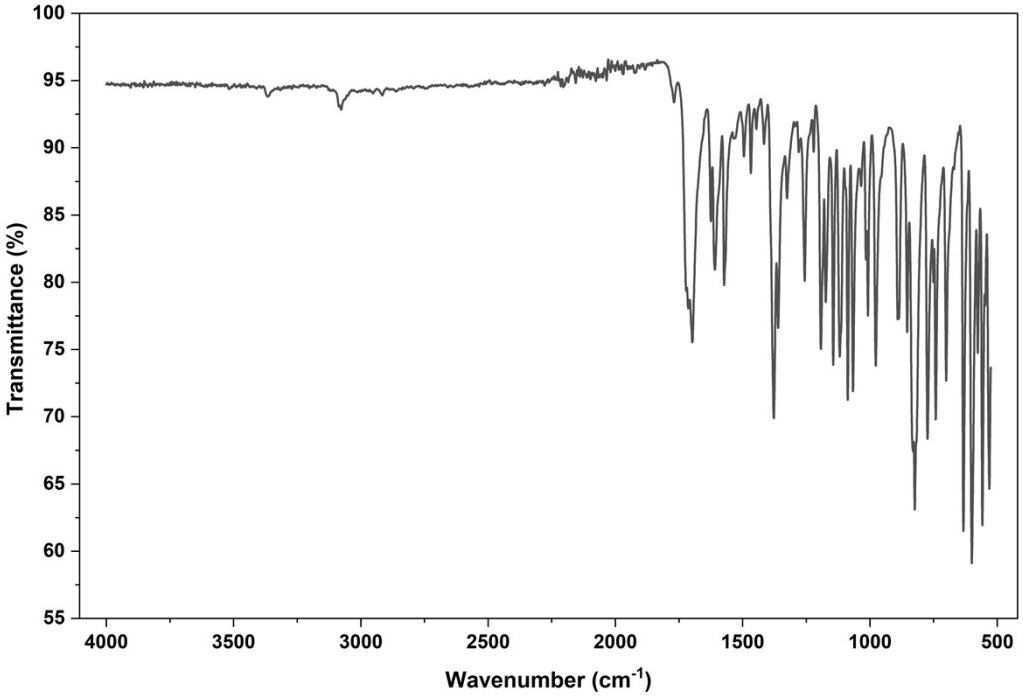
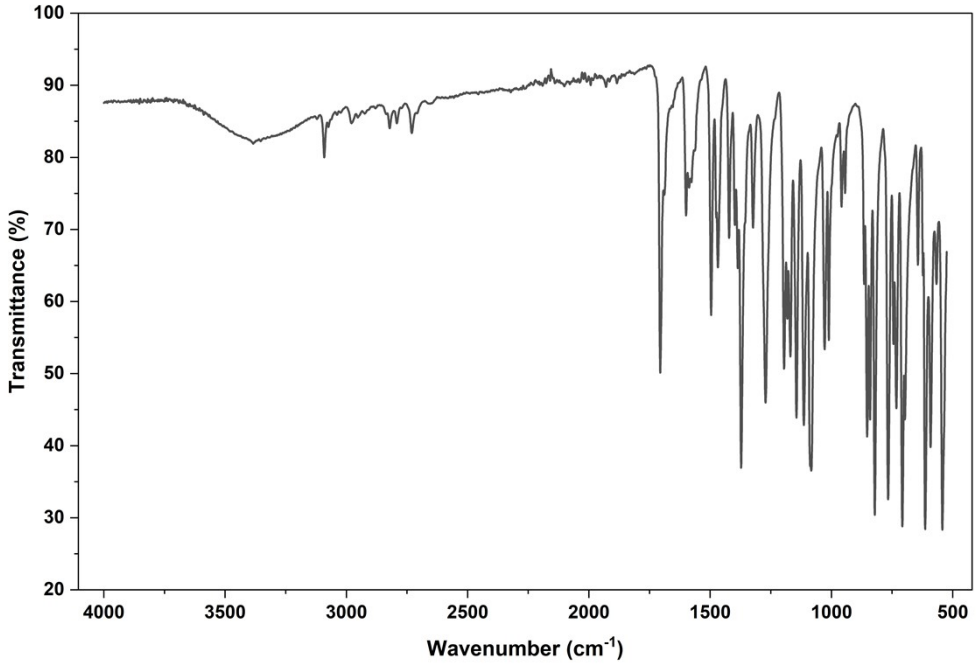
Supporting Information

