

# Trifluoroacetic Acid-mediated Synthesis of Xanthene Constructs and their Extensive Anti-tuberculosis Evaluation

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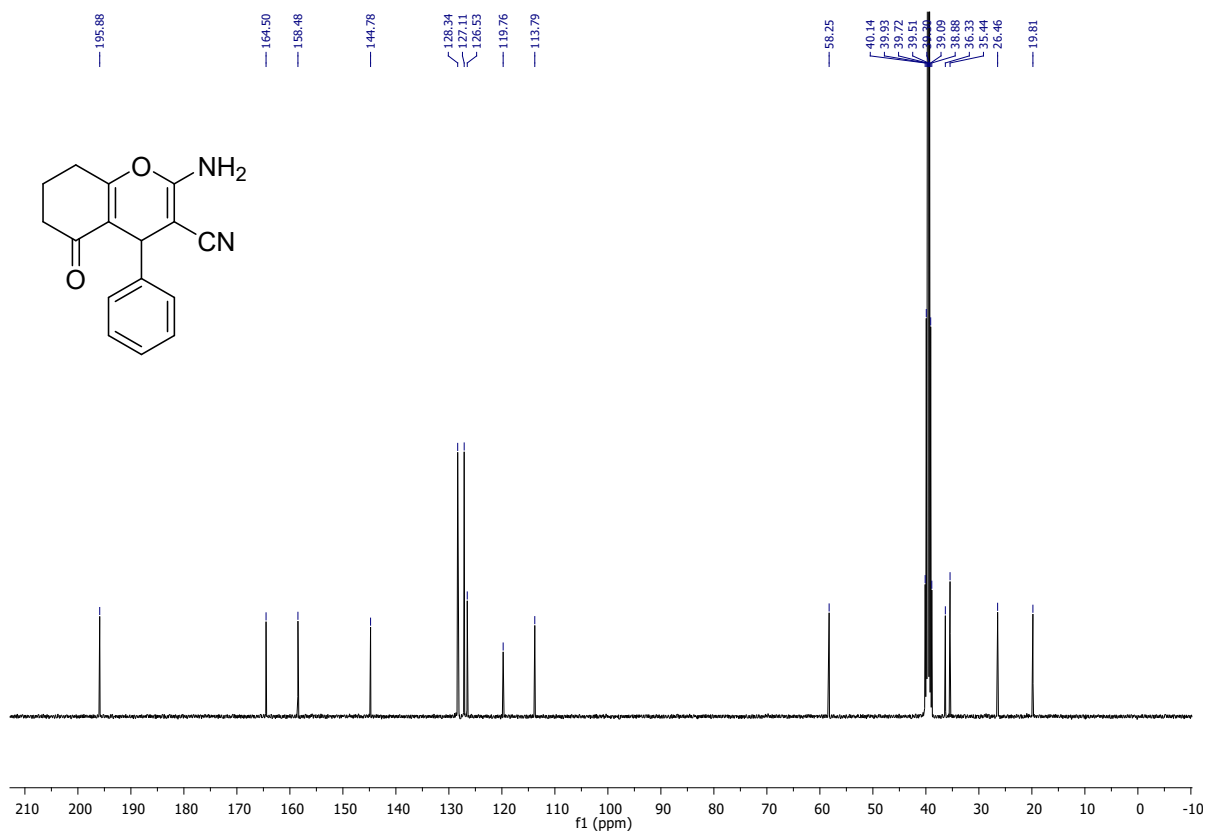
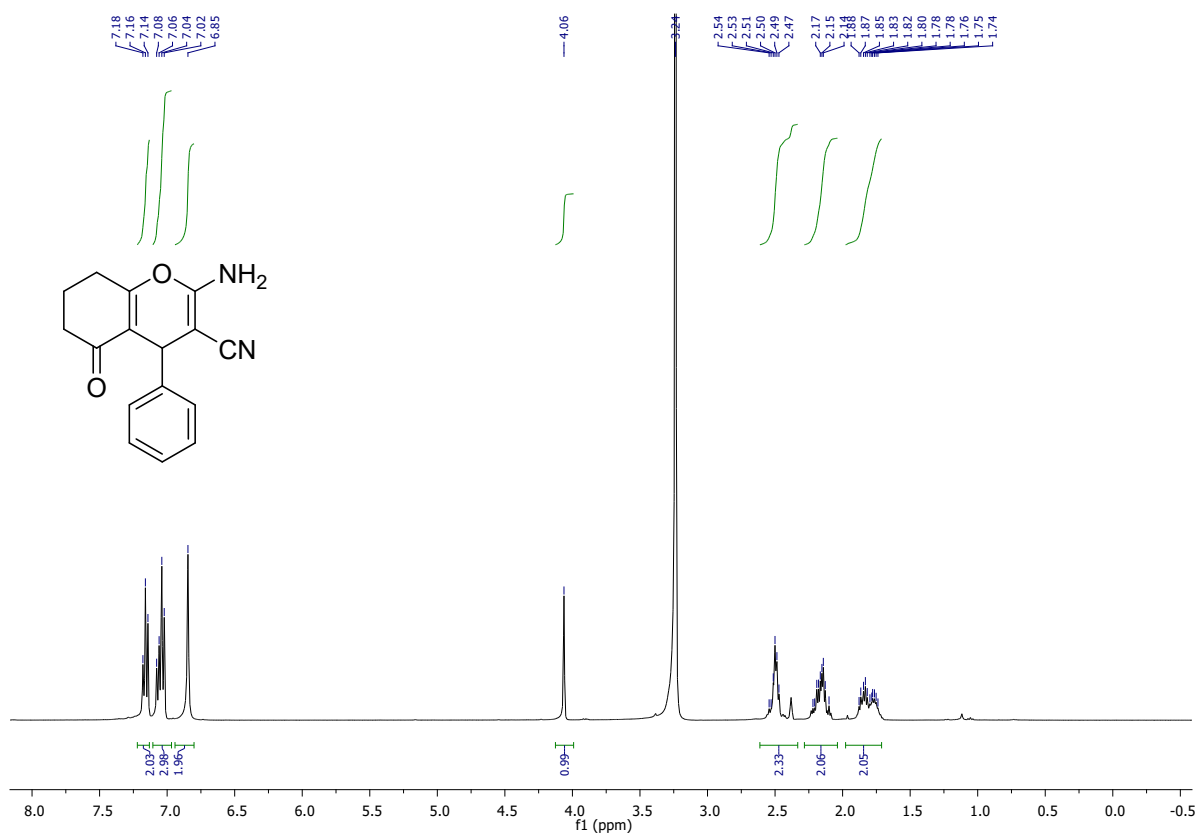
<sup>#</sup> *Equal Contribution.*

\* Corresponding authors.

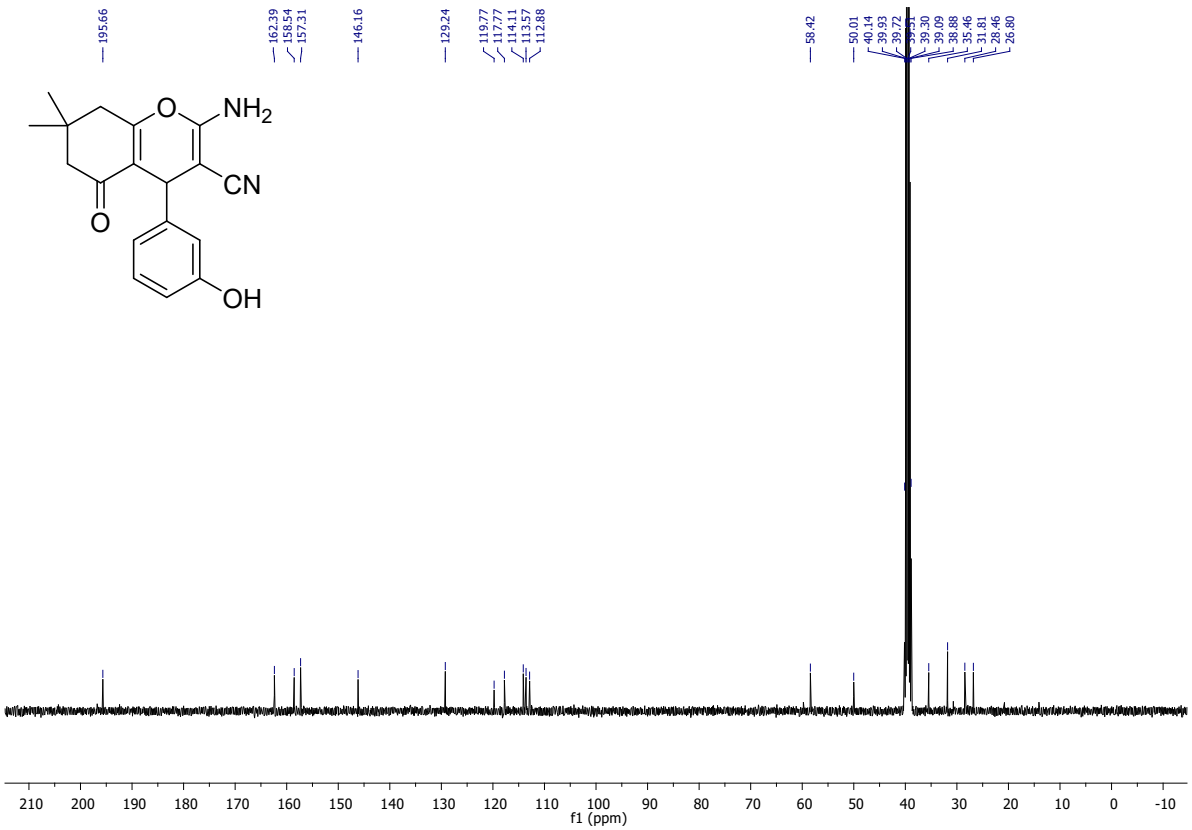
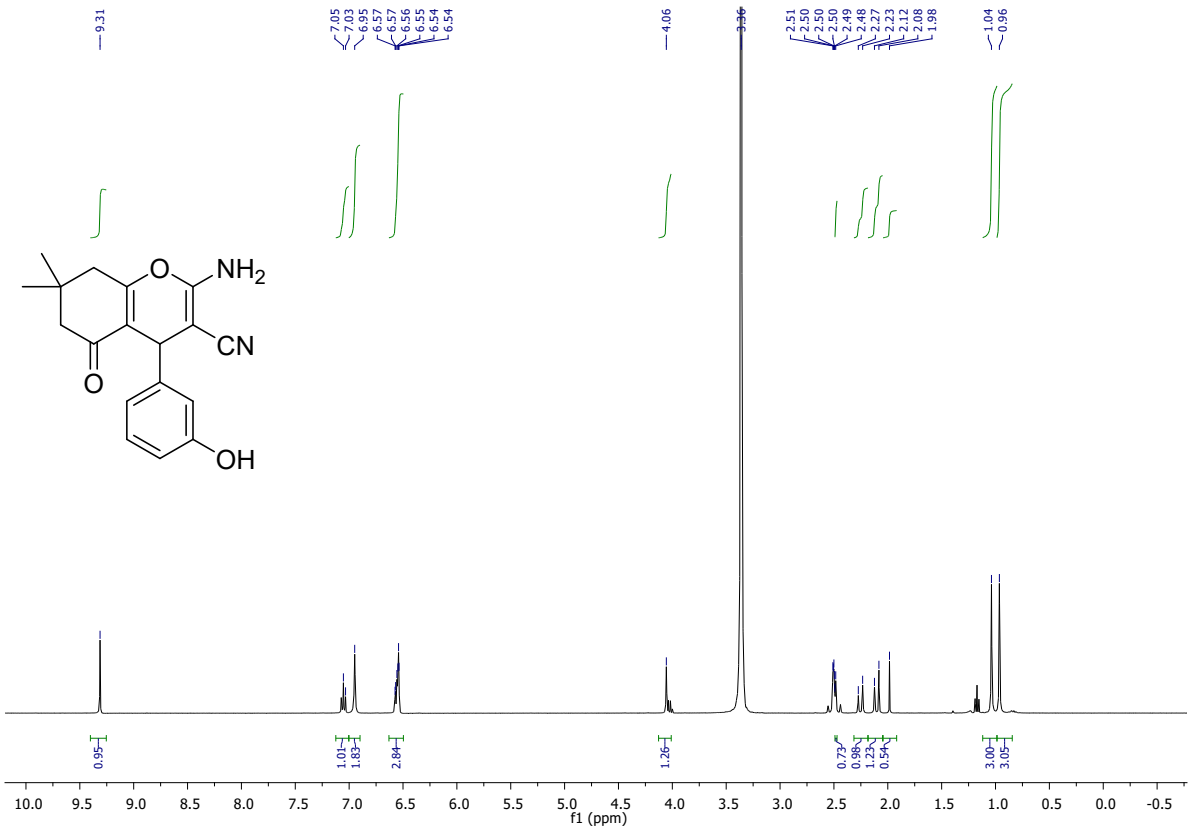
E-mail address: [zahoorap@iiim.res.in](mailto:zahoorap@iiim.res.in) (Zahoor Ahmad), [bilal@iiim.res.in](mailto:bilal@iiim.res.in) (Bilal A. Bhat)

## Supporting Information

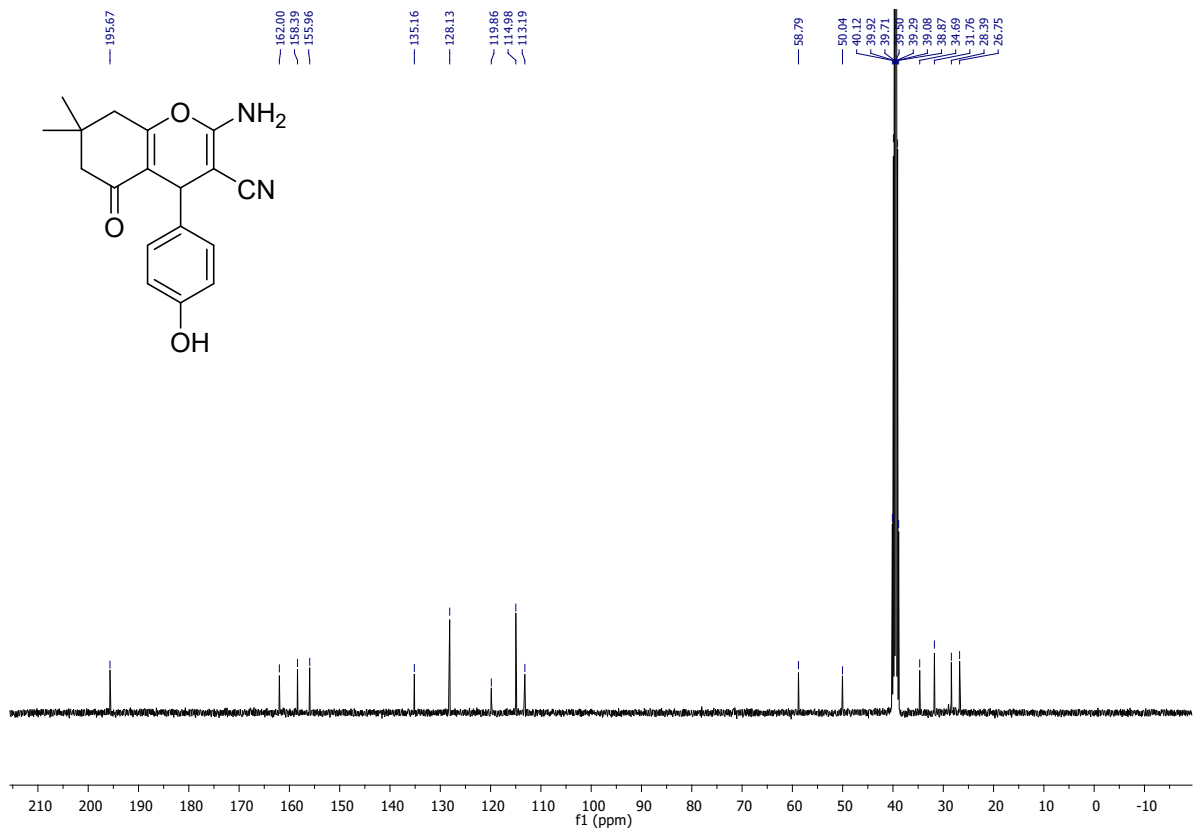
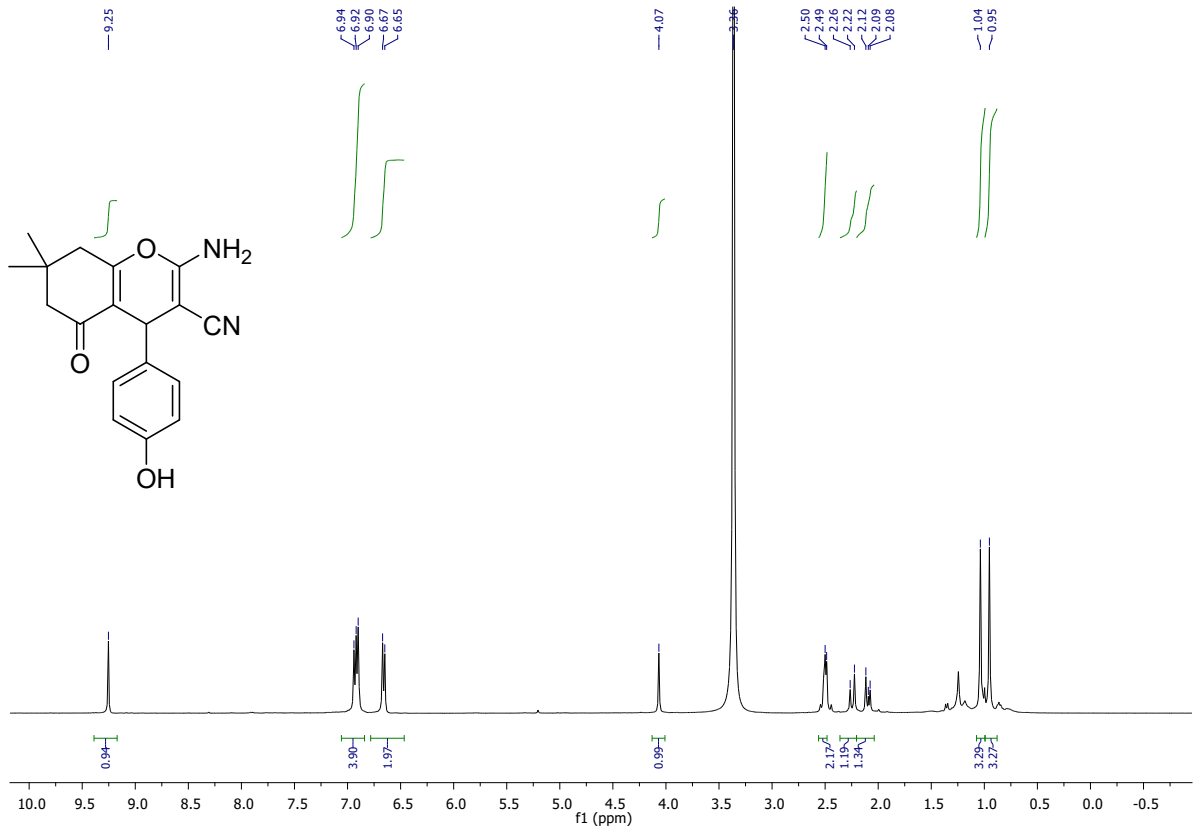
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 13a



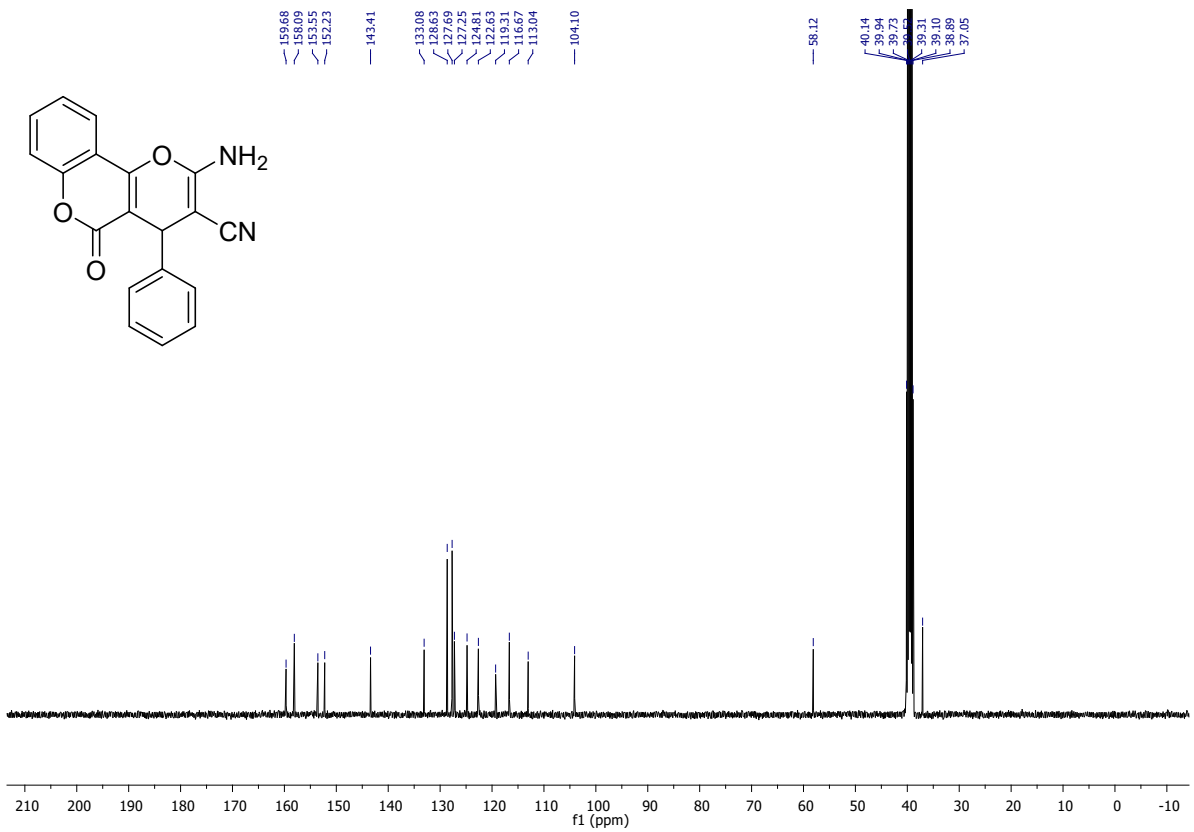
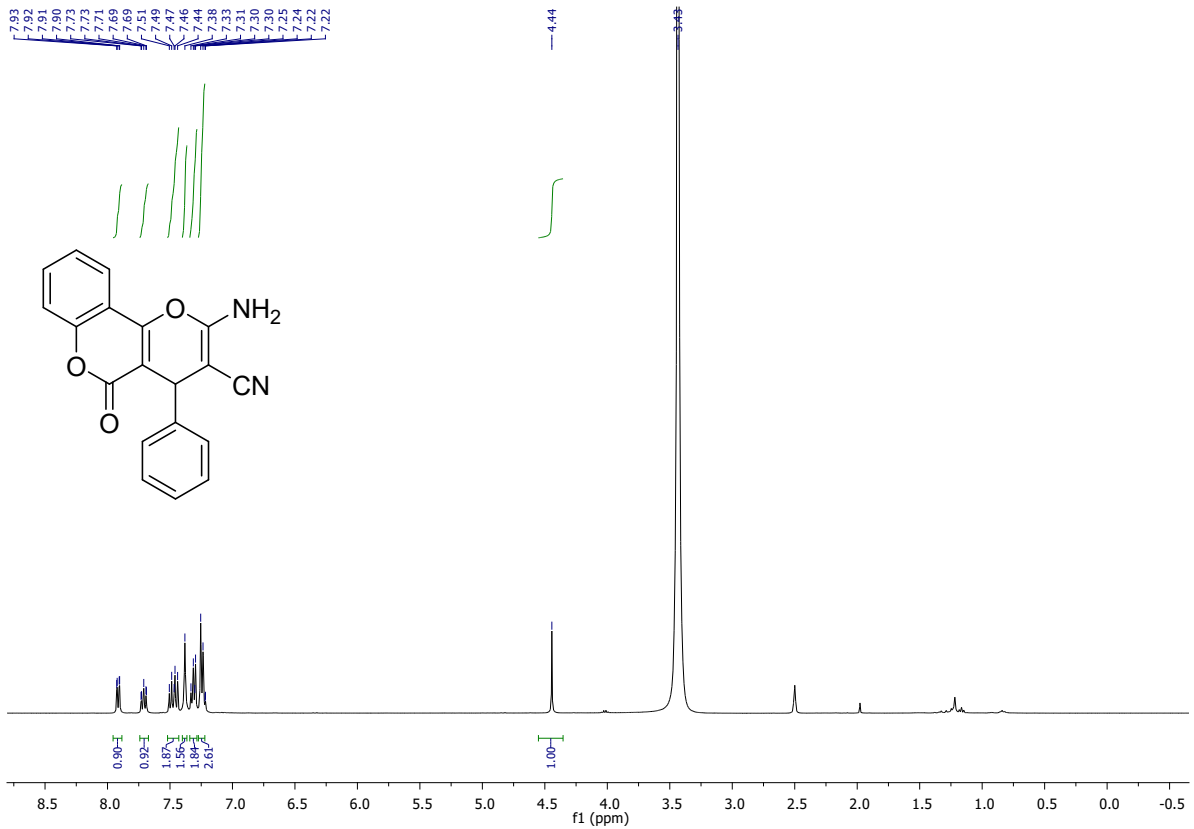
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 13b



