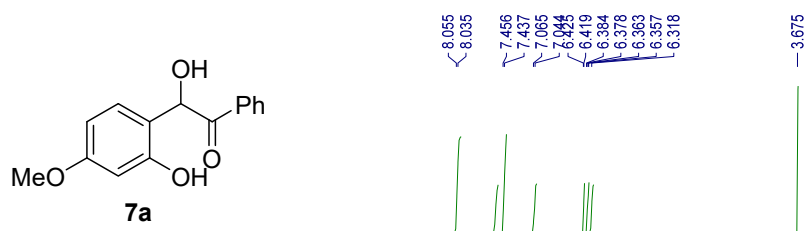


Supplementary Materials

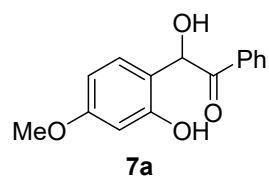
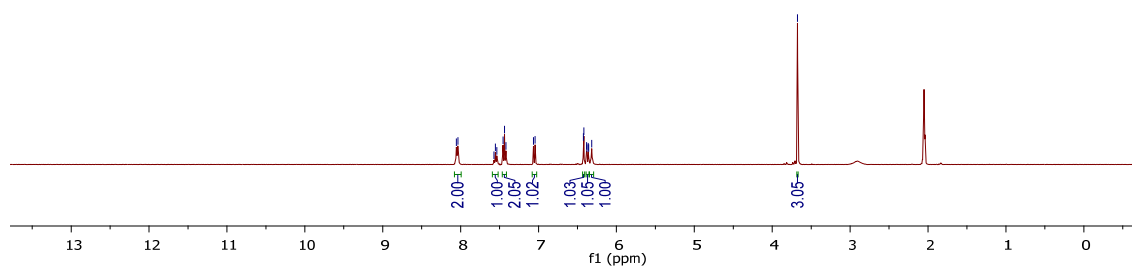
Anticancer Evaluation of Novel Benzofuran-Indole Hybrids as EGFR Inhibitors Against Non-Small Cell Lung Cancer Cells

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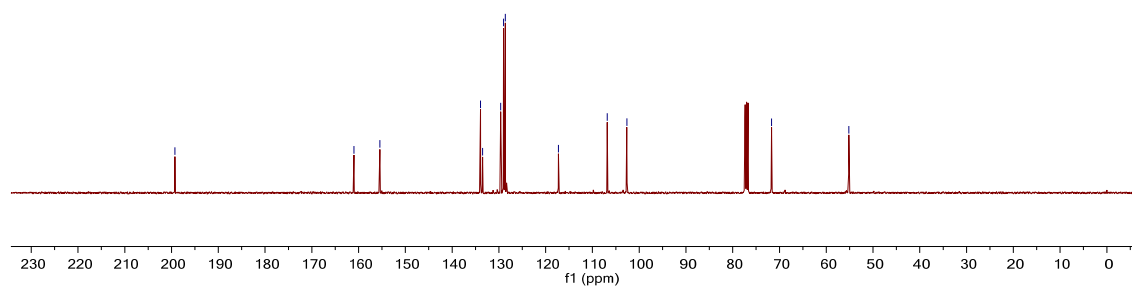
Copies of ^1H and ^{13}C NMR spectra of 7	S3-19
Copies of ^1H and ^{13}C NMR spectra of 8	S20-49
Copies of HRMS spectra of 7	S50-58
Copies of HRMS spectra of 8	S59-73
HPLC Chromatogram of 8aa	S74-75

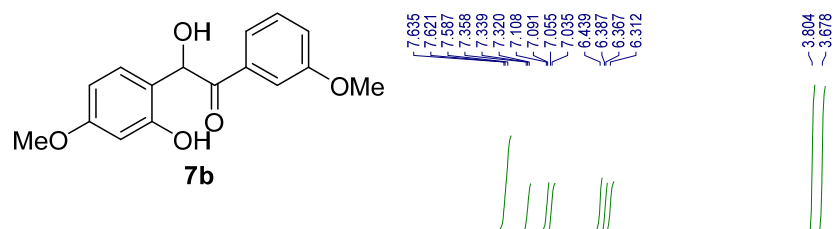


^1H NMR spectrum of **7a** (400 MHz, $(\text{CD}_3)_2\text{CO}$)

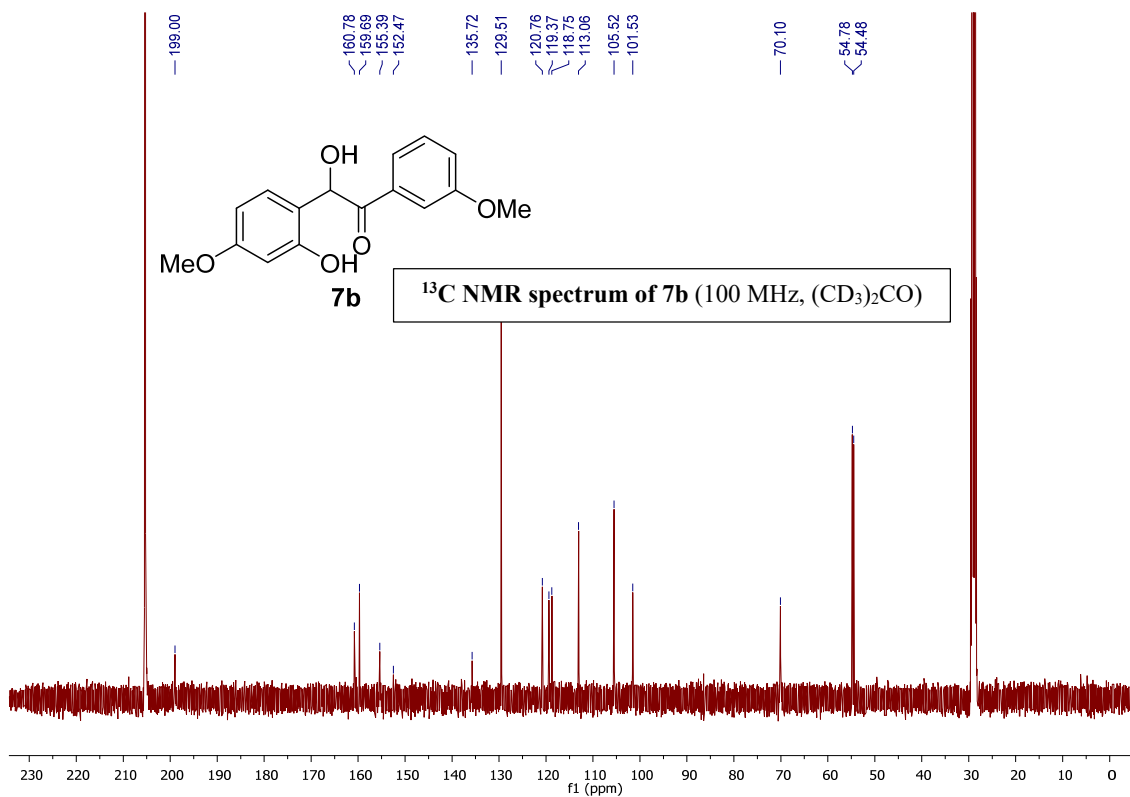
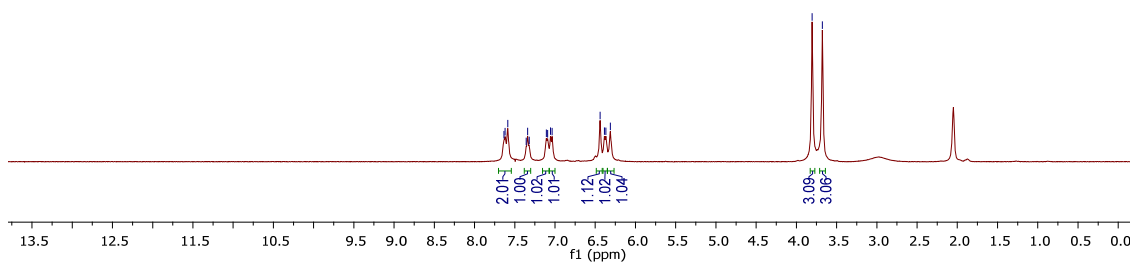


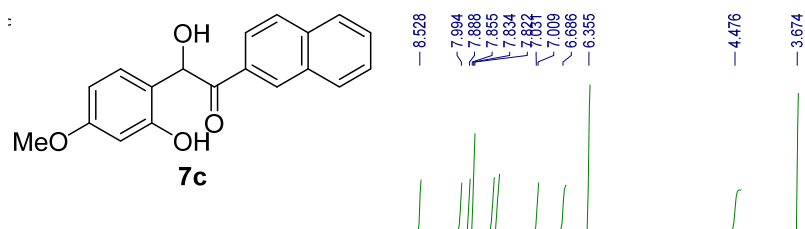
^{13}C NMR spectrum of **7a** (100 MHz, CDCl_3)



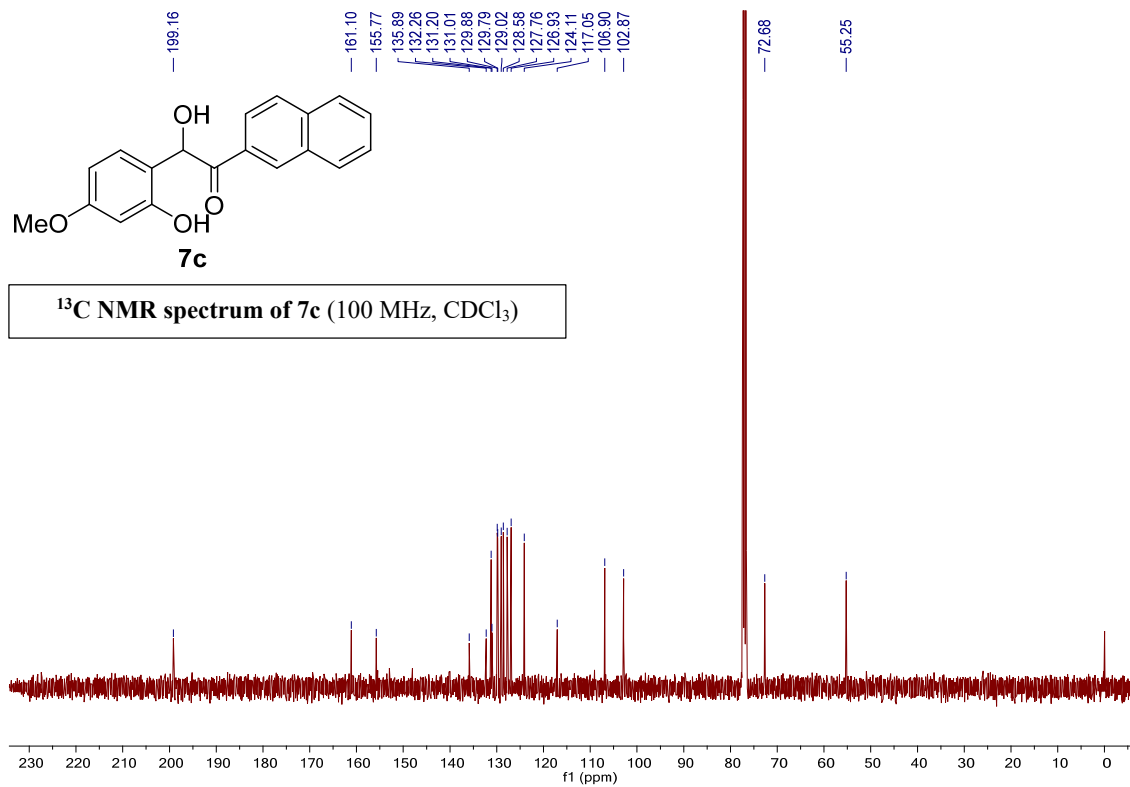
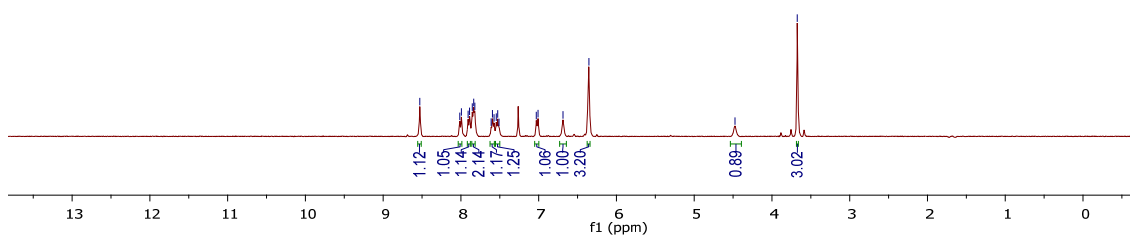


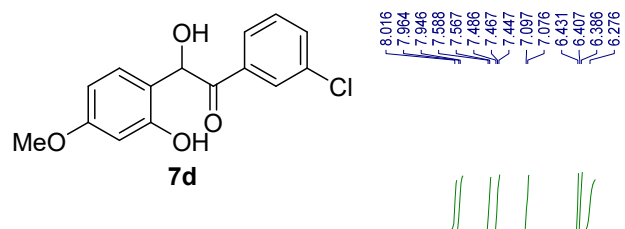
¹H NMR spectrum of **7b** (400 MHz, (CD₃)₂CO)



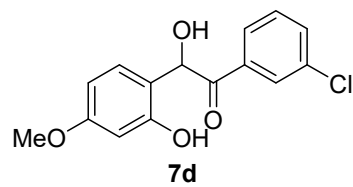
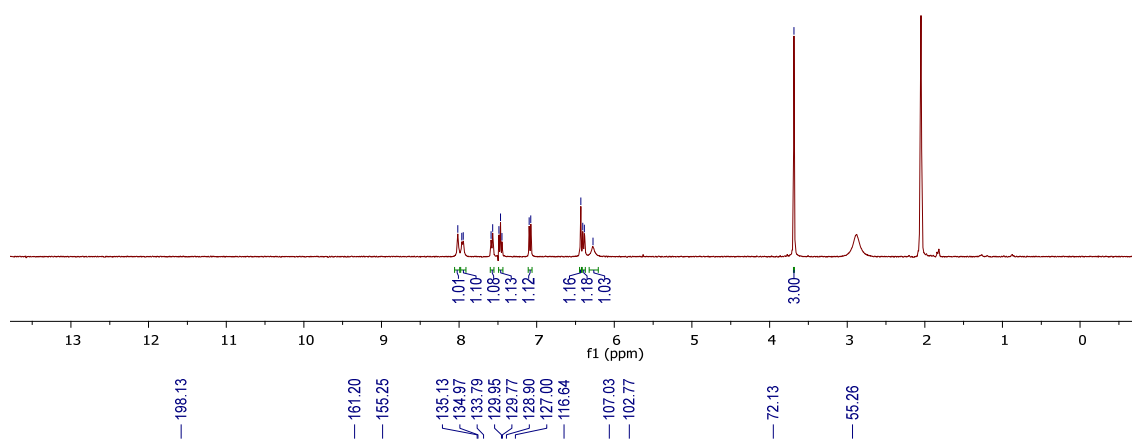


¹H NMR spectrum of **7c** (400 MHz, CDCl₃)

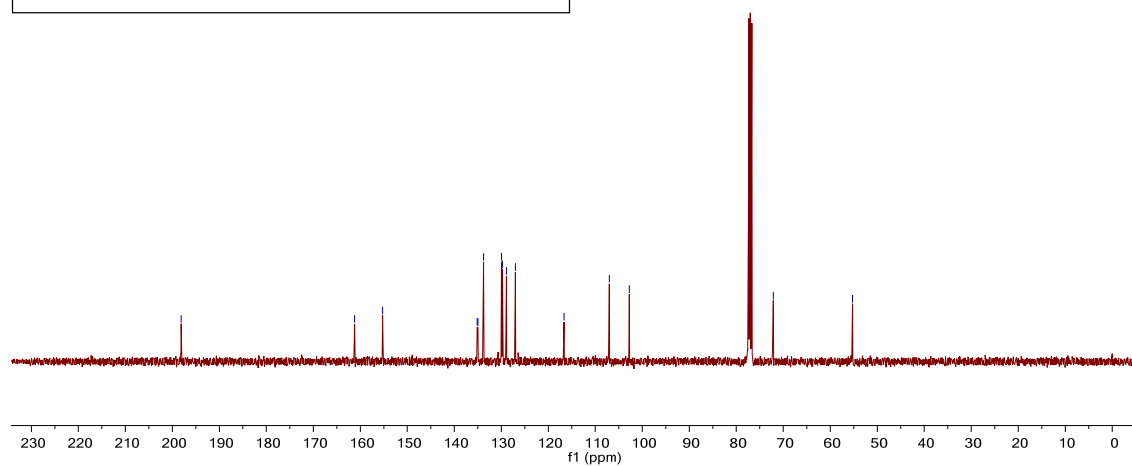


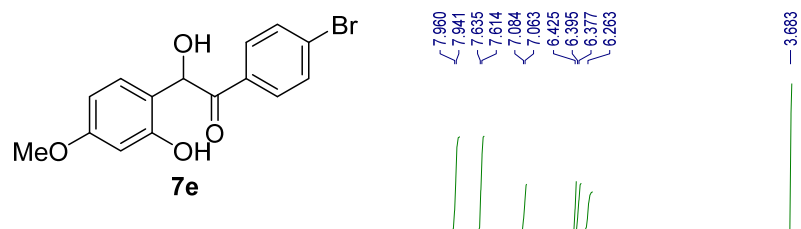


¹H NMR spectrum of **7d** (400 MHz, (CD₃)₂CO)

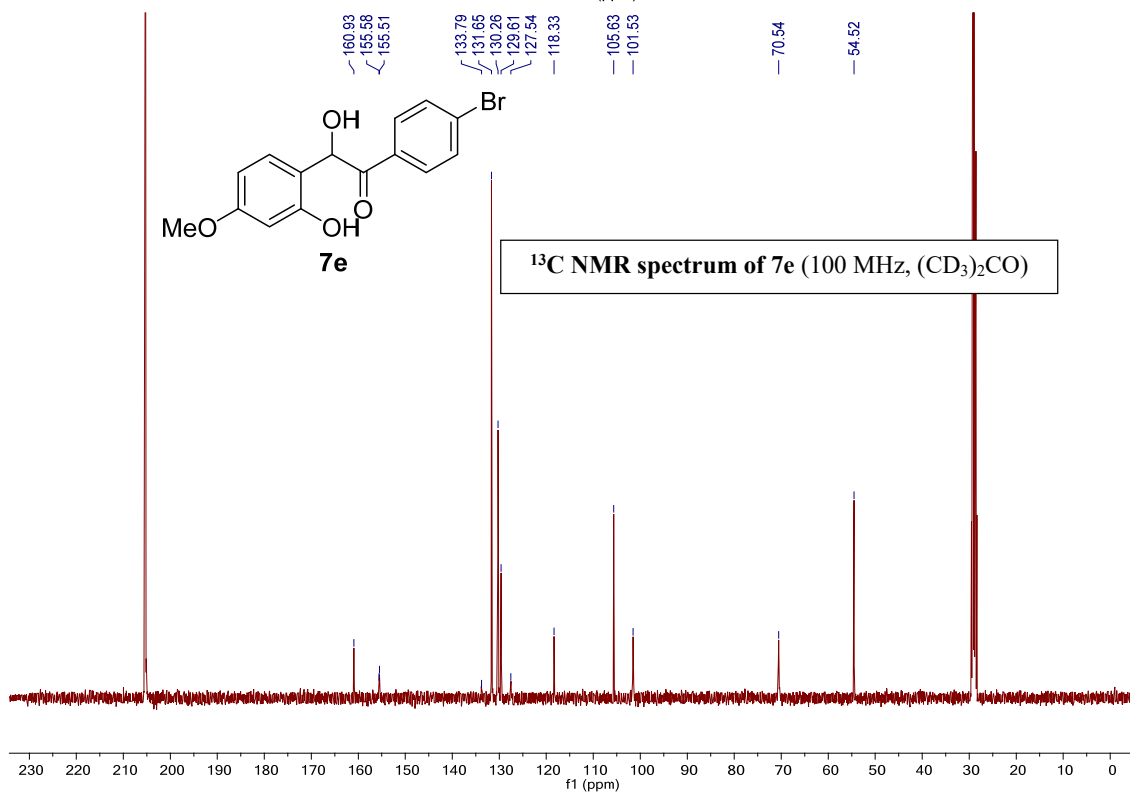
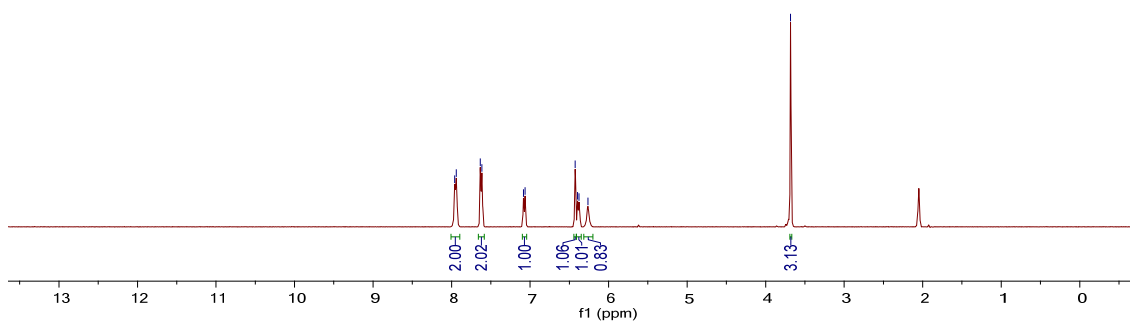


¹³C NMR spectrum of **7d** (100 MHz, CDCl₃)

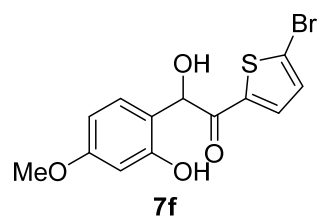




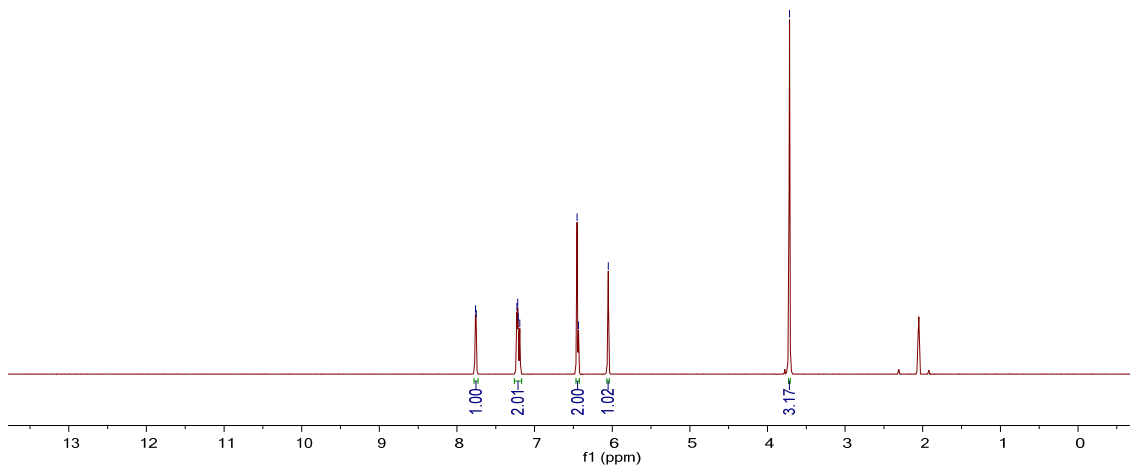
^1H NMR spectrum of **7e** (400 MHz, $(\text{CD}_3)_2\text{CO}$)



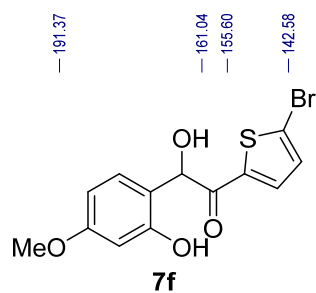
^{13}C NMR spectrum of **7e** (100 MHz, $(\text{CD}_3)_2\text{CO}$)



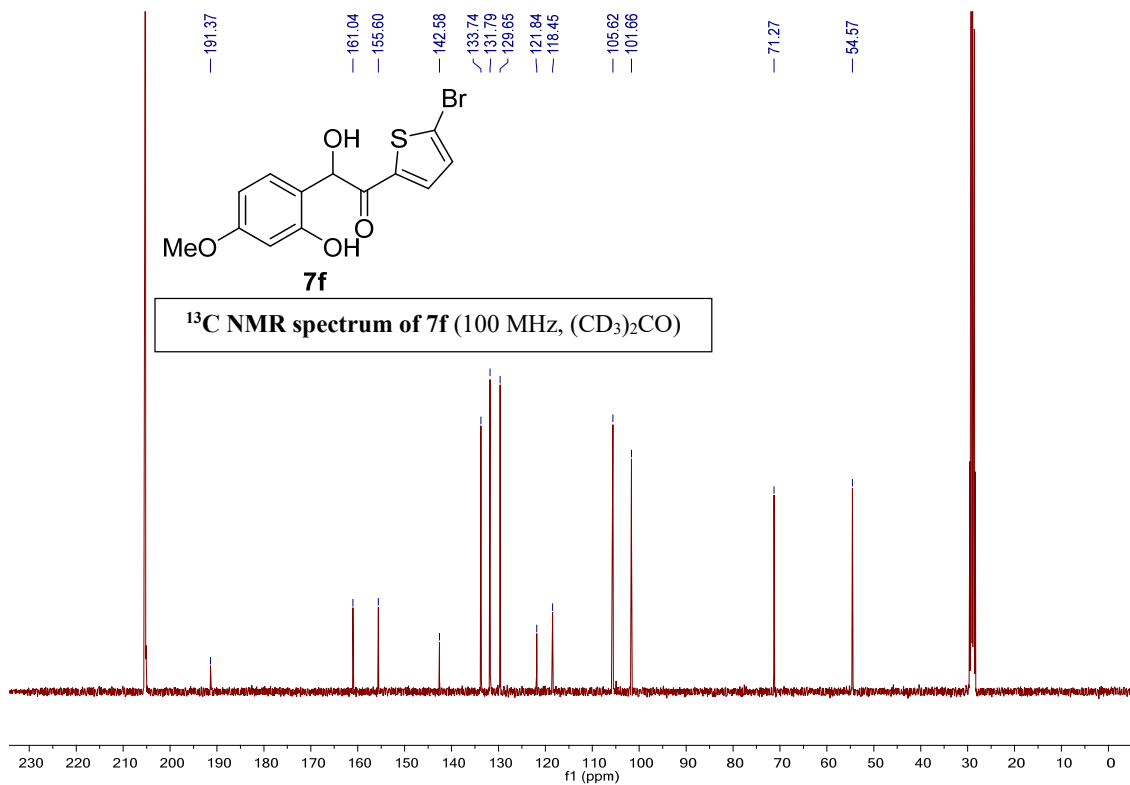
^1H NMR spectrum of **7f** (400 MHz, $(\text{CD}_3)_2\text{CO}$)

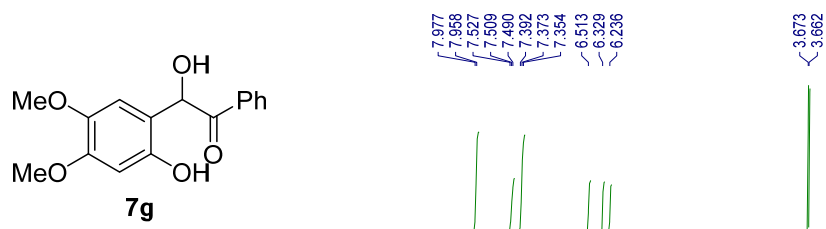


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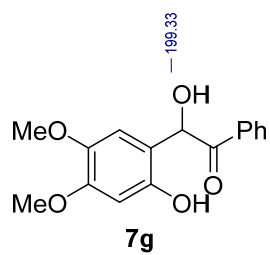
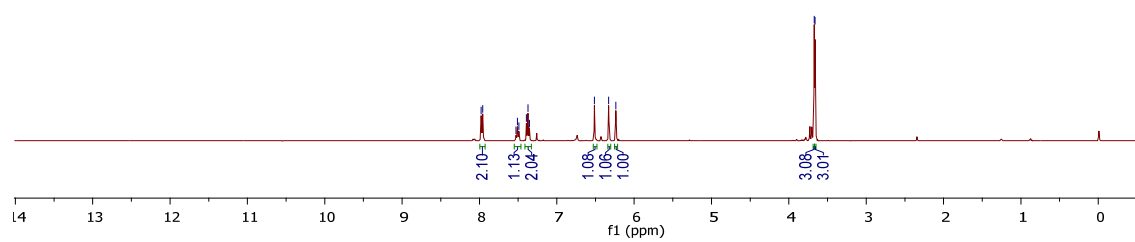


^{13}C NMR spectrum of **7f** (100 MHz, $(\text{CD}_3)_2\text{CO}$)

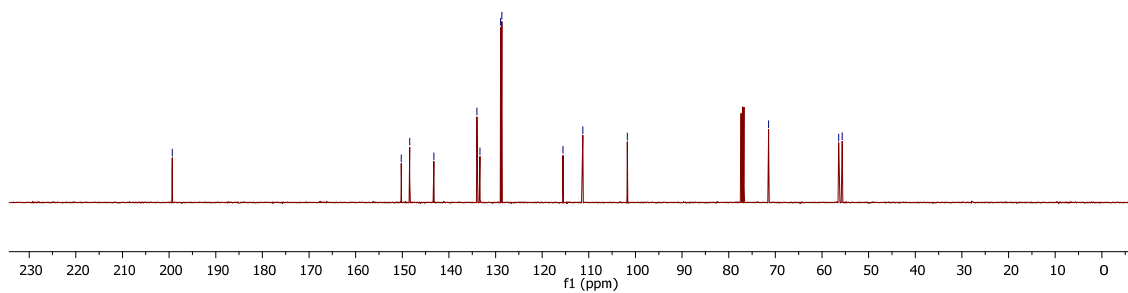


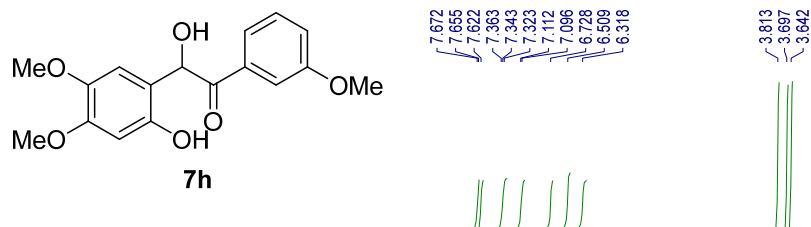


^1H NMR spectrum of **7g** (400 MHz, CDCl_3)

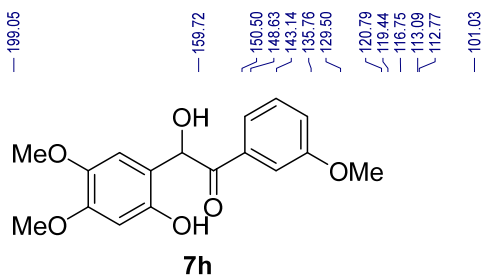
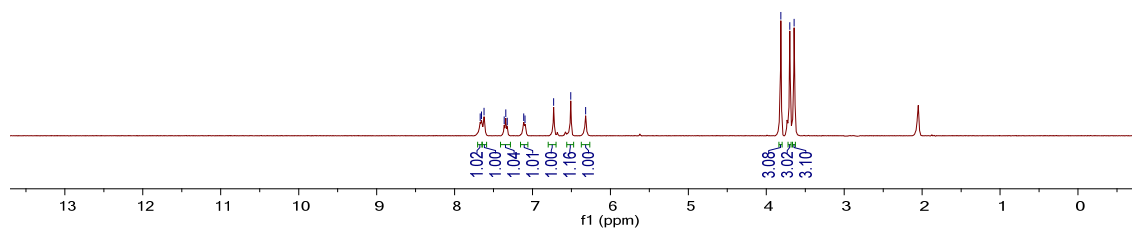


^{13}C NMR spectrum of **7g** (100 MHz, CDCl_3)

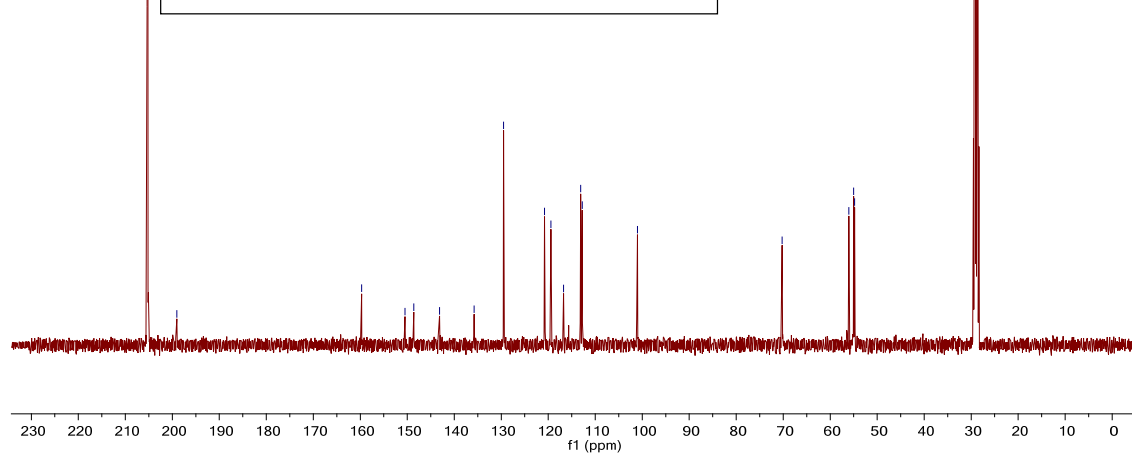


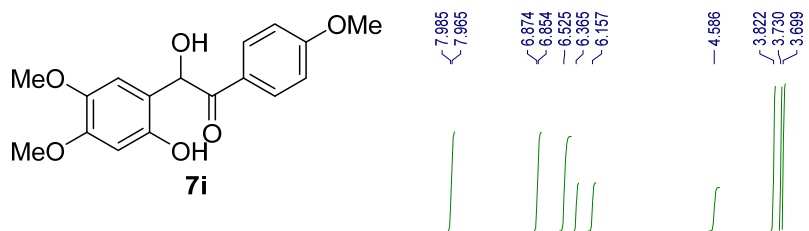


^1H NMR spectrum of **7h** (400 MHz, $(\text{CD}_3)_2\text{CO}$)

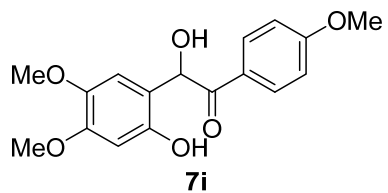
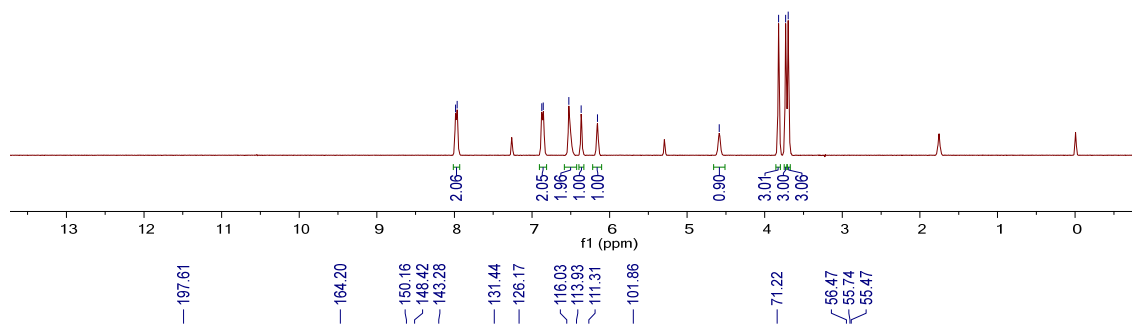


^{13}C NMR spectrum of **7h** (100 MHz, $(\text{CD}_3)_2\text{CO}$)

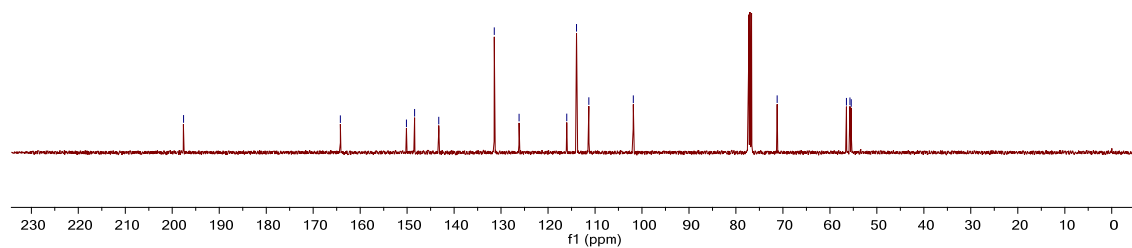


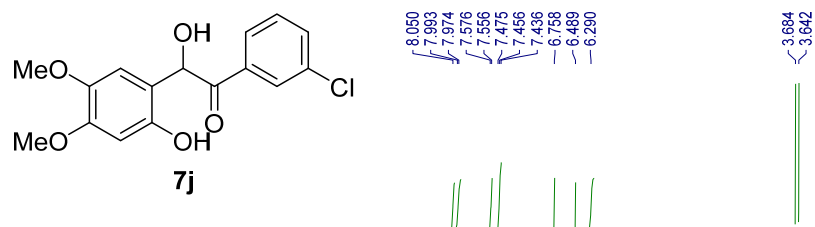


^1H NMR spectrum of **7i** (400 MHz, CDCl_3)

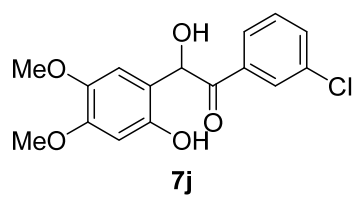
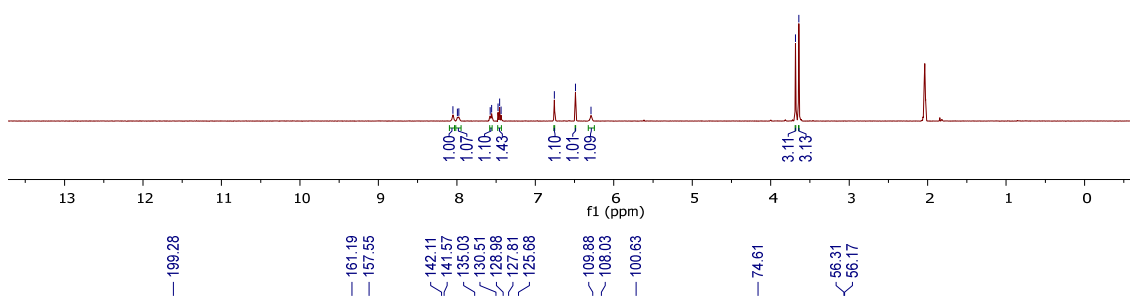


^{13}C NMR spectrum of **7i** (100 MHz, CDCl_3)