FTIR Spectra of Synthesized Compounds

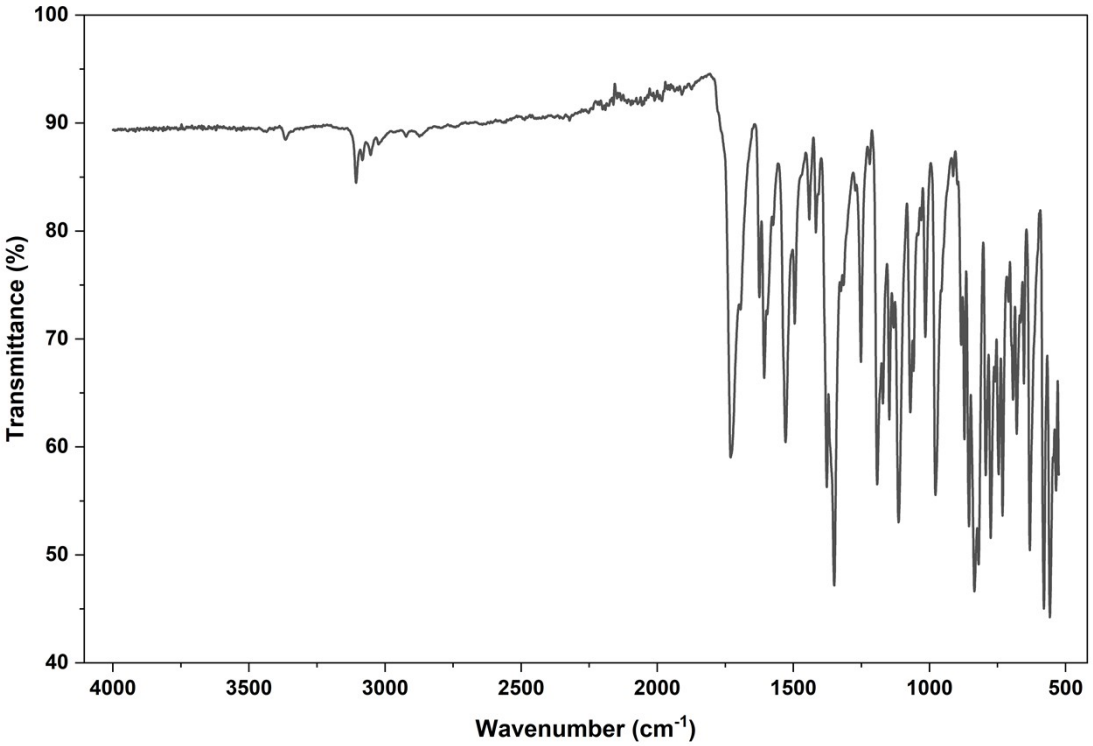
Compound 1



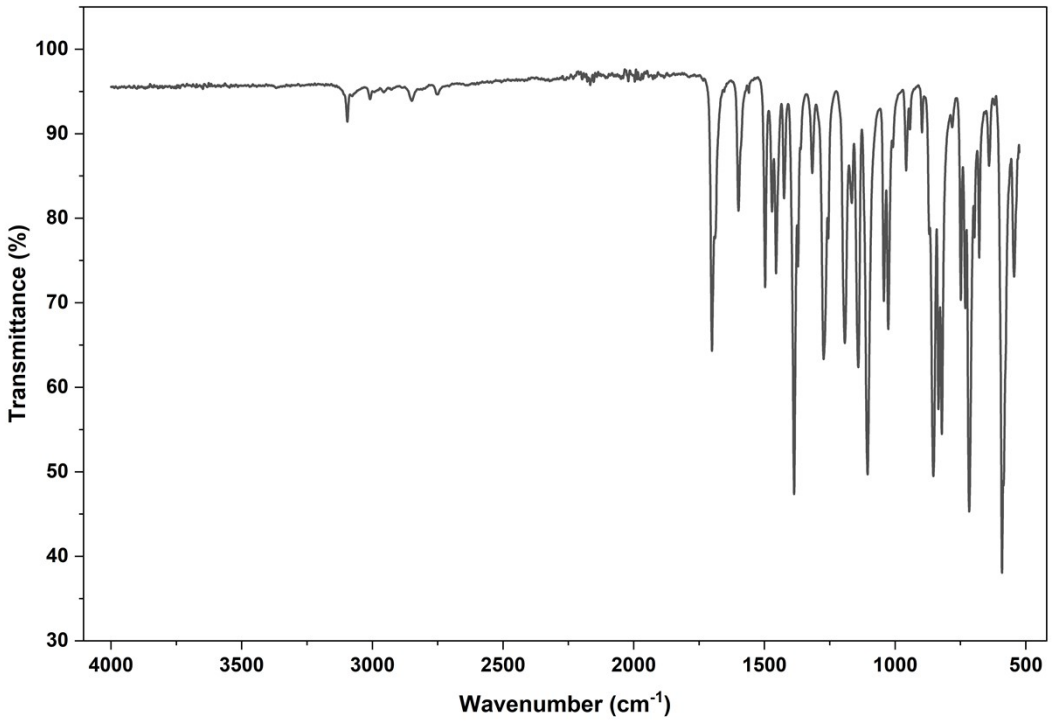
Compound 2



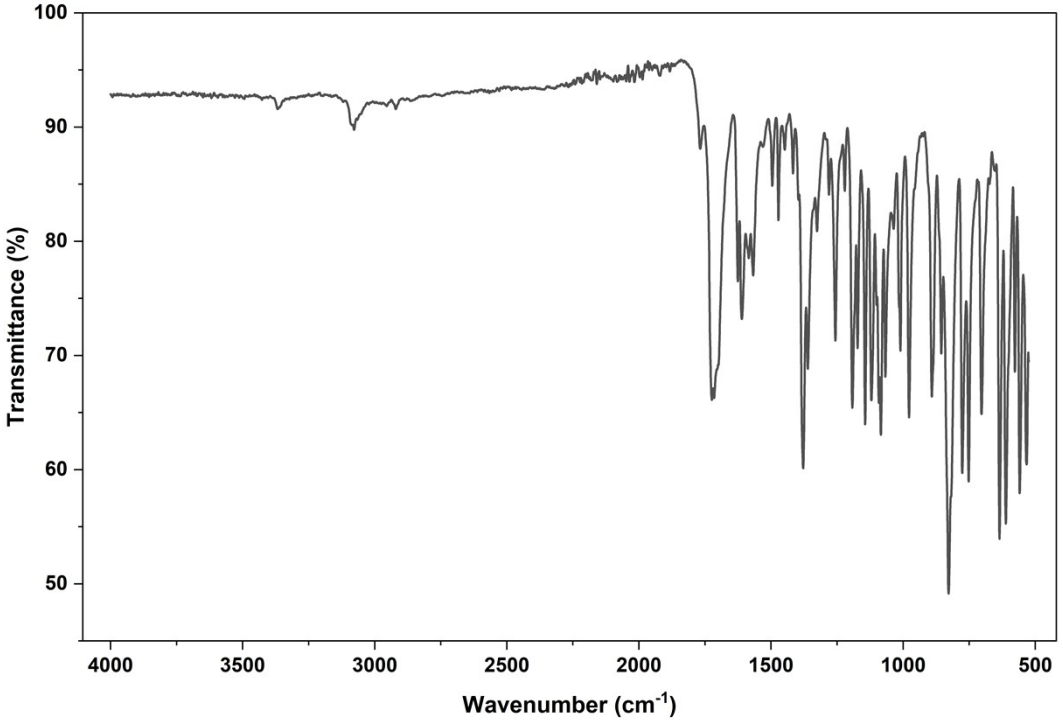
Compound 3



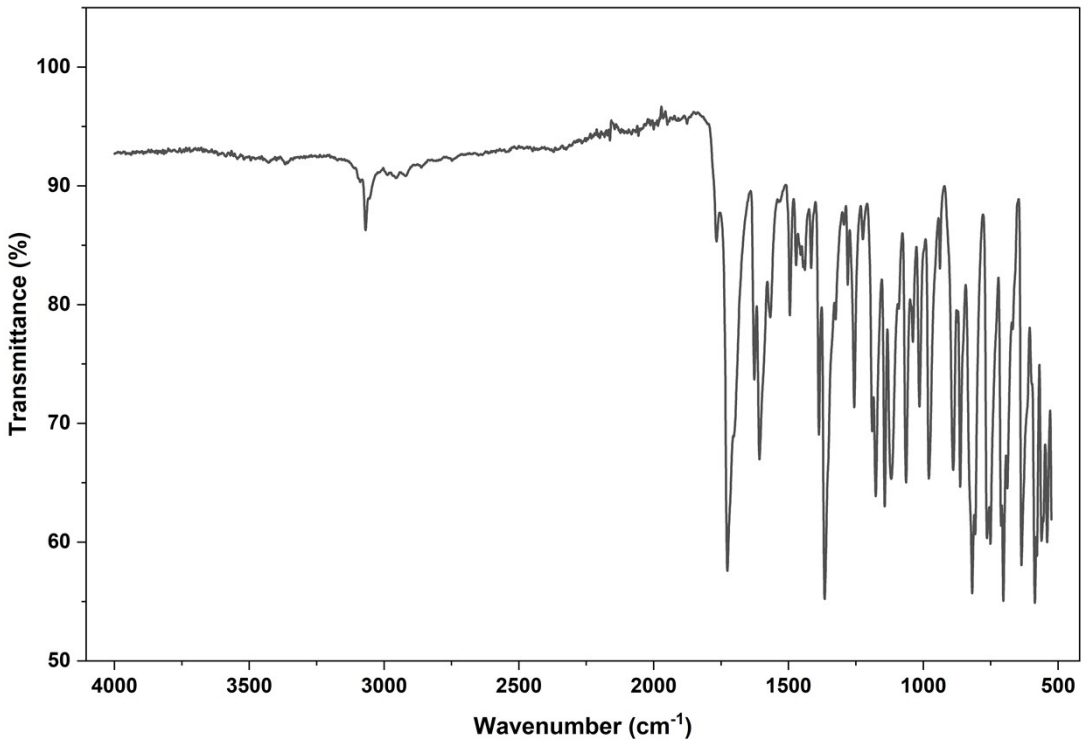
Compound 4



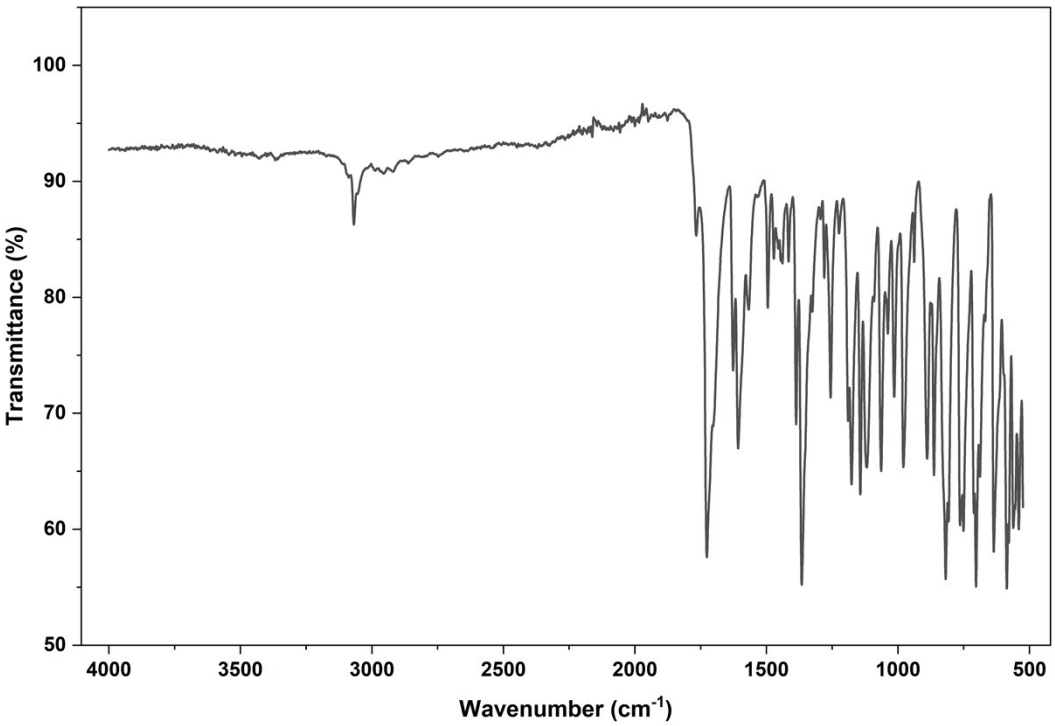
Compound 5



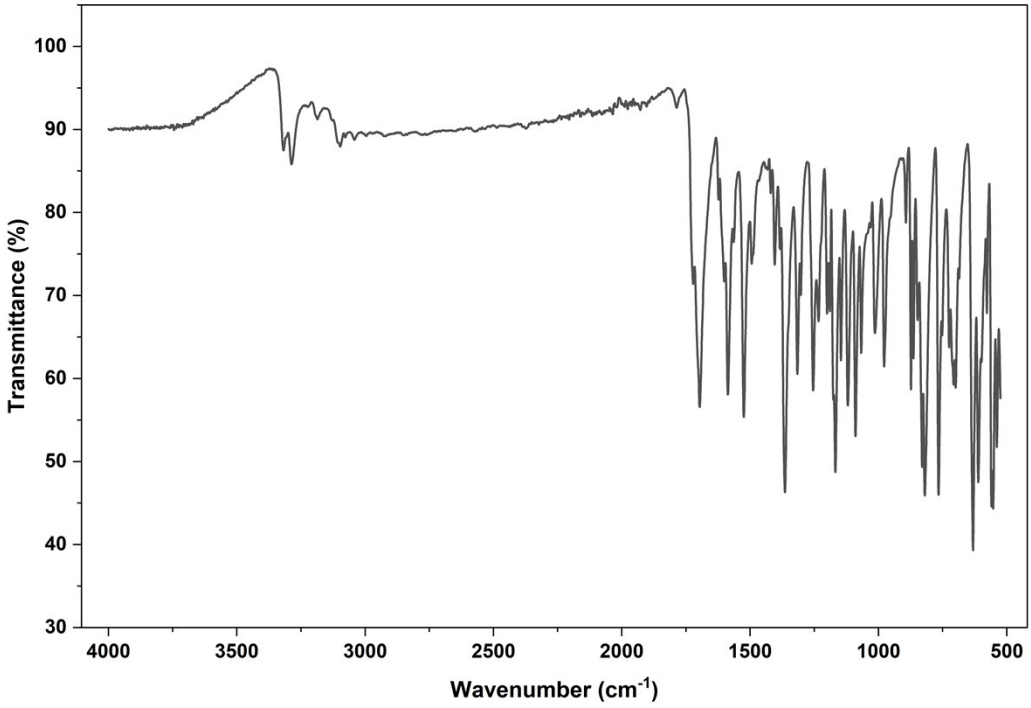
Compound 6



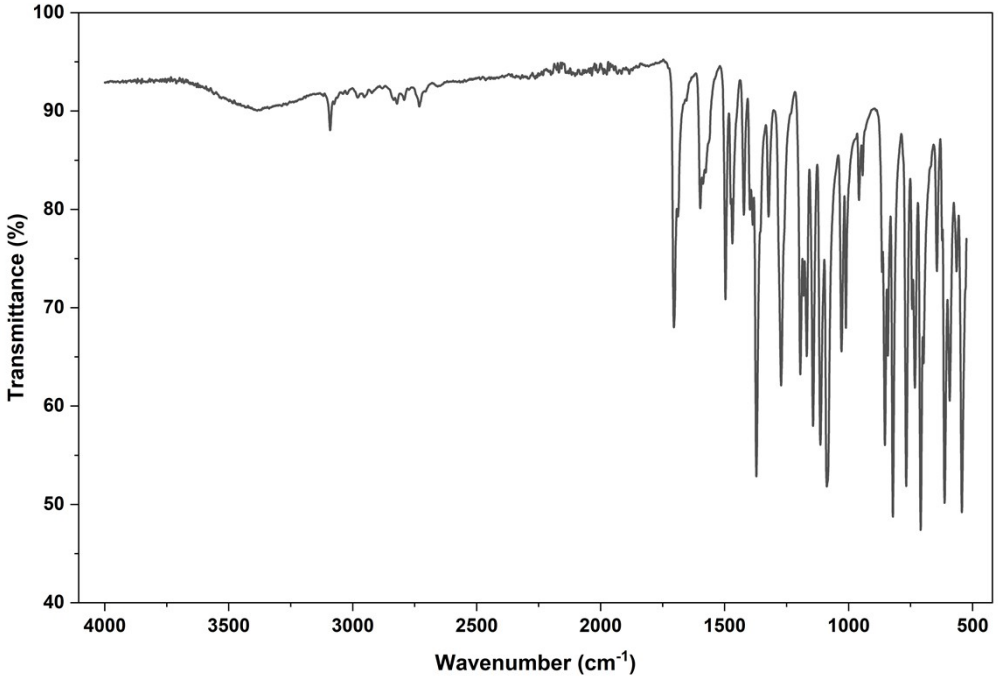
Compound 7



Compound 8

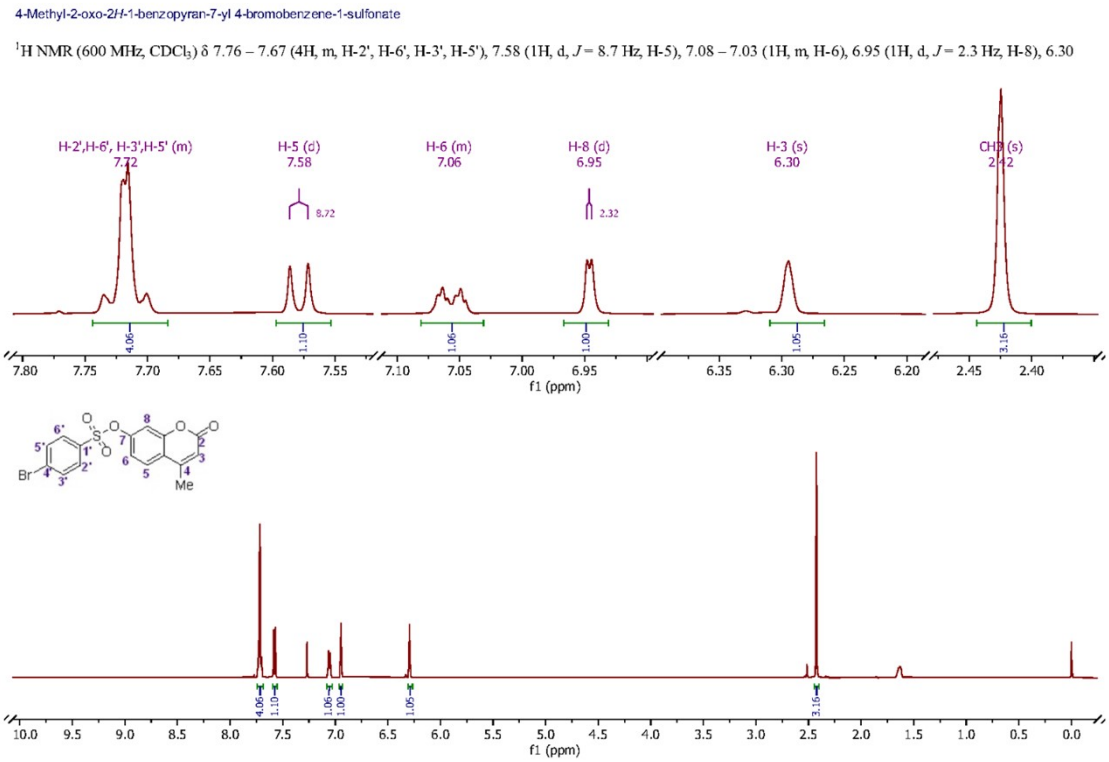


Compound 9

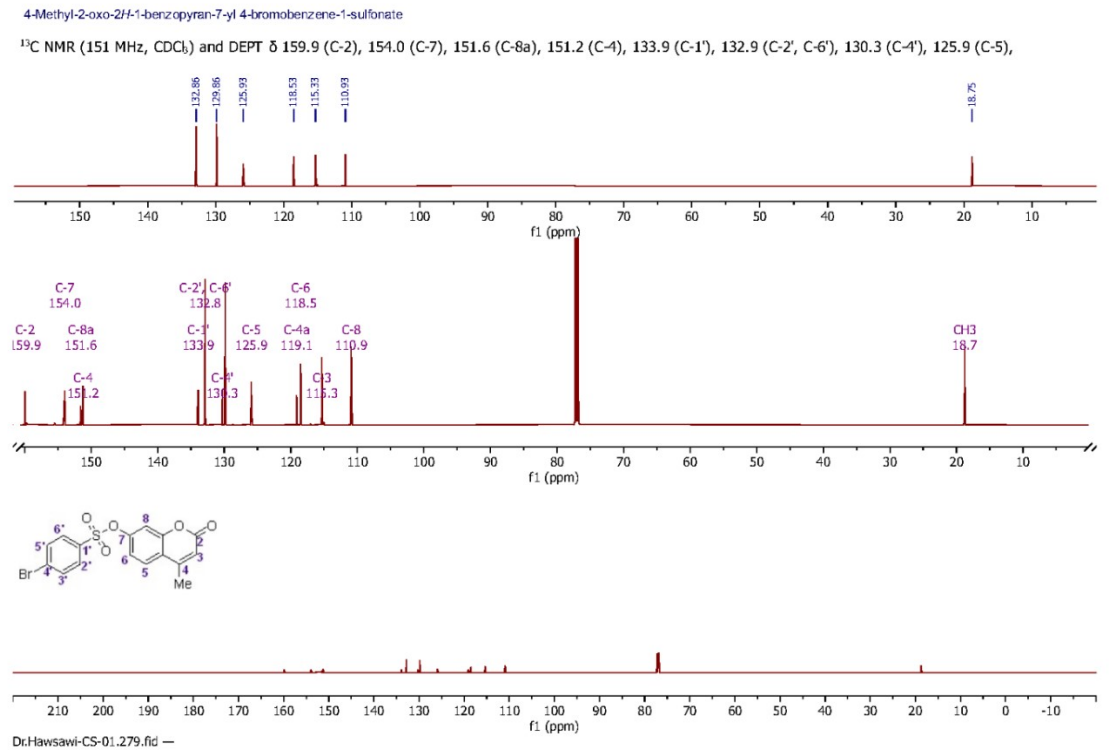

Transmittance (%)
100
90
80
70
60
50
40
4000
3500
3000
2500
2000
1500
1000
500
Wavenumber (cm-1)

