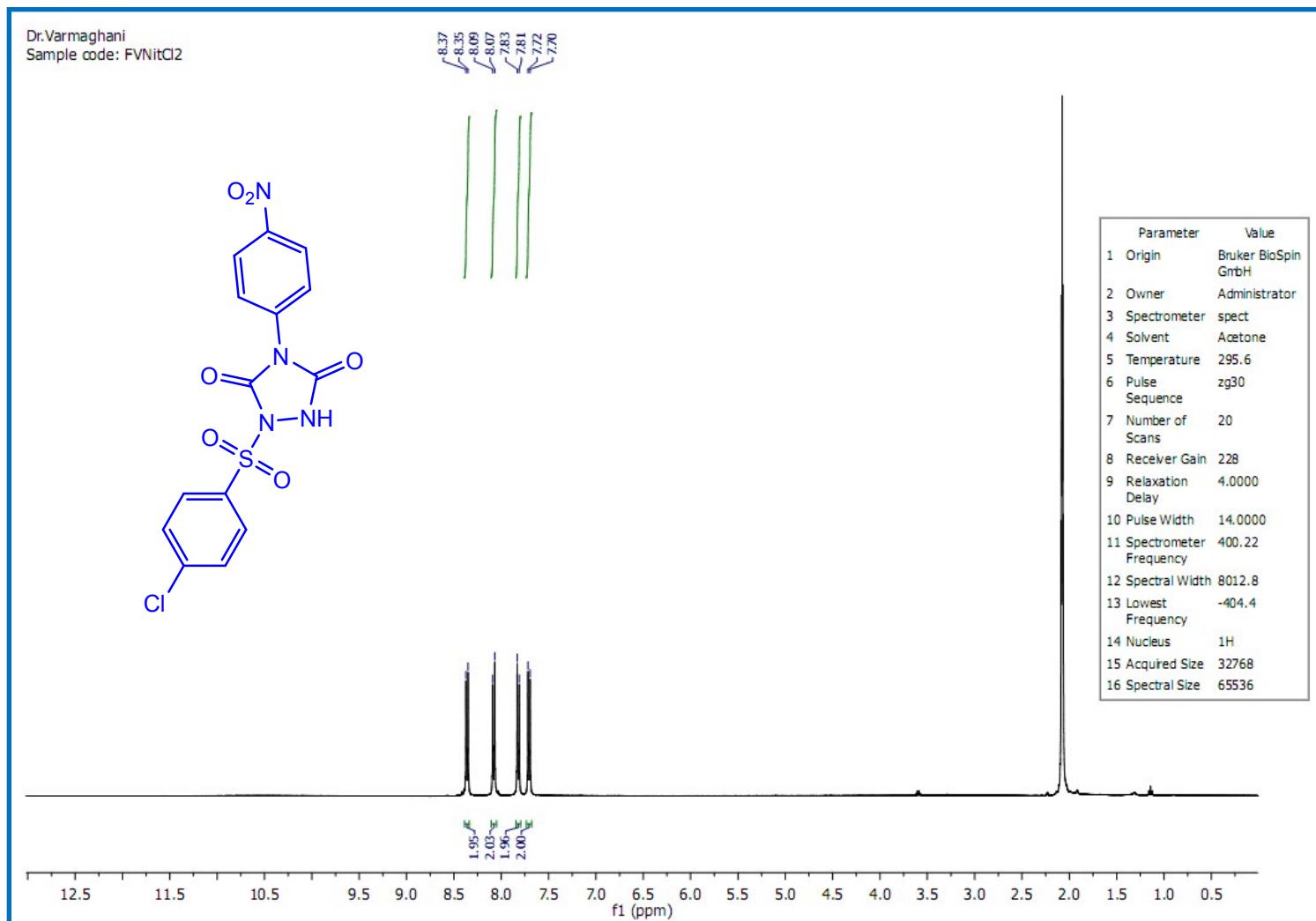
[f.varmaghani@iasbs.ac.ir](mailto:f.varmaghani@iasbs.ac.ir)

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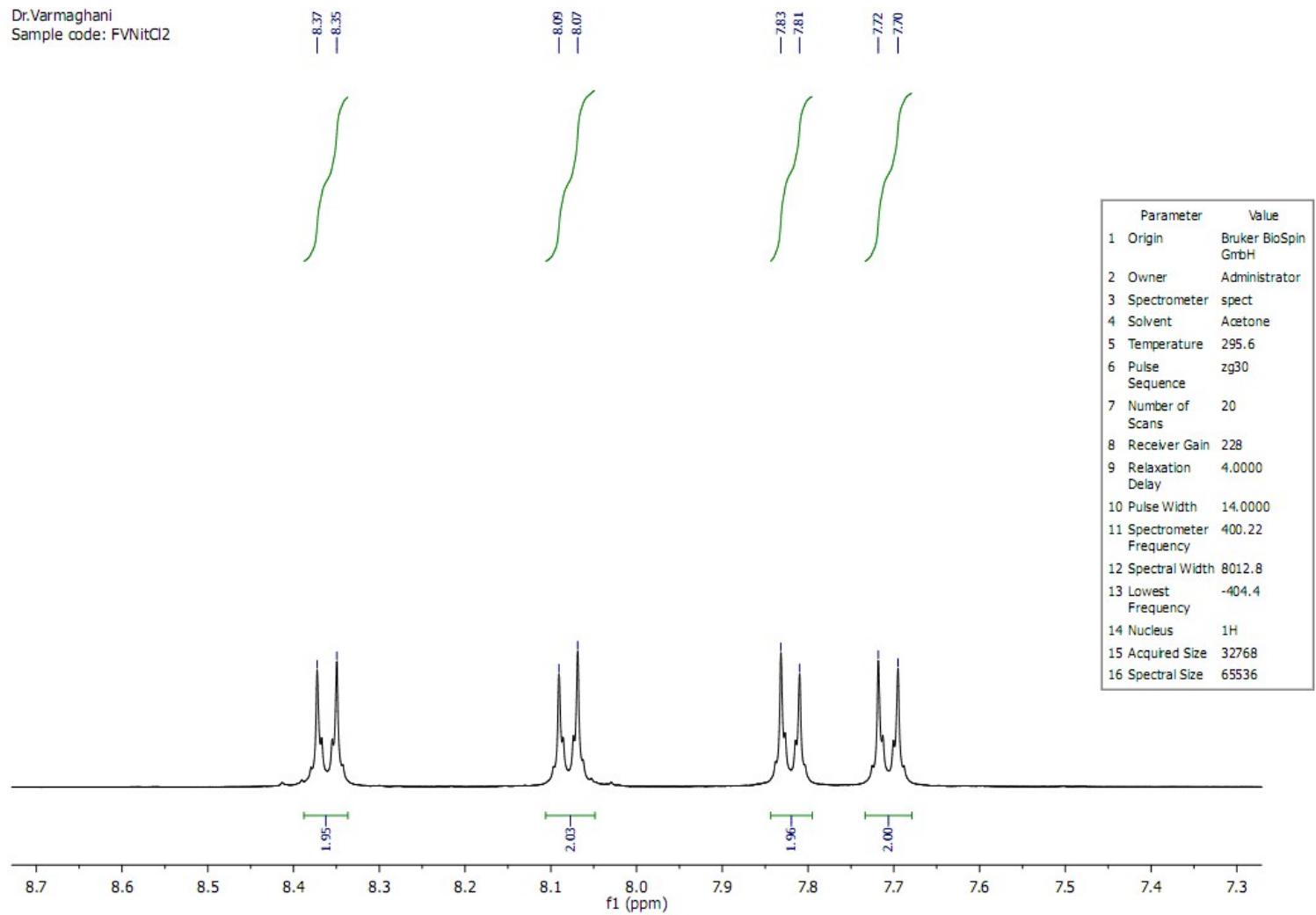
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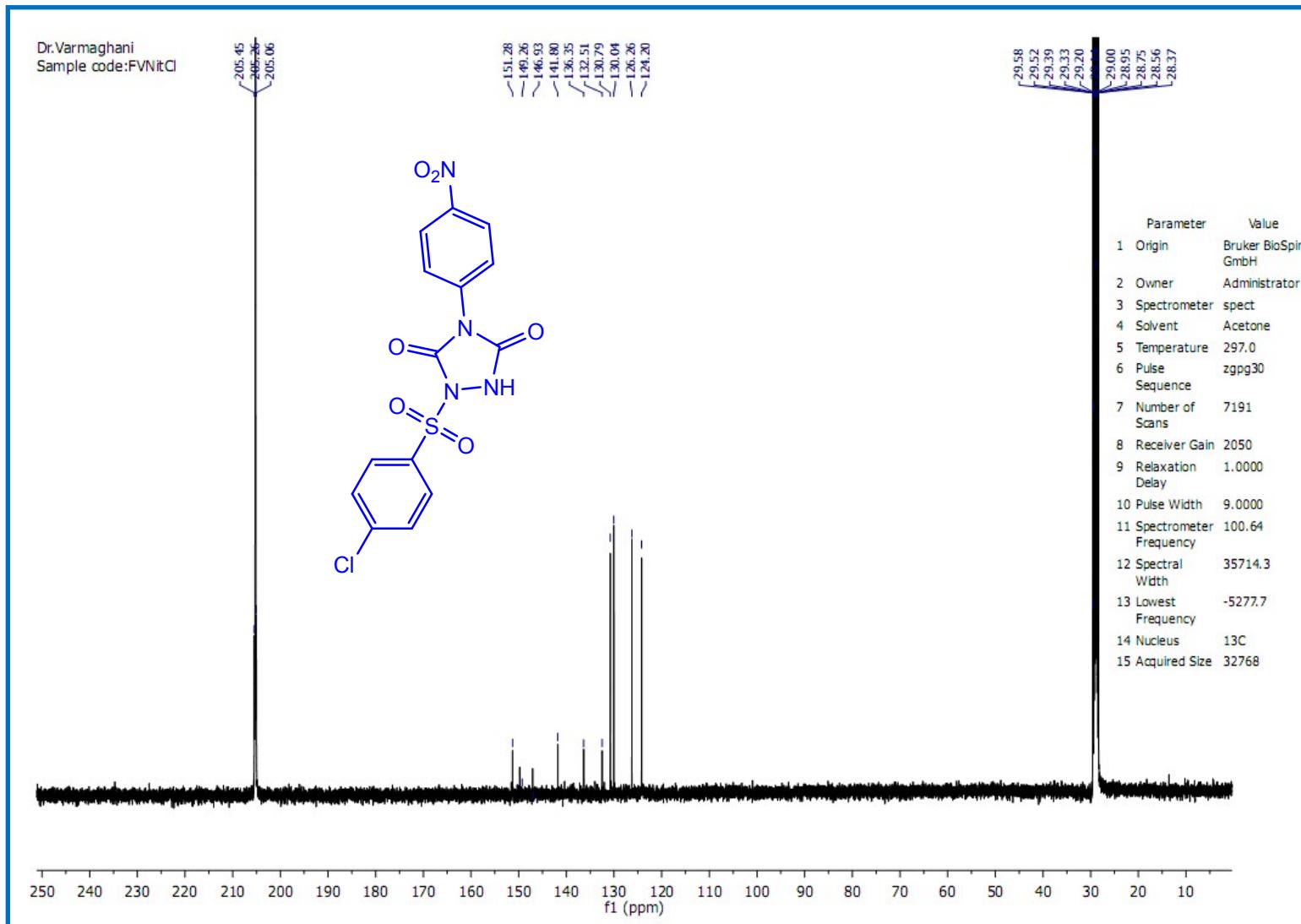
1.  $^1\text{H}$  NMR spectrum of **2a**



