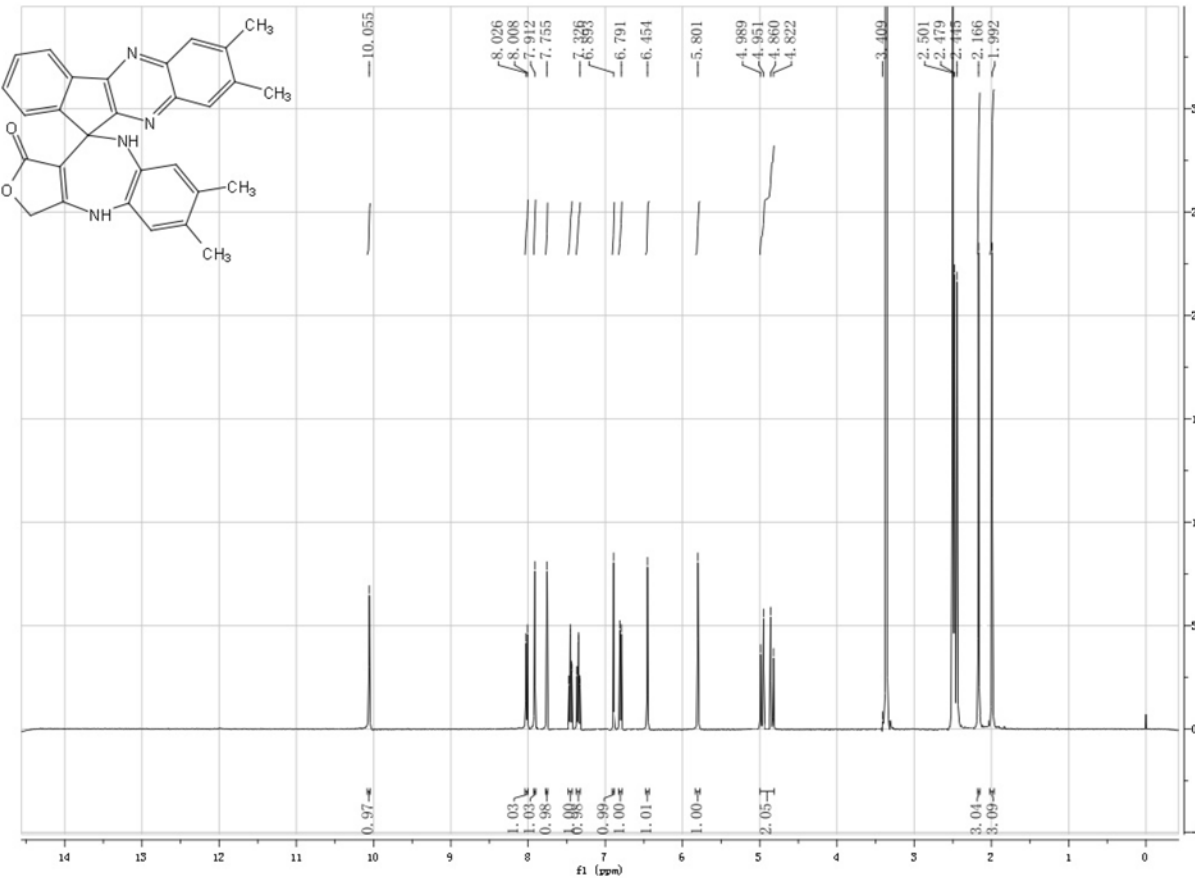


¹H NMR Spectrum of Compound 4a



¹H NMR Spectrum of Compound 4b

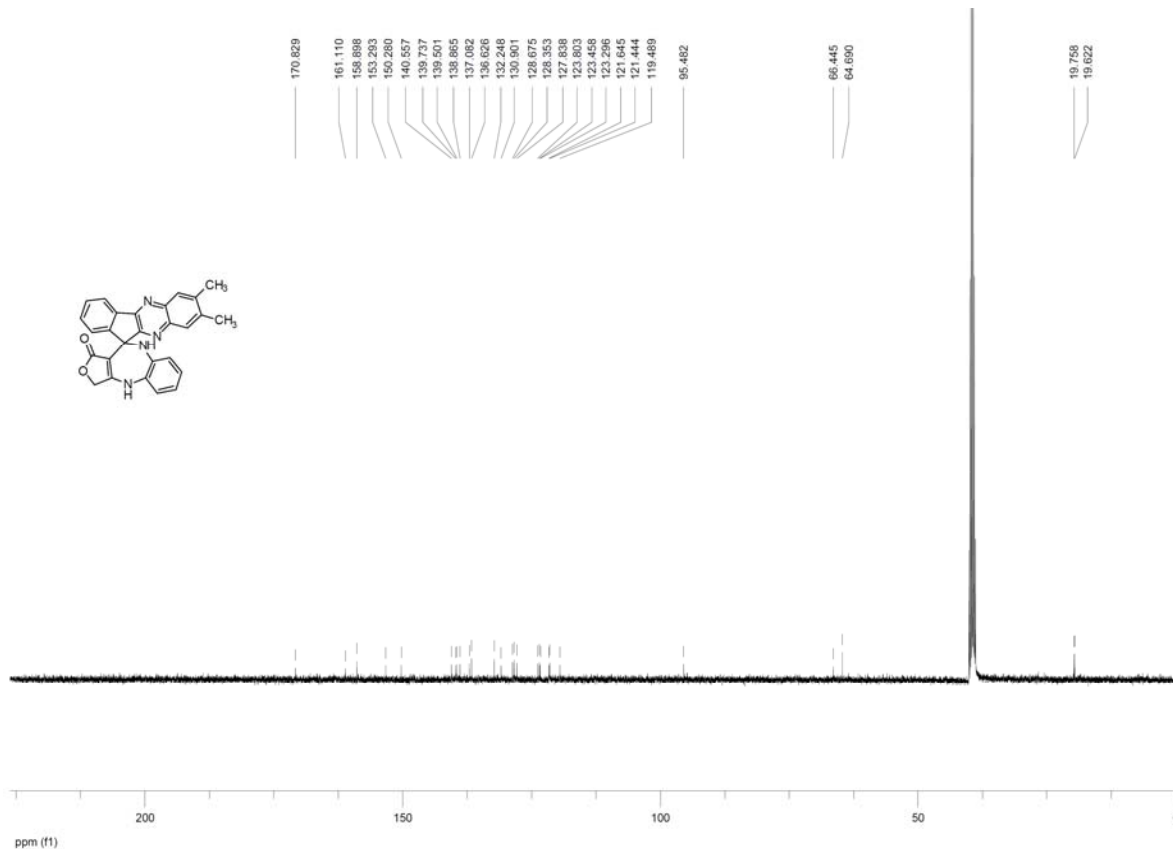
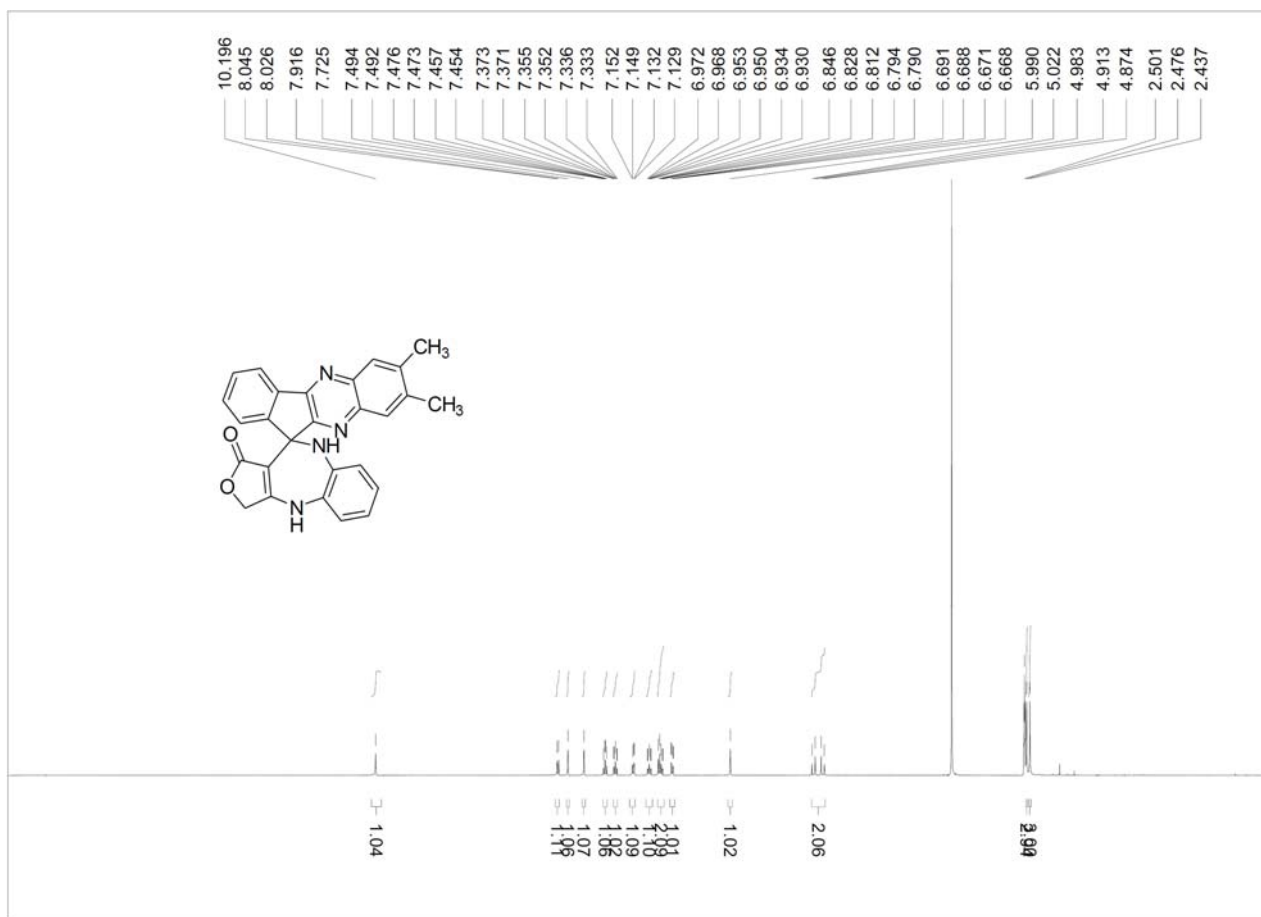
Chemical structure of compound 10 is shown. The ¹H NMR spectrum (CDCl₃) displays peaks at the following chemical shifts (ppm): 10.493, 8.476, 8.335, 8.119, 8.101, 7.602, 7.599, 7.583, 7.581, 7.565, 7.562, 7.542, 7.534, 7.531, 7.515, 7.512, 7.337, 7.023, 7.005, 6.899, 6.466, 5.068, 5.029, 4.968, 4.929, 3.962, and 2.504. Integration values are provided below the baseline: 0.85, 0.88, 0.96, 0.93, 1.94, 0.96, 0.95, 0.97, 2.00, and 0.85.

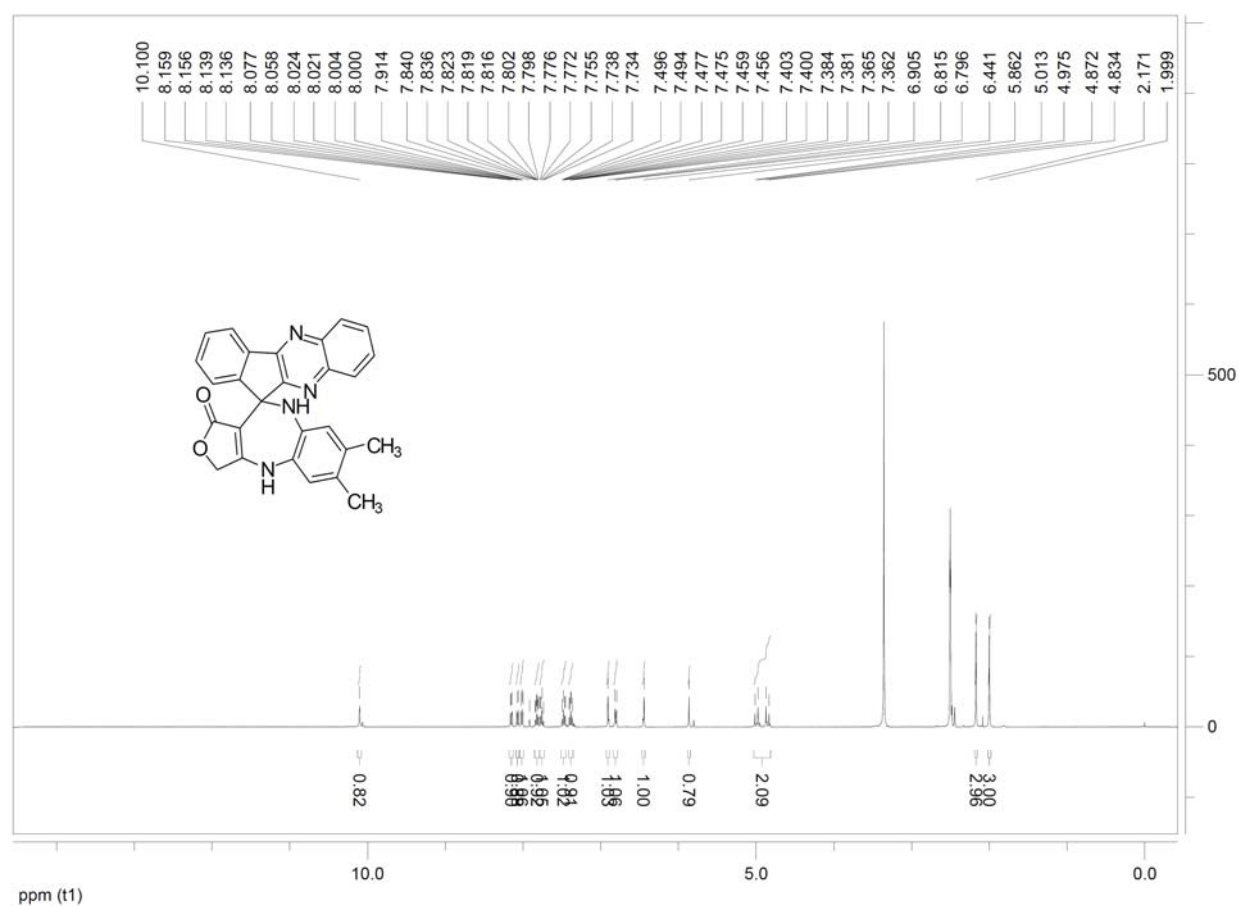
¹H NMR Spectrum of Compound 4c

Chemical structure of the compound is shown above the spectrum. The spectrum displays peaks corresponding to the following chemical shifts (ppm):