NMR Spectra of Synthesized Compounds

^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 1



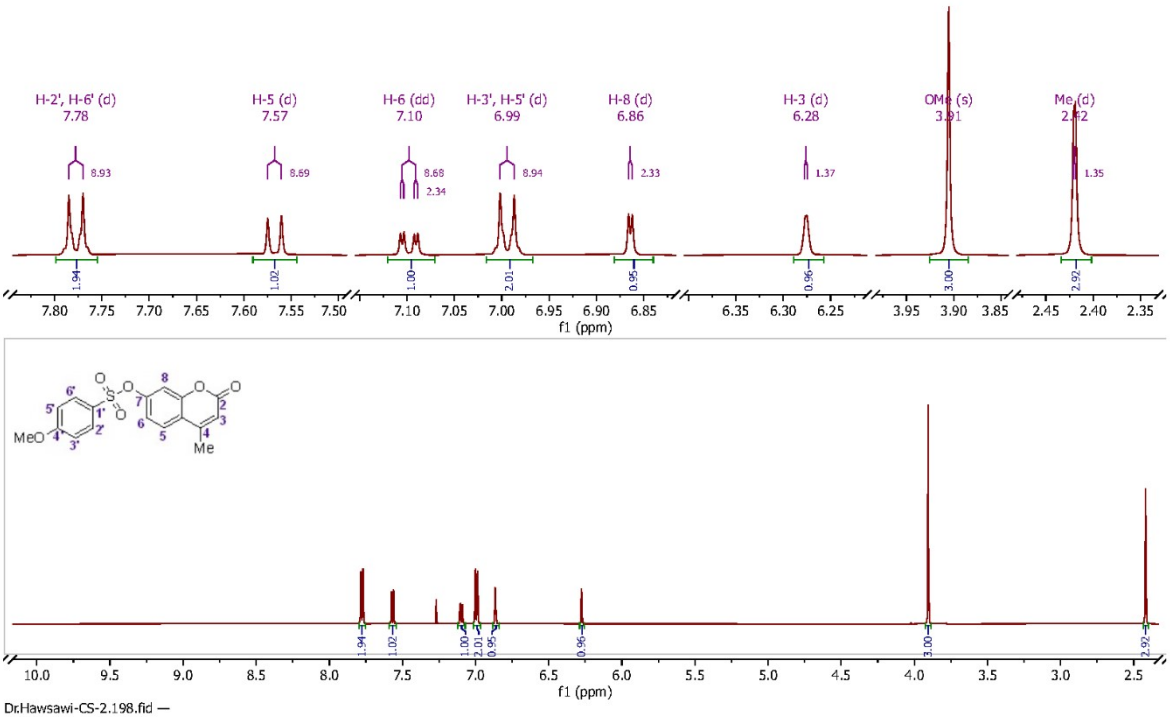
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 1



^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 2

4-Methyl-2-oxo-2*H*-1-benzopyran-7-yl 4-methoxybenzene-1-sulfonate

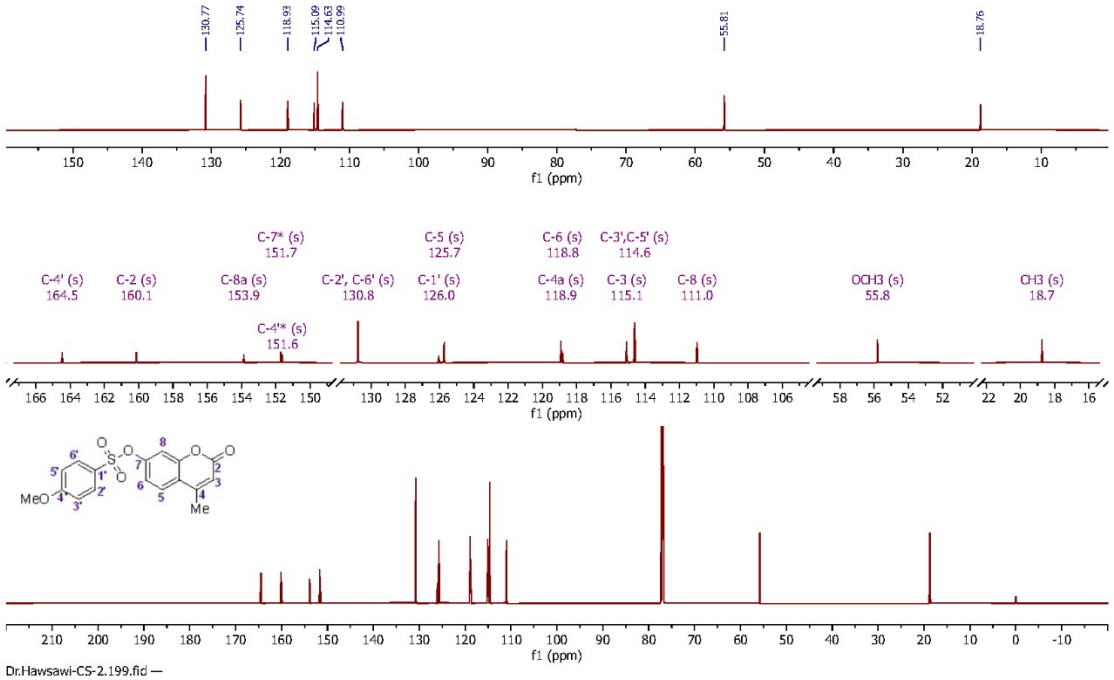
^{1}H NMR (600 MHz, $CDCl_3$) δ 7.78 (2H, d, *J* = 8.9 Hz, H-2', H-6'), 7.57 (1H, d, *J* = 8.7 Hz, H-5), 7.10 (1H, dd, *J* = 8.7, 2.3 Hz, H-6), 6.99 (2H, d, *J* = 8.9 Hz, H-3', H-5'), 6.86 (1H, d, *J* = 2.3 Hz, H-8), 6.28 (1H, d, *J* = 1.4 Hz, H-3), 3.91 (2H, s, OCH_3), 2.42 (3H, d, *J* = 1.4 Hz, CH_3)



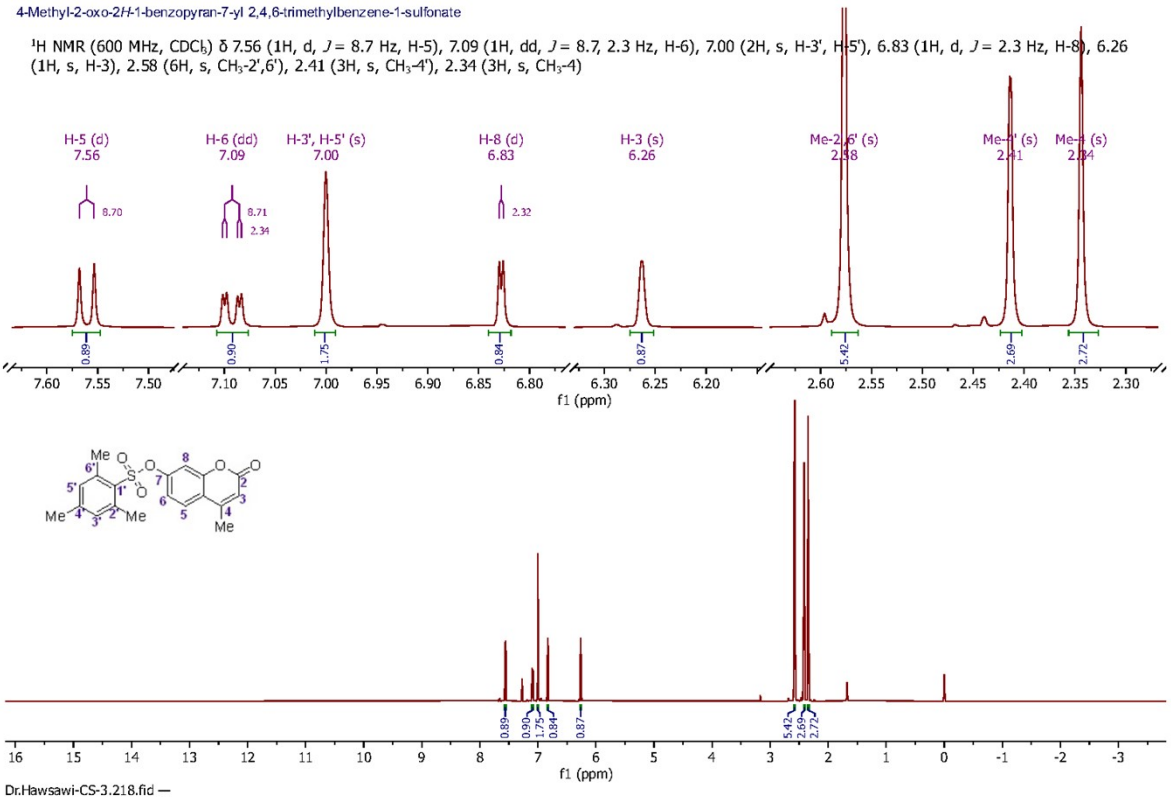
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 2

4-Methyl-2-oxo-2*H*-1-benzopyran-7-yl 4-methoxybenzene-1-sulfonate

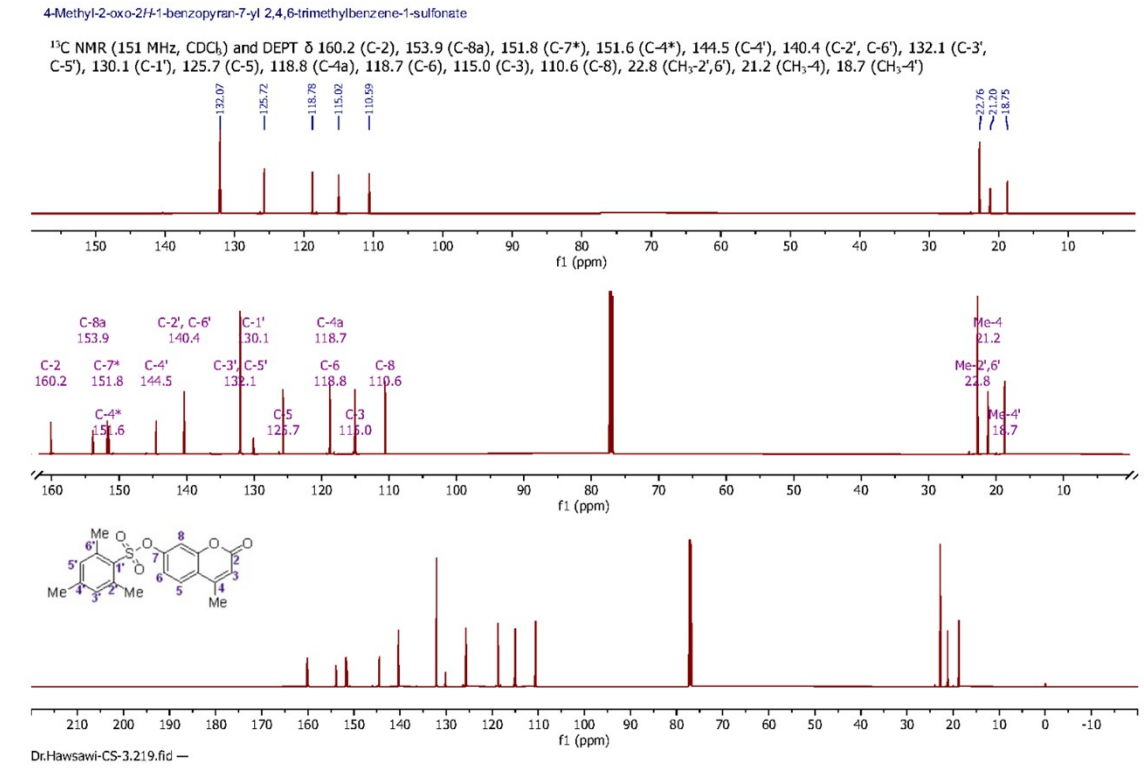
^{13}C NMR (151 MHz, $CDCl_3$) and DEPT δ 164.5 (C-4'), 160.1 (C-2), 153.9 (C-8a), 151.7 (C-7*), 151.6 (C-4'*), 130.8 (C-2', C-6'), 126.1 (C-1'), 125.7 (C-5), 118.9 (C-4a), 118.8 (C-6), 115.1 (C-3), 114.6 (C-3', C-5'), 111.0 (C-8), 55.8 (OCH_3), 18.7 (CH_3)