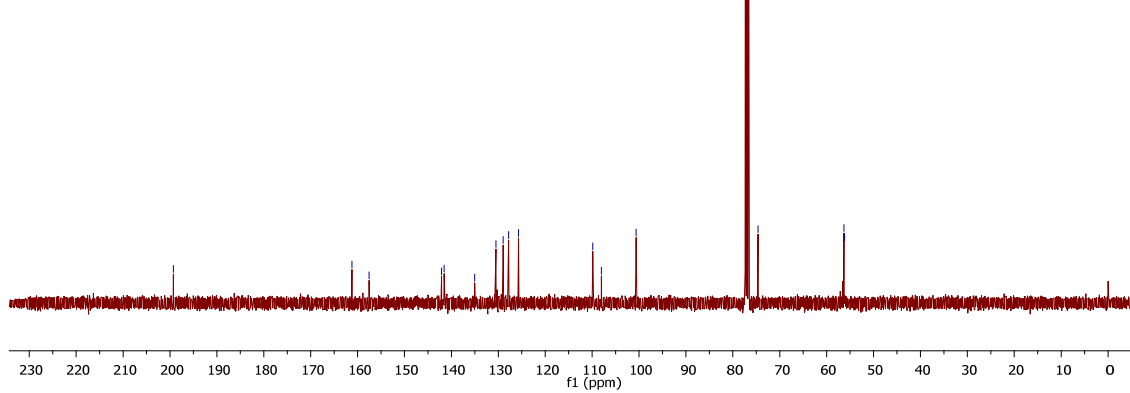


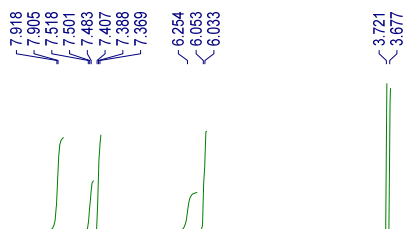
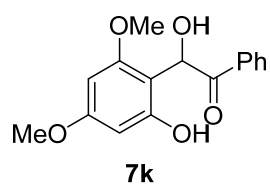


^1H NMR spectrum of **7j** (400 MHz, $(\text{CD}_3)_2\text{CO}$)

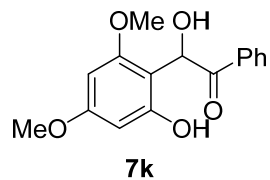
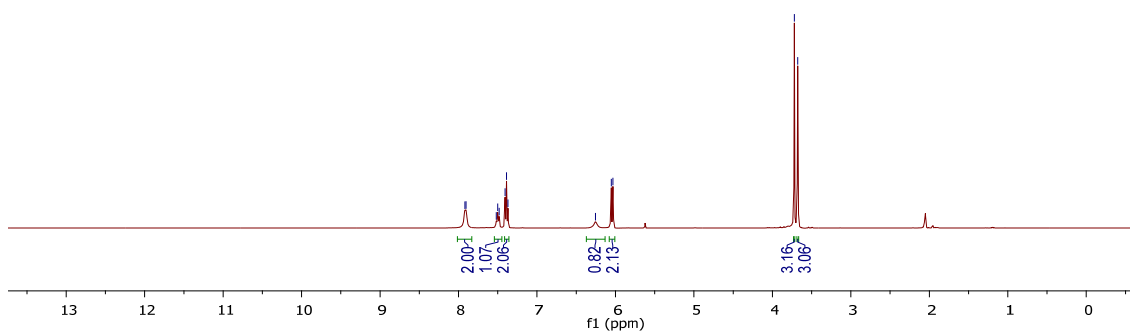


^{13}C NMR spectrum of **7j** (100 MHz, CDCl_3)

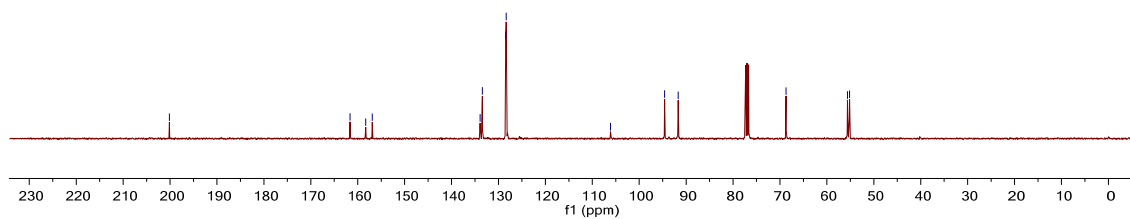


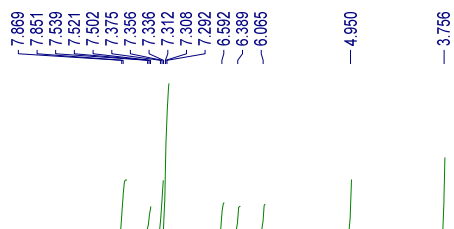
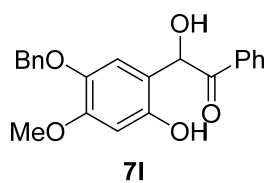


¹H NMR spectrum of **7k** (400 MHz, (CD₃)₂CO)

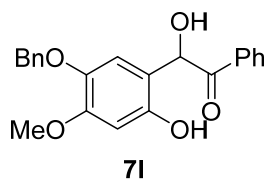
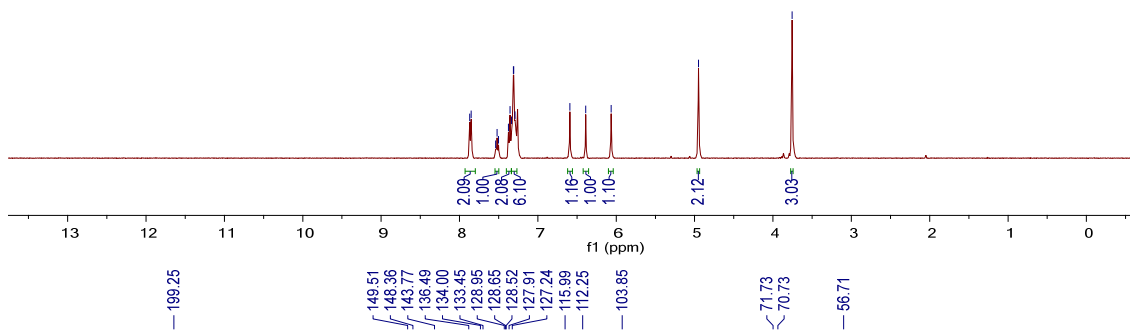


¹³C NMR spectrum of **7k** (100 MHz, CDCl₃)

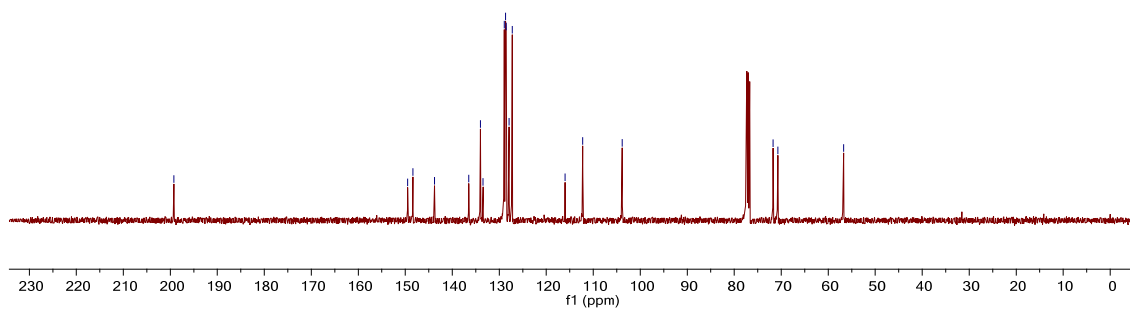


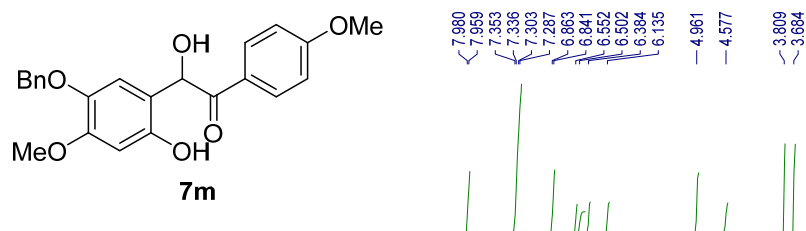


¹H NMR spectrum of **7l** (400 MHz, CDCl₃)

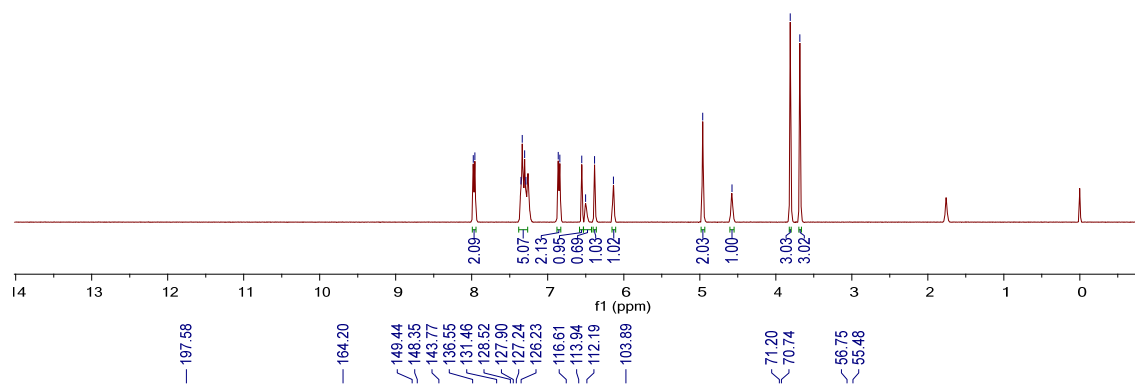


¹³C NMR spectrum of **7l** (100 MHz, CDCl₃)

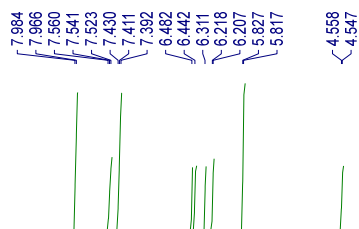
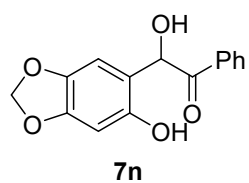




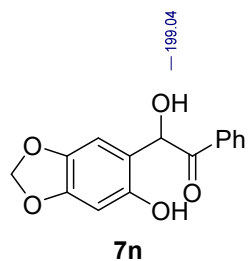
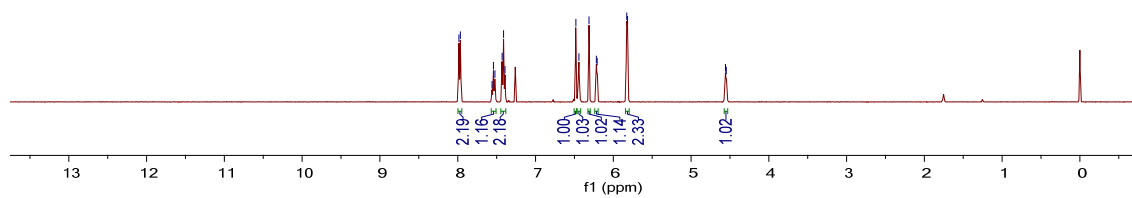
^1H NMR spectrum of **7m** (400 MHz, CDCl_3)



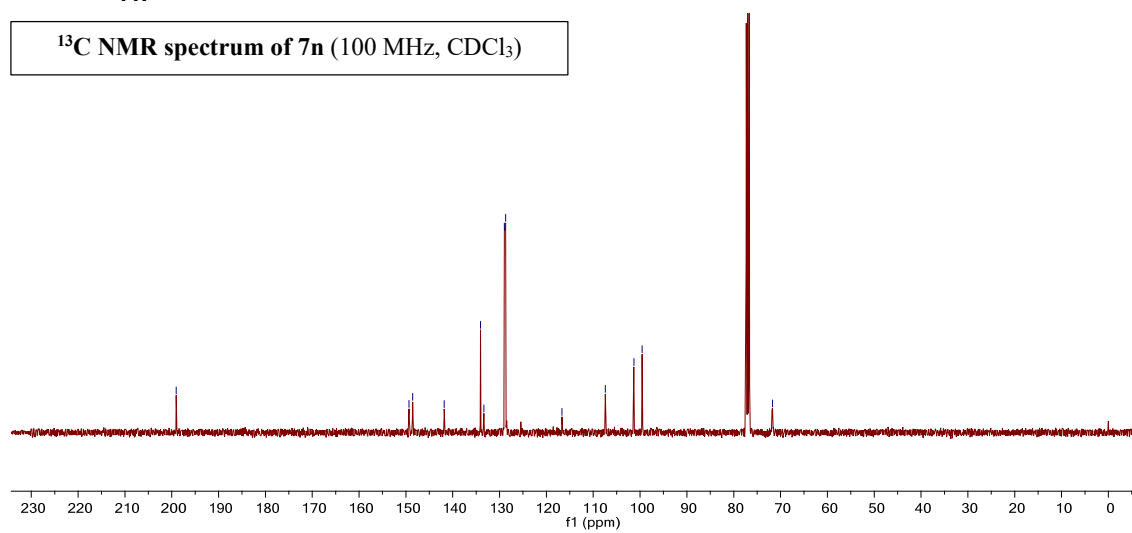
^{13}C NMR spectrum of **7m** (100 MHz, CDCl_3)

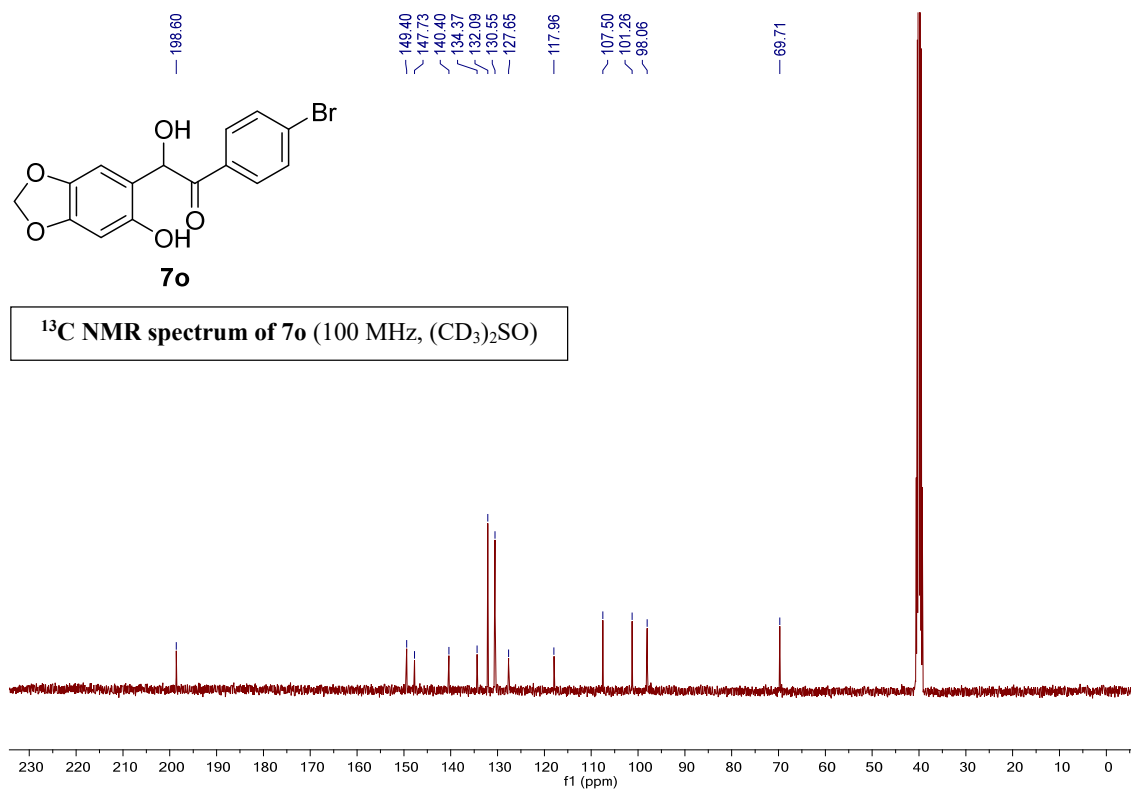
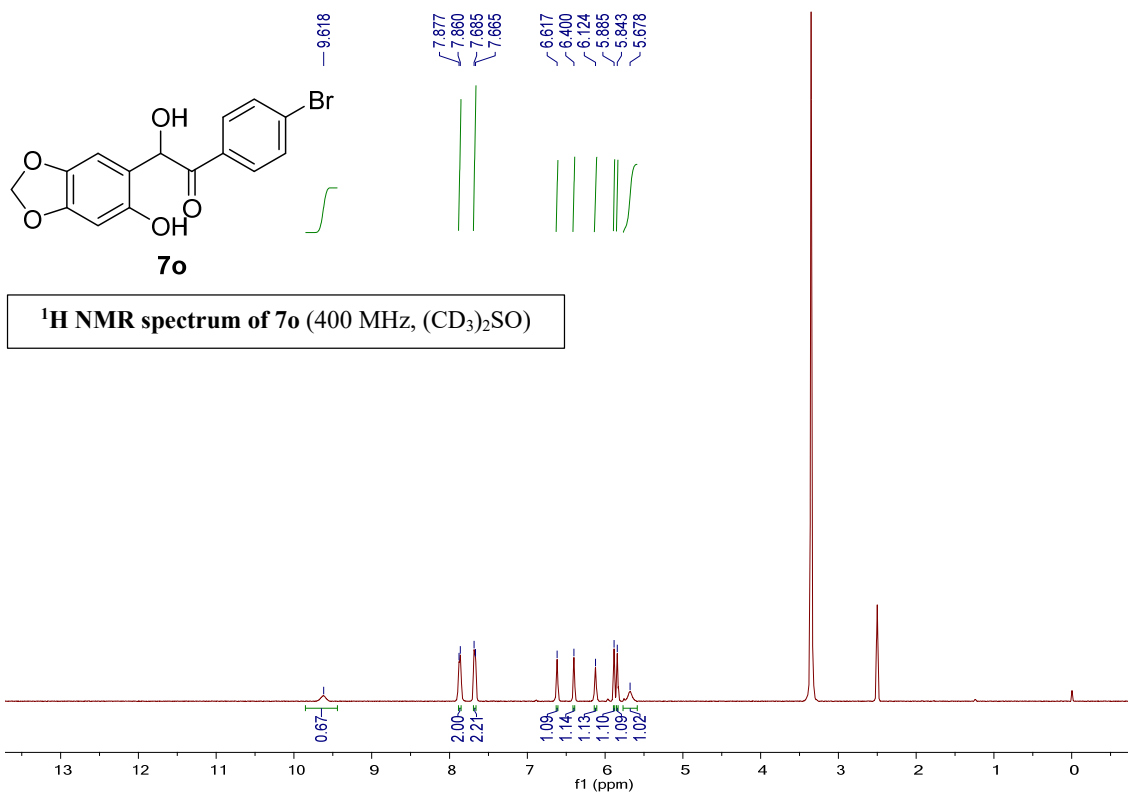


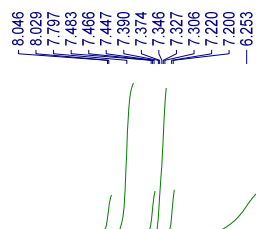
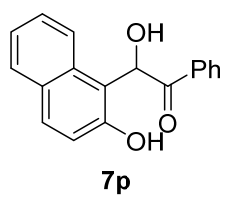
¹H NMR spectrum of **7n** (400 MHz, CDCl₃)



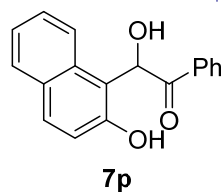
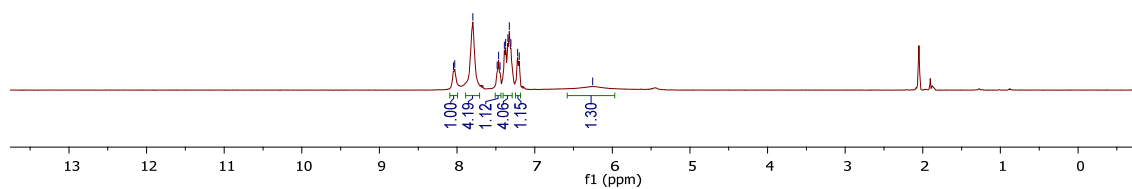
¹³C NMR spectrum of **7n** (100 MHz, CDCl₃)



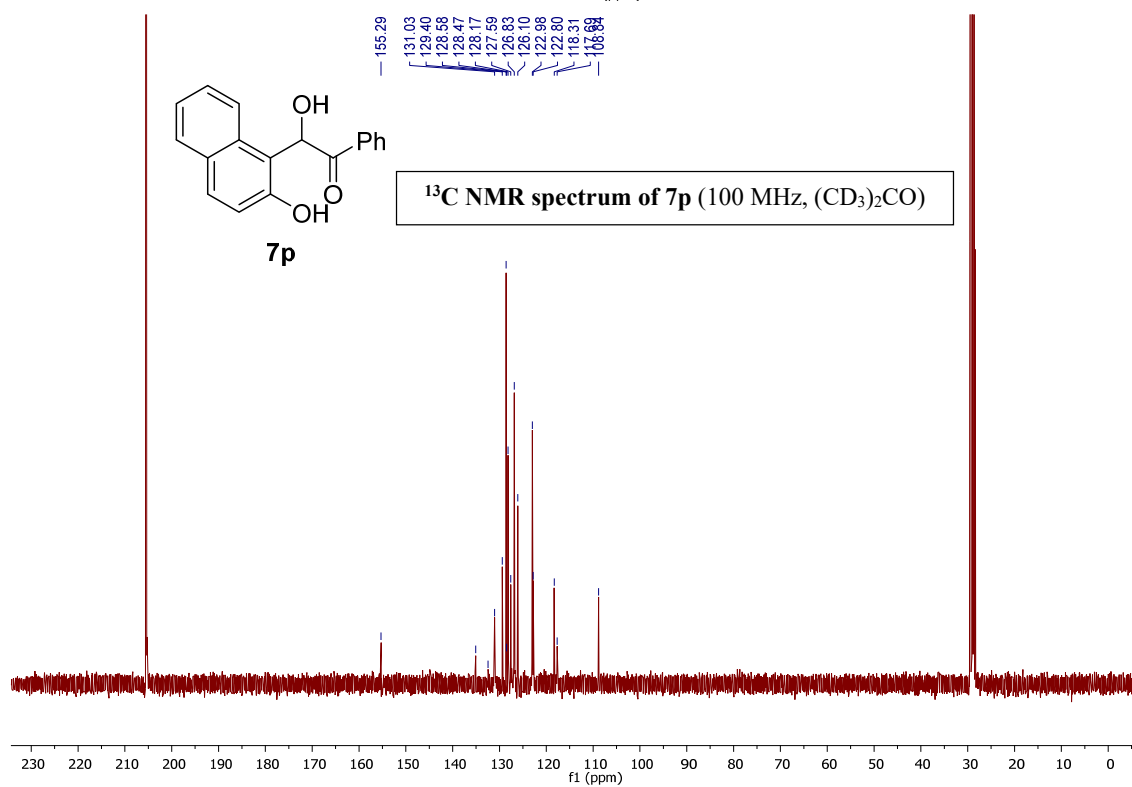


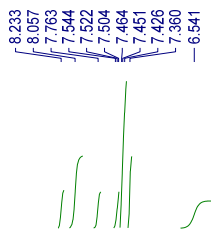
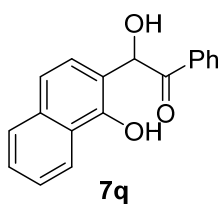


¹H NMR spectrum of **7p** (400 MHz, (CD₃)₂CO)

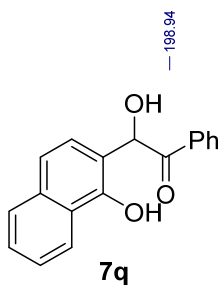
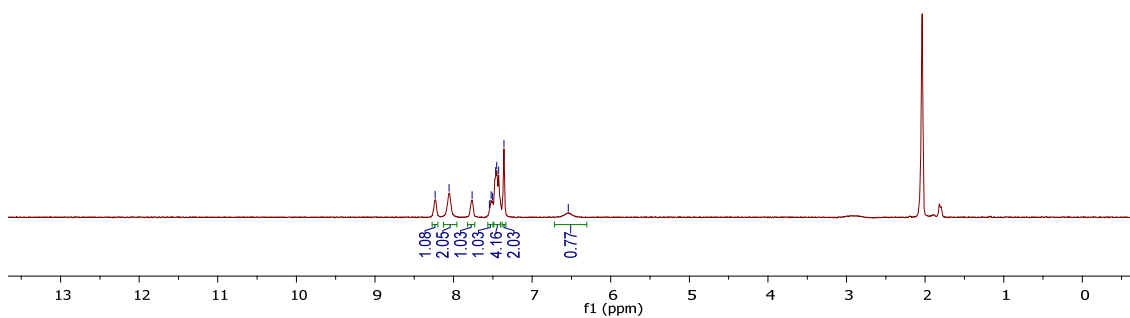


¹³C NMR spectrum of **7p** (100 MHz, (CD₃)₂CO)

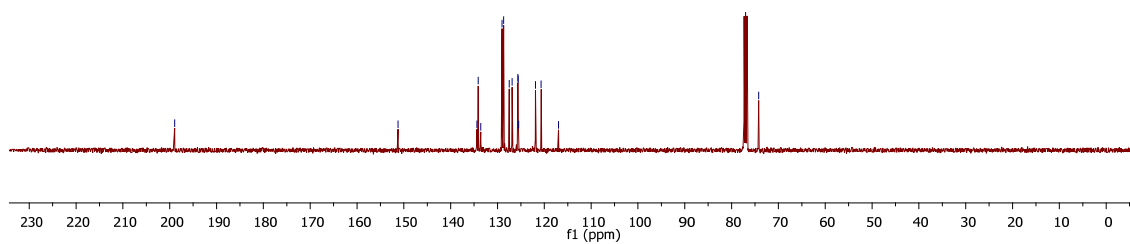


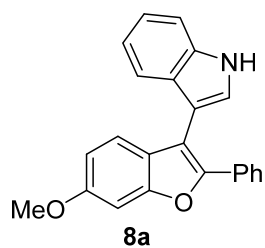


¹H NMR spectrum of **7q** (400 MHz, (CD₃)₂CO)

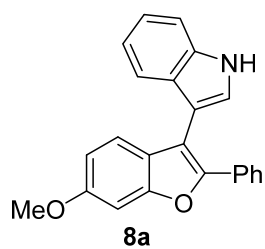
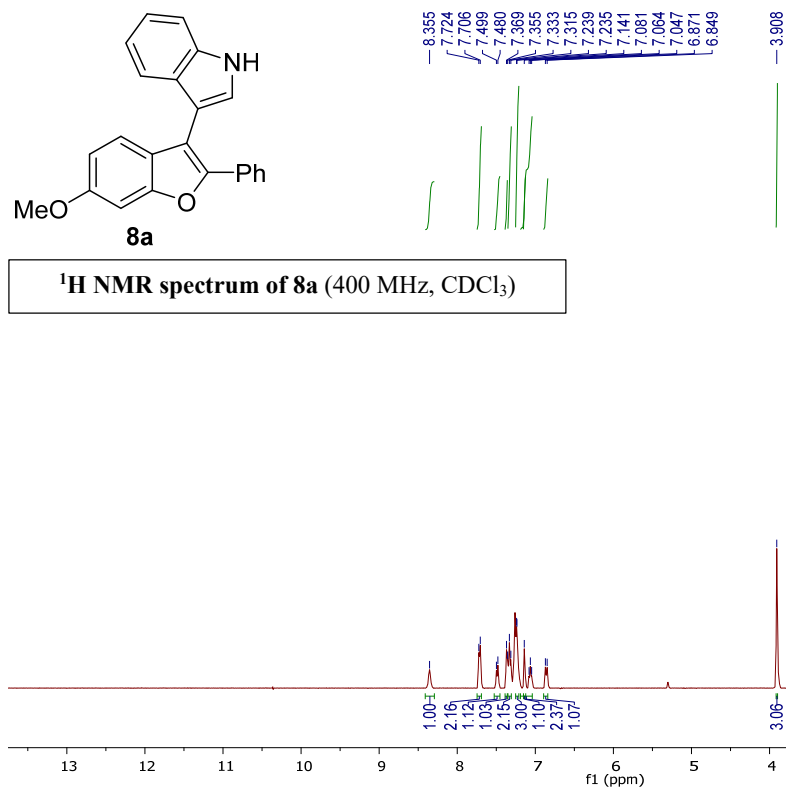


¹³C NMR spectrum of **7q** (100 MHz, CDCl₃)

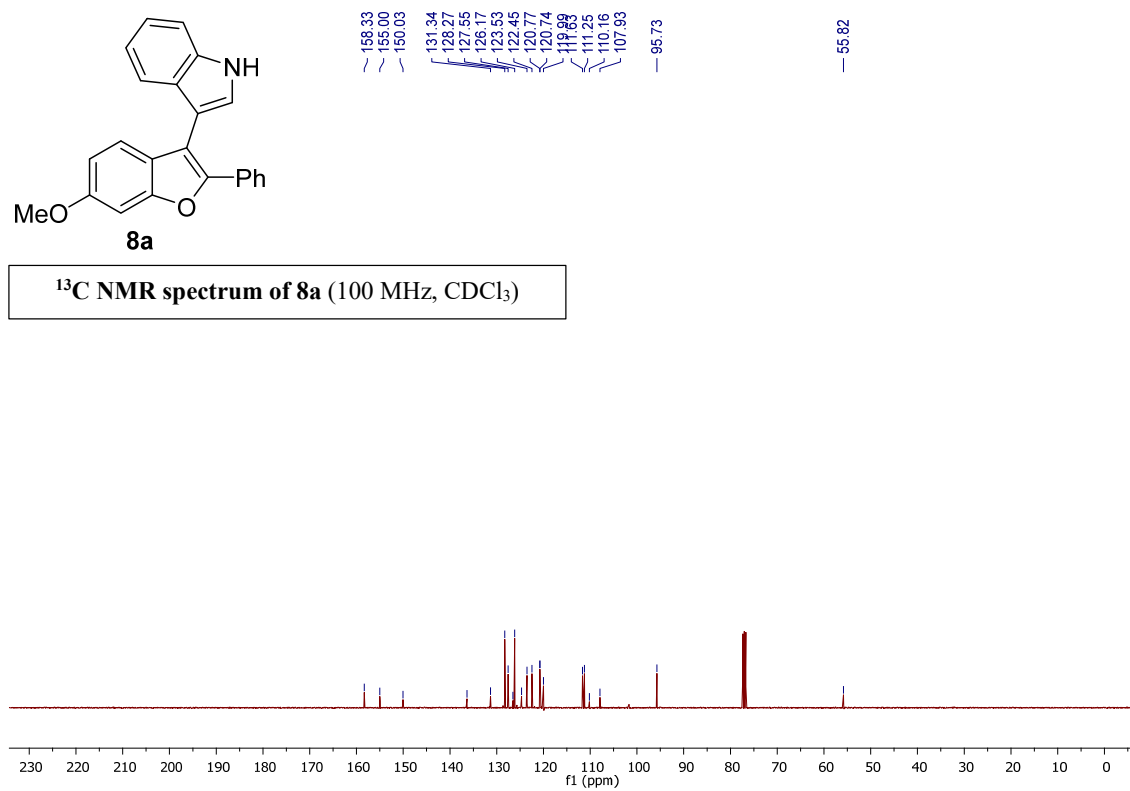


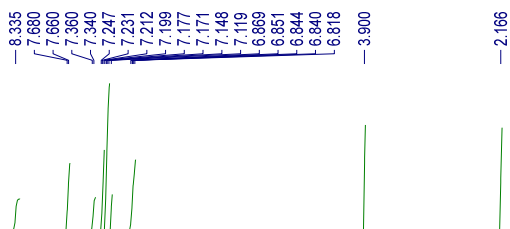
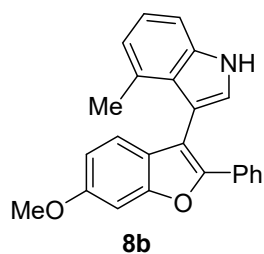


¹H NMR spectrum of 8a (400 MHz, CDCl₃)

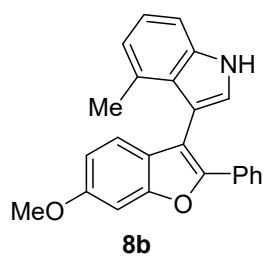
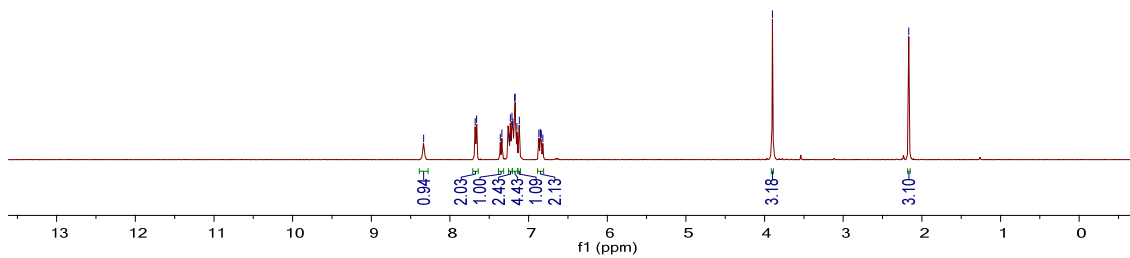


¹³C NMR spectrum of 8a (100 MHz, CDCl₃)

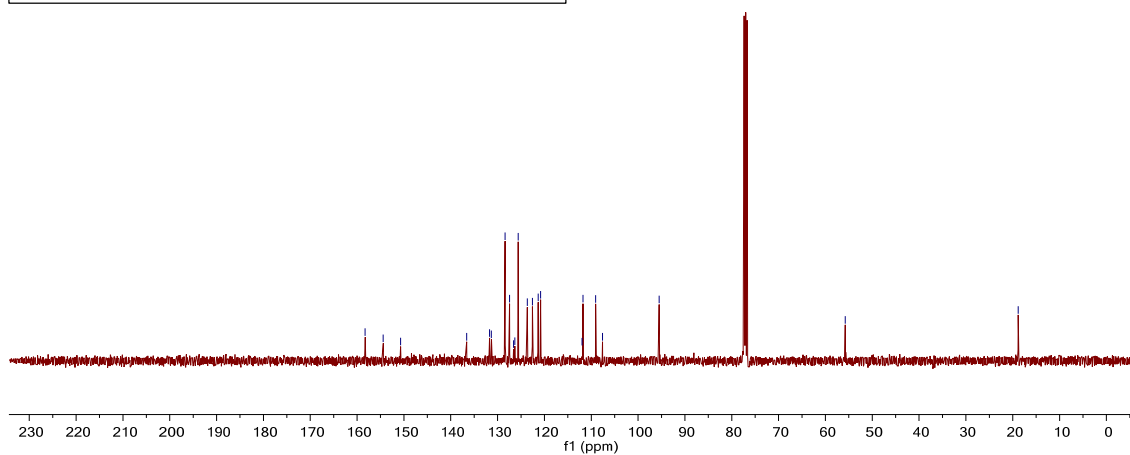


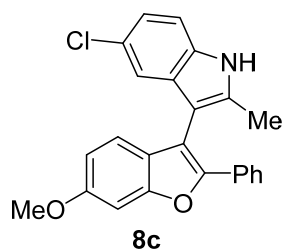


¹H NMR spectrum of **8b** (400 MHz, CDCl₃)

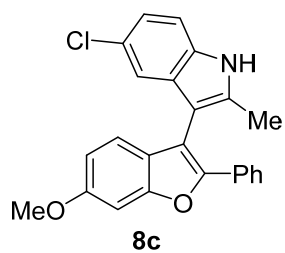
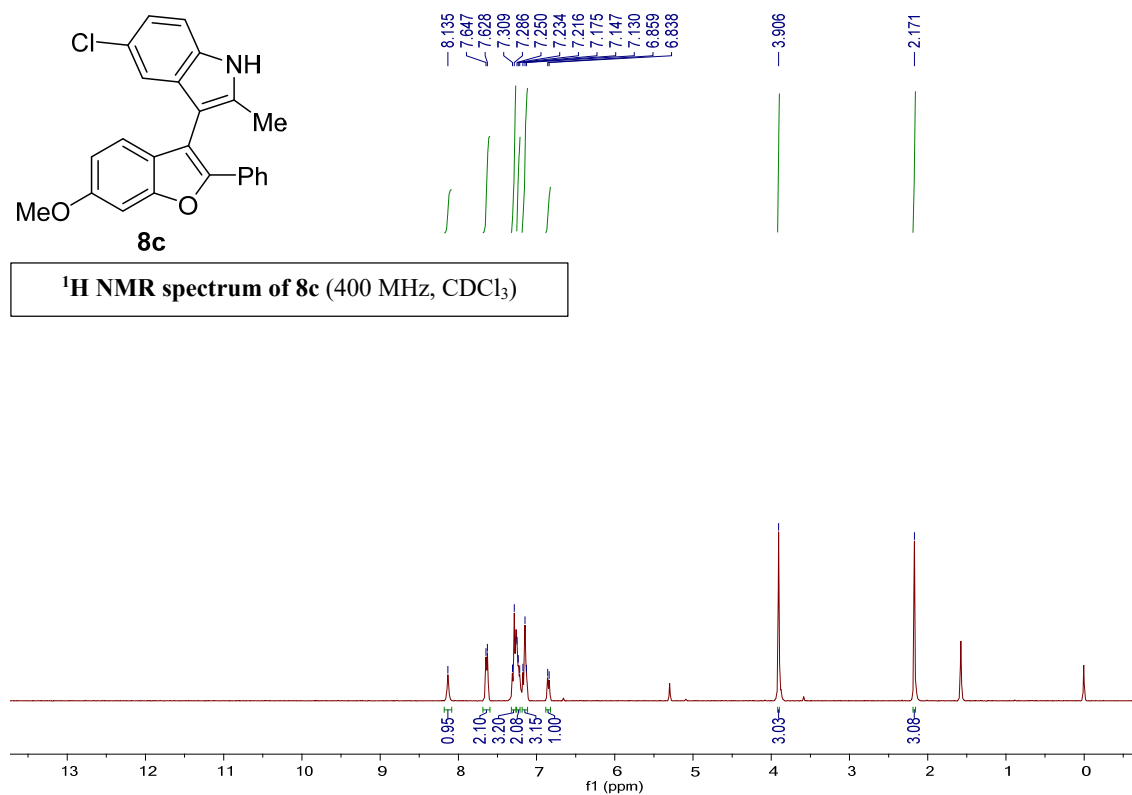


¹³C NMR spectrum of **8b** (100 MHz, CDCl₃)

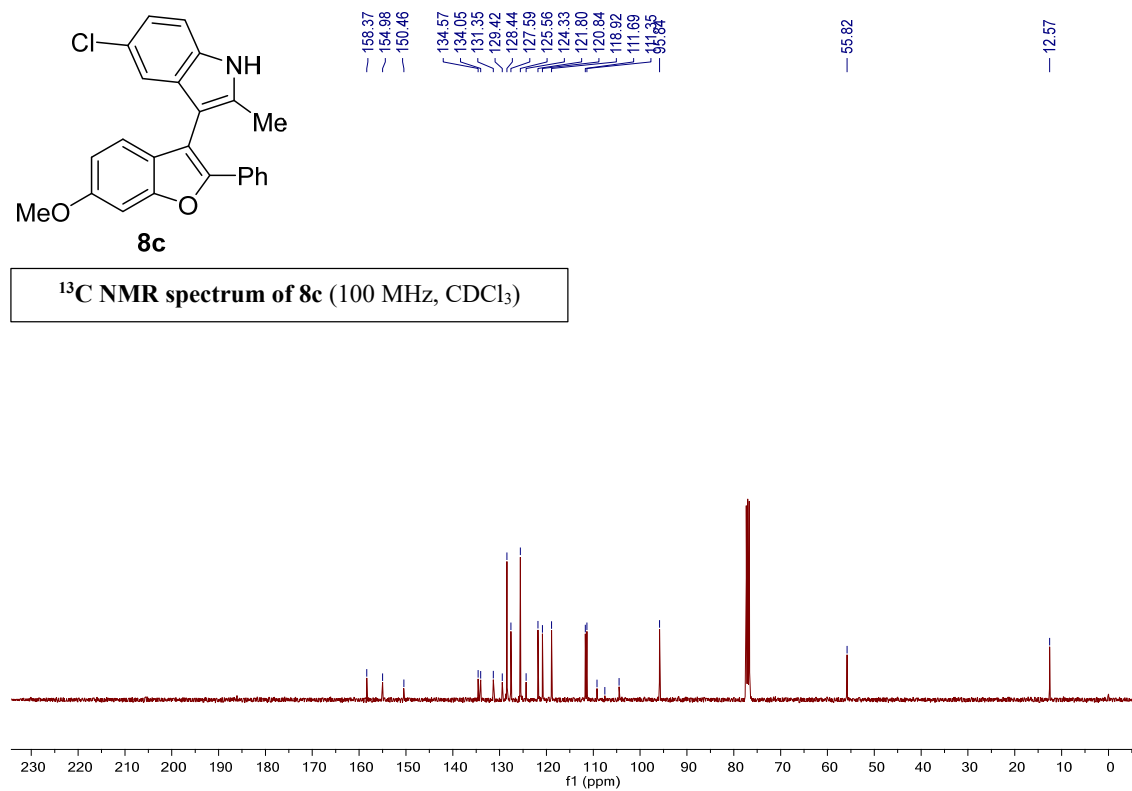


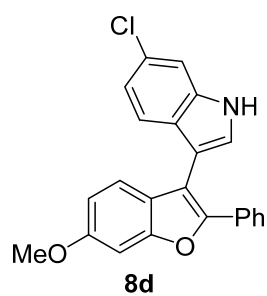


¹H NMR spectrum of **8c** (400 MHz, CDCl₃)