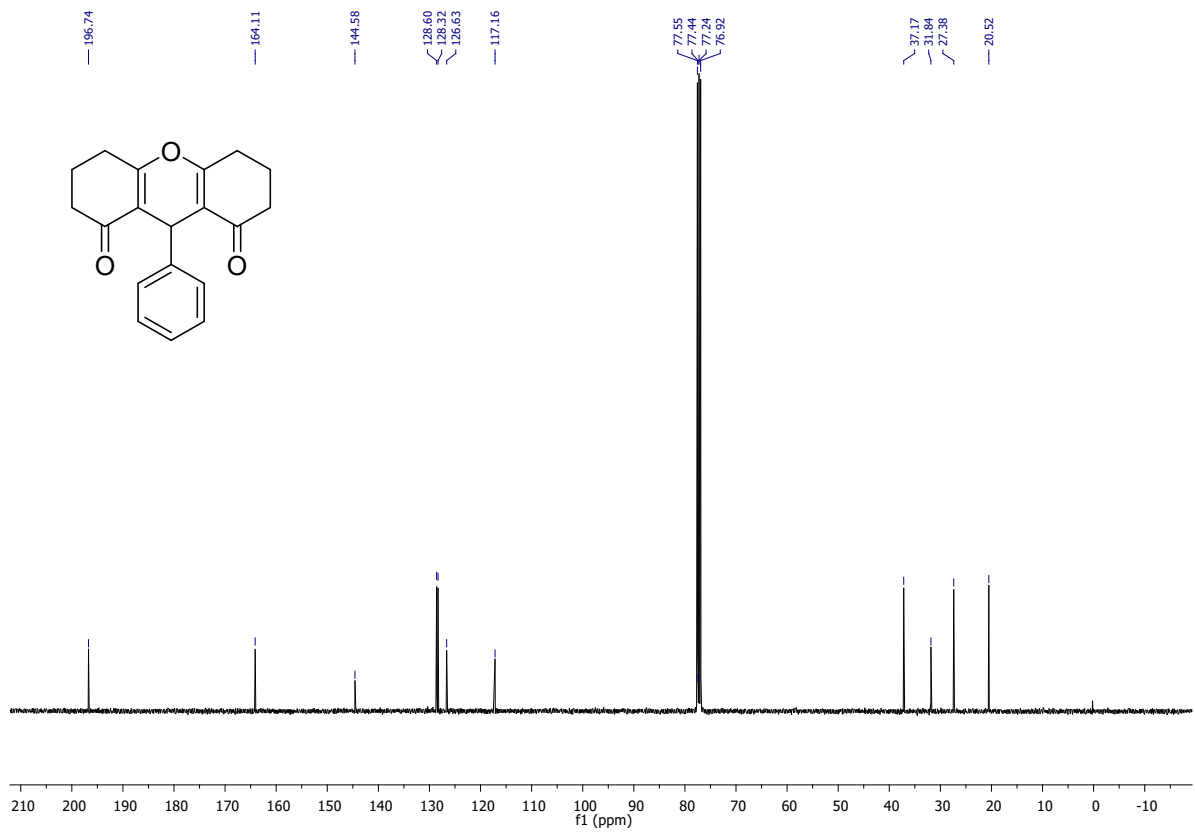
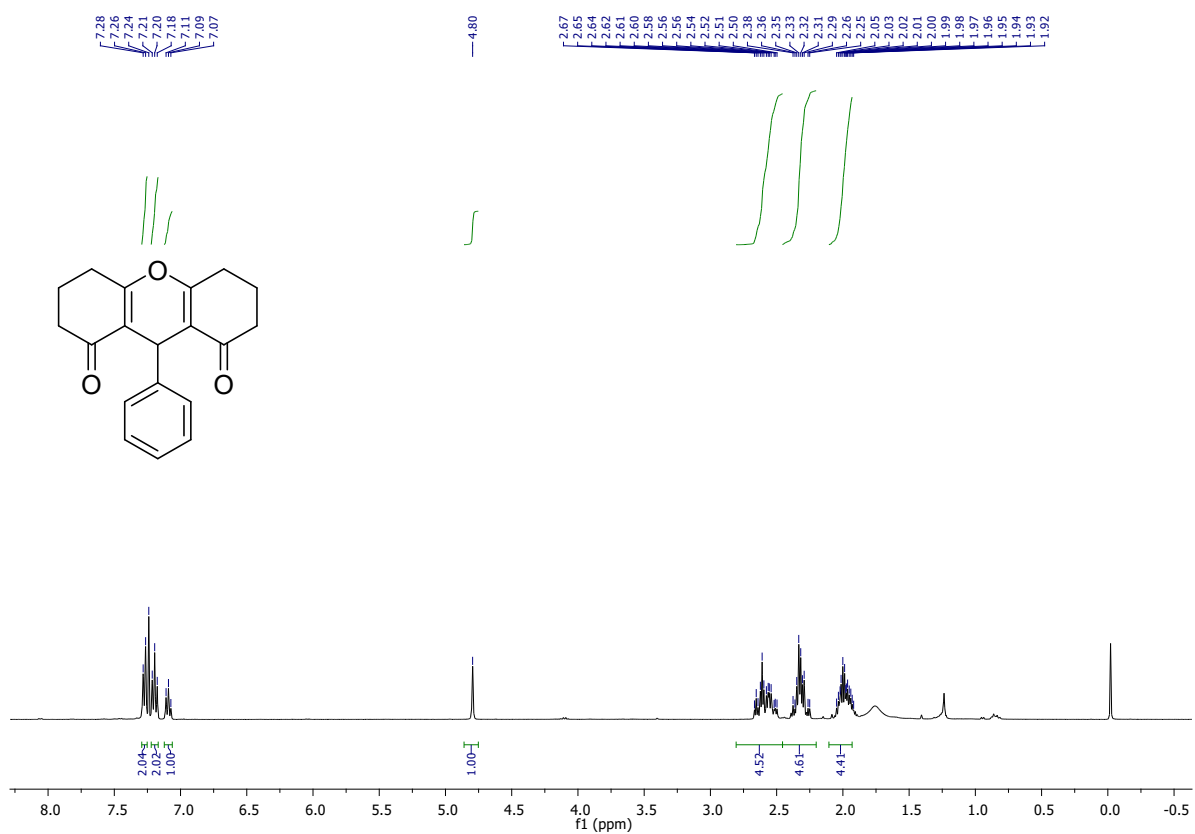
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 13c



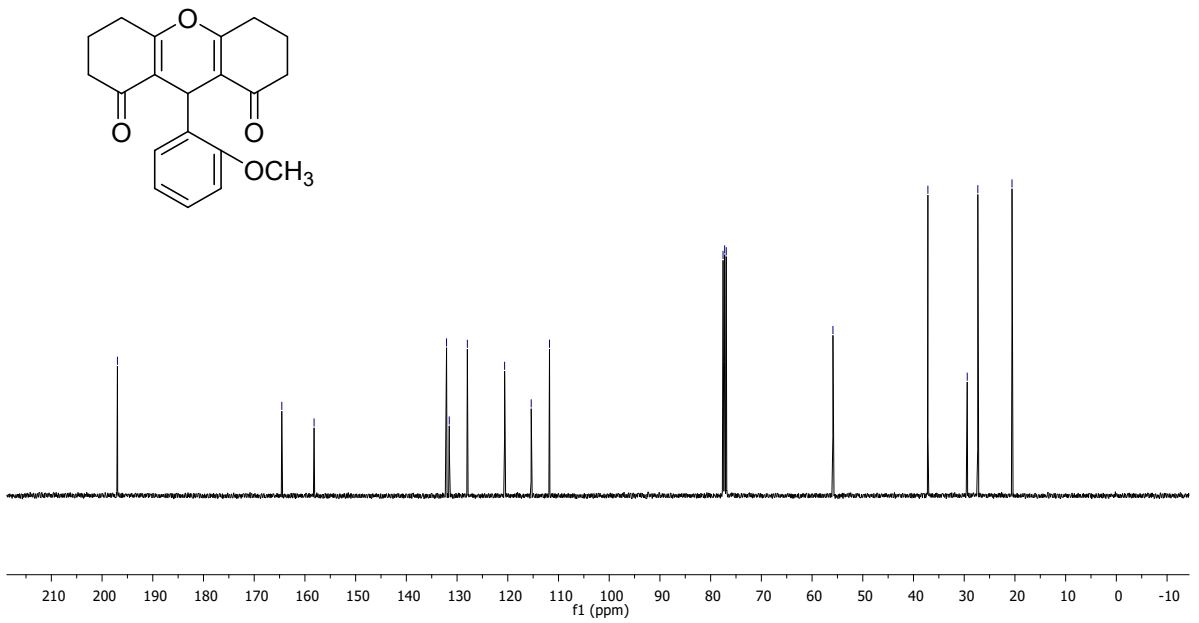
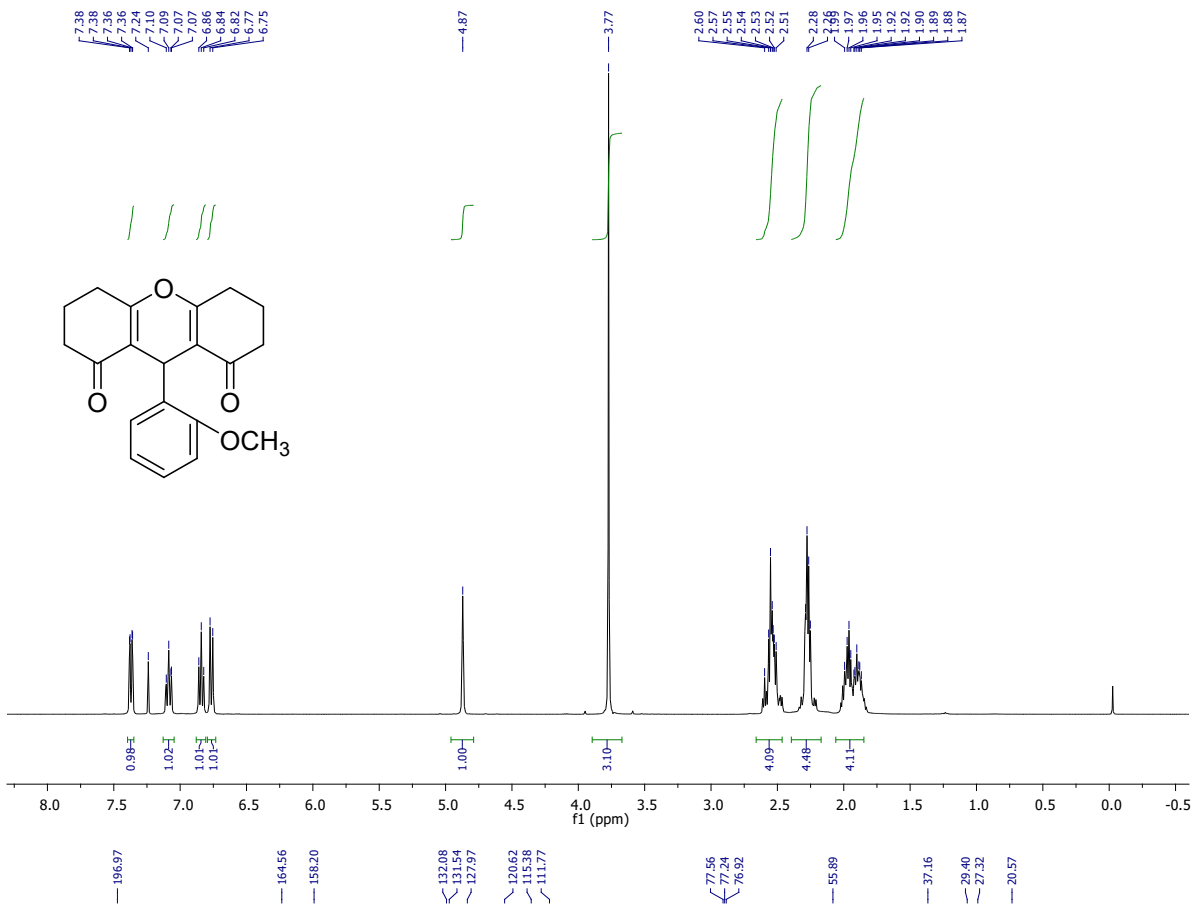
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 13d



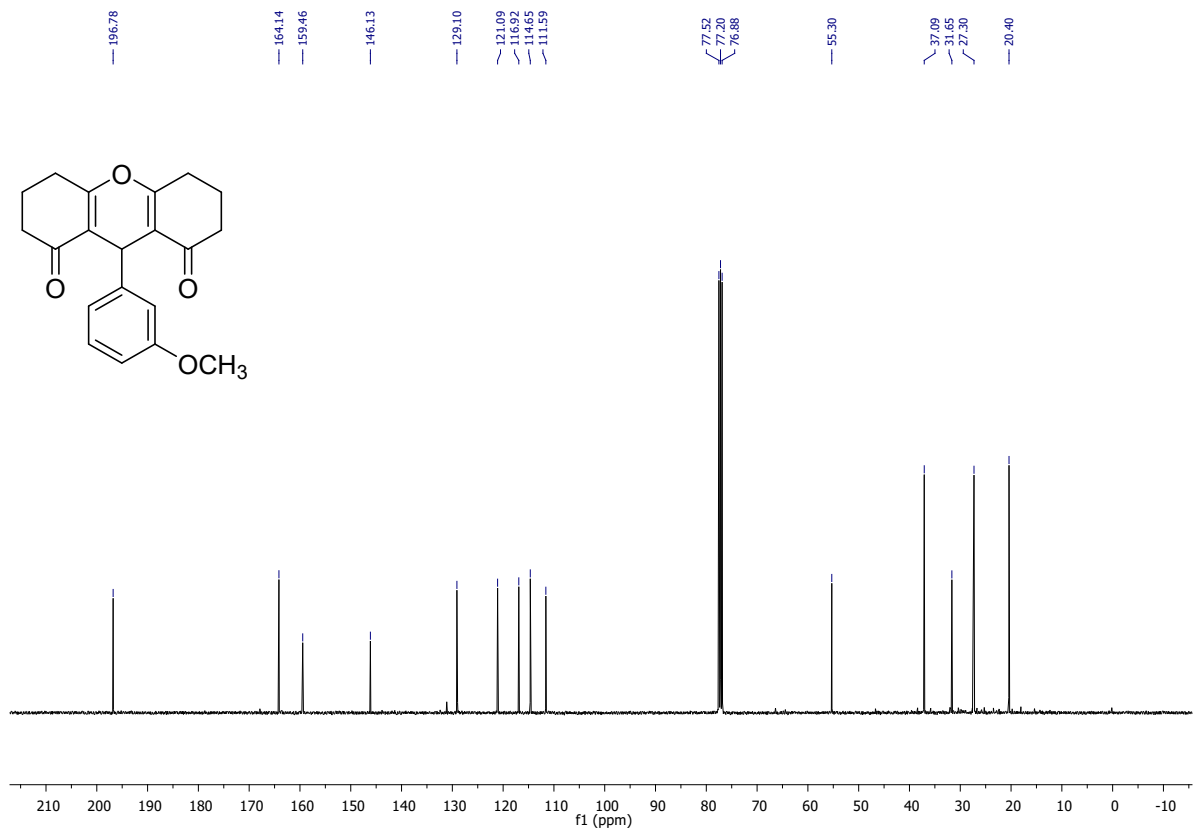
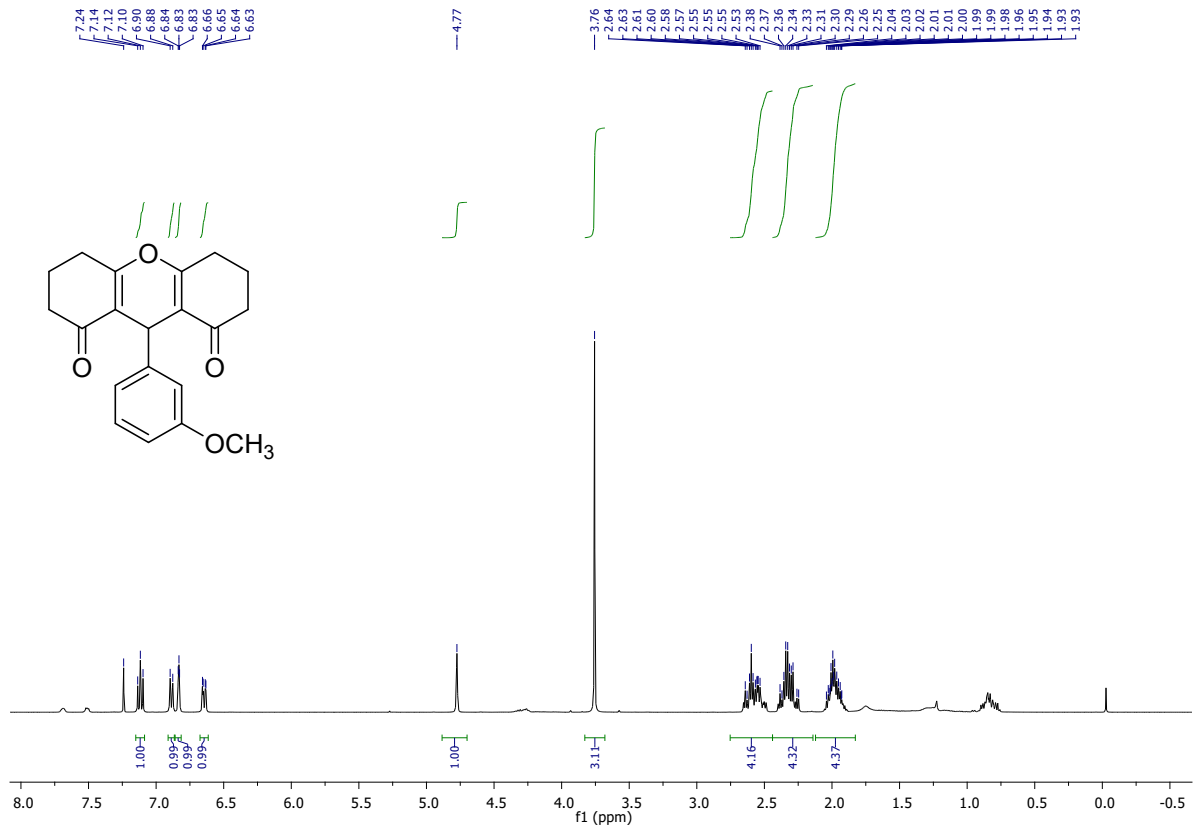
# $^1\text{H}$ and $^{13}\text{C}$ NMR of compound 14a



# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14b

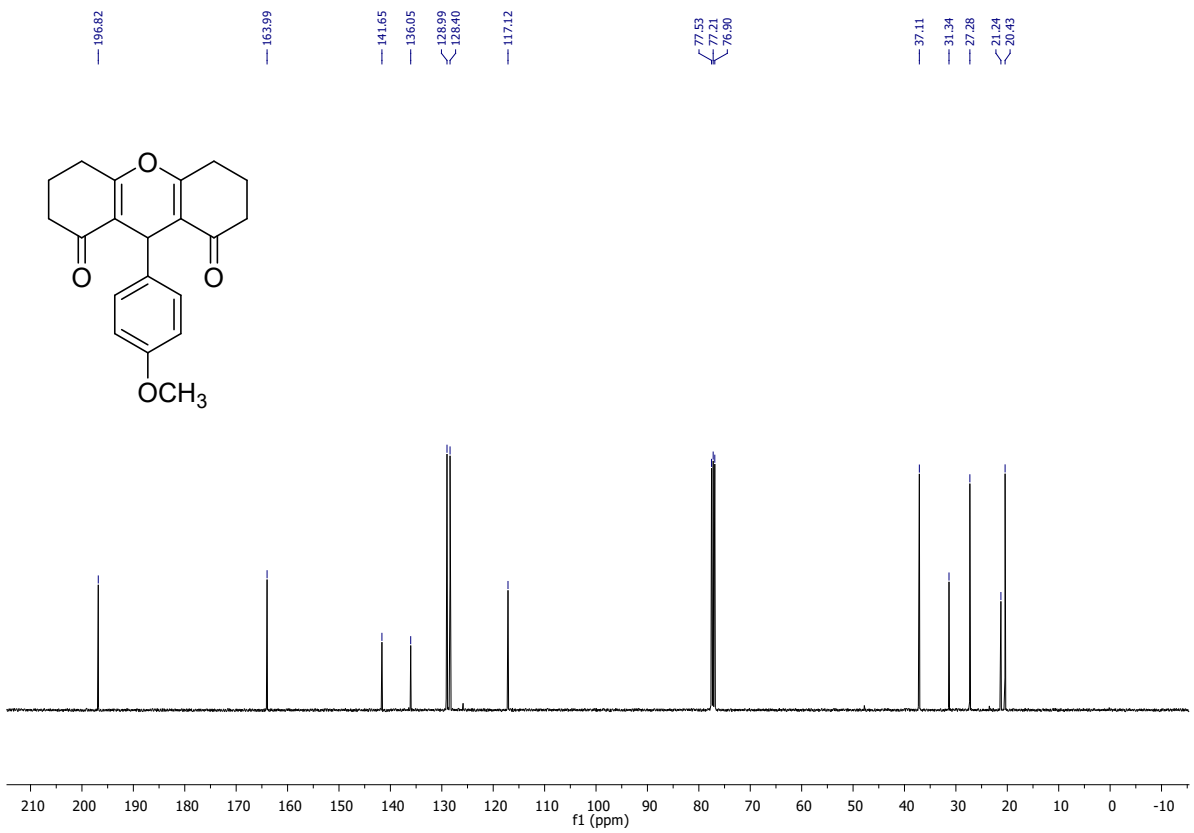
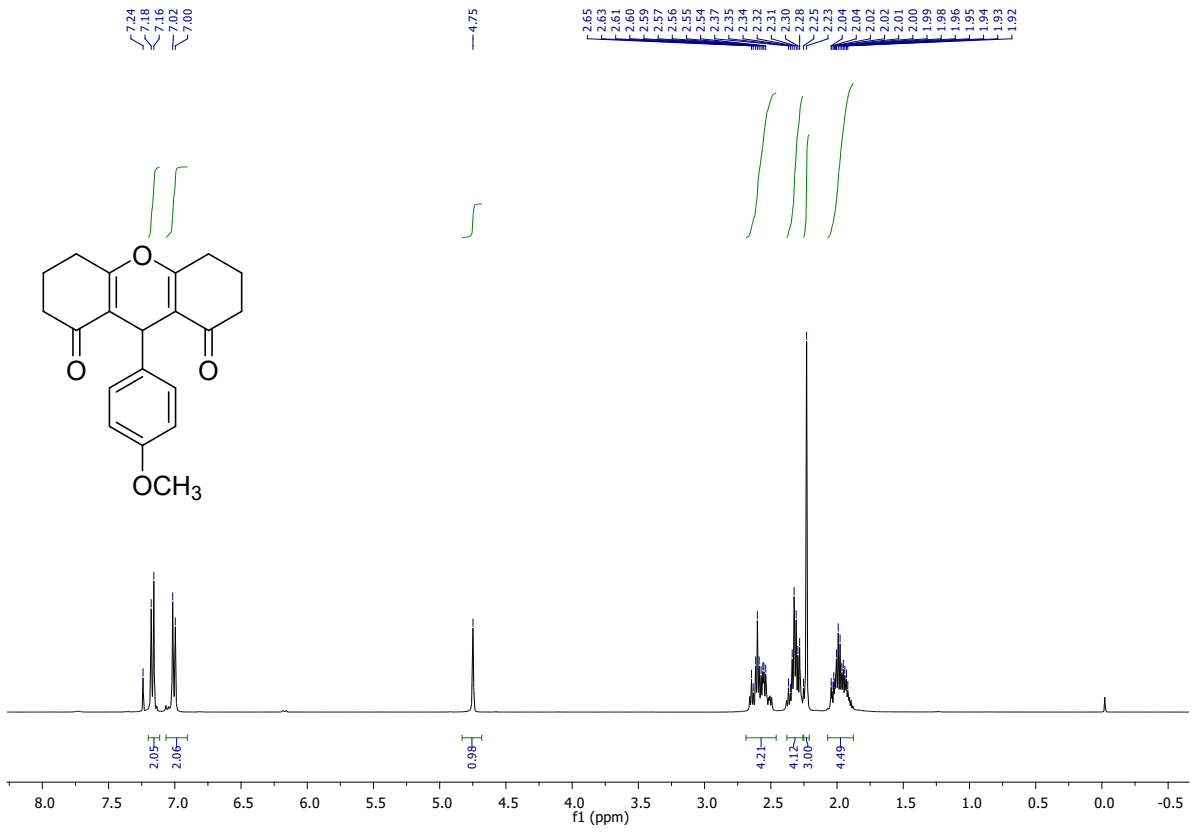


# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14c

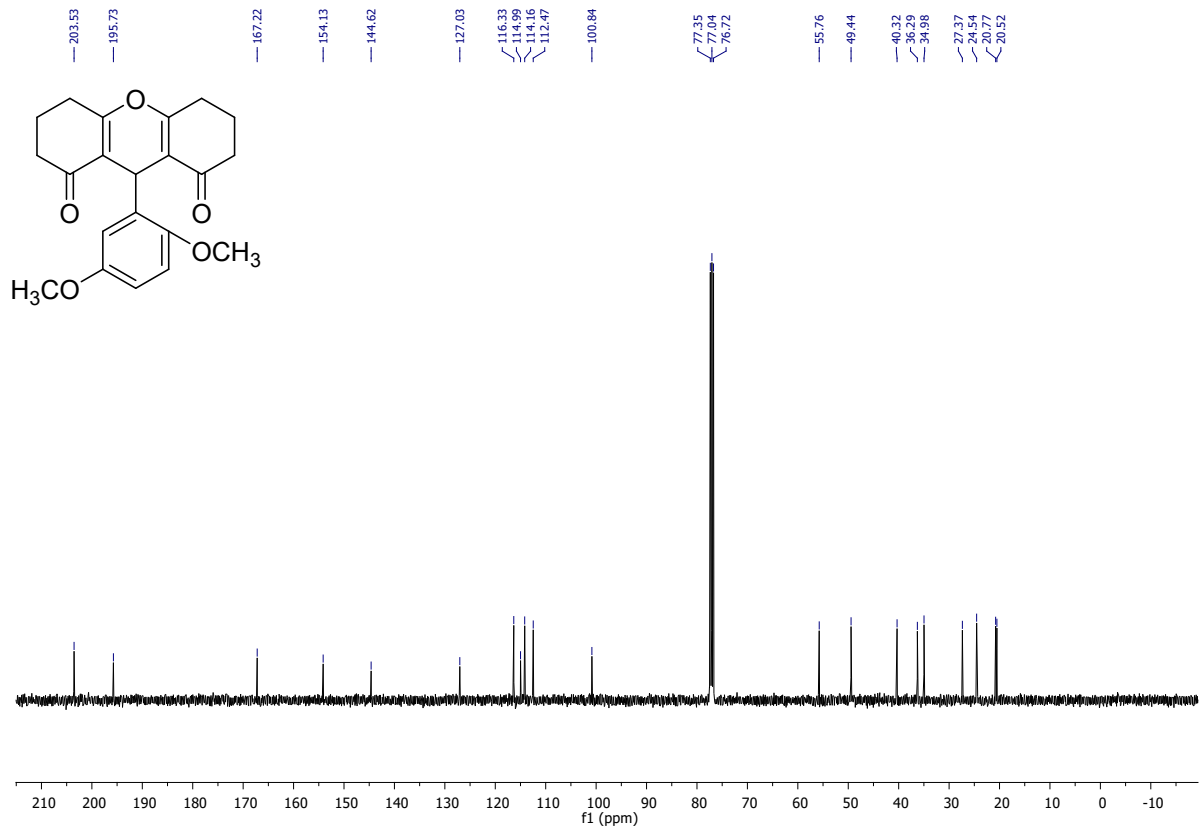
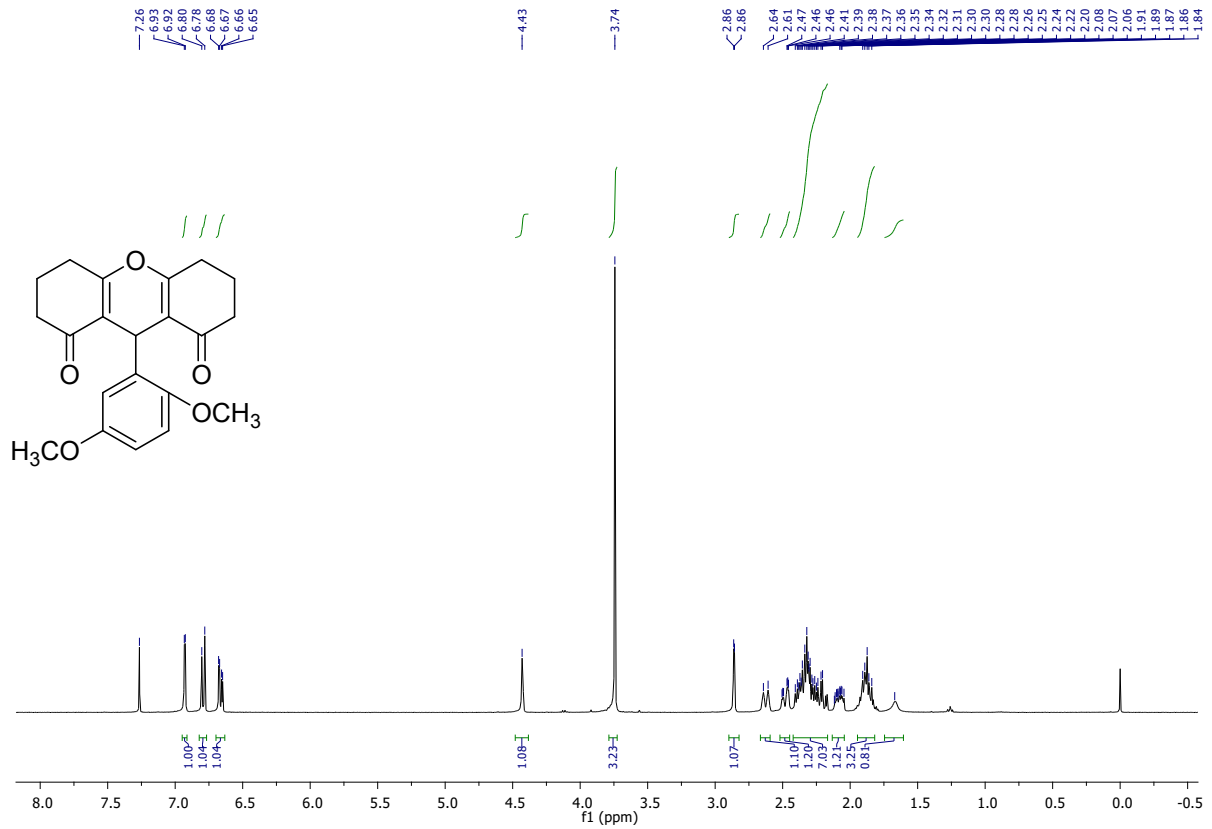




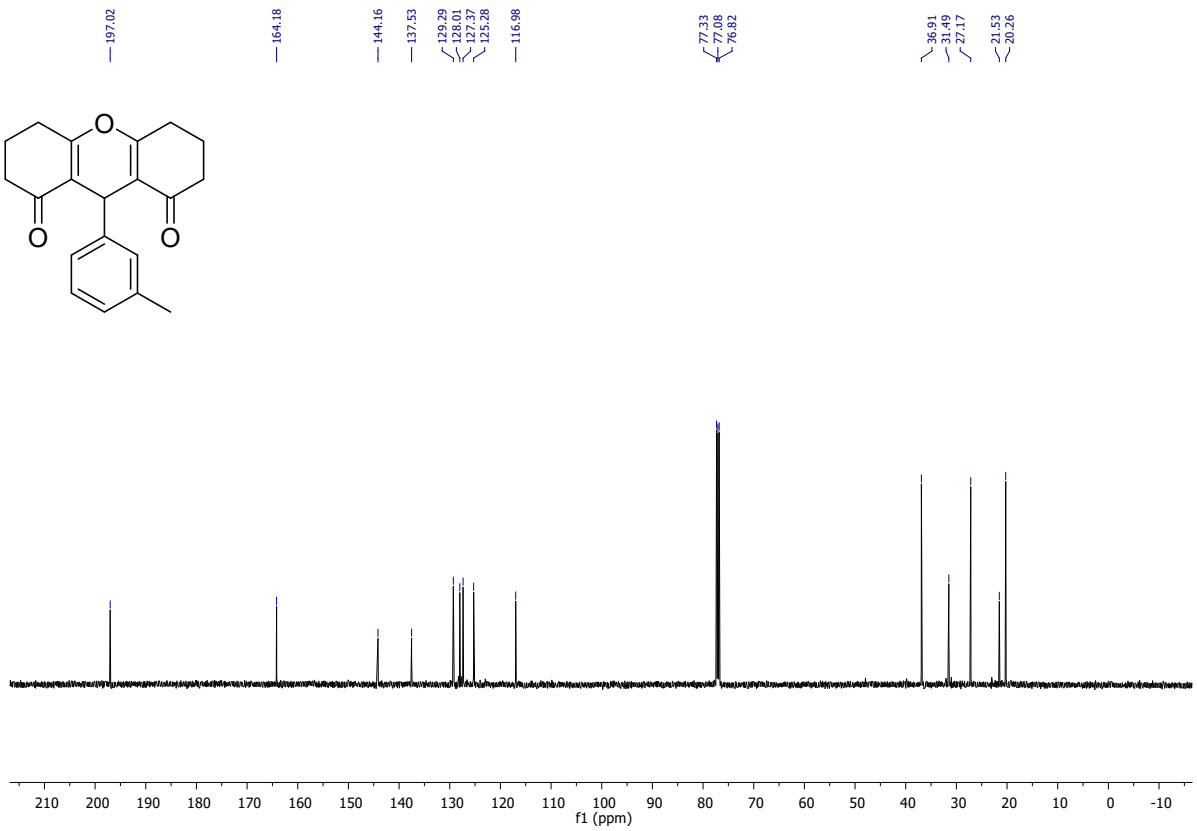
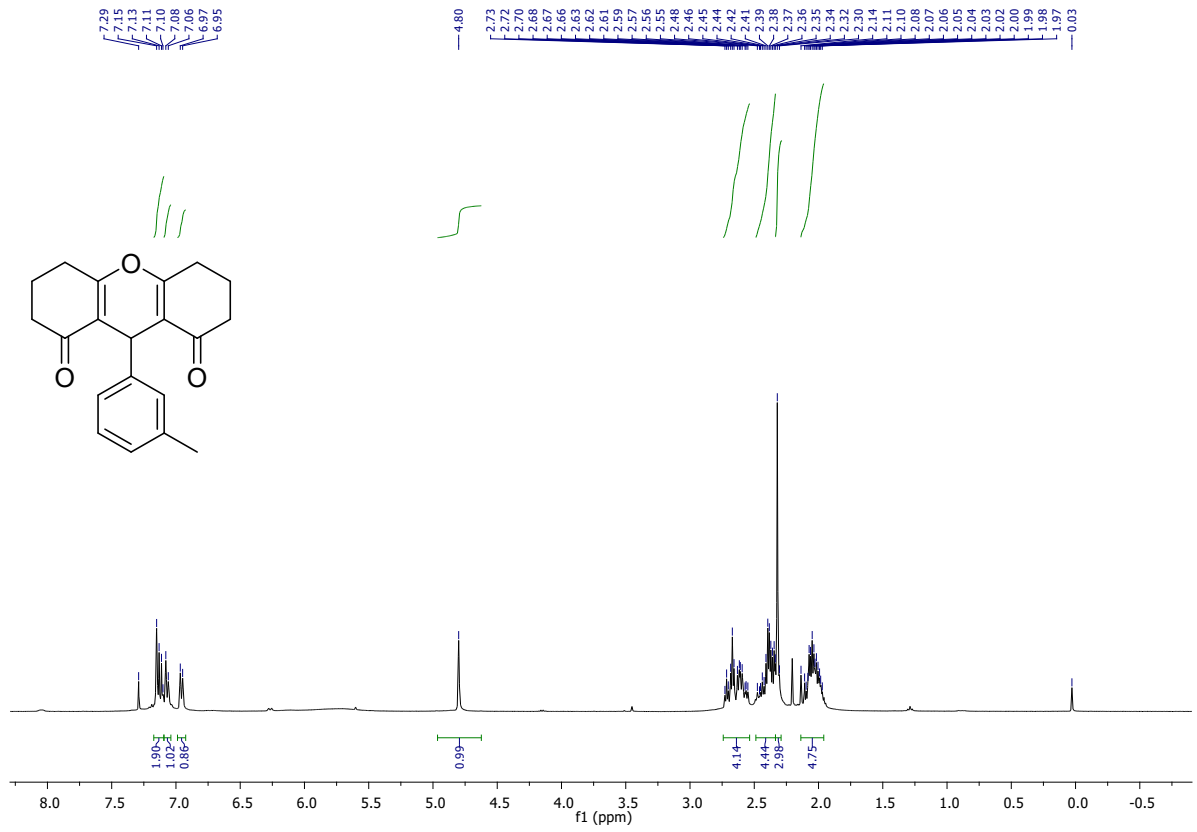
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14d



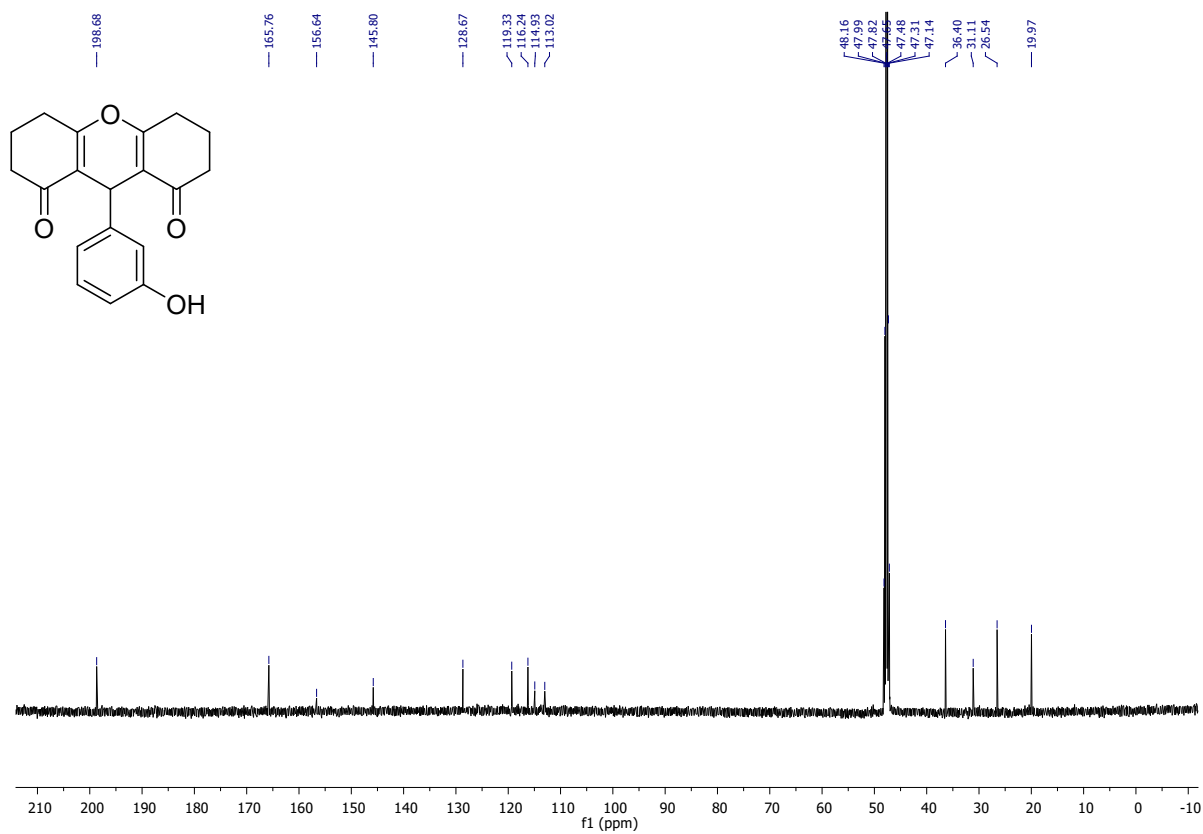
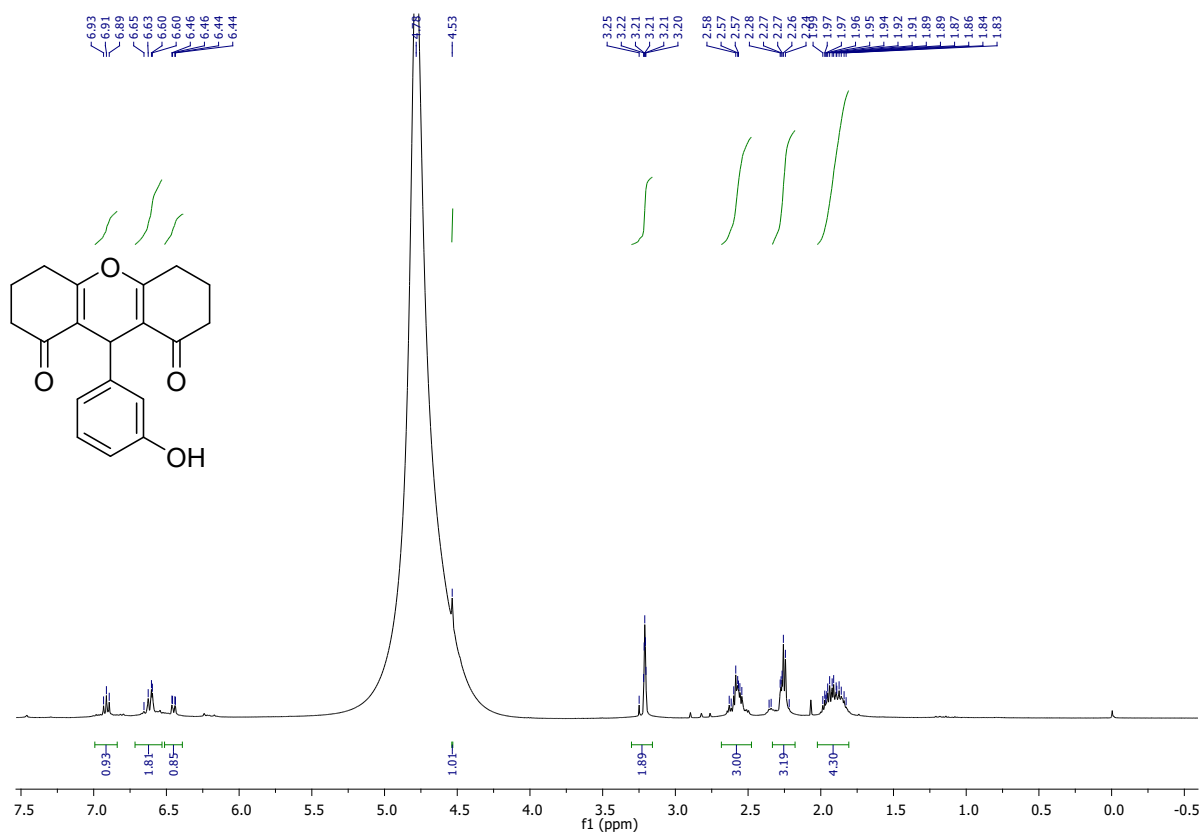
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14e