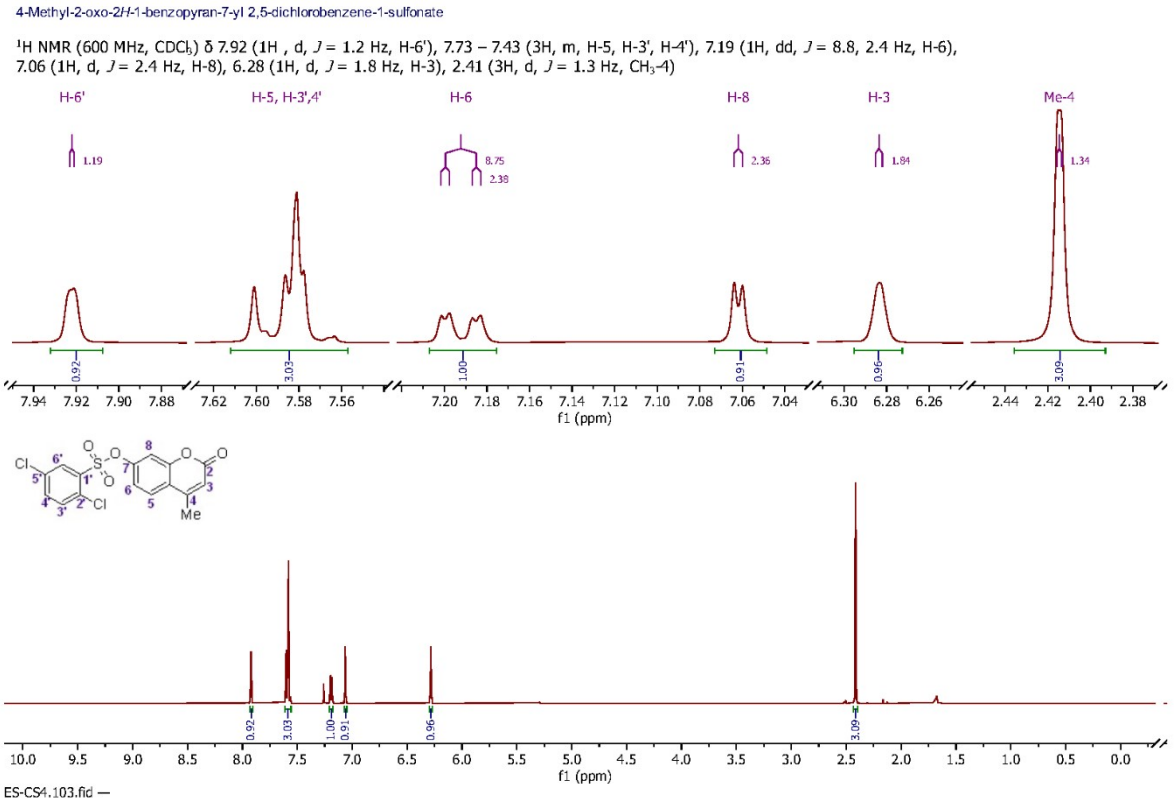
^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 3



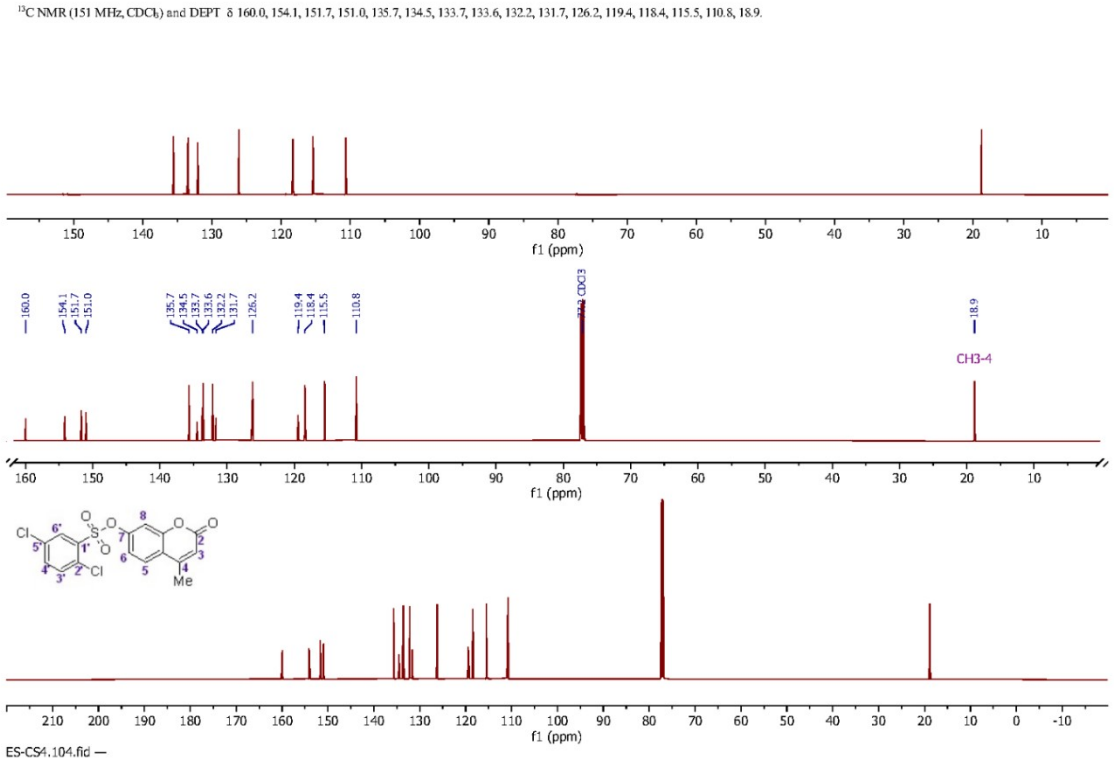
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 3



^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 4



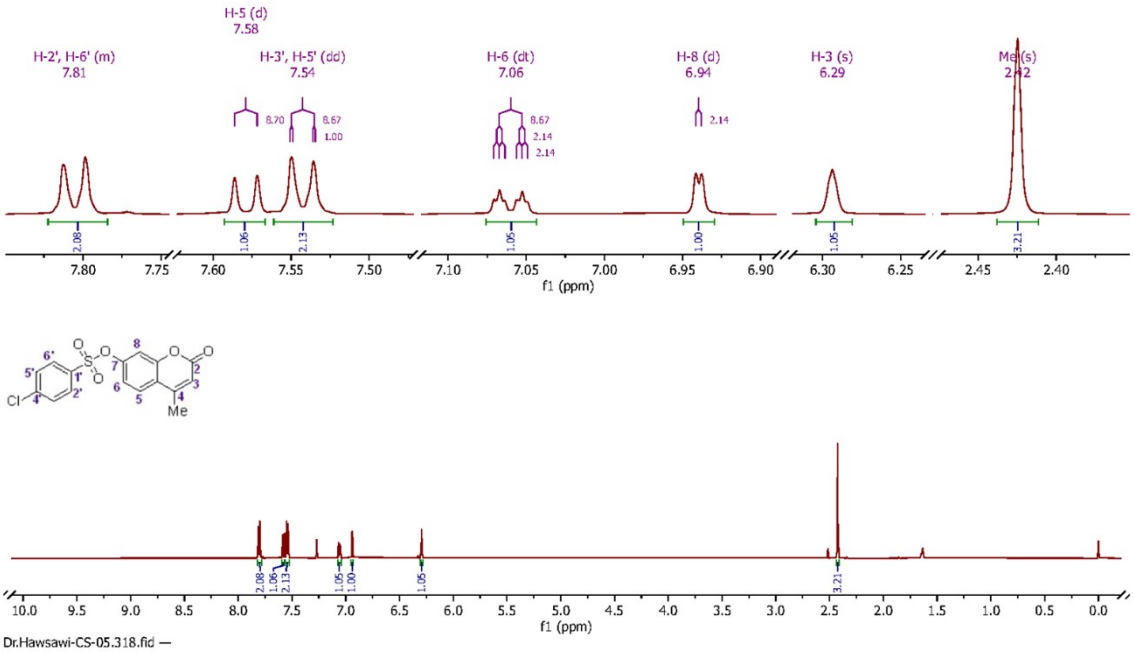
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 4



^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 5

4-Methyl-2-oxo-2*H*-1-benzopyran-7-yl 4-chlorobenzene-1-sulfonate

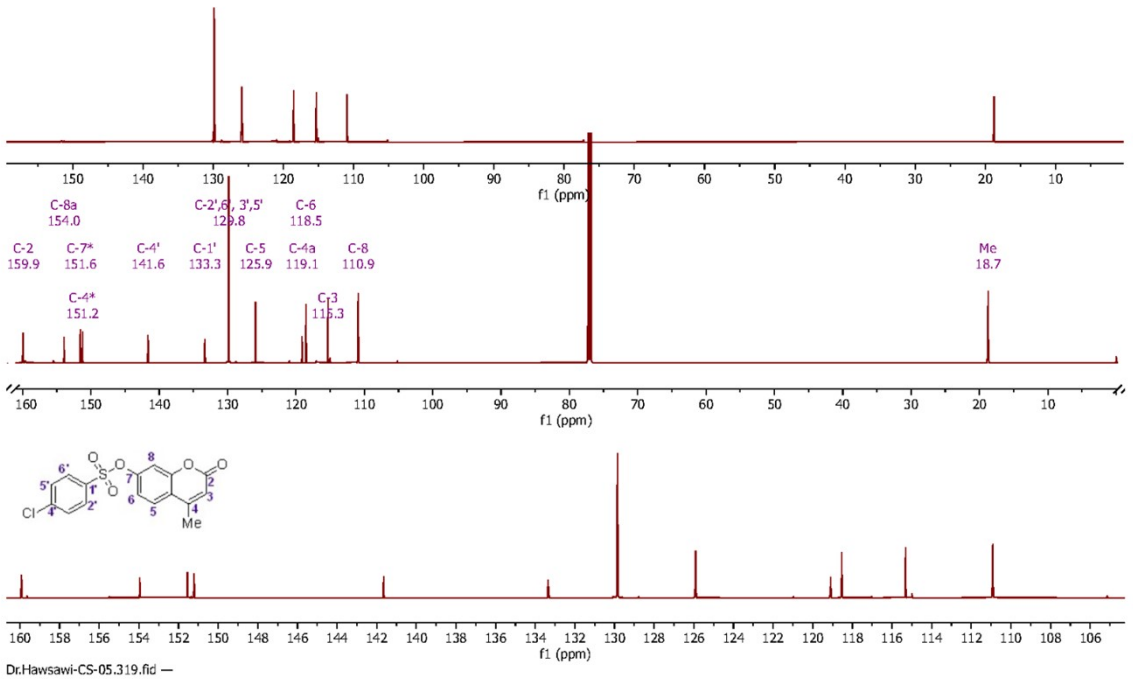
^{1}H NMR (600 MHz, $CDCl_3$) δ 7.85 – 7.76 (2H, m, H-2', H-6'), 7.58 (1H, d, J = 8.7 Hz, H-5), 7.54 (2H, dd, J = 8.7, 1.0 Hz, H-3', H-5')), 7.06 (1H, dt, J = 8.7, 2.1 Hz, H-6), 6.94 (1H, d, J = 2.1 Hz, H-8), 6.29 (1H, s, H-3), 2.42 (3H, s, CH_3).