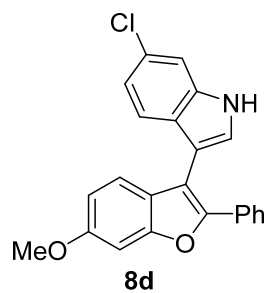
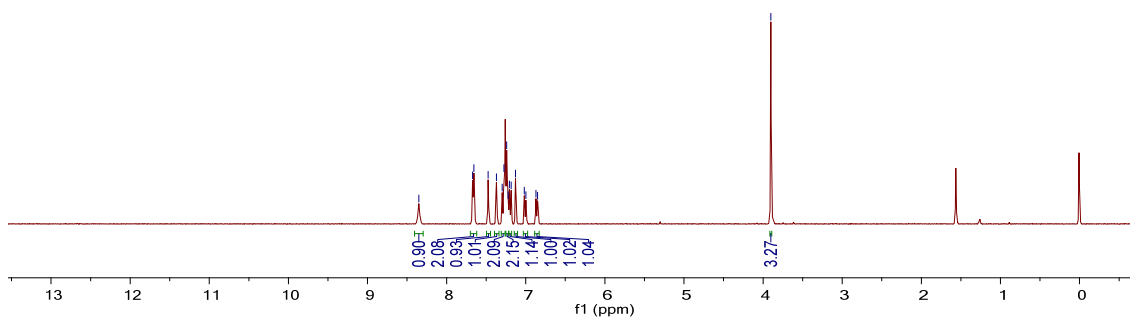
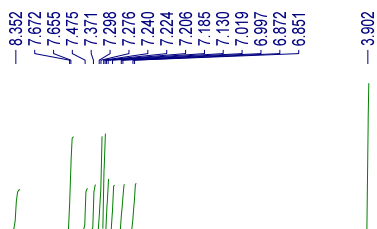


¹³C NMR spectrum of **8c** (100 MHz, CDCl₃)

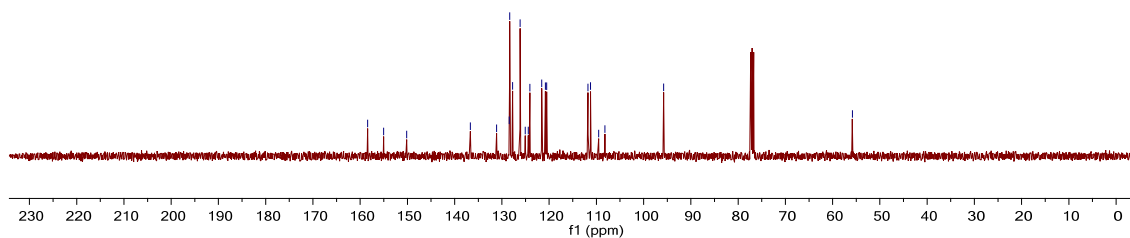


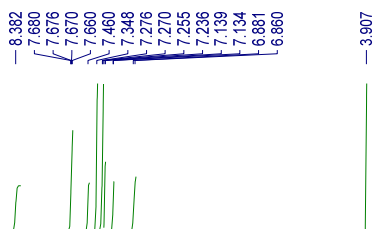
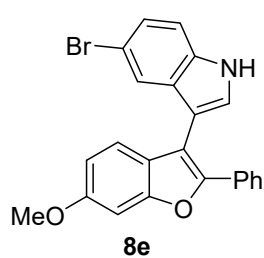


¹H NMR spectrum of **8d** (400 MHz, CDCl₃)

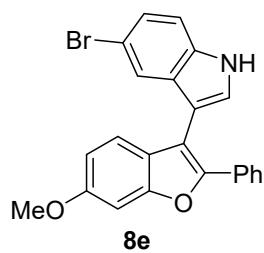
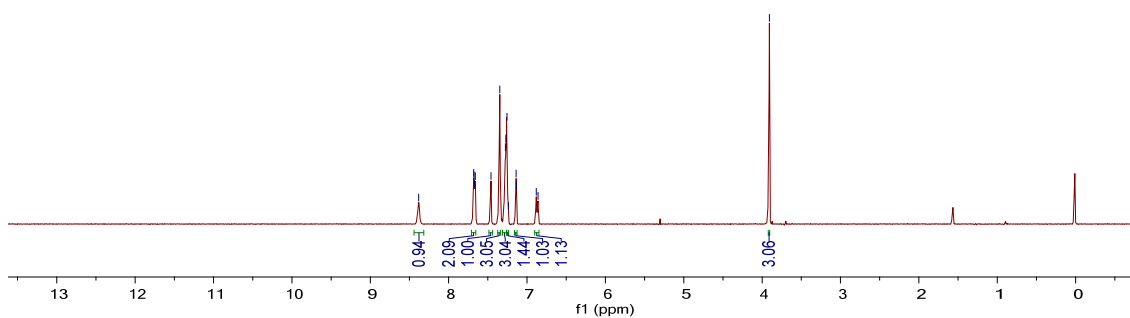


¹³C NMR spectrum of **8d** (100 MHz, CDCl₃)

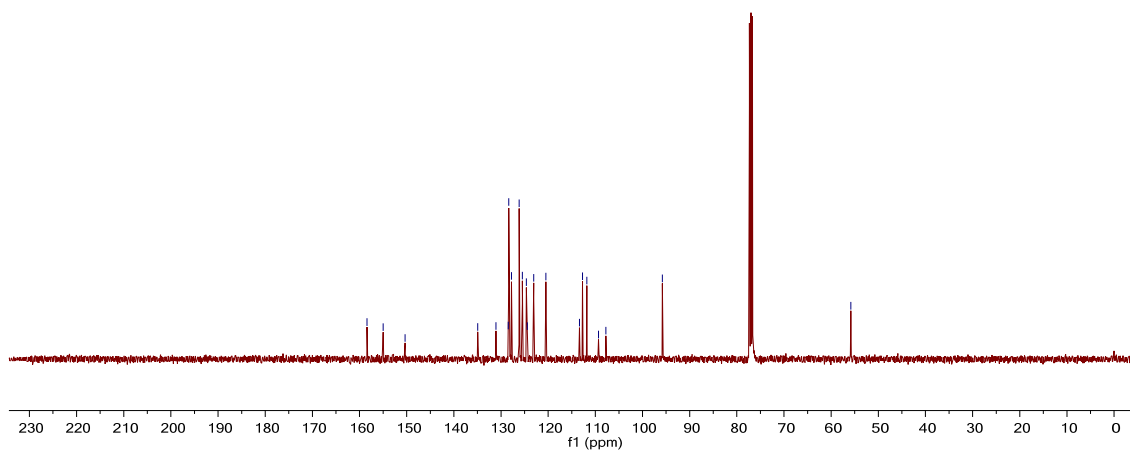


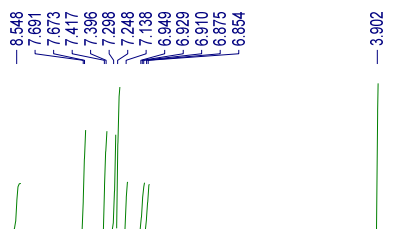
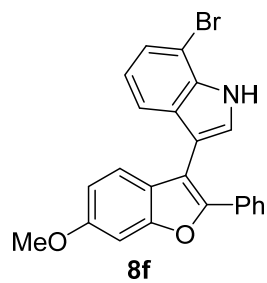


¹H NMR spectrum of **8e** (400 MHz, CDCl₃)

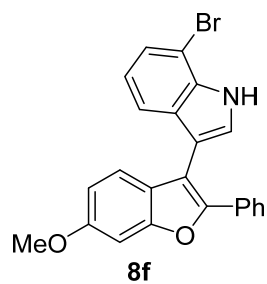
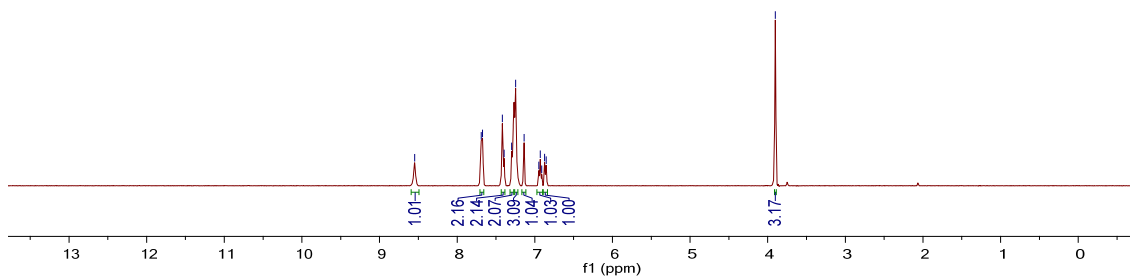


¹³C NMR spectrum of **8e** (100 MHz, CDCl₃)

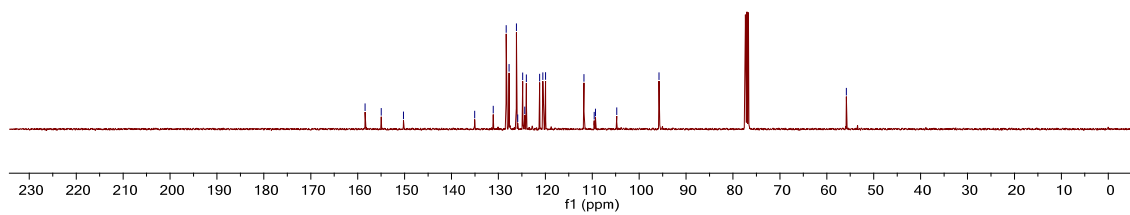


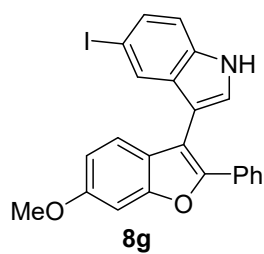


¹H NMR spectrum of **8f** (400 MHz, CDCl₃)

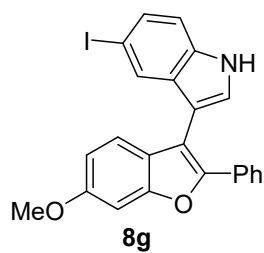
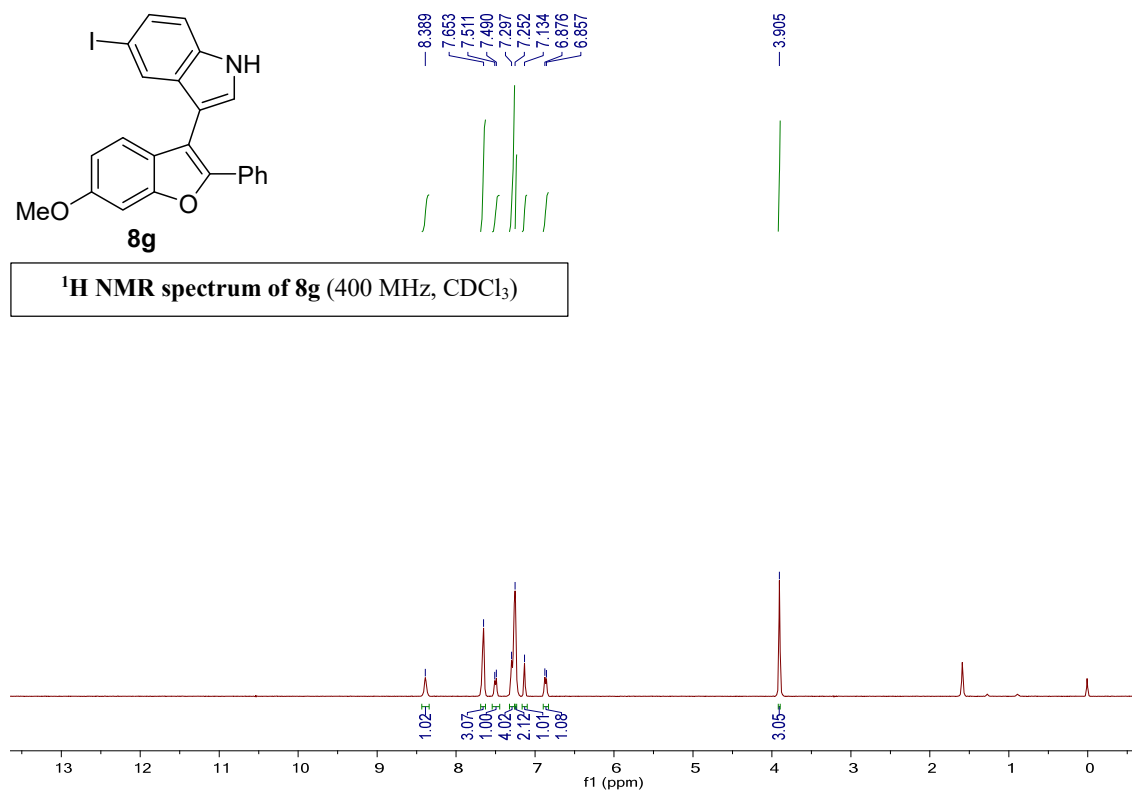


¹³C NMR spectrum of **8f** (100 MHz, CDCl₃)

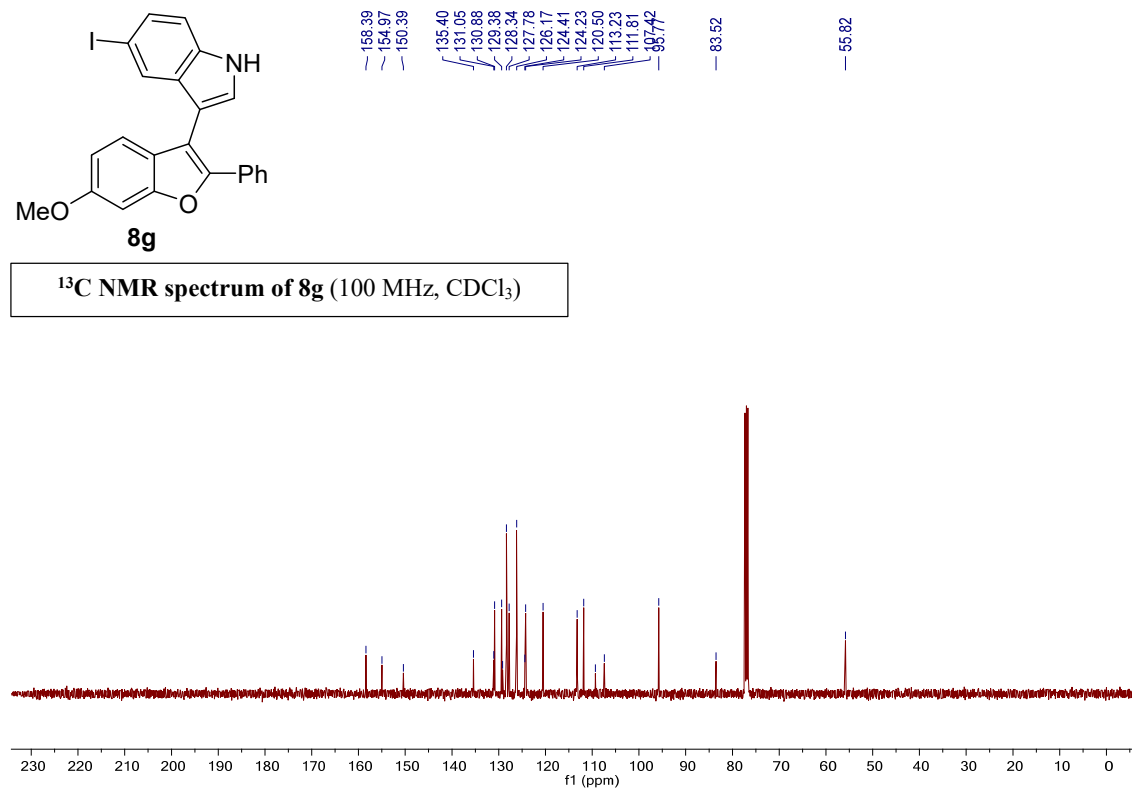


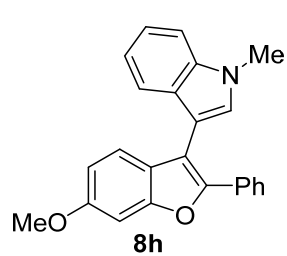


¹H NMR spectrum of **8g** (400 MHz, CDCl₃)

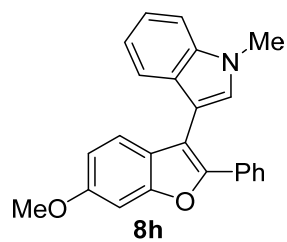
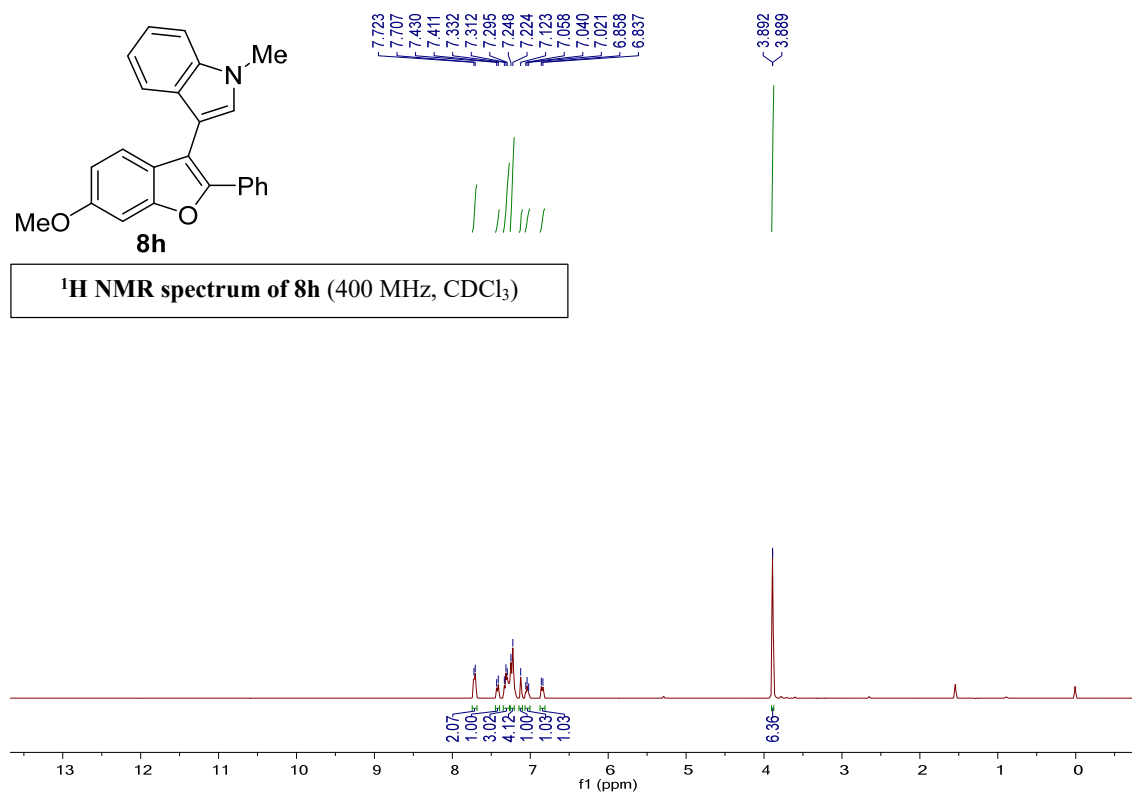


¹³C NMR spectrum of **8g** (100 MHz, CDCl₃)

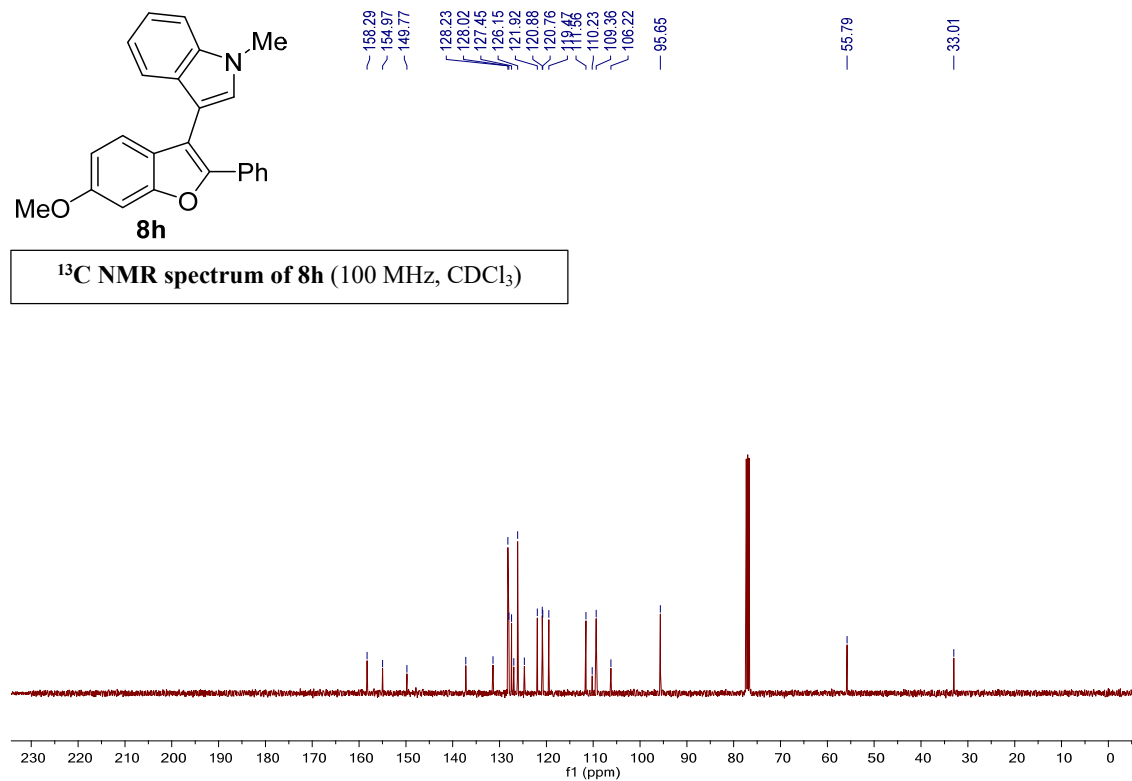


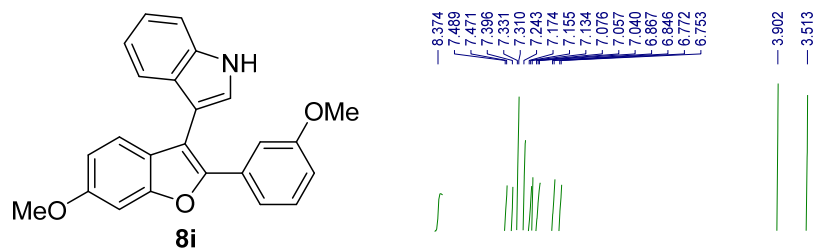


¹H NMR spectrum of 8h (400 MHz, CDCl₃)

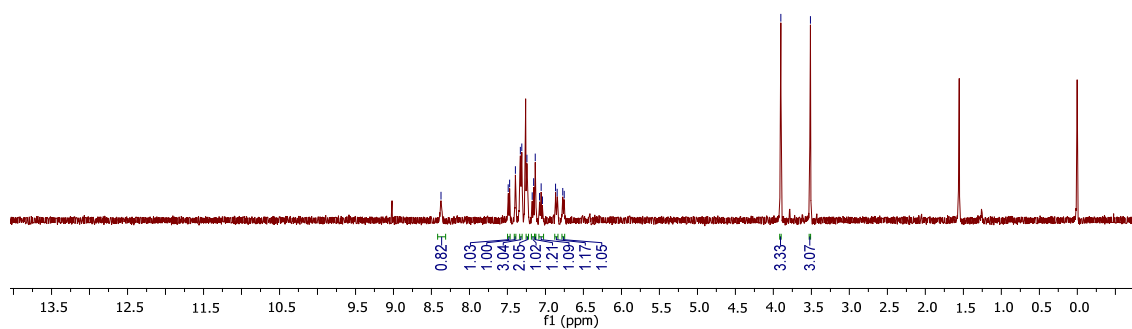


¹³C NMR spectrum of 8h (100 MHz, CDCl₃)

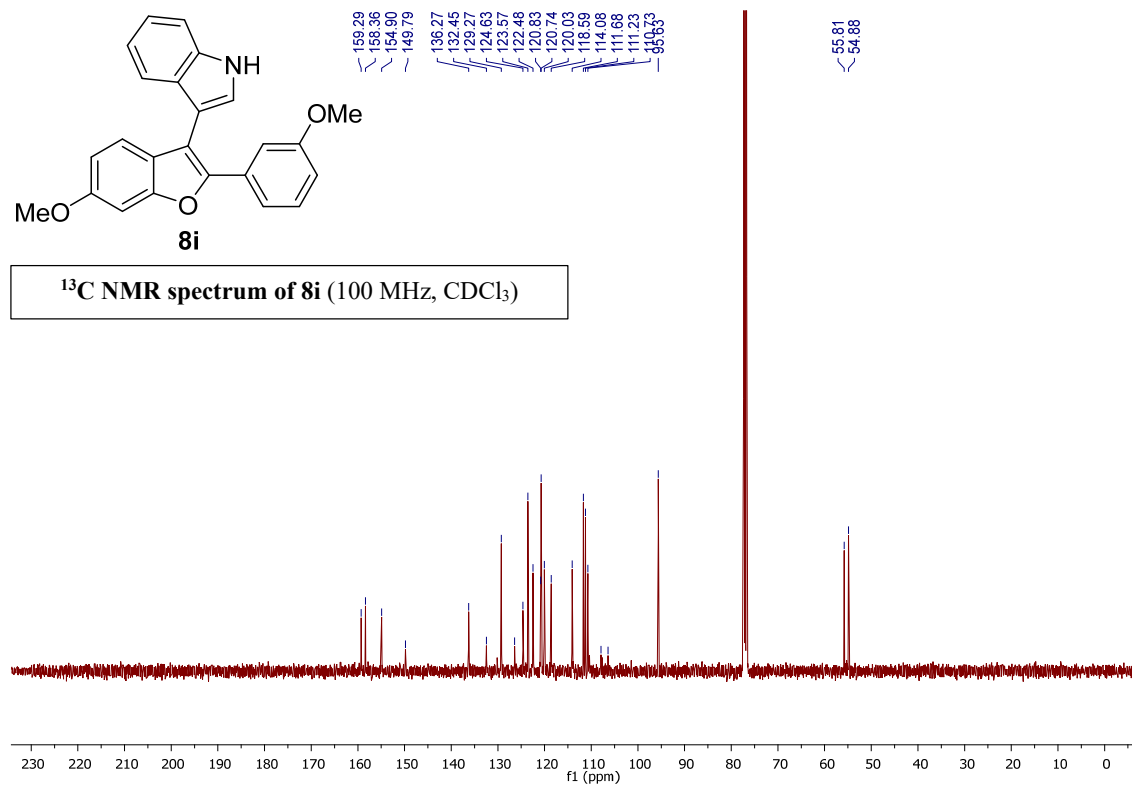


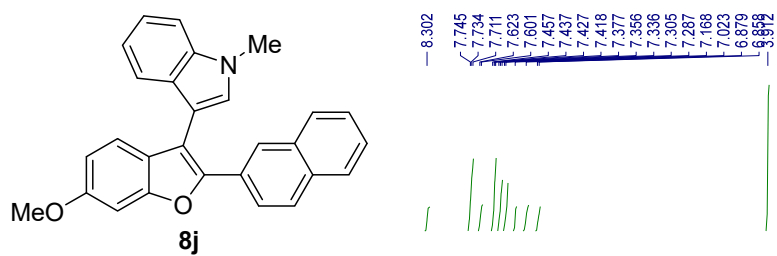


¹H NMR spectrum of **8i** (400 MHz, CDCl₃)

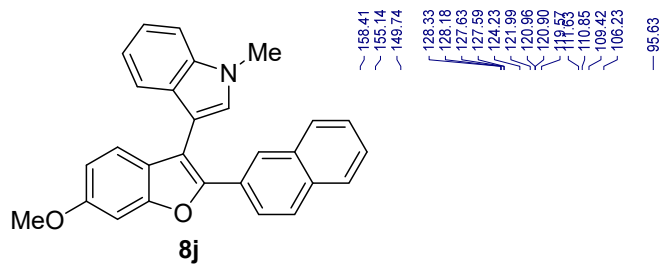
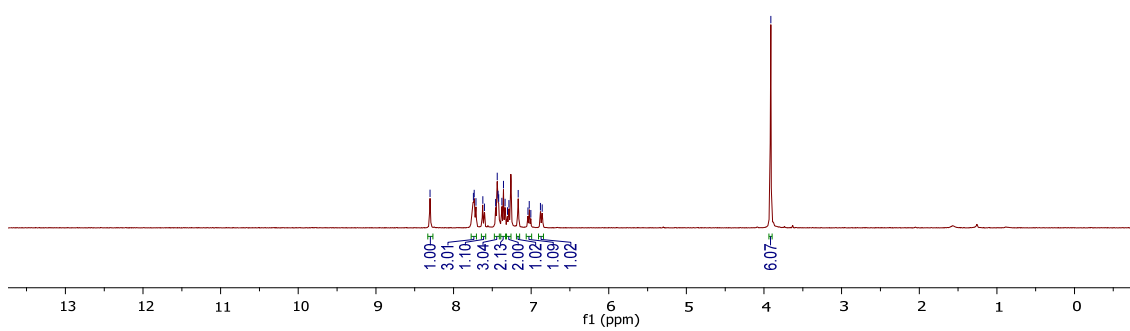


¹³C NMR spectrum of **8i** (100 MHz, CDCl₃)

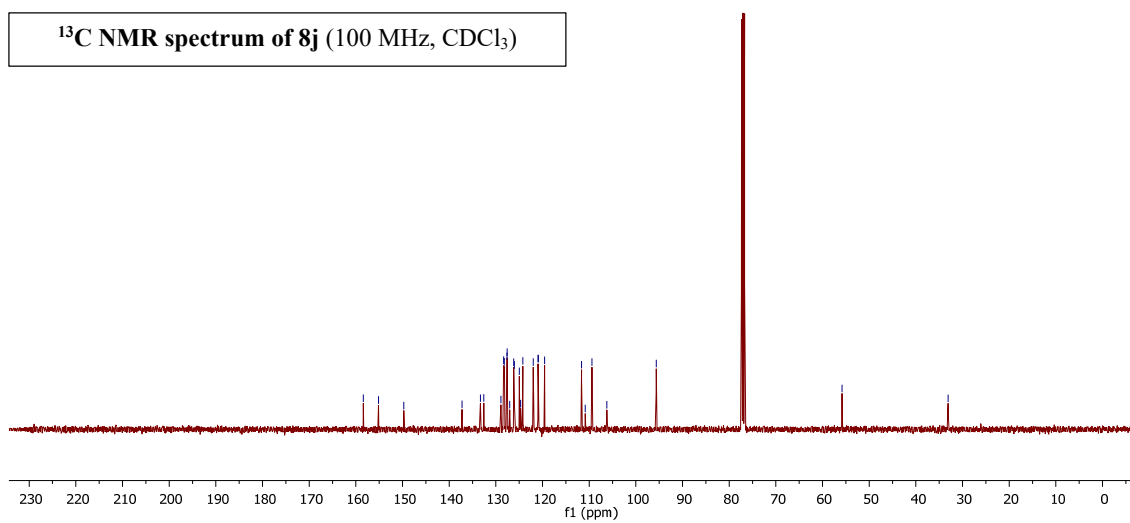


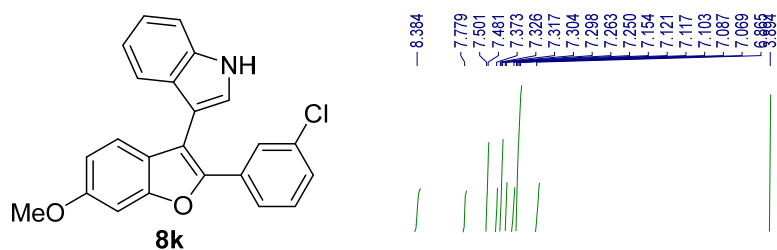


^1H NMR spectrum of **8j** (400 MHz, CDCl_3)

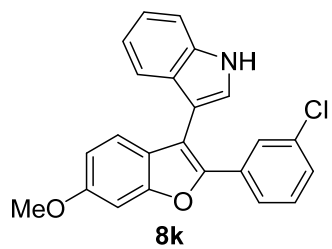
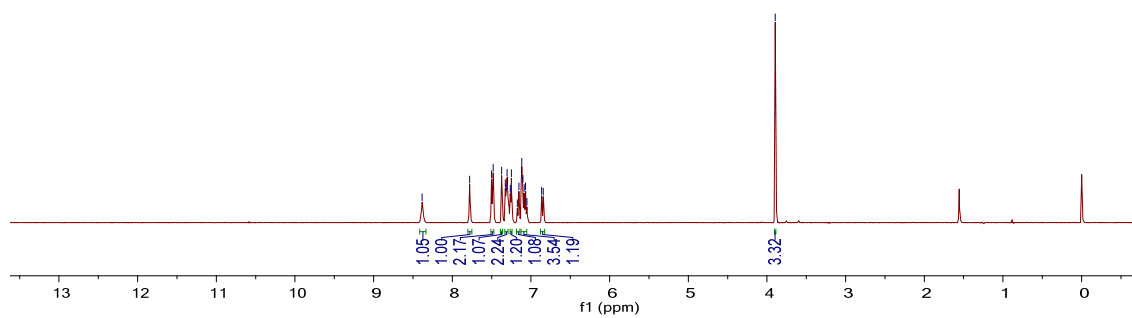


^{13}C NMR spectrum of **8j** (100 MHz, CDCl_3)

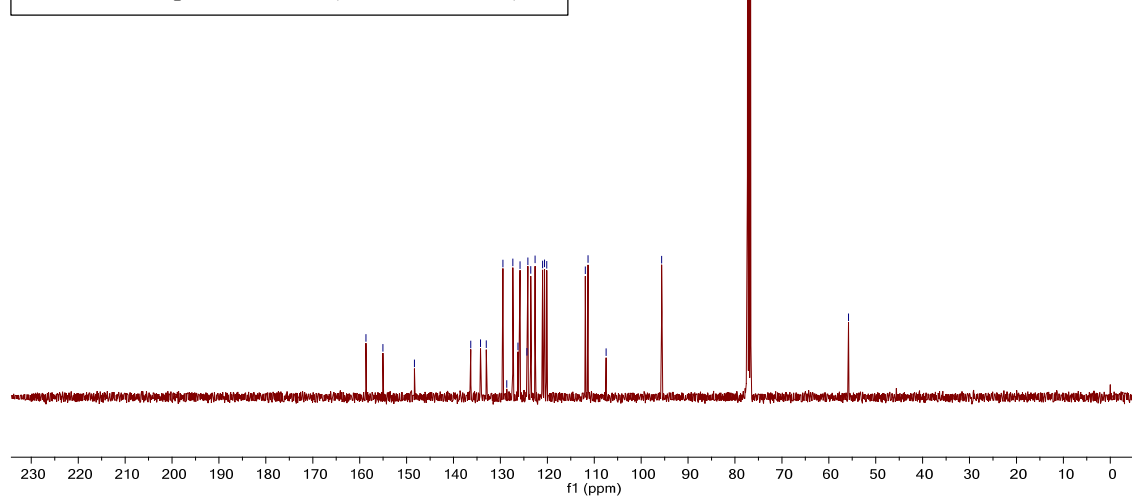


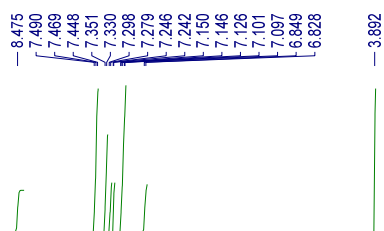
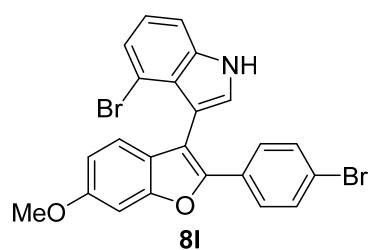


¹H NMR spectrum of **8k** (400 MHz, CDCl₃)

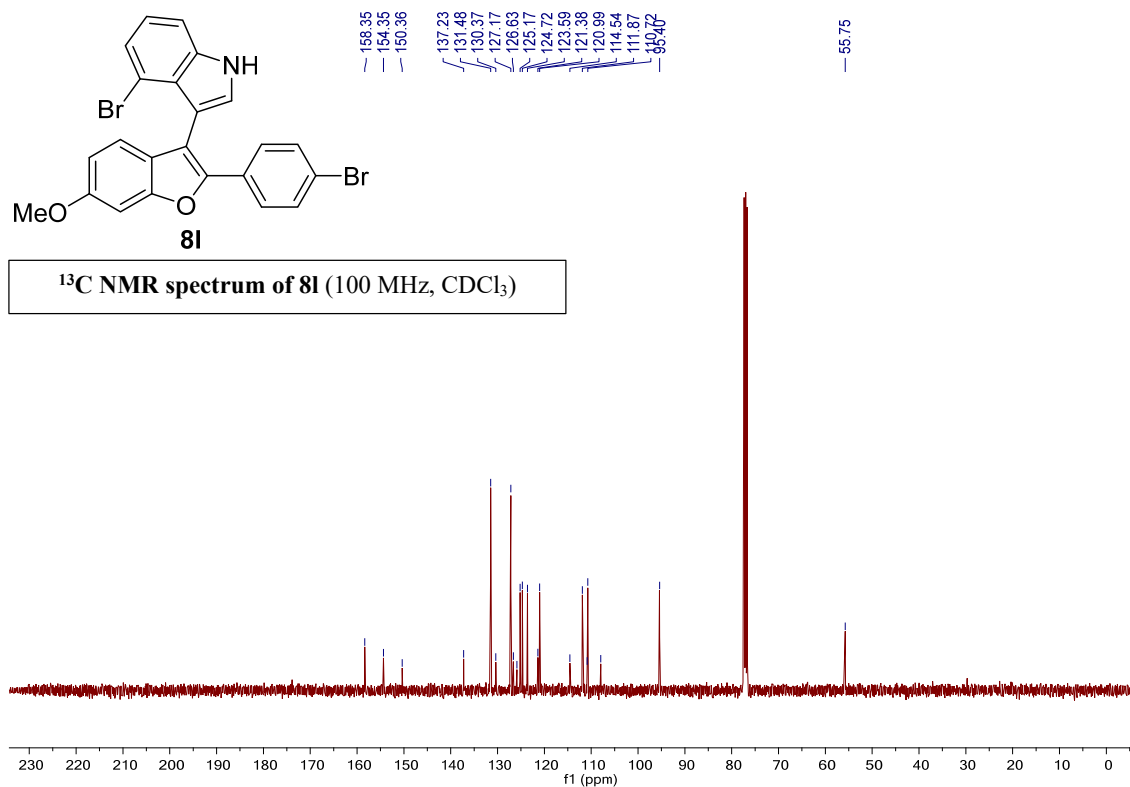
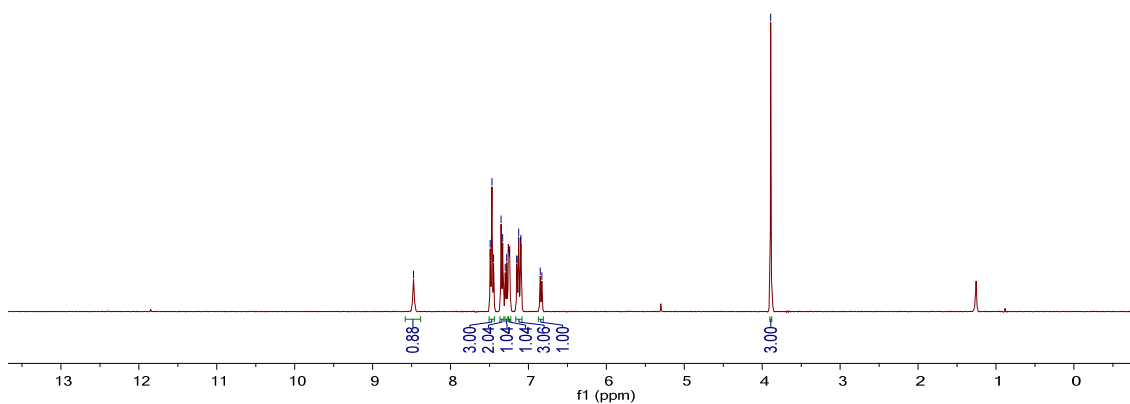