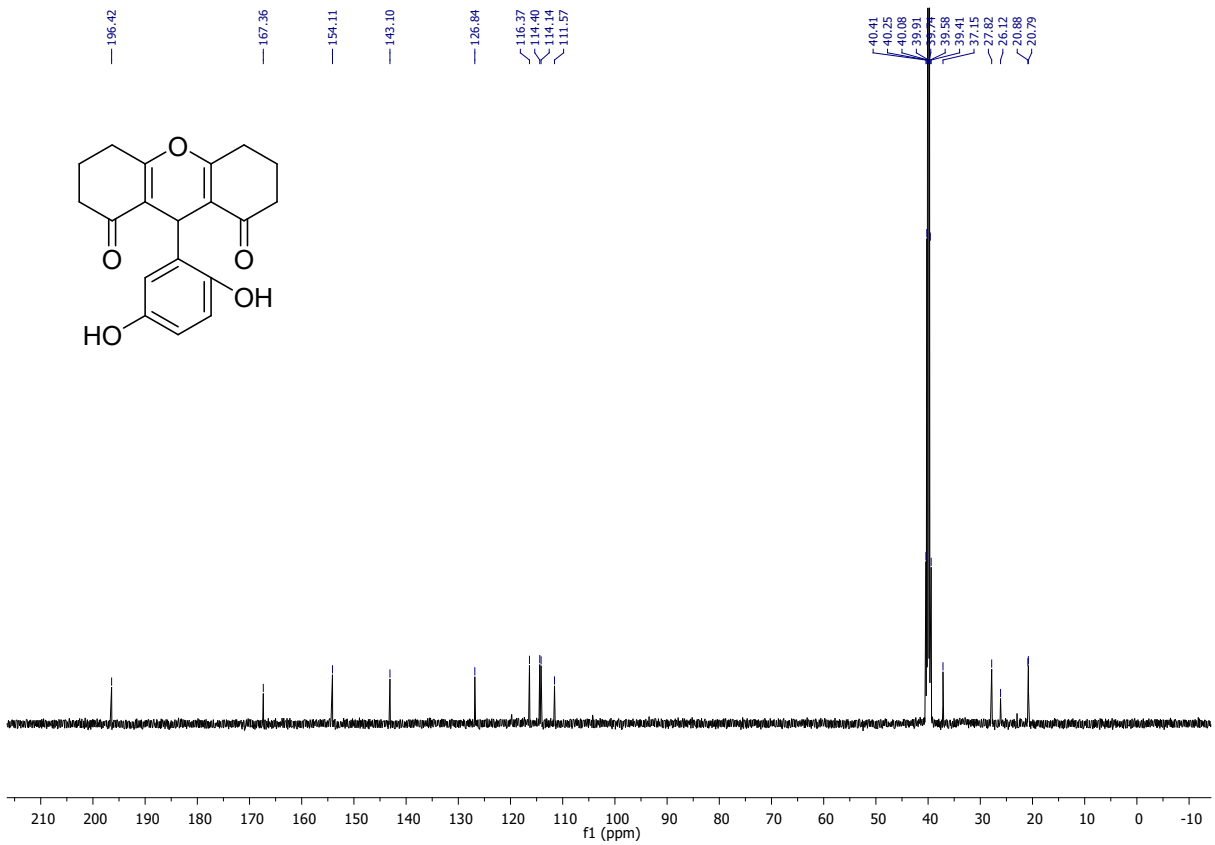
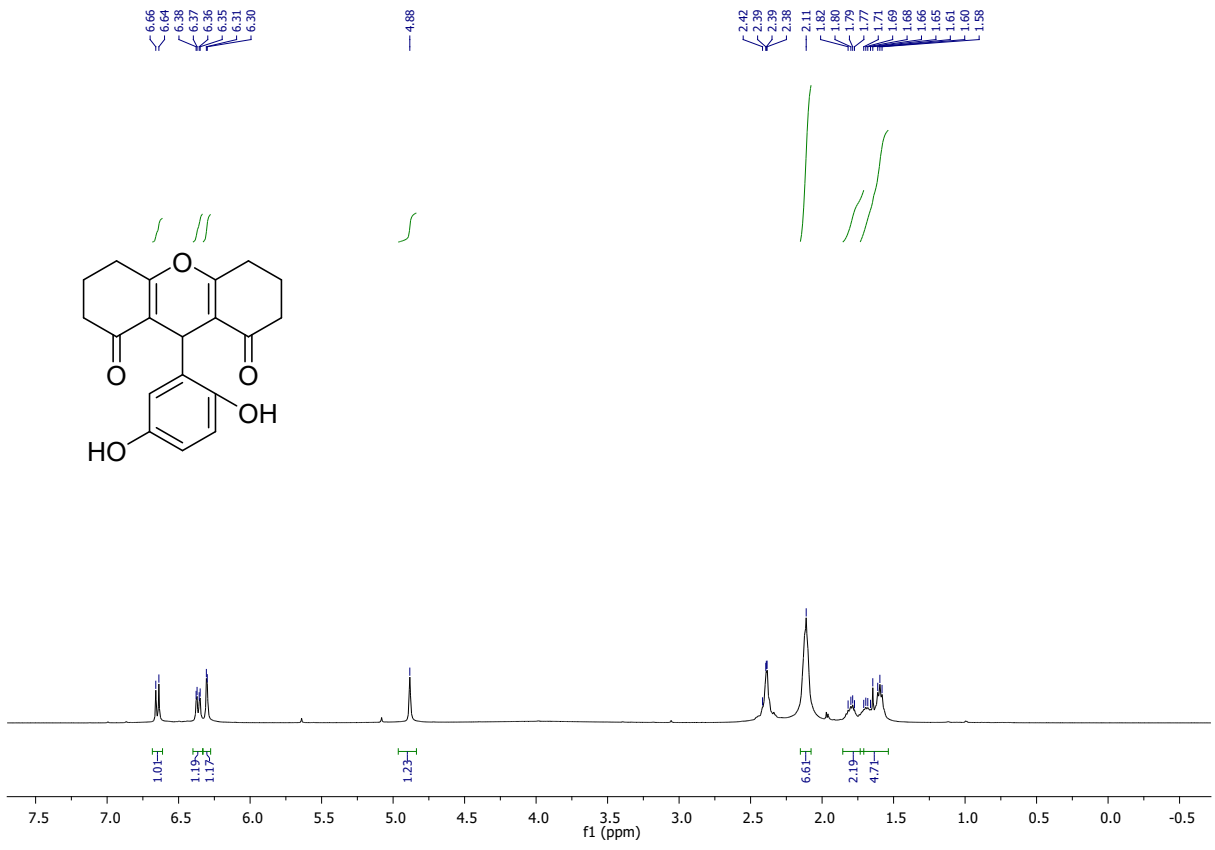
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14f



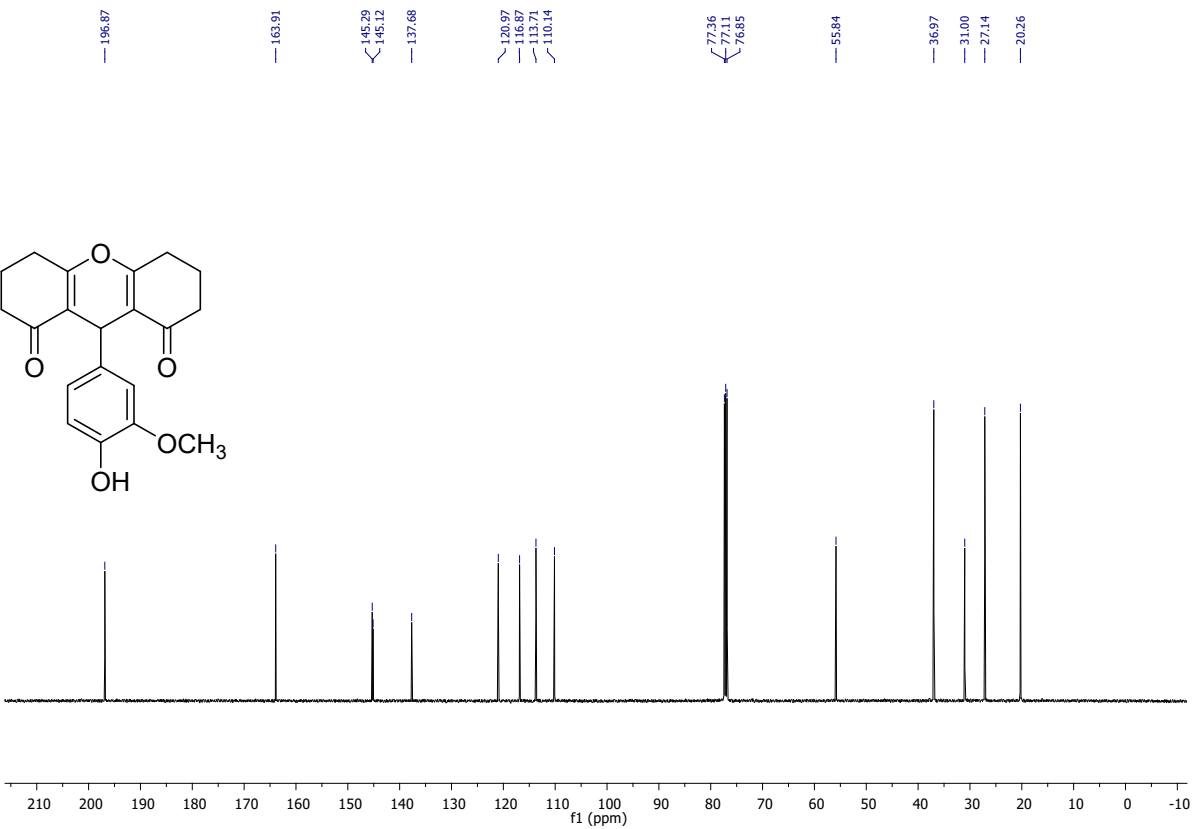
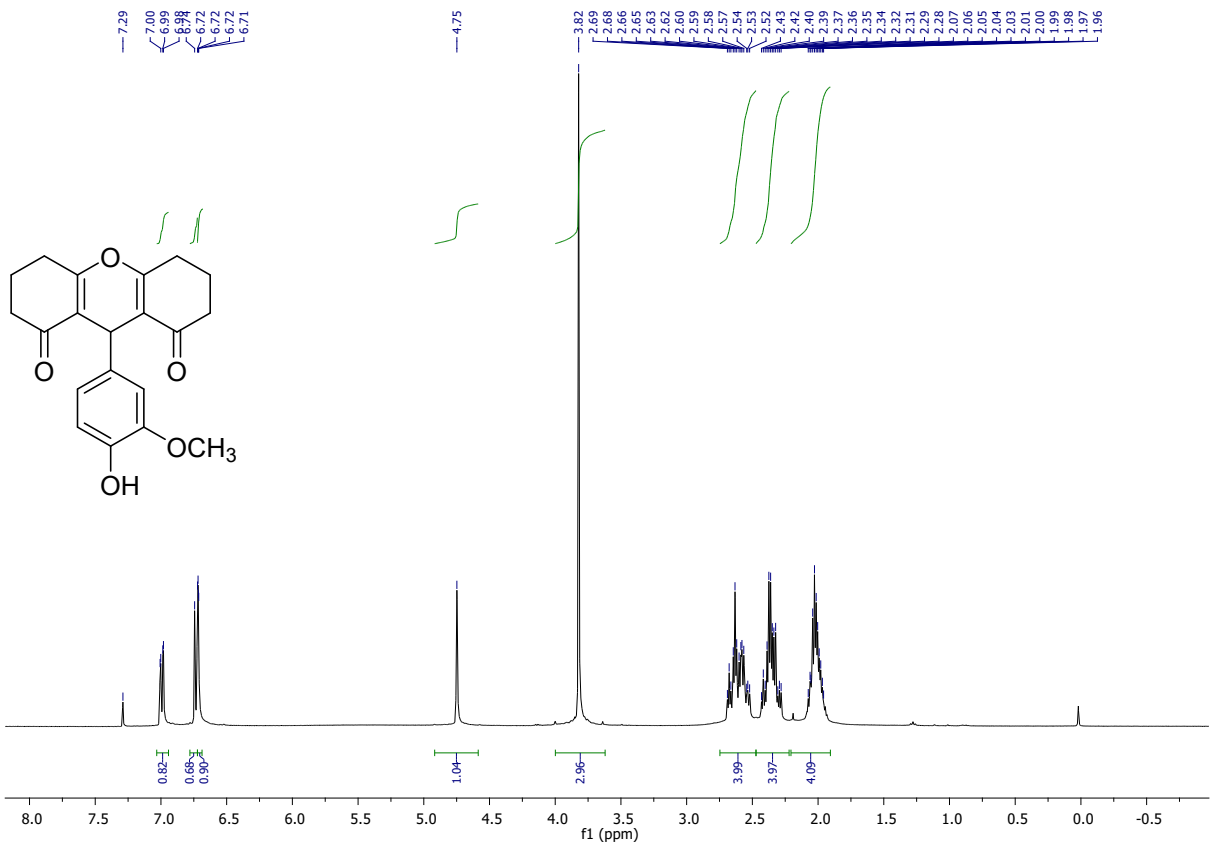
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14g



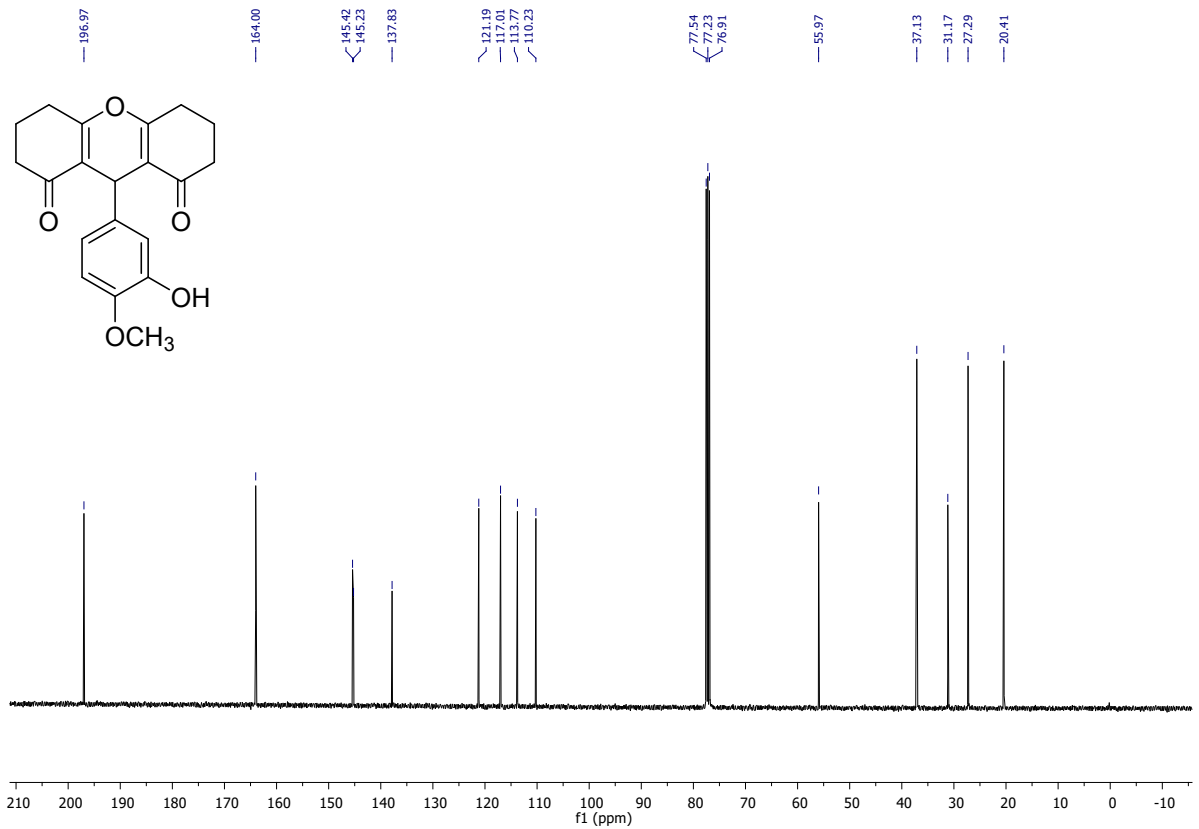
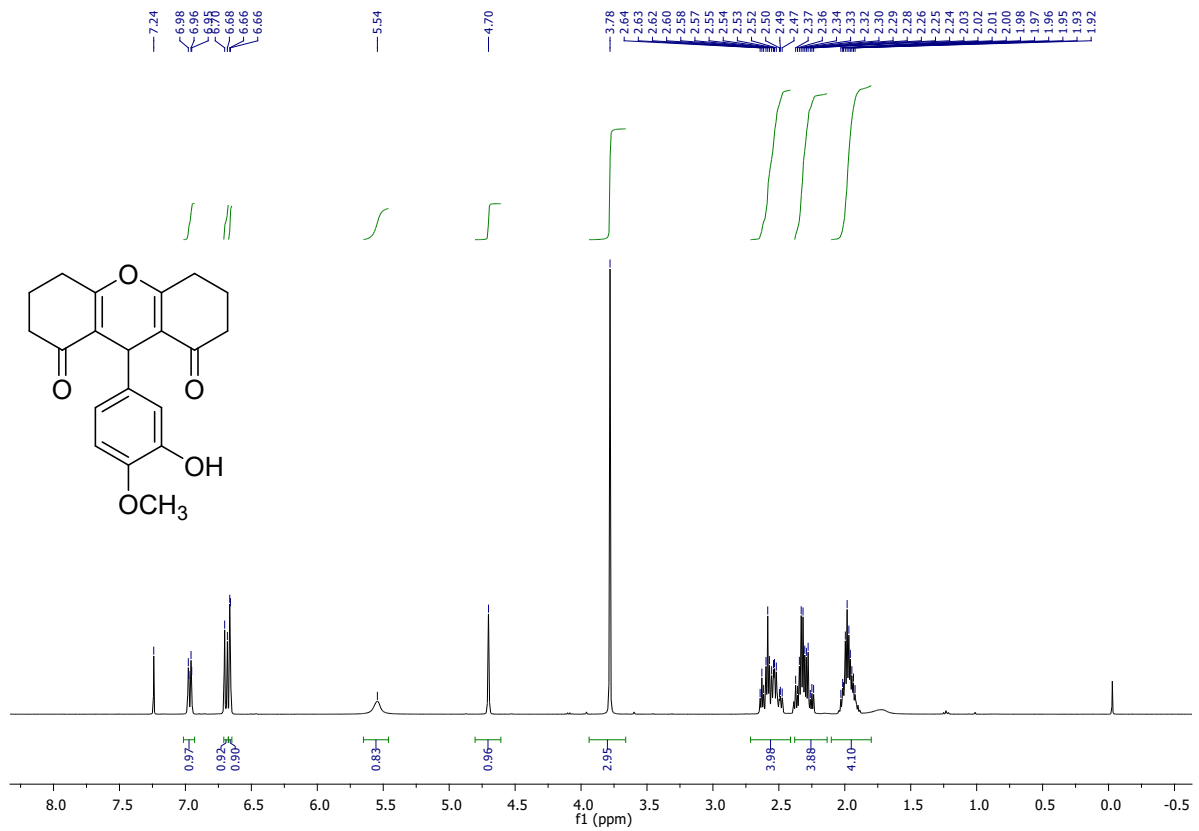
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14h



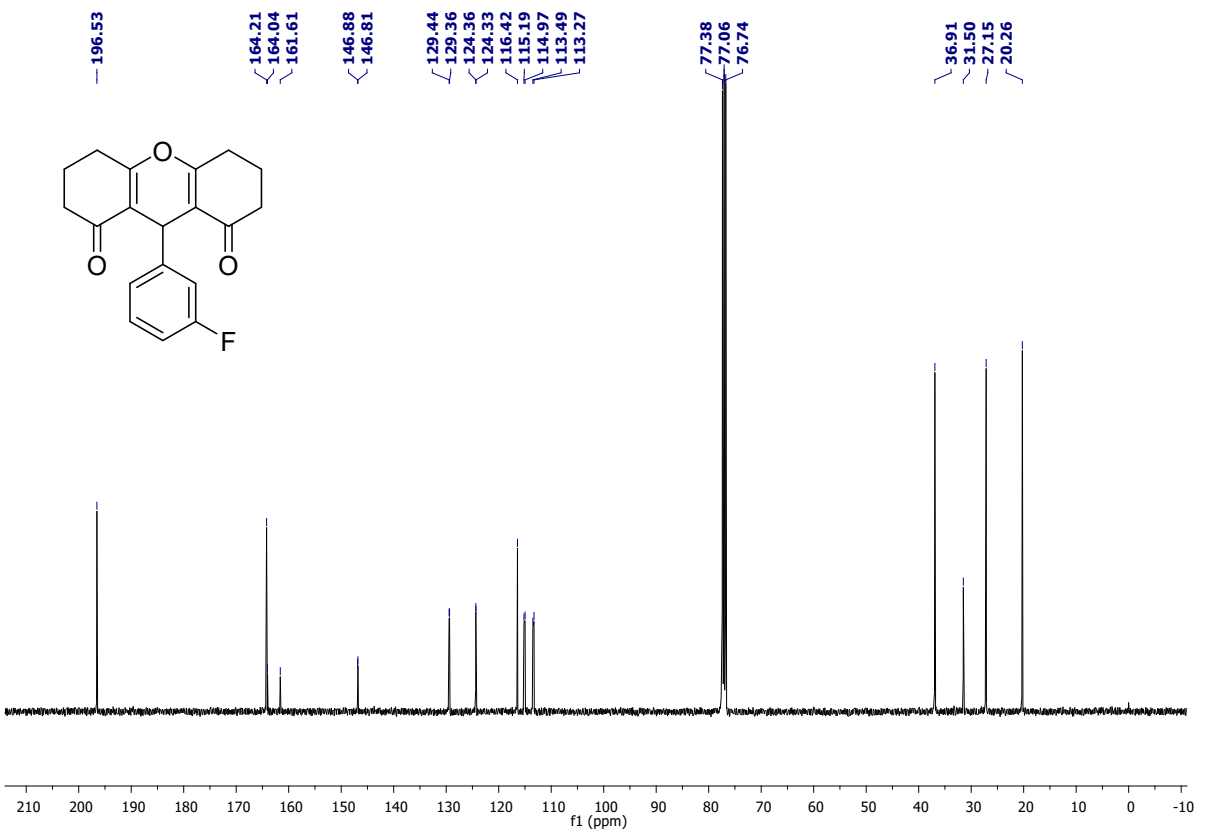
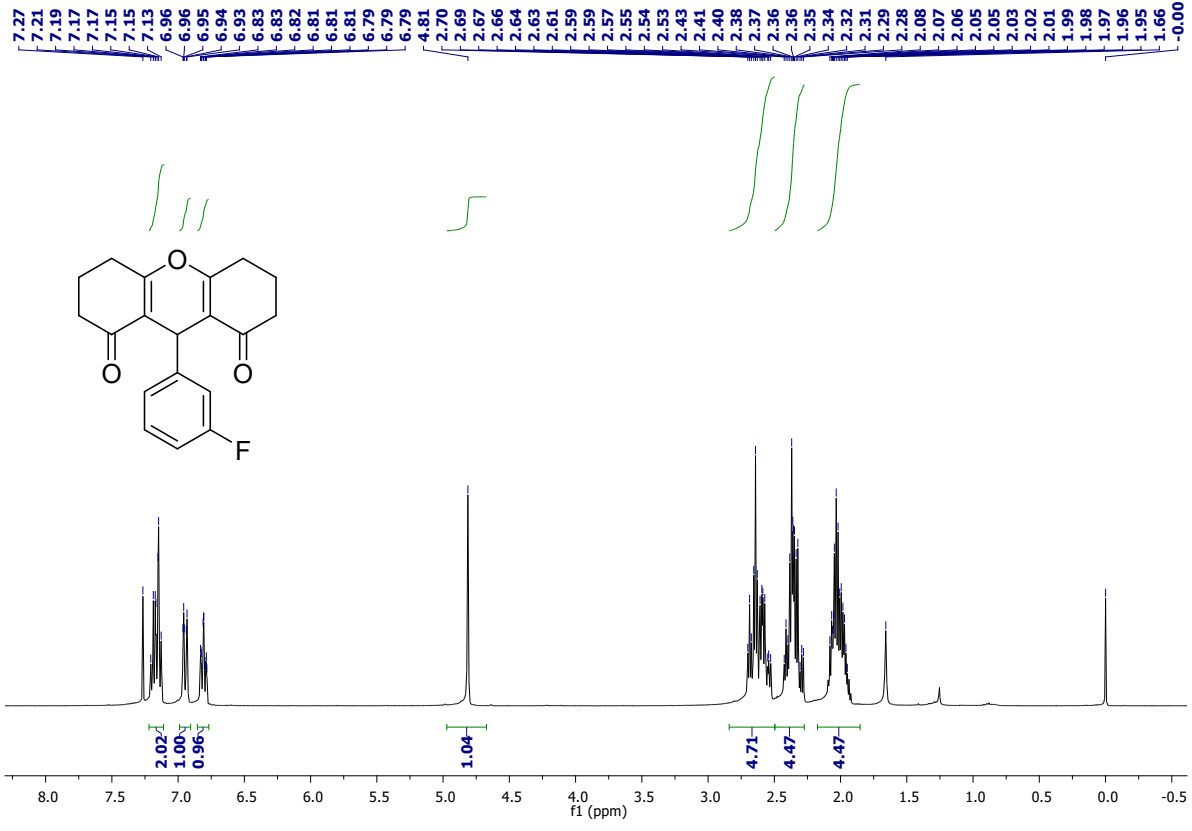
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14i



# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14j

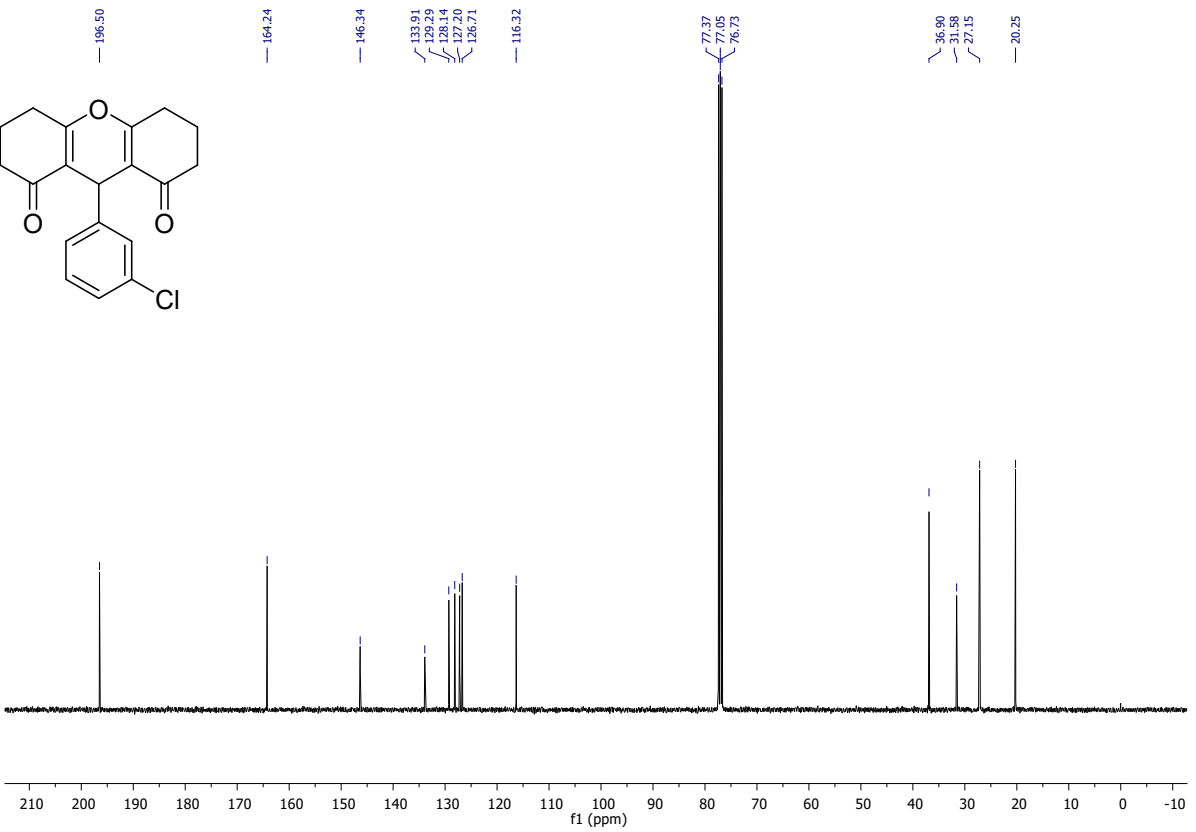
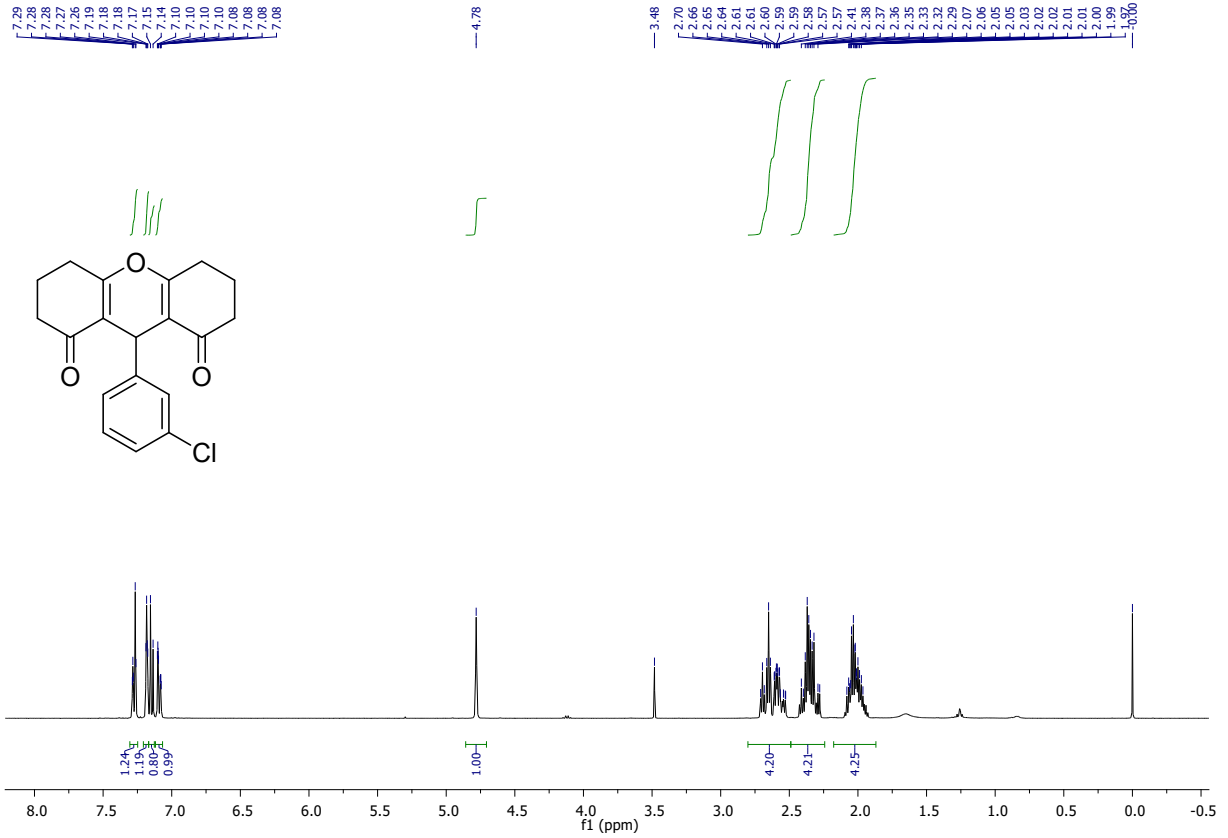


# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14k

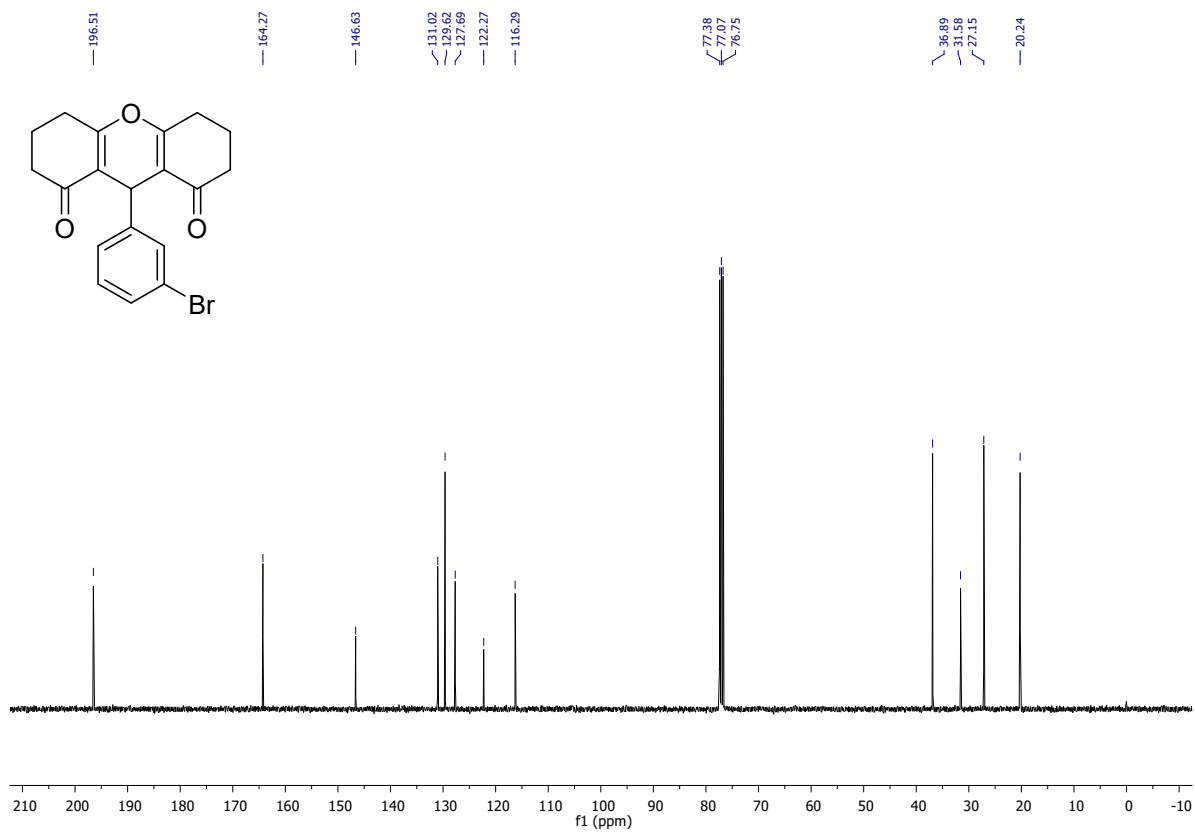
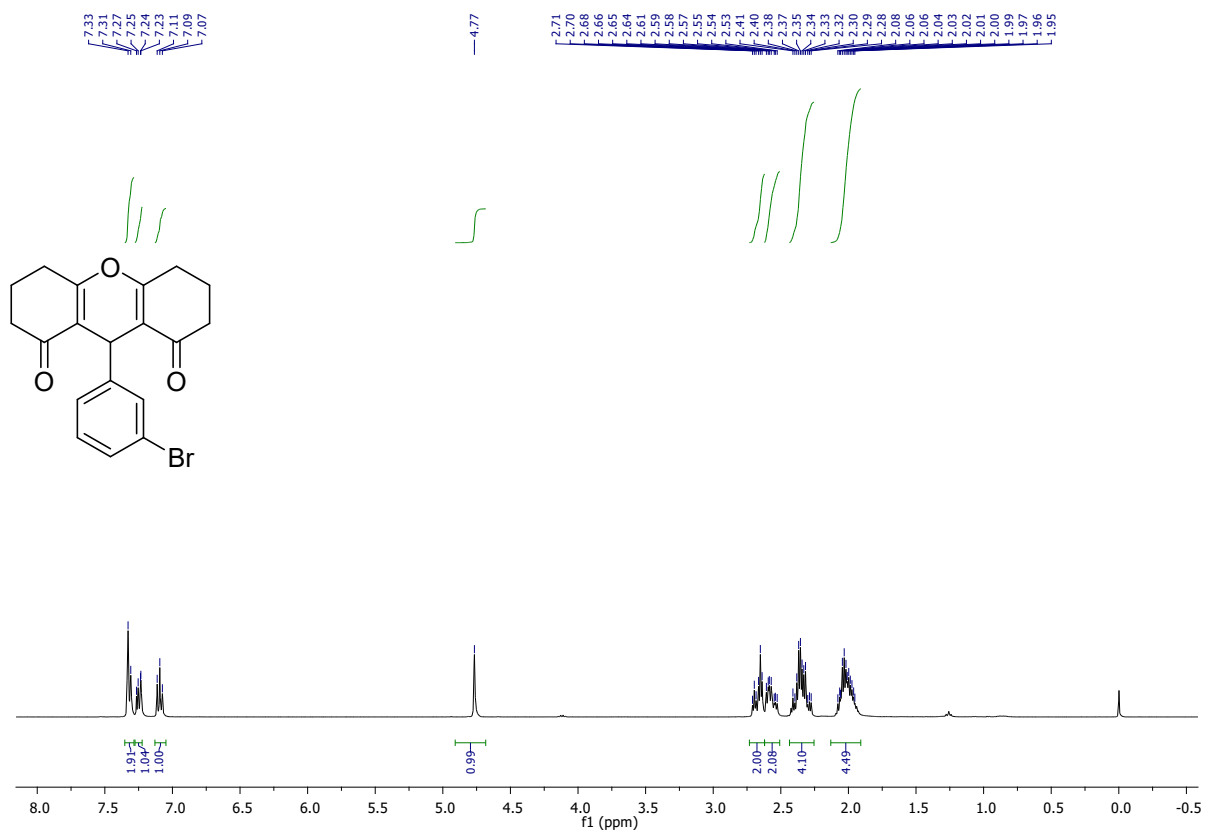




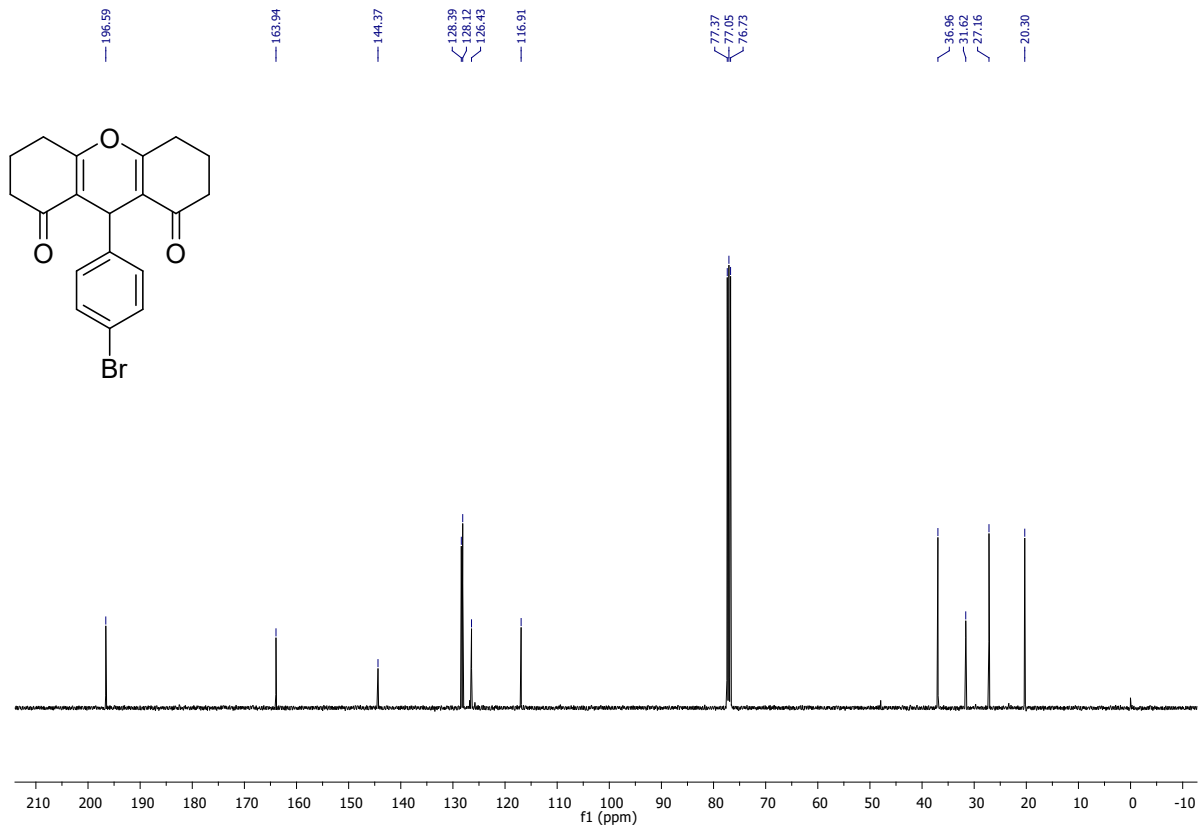
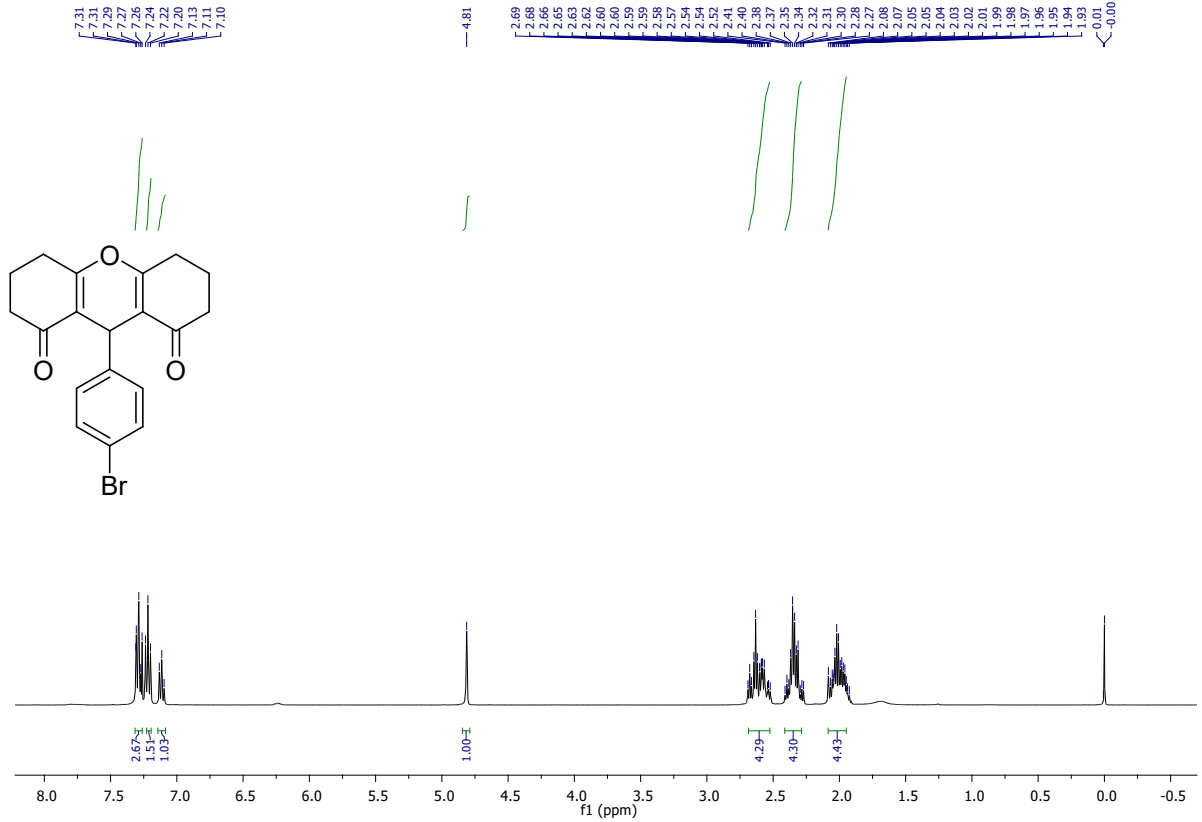
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14l



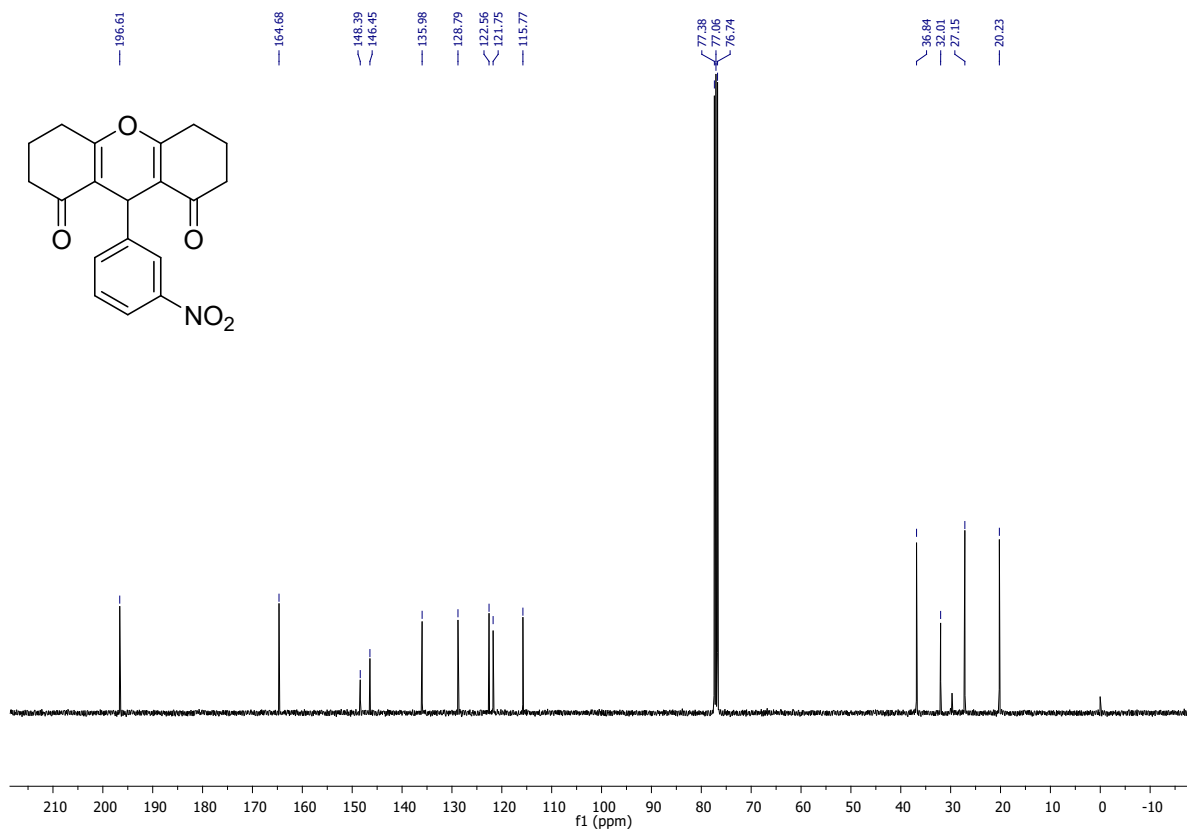
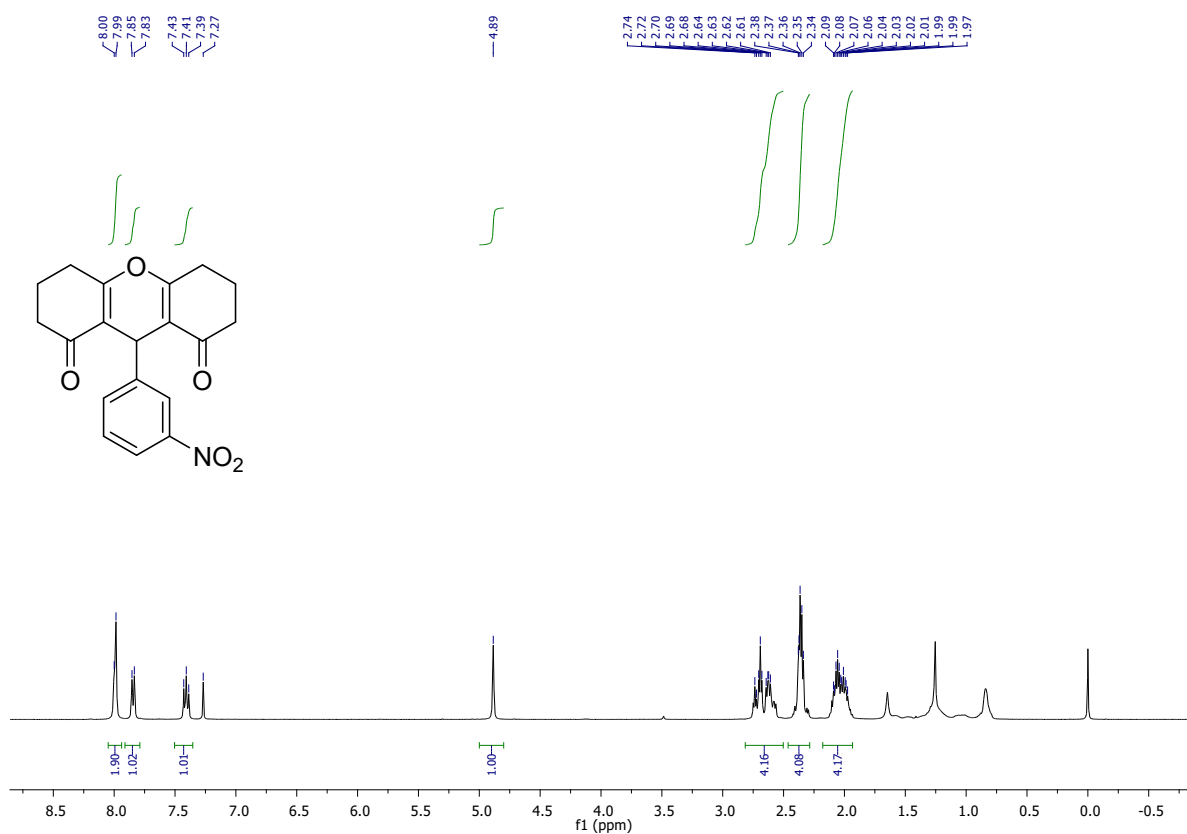
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14m