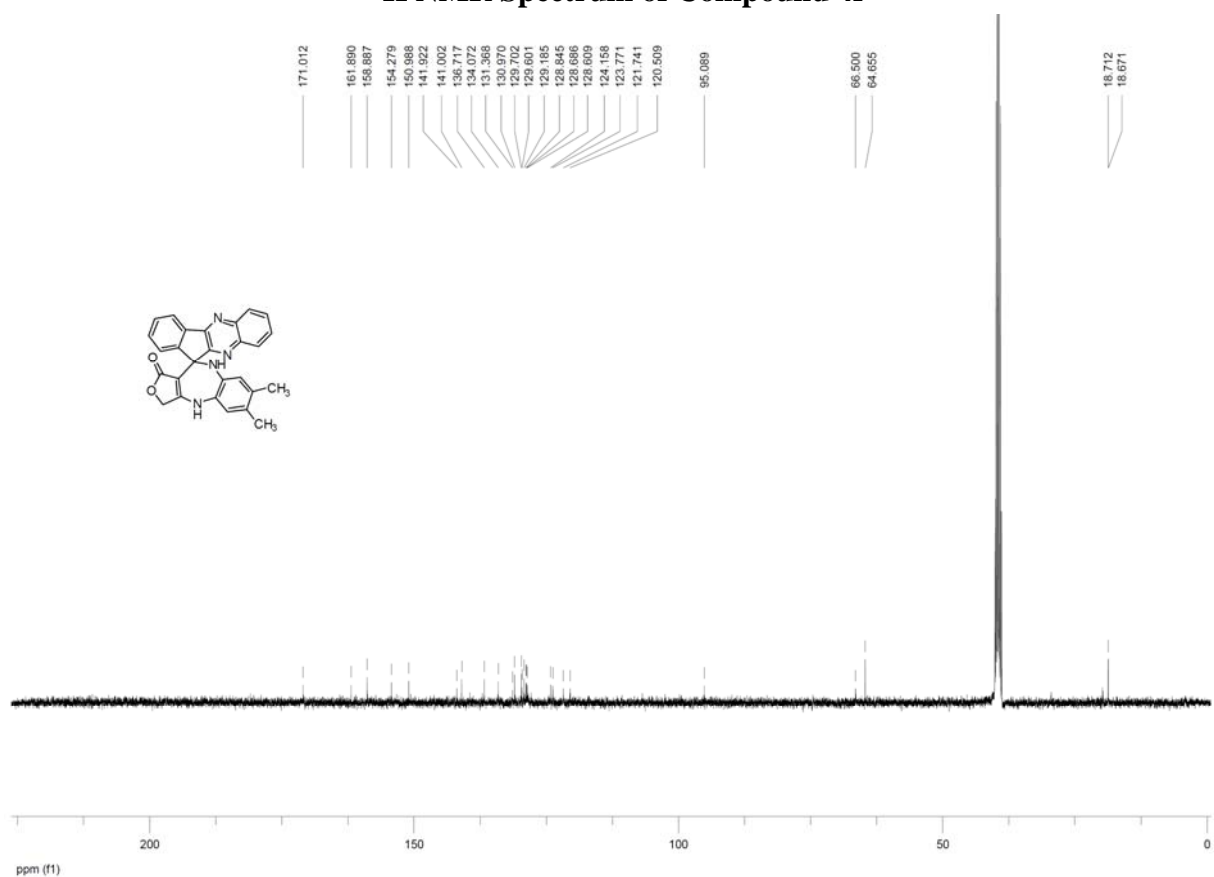
Chemical Shift (ppm)
171.152
162.982
159.089
154.842
150.168
138.755
137.955
137.328
136.511
134.034
133.168
132.879
132.014
130.199
129.216
129.176
128.112
128.215
127.400
126.841
126.696
125.901
126.380
125.889
124.608
124.368
122.184
119.038
115.541
98.215
66.820
64.717