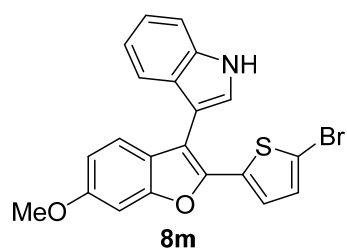
¹³C NMR spectrum of **8k** (100 MHz, CDCl₃)



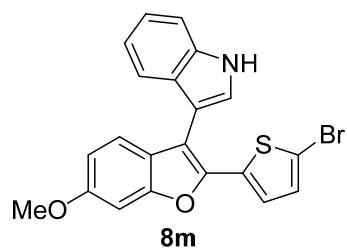
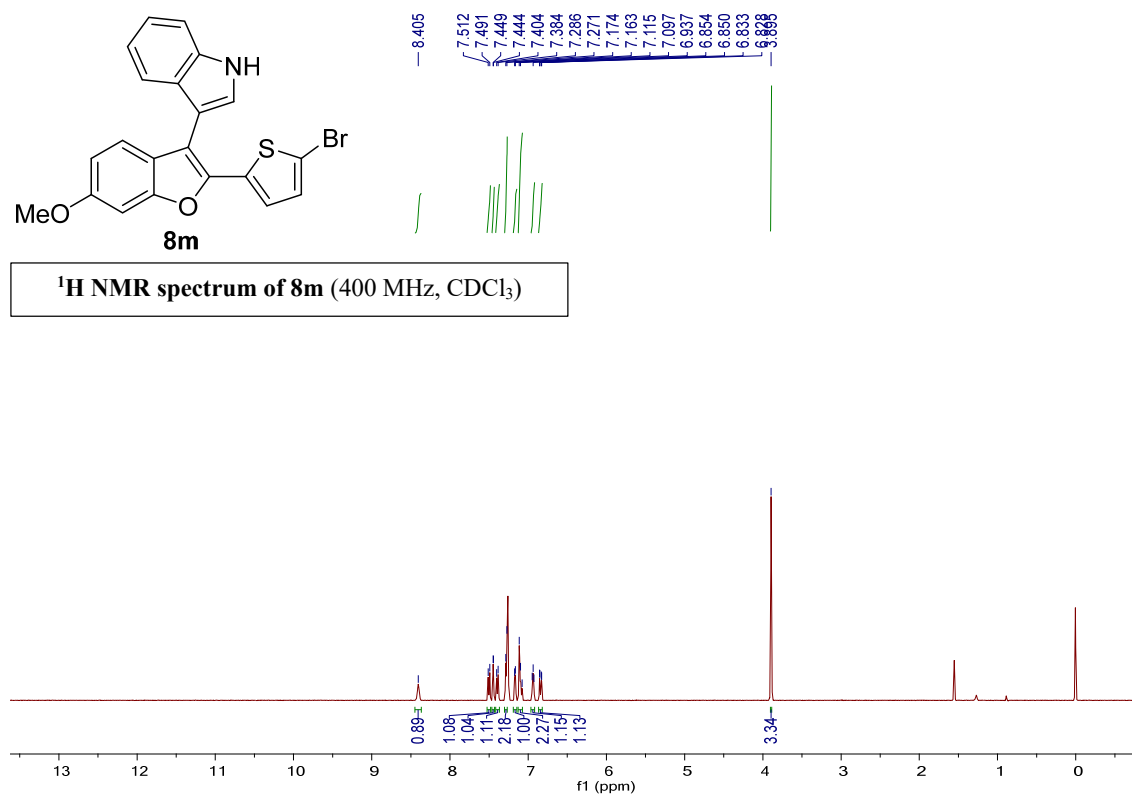


^1H NMR spectrum of **8I** (400 MHz, CDCl_3)

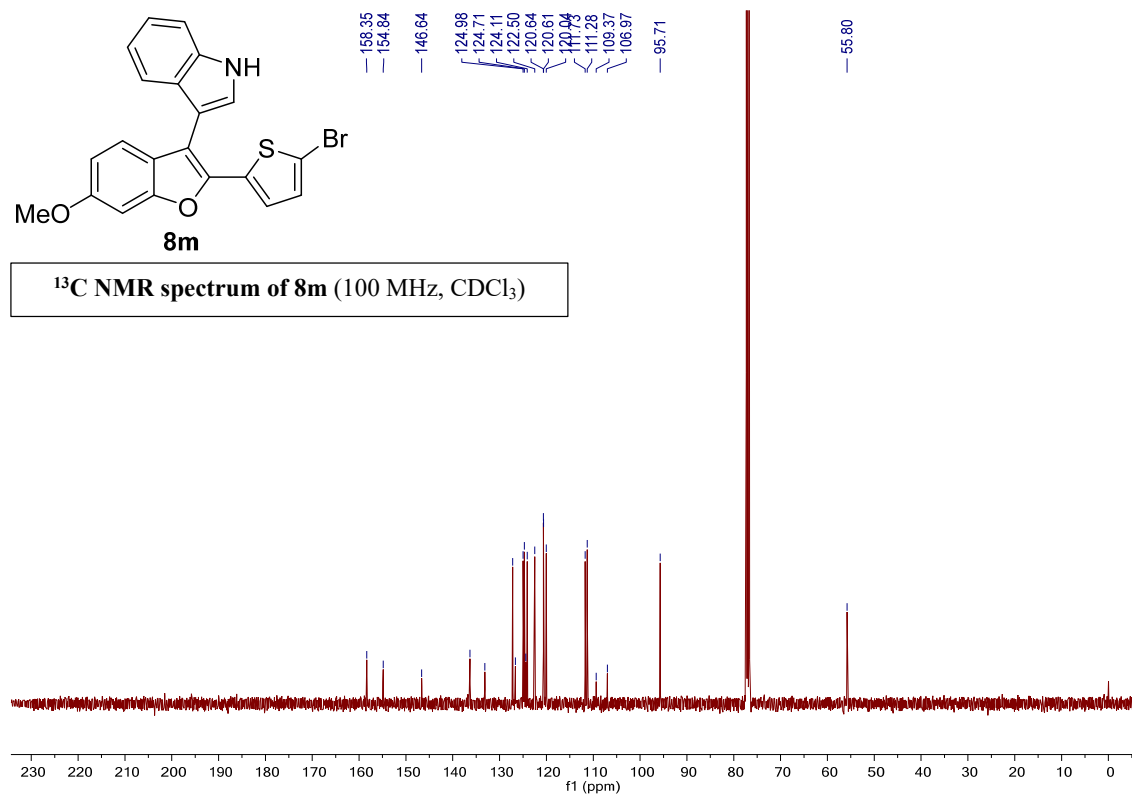


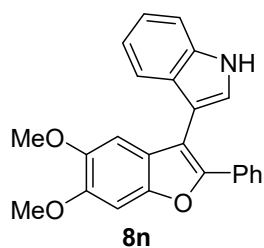


¹H NMR spectrum of **8m** (400 MHz, CDCl₃)

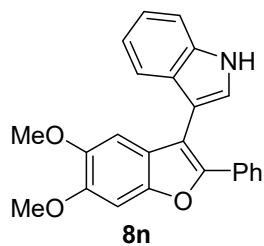
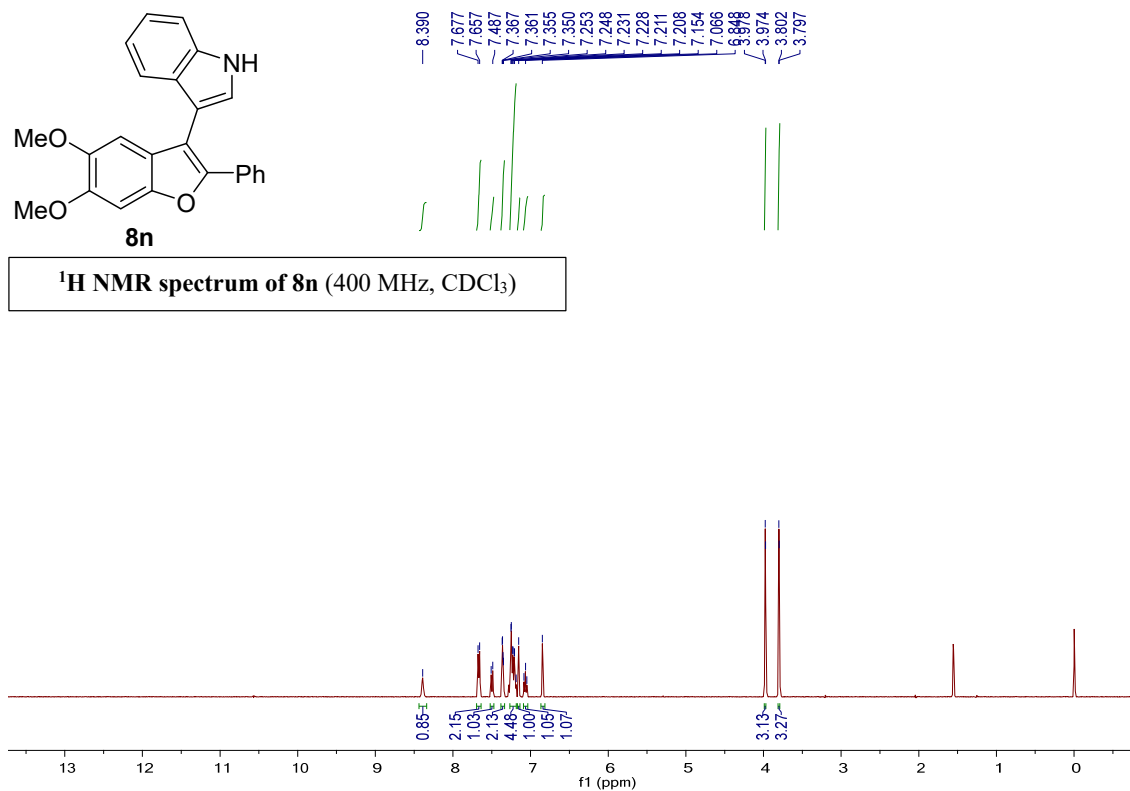


¹³C NMR spectrum of **8m** (100 MHz, CDCl₃)

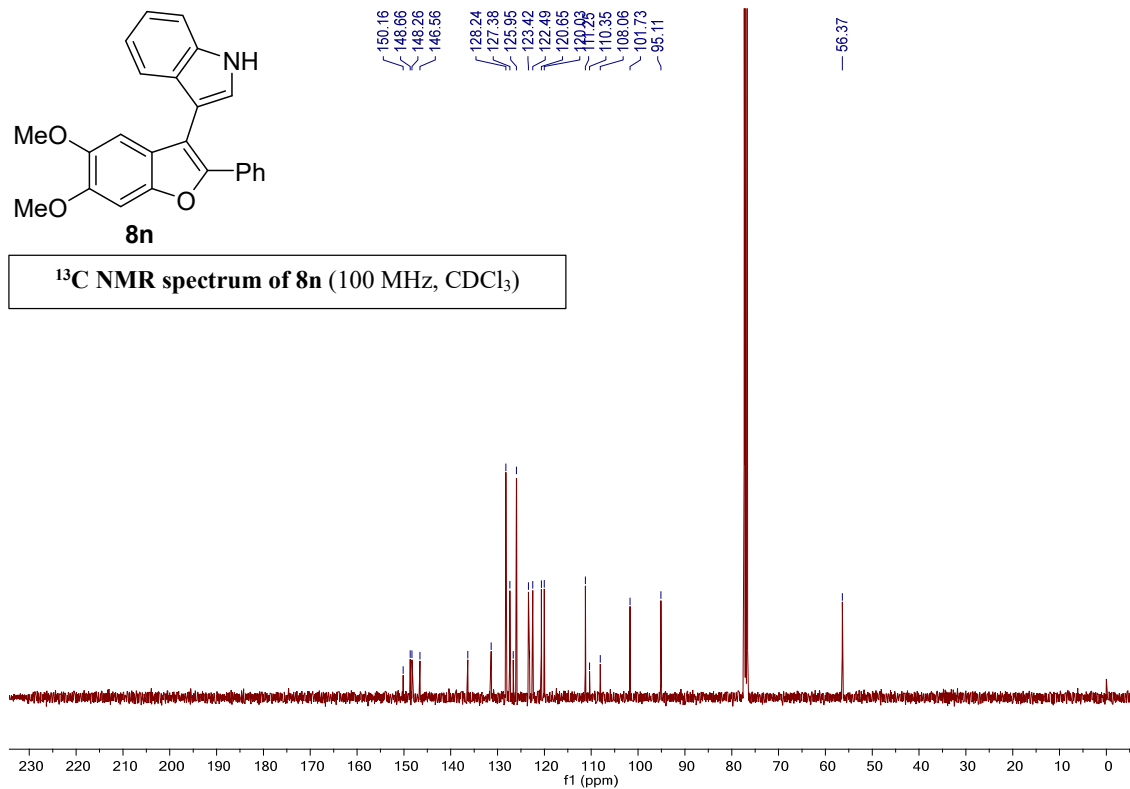




¹H NMR spectrum of **8n** (400 MHz, CDCl₃)

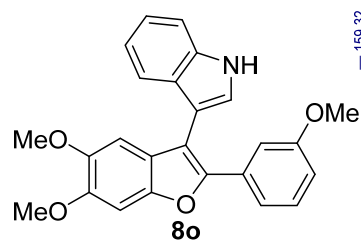
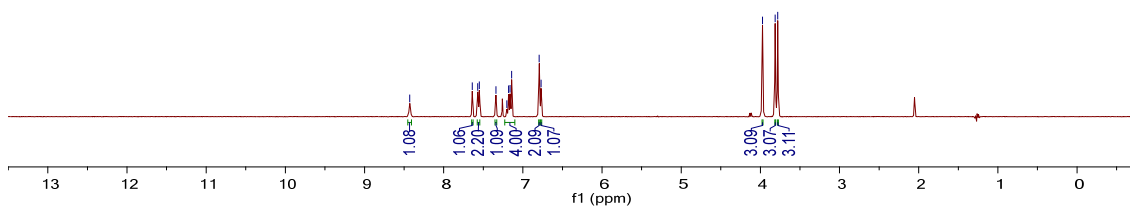


¹³C NMR spectrum of **8n** (100 MHz, CDCl₃)

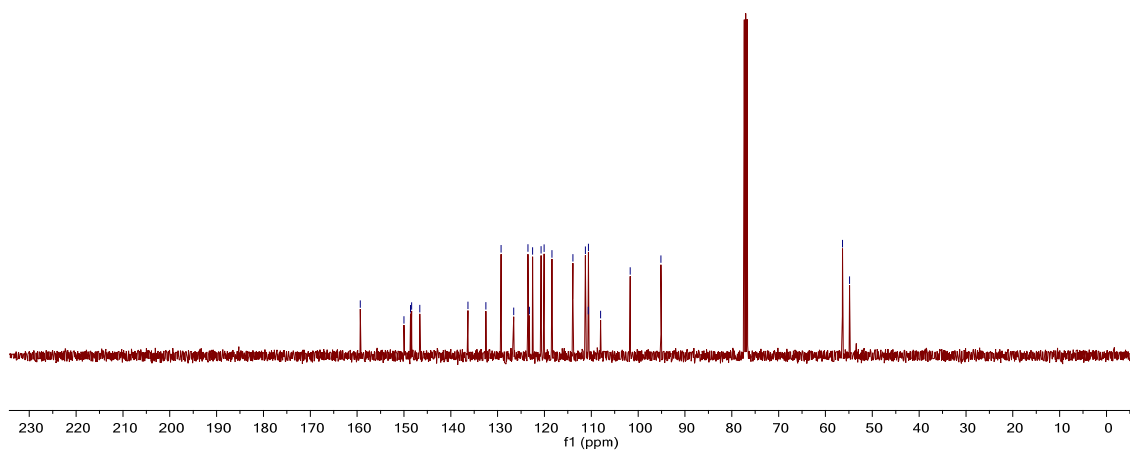


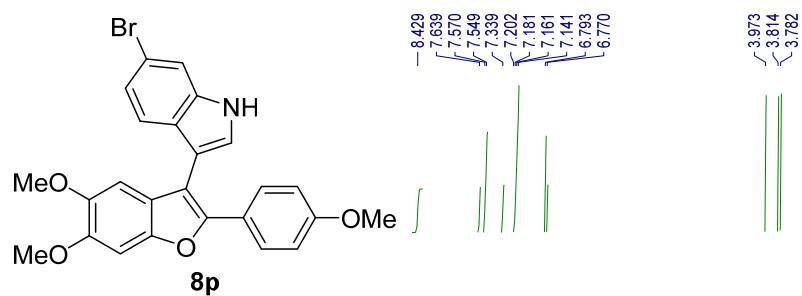


¹H NMR spectrum of **8o** (400 MHz, CDCl₃)

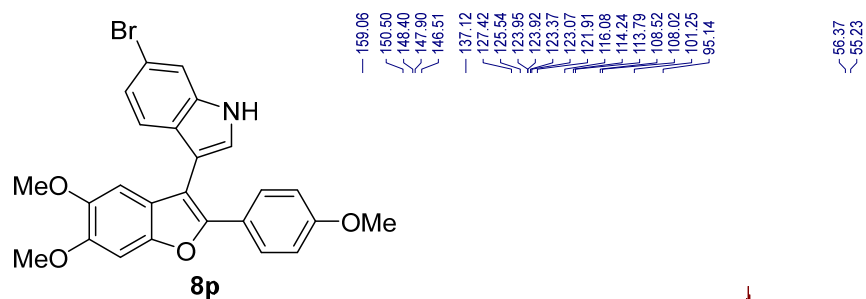
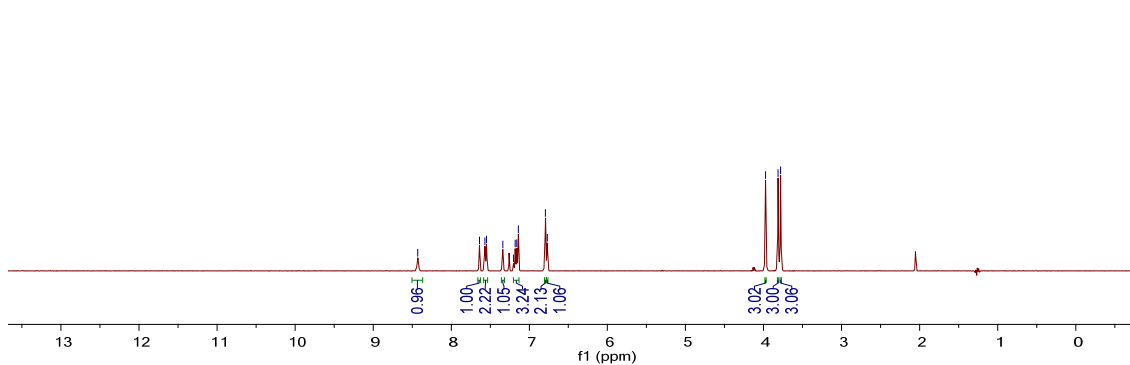


¹³C NMR spectrum of **8o** (100 MHz, CDCl₃)

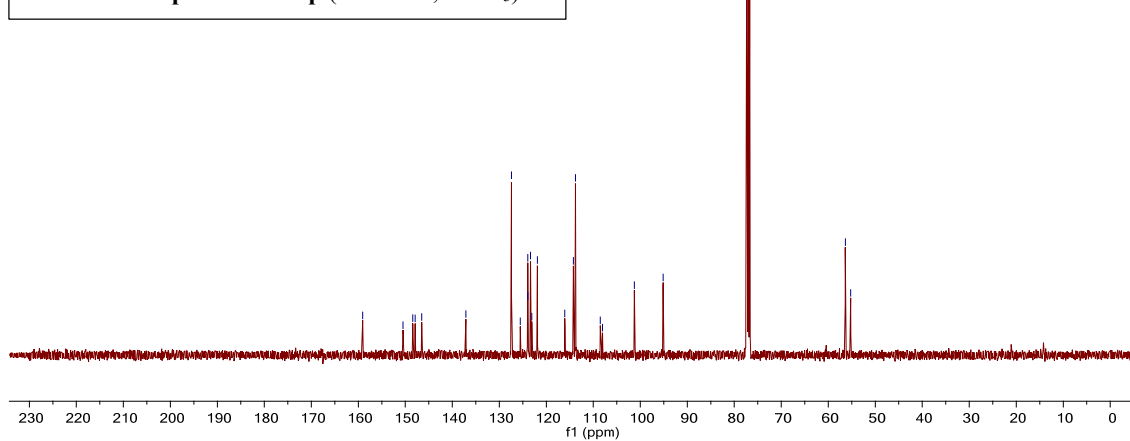


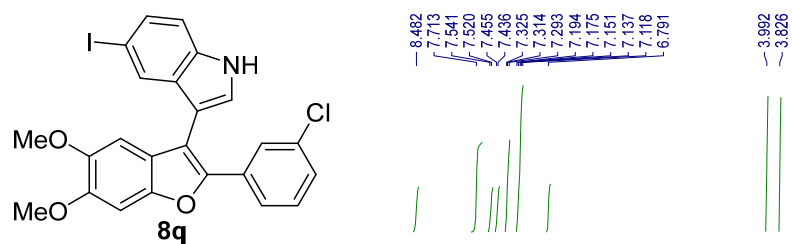


¹H NMR spectrum of **8p** (400 MHz, CDCl₃)

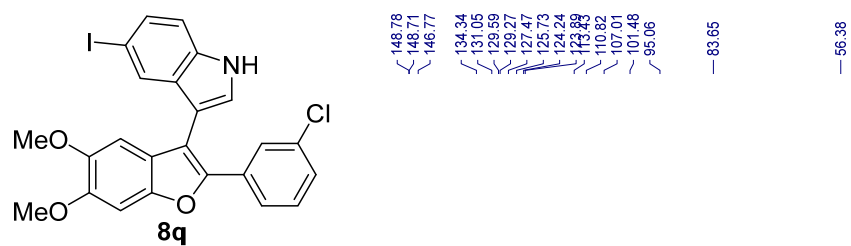
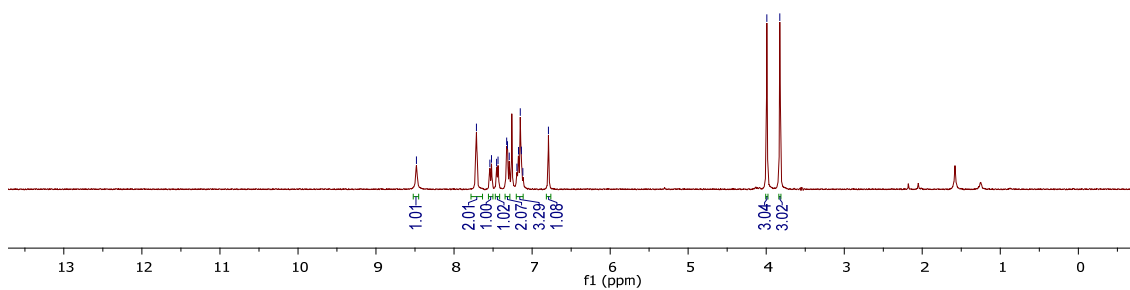


¹³C NMR spectrum of **8p** (100 MHz, CDCl₃)

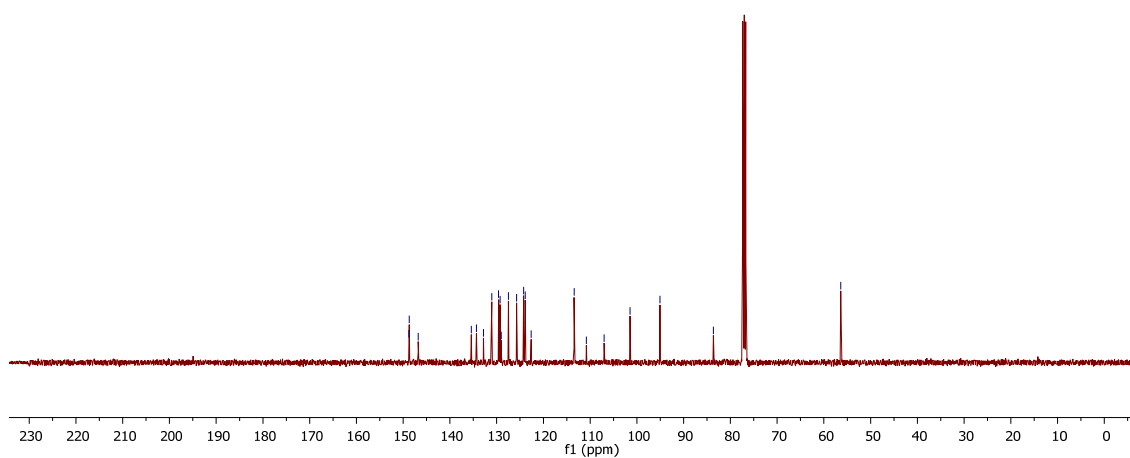


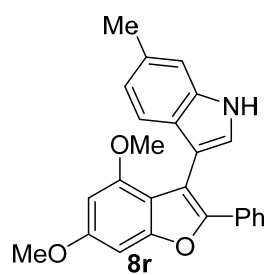


¹H NMR spectrum of **8q** (400 MHz, CDCl₃)

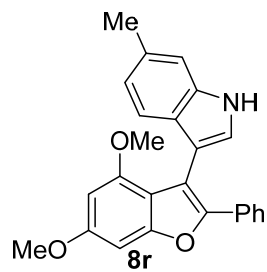
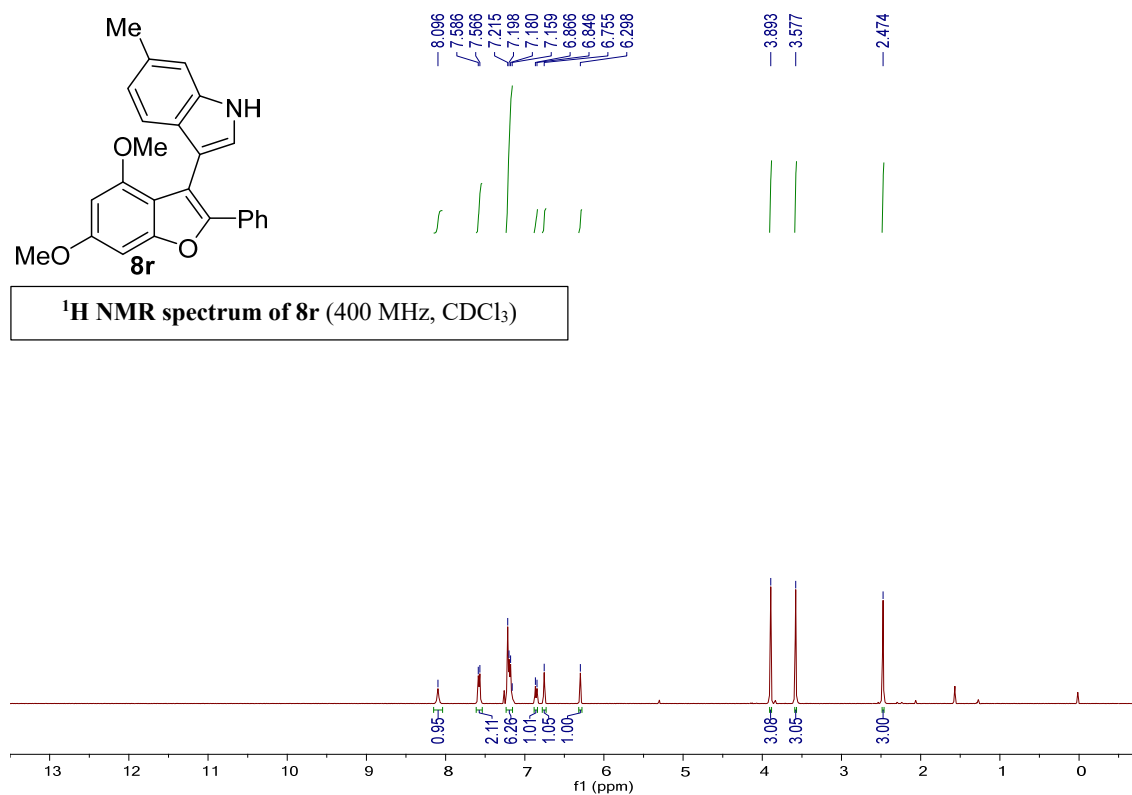


¹³C NMR spectrum of **8q** (100 MHz, CDCl₃)

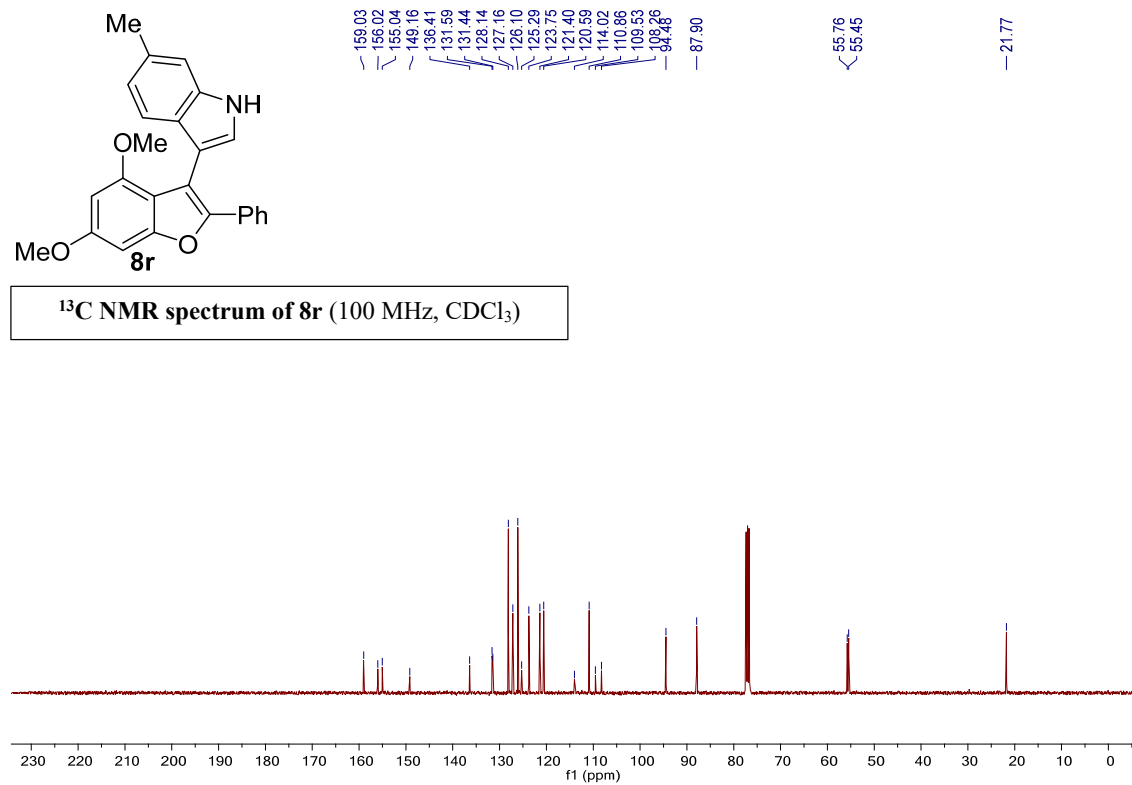


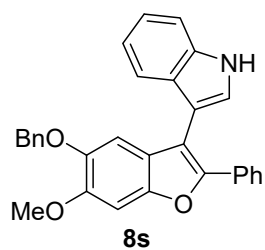


¹H NMR spectrum of **8r** (400 MHz, CDCl₃)

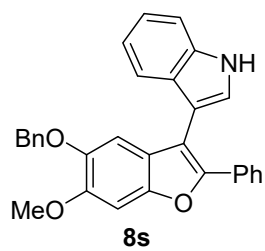
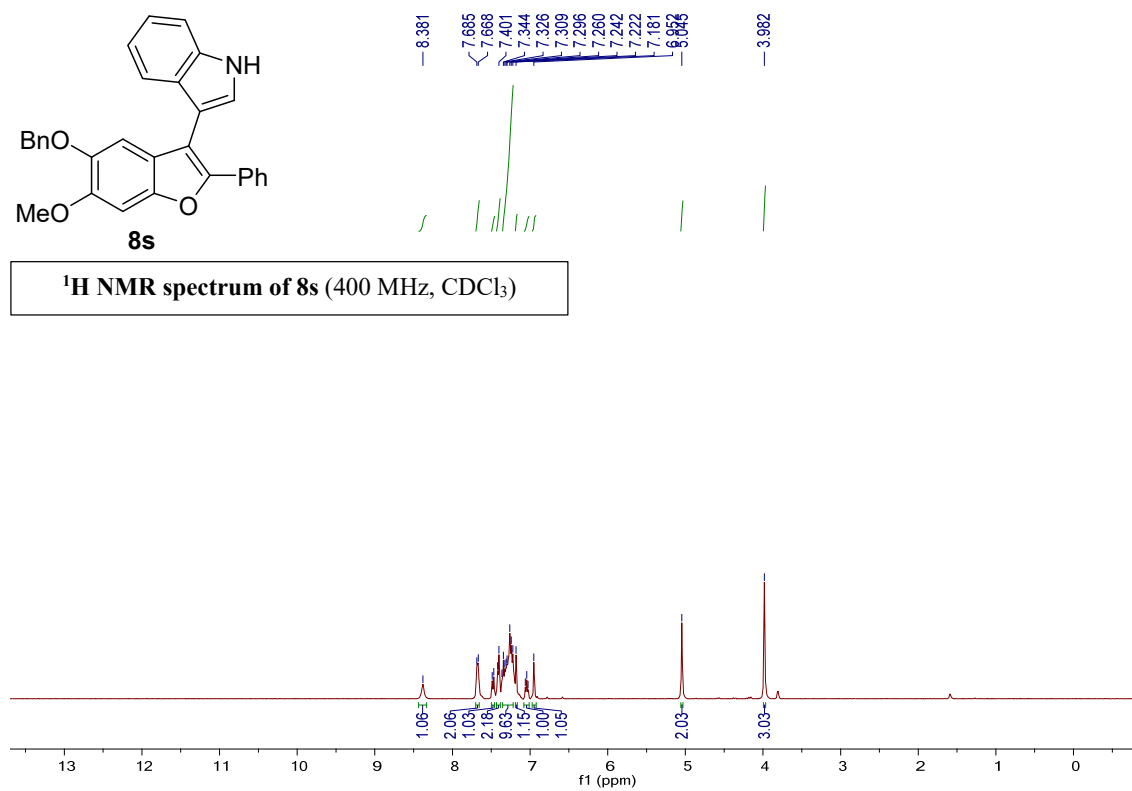


¹³C NMR spectrum of **8r** (100 MHz, CDCl₃)

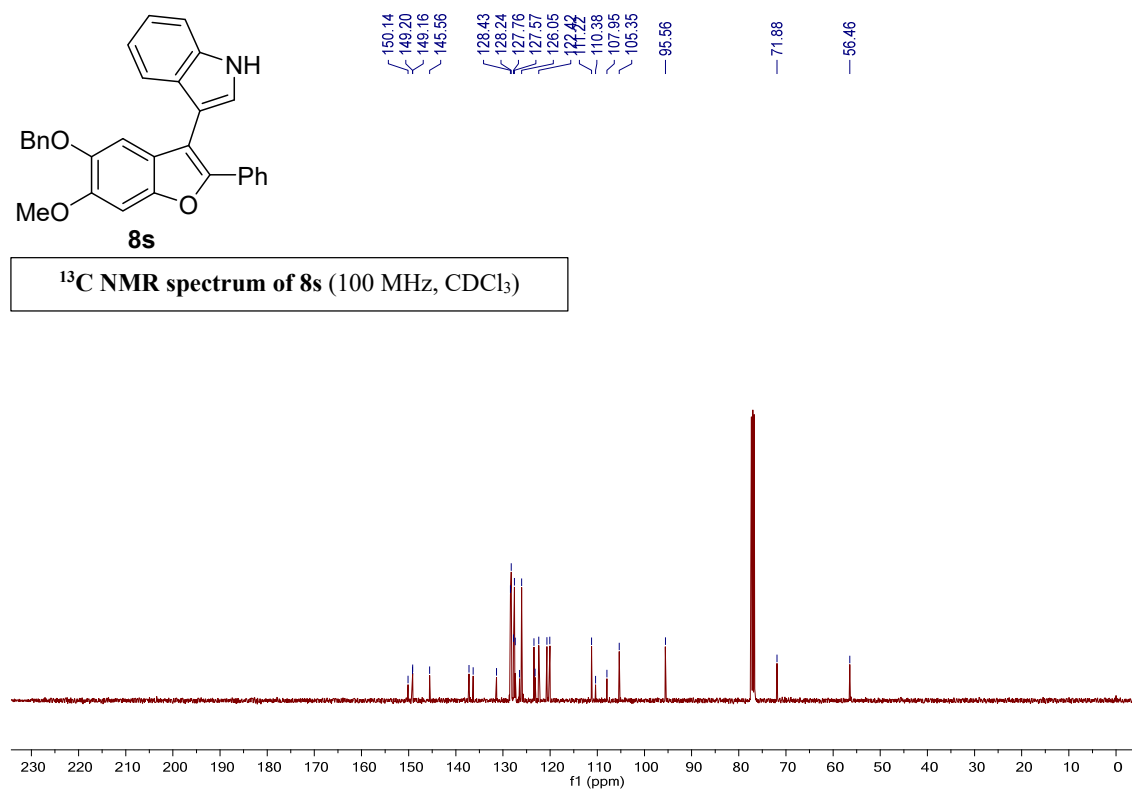


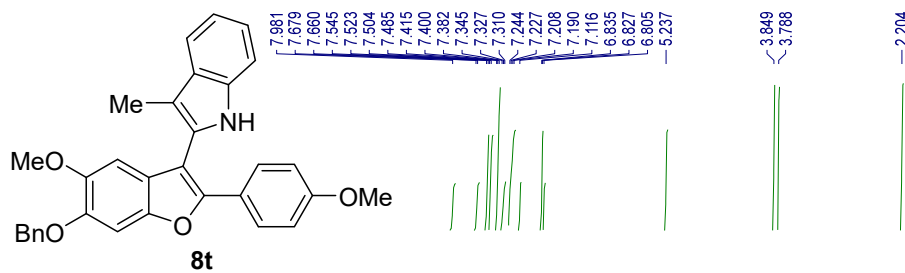


¹H NMR spectrum of **8s** (400 MHz, CDCl₃)