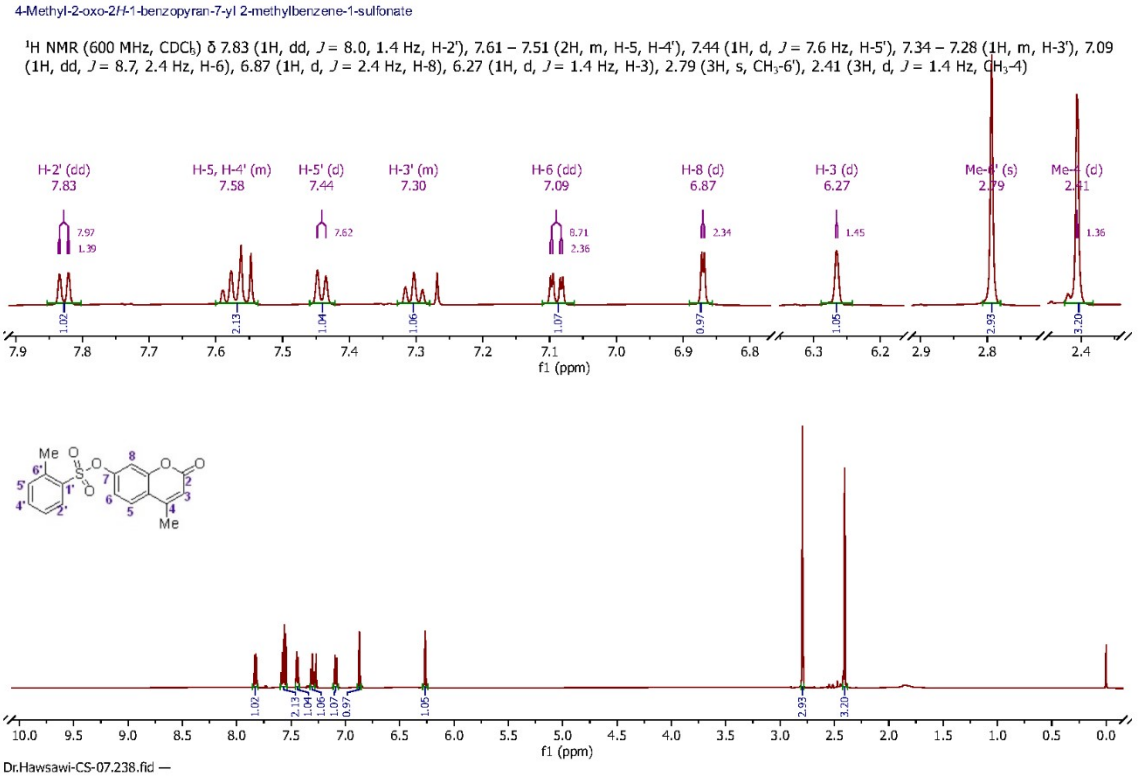
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 5

4-Methyl-2-oxo-2*H*-1-benzopyran-7-yl 4-chlorobenzene-1-sulfonate

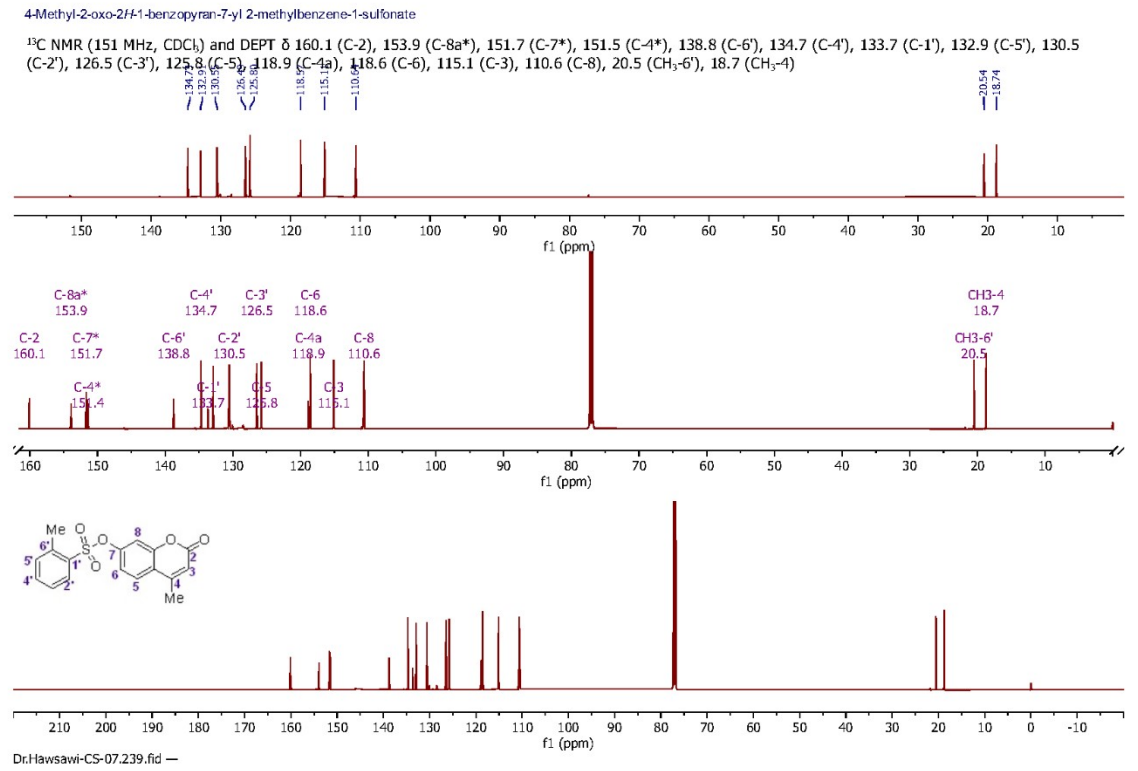
^{13}C NMR (151 MHz, $CDCl_3$) and DEPT δ 159.9 (C-2), 154.0 (C-8a), 151.6 (C-7*), 151.2 (C-4*), 141.7 (C-4'), 133.4 (C-1'), 129.9 (C-2',6',3',5'), 125.9 (C-5), 119.1 (C-4a), 118.5 (C-6), 115.3 (C-3), 110.9 (C-8), 18.7 (CH_3-4)



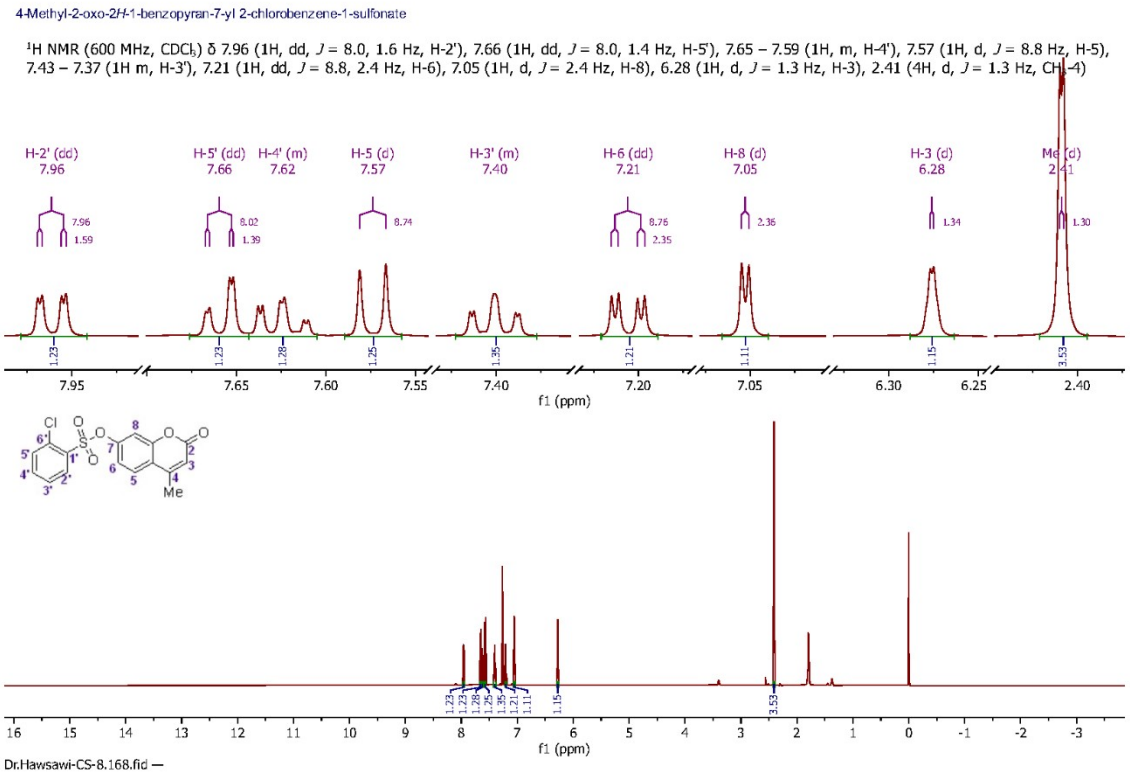
^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 6



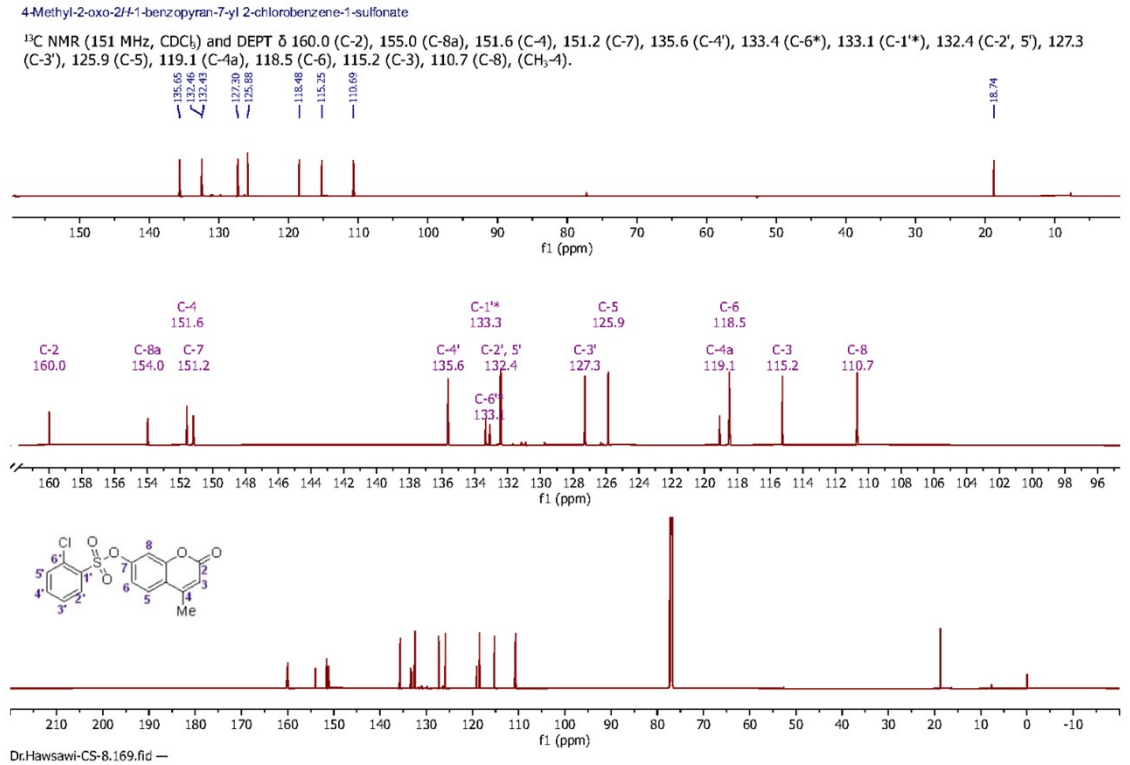
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 6



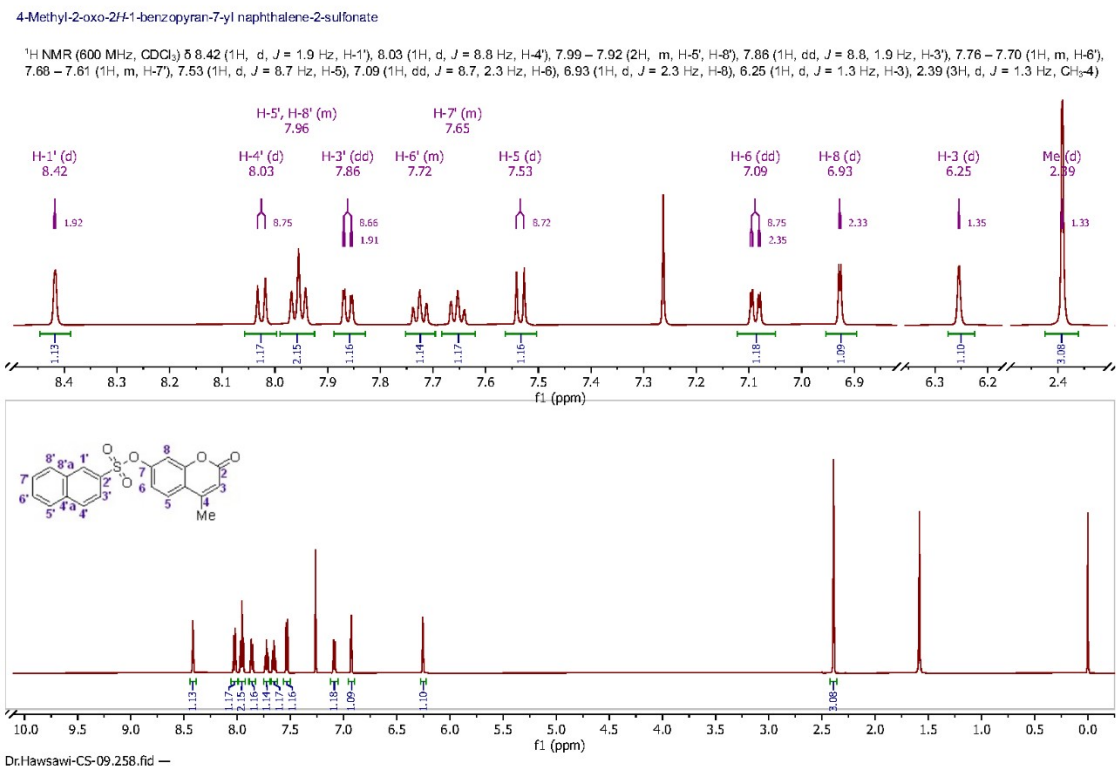
^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 7