¹³C NMR Spectrum of Compound 4d

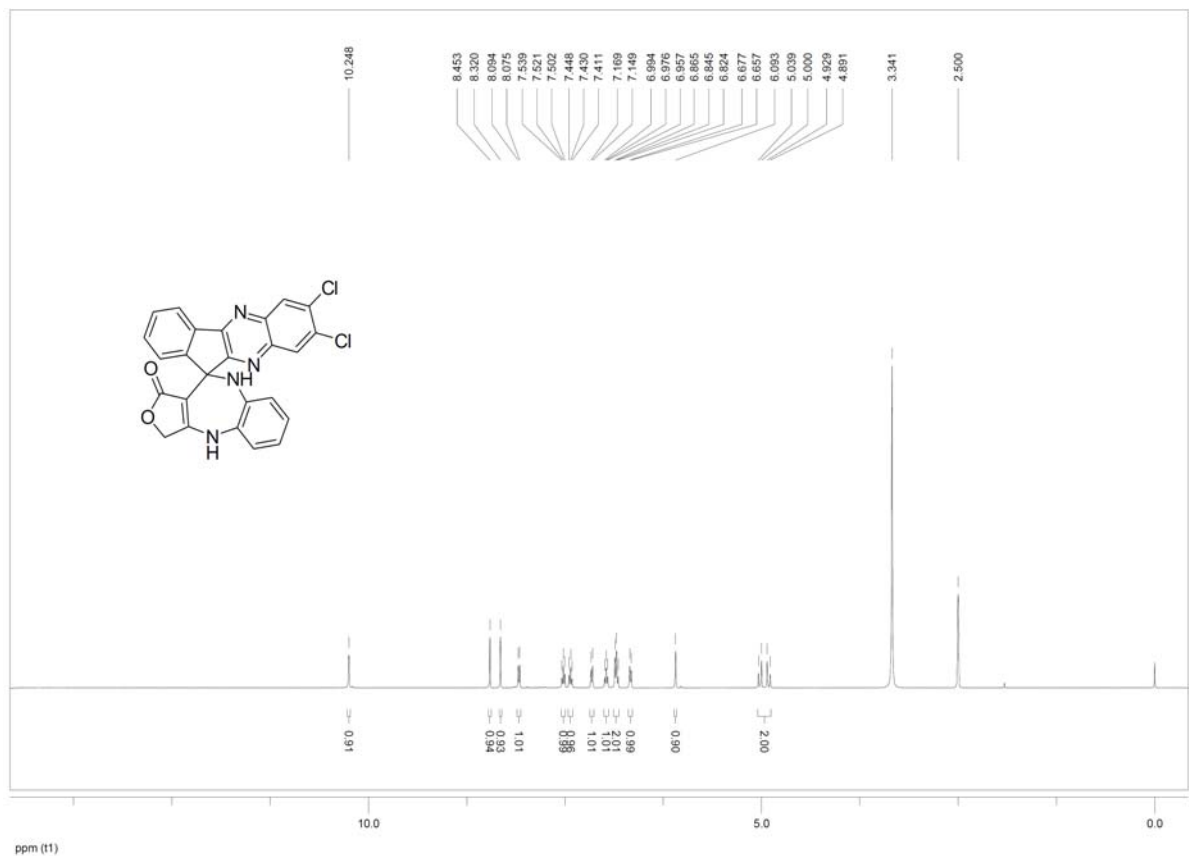




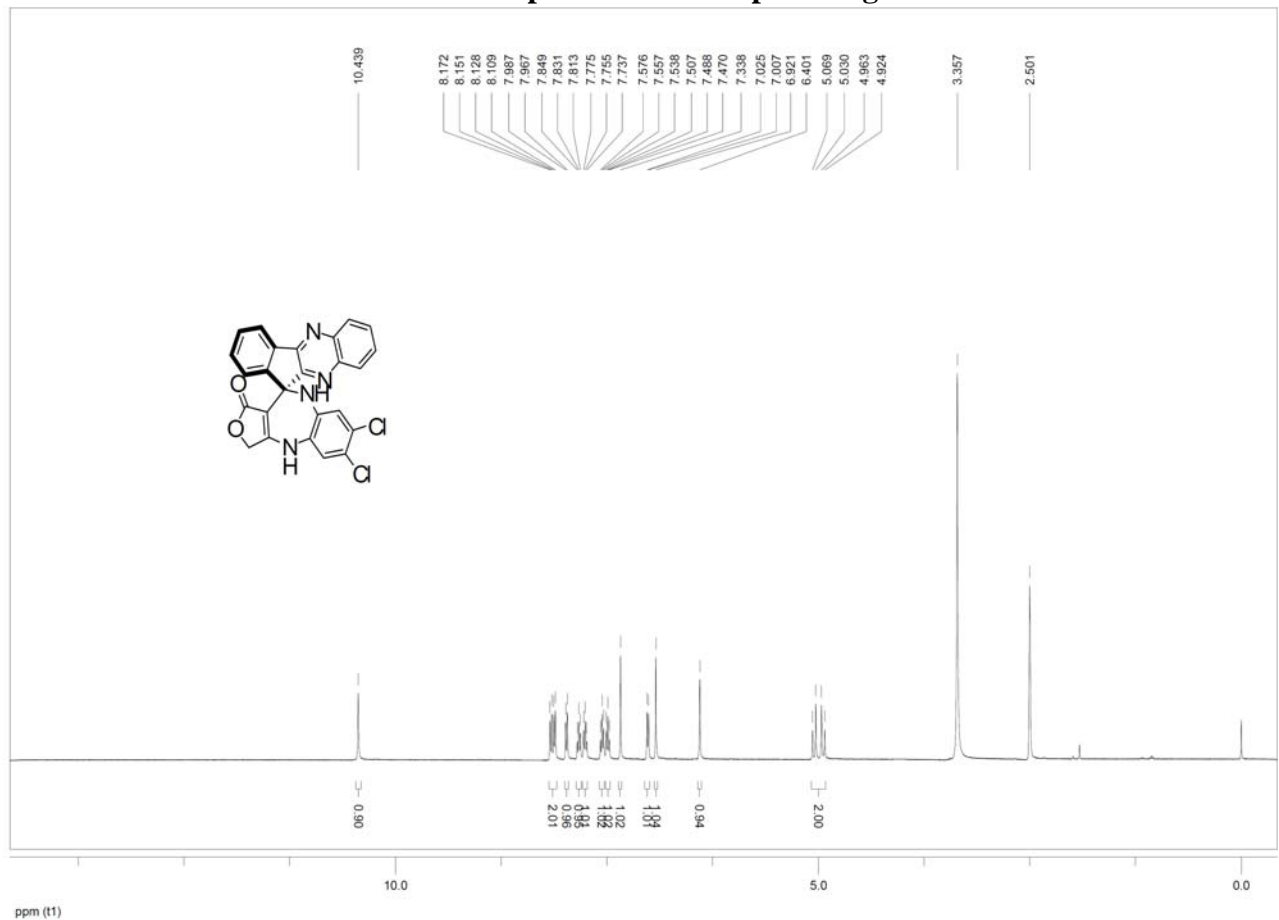
¹H NMR Spectrum of Compound 4f



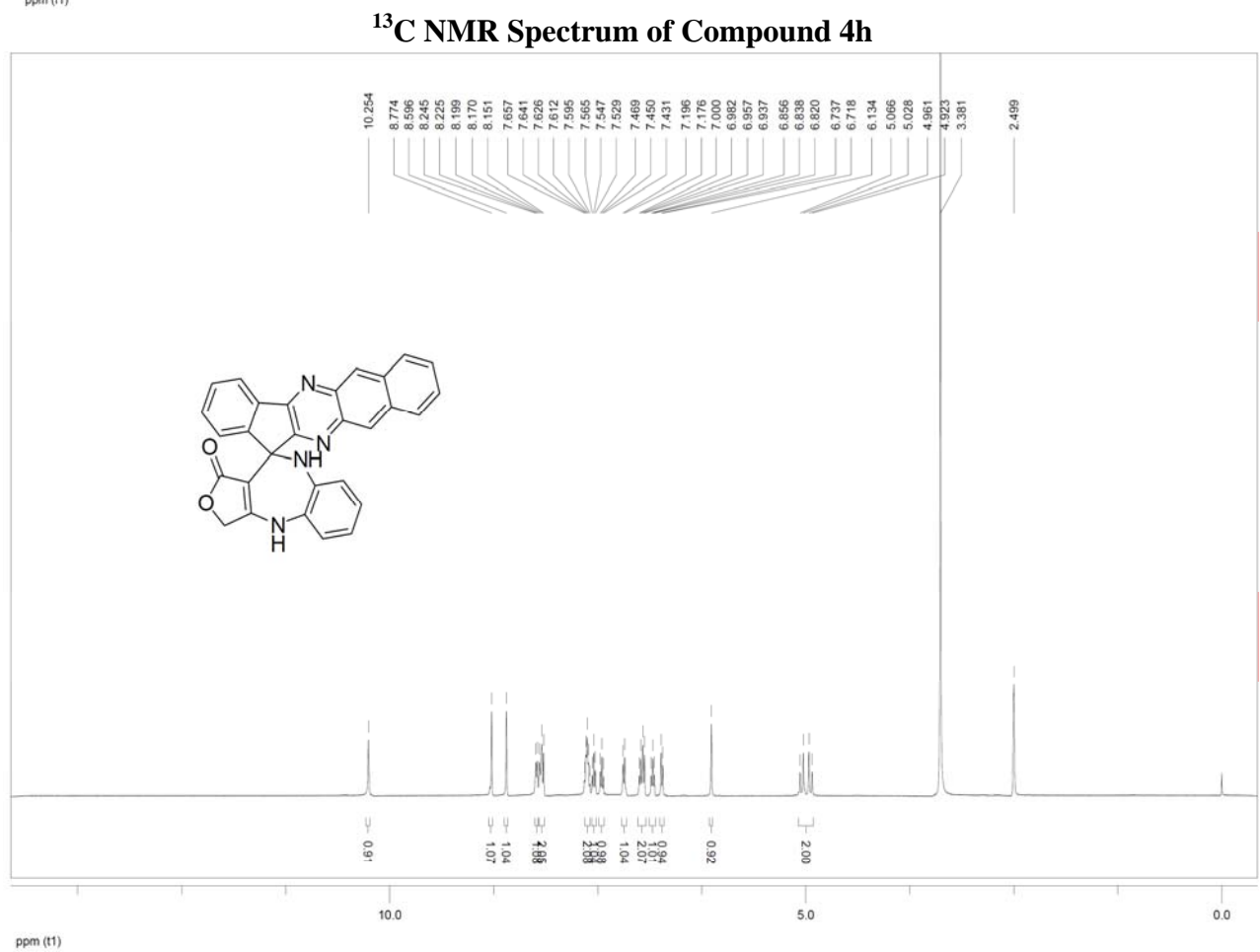
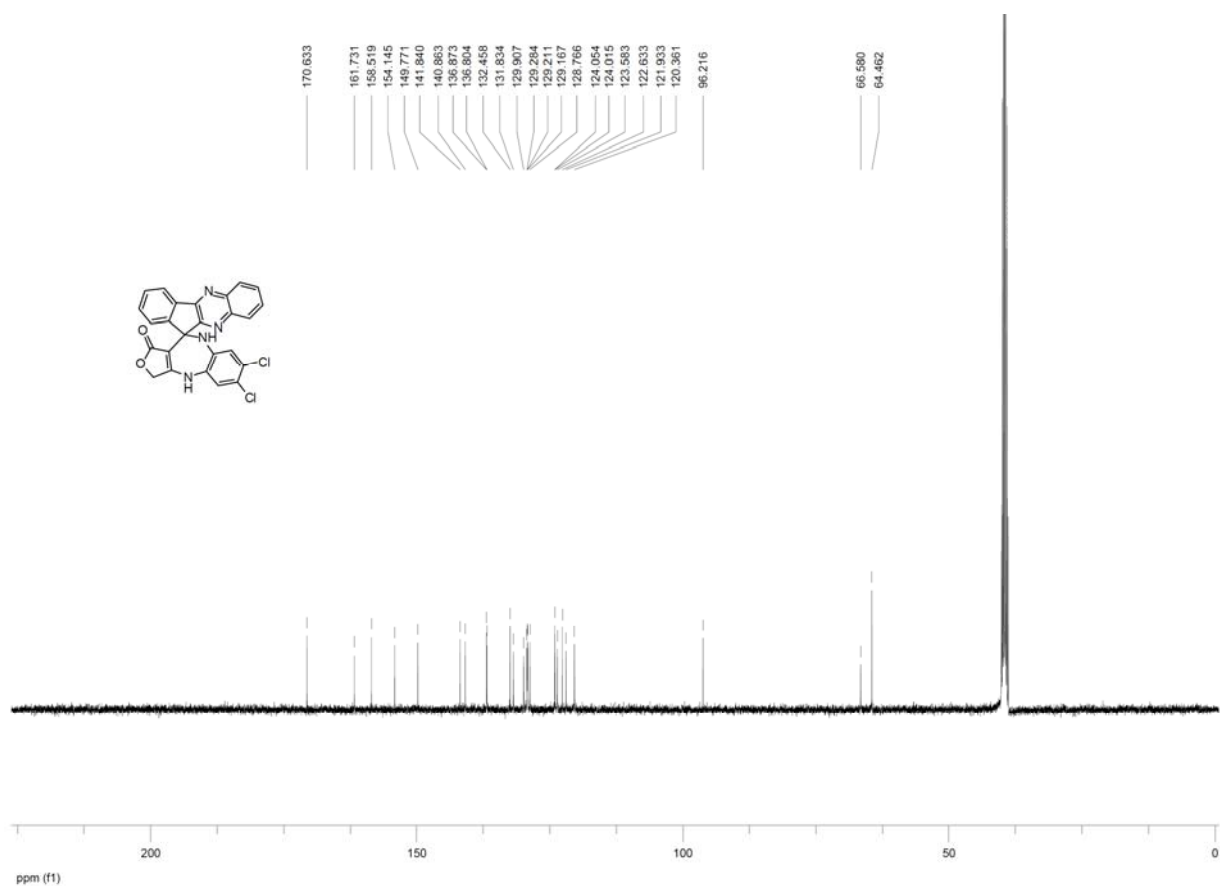
¹³C NMR Spectrum of Compound 4f