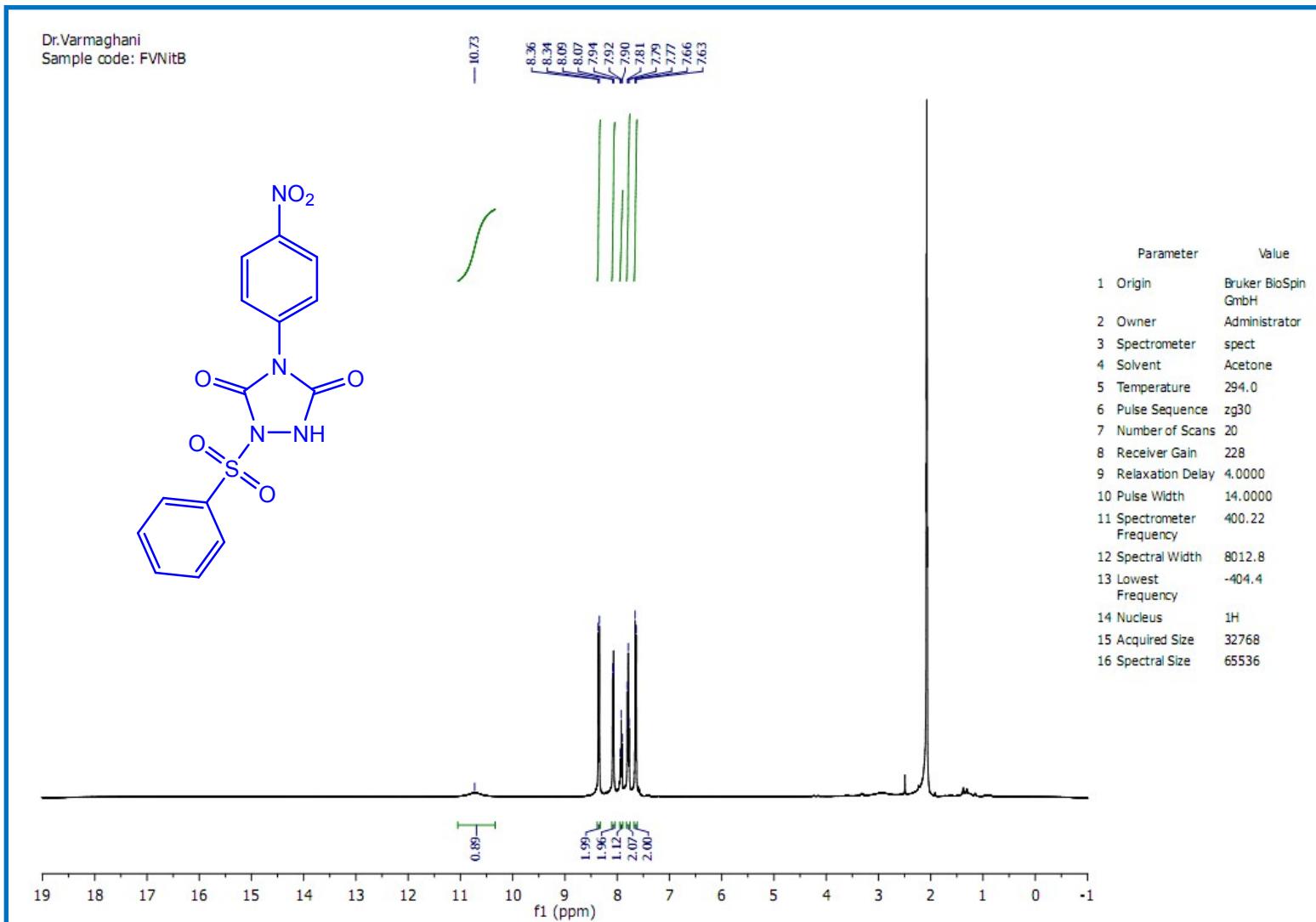
Dr.Varmaghani  
Sample code: FVNitCl2



2.  $^{13}\text{C}$  NMR spectrum of **2a**



3.  $^1\text{H}$  NMR spectrum of **2b**

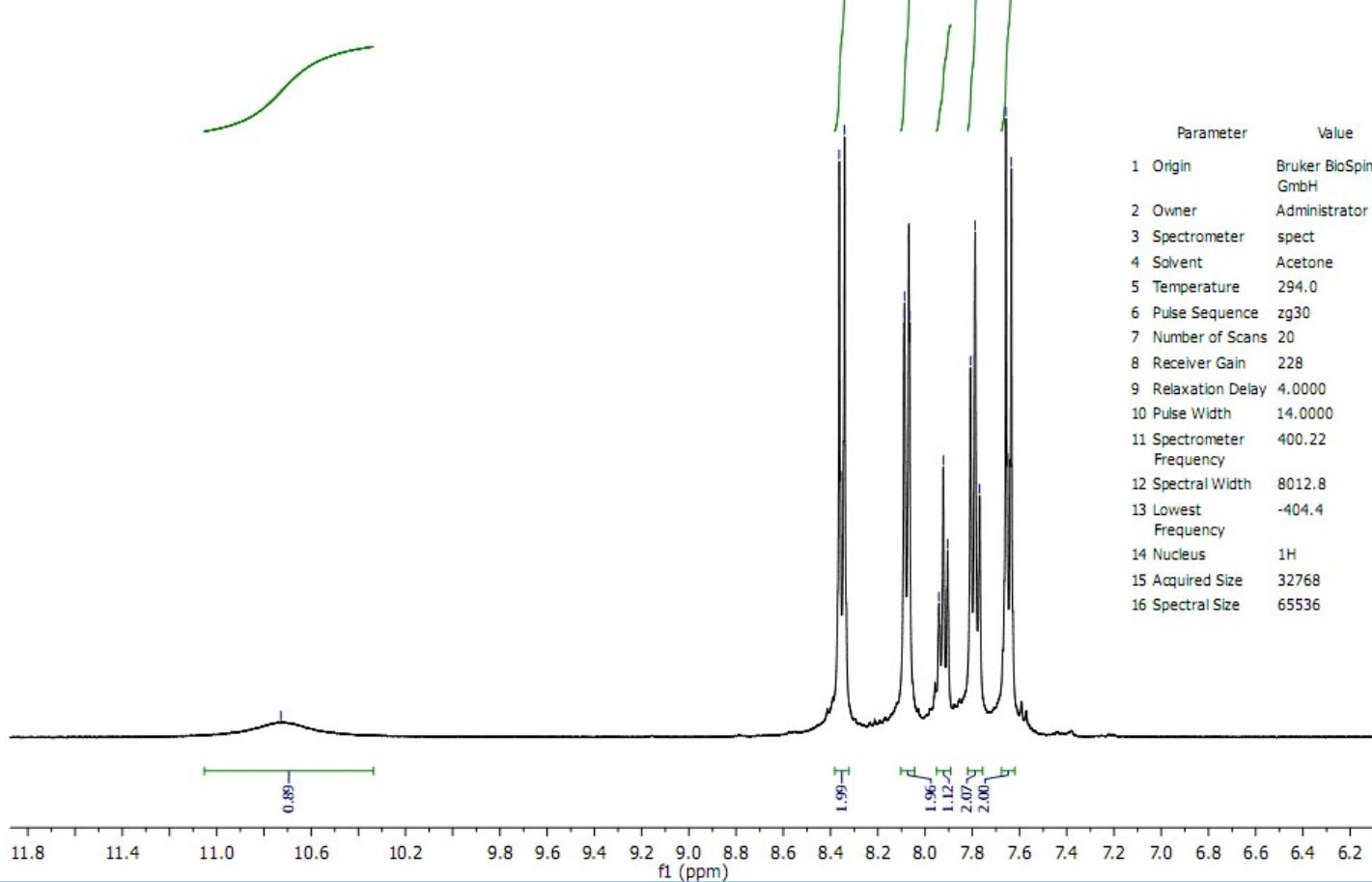


Dr.Varmaghani  
Sample code: FVNItB

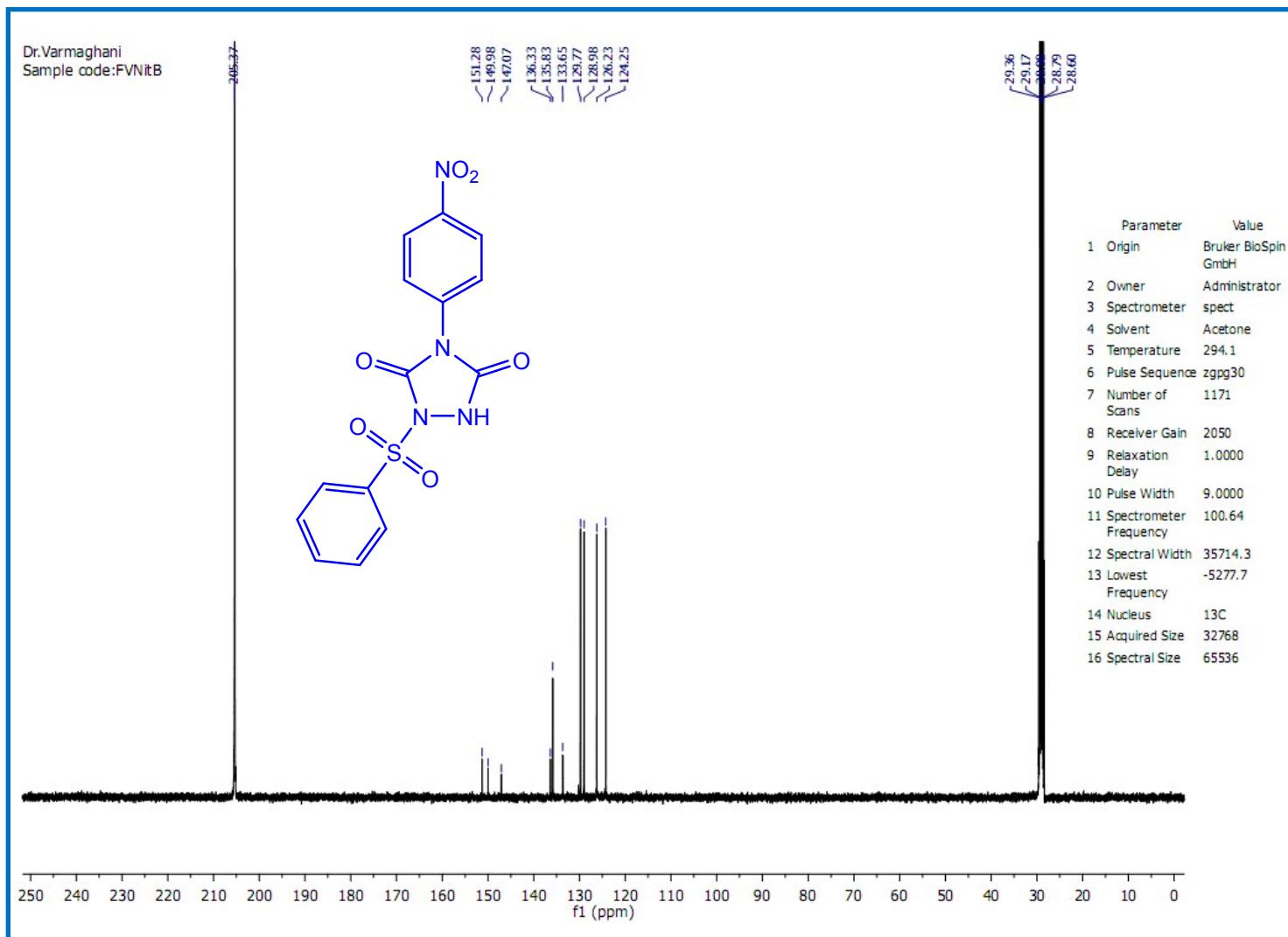
-10.73

8.36  
8.34  
8.09  
8.07  
7.94  
7.92  
7.90  
7.81  
7.79  
7.77  
7.66  
7.63

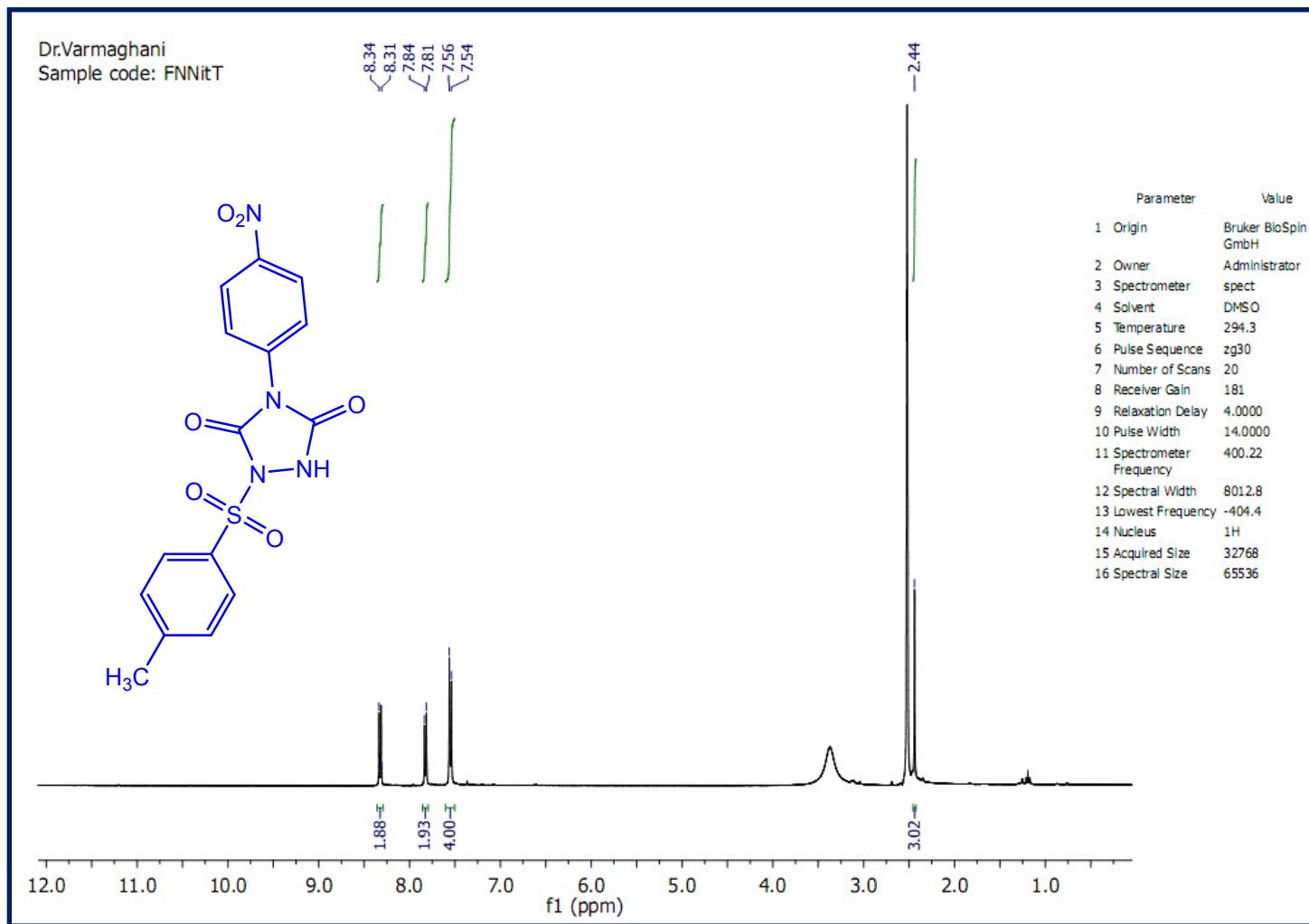
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2 Owner	Administrator
3 Spectrometer	spect
4 Solvent	Acetone
5 Temperature	294.0
6 Pulse Sequence	zg30
7 Number of Scans	20
8 Receiver Gain	228
9 Relaxation Delay	4.0000
10 Pulse Width	14.0000
11 Spectrometer Frequency	400.22
12 Spectral Width	8012.8
13 Lowest Frequency	-404.4
14 Nucleus	1H
15 Acquired Size	32768
16 Spectral Size	65536