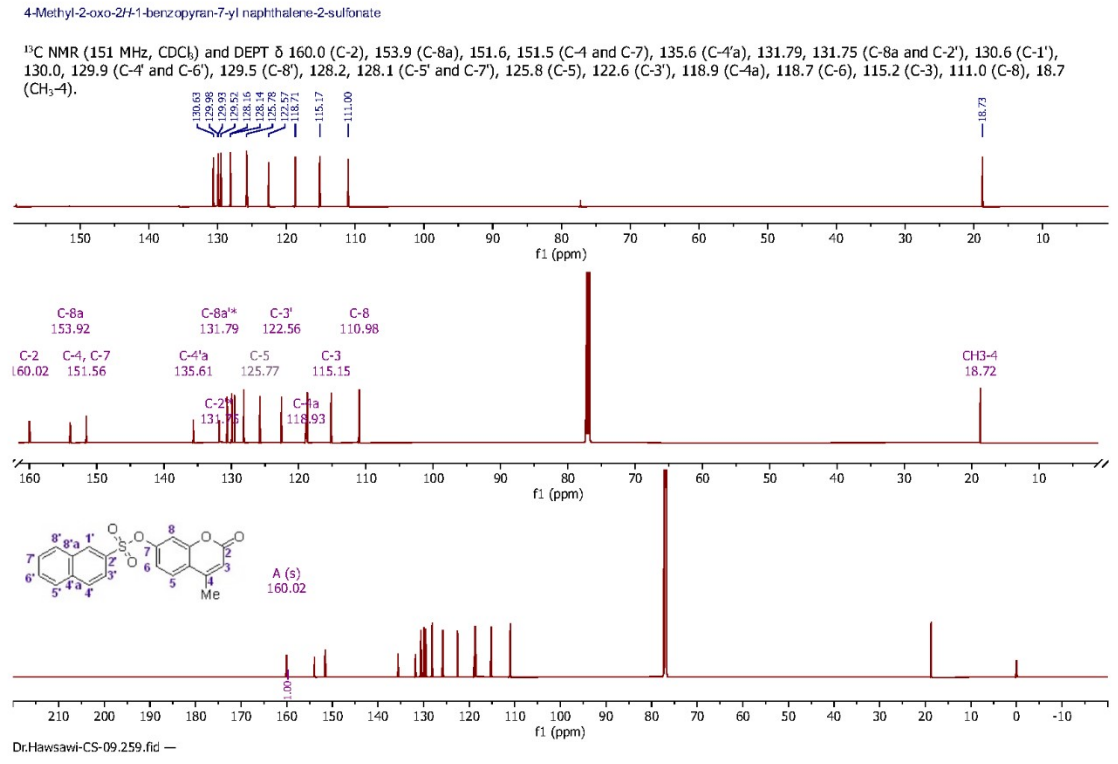
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 7



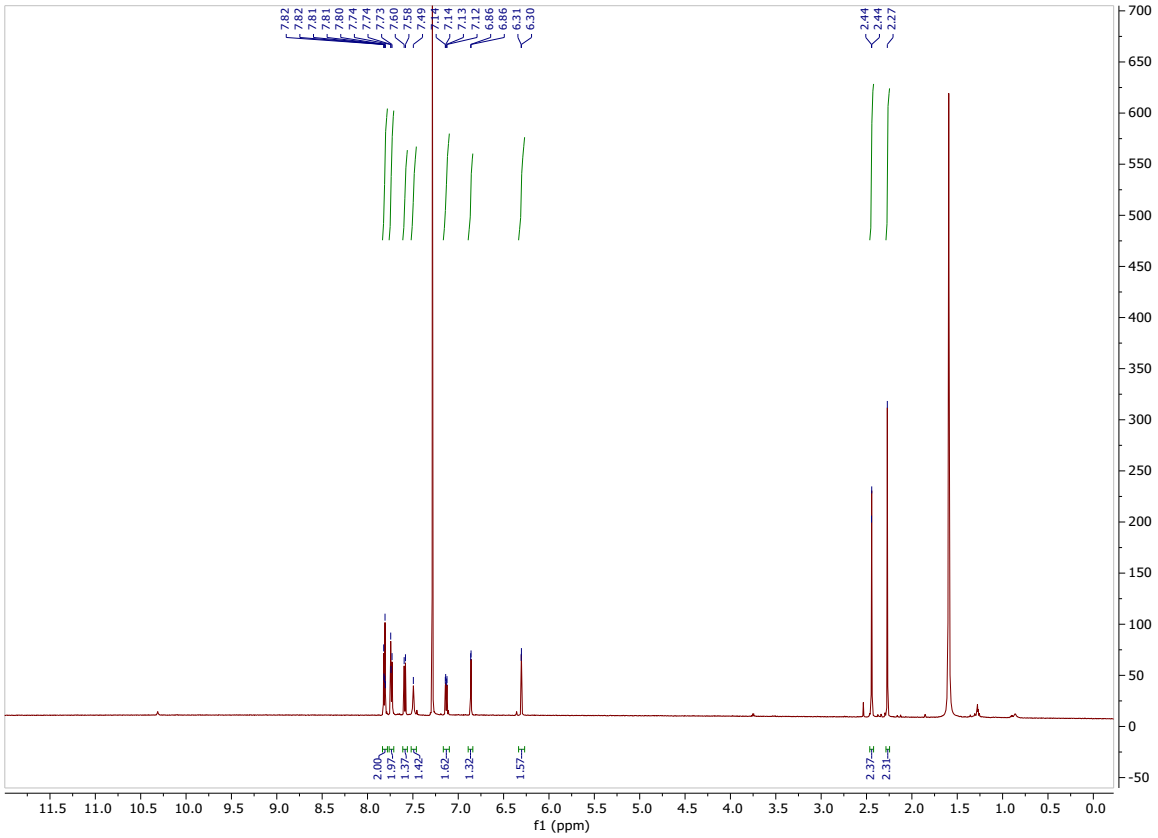
^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 8



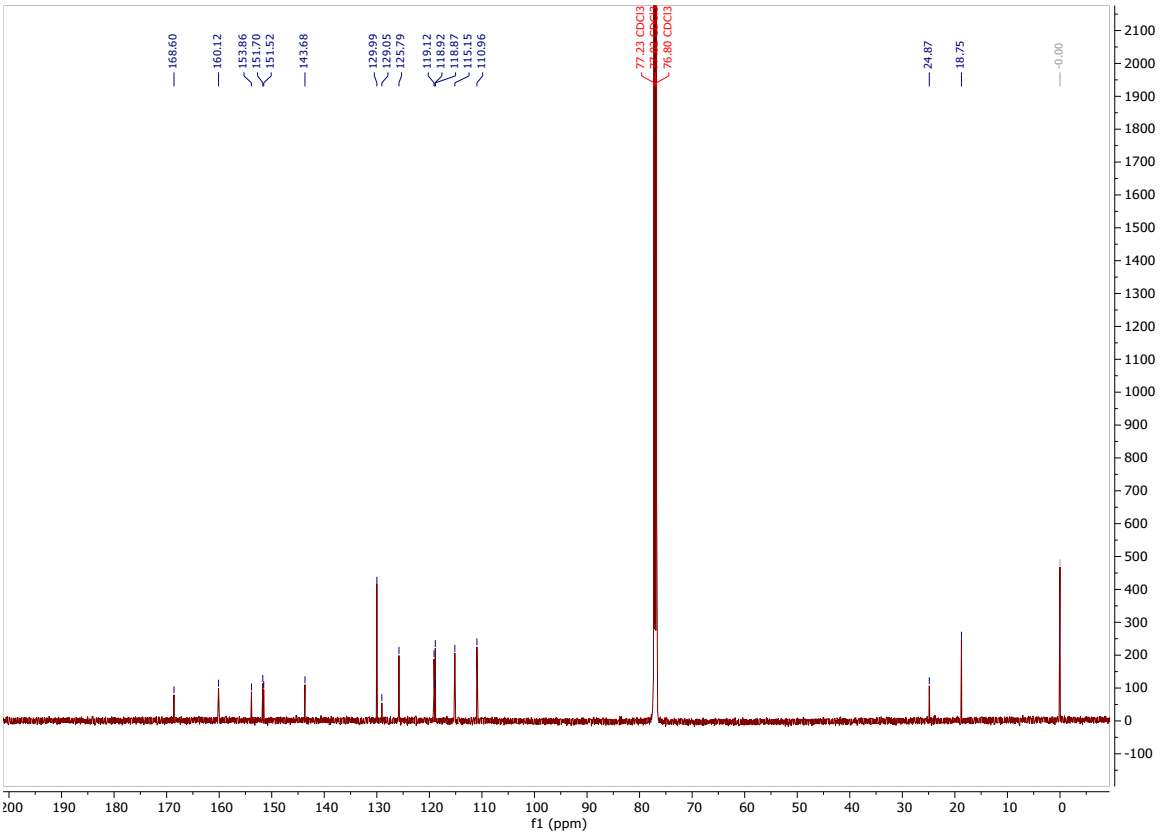
^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 8



^{1}H-NMR Spectrum (600 MHz, $CDCl_3$) of Compound 9

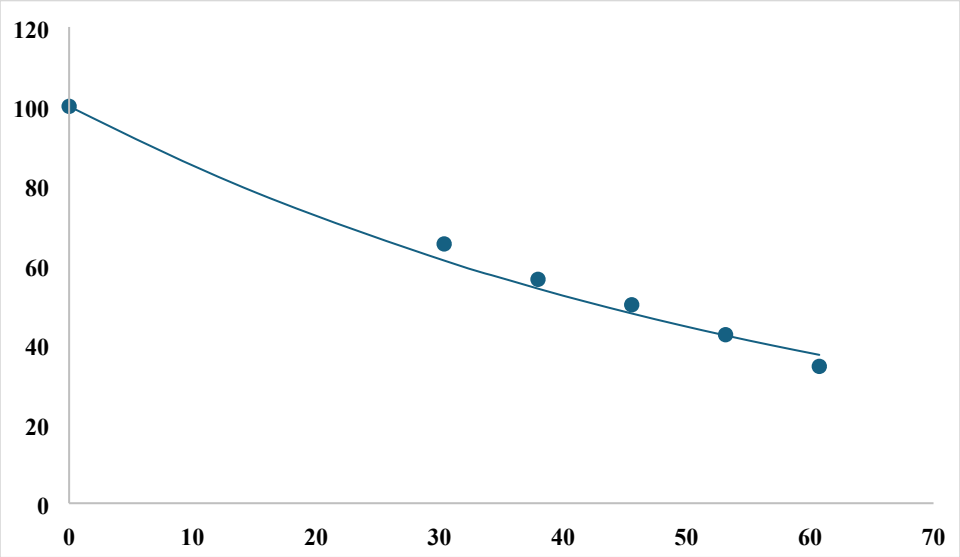


^{13}C-NMR Spectrum (151 MHz, $CDCl_3$) of Compound 9

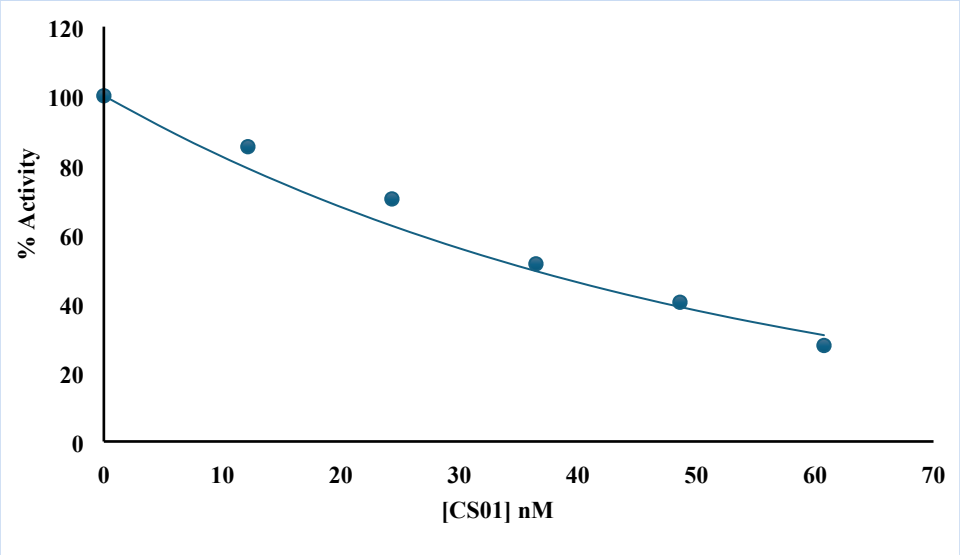


IC_{50} Curve Graphs of All the Synthesized Compounds against AChE and BChE

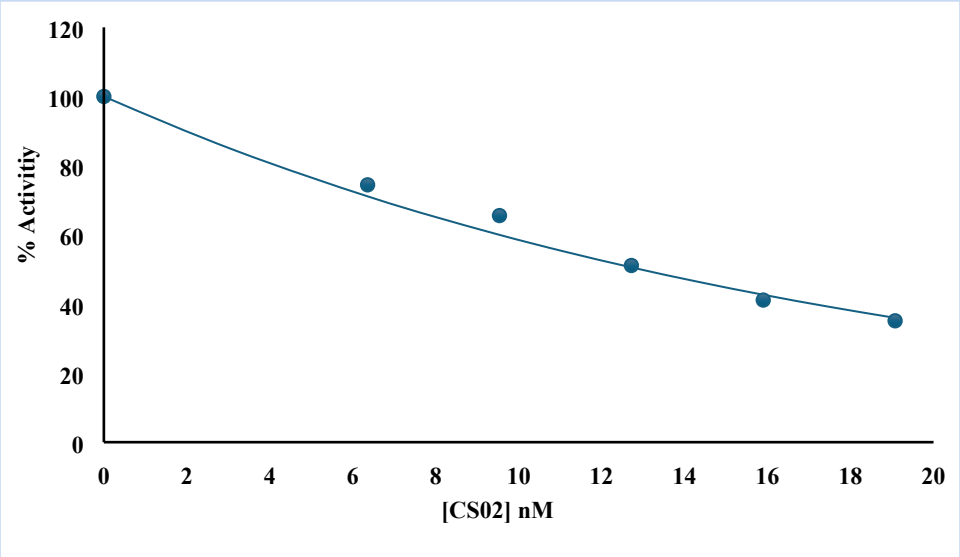
Compound 1 (AChE)