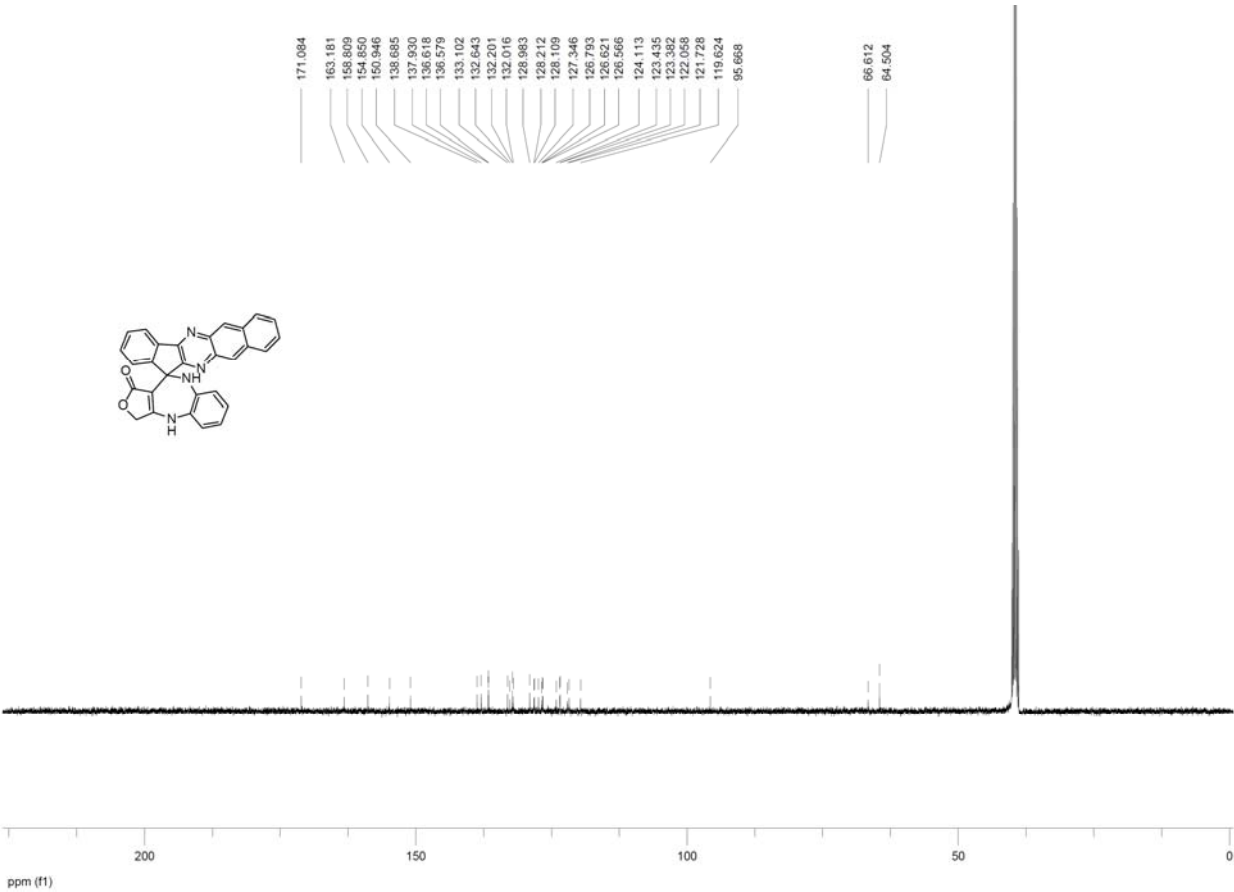


¹H NMR Spectrum of Compound 4g

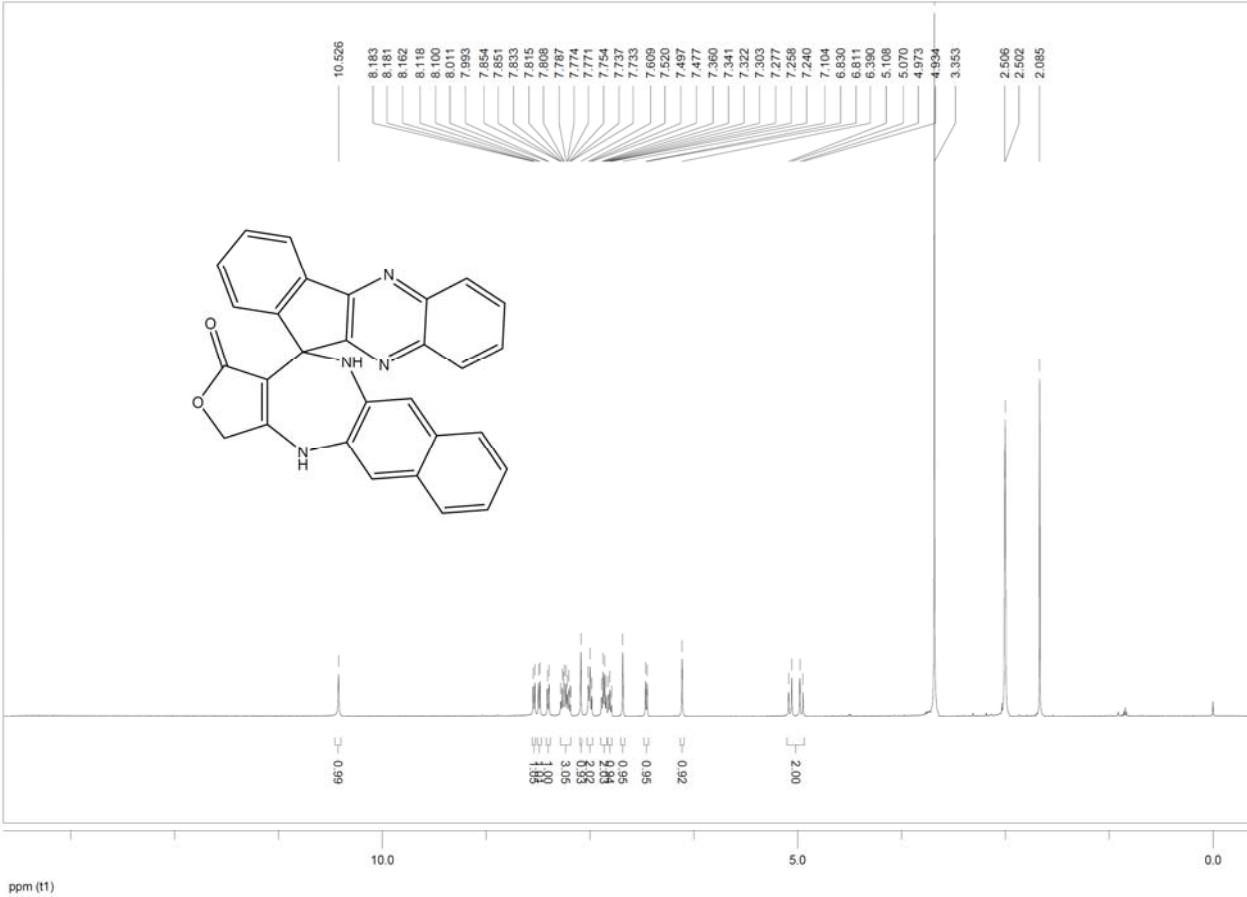


¹H NMR Spectrum of Compound 4h

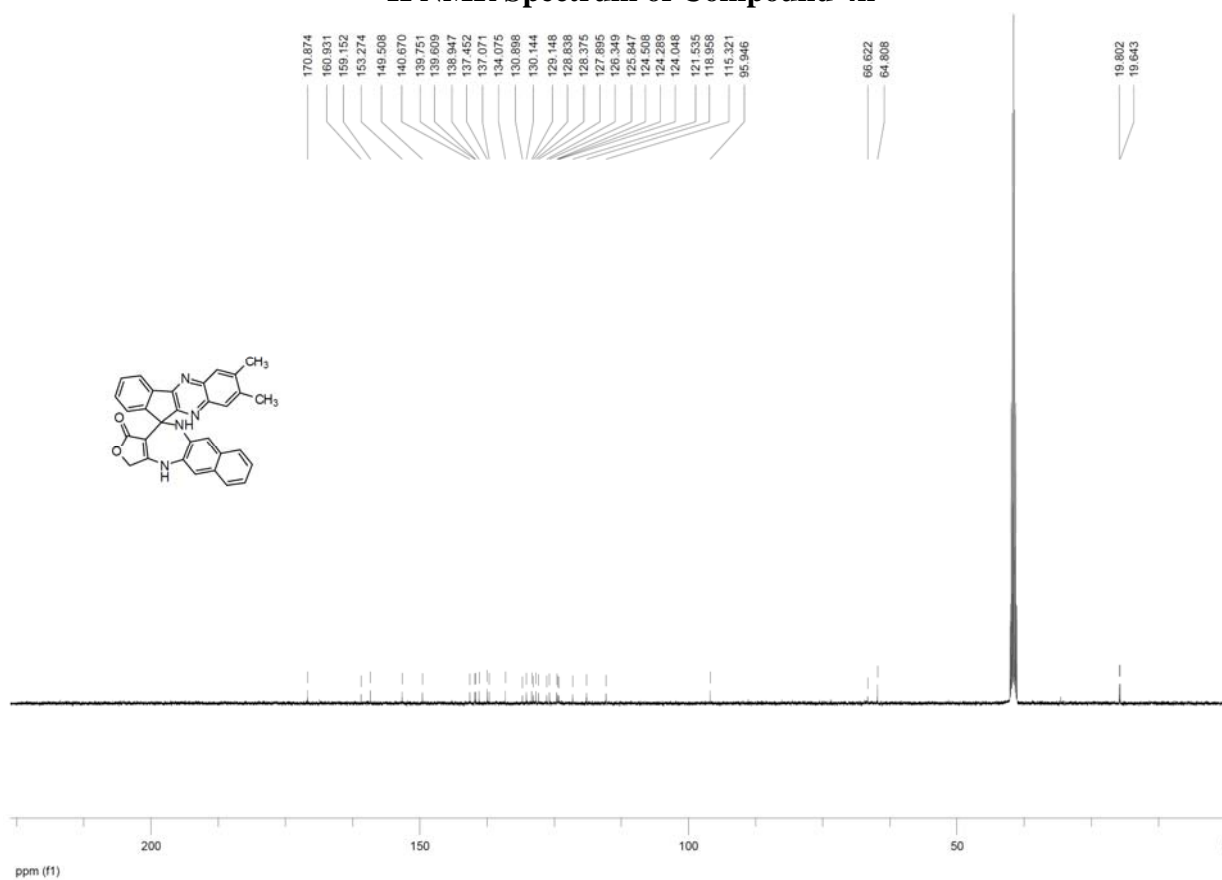
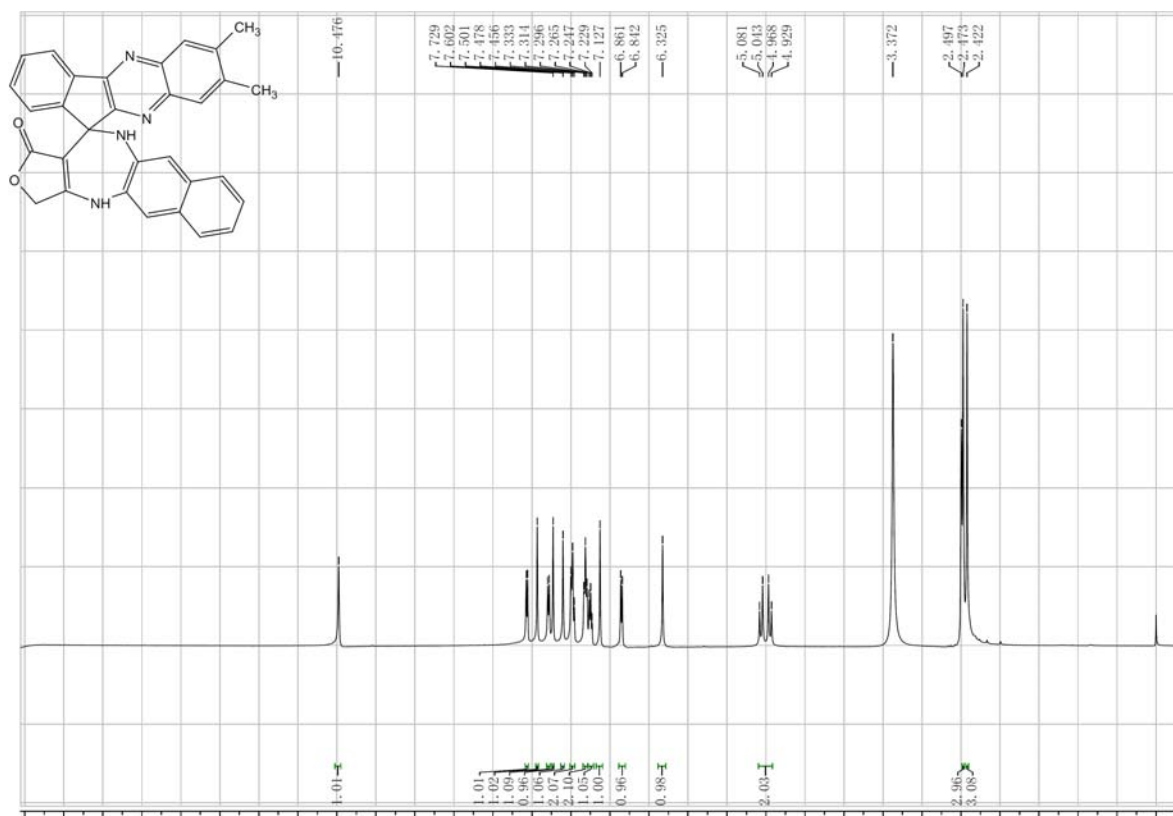