4.  $^{13}\text{C}$  NMR spectrum of **2b**



5.  $^1\text{H}$  NMR spectrum of **2c**



Dr.Varmaghami  
Sample code: FNNiT

—8.34

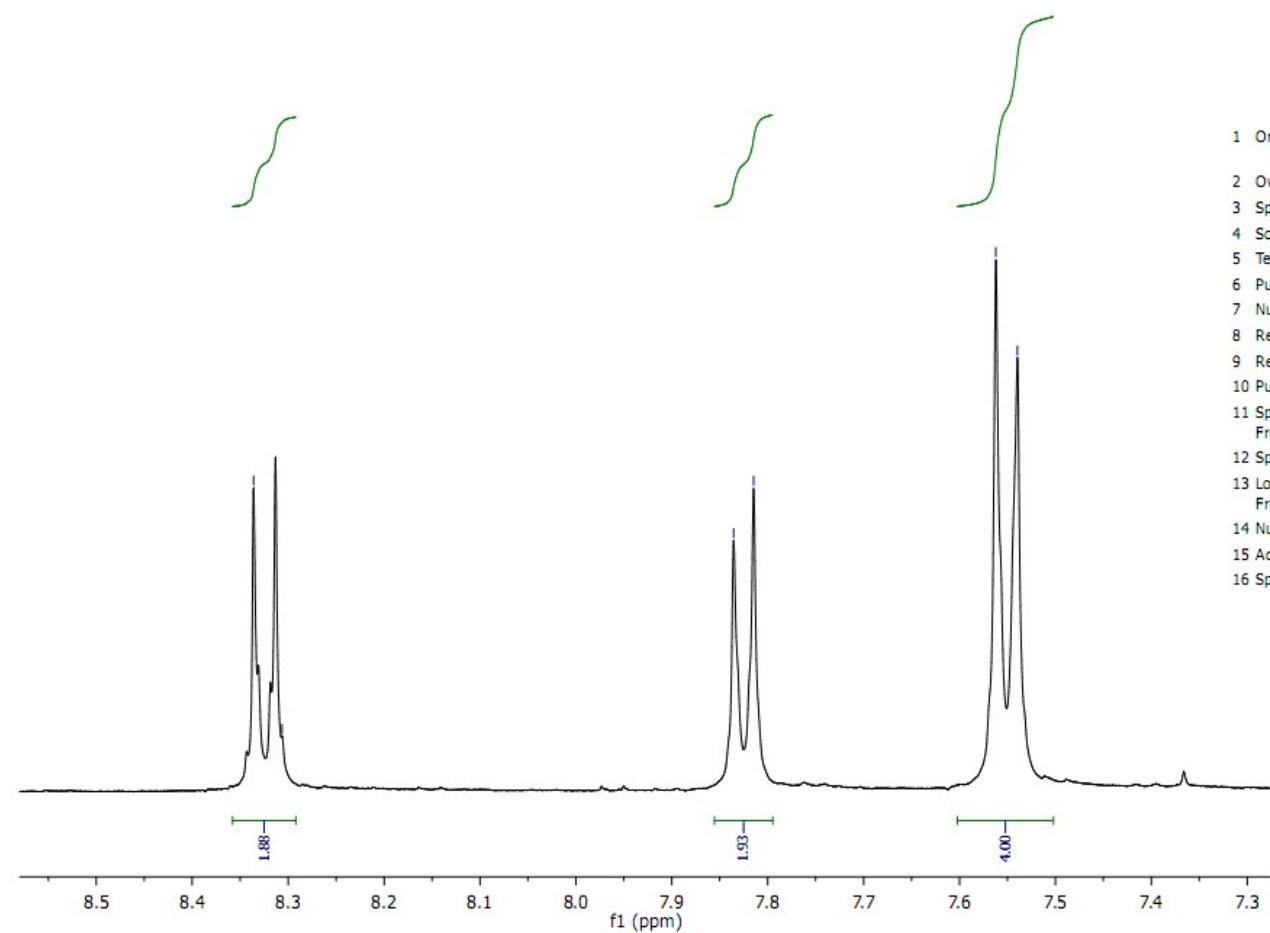
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—7.84

—7.81

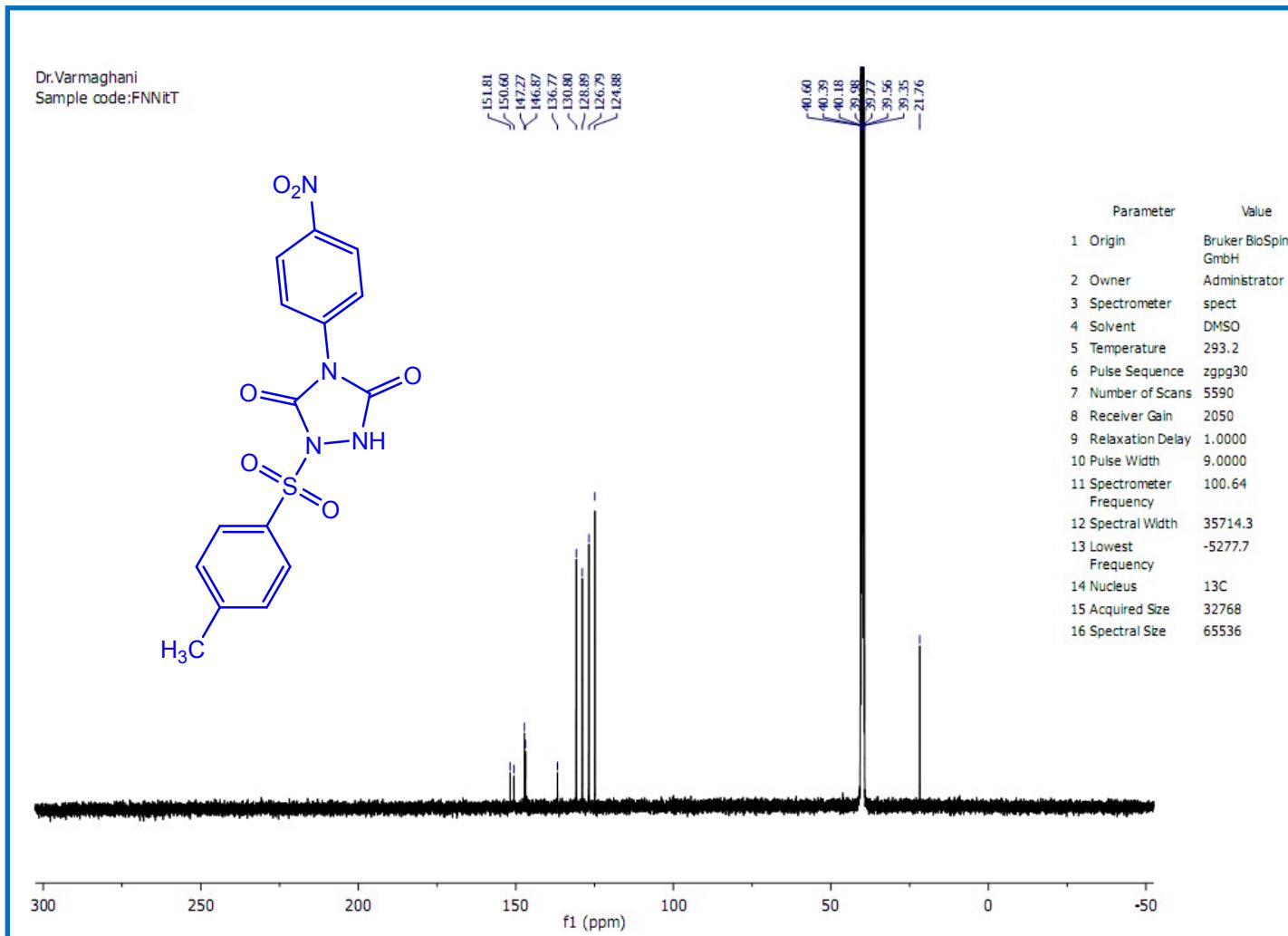
—7.56

—7.54

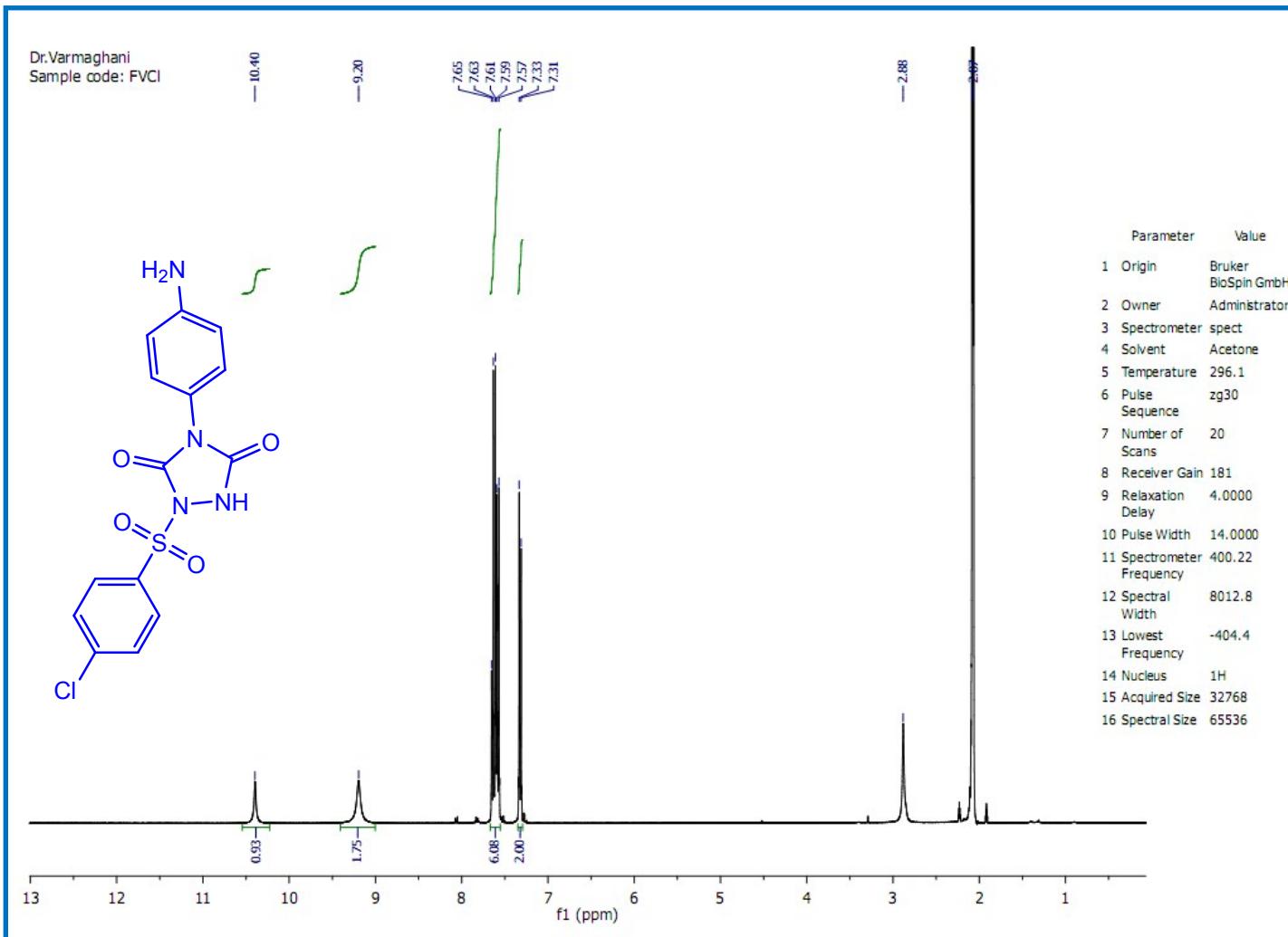


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10 Pulse Width	14.0000
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12 Spectral Width	8012.8
13 Lowest Frequency	-404.4
14 Nucleus	1H
15 Acquired Size	32768
16 Spectral Size	65536