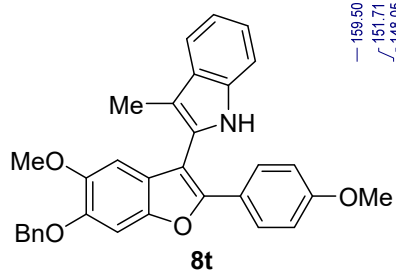
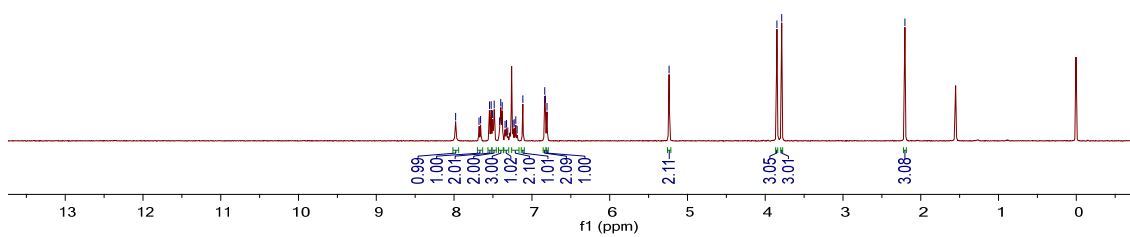


¹³C NMR spectrum of **8s** (100 MHz, CDCl₃)

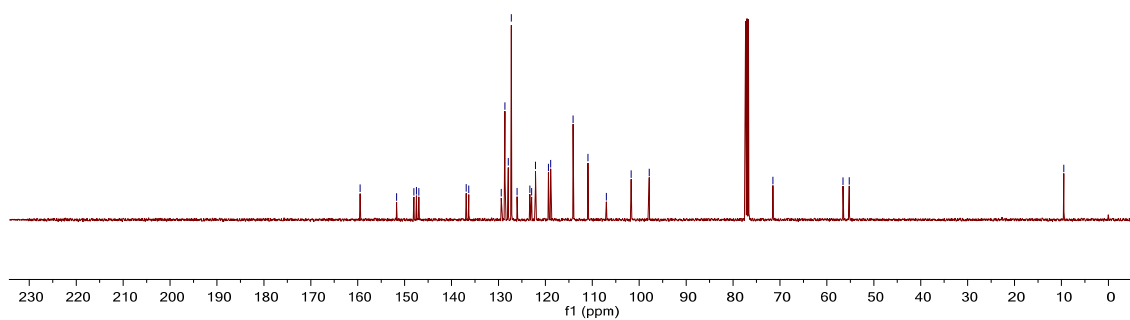


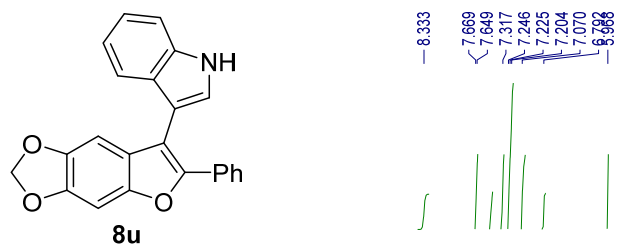


¹H NMR spectrum of **8t** (400 MHz, CDCl₃)

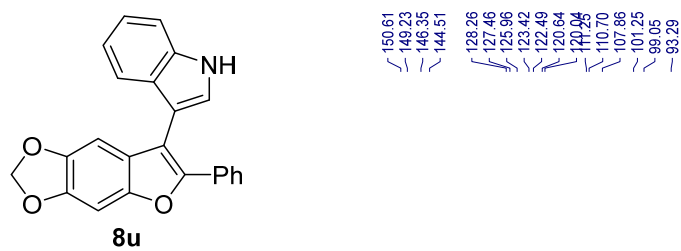
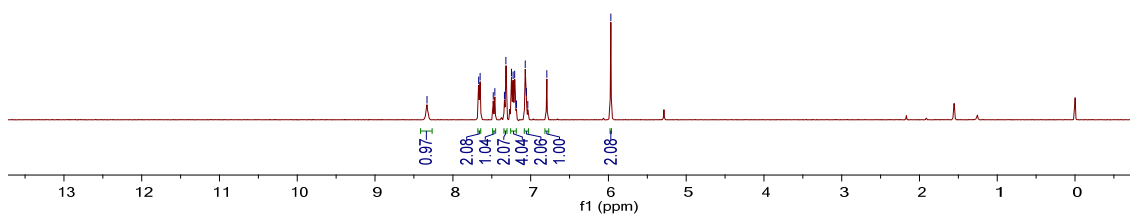


¹³C NMR spectrum of **8t** (100 MHz, CDCl₃)

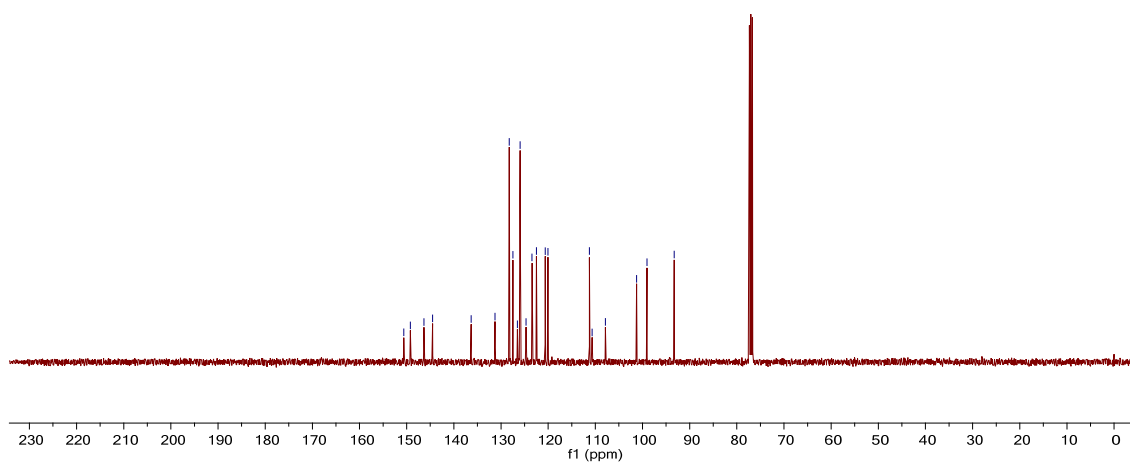


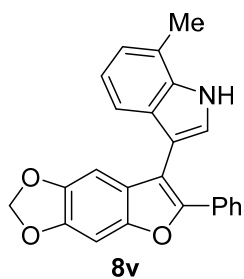


¹H NMR spectrum of **8u** (400 MHz, CDCl₃)

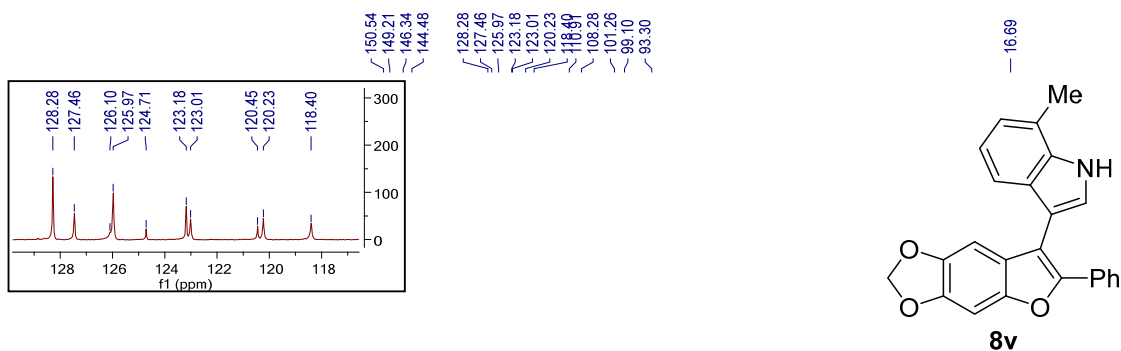
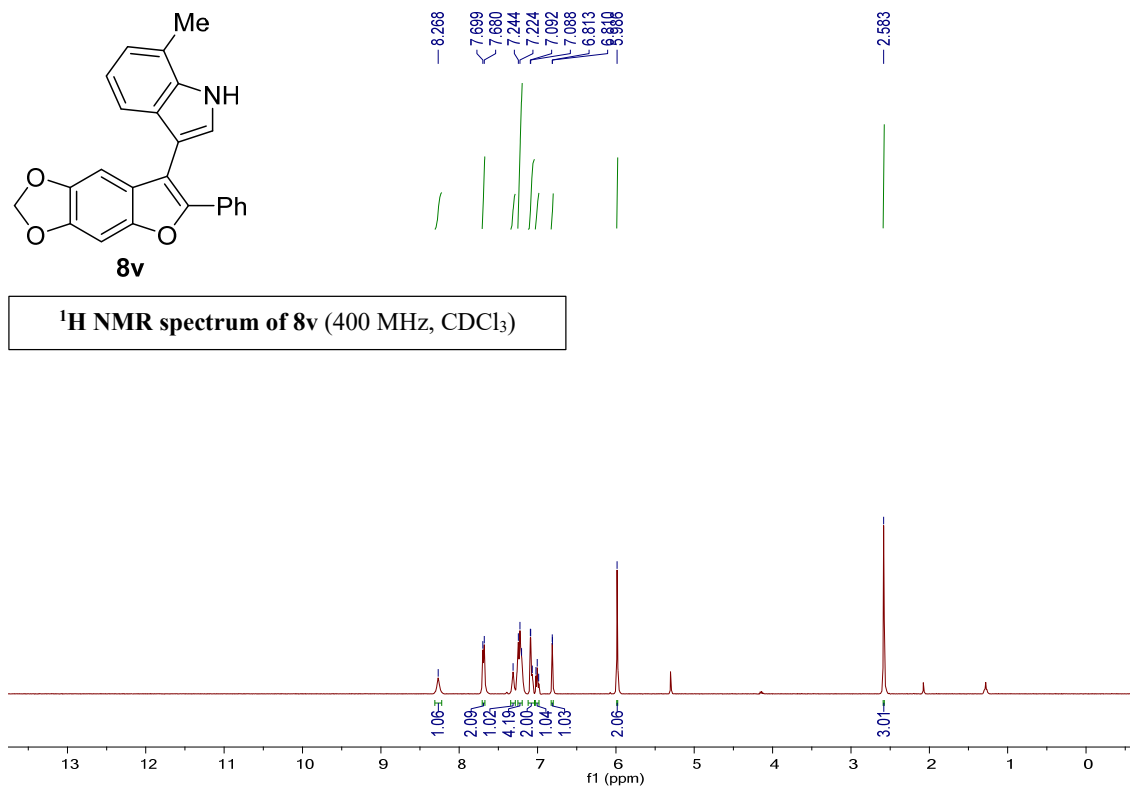


¹³C NMR spectrum of **8u** (100 MHz, CDCl₃)

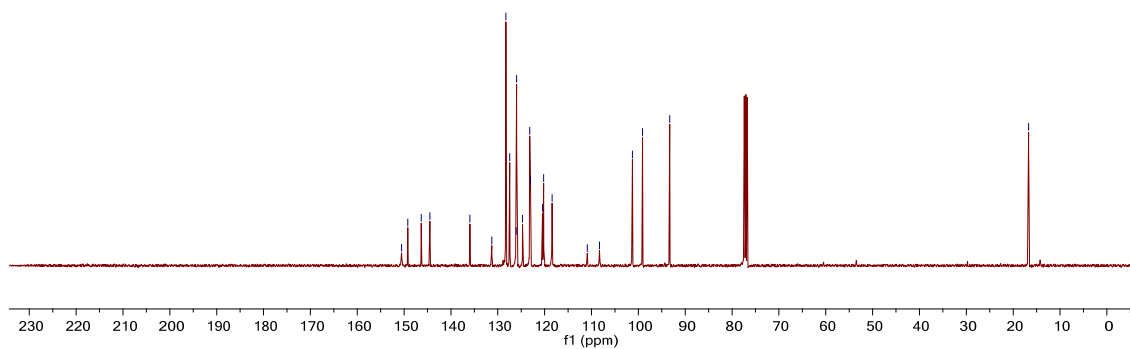


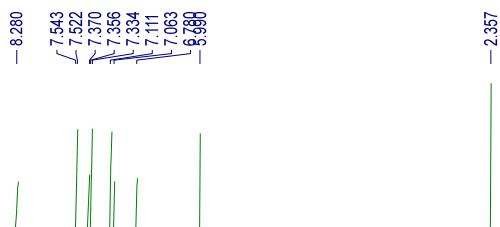
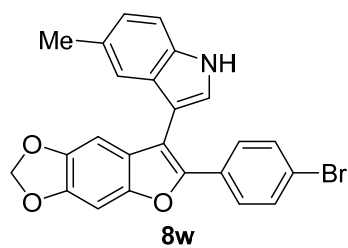


¹H NMR spectrum of **8v** (400 MHz, CDCl₃)

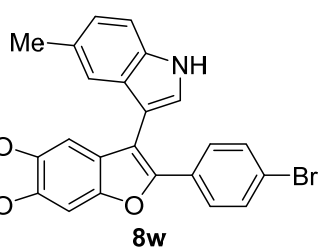
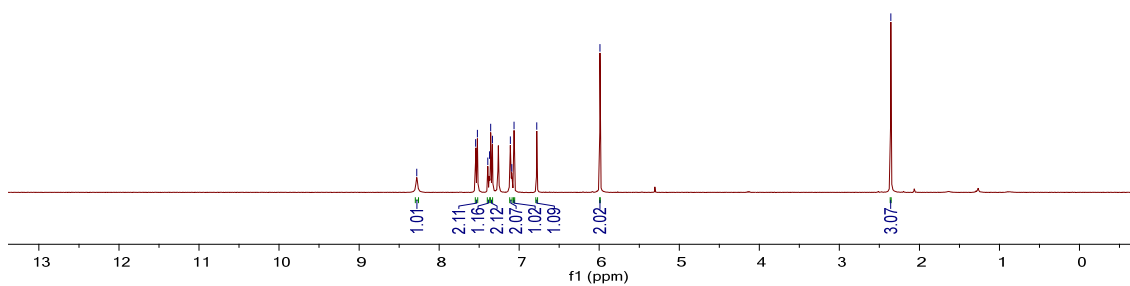


¹³C NMR spectrum of **8v** (100 MHz, CDCl₃)

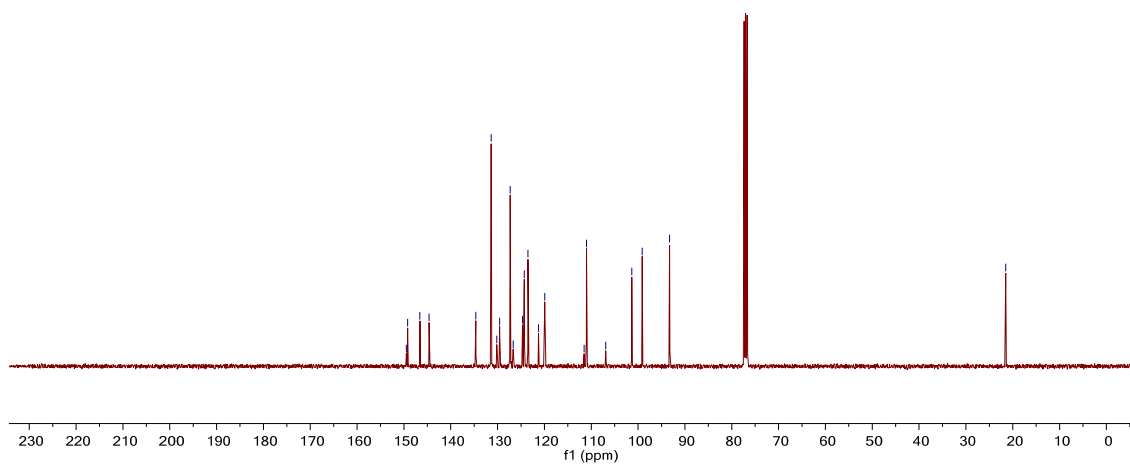


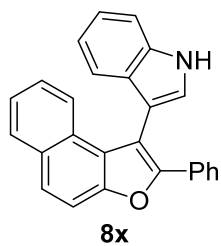


¹H NMR spectrum of **8w** (400 MHz, CDCl₃)

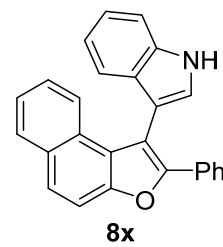
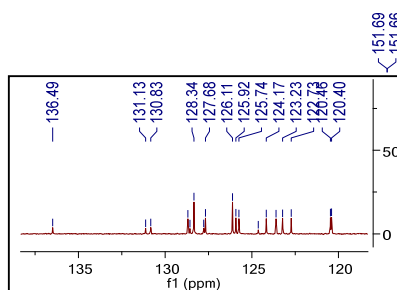
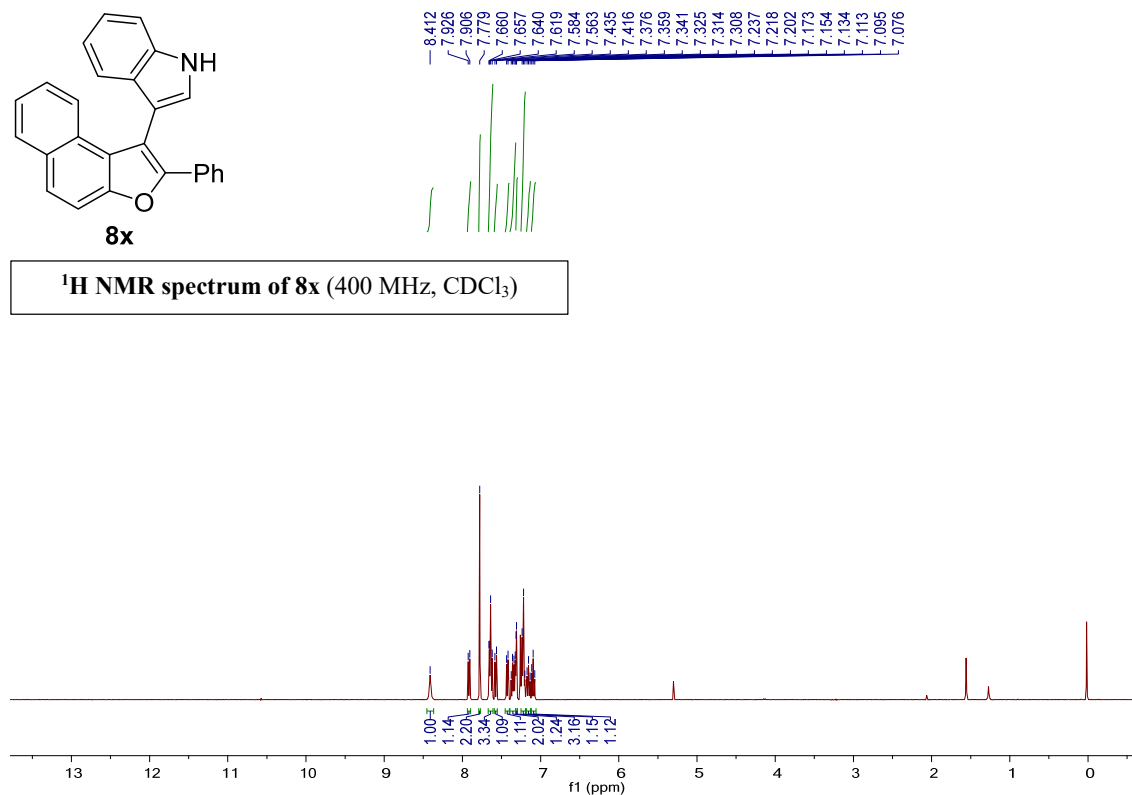


¹³C NMR spectrum of **8w** (100 MHz, CDCl₃)

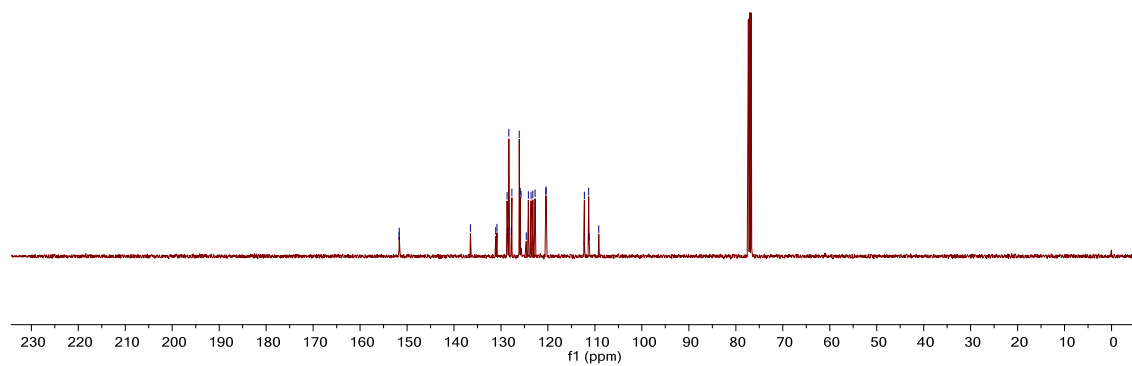


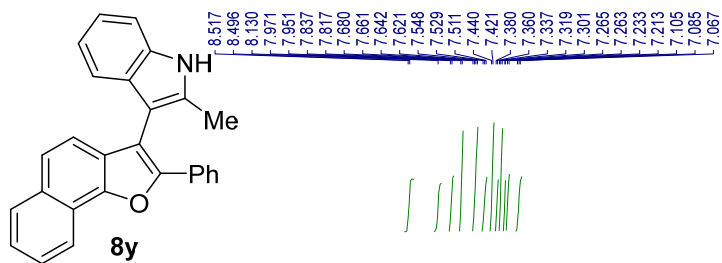


¹H NMR spectrum of **8x** (400 MHz, CDCl₃)

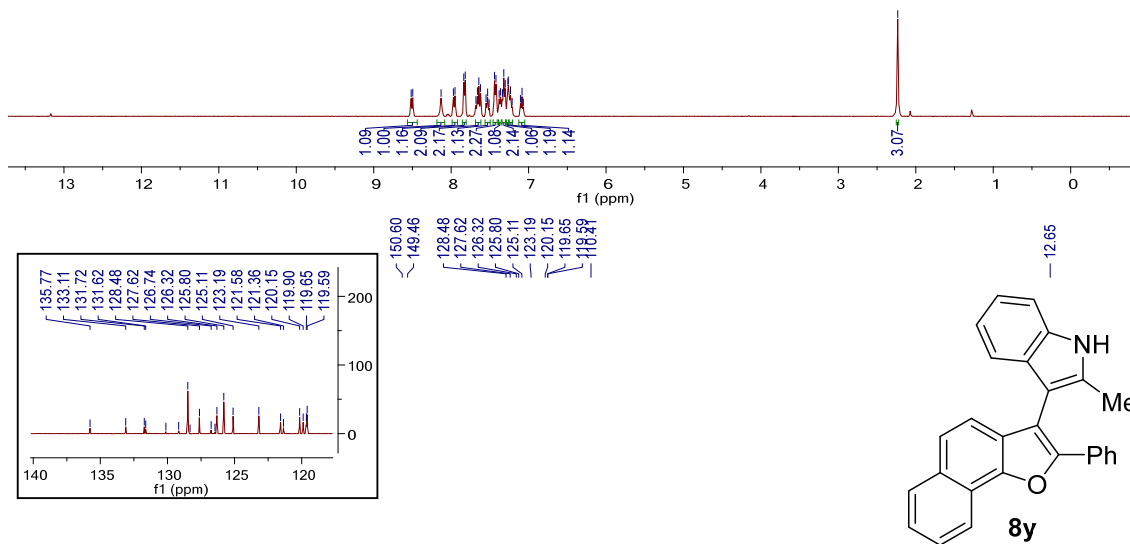


¹³C NMR spectrum of **8x** (100 MHz, CDCl₃)

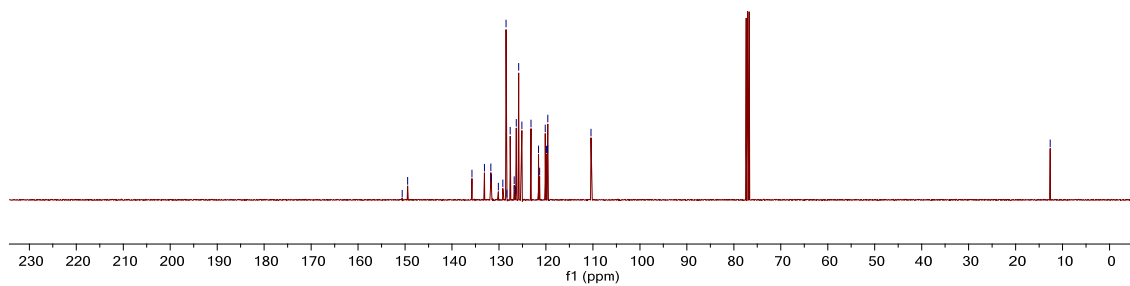


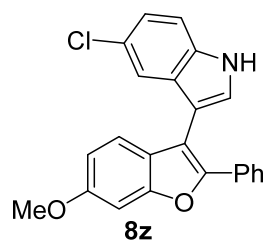


^1H NMR spectrum of **8y** (400 MHz, CDCl_3)

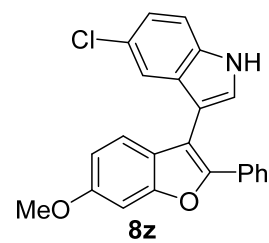
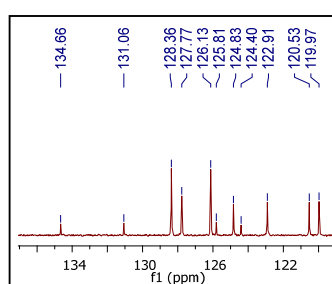
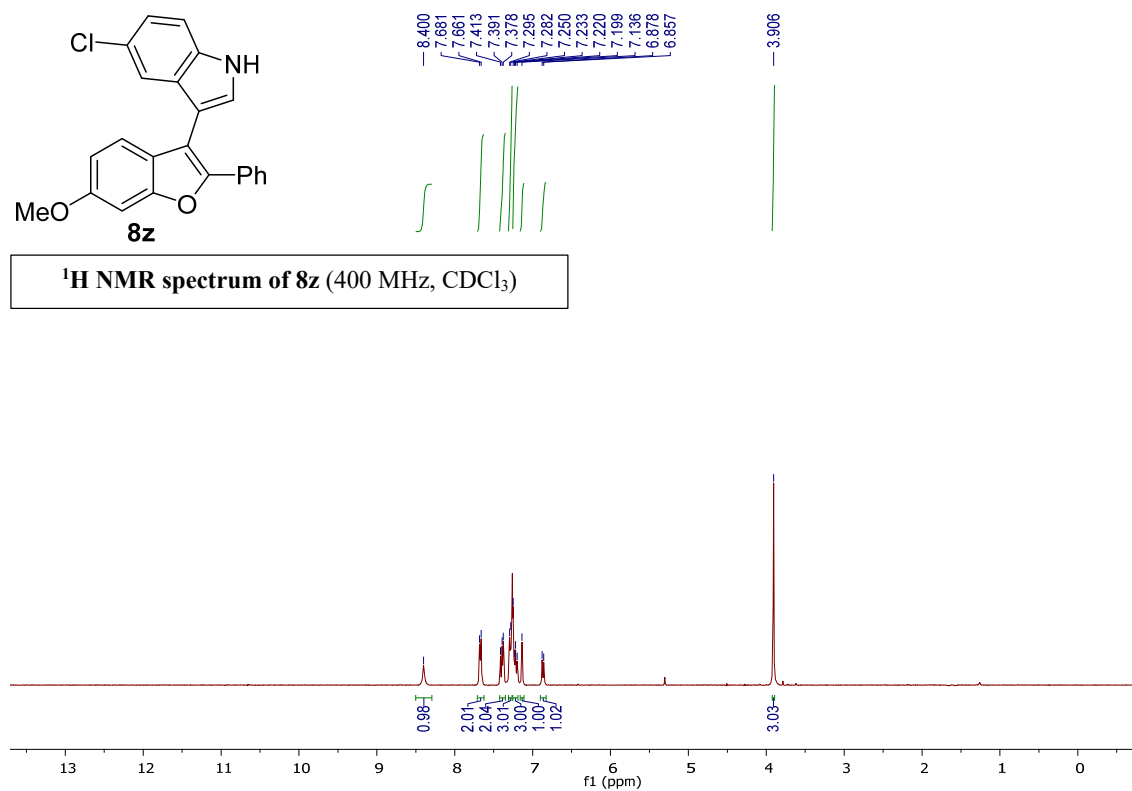


^{13}C NMR spectrum of **8y** (100 MHz, CDCl_3)

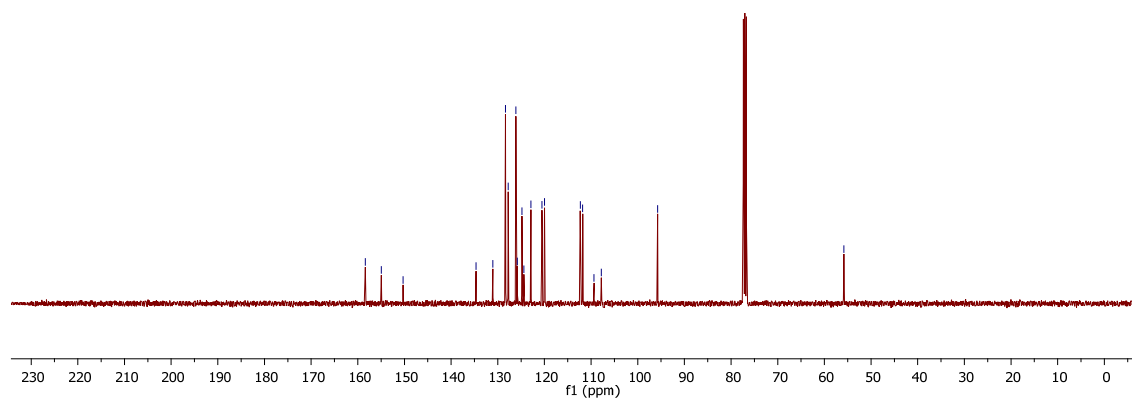


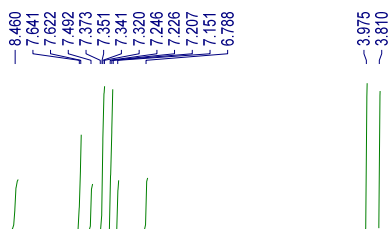
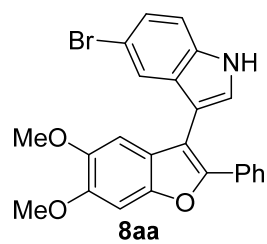


¹H NMR spectrum of **8z** (400 MHz, CDCl₃)

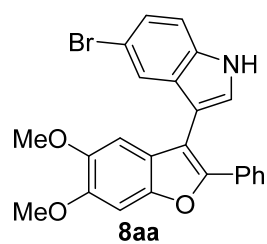
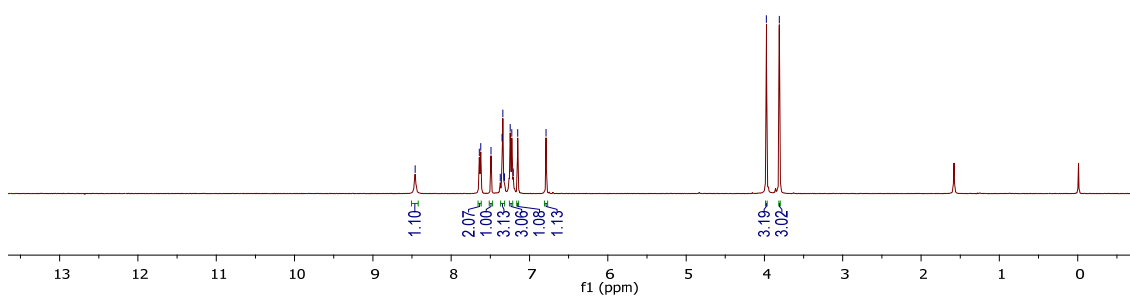


¹³C NMR spectrum of **8z** (100 MHz, CDCl₃)

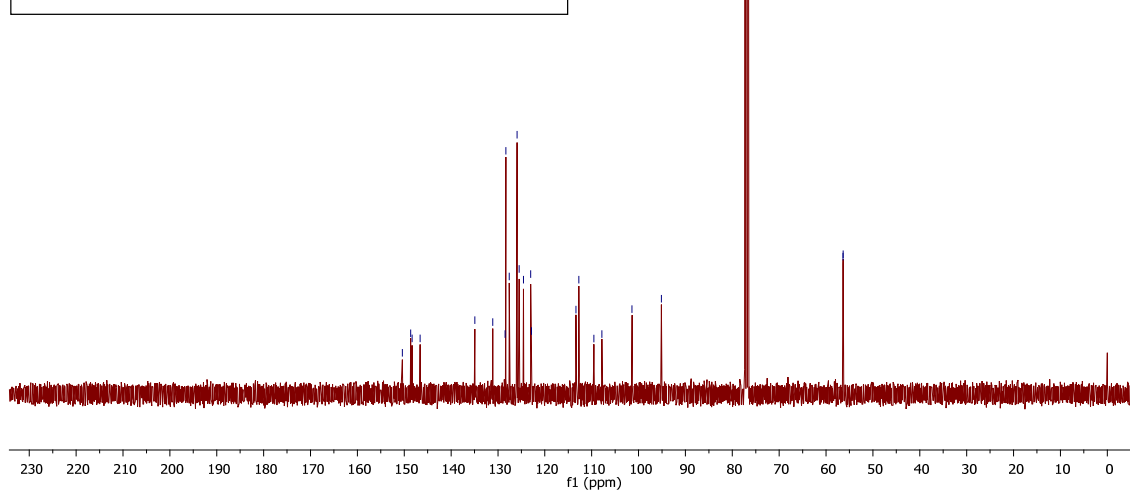


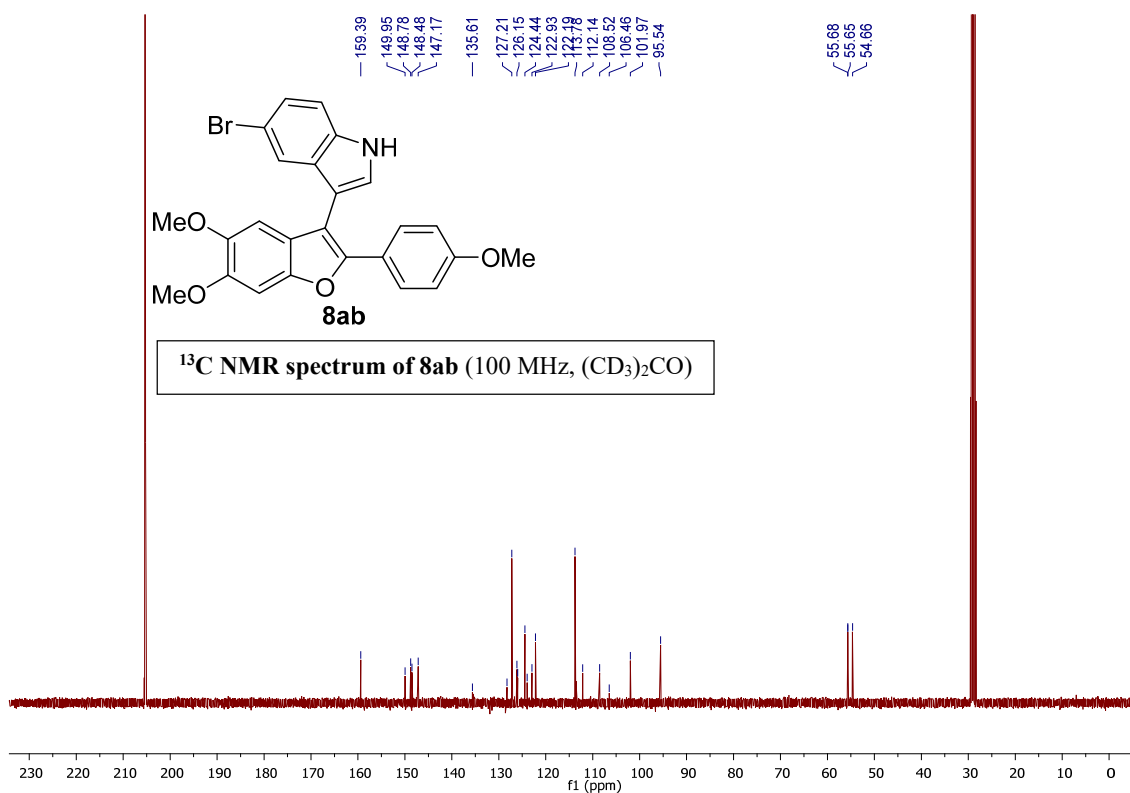
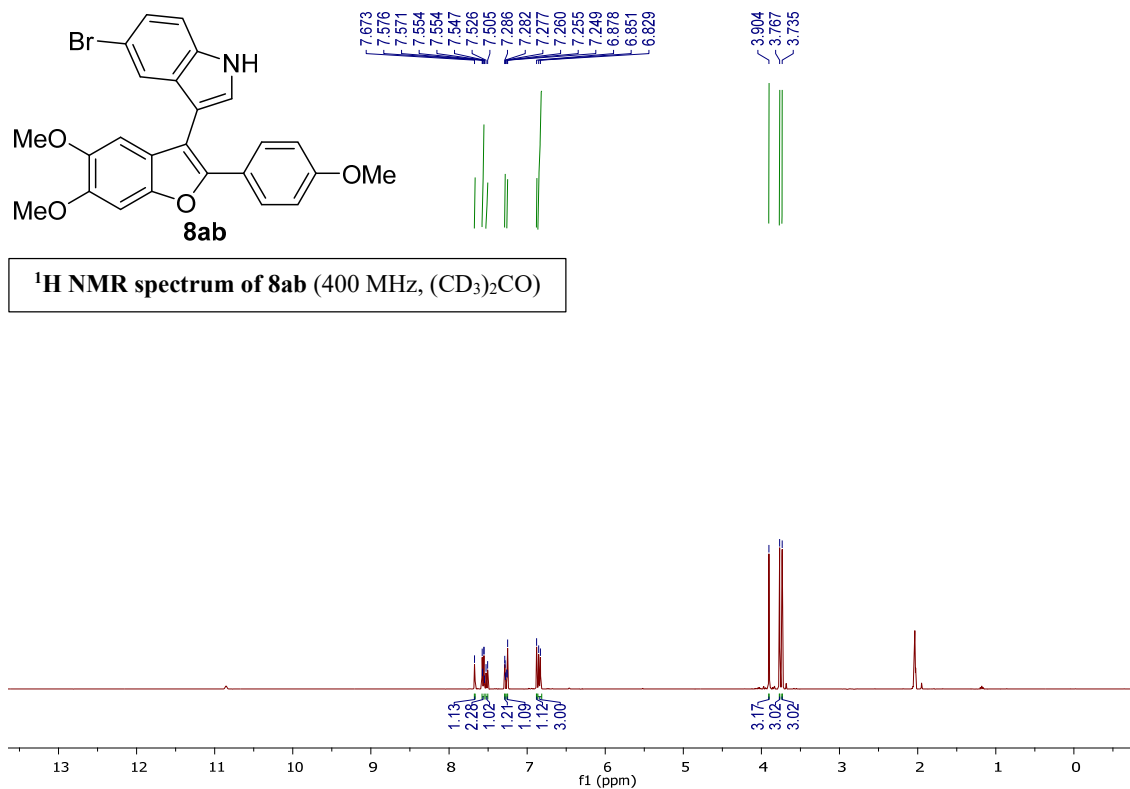