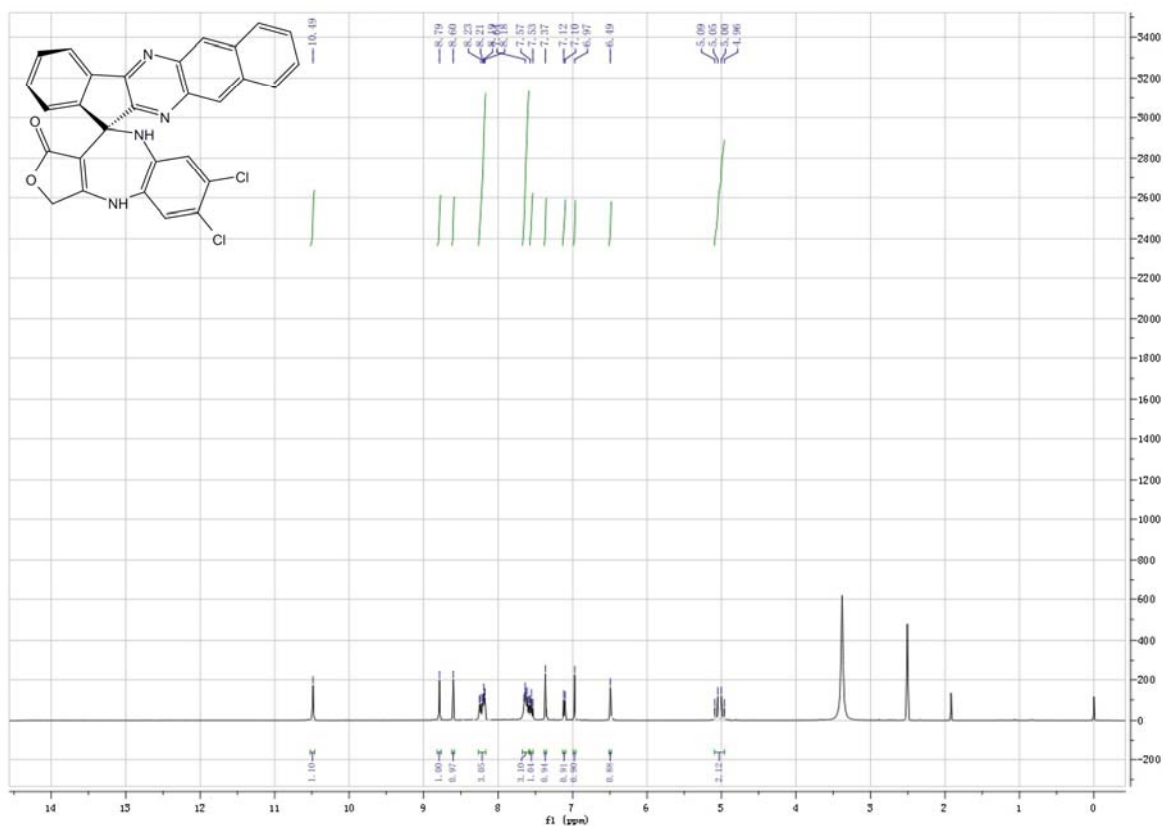


¹³C NMR Spectrum of Compound 4i

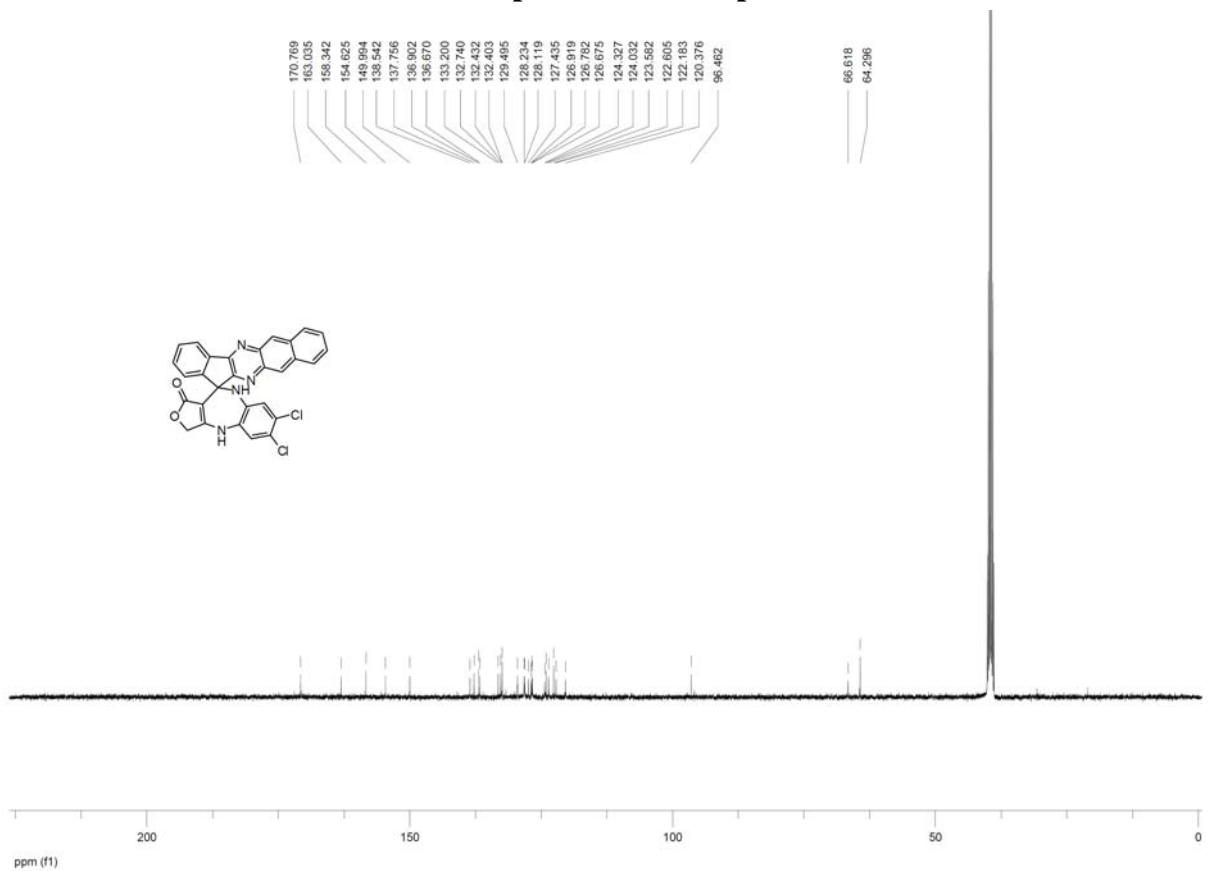


¹H NMR Spectrum of Compound 4j

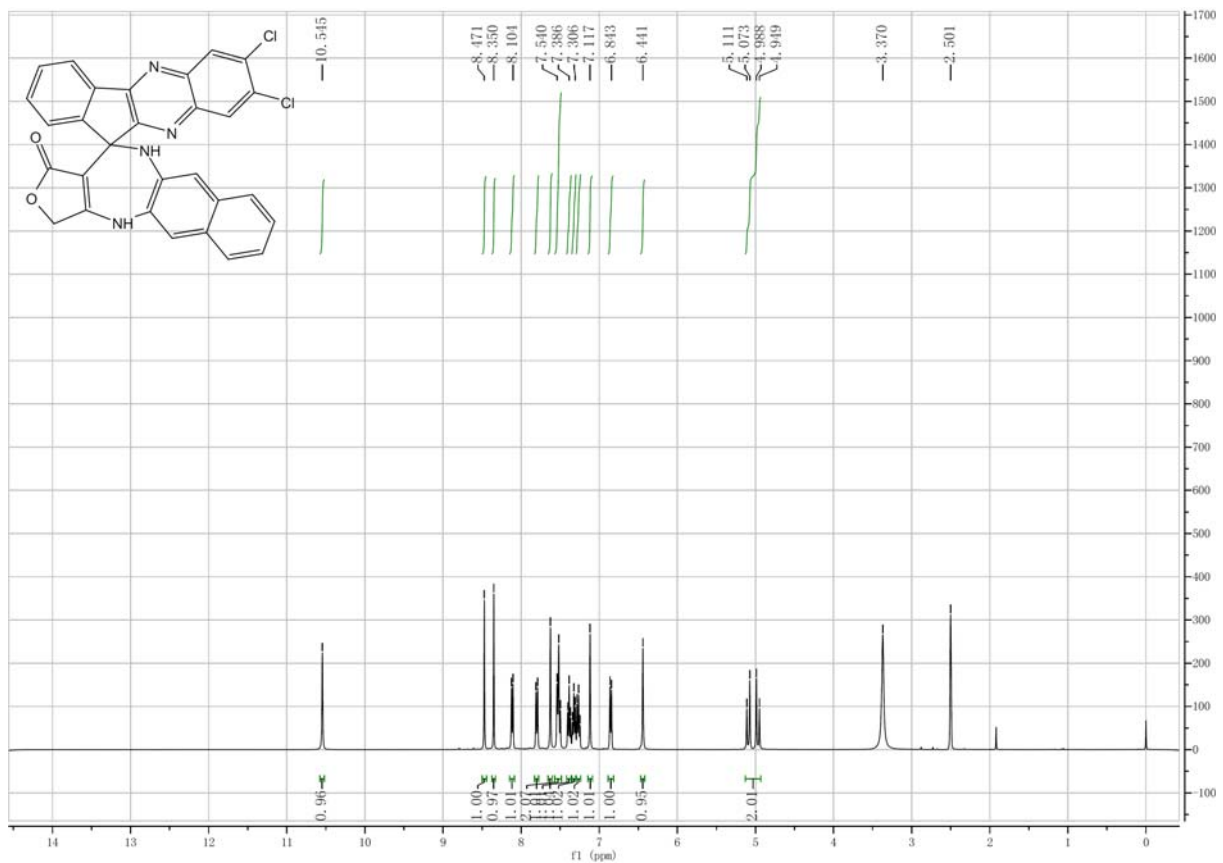




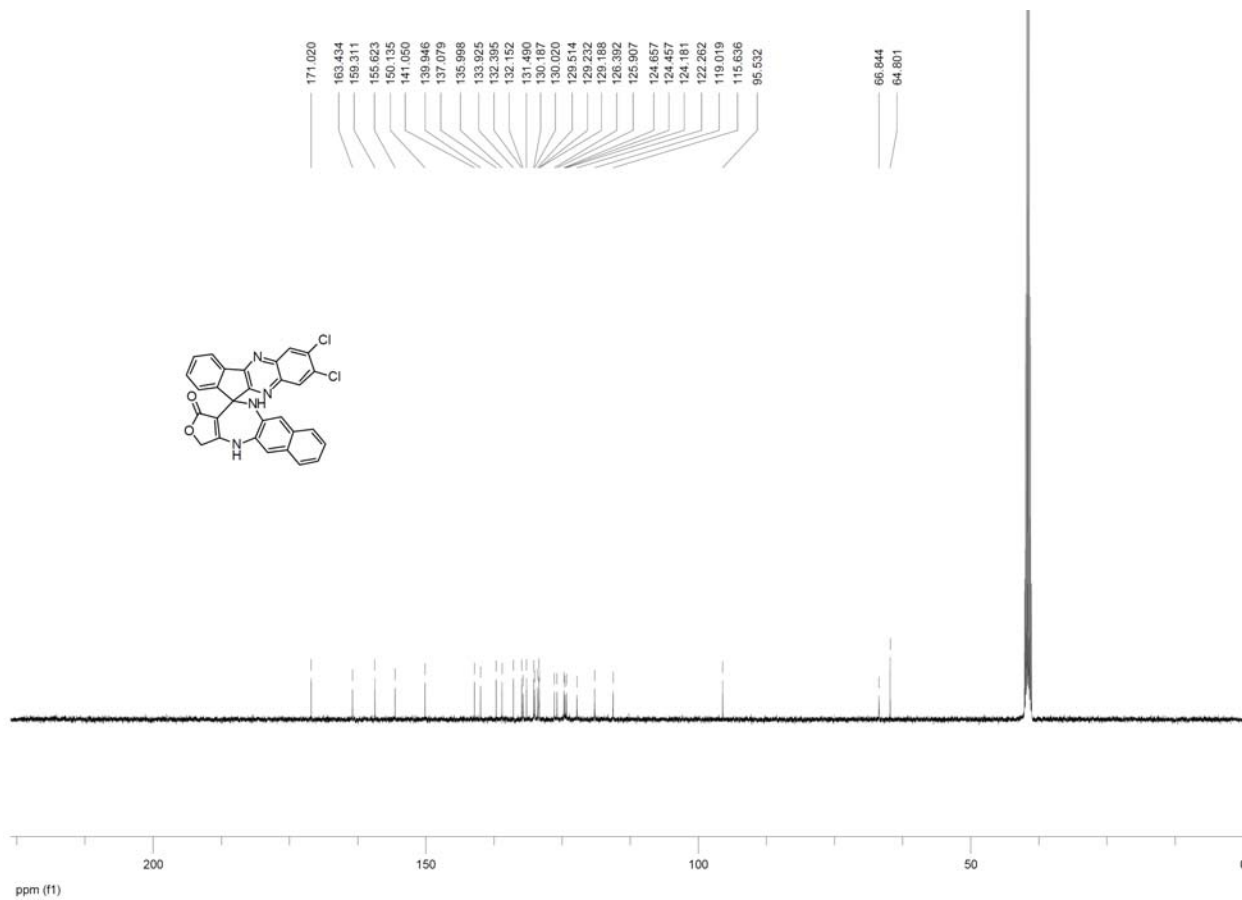
¹H NMR Spectrum of Compound 4l



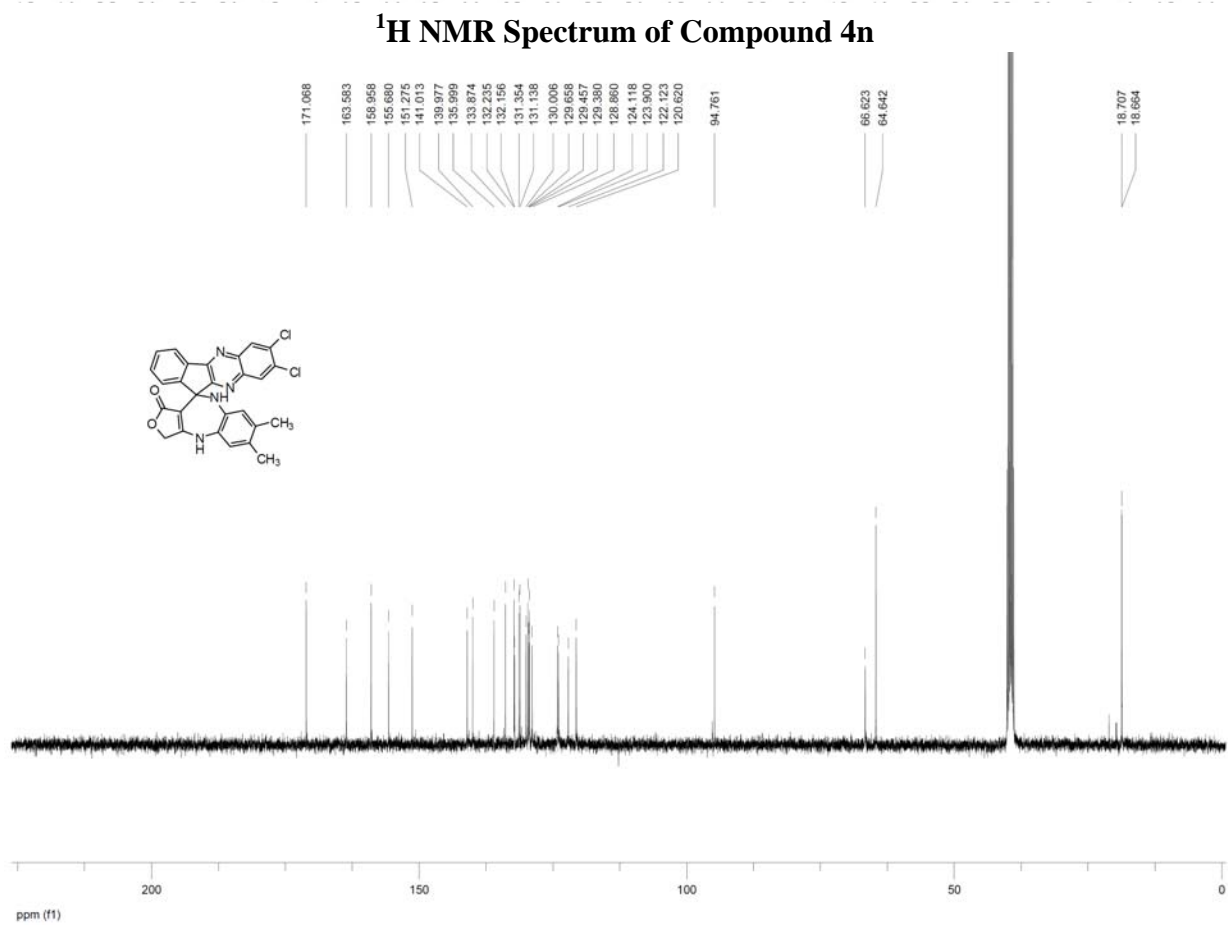
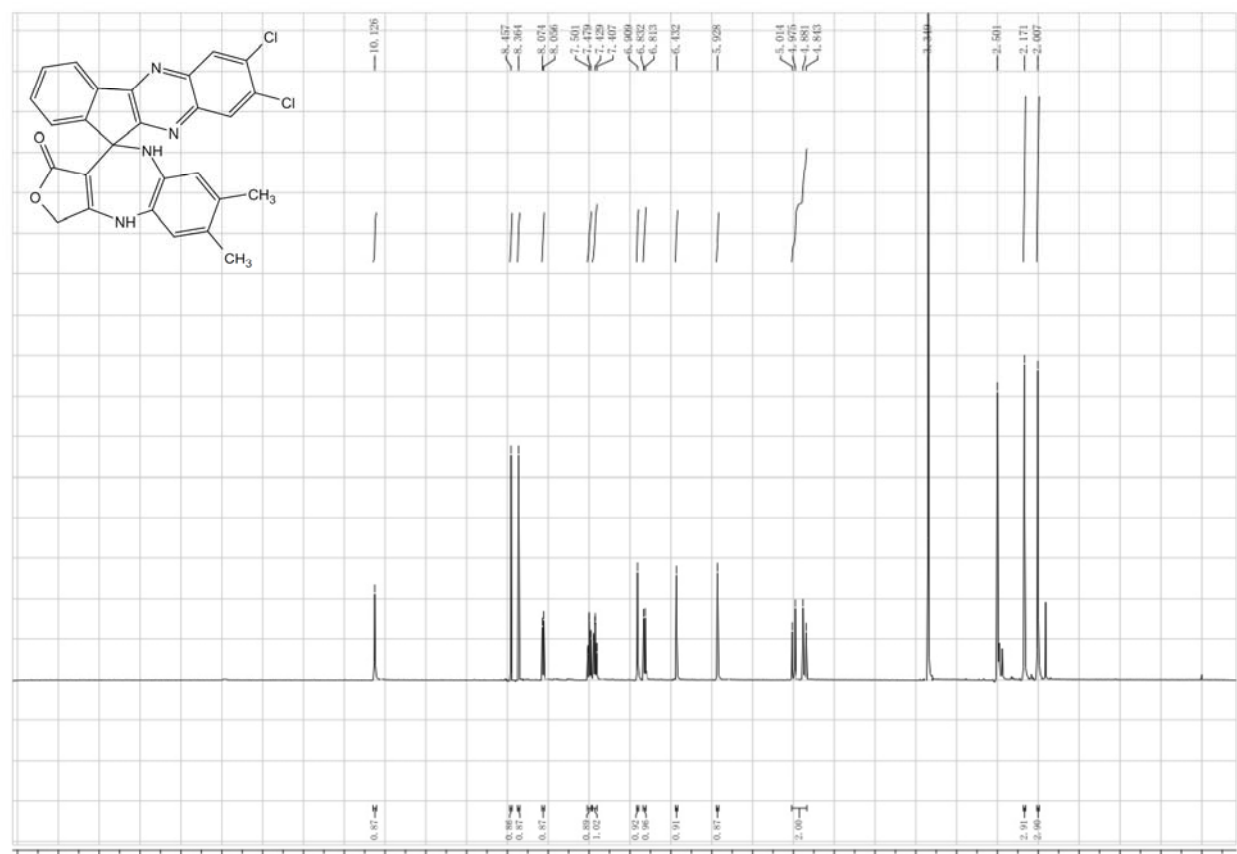
¹³C NMR Spectrum of Compound 4l