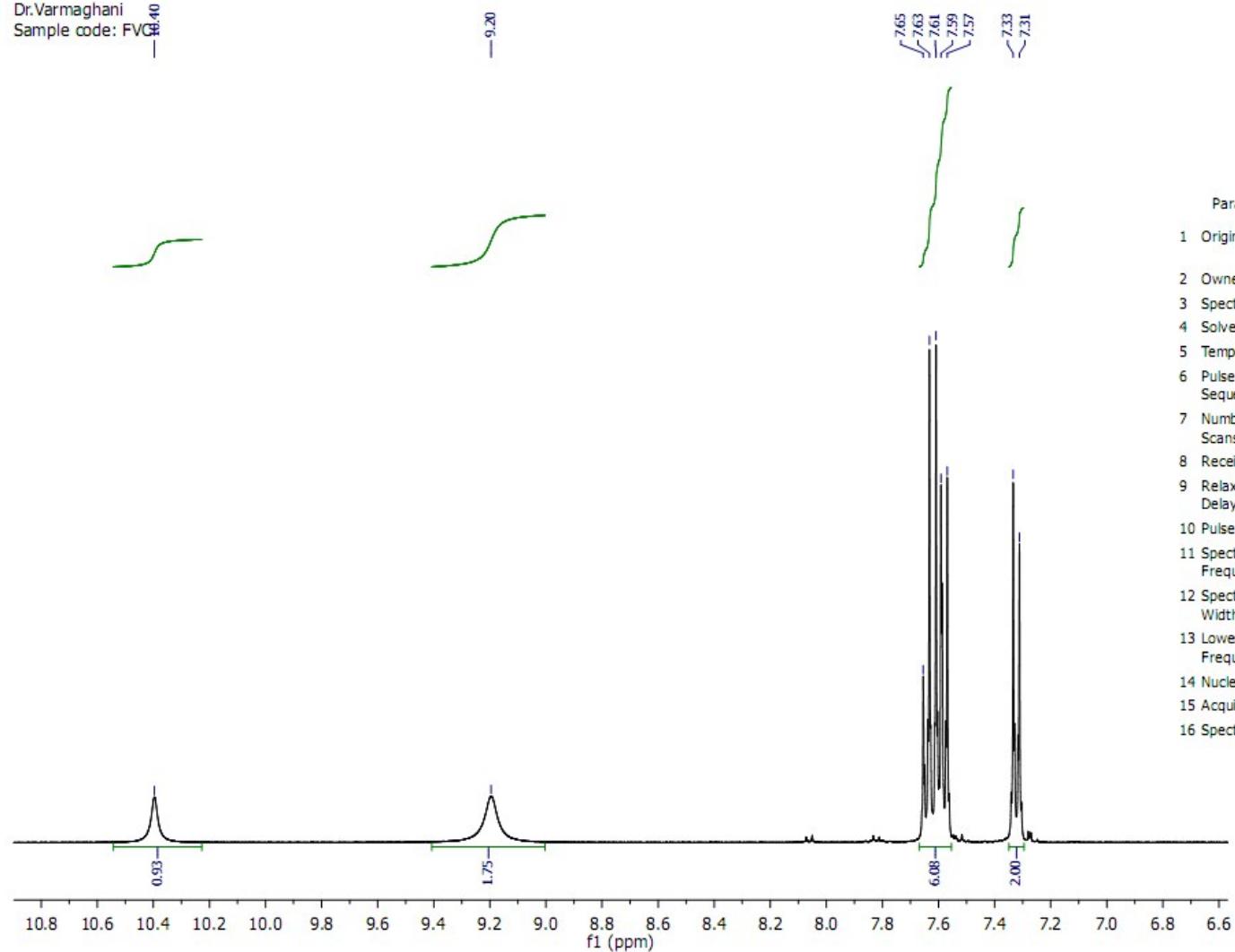
6.  $^{13}\text{C}$  NMR spectrum of **2c**



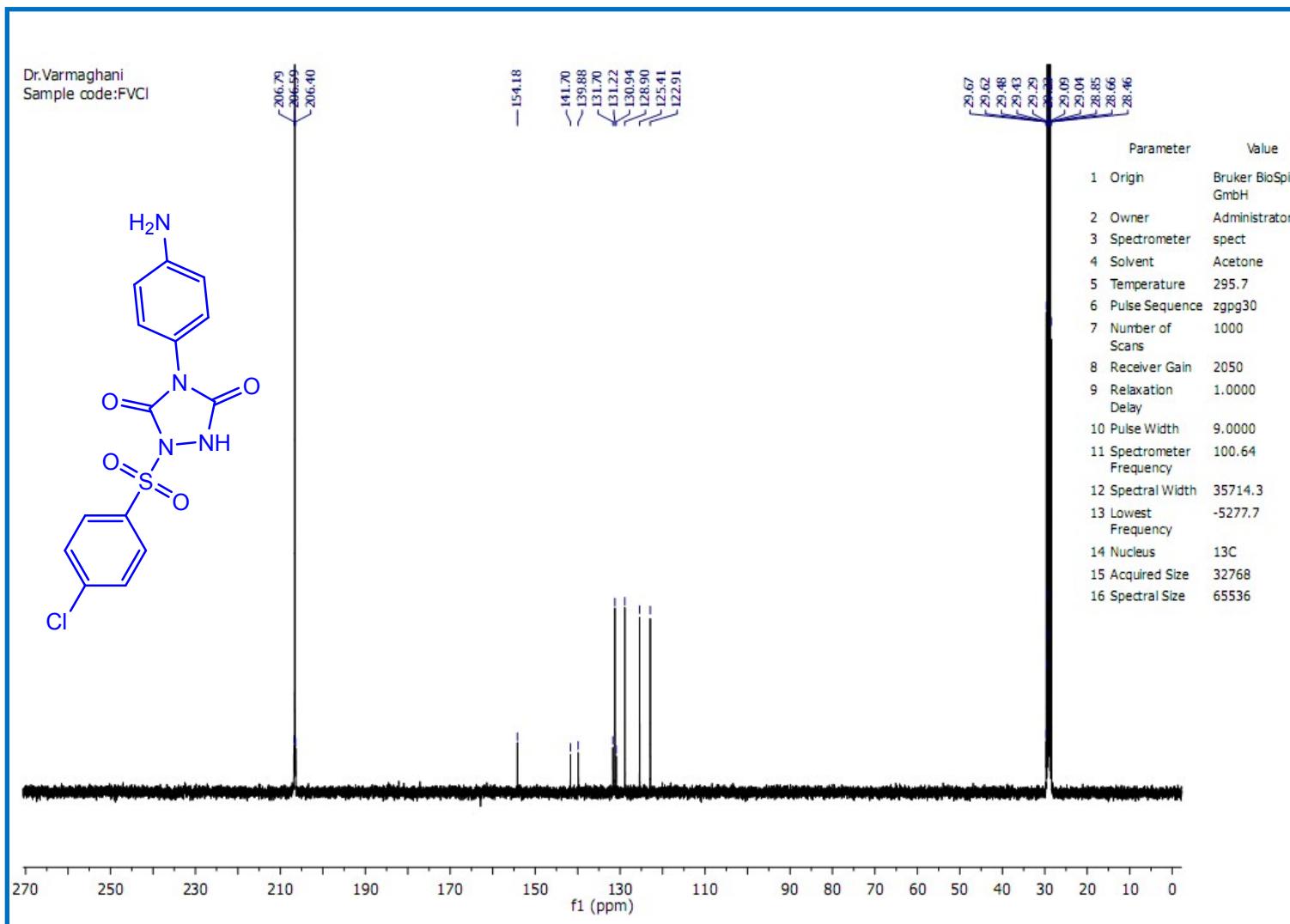
7.  $^1\text{H}$  NMR spectrum of **2d**



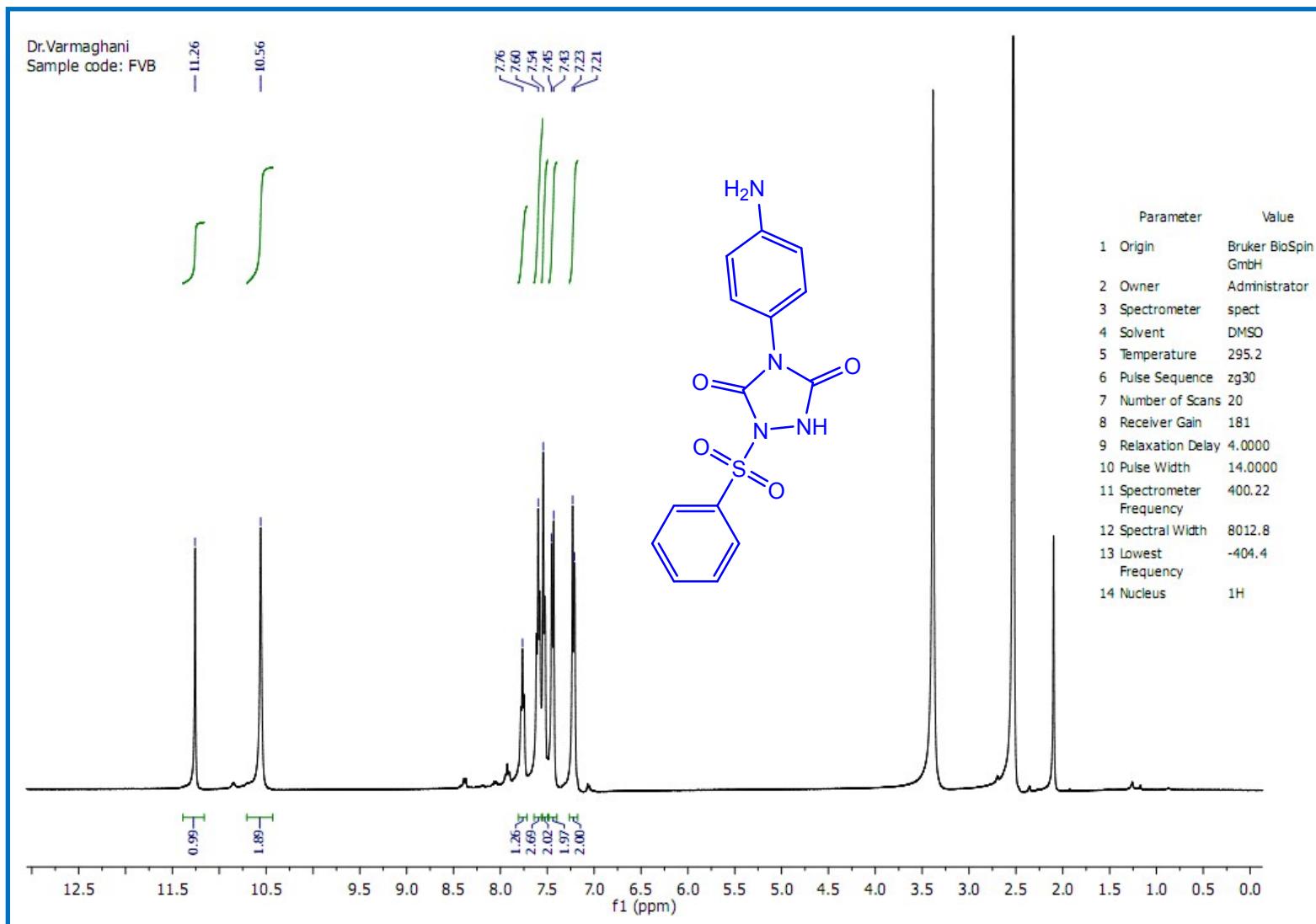
Dr.Varmaghani  
Sample code: FVG<sup>40</sup>



8.  $^{13}\text{C}$  NMR spectrum of **2d**



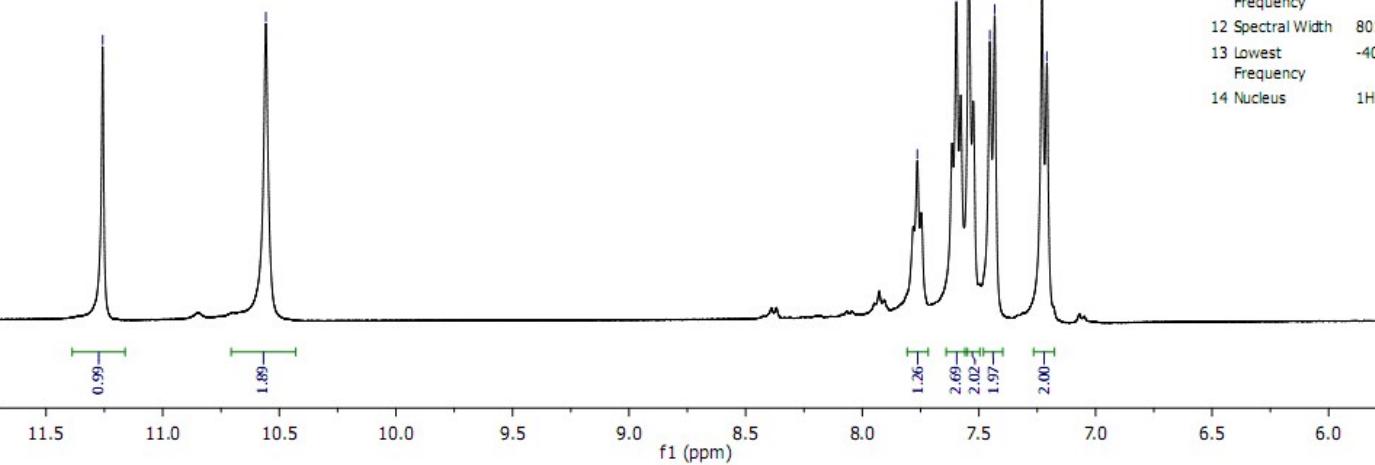
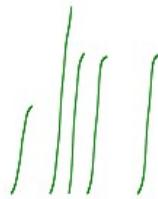
9.  $^1\text{H}$  NMR spectrum of **2e**