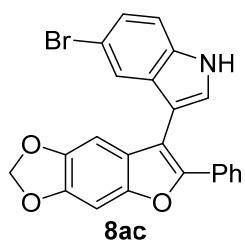
¹H NMR spectrum of **8aa** (400 MHz, CDCl₃)



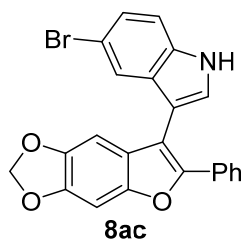
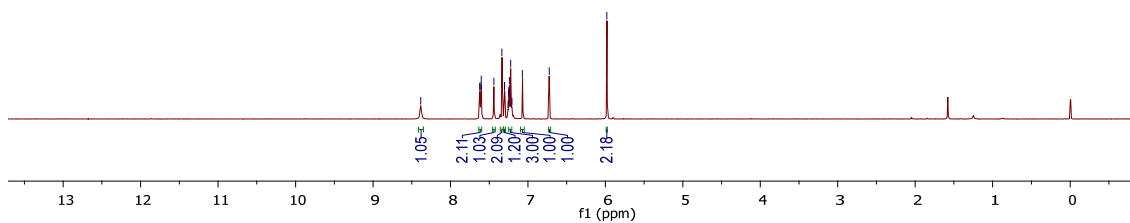
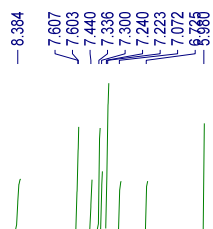
¹³C NMR spectrum of **8aa** (100 MHz, CDCl₃)



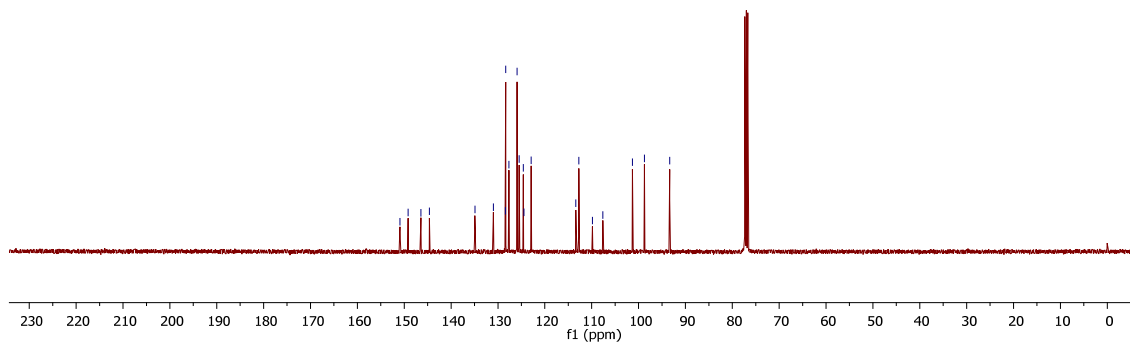


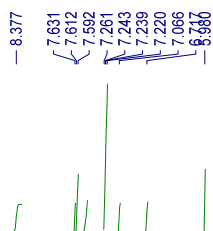
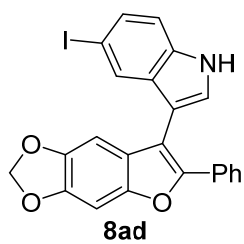


¹H NMR spectrum of **8ac** (400 MHz, CDCl₃)

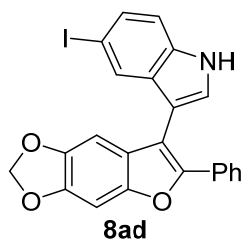
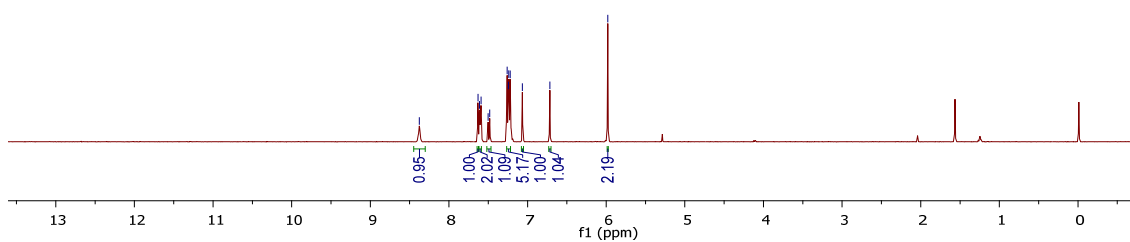


¹³C NMR spectrum of **8ac** (100 MHz, CDCl₃)

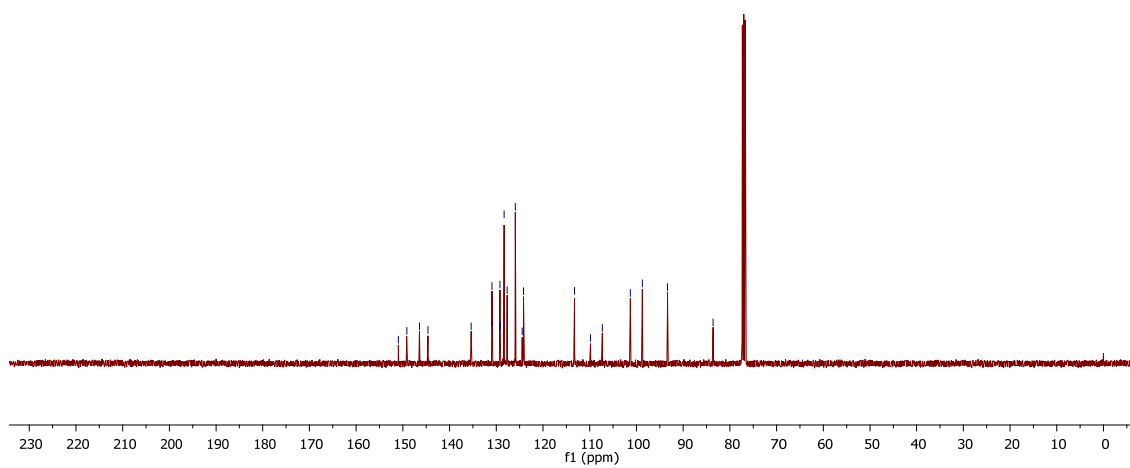




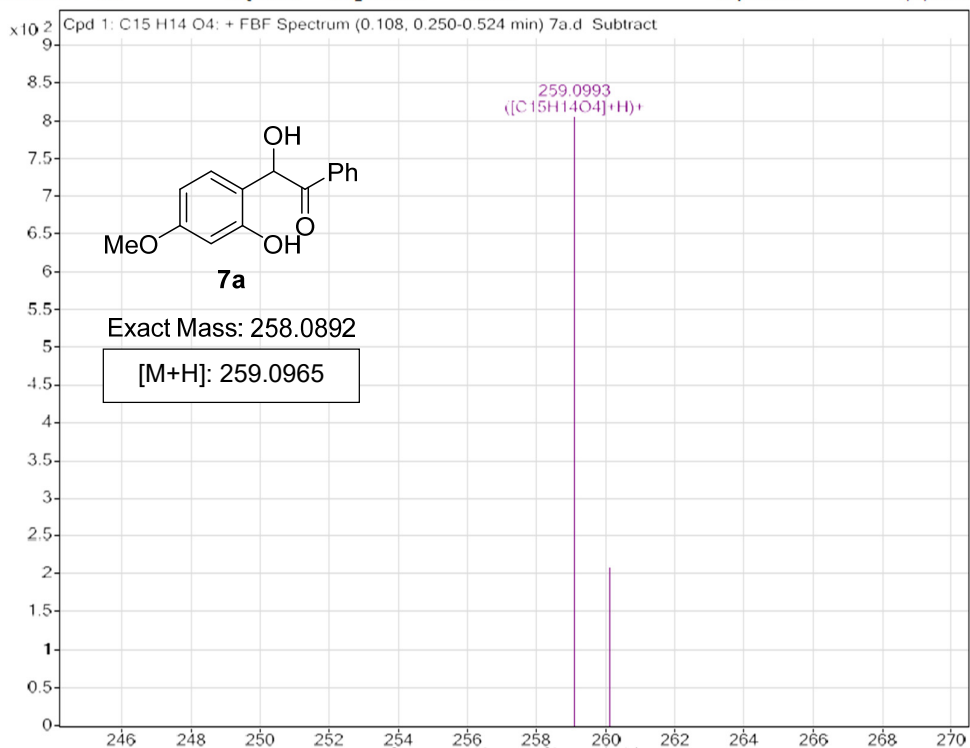
¹H NMR spectrum of **8ad** (400 MHz, CDCl₃)



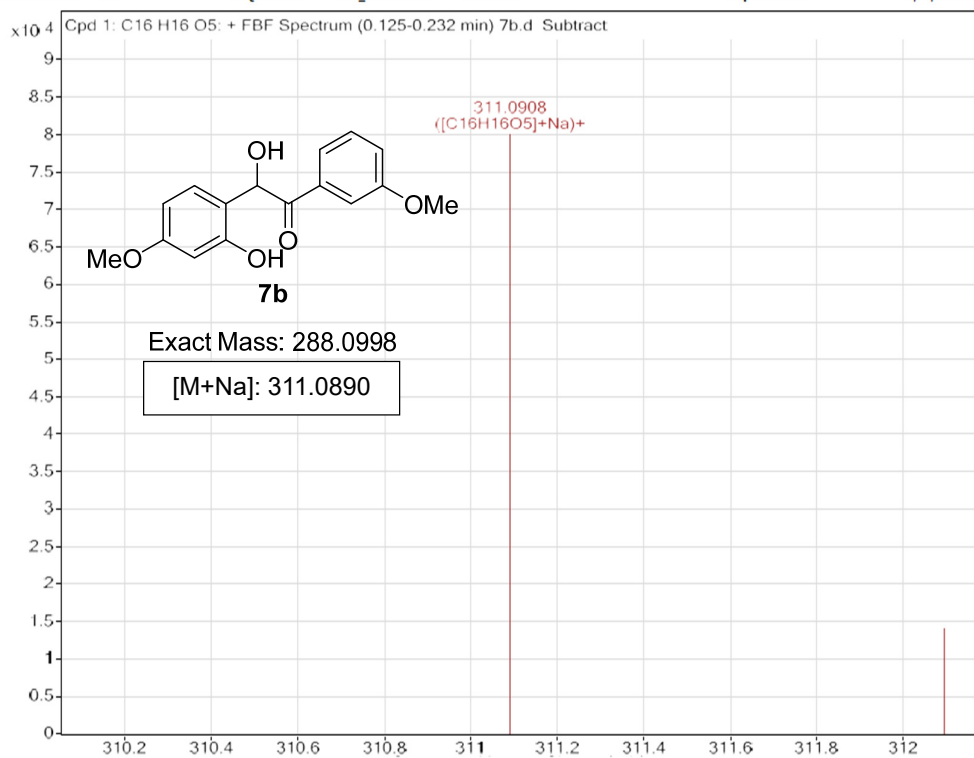
¹³C NMR spectrum of **8ad** (100 MHz, CDCl₃)



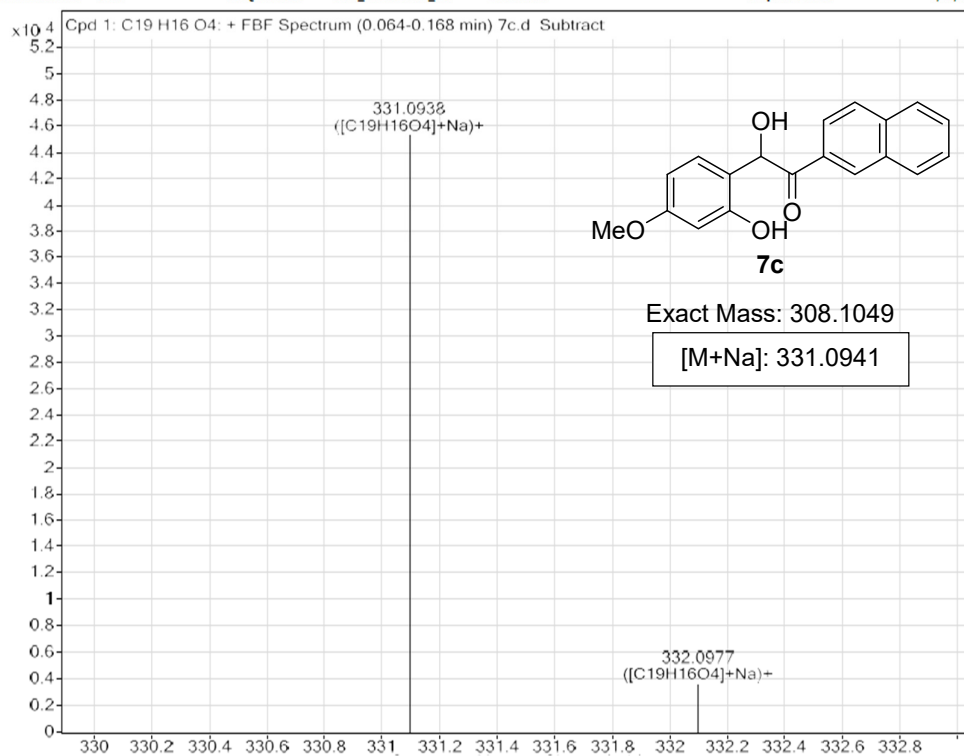
Data Filename 7a.d ACQ Method 506k_jeesunhee.m Comment Acquired Time 5/19/2023 3:48:43 PM



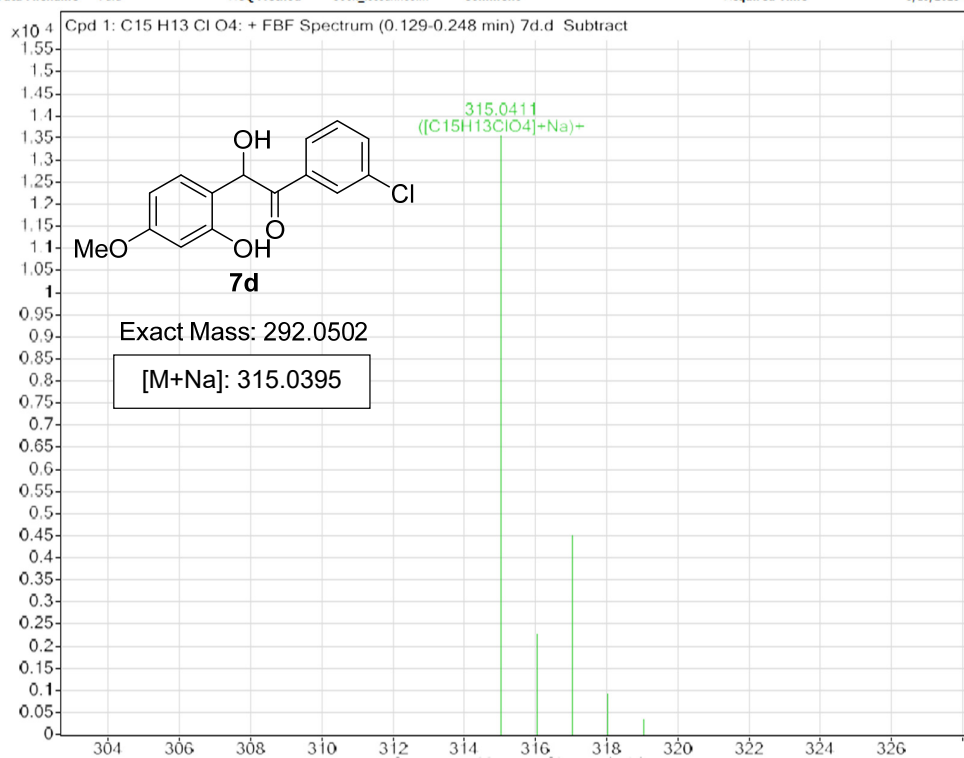
Data Filename 7b.d ACQ Method 506k_jeesunhee.m Comment Acquired Time 5/19/2023 3:52:27 PM



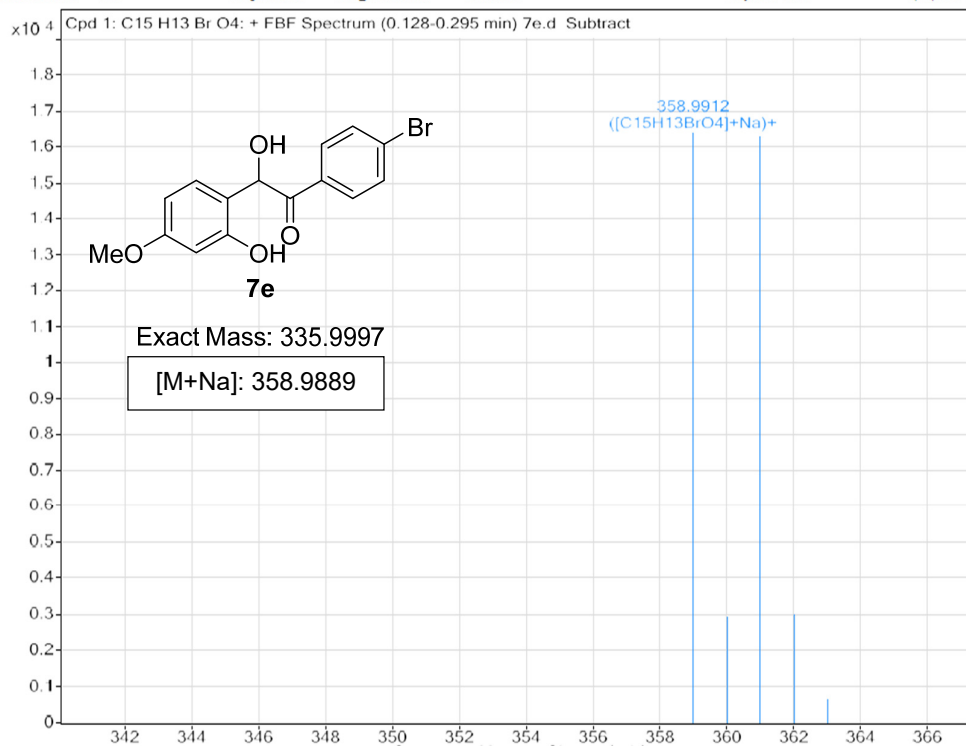
Data Filename 7c.d ACQ Method 506k_jeesunhee.m_A2 Comment Acquired Time 1/29/2024 11:41:37 AM



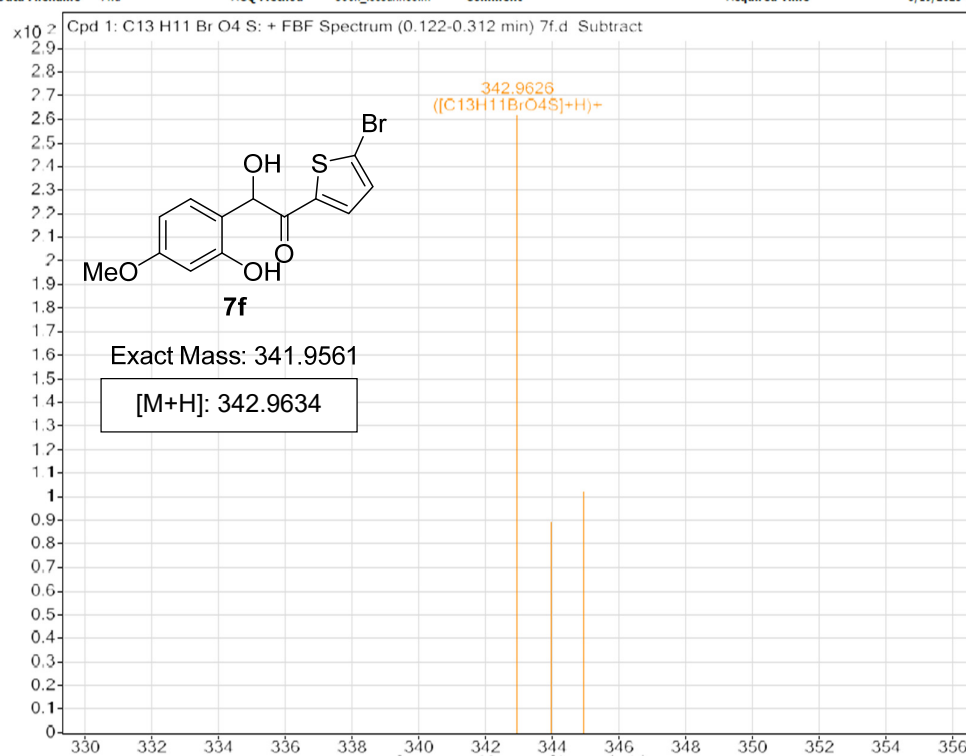
Data Filename 7d.d ACQ Method 506k_jeesunhee.m Comment Acquired Time 5/19/2023 3:59:51 PM



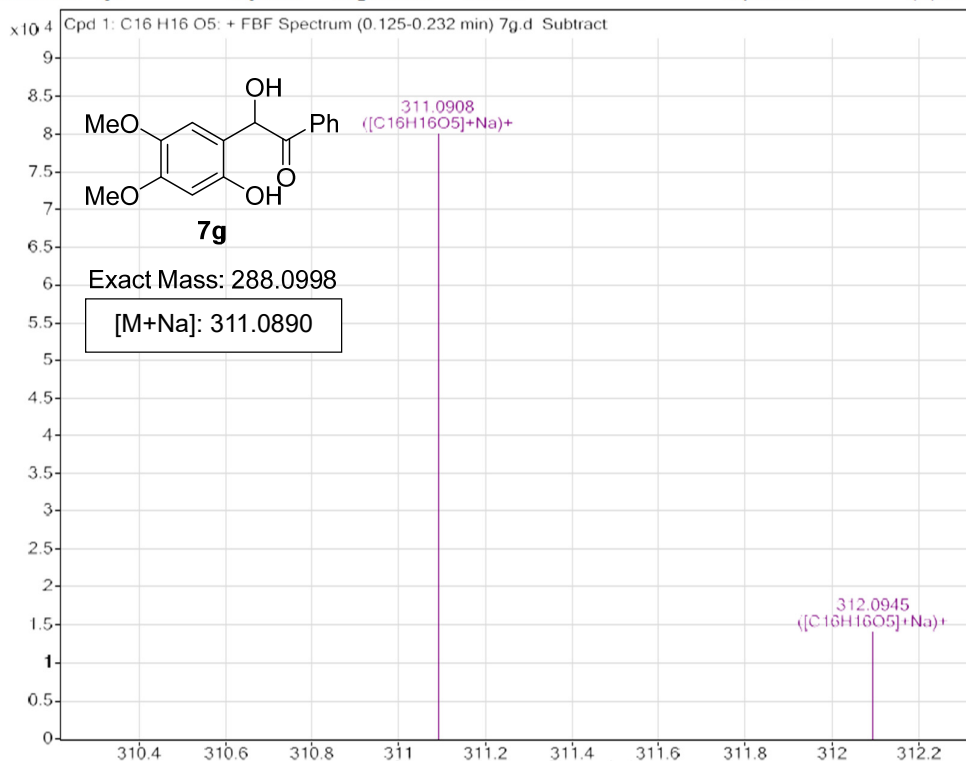
Data Filename 7e.d ACQ Method 506k_jeesunhee.m Comment Acquired Time 5/19/2023 4:03:33 PM



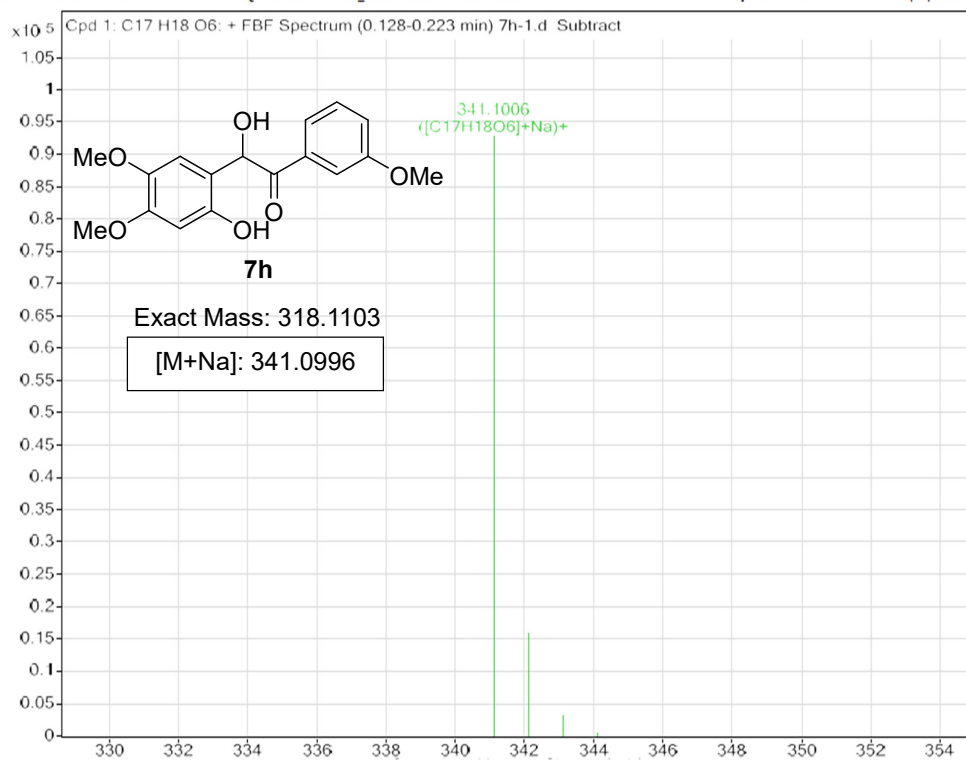
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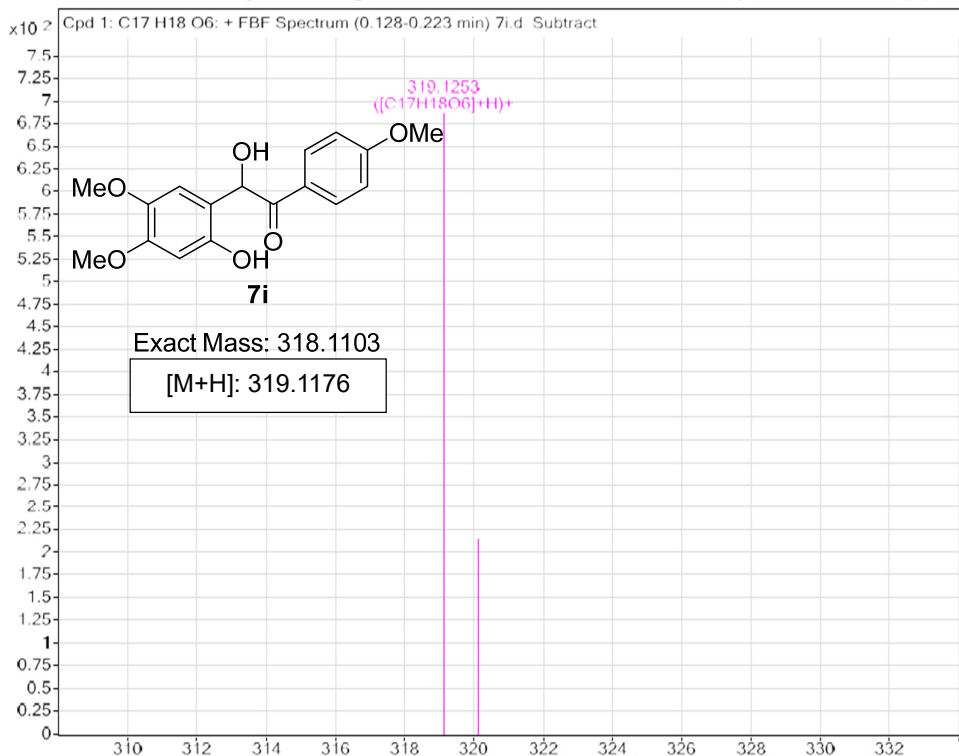
Data Filename 7g.d ACQ Method 506k_leesunhee.m Comment Acquired Time 5/19/2023 3:52:27 PM



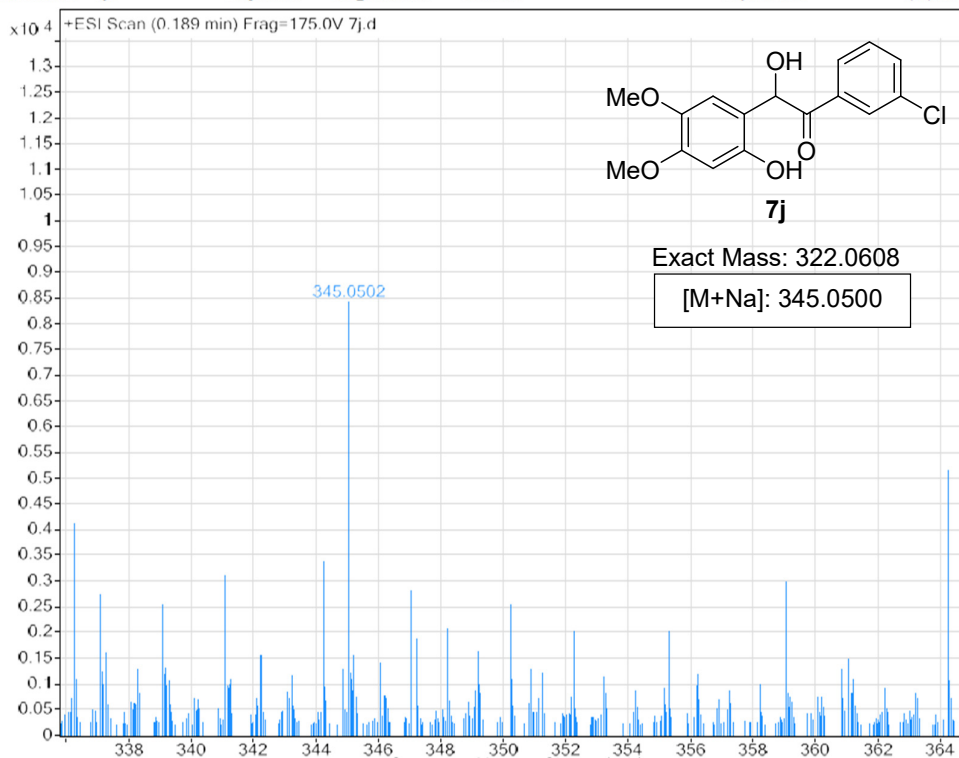
Data Filename 7h-1.d ACQ Method 506k_leesunhee.m Comment Acquired Time 5/19/2023 4:10:56 PM



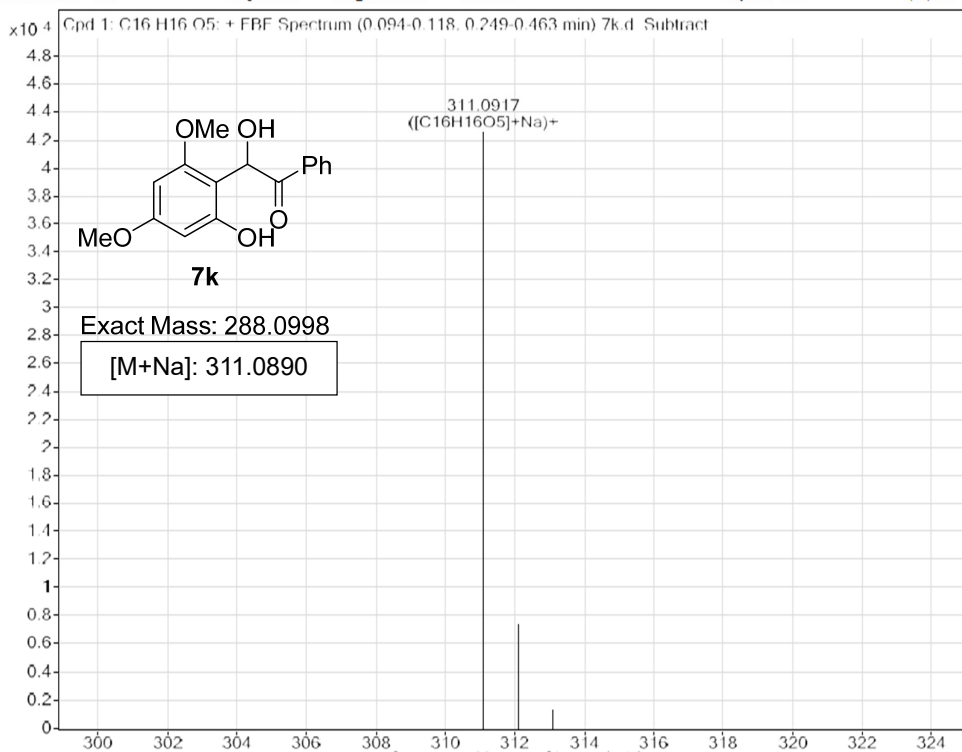
Data Filename 7i.d ACQ Method 506k_leesunhee.m Comment Acquired Time 5/19/2023 4:10:56 PM



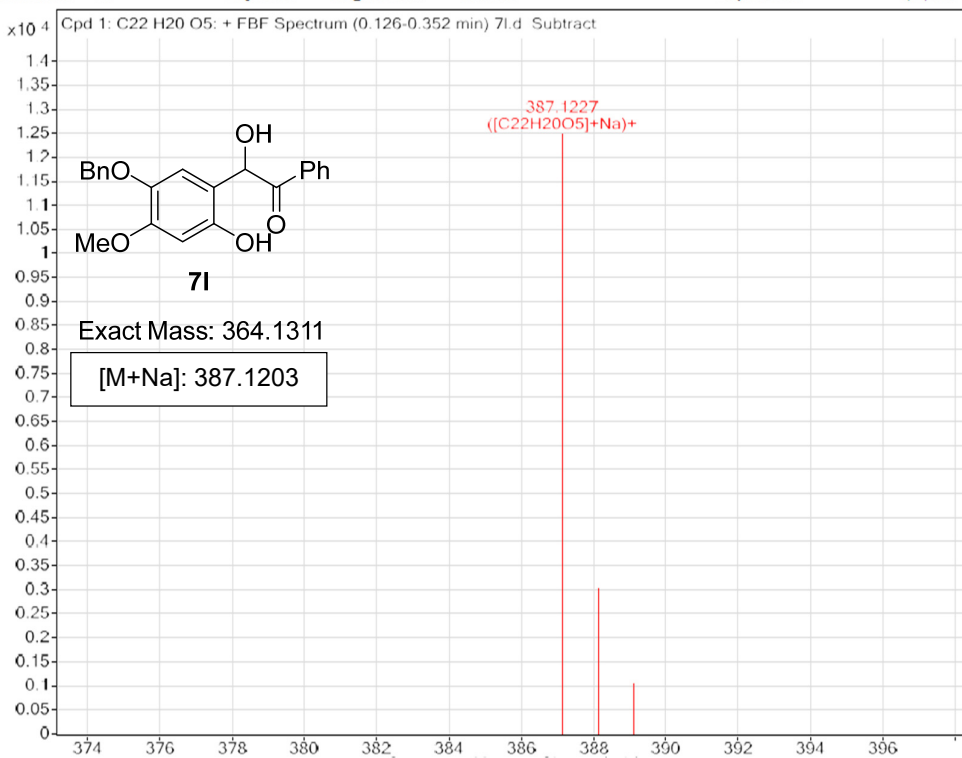
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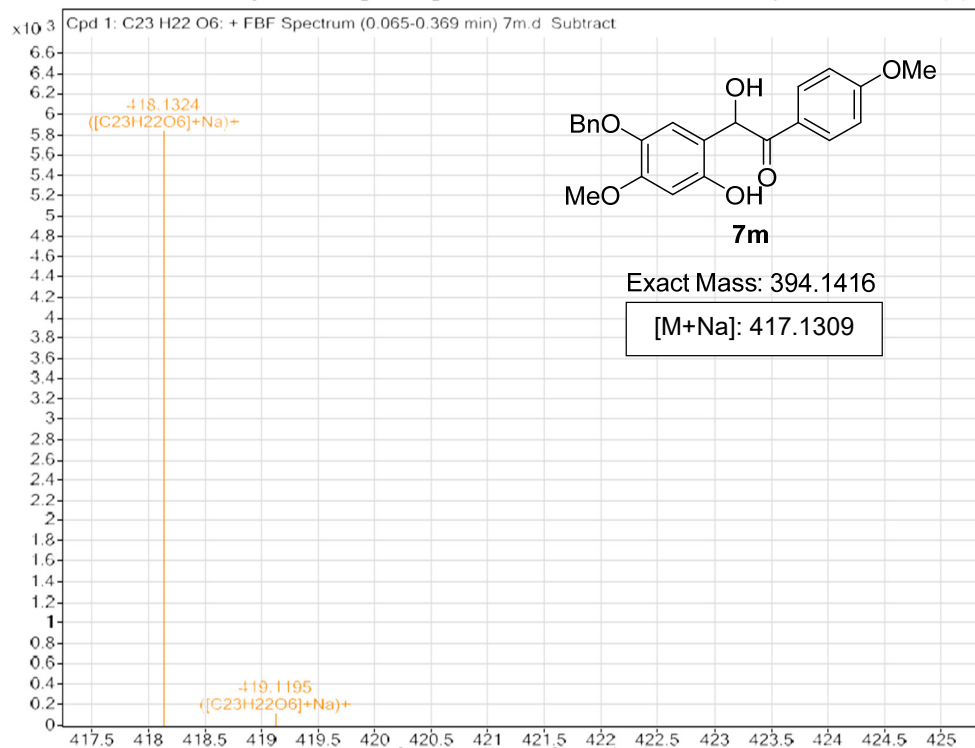
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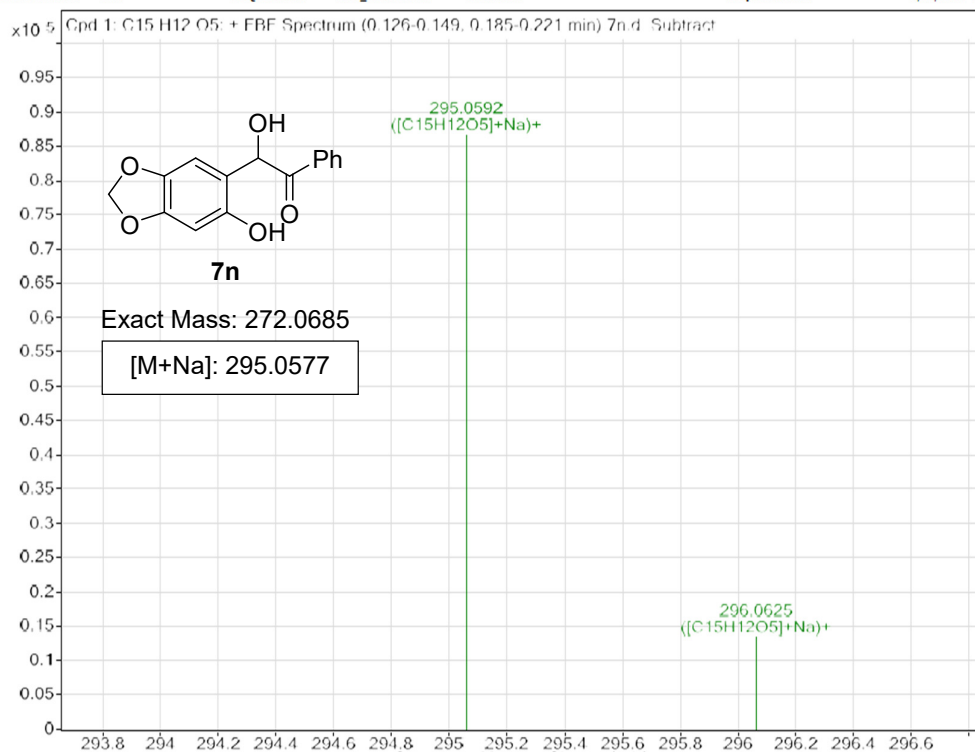
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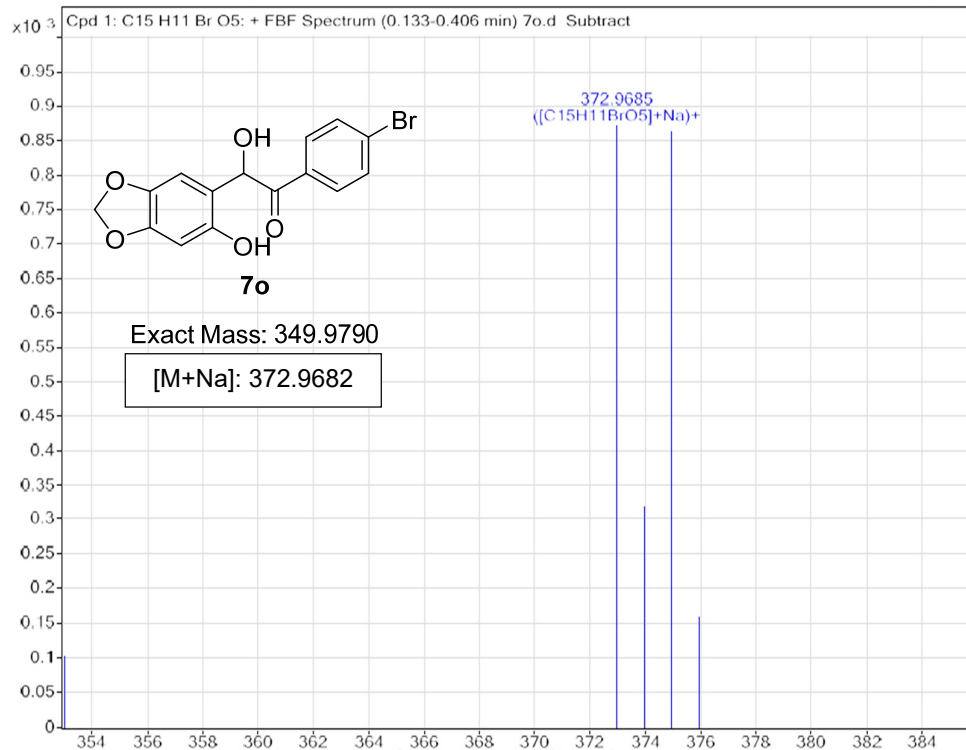
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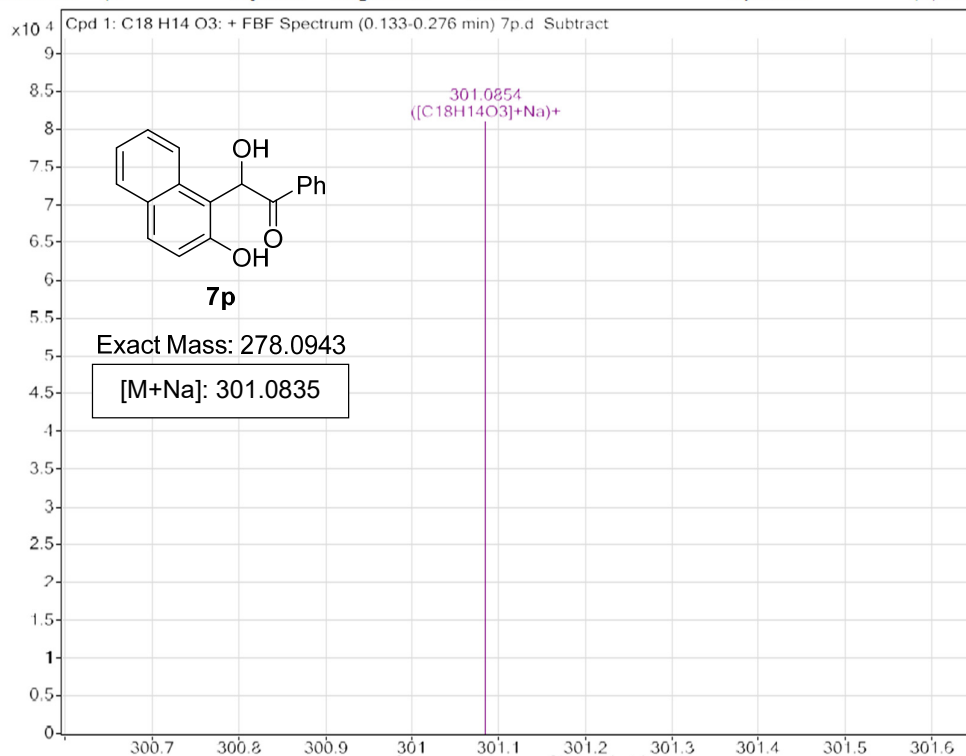
Data Filename 7n.d ACQ Method 506k_jeesunhee.m Comment Acquired Time 5/19/2023 4:25:48 PM