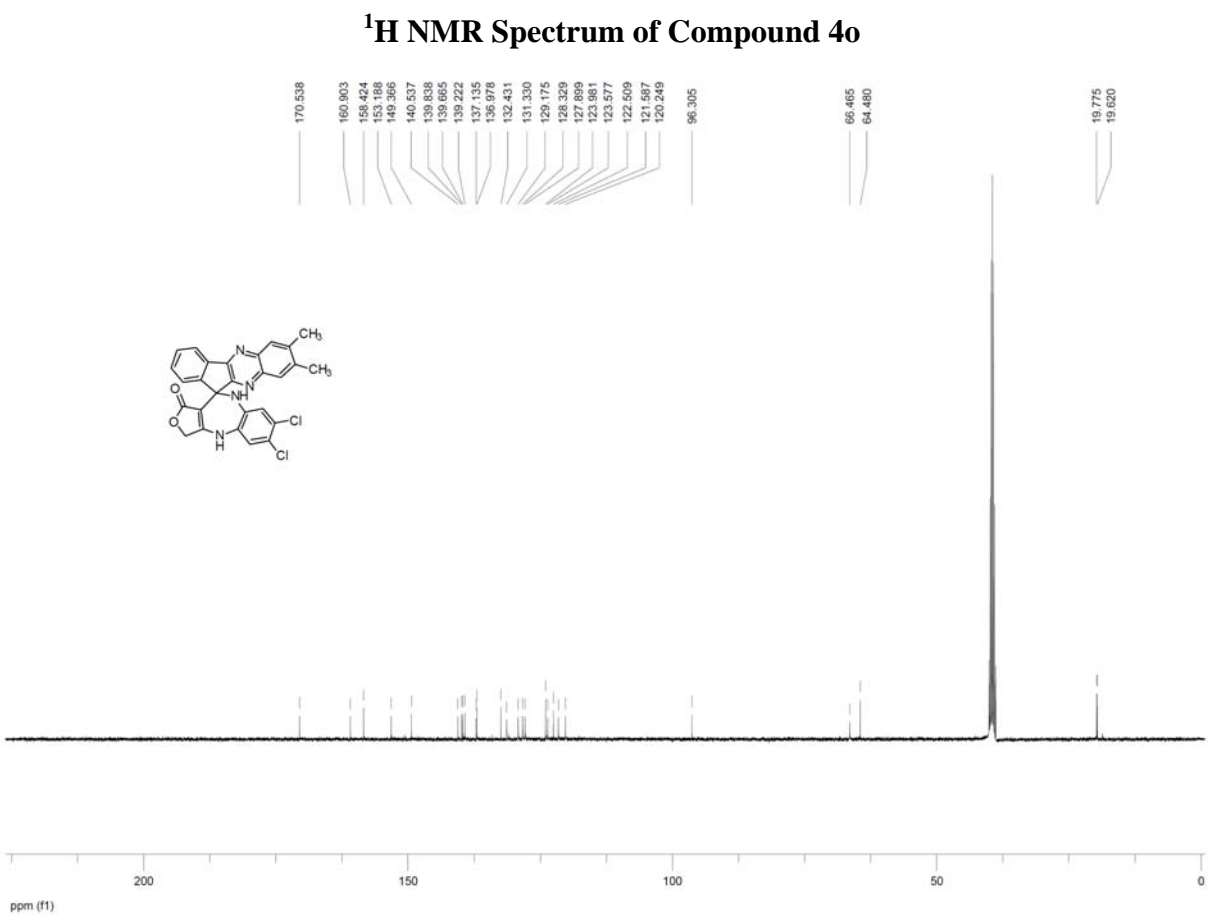
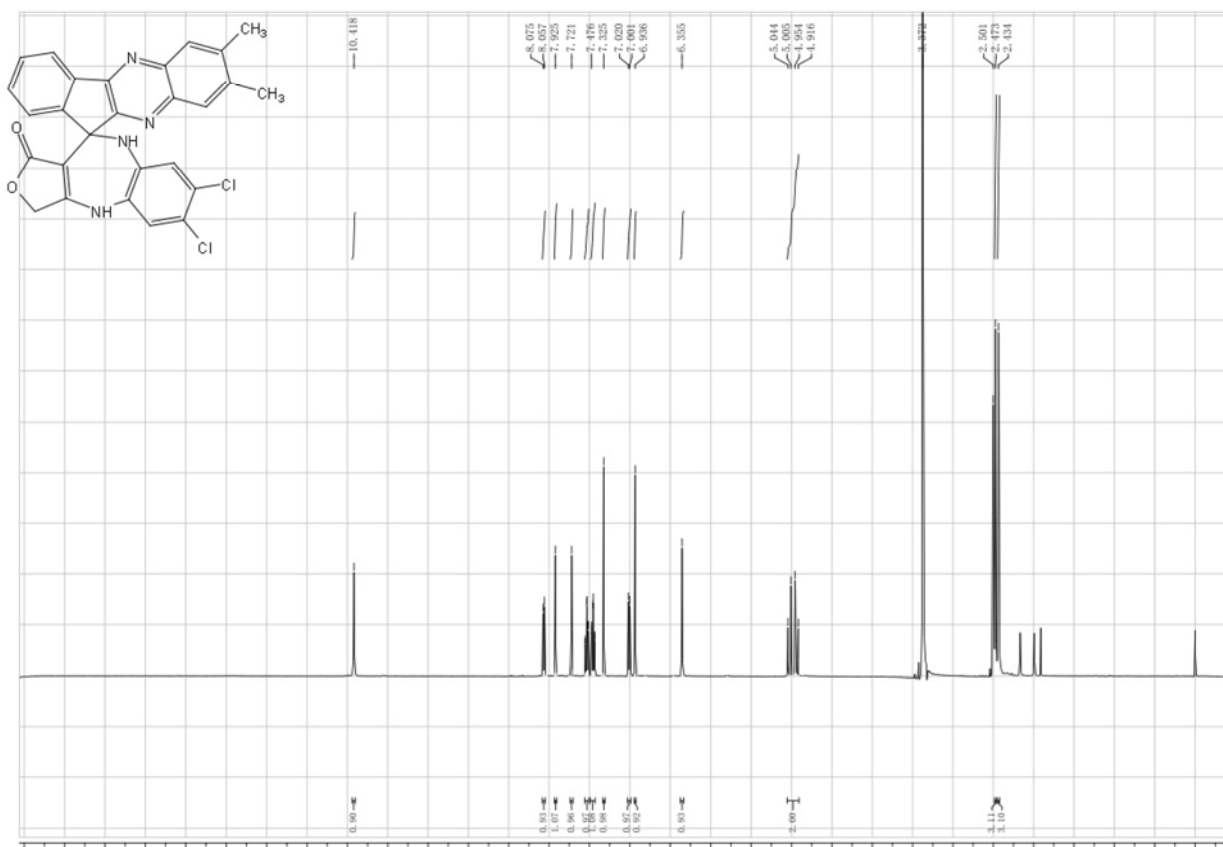


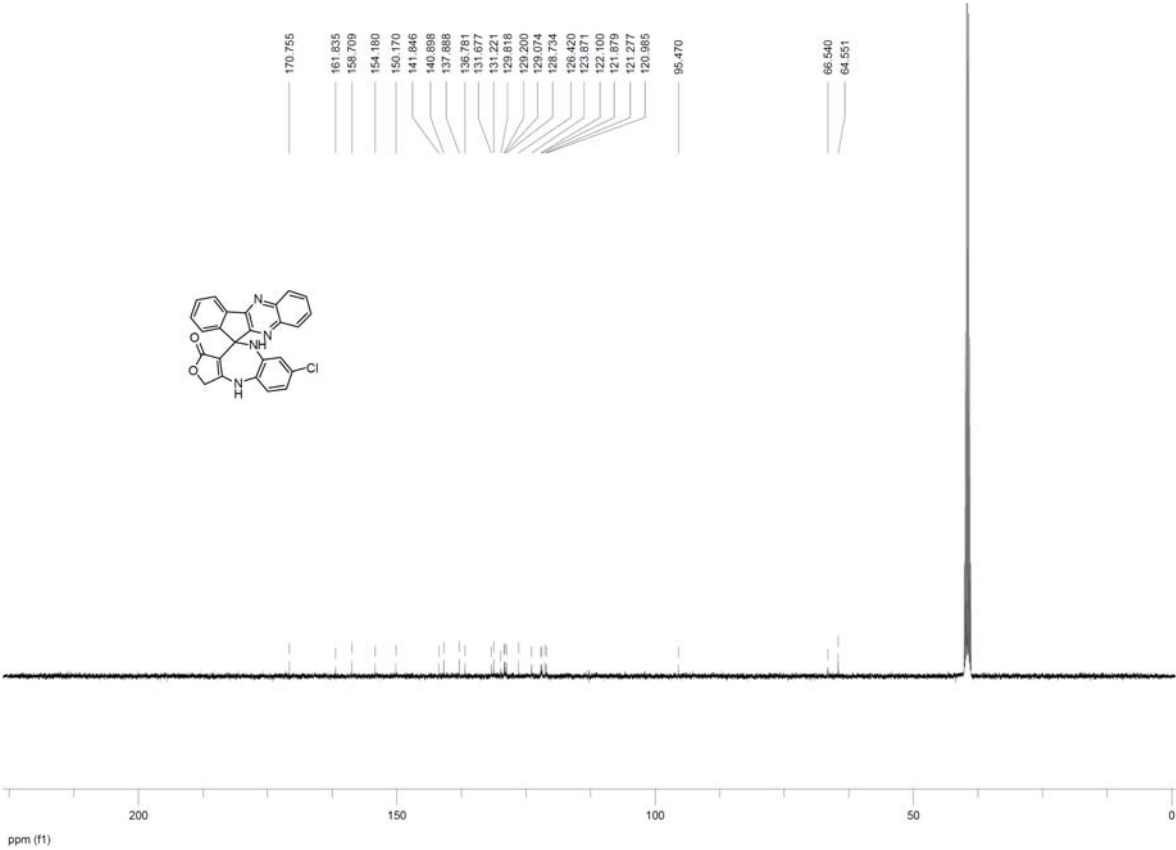
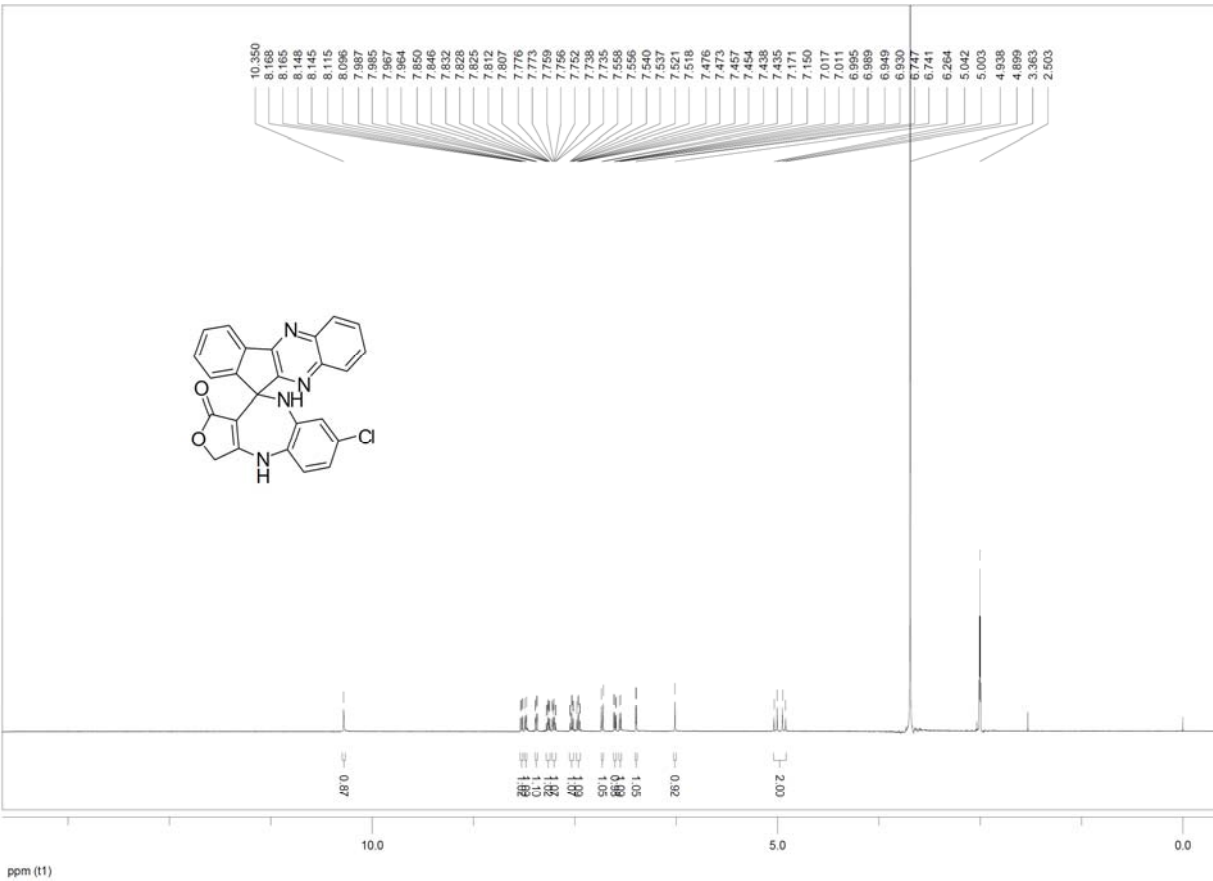
¹H NMR Spectrum of Compound 4m