Dr.Varmaghani  
Sample code# FVB

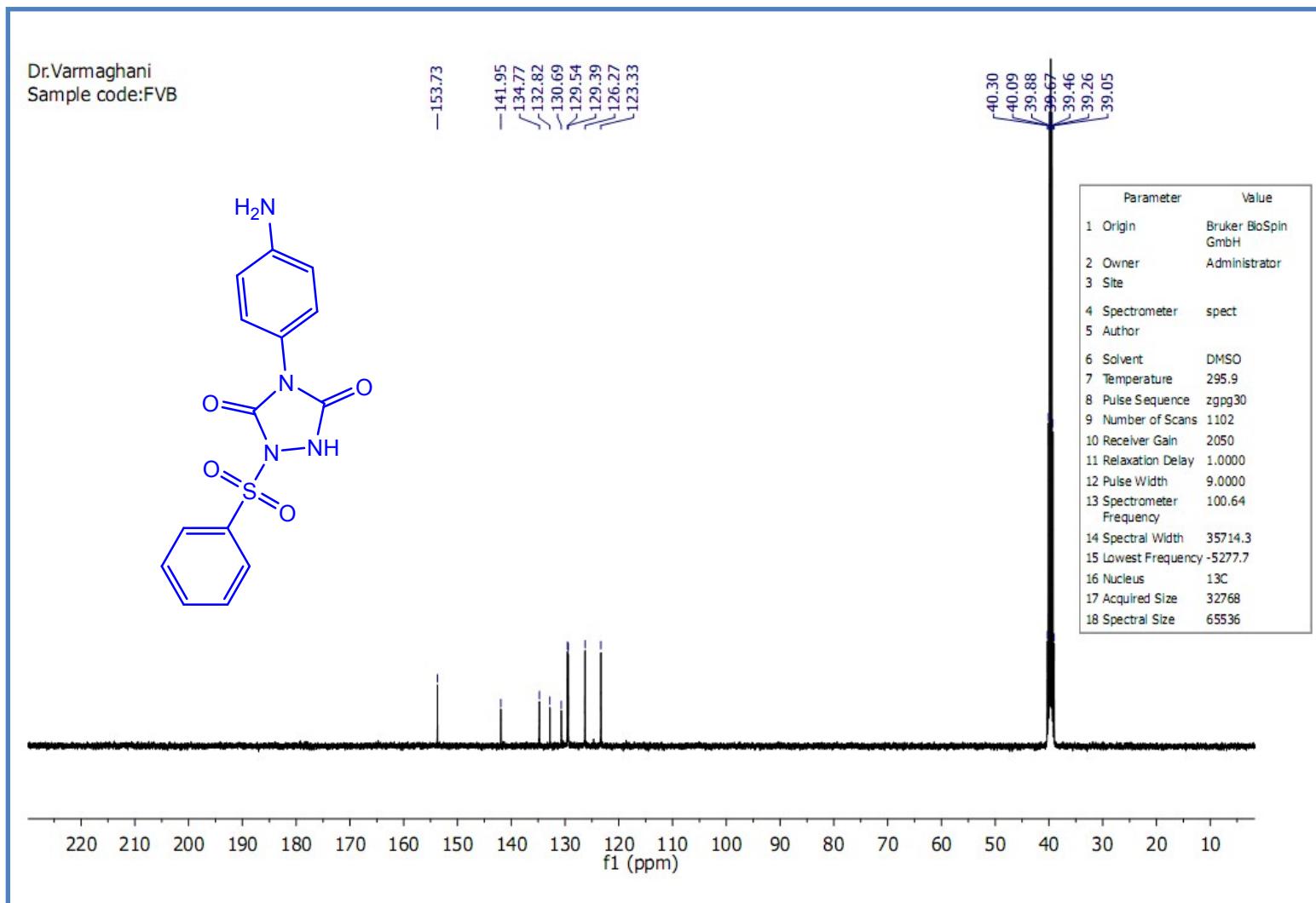
-10.56

-7.76  
-7.60  
-7.54  
-7.45  
-7.43  
-7.23  
-7.21

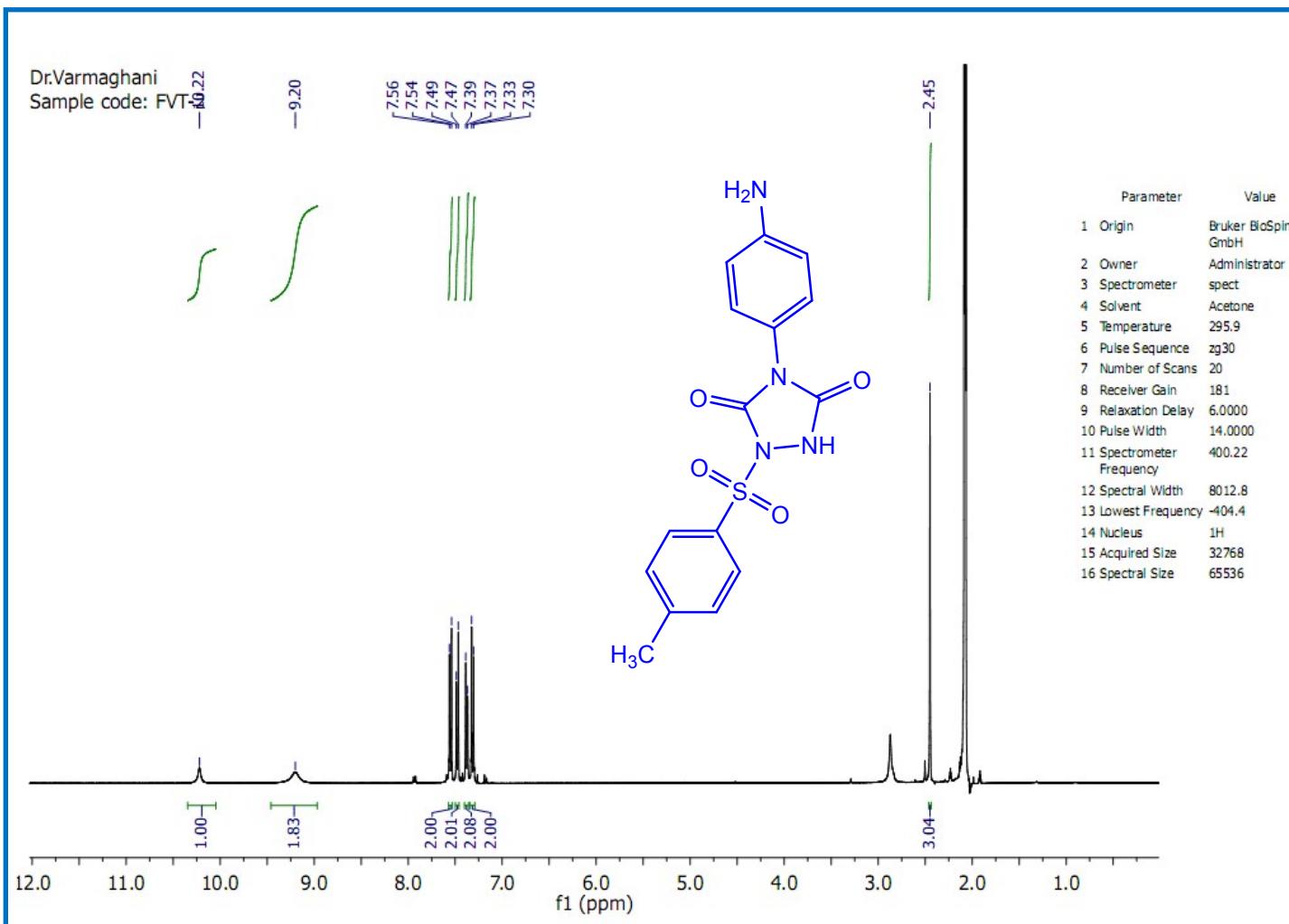


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2 Owner	Administrator
3 Spectrometer	spect
4 Solvent	DMSO
5 Temperature	295.2
6 Pulse Sequence	zg30
7 Number of Scans	20
8 Receiver Gain	181
9 Relaxation Delay	4.0000
10 Pulse Width	14.0000
11 Spectrometer Frequency	400.22
12 Spectral Width	8012.8
13 Lowest Frequency	-404.4
14 Nucleus	1H