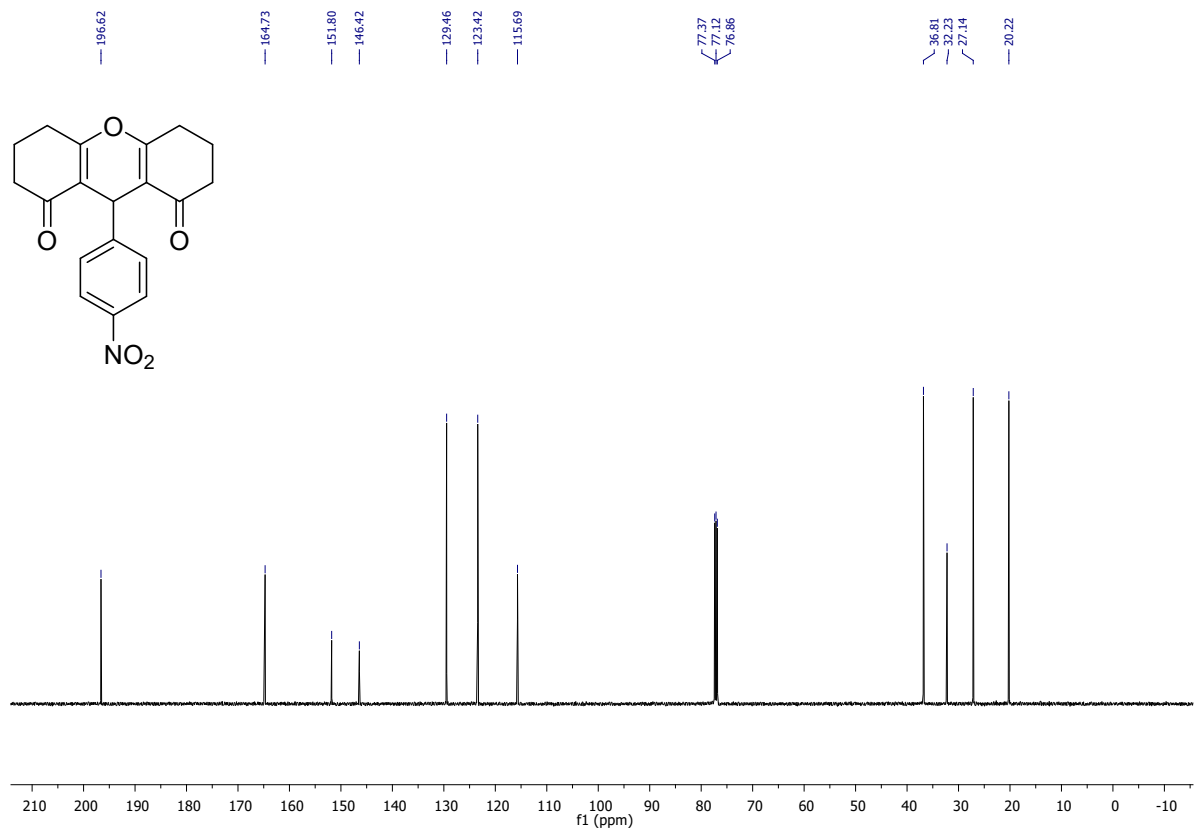
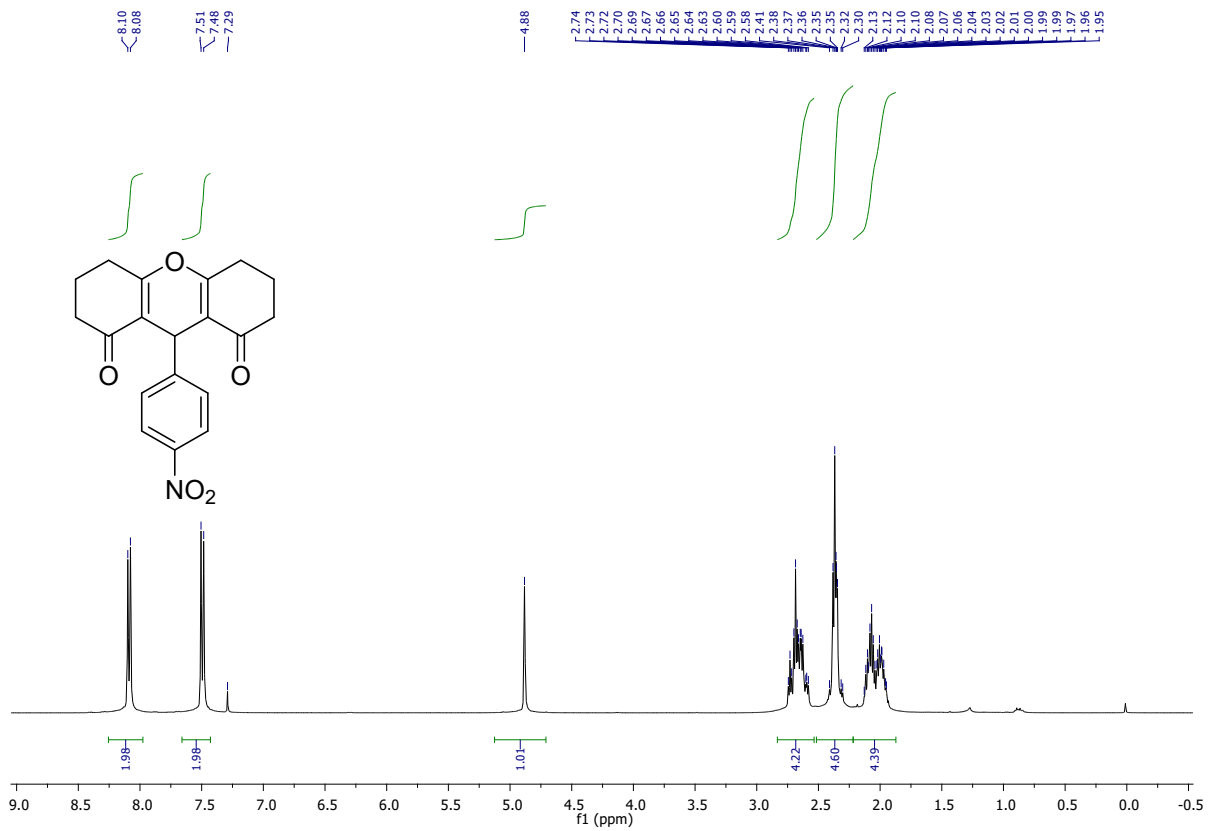
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14n



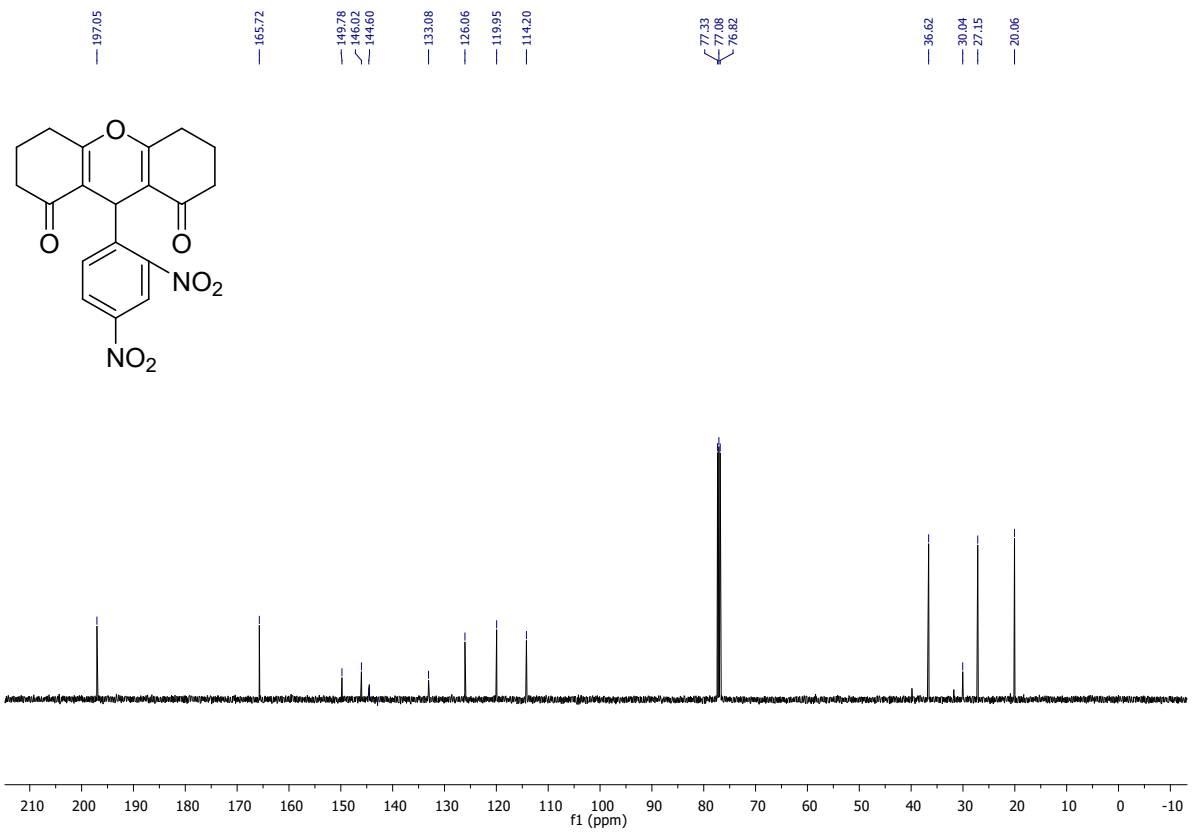
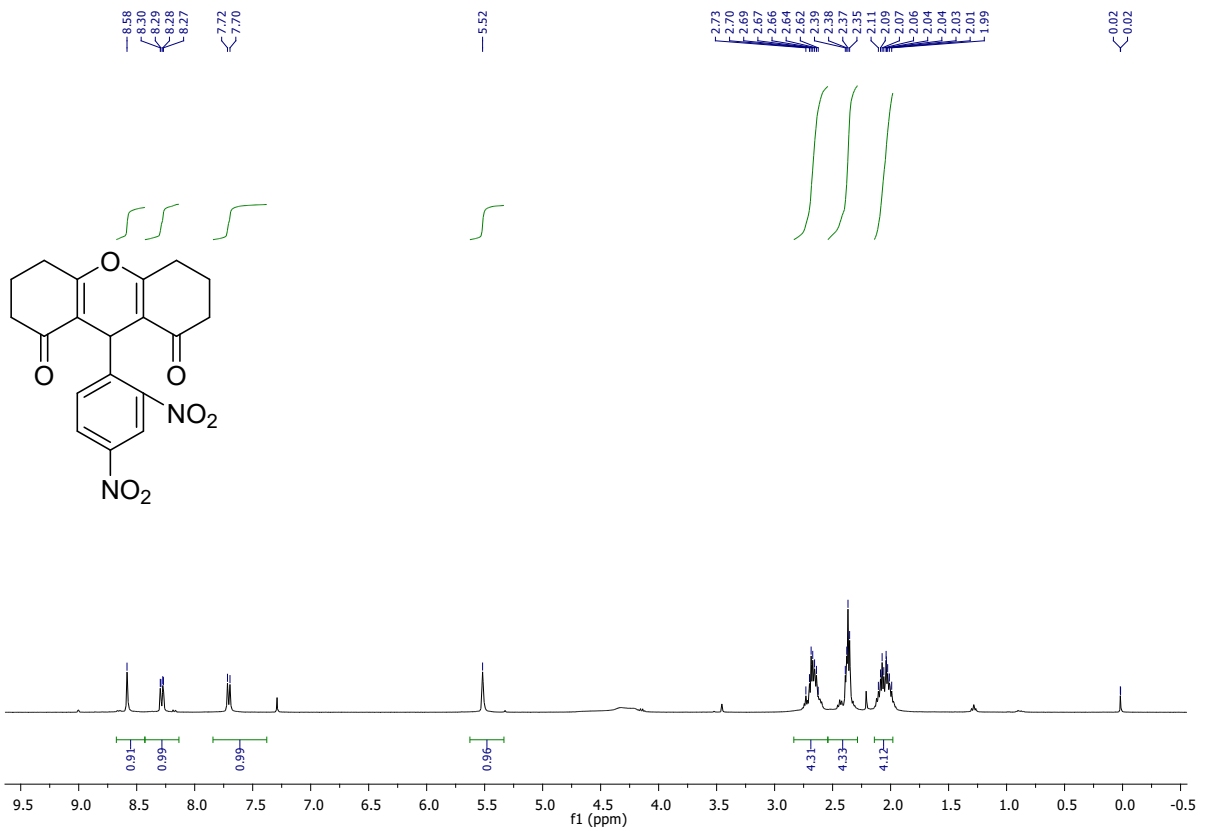
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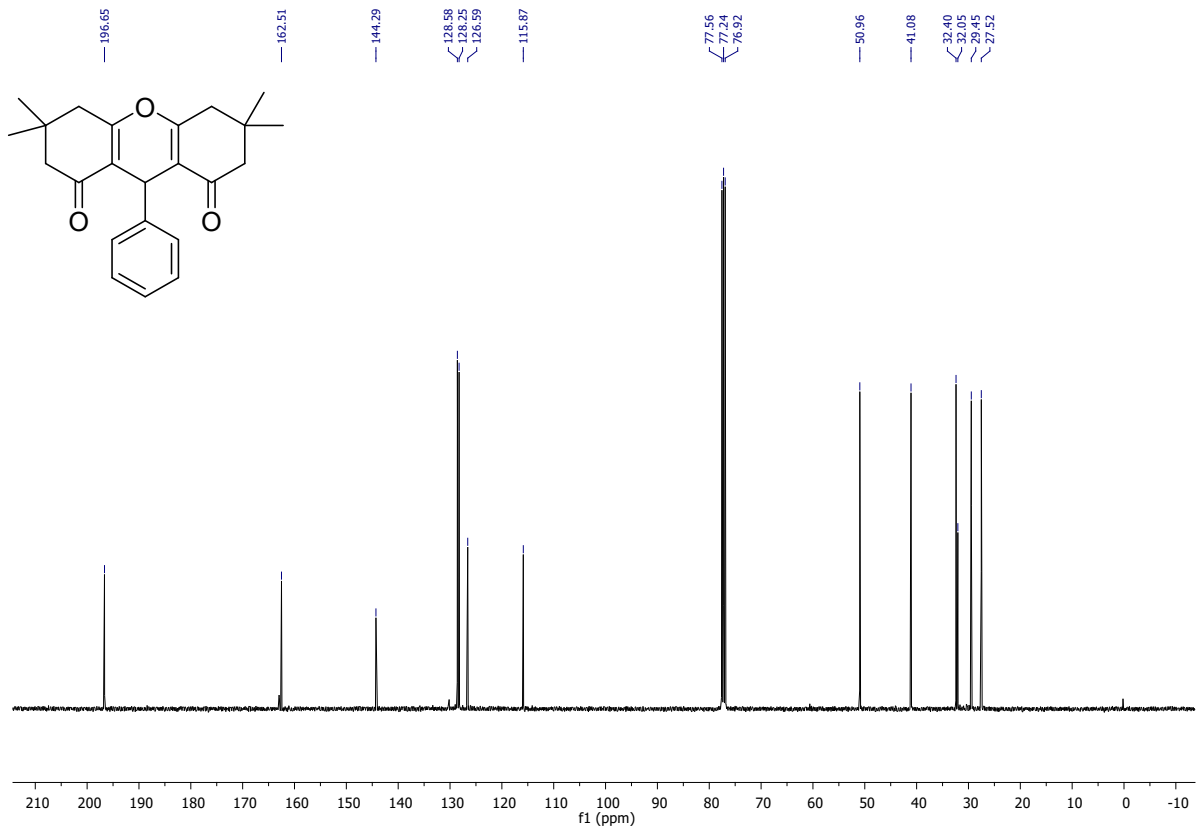
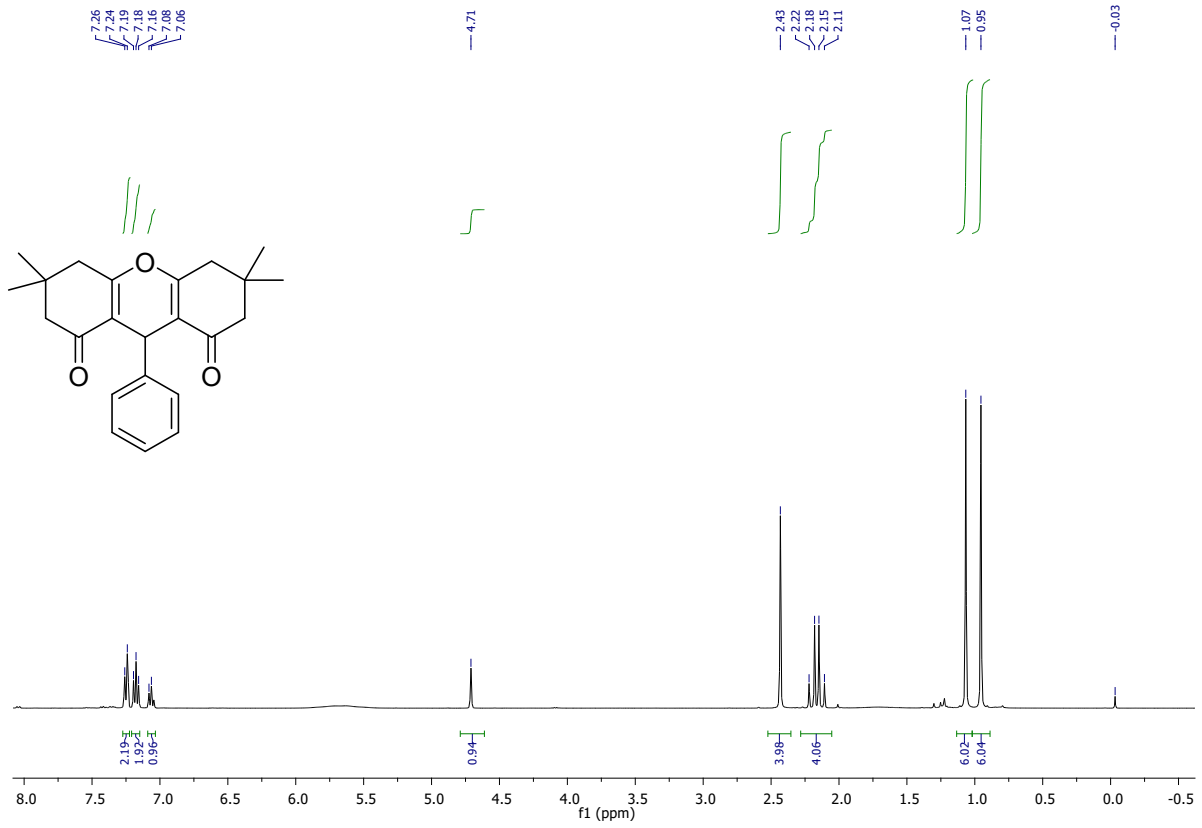
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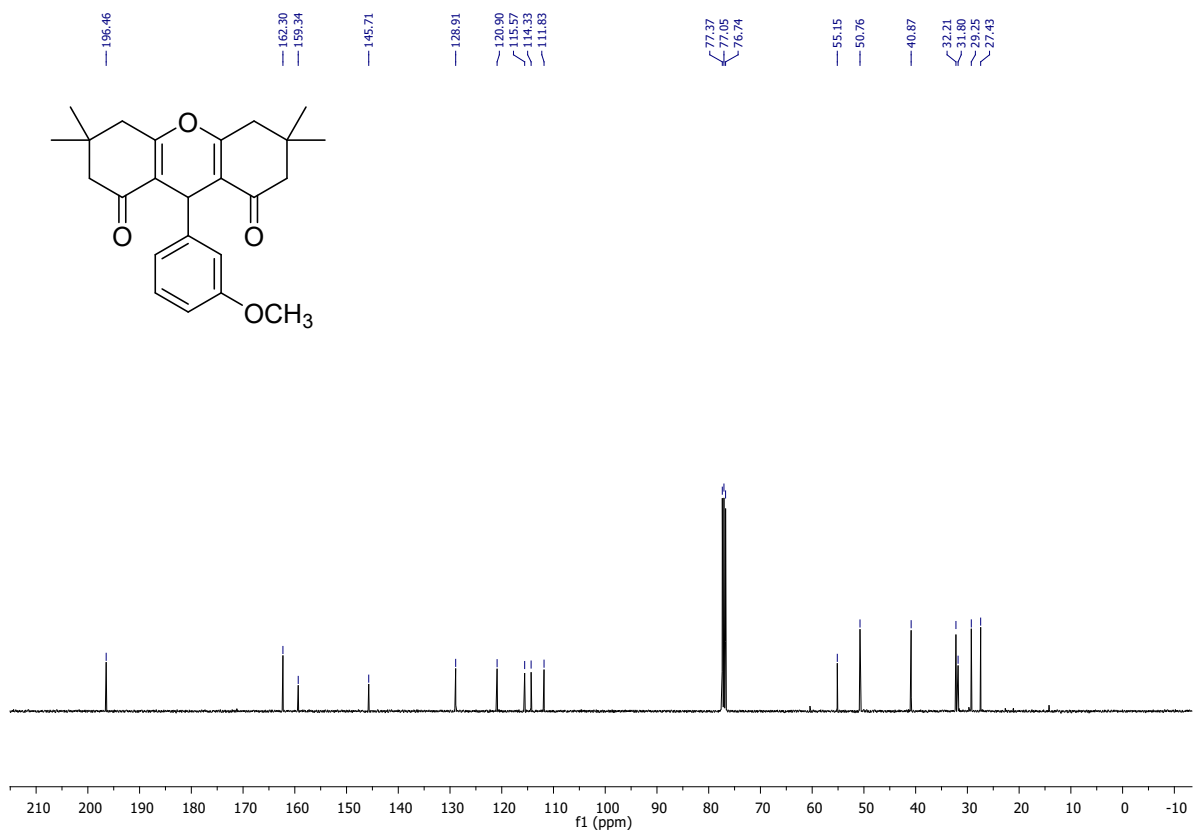
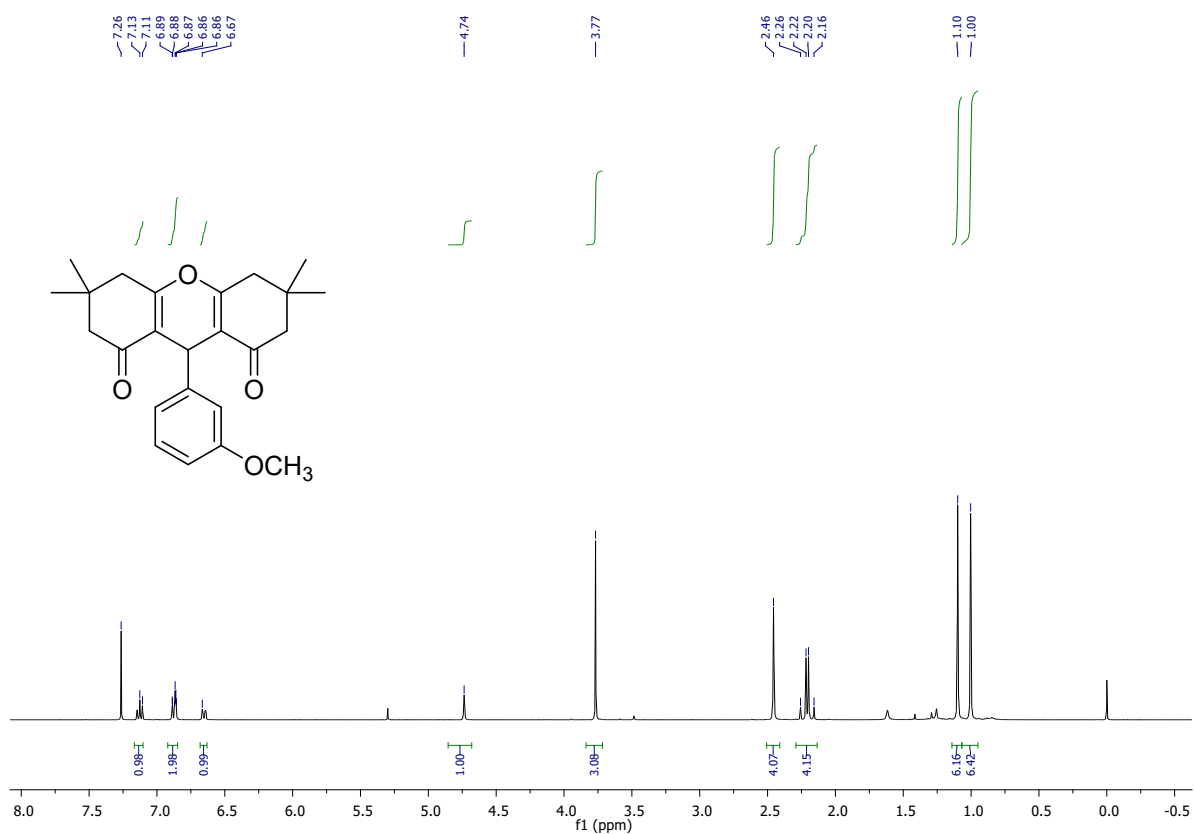
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14q



# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14r

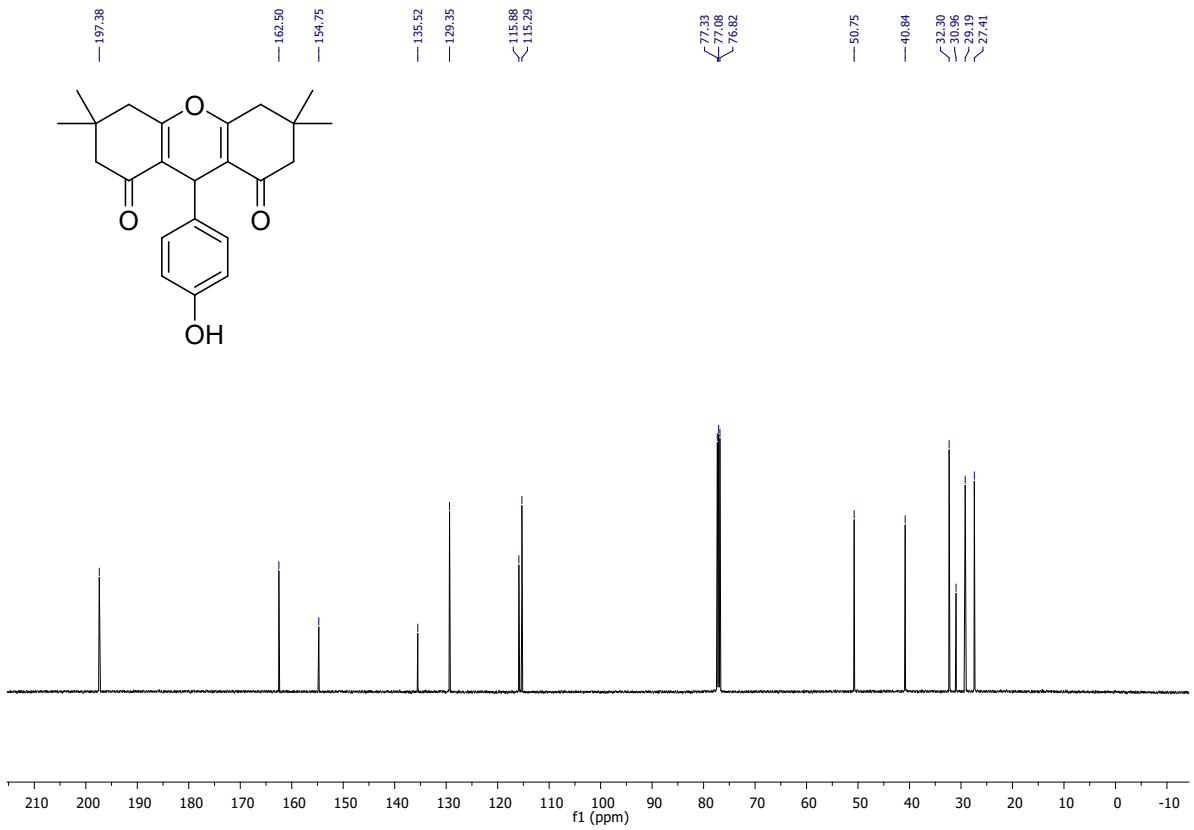
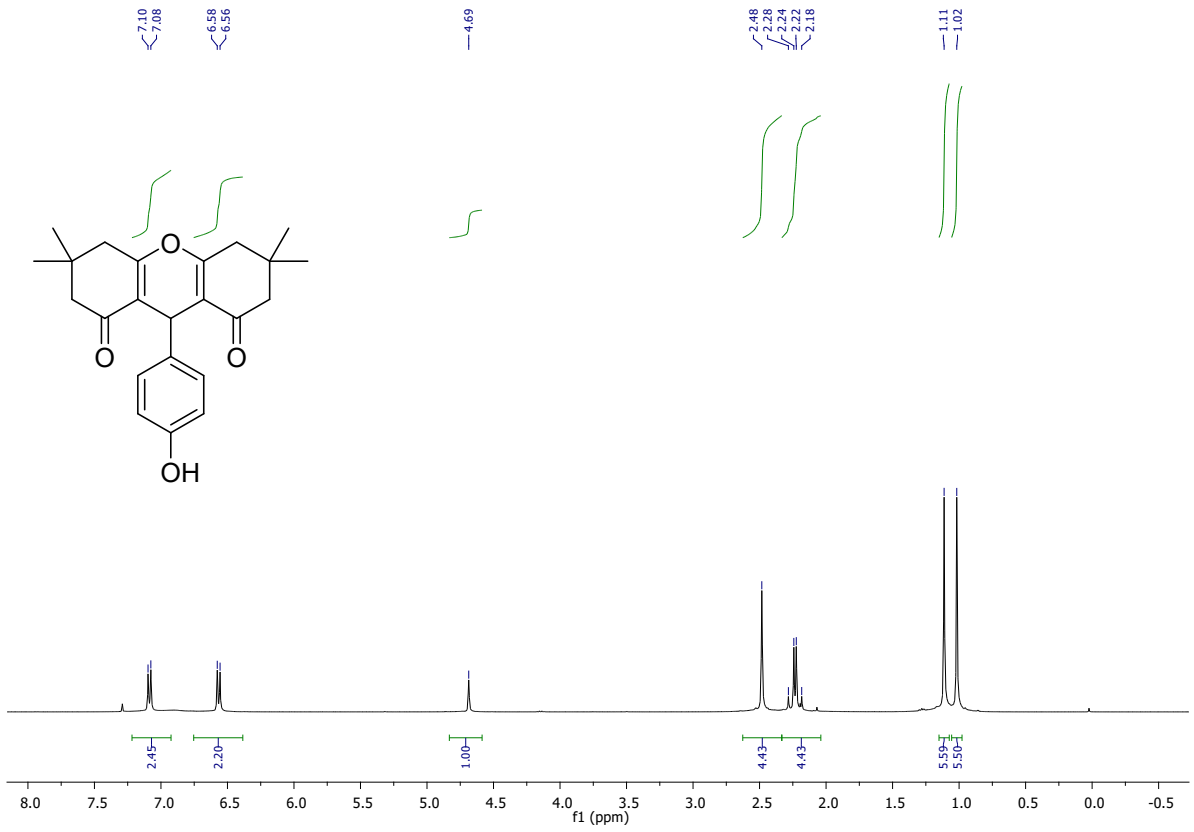


# $^1\text{H}$ and $^{13}\text{C}$ NMR of compound 14s

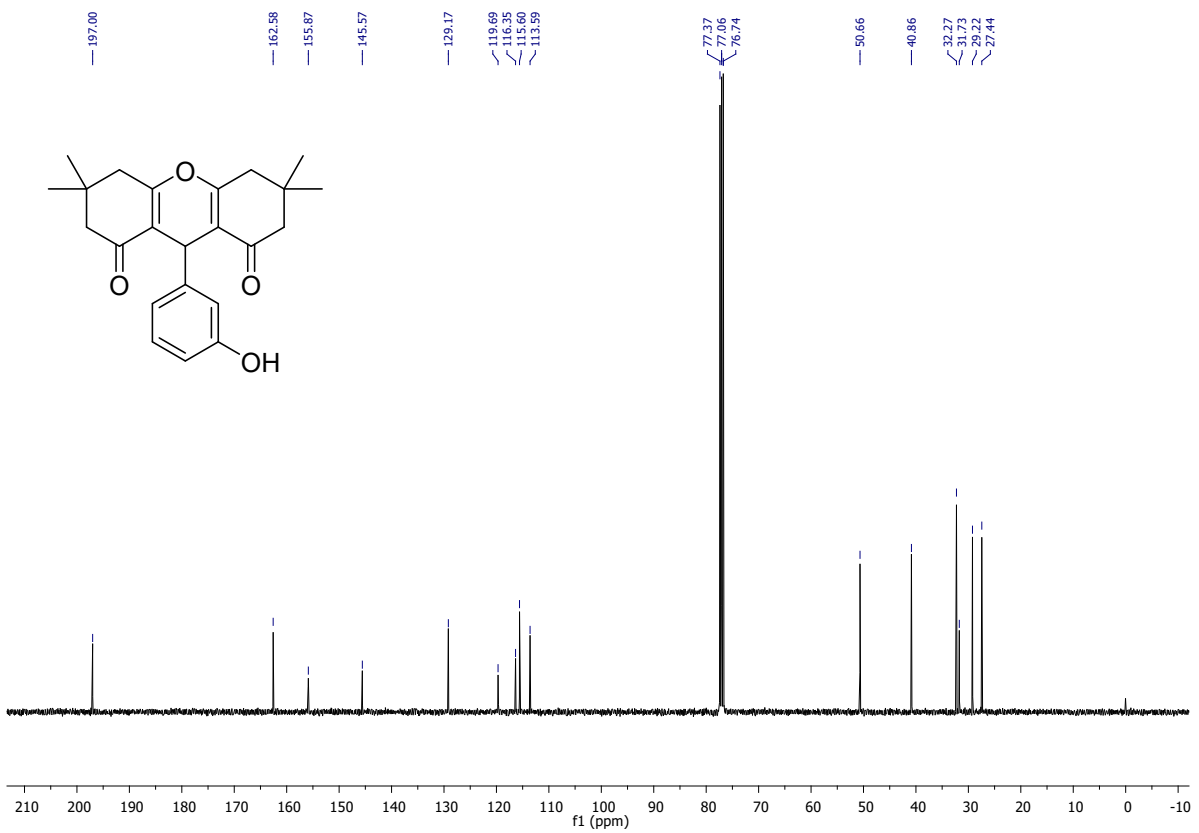
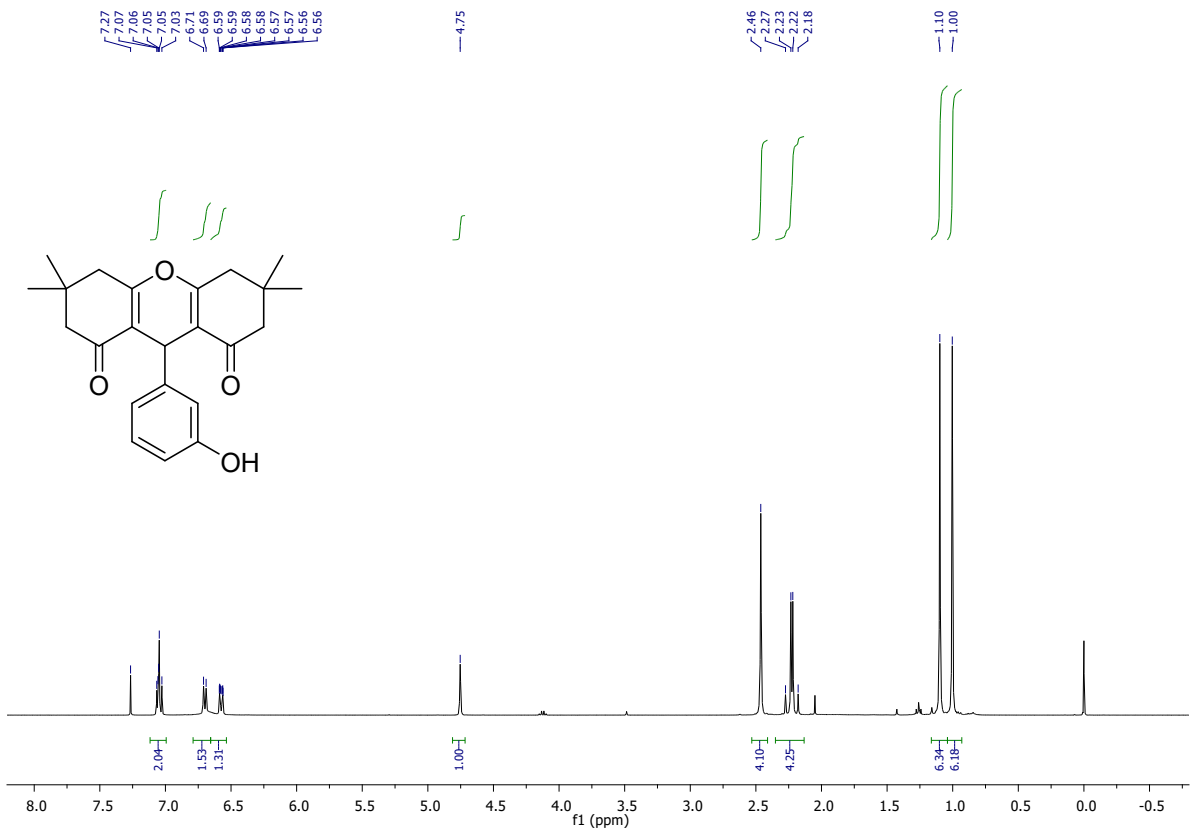




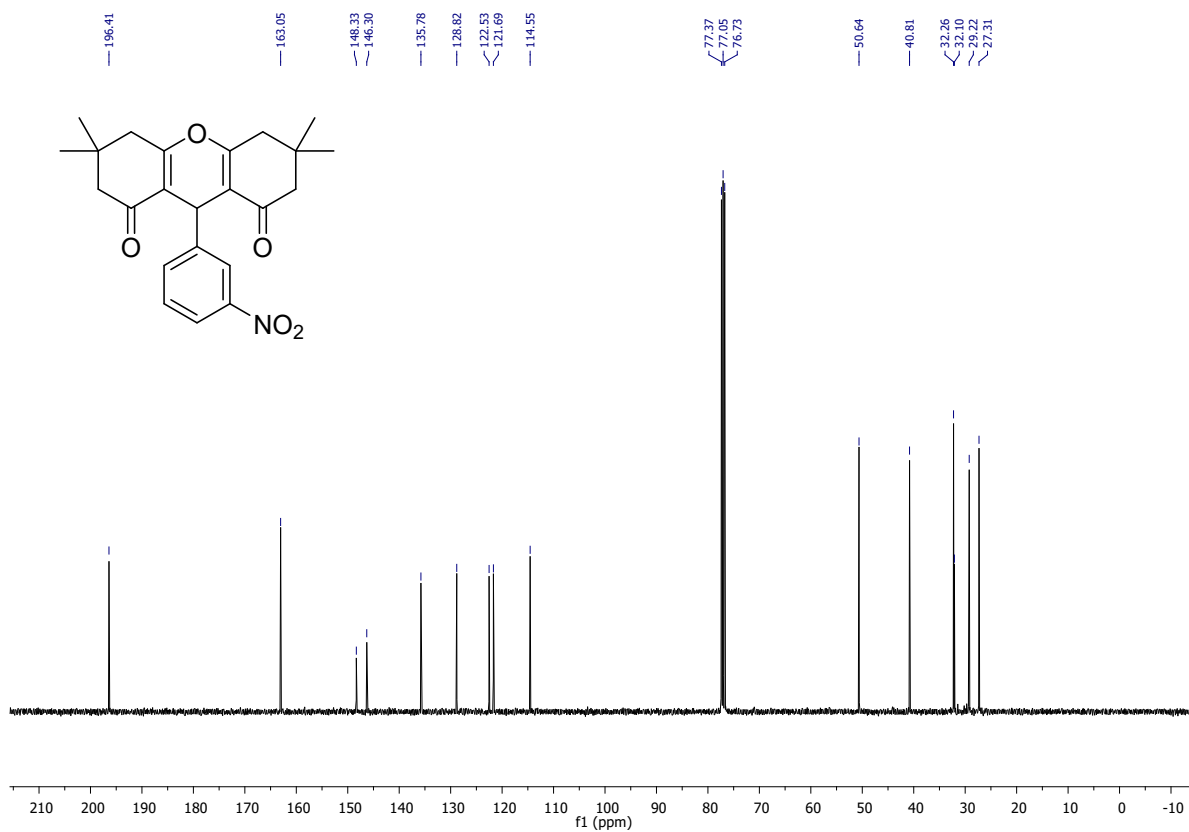
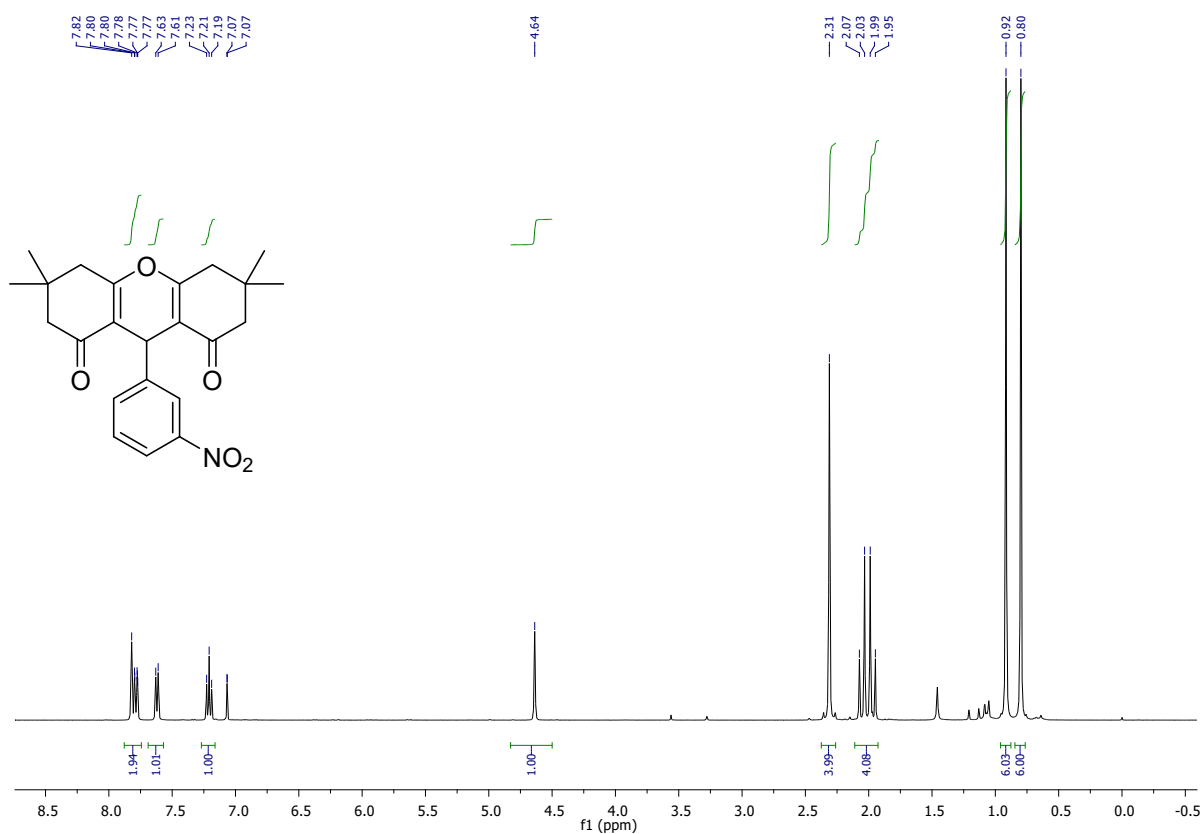
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14t