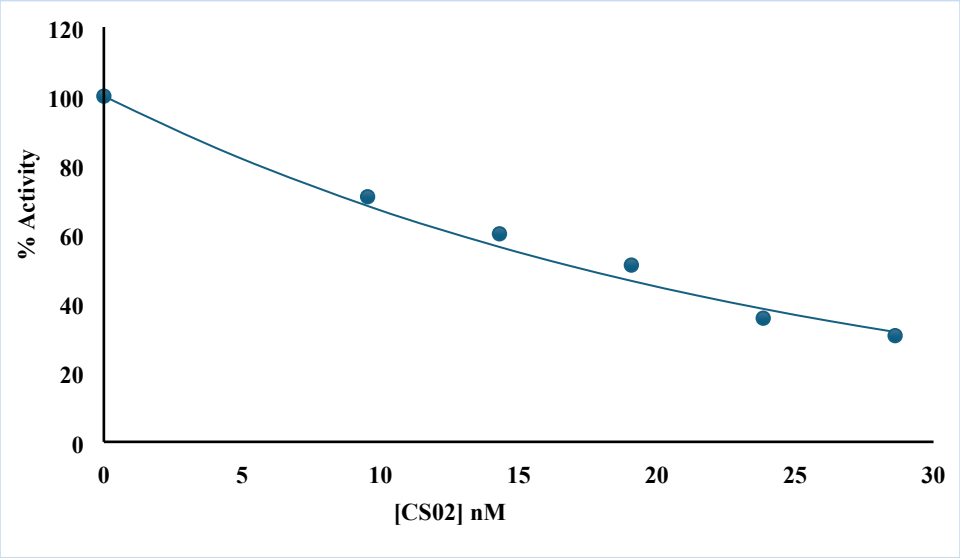
Compound 1 (BChE)



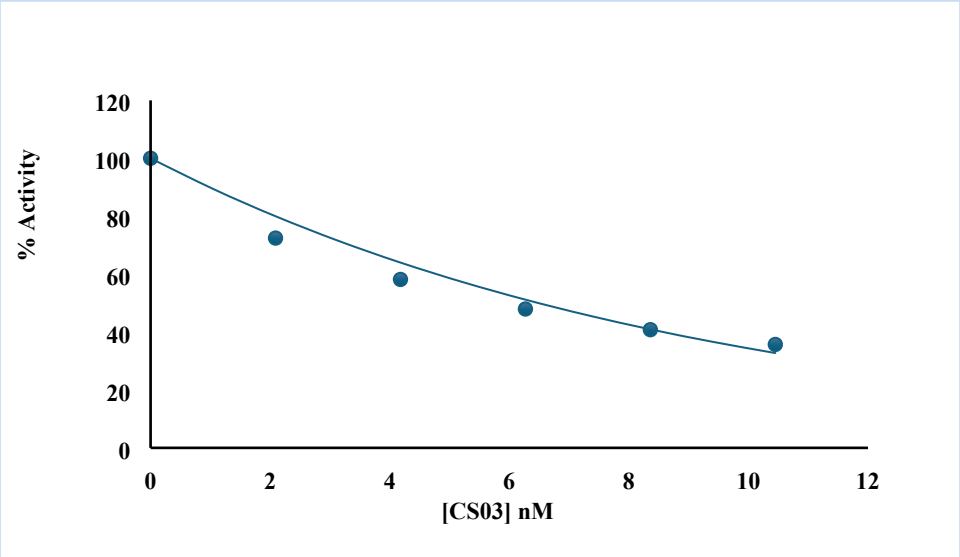
Compound 2 (AChE)



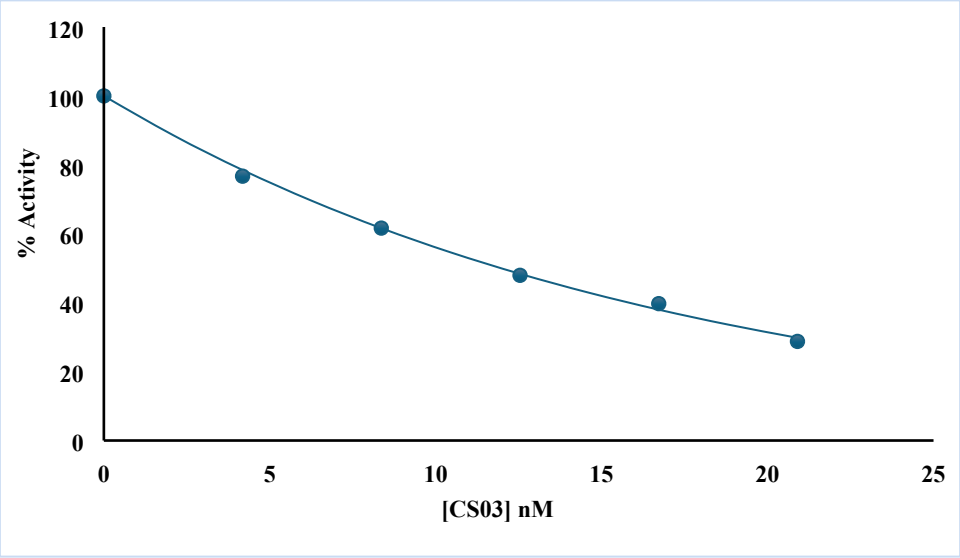
Compound 2 (BChE)



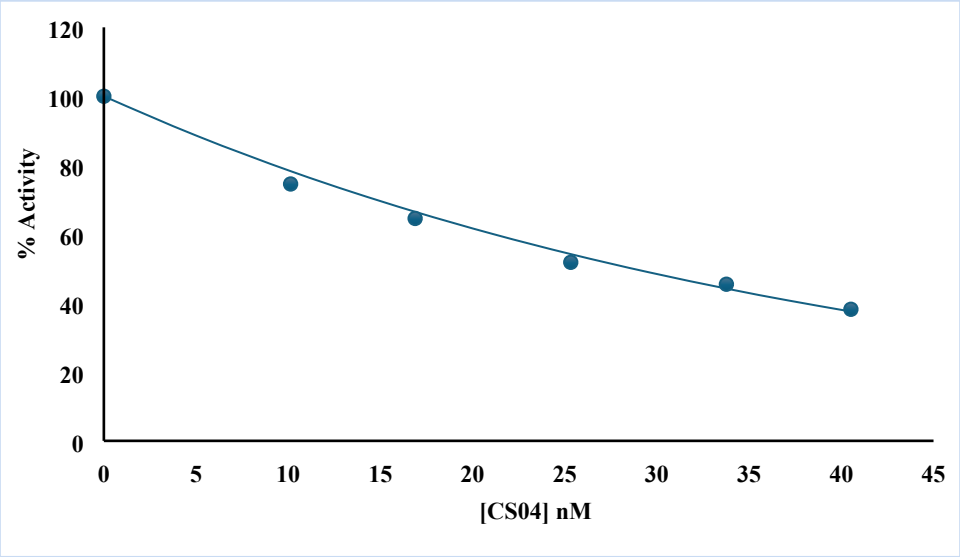
Compound 3 (AChE)



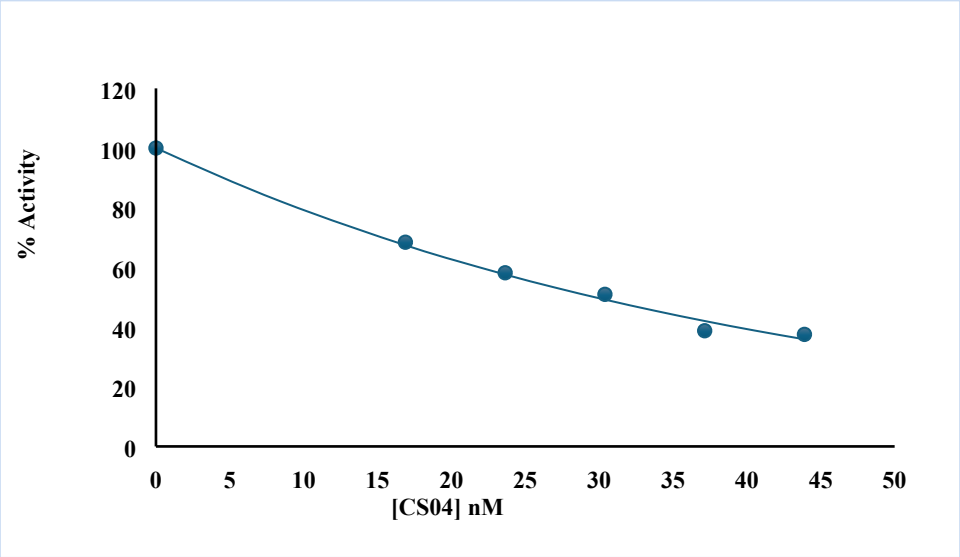
Compound 3 (BChE)



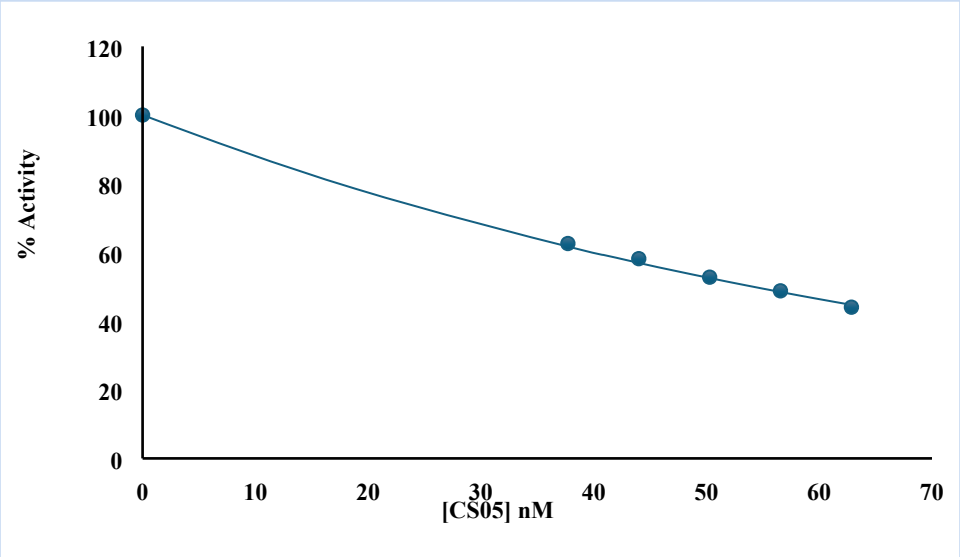
Compound 4 (AChE)



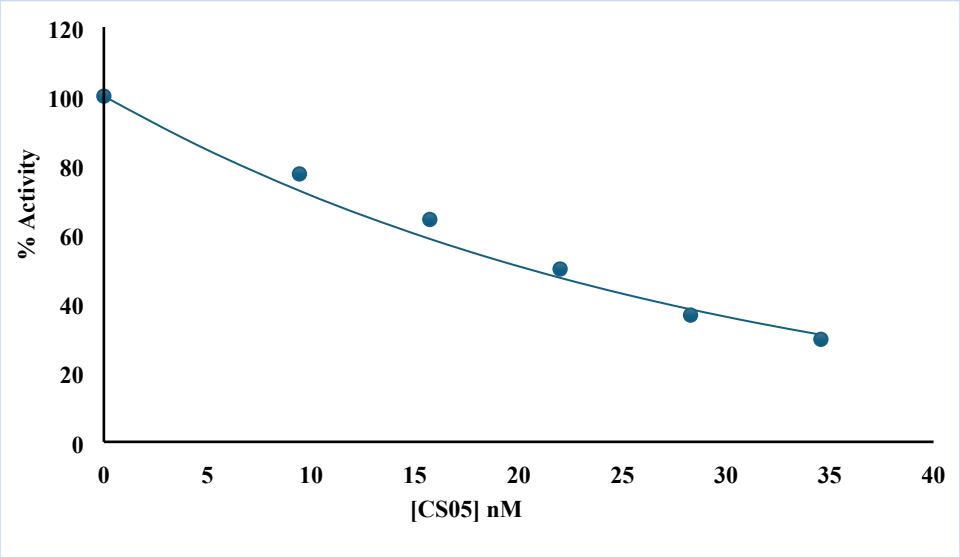
Compound 4 (BChE)