**10.**  $^{13}\text{C}$  NMR spectrum of **2e**



11.  $^1\text{H}$  NMR spectrum of **2f**

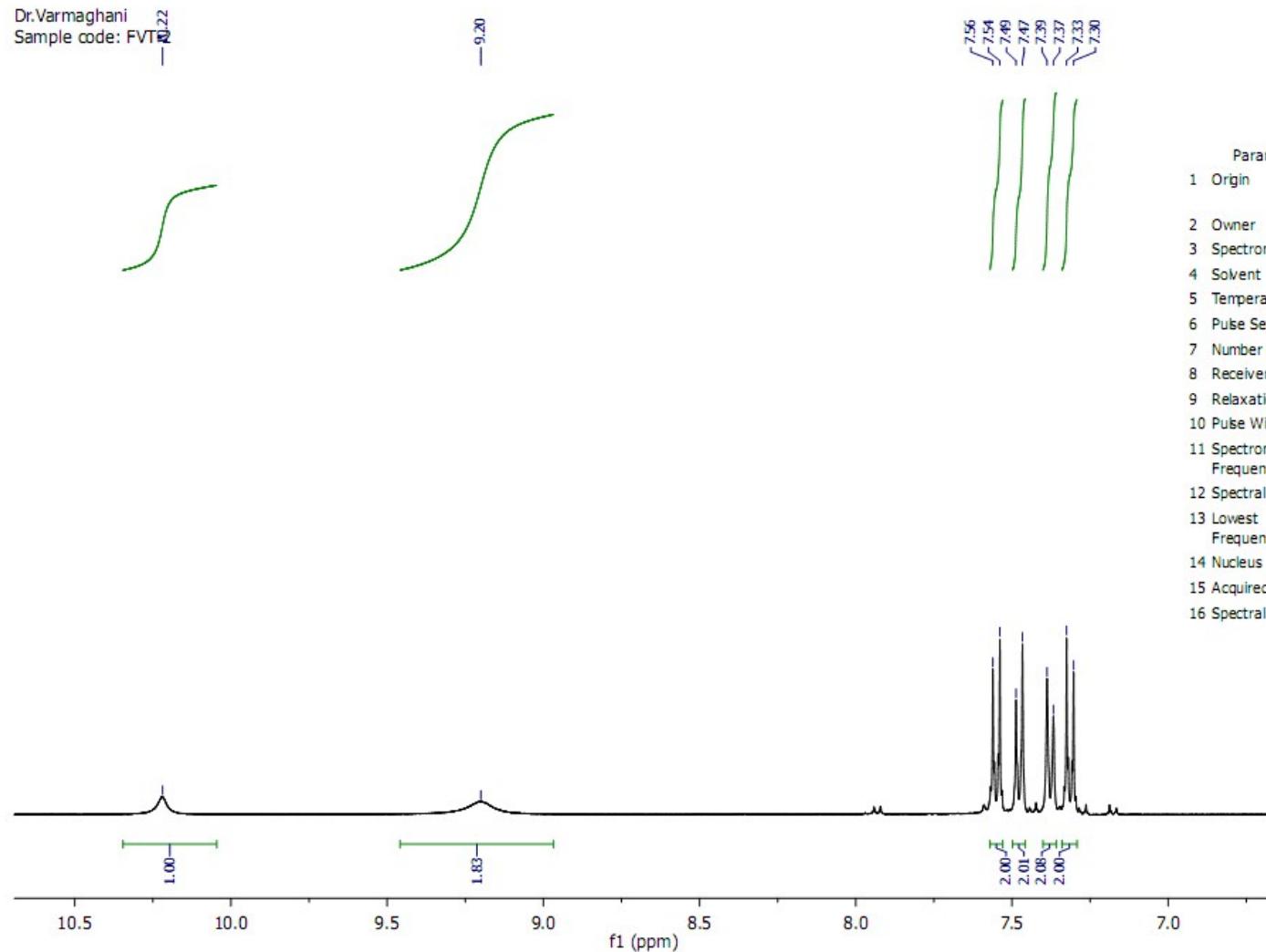


Dr.Varmaghani  
Sample code: FVT<sup>222</sup>

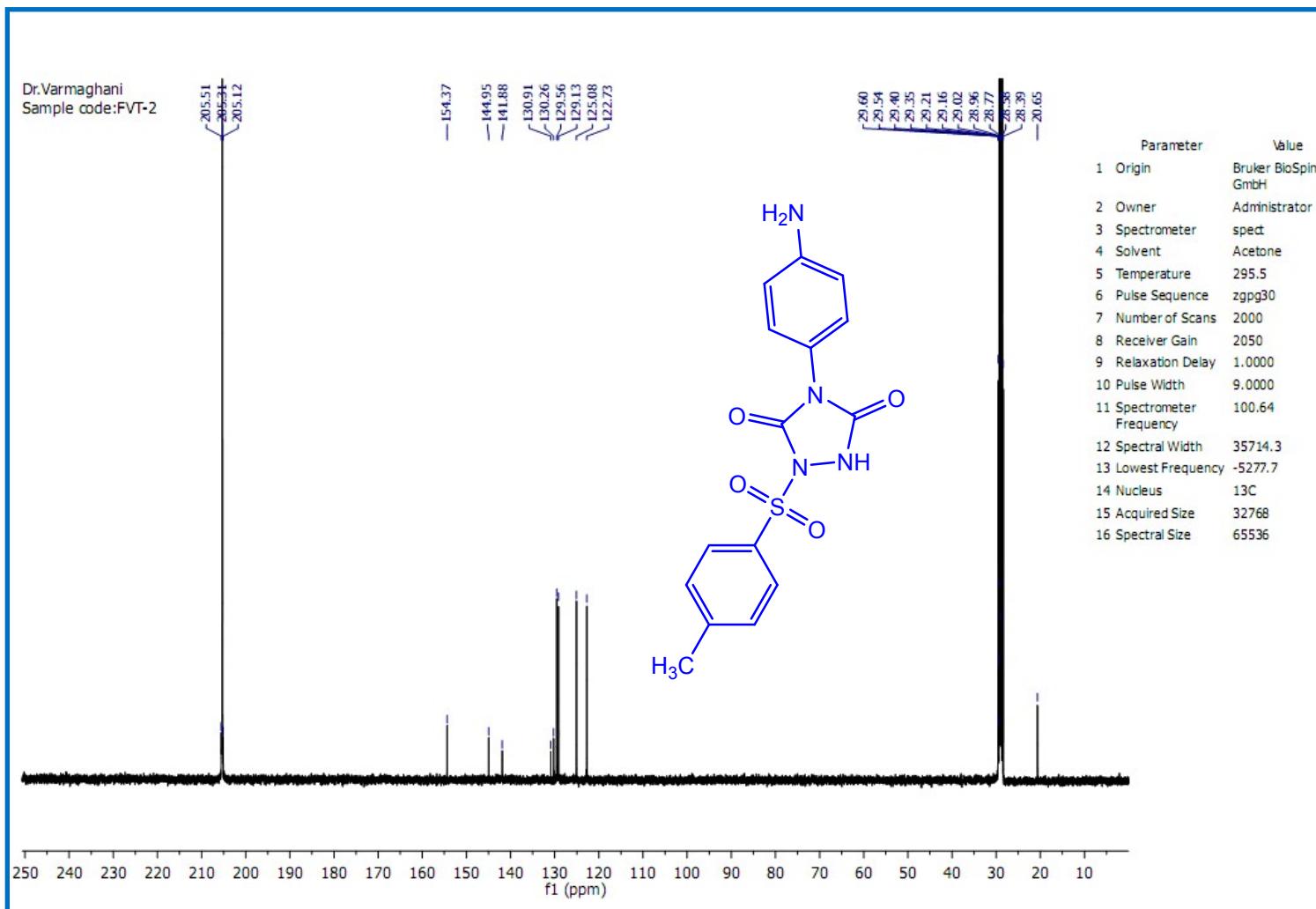
R

— 9.20

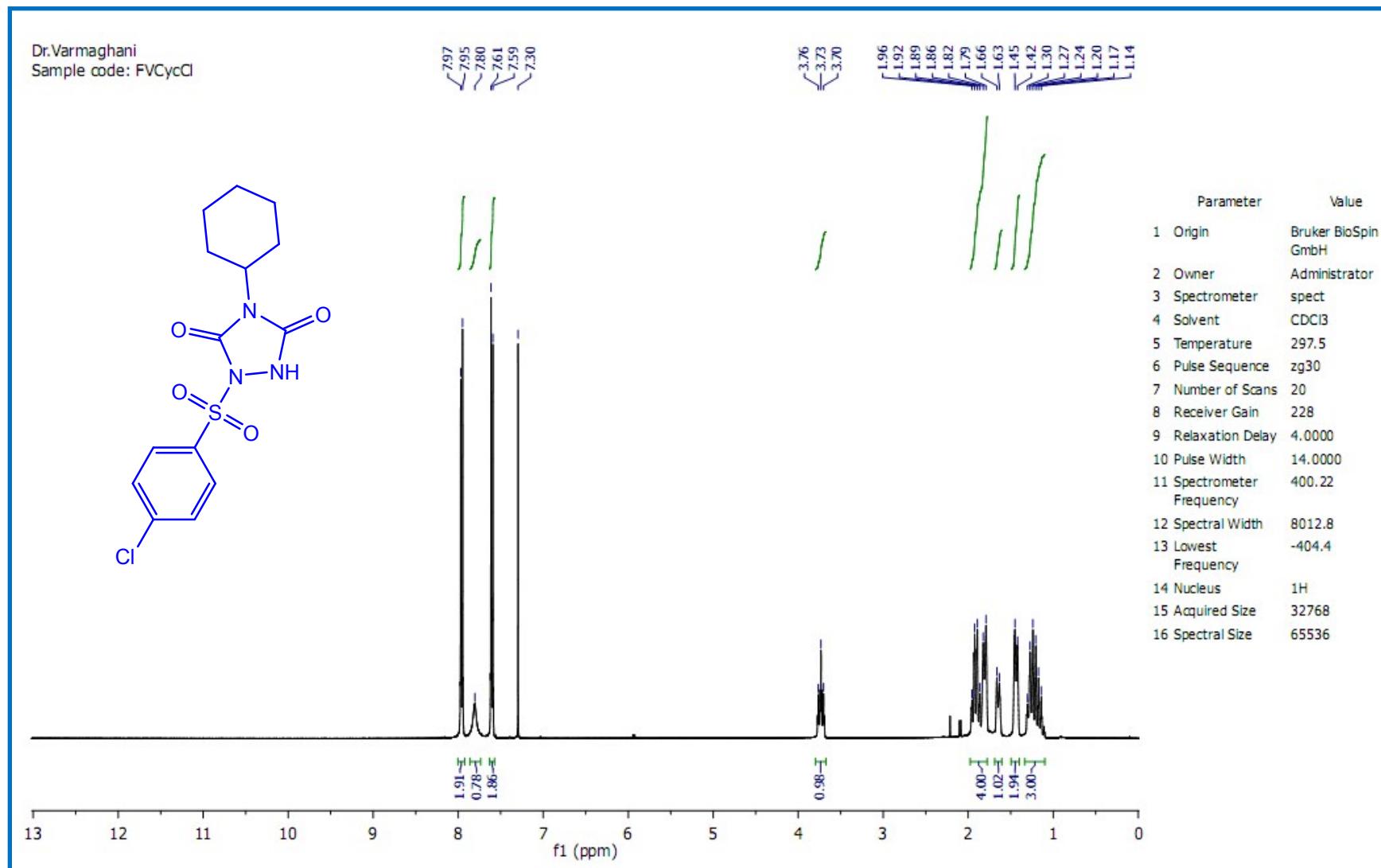
— 7.56  
— 7.54  
— 7.49  
— 7.47  
— 7.39  
— 7.37  
— 7.33  
— 7.30



12.  $^{13}\text{C}$  NMR spectrum of **2f**



13.  $^1\text{H}$  NMR spectrum of **2g**



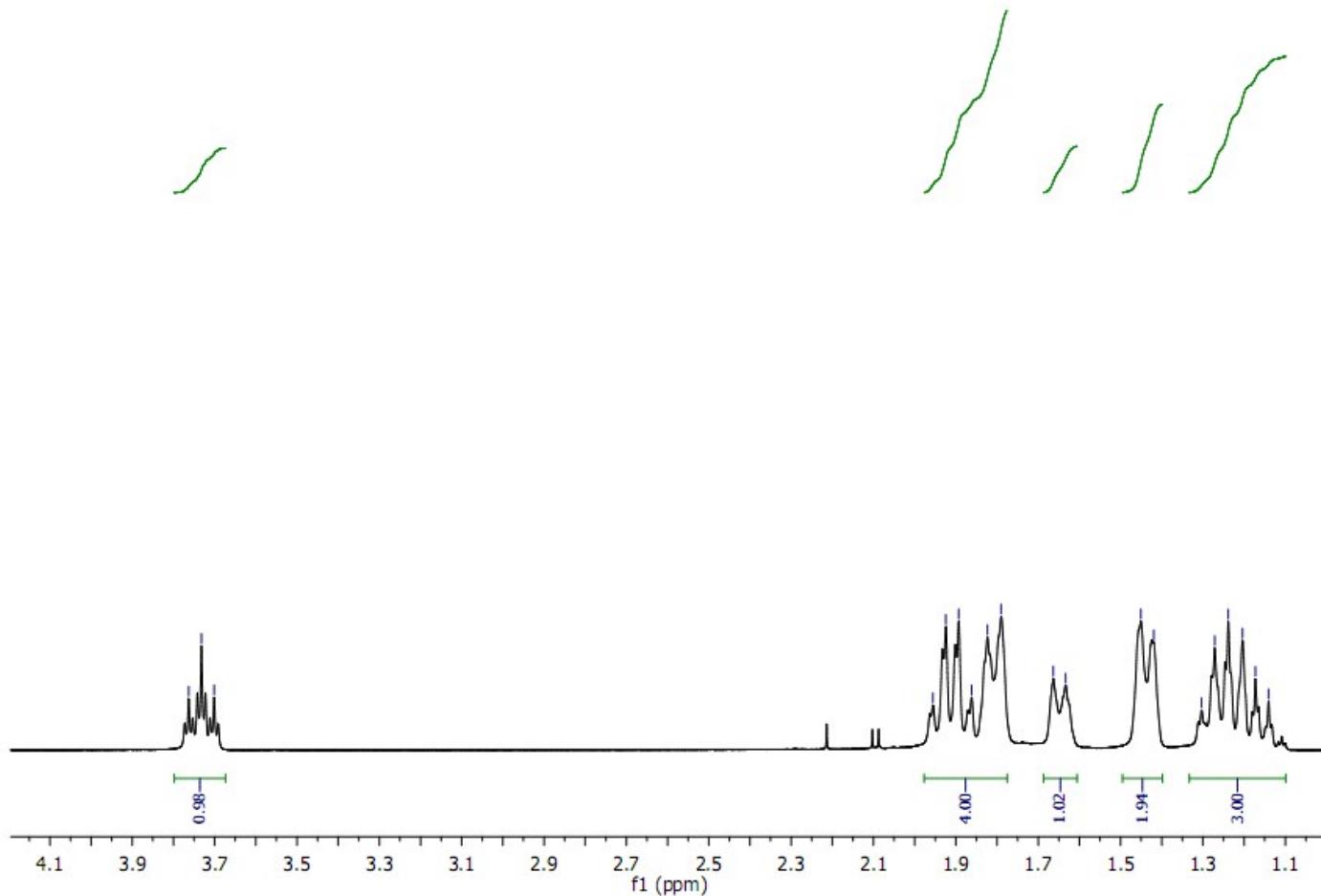
Dr.Varmaghani  
Sample code: FVCy76CP

76

73

3.70

1.96  
1.92  
1.89  
1.86  
1.82  
1.79  
1.66  
1.63  
1.45  
1.42  
1.30  
1.27  
1.24  
1.20  
1.17  
1.14



Dr.Varmaghan  
Sample code: FVCycCl

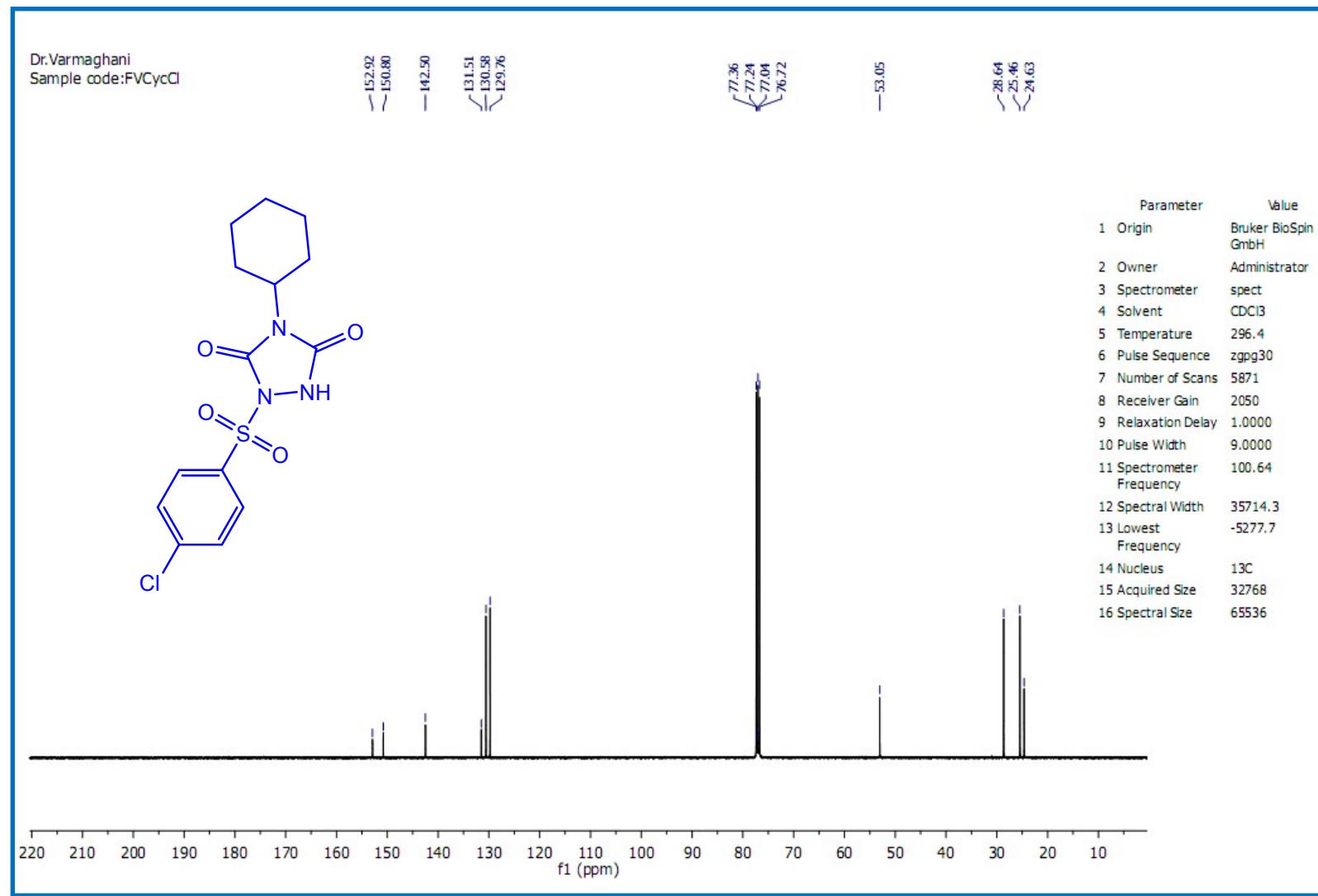
— 7.97  
— 7.95  
— 7.80  
— 7.61  
— 7.59  
— 7.30