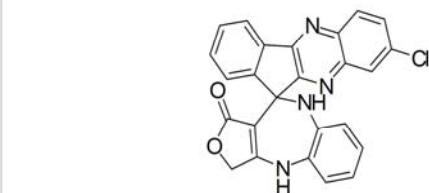


¹³C NMR Spectrum of Compound 4m

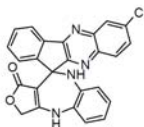




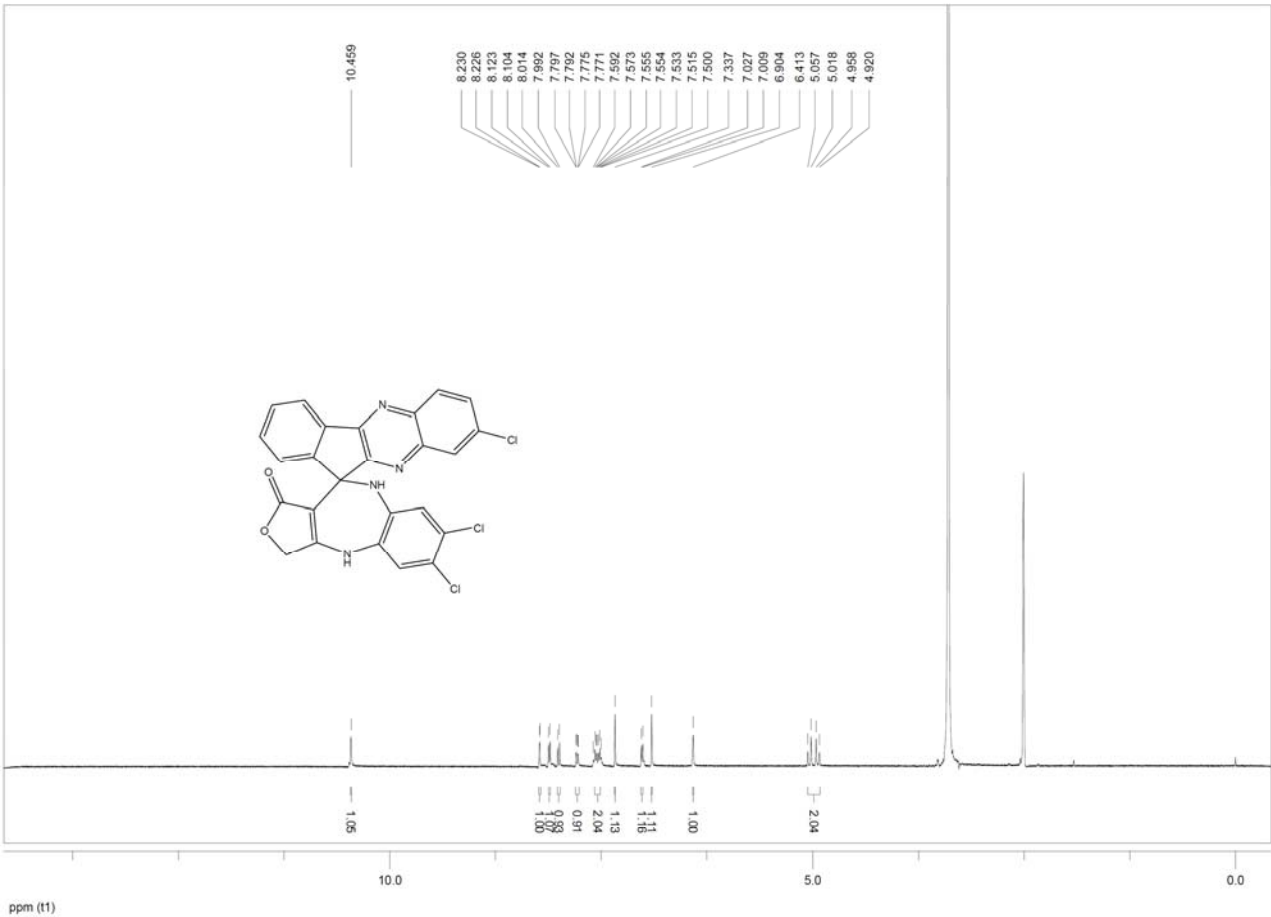




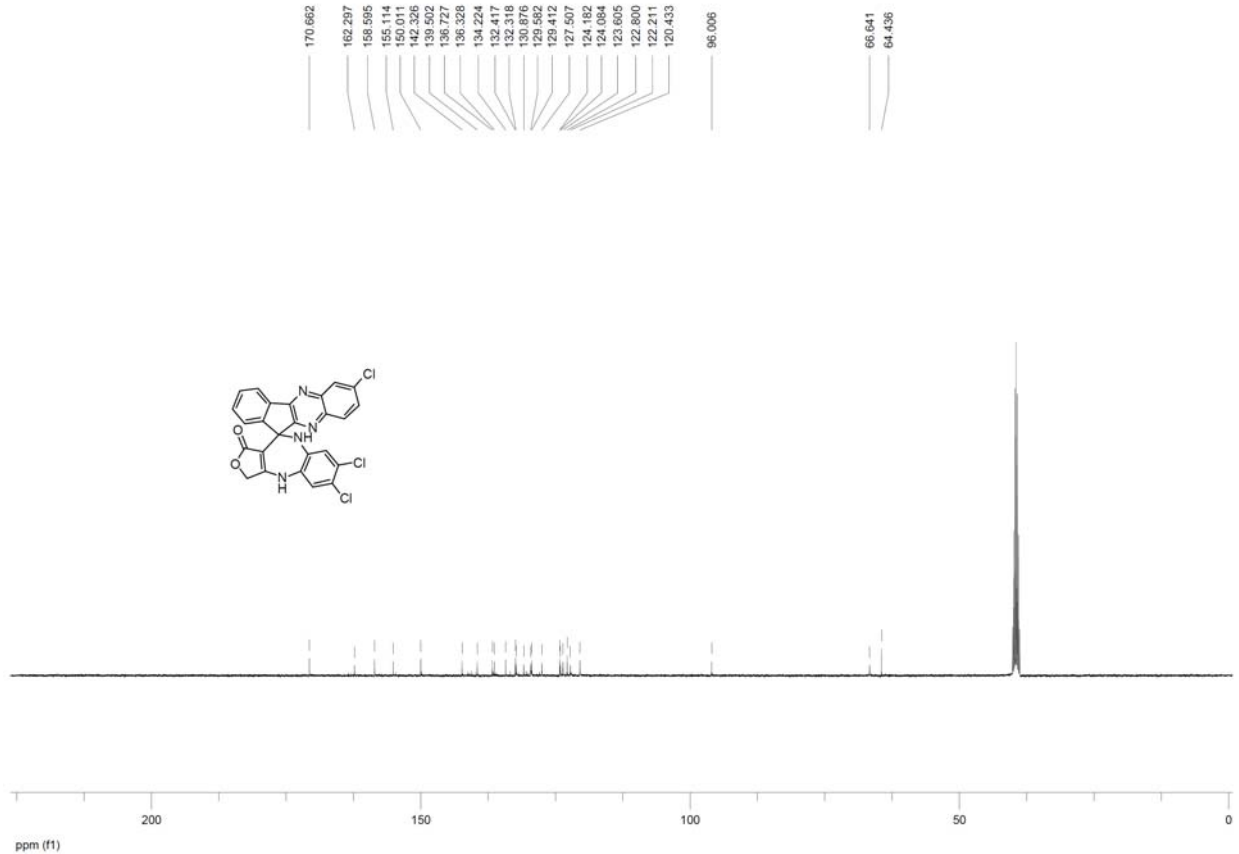
¹H NMR Spectrum of Compound 4q



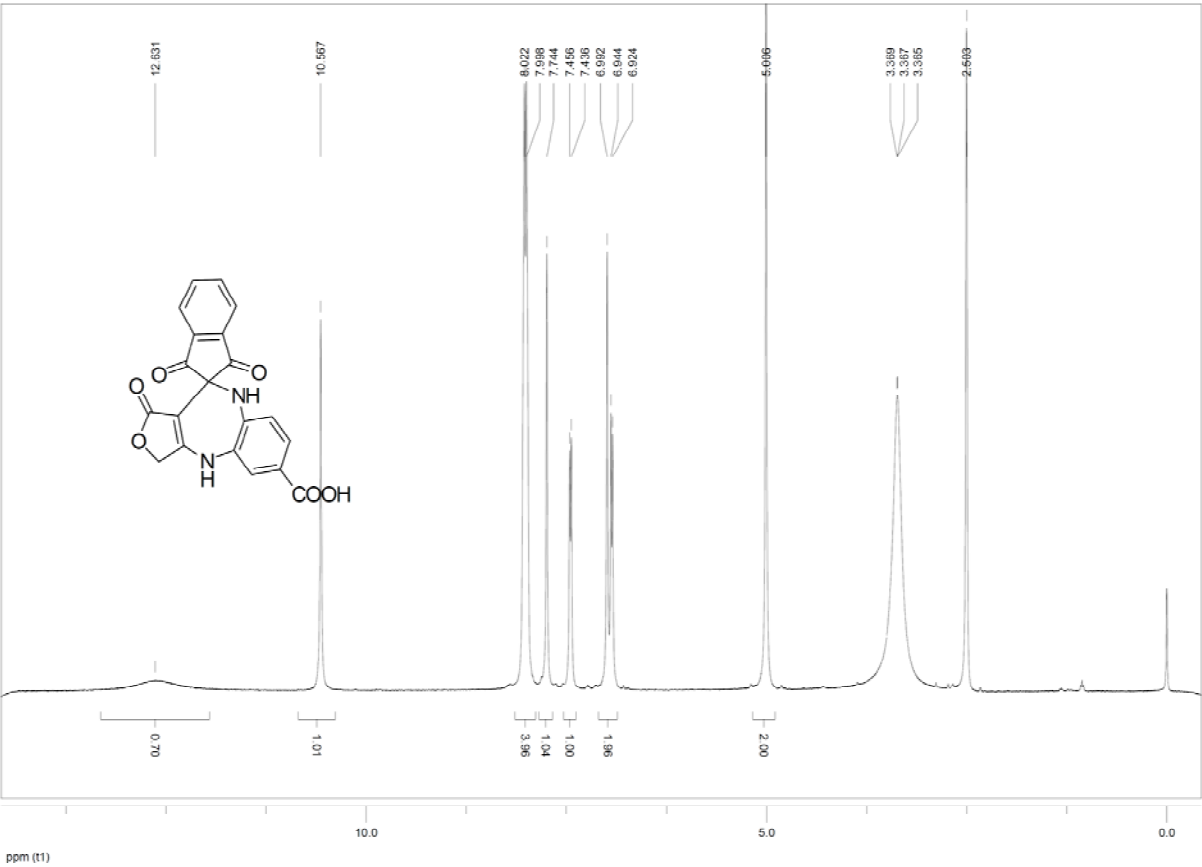
¹³C NMR Spectrum of Compound 4g