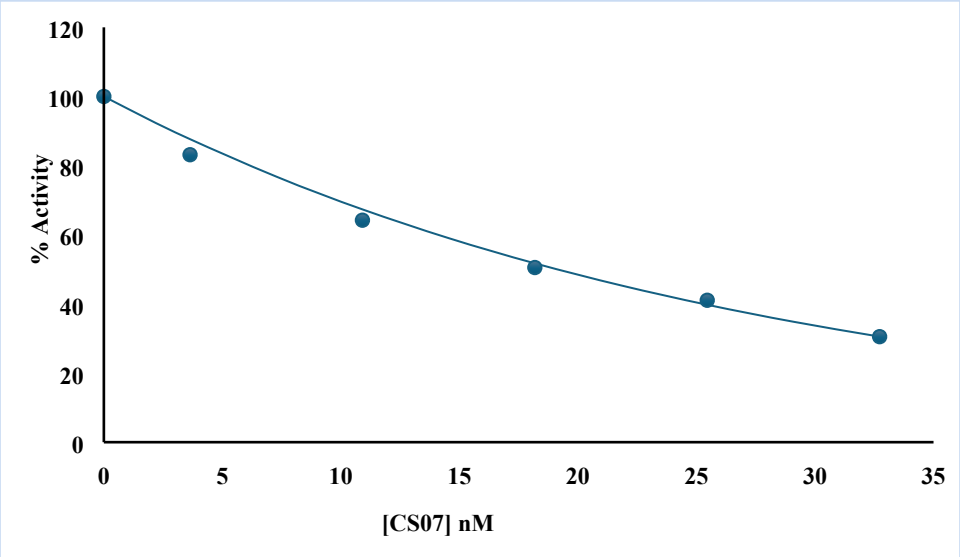
Compound 5 (AChE)



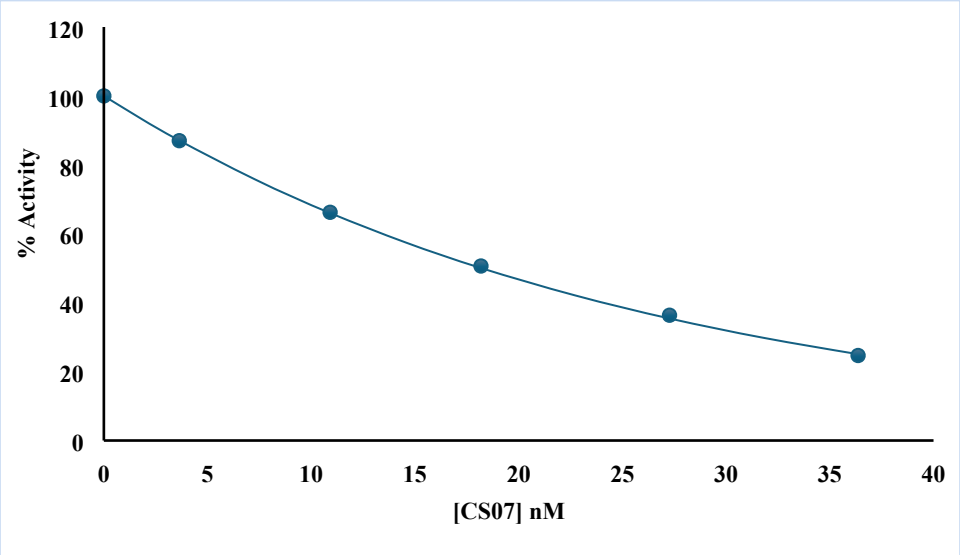
Compound 5 (BChE)



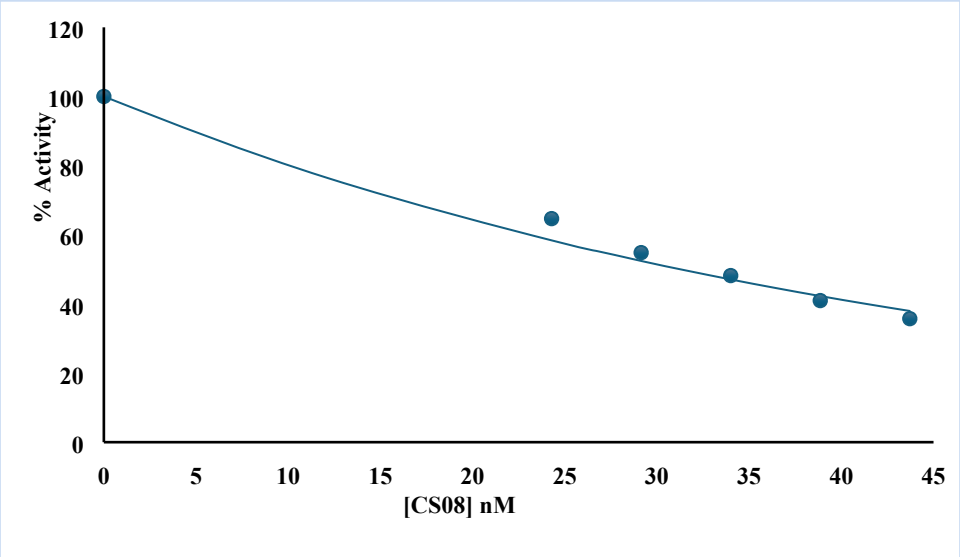
Compound 6 (AChE)



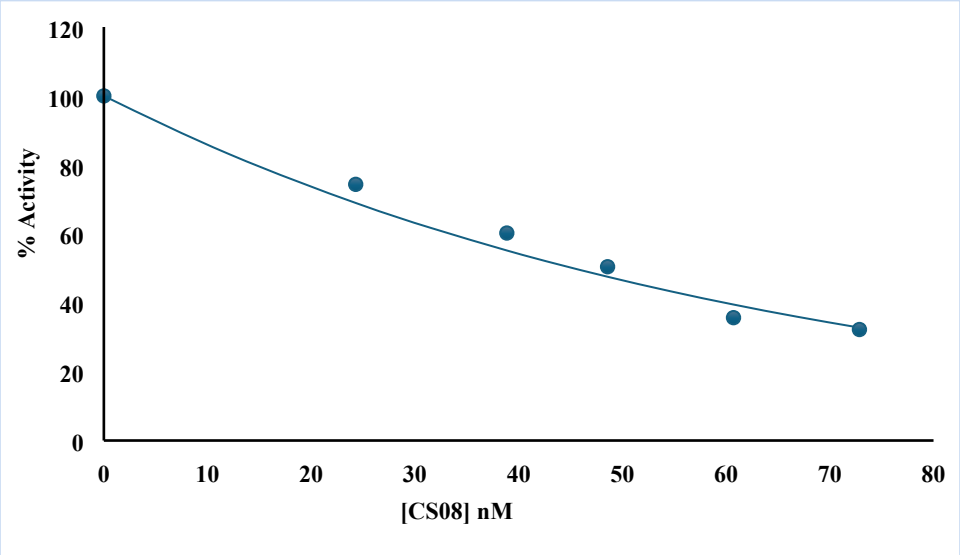
Compound 6 (BChE)



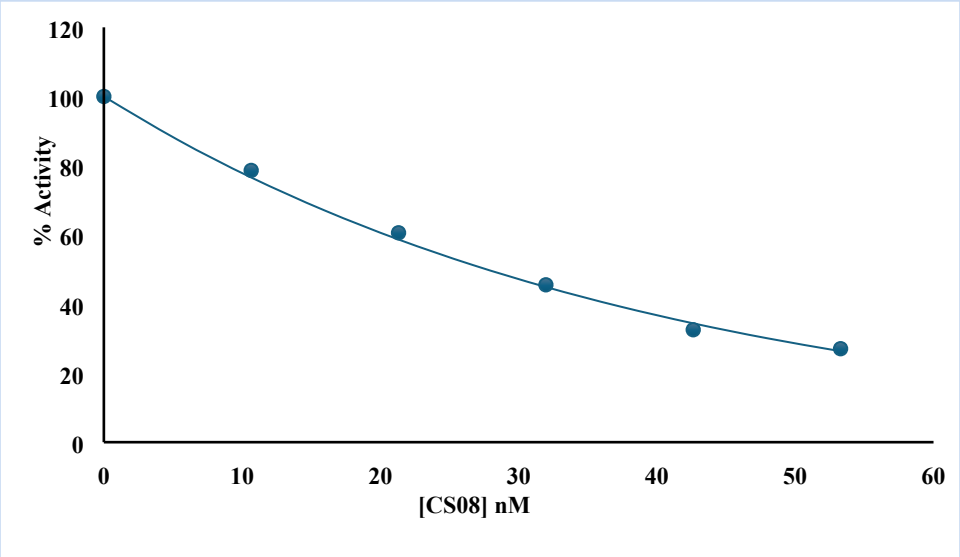
Compound 7 (AChE)



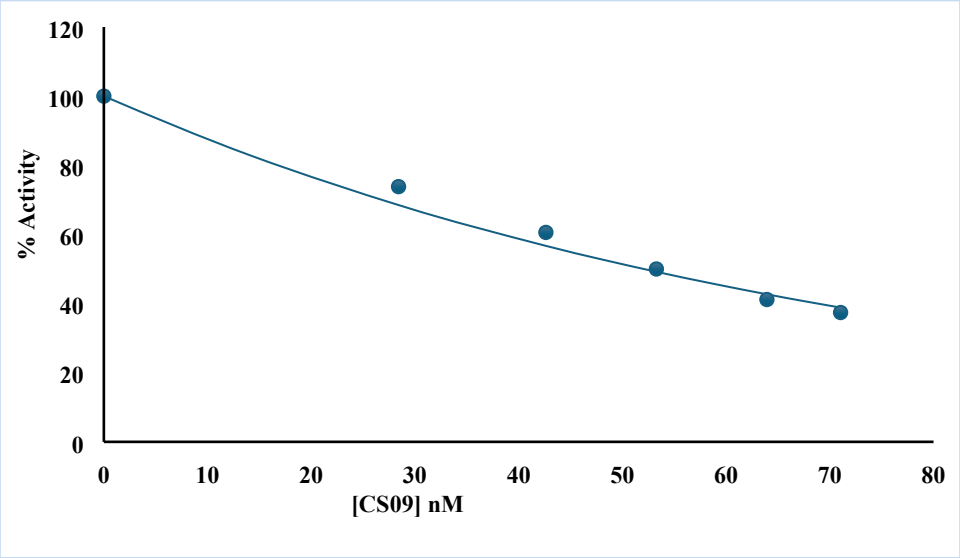
Compound 7 (BChE)



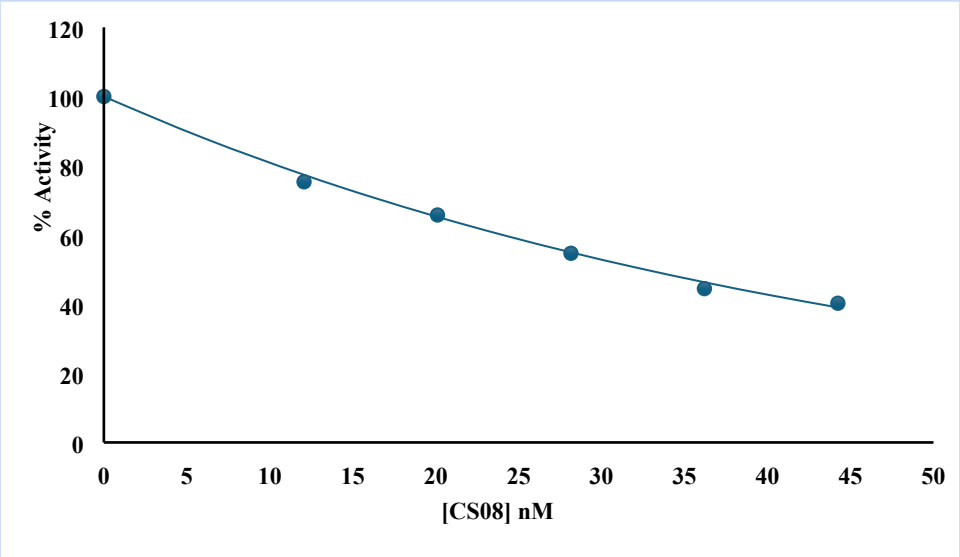
Compound 8 (AChE)



Compound 8 (BChE)



Compound 9 (AChE)



Compound 9 (BChE)