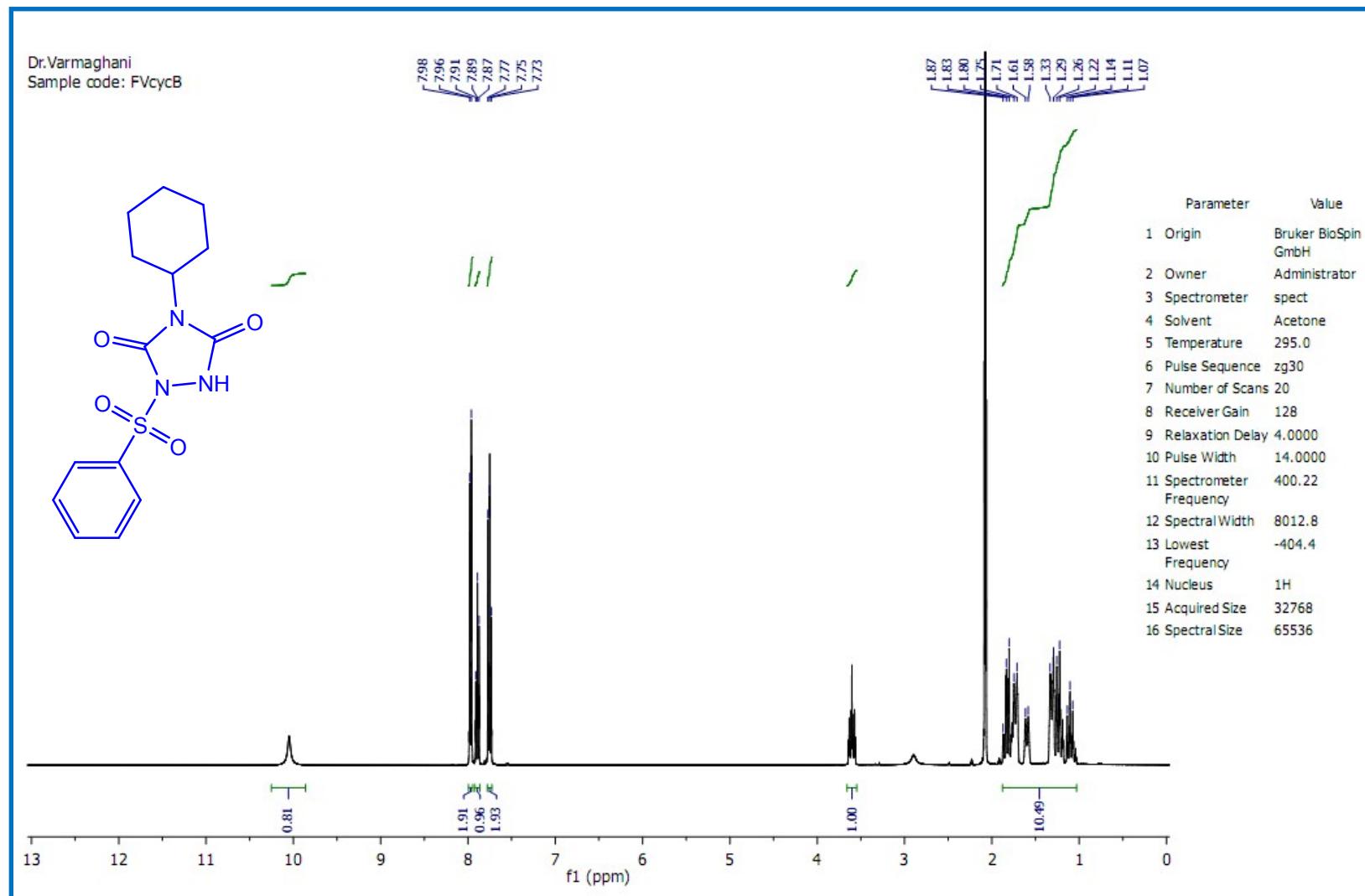
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7 Number of Scans	20
8 Receiver Gain	228
9 Relaxation Delay	4.0000
10 Pulse Width	14.0000
11 Spectrometer Frequency	400.22
12 Spectral Width	8012.8
13 Lowest Frequency	-404.4
14 Nucleus	1H
15 Acquired Size	32768
16 Spectral Size	65536

8.7 8.6 8.5 8.4 8.3 8.2 8.1 8.0 7.9 7.8 7.7 7.6 7.5 7.4 7.3 7.2 7.1 7.0 6.9 6.8 6.7 6.6

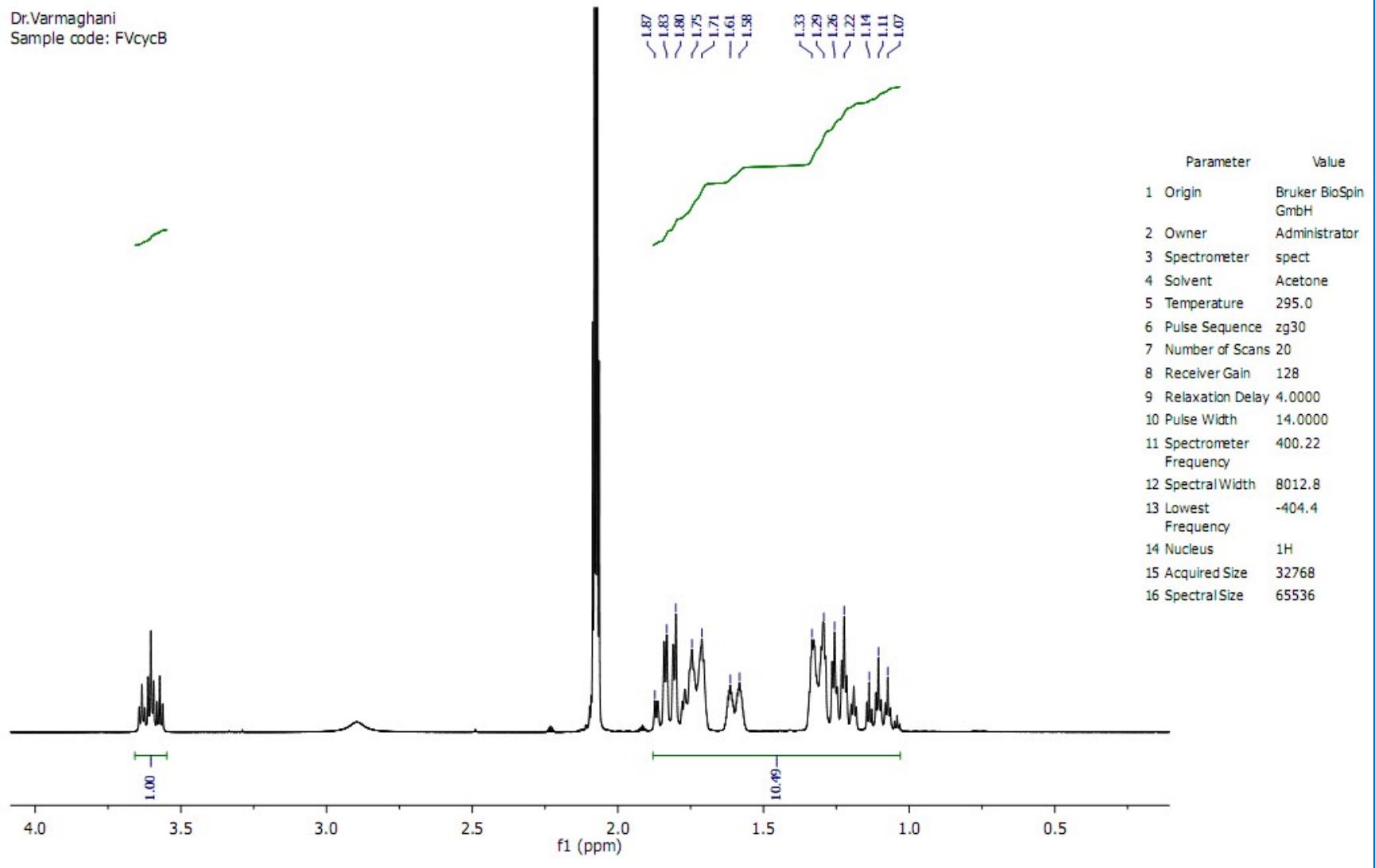
**14.  $^{13}\text{C}$  NMR spectrum of **2g****