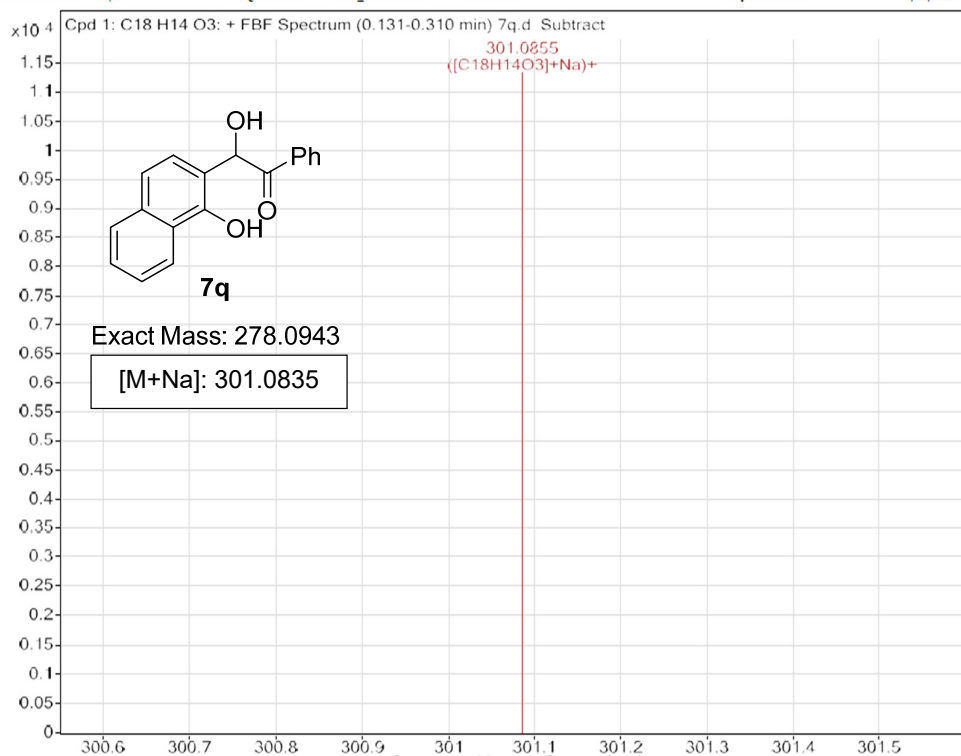
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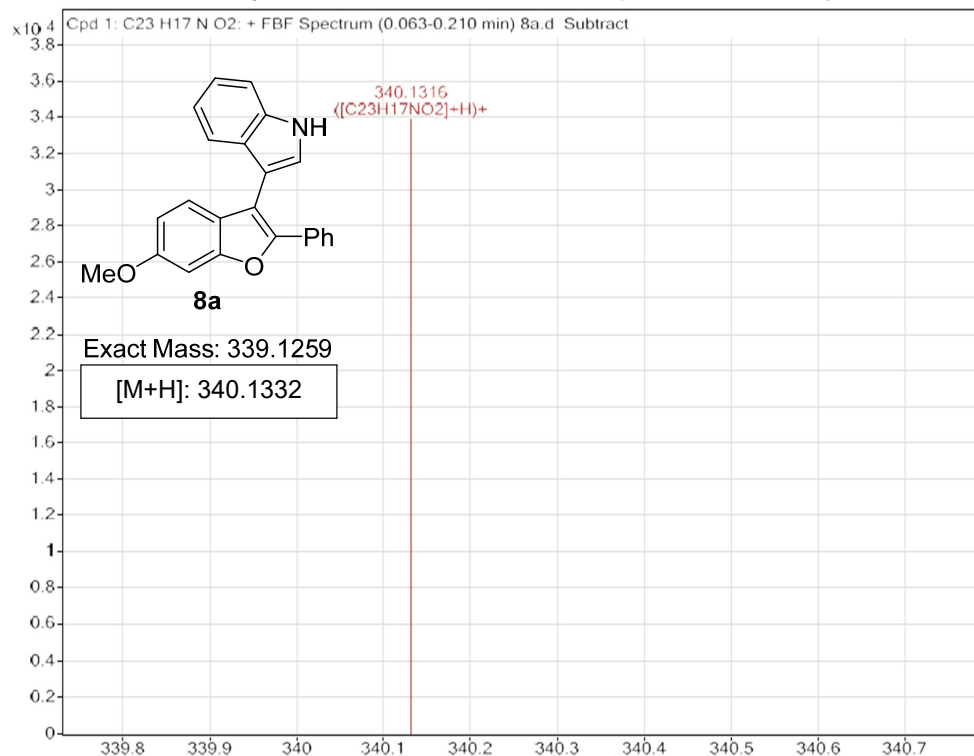
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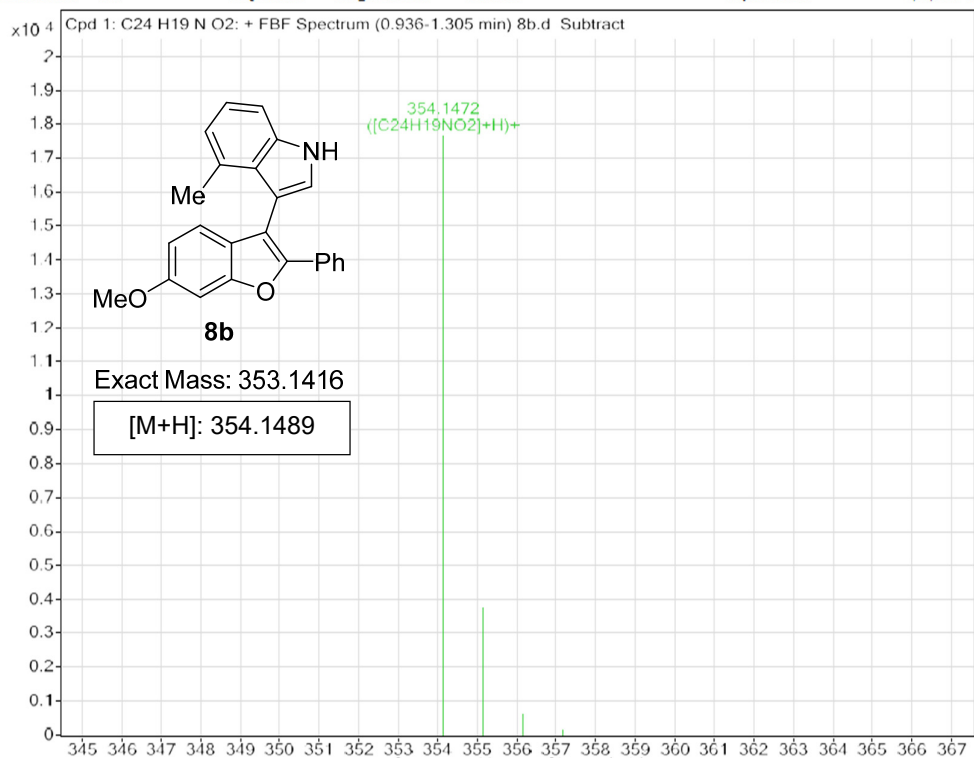
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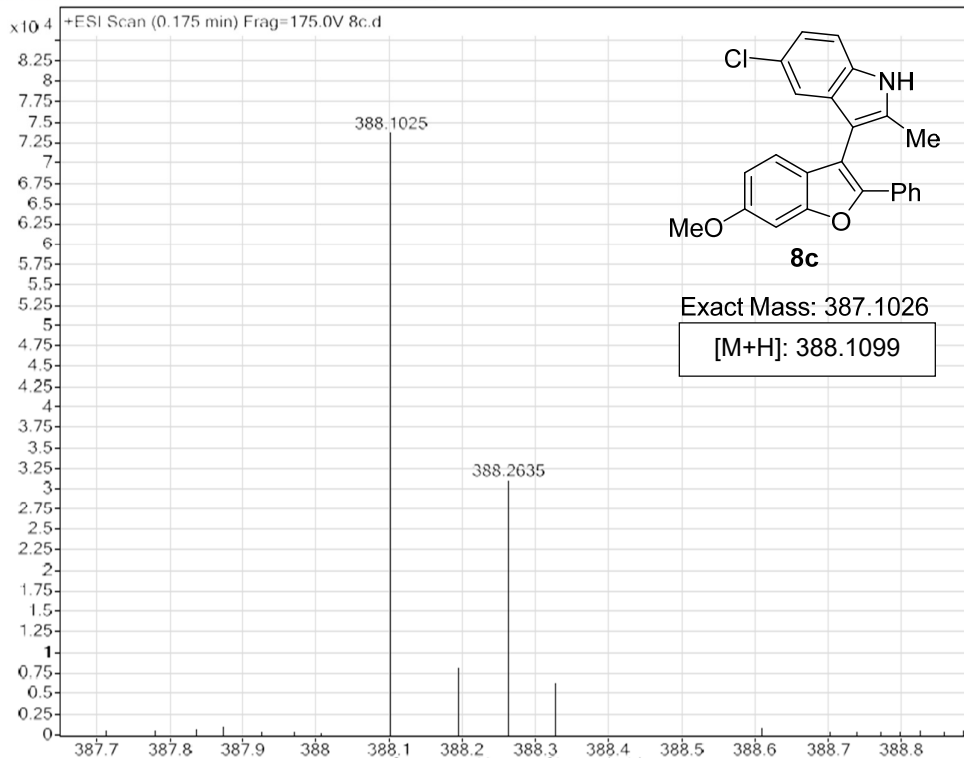
Data Filename	8a.d	ACQ Method	Comment	Sample information is unavailable	Acquired Time	Unavailable
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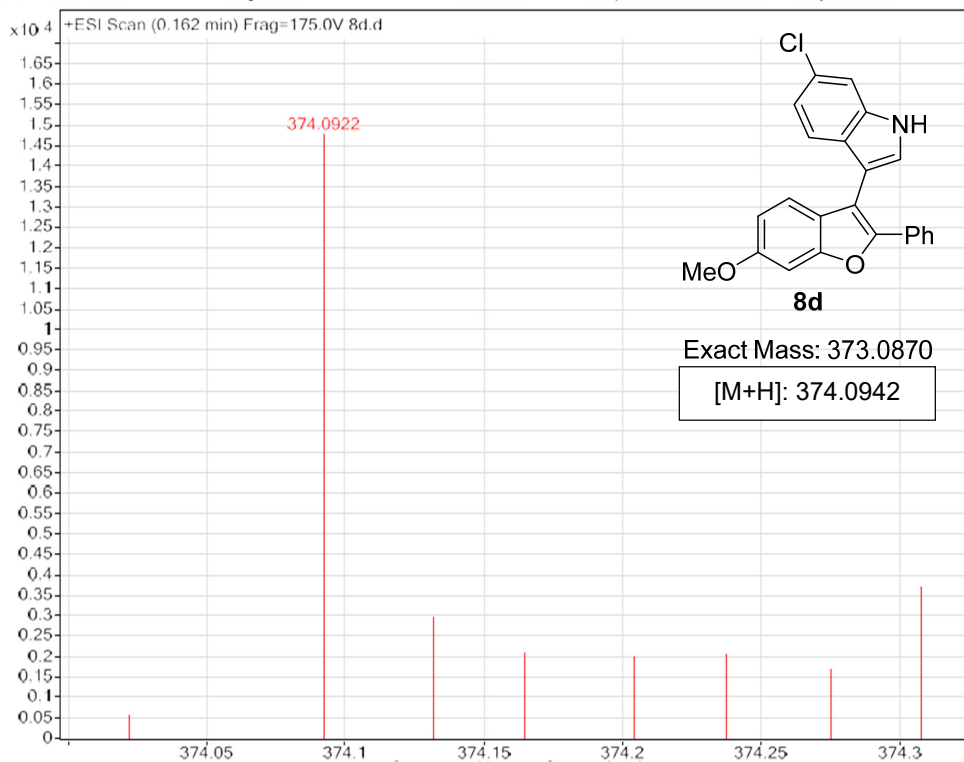
Data Filename	8b.d	ACQ Method	506k_leesunhee.m	Comment	Acquired Time	5/19/2023 4:44:20 PM
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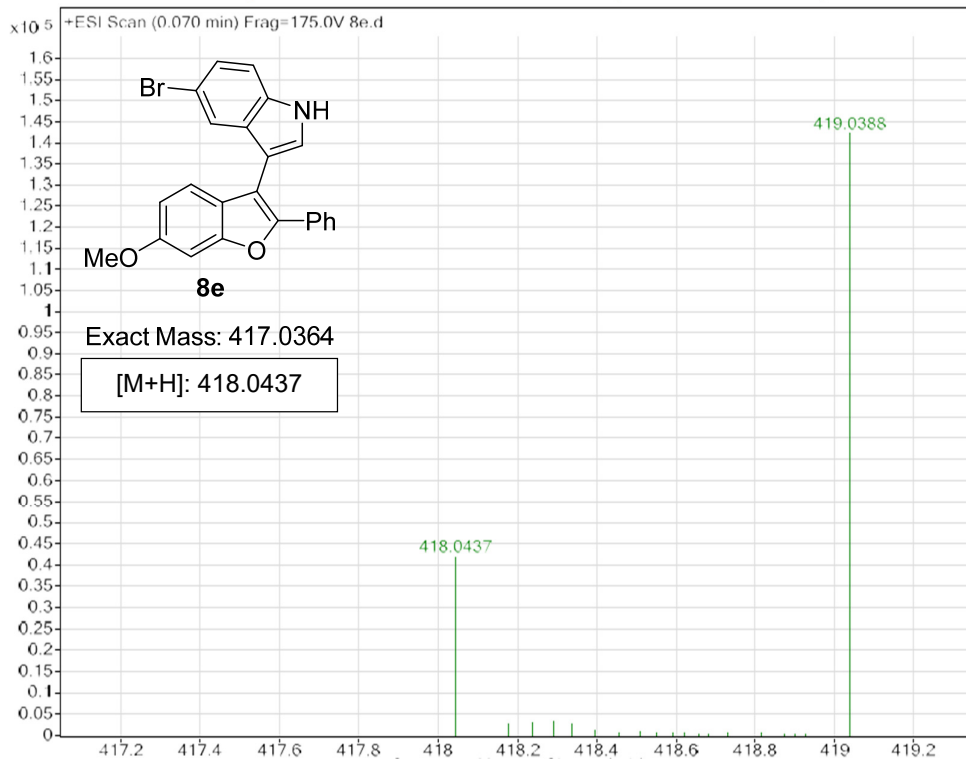
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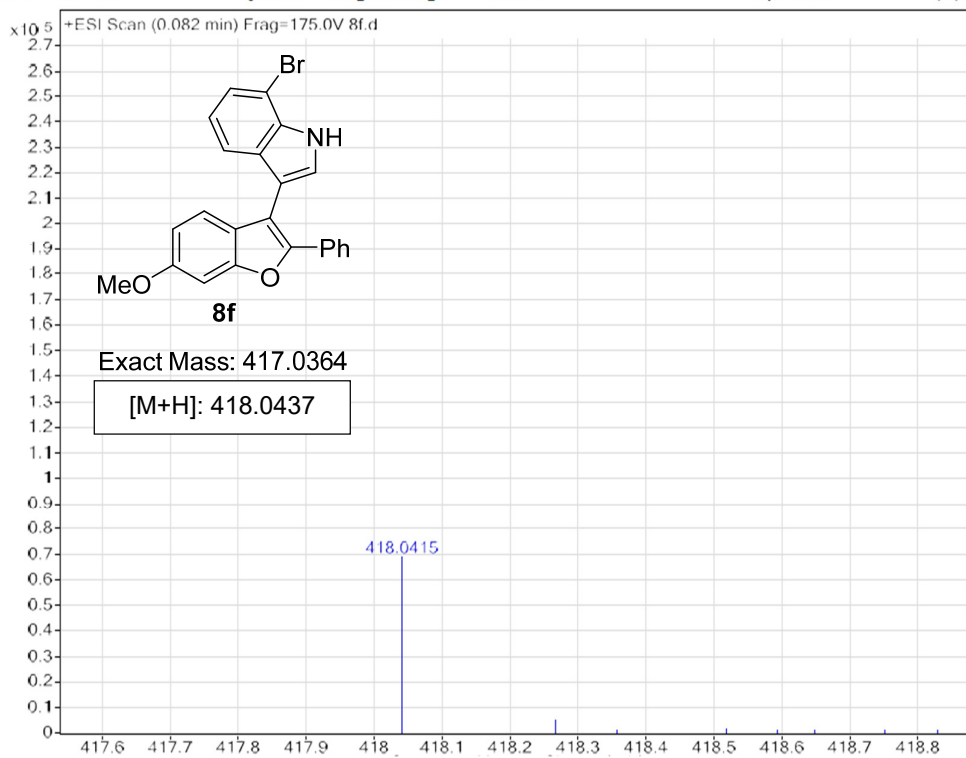
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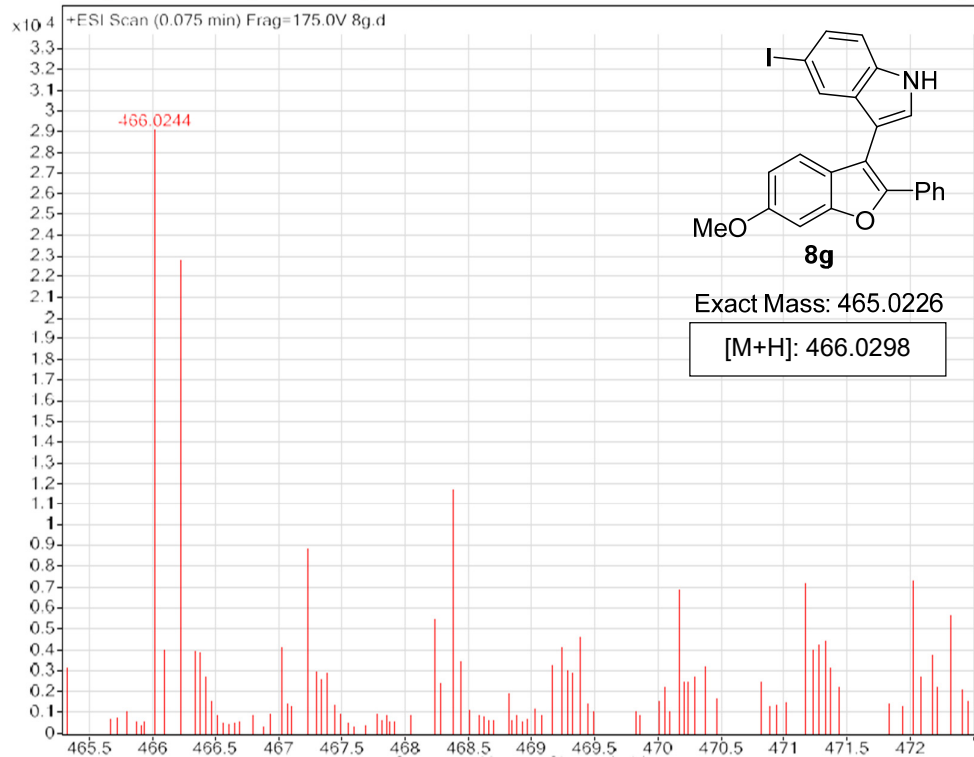
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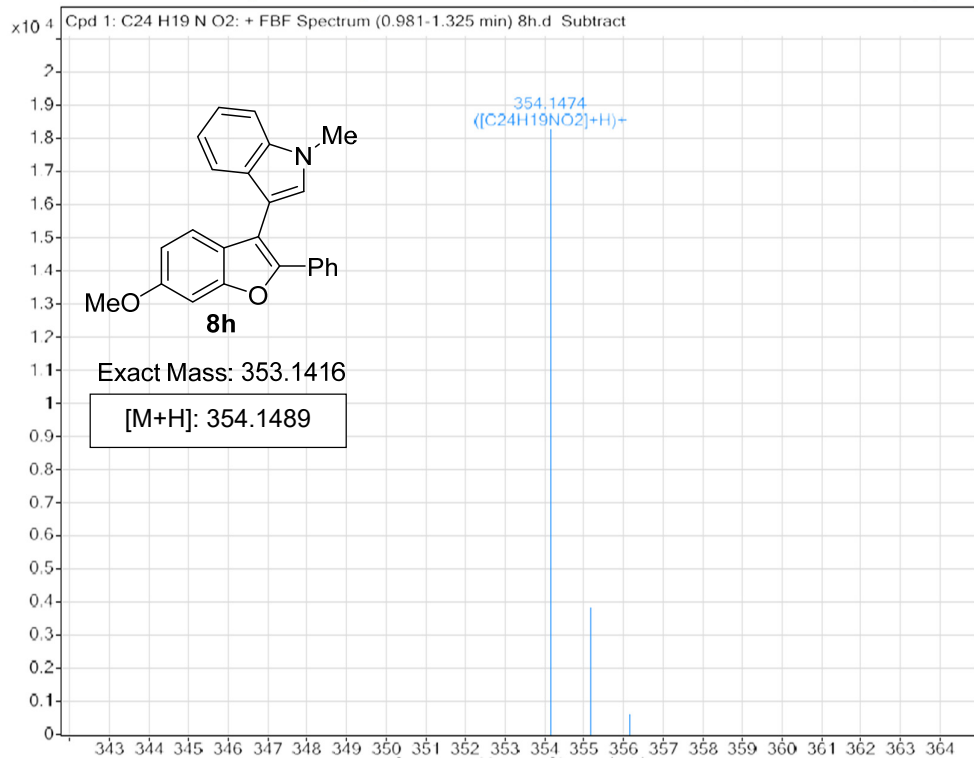
Data Filename 8f.d ACQ Method 506k_jeesunhee.m_A2. Comment Acquired Time 1/29/2024 2:51:37 PM



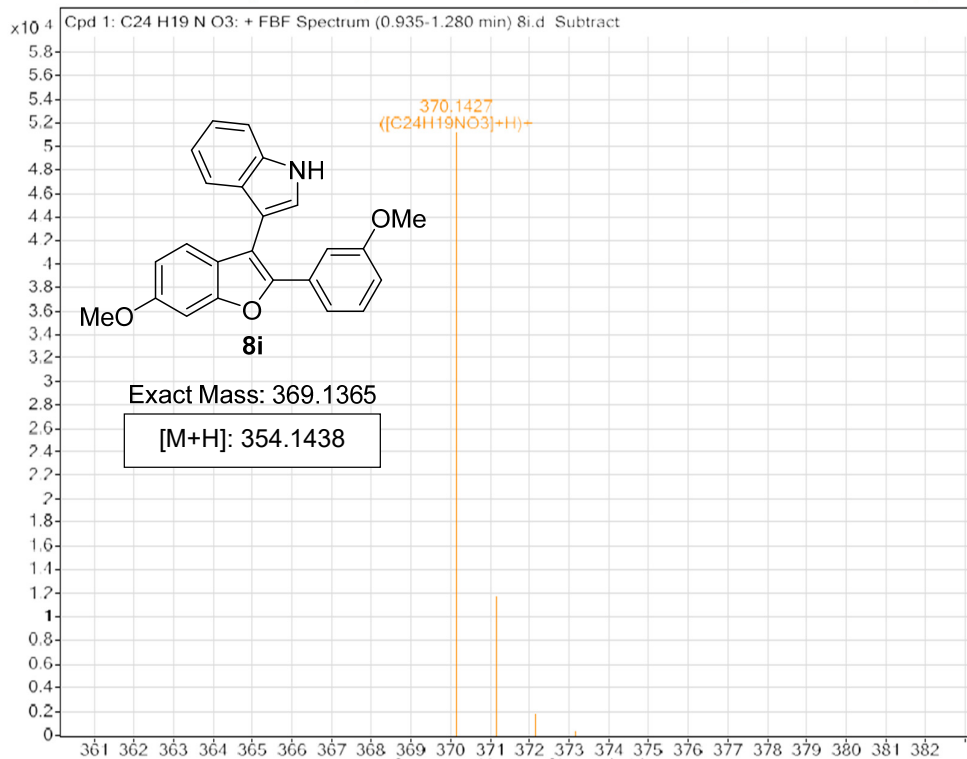
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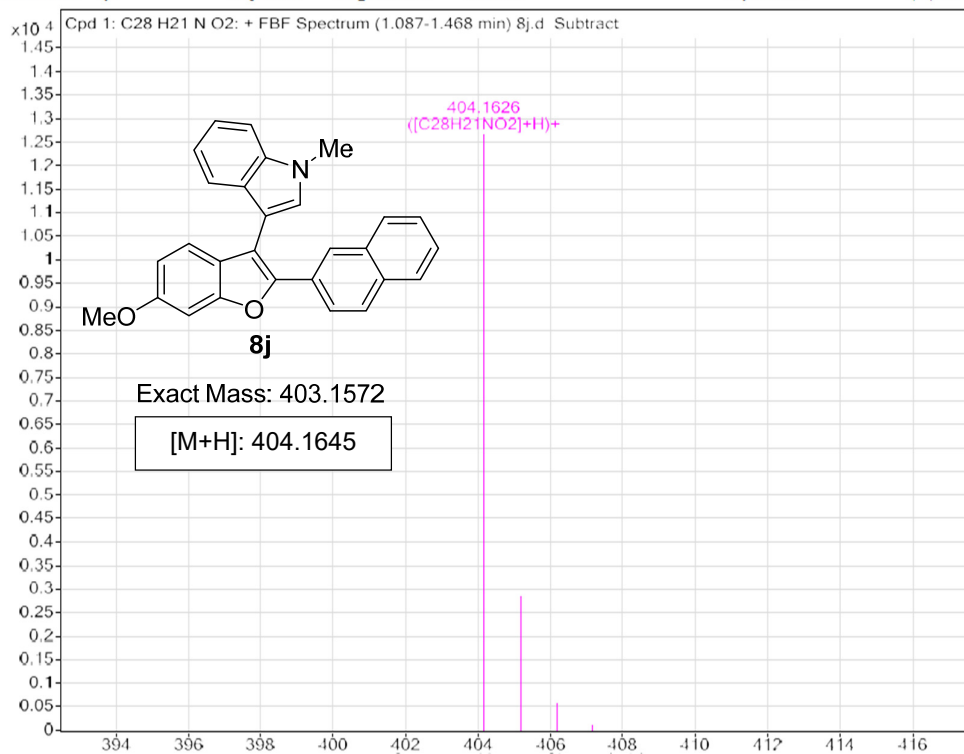
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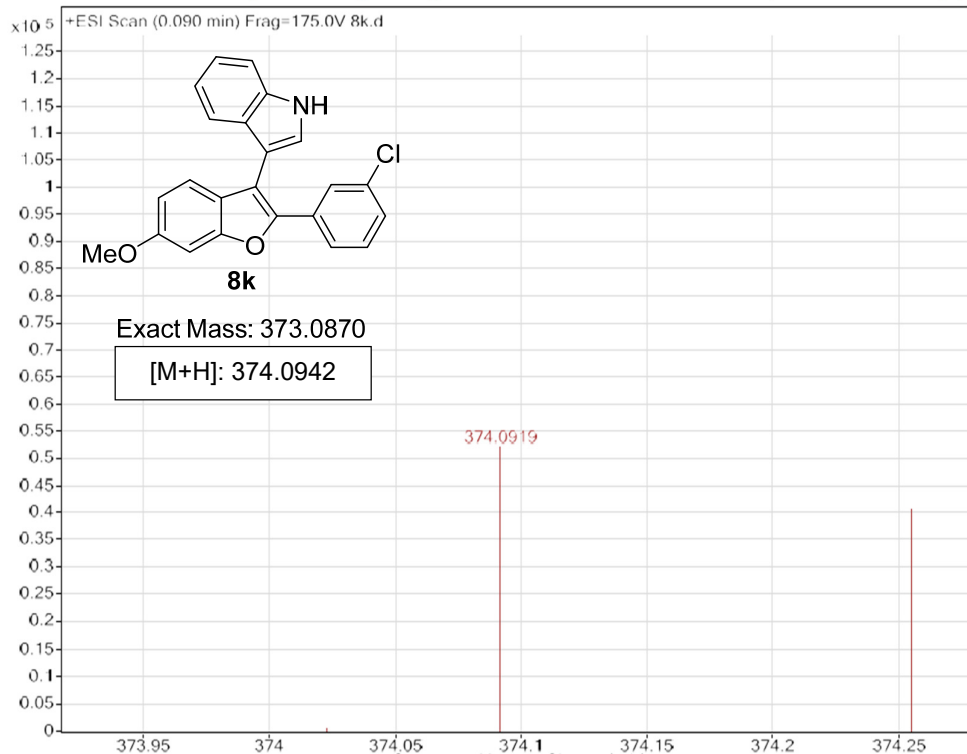
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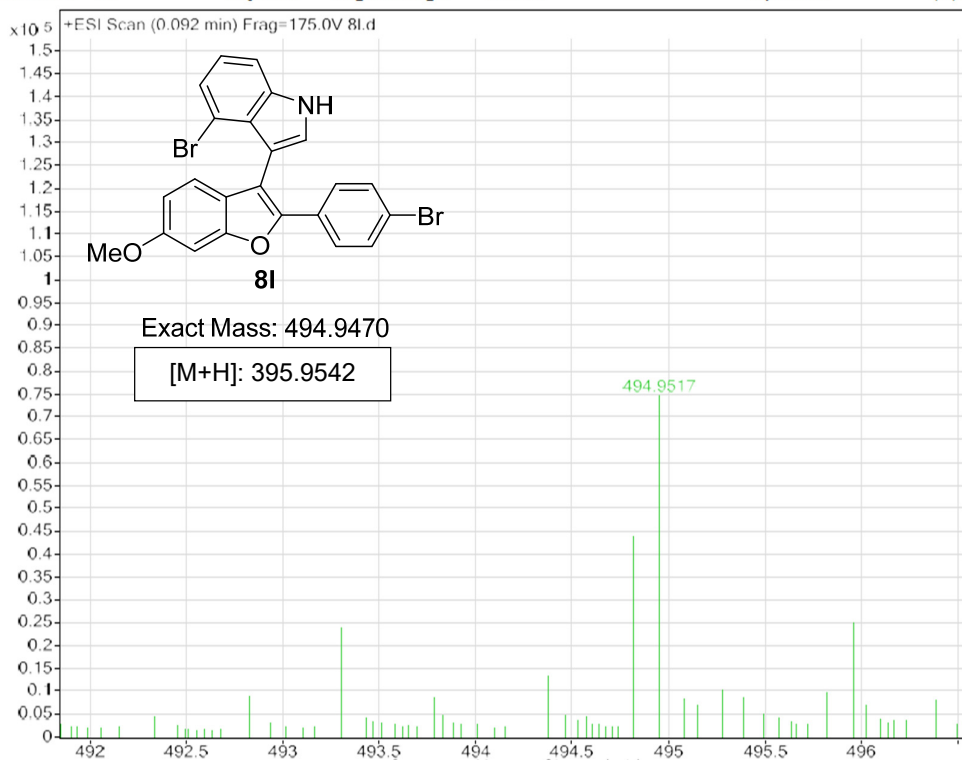
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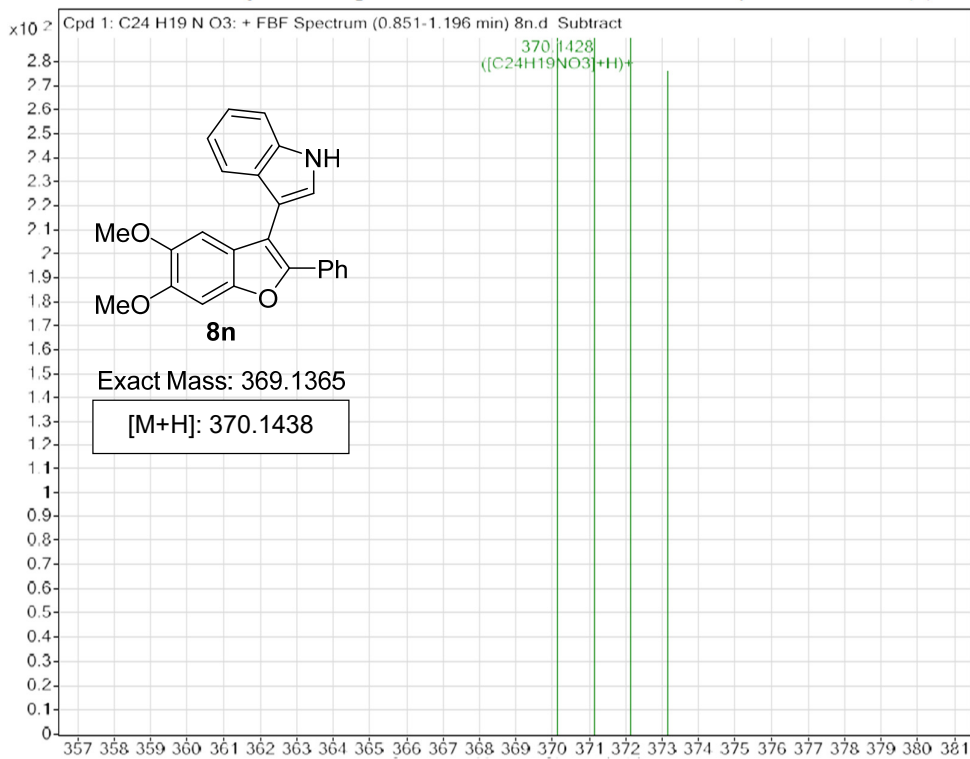
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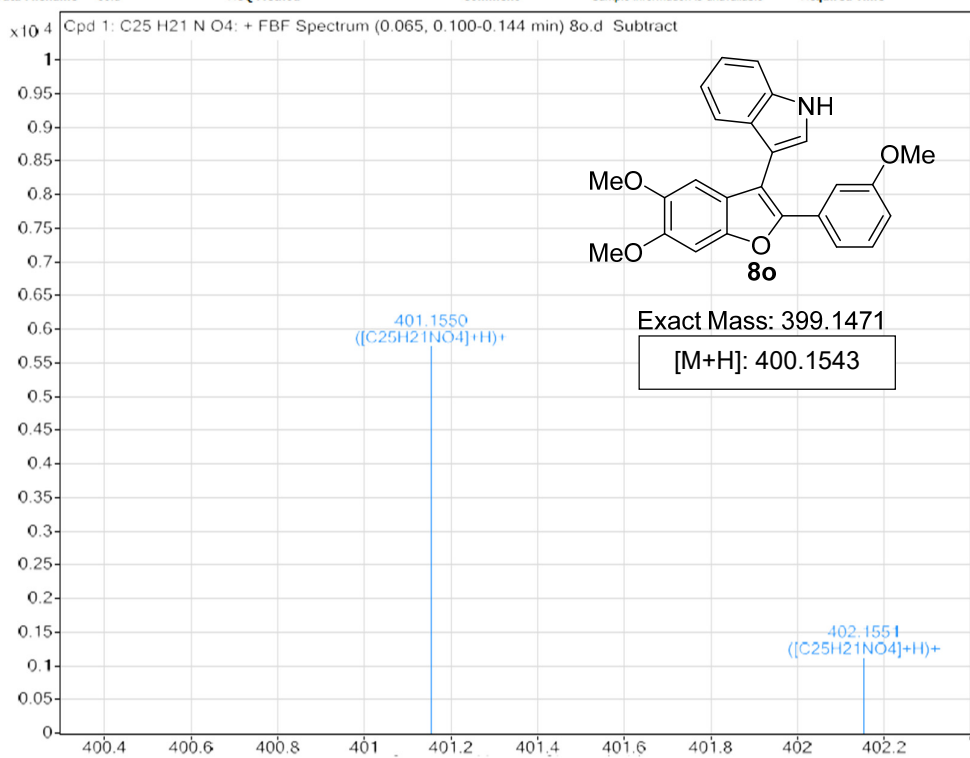
Data Filename 8l.d ACQ Method 506k_jeesunhee.m_A2 Comment Acquired Time 1/29/2024 3:02:49 PM