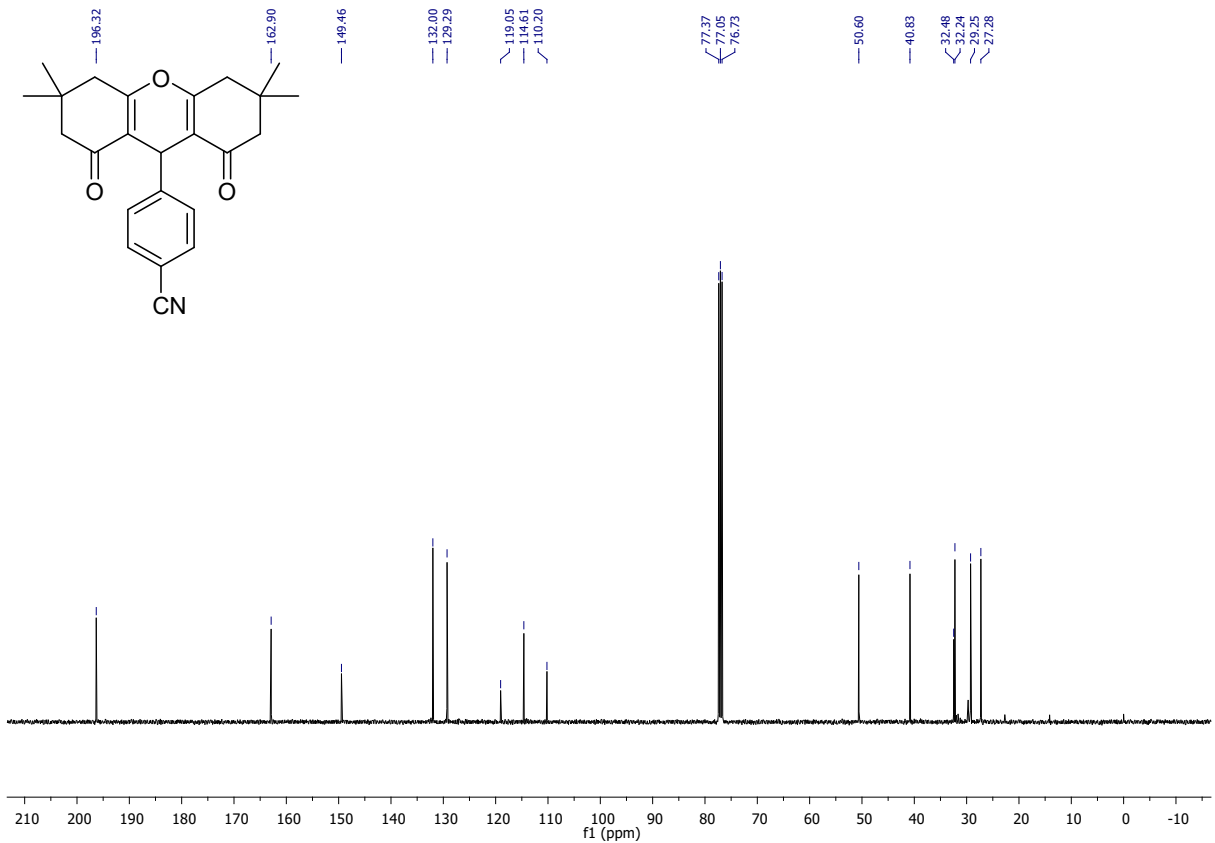
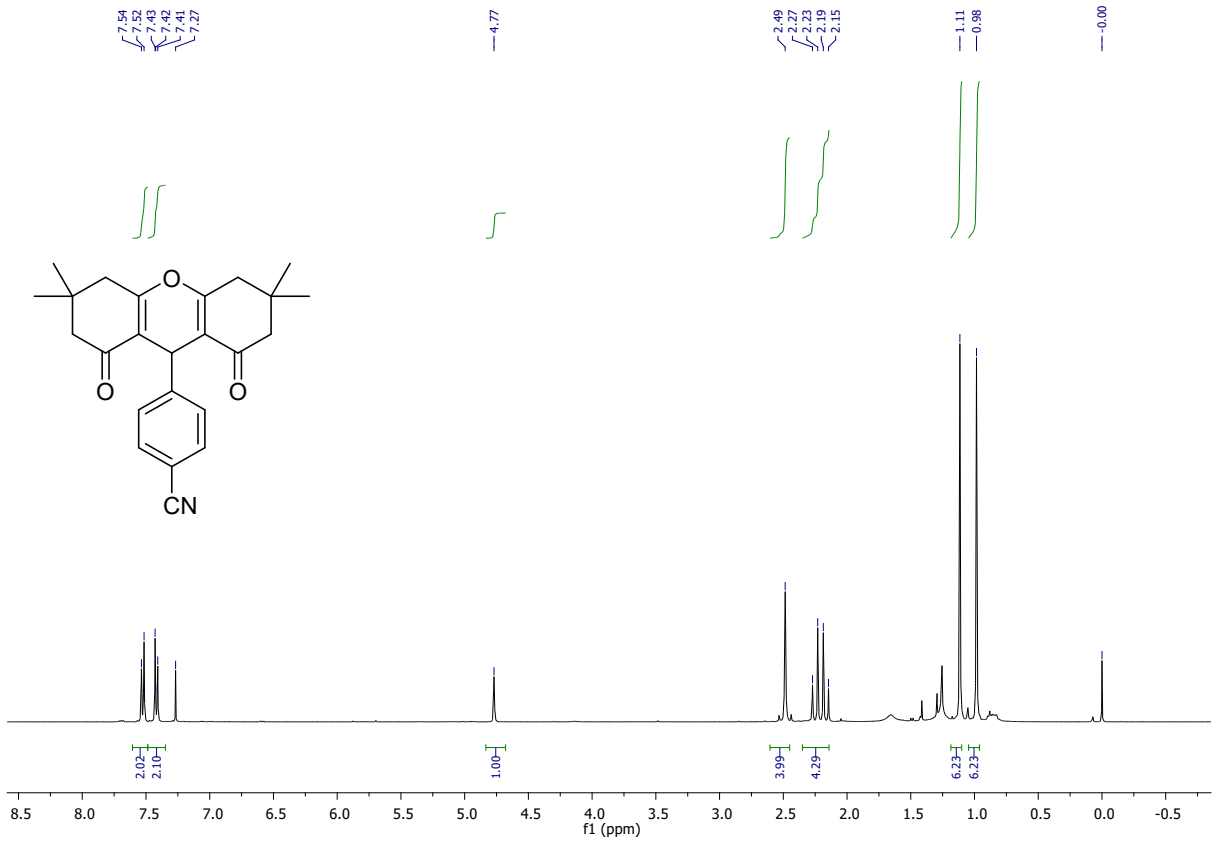
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14u



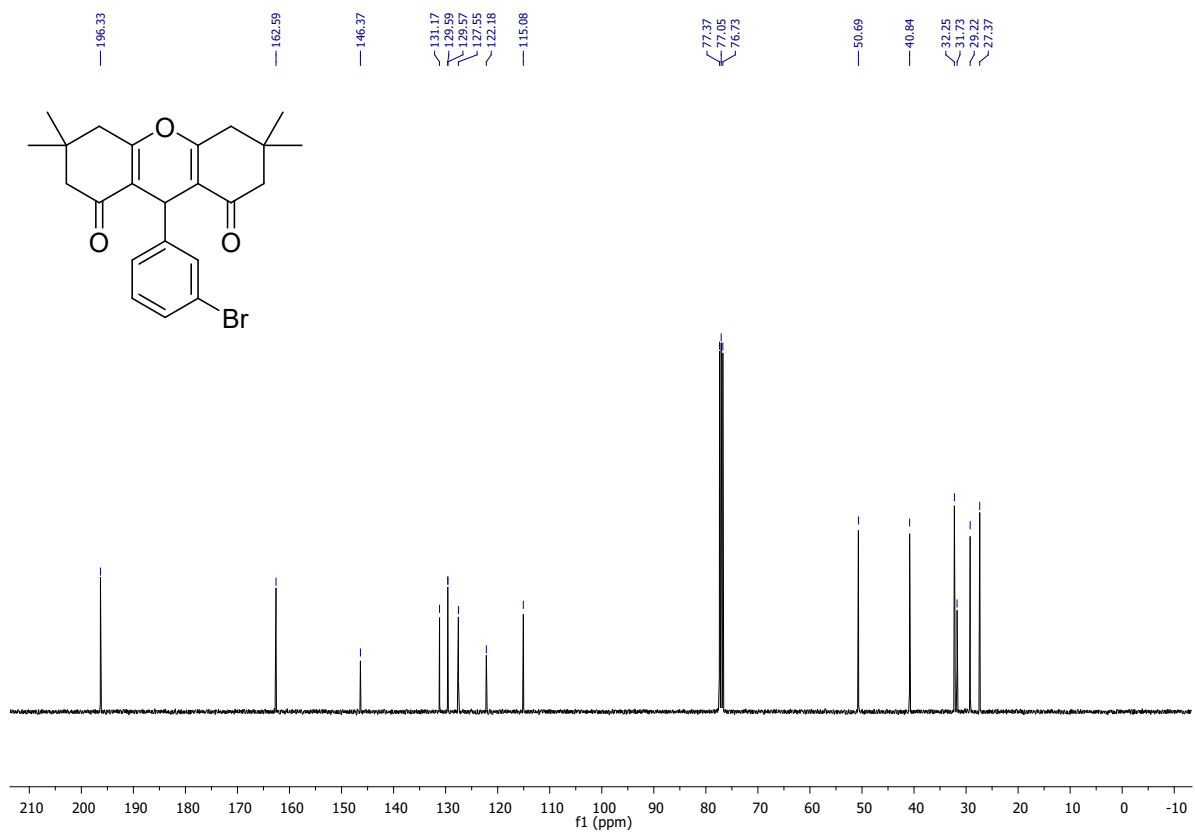
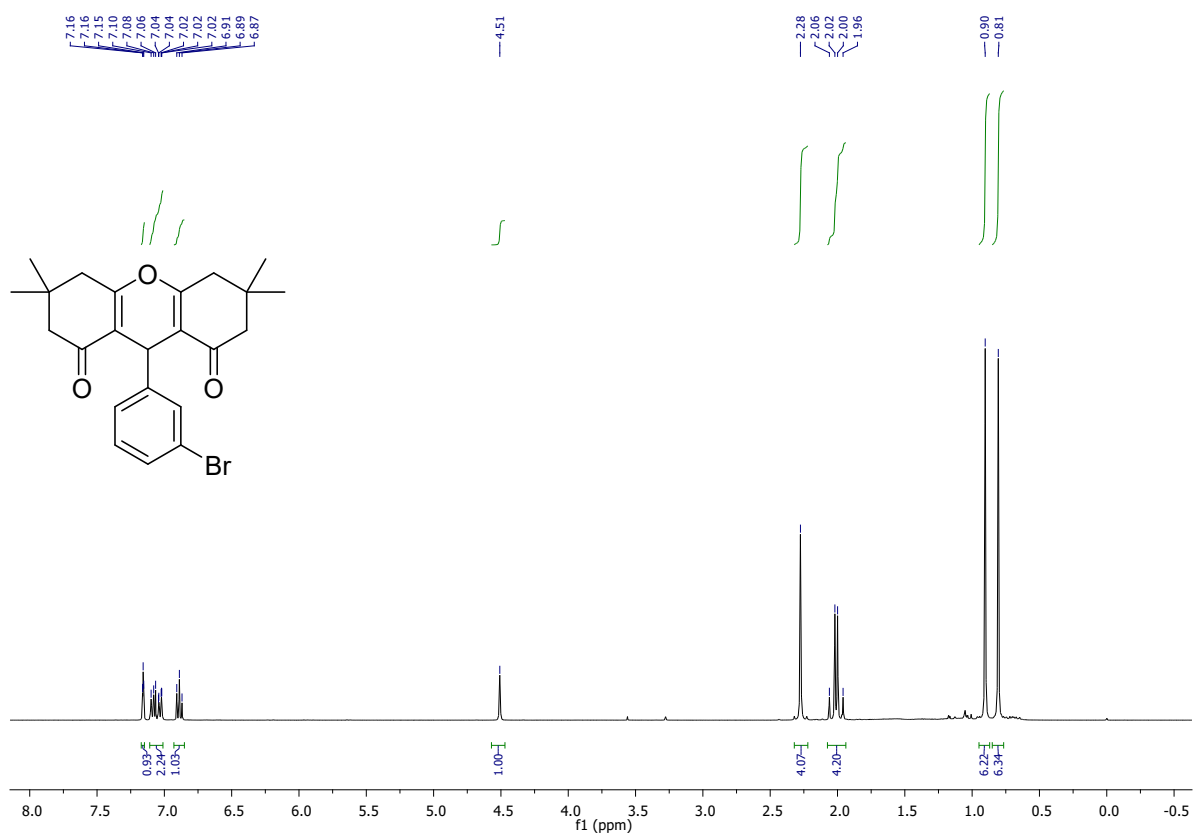
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14v



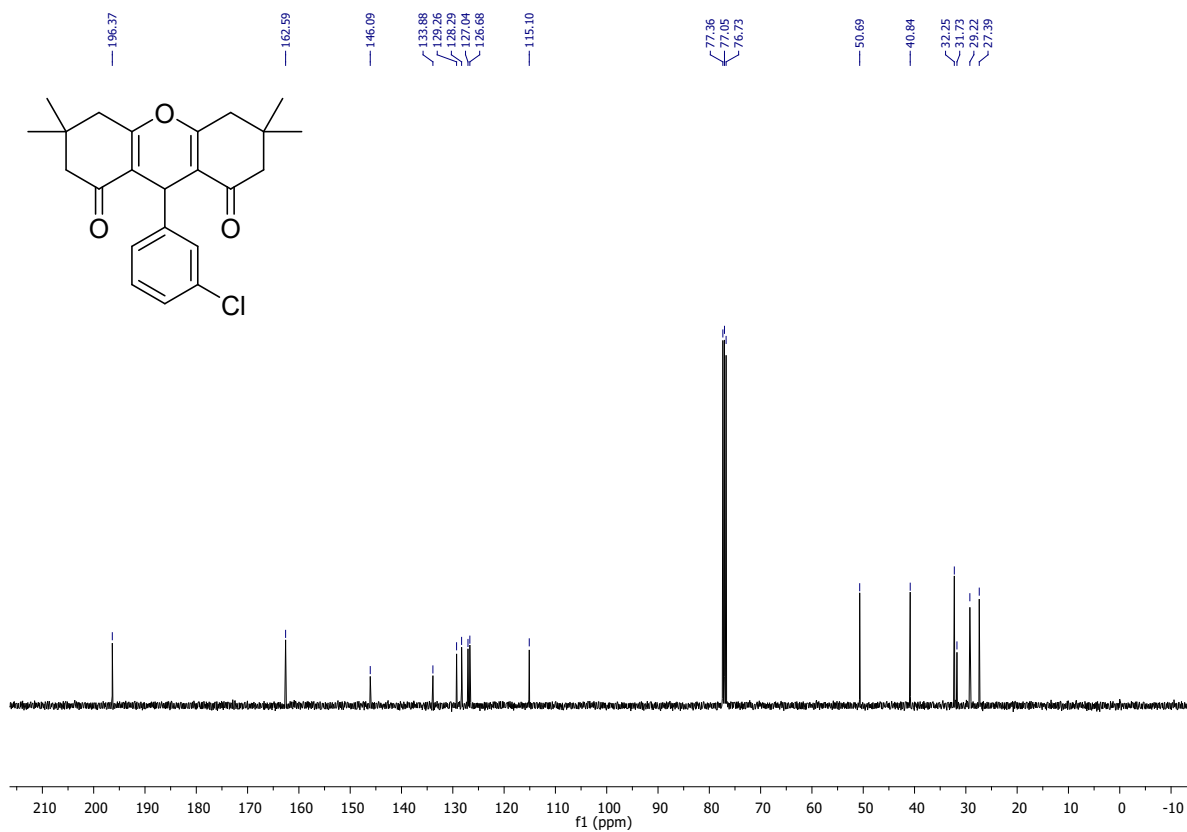
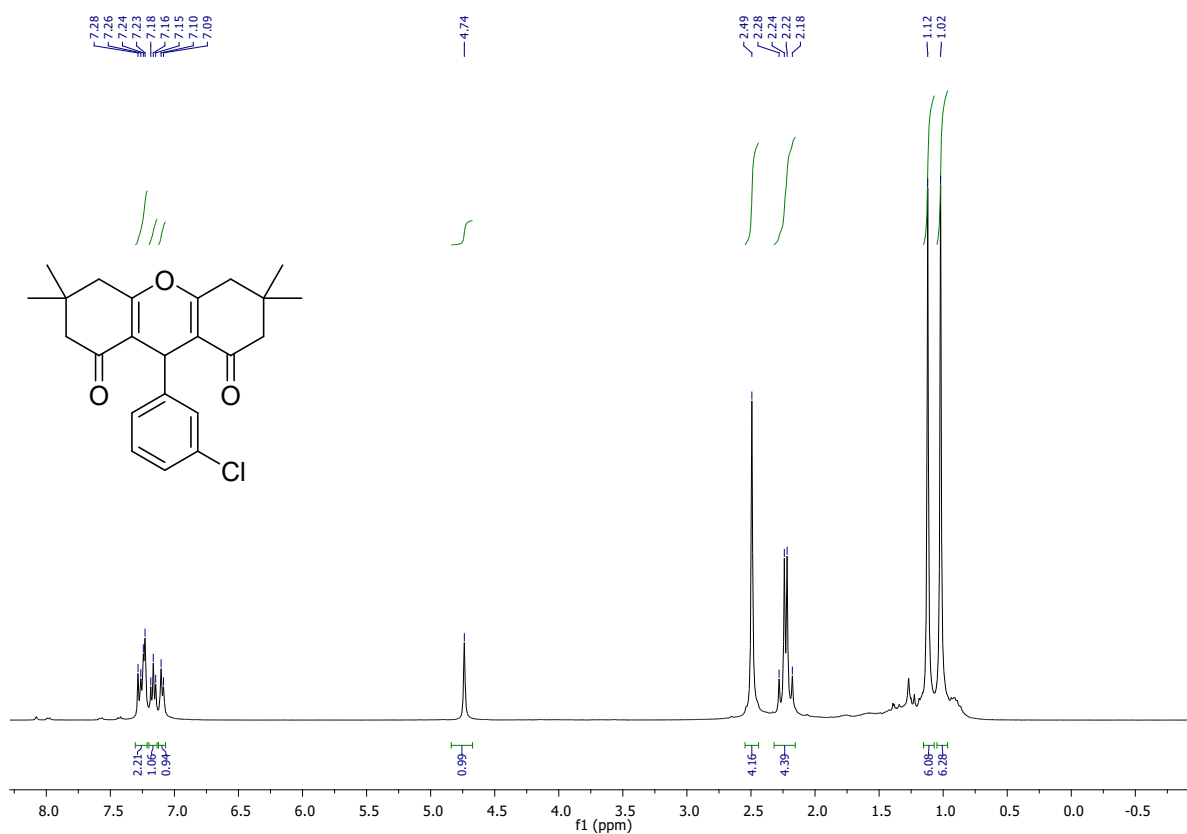
# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14w



# <sup>1</sup>H and <sup>13</sup>C NMR of compound 14x



# $^1\text{H}$ and $^{13}\text{C}$ NMR of compound 14y



# HPLC Purity data of Compound 14c



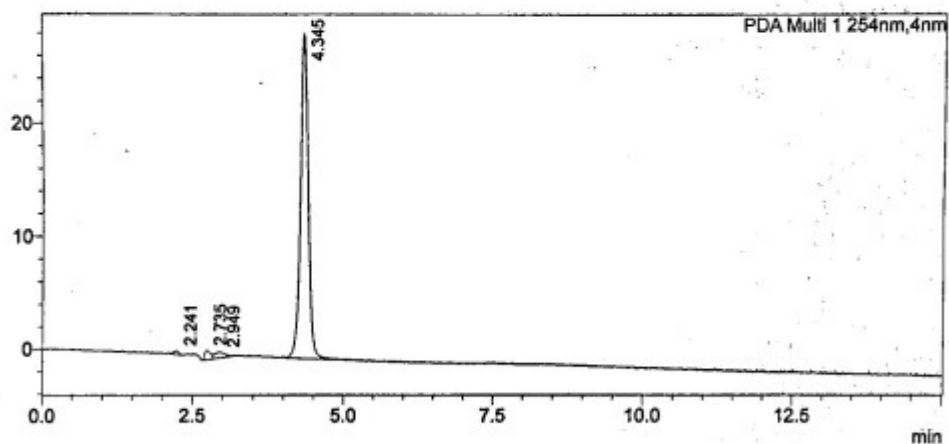
## Analysis Report

### <Sample Information>

Sample Name : BT-01-53  
Sample ID : BT-01-53  
Data Filename : 15.02.2023\_02.lcd  
Method Filename : 15-02-2023\_Isocratic-01.lcm  
Batch Filename : 15.02.2023.Lcb  
Vial # : 1-91  
Injection Volume : 1 uL  
Date Acquired : 2/15/2023 12:20:16 PM  
Date Processed : 2/15/2023 12:35:19 PM  
Sample Type : Unknown  
Acquired by : System Administrator  
Processed by : System Administrator

### <Chromatogram>

mAU



### <Peak Table>

PDA Ch1 254nm

Peak#	Ret. Time	Name	Area	Area%
1	2.241		1675	0.618
2	2.735		5805	2.144
3	2.949		5995	2.214
4	4.345		257325	95.024
Total			270799	100.000

# HPLC Purity data of Compound 14r



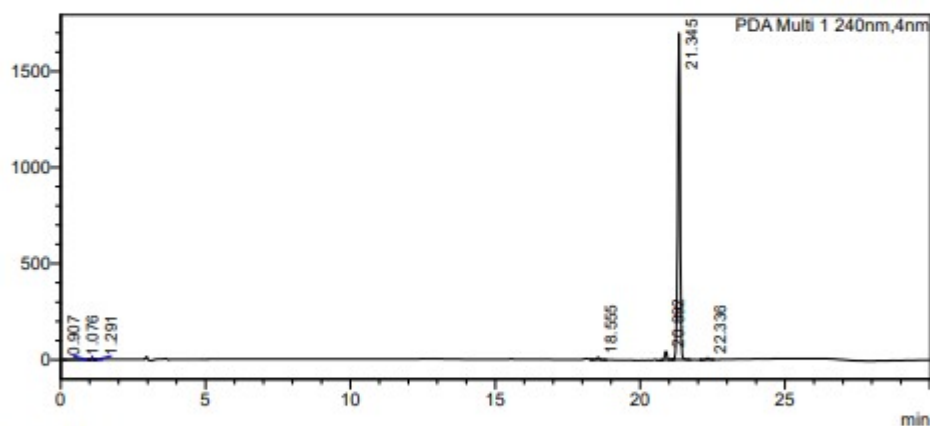
## Analysis Report

### <Sample Information>

Sample Name : BT 01 47  
Sample ID : BT 01 47  
Data Filename : 26-04-22AMIT008.lcd  
Method Filename : amit.lcm  
Batch Filename : amit.lcb  
Vial # : 1-42  
Injection Volume : 5 uL  
Date Acquired : 26-04-2022  
Sample Type : Unknown  
Acquired by : Amit Kumar

### <Chromatogram>

mAU



### <Peak Table>

PDA Ch1 240nm

Ret. Time	Area	Height	Area%
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1.076	2391	284	0.023
1.291	732	74	0.007
18.555	73893	12371	0.724
20.892	223588	44324	2.190
21.345	9843134	1698277	96.418
22.336	53507	8686	0.524
	10208821	1764349	100.000