15.  $^1\text{H}$  NMR spectrum of **2h**



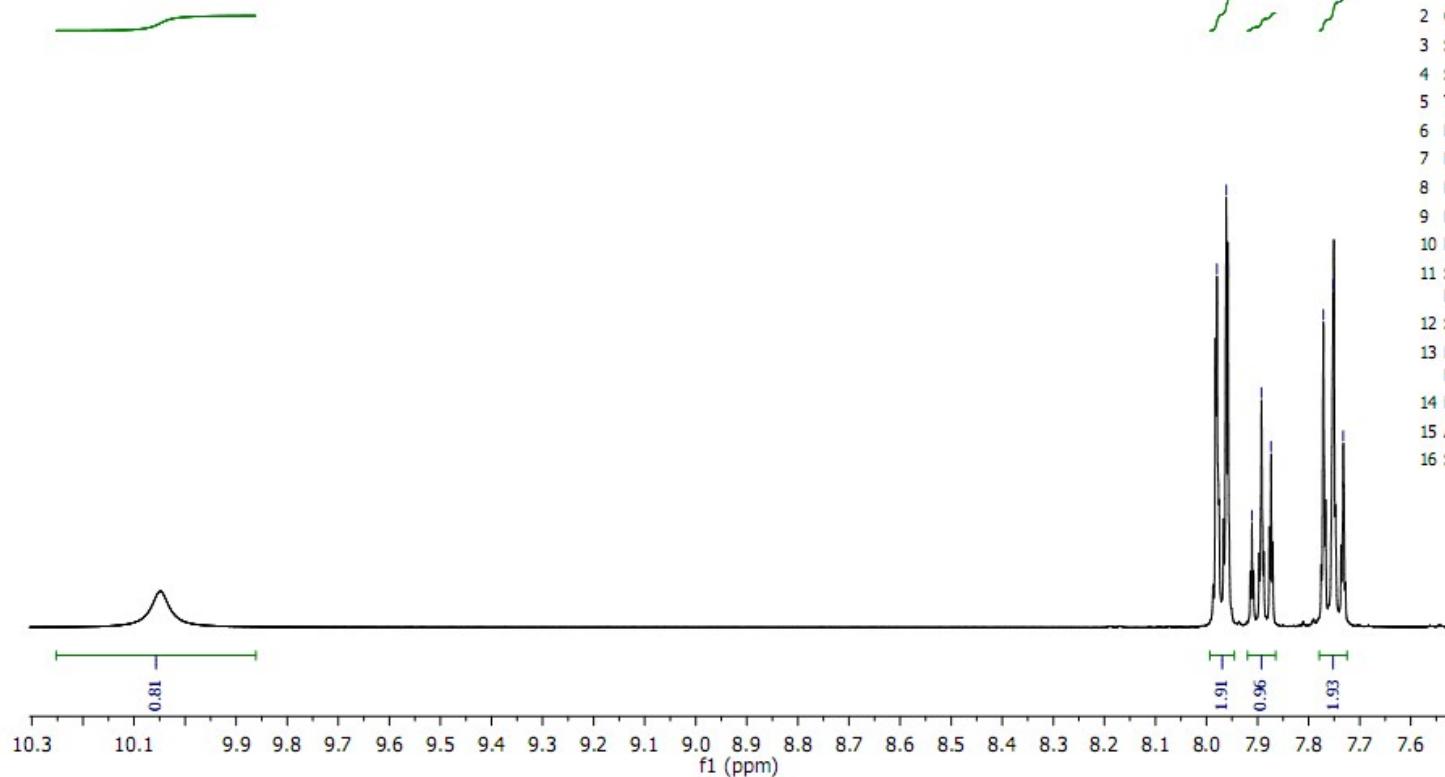
Dr.Varmaghani  
Sample code: FVcycB



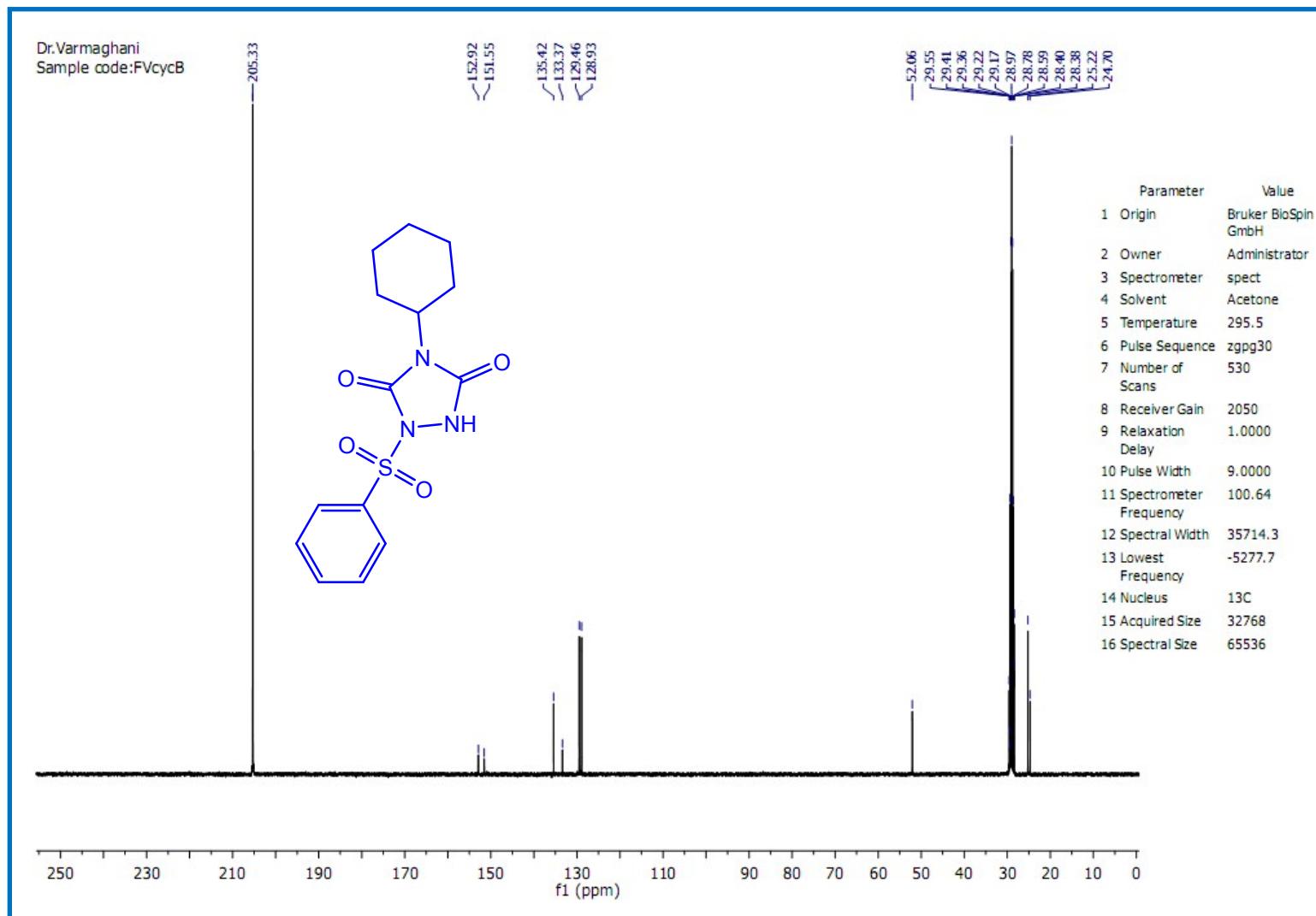
Dr.Varmaghani  
Sample code: FVcycB

7.98  
7.96  
7.91  
7.89  
7.87  
7.77  
7.75  
7.73

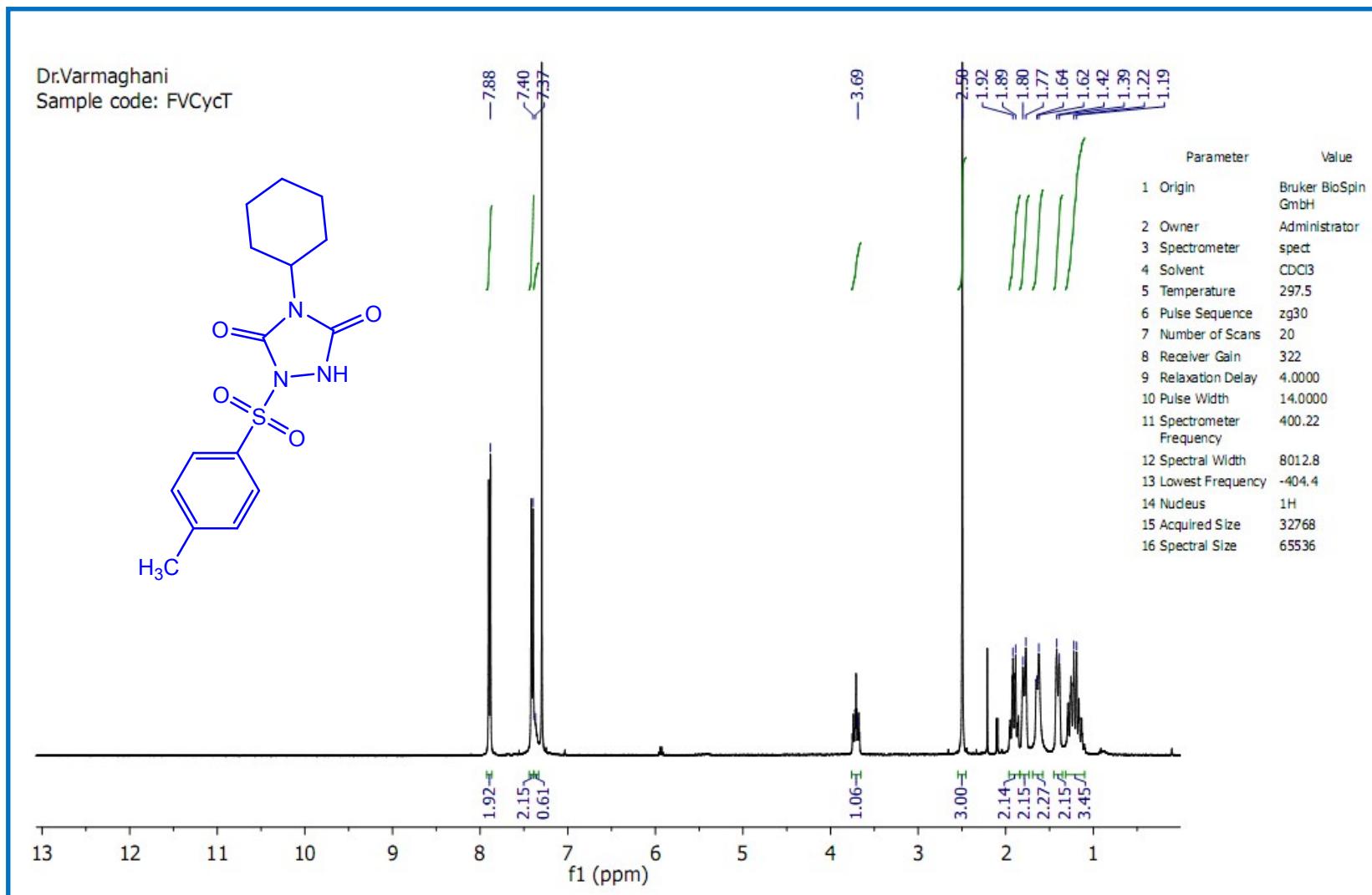
Parameter	Value
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2 Owner	Administrator
3 Spectrometer	spect
4 Solvent	Acetone
5 Temperature	295.0
6 Pulse Sequence	zg30
7 Number of Scans	20
8 Receiver Gain	128
9 Relaxation Delay	4.0000
10 Pulse Width	14.0000
11 Spectrometer Frequency	400.22
12 Spectral Width	8012.8
13 Lowest Frequency	-404.4
14 Nucleus	1H
15 Acquired Size	32768
16 Spectral Size	65536



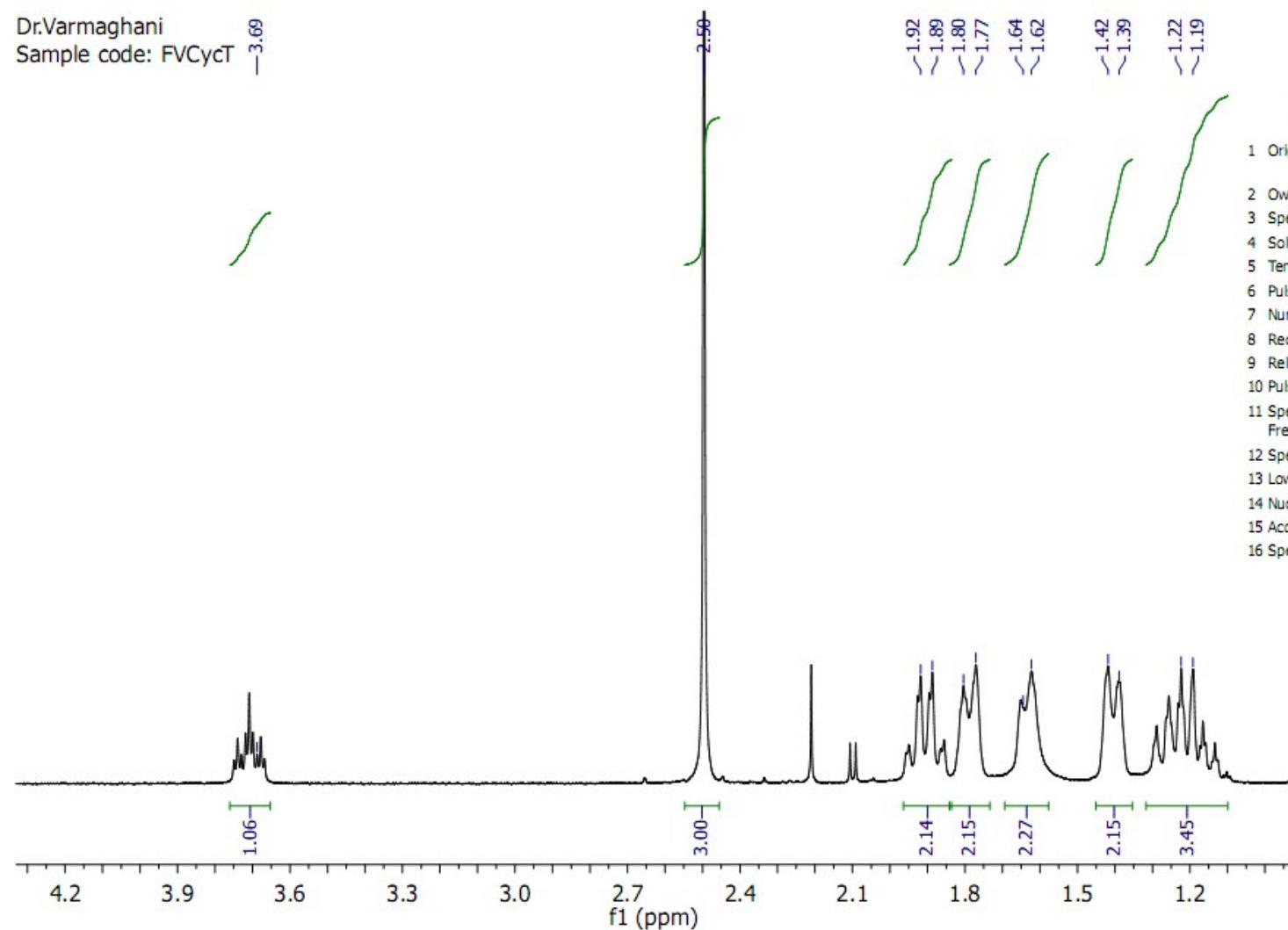
**16.**  $^{13}\text{C}$  NMR spectrum of **2h**



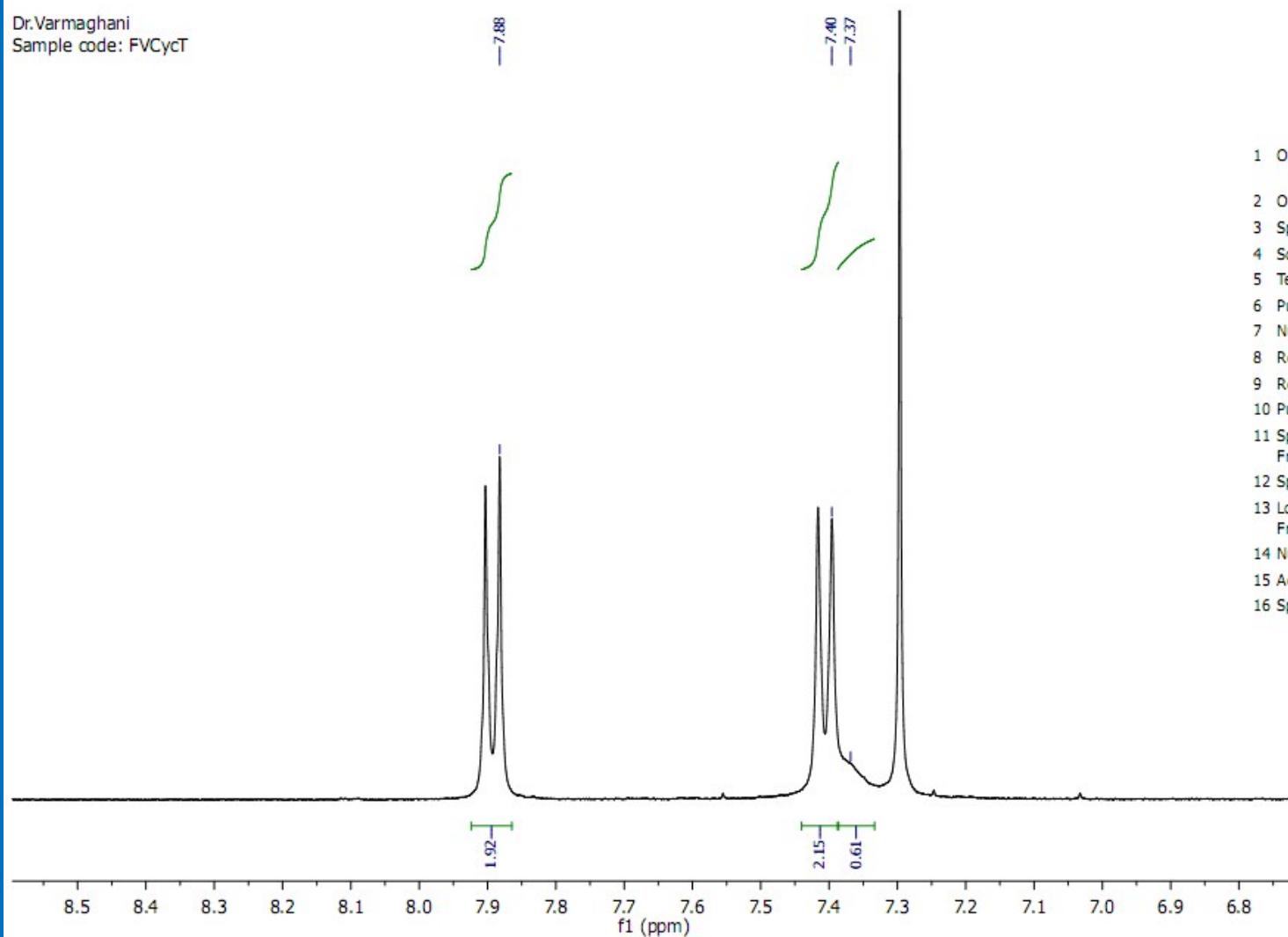
17.  $^1\text{H}$  NMR spectrum of **2i**



Dr.Varmaghani  
Sample code: FVCycT -3.69



Dr.Varmaghani  
Sample code: FVCycT



**18.**  $^{13}\text{C}$  NMR spectrum of **2i**