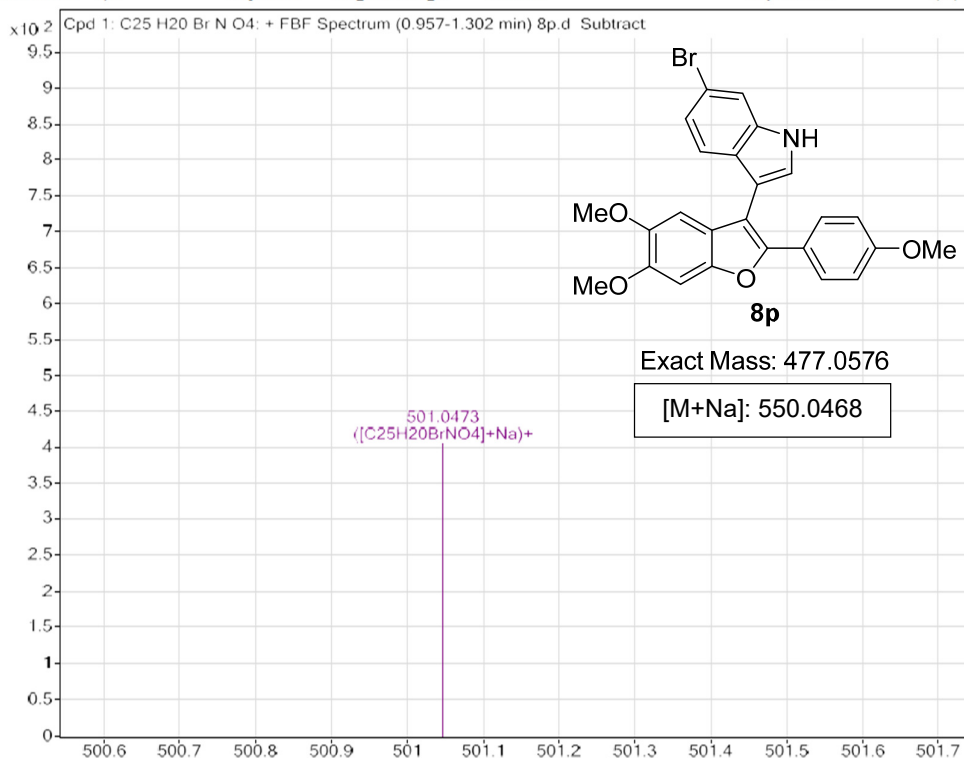
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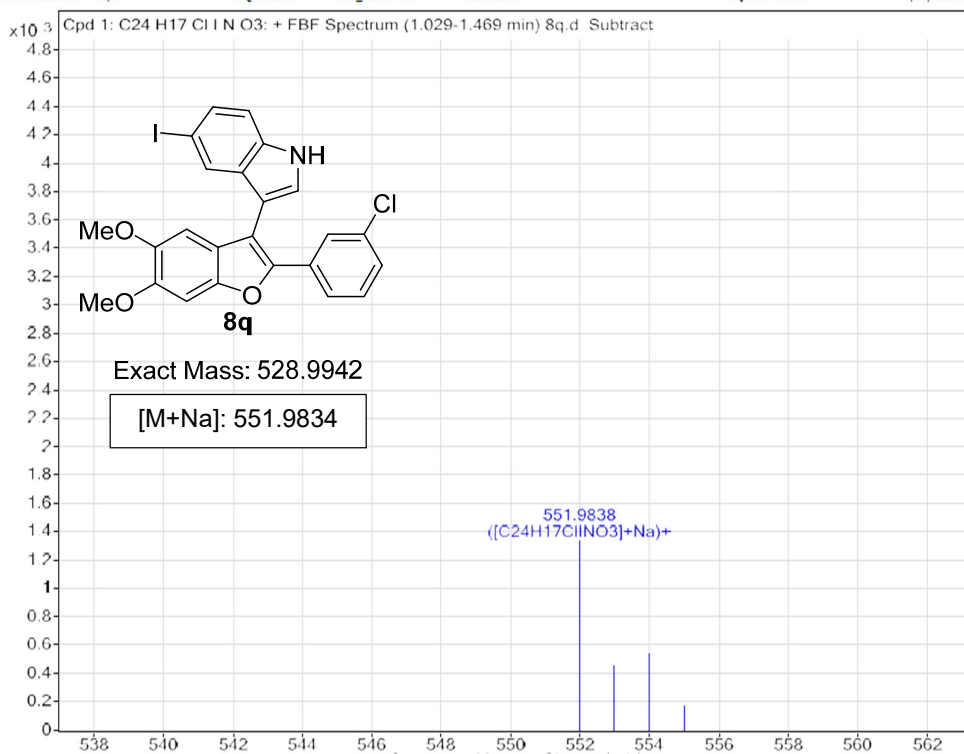
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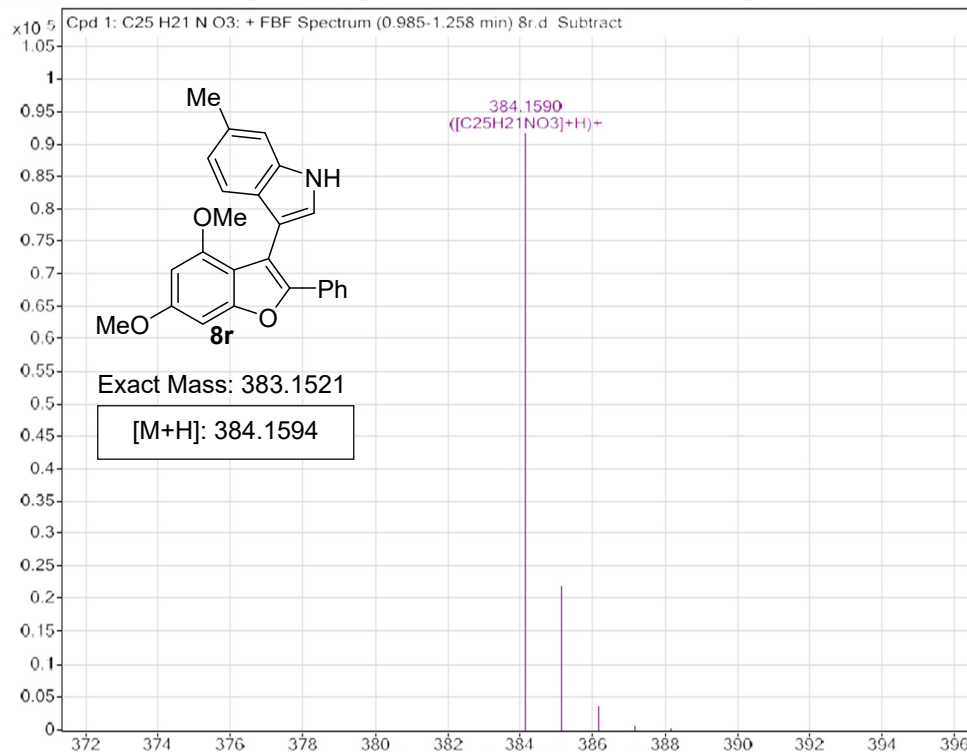
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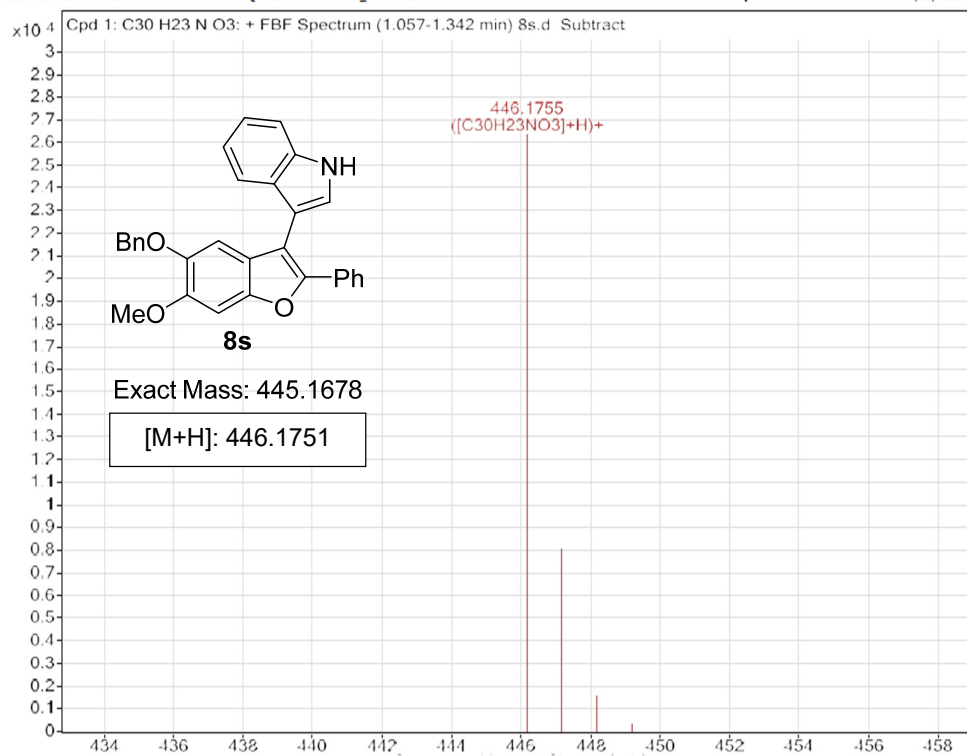
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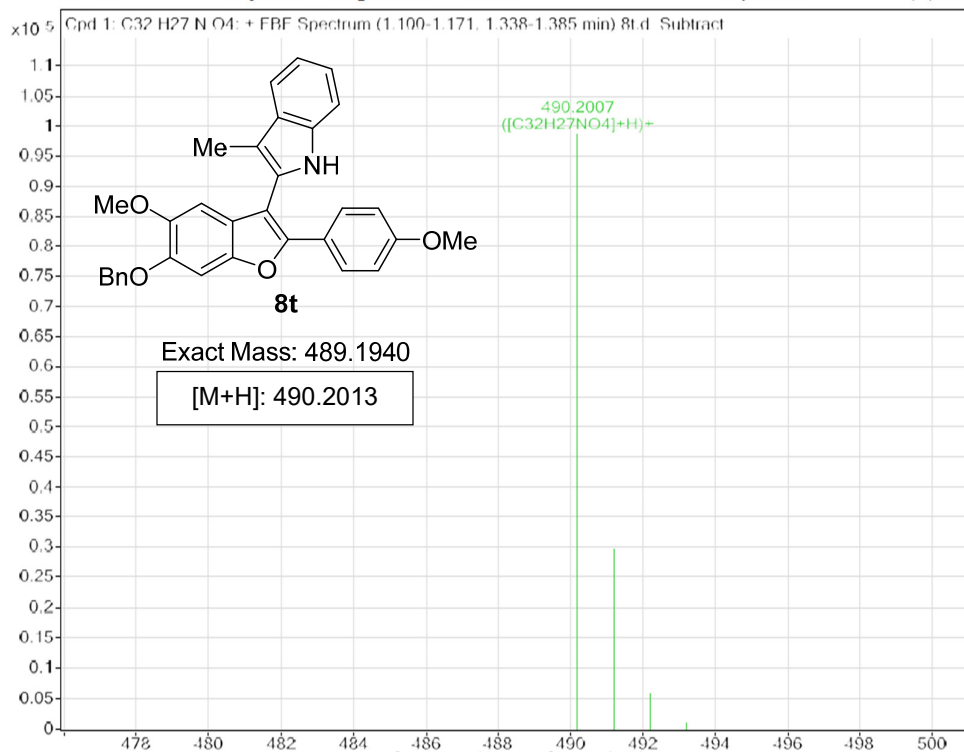
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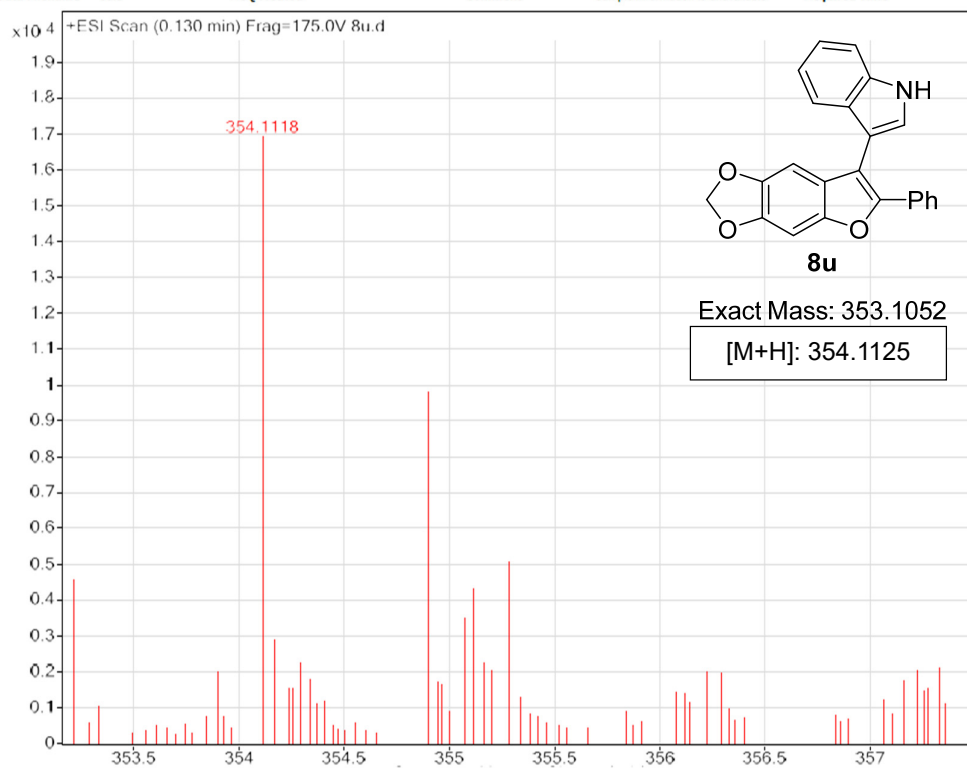
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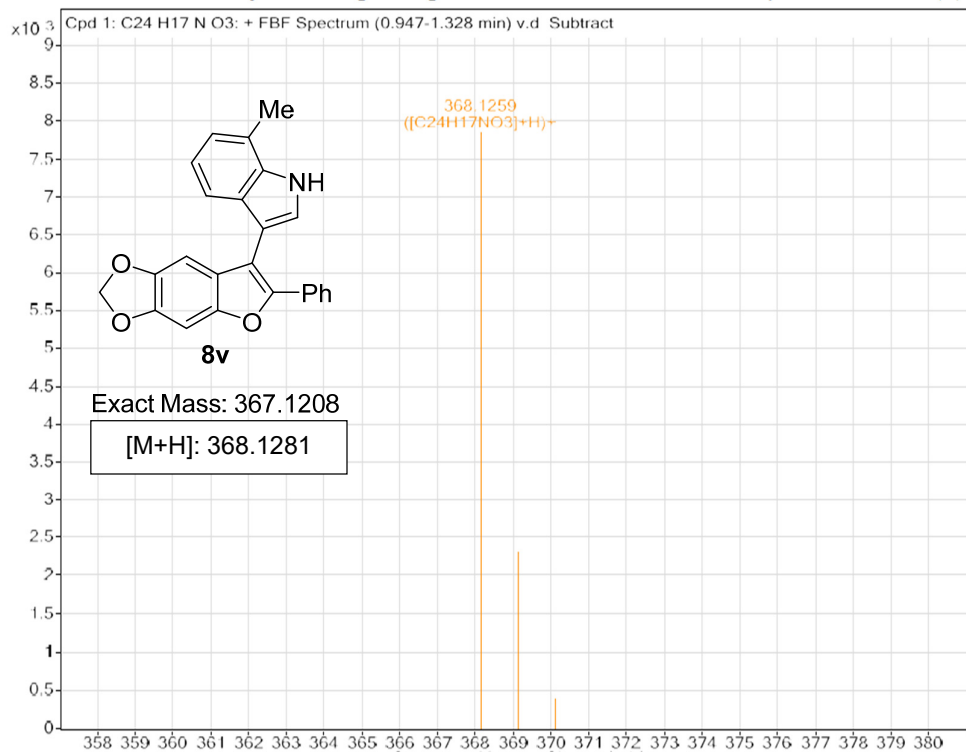
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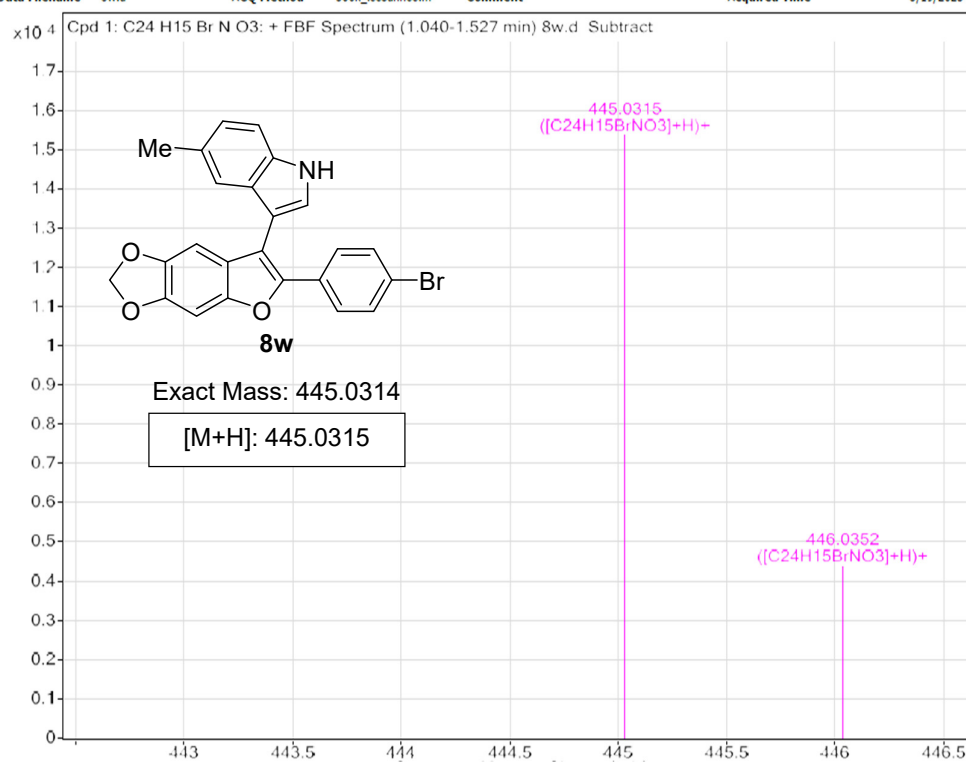
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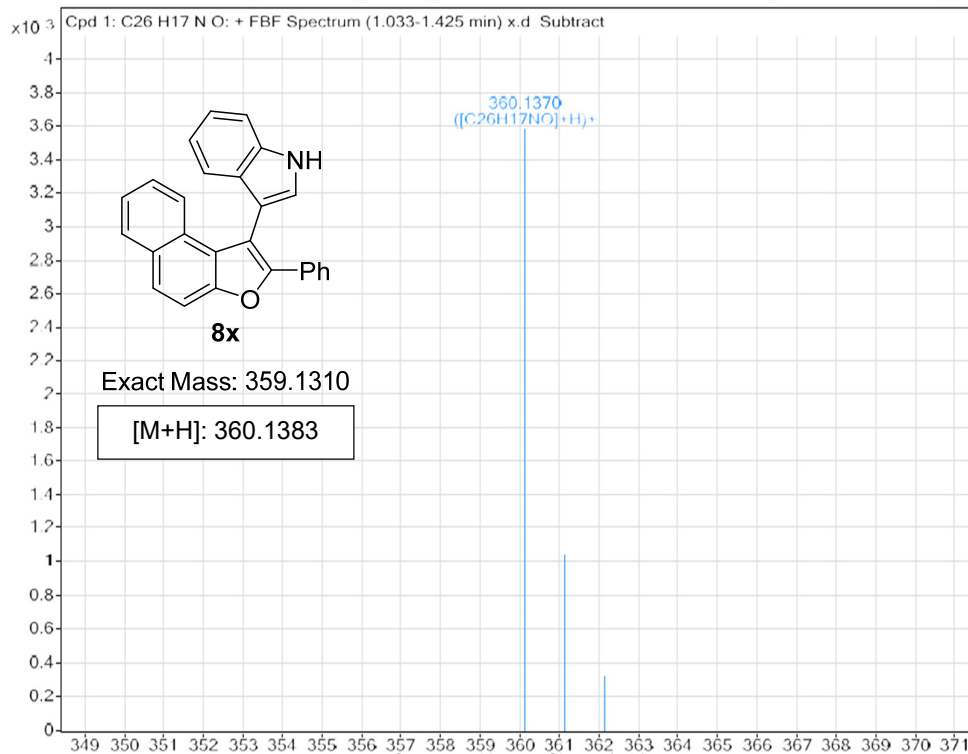
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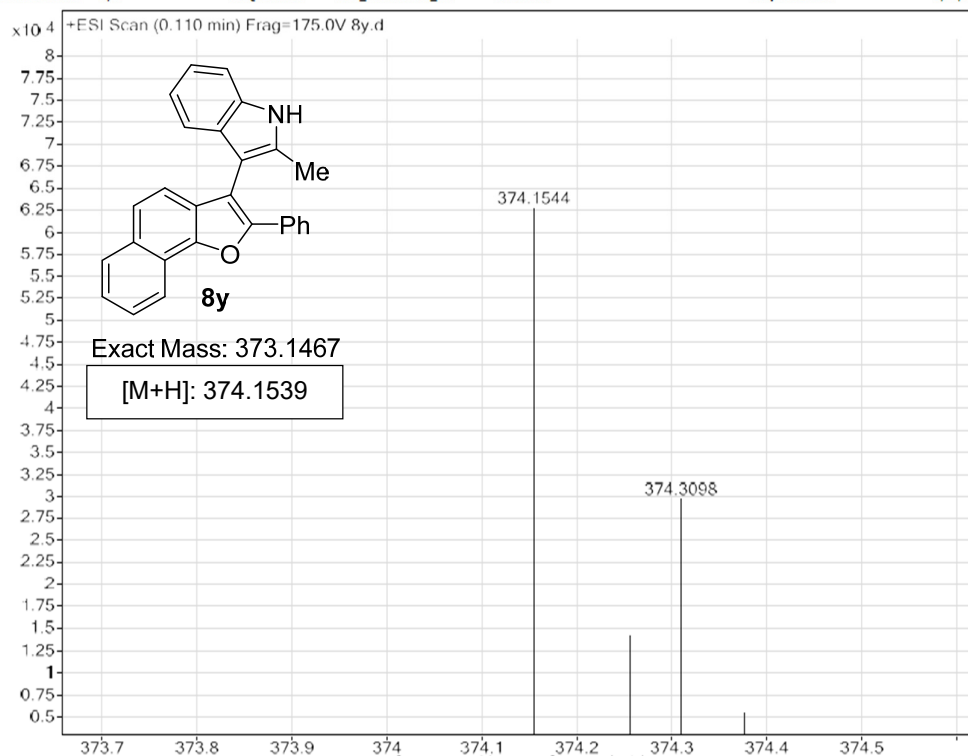
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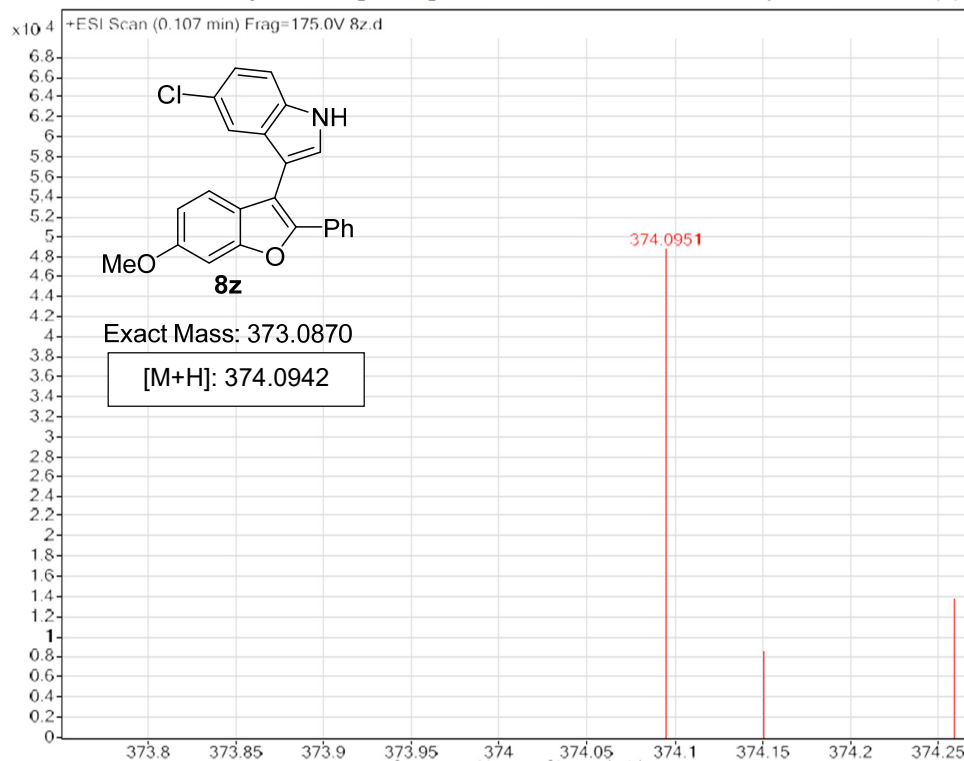
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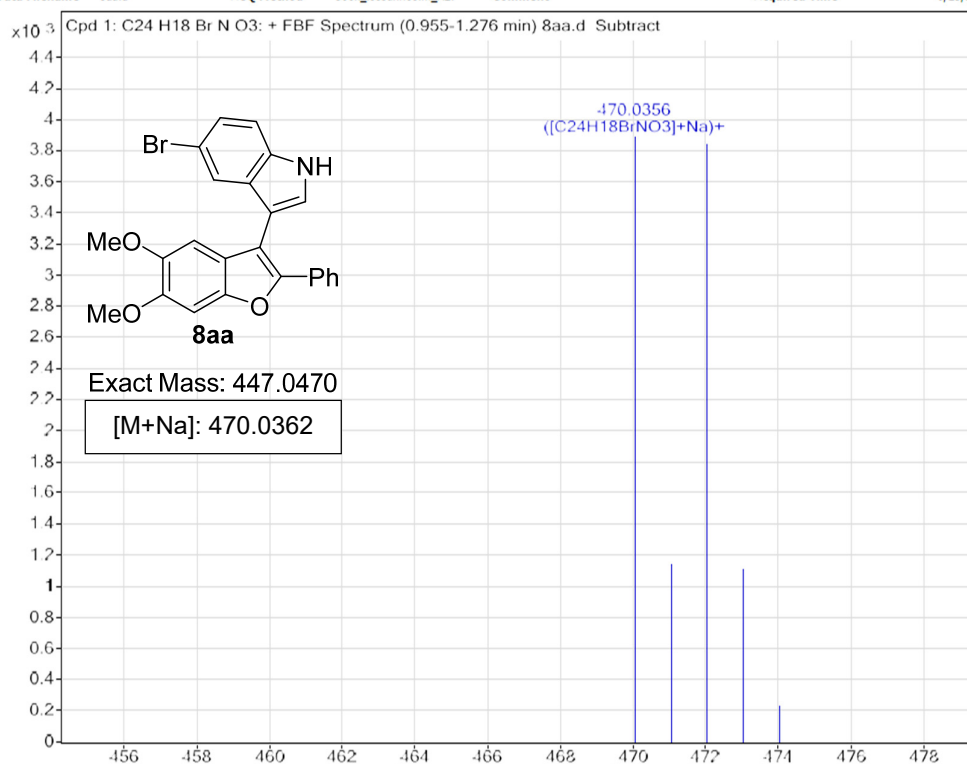
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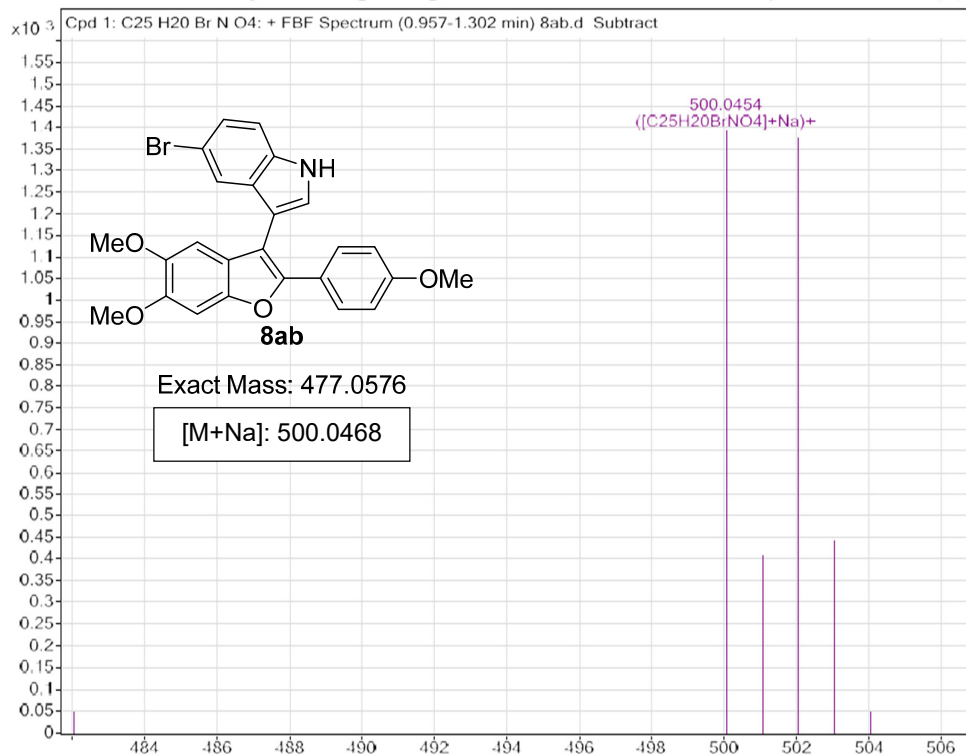
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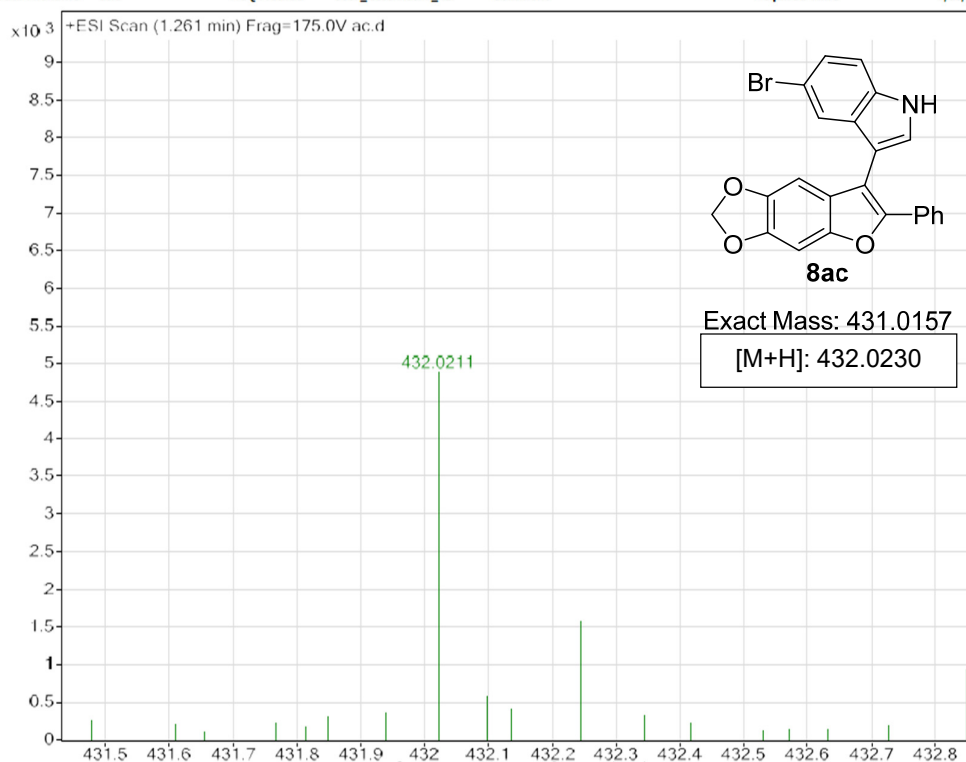
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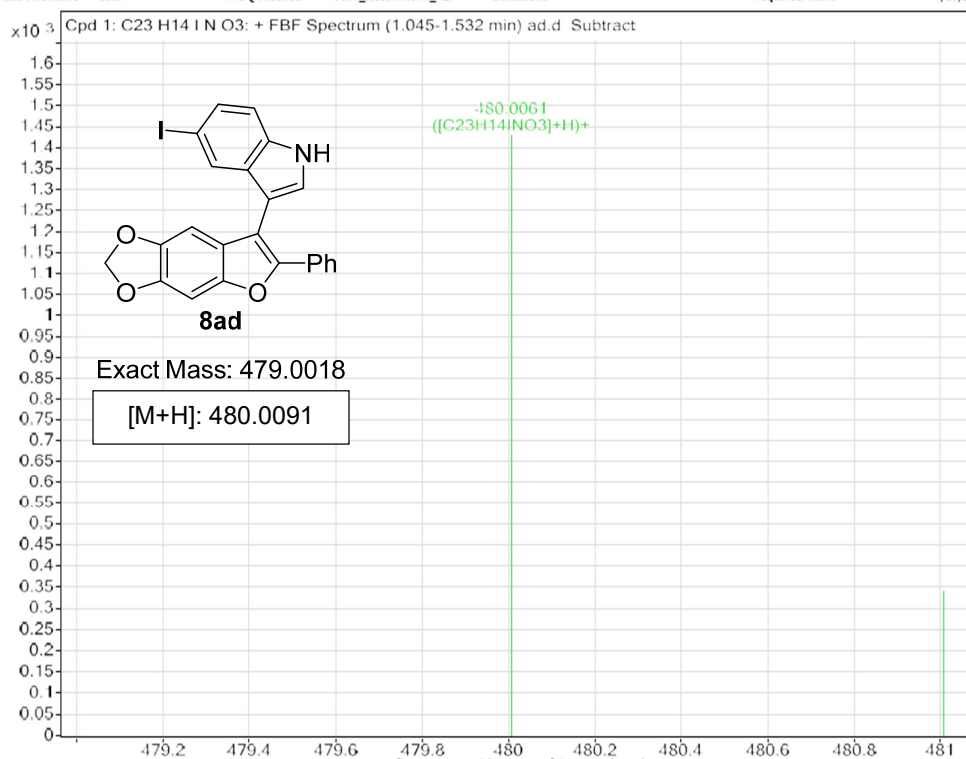
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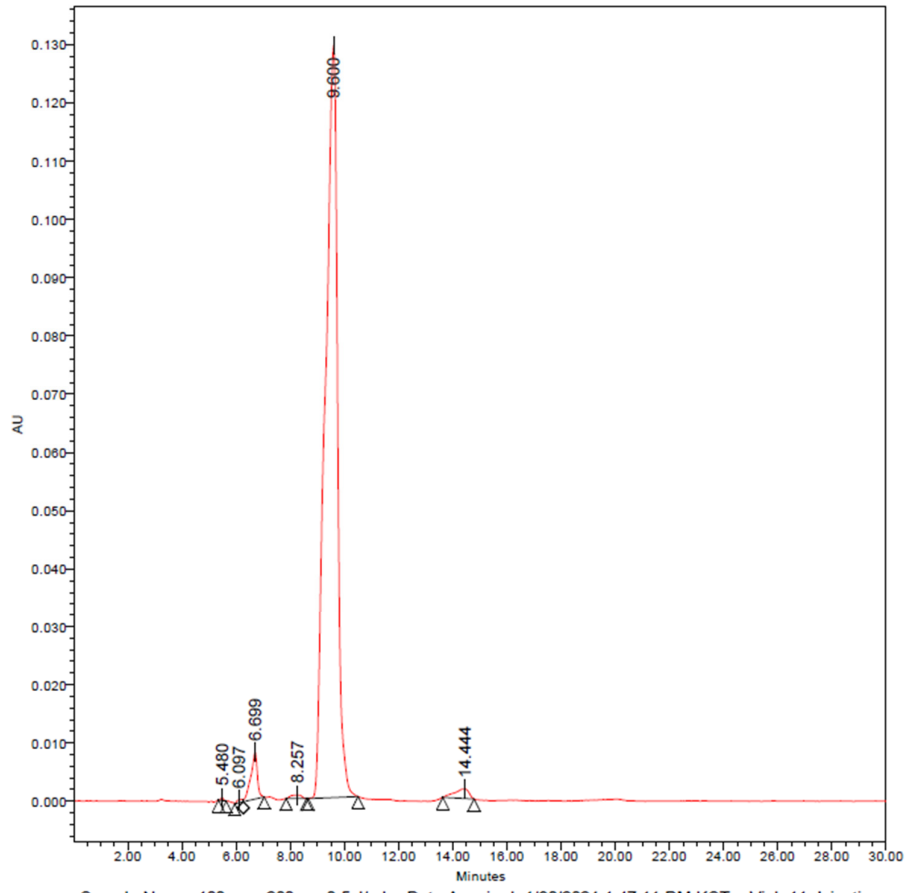
Data Filename ac.d ACQ Method 506k_jeesunhee.m_A2. Comment Acquired Time 7/13/2023 6:16:23 PM



Data Filename: ad.d ACQ Method: 506k_jeesunhee.m_A2 Comment: Acquired Time: 7/13/2023 6:20:07 PM



Purity of 8aa measured by HPLC



— Sample Name: 100ppm_200nm_0.5ul/ml; Date Acquired: 1/30/2024 1:47:11 PM KST; Vial: 11; Injection:

Peak Summary with Statistics

Name:

	Sample Name	Vial	Inj	Retention Time (min)	Area	% Area	Height
1	100ppm_200nm_0.5ul/ml	11	1	5.480	3532	0.08	510
2	100ppm_200nm_0.5ul/ml	11	1	6.097	7370	0.17	497
3	100ppm_200nm_0.5ul/ml	11	1	14.444	60905	1.44	1617
4	100ppm_200nm_0.5ul/ml	11	1	8.257	16691	0.39	601
5	100ppm_200nm_0.5ul/ml	11	1	9.600	4013420	94.75	129276
6	100ppm_200nm_0.5ul/ml	11	1	6.699	134010	3.16	8022
Mean				8.429			
Std. Dev.				3.308			
% RSD				39.24			

8aa HPLC conditions	
Column	CHIRALPAK® C18 UG 5 μ m, 4.6 mm i.d. \times 250 mm
Mobile phase	Acetonitrile : Water = 8 : 2
Flow rate	0.5 mL/min
Injection volume	10 μ L
Detection	254 nm
Column Temperature	25 °C
Auto-sampler temperature	25 °C
Retention time	9.6 minutes