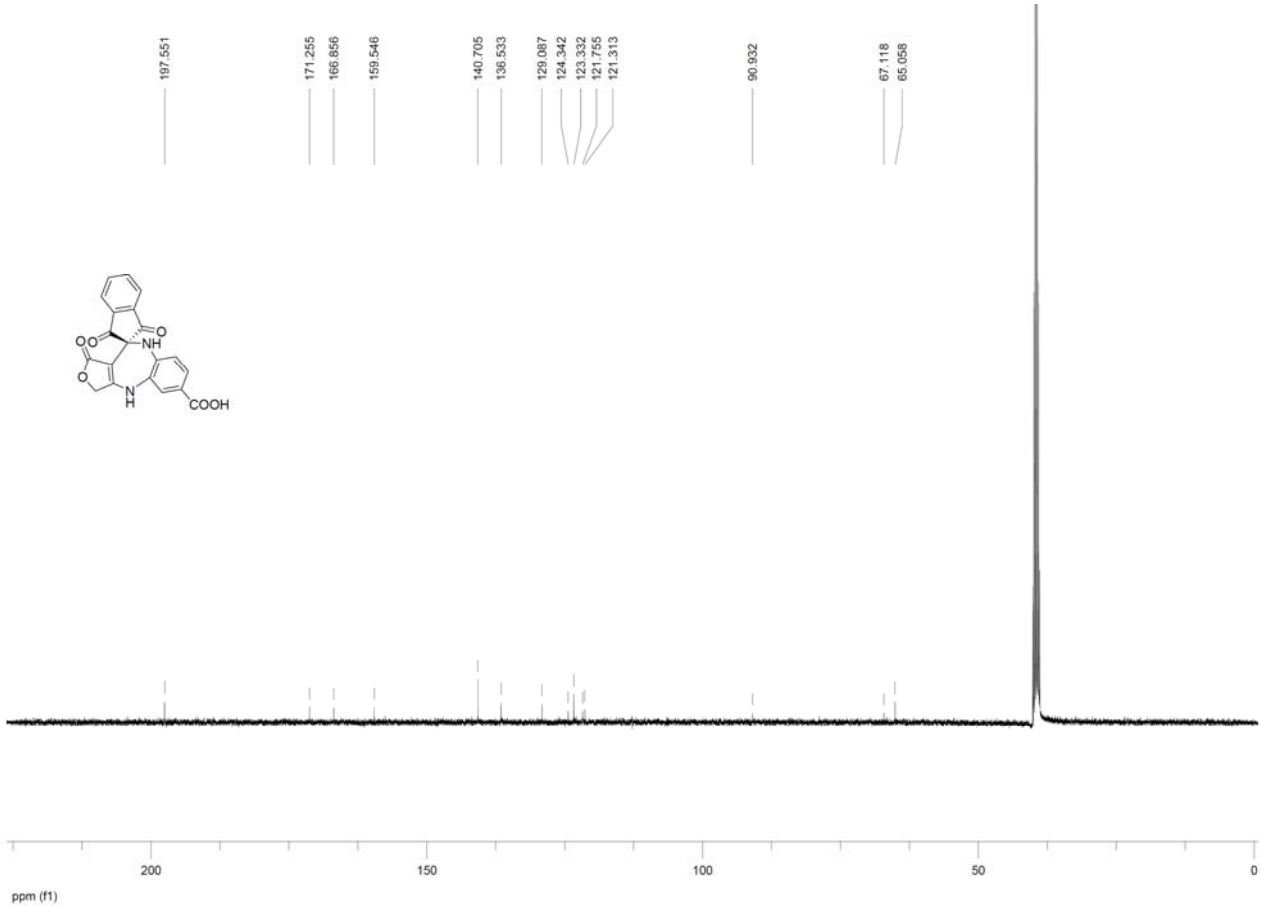
¹H NMR Spectrum of Compound 4r



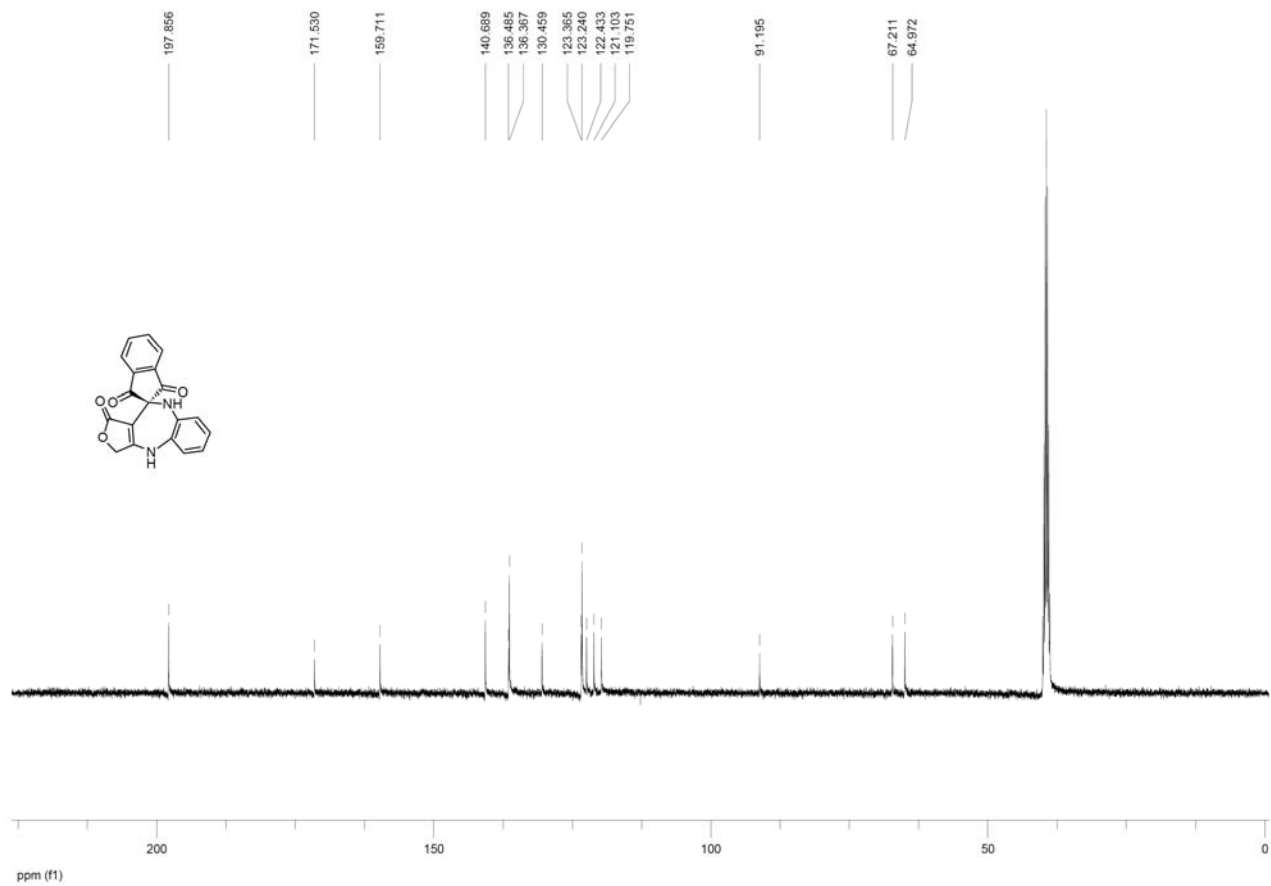
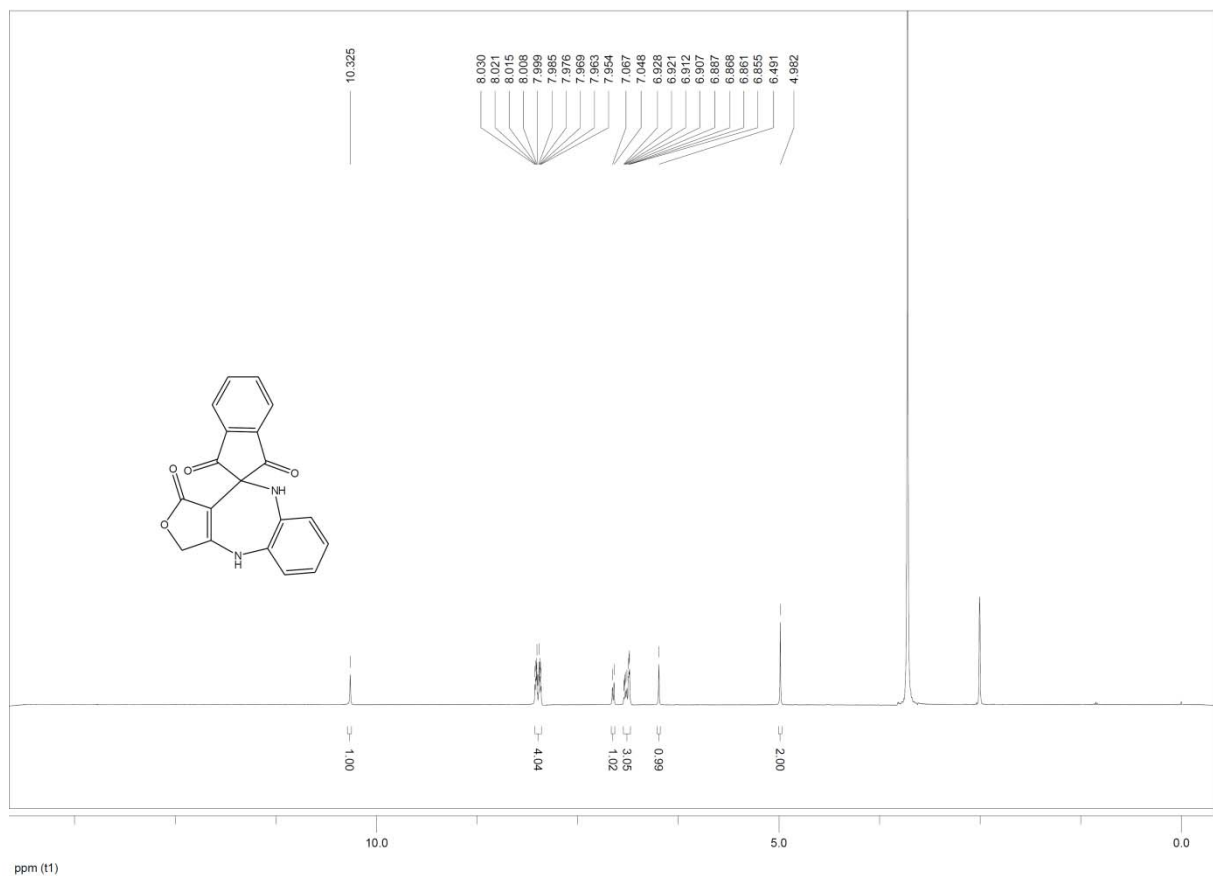
¹³C NMR Spectrum of Compound 4r

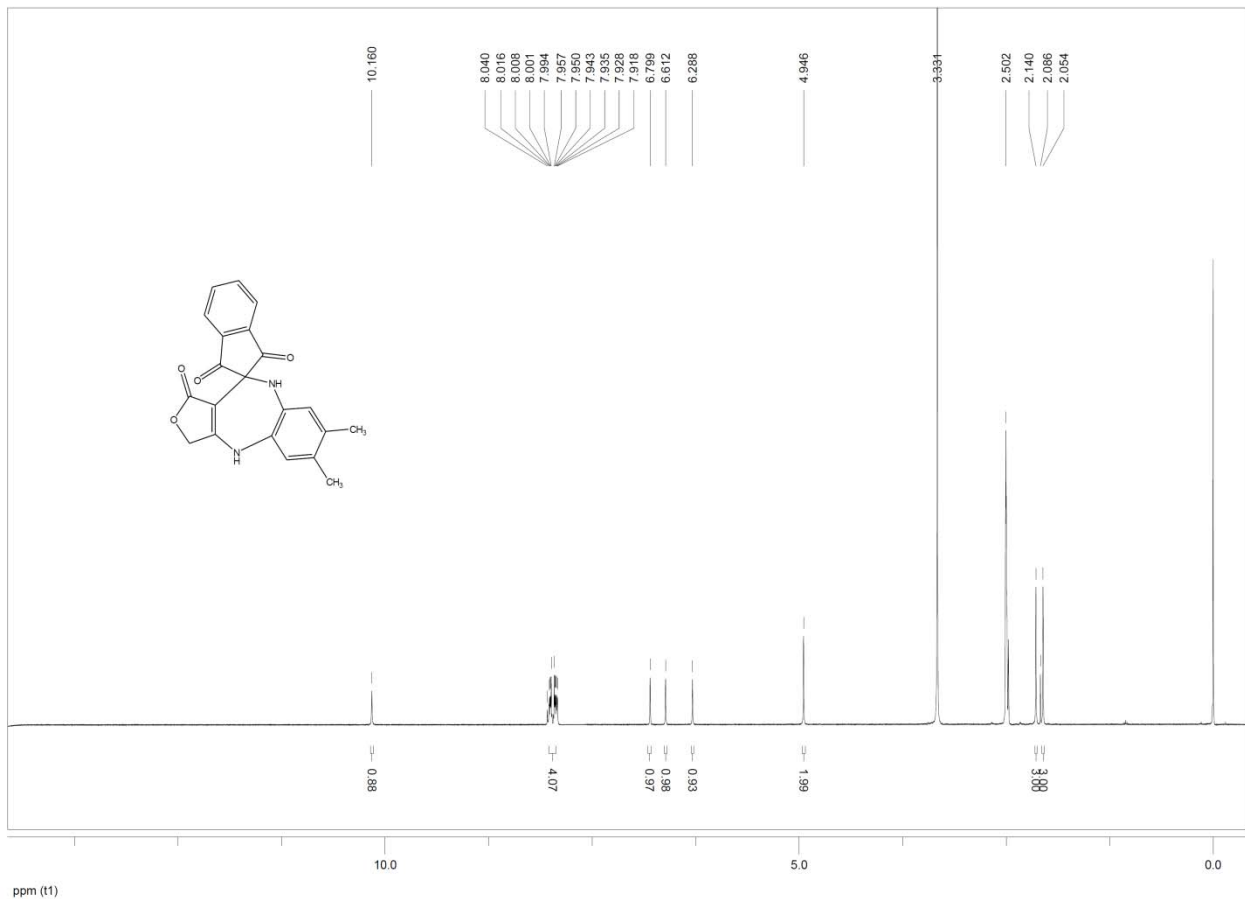


¹H NMR Spectrum of Compound 5a

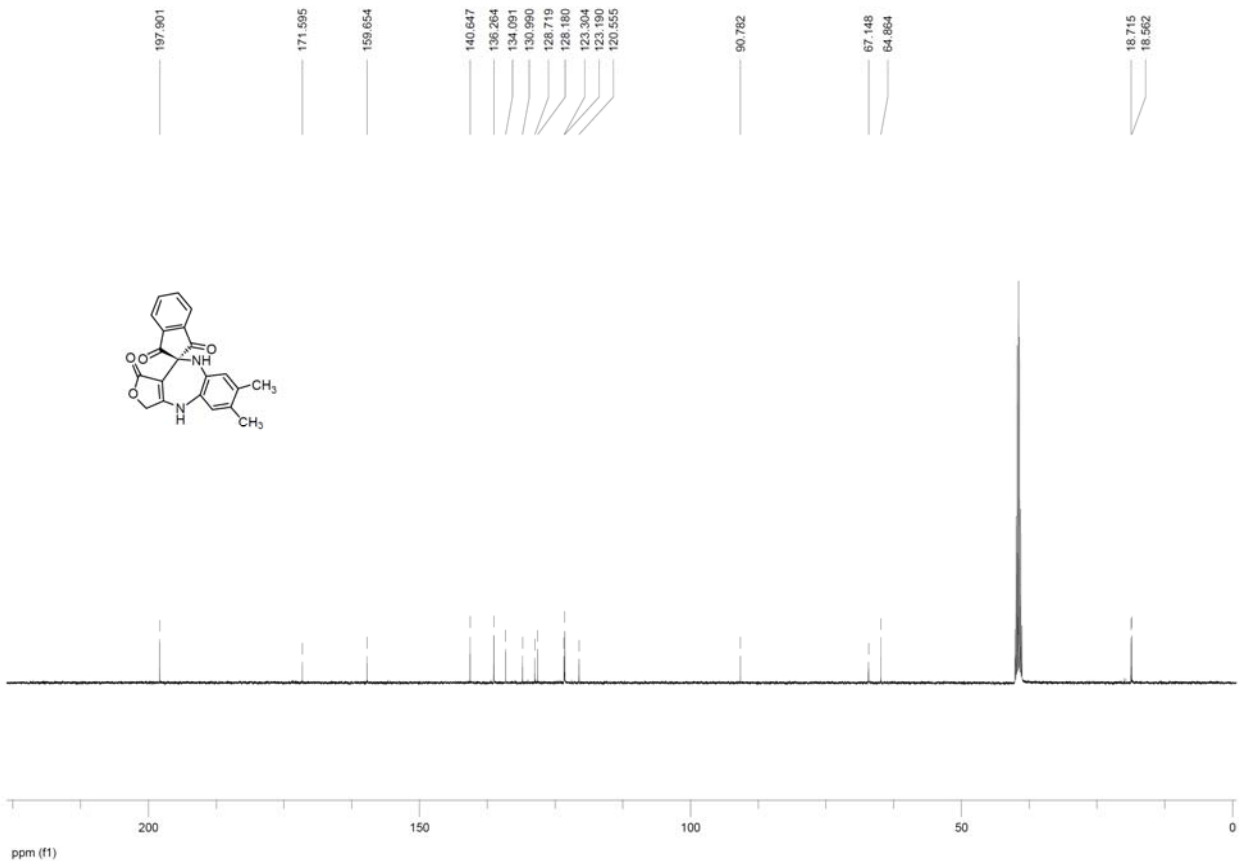


¹³C NMR Spectrum of Compound 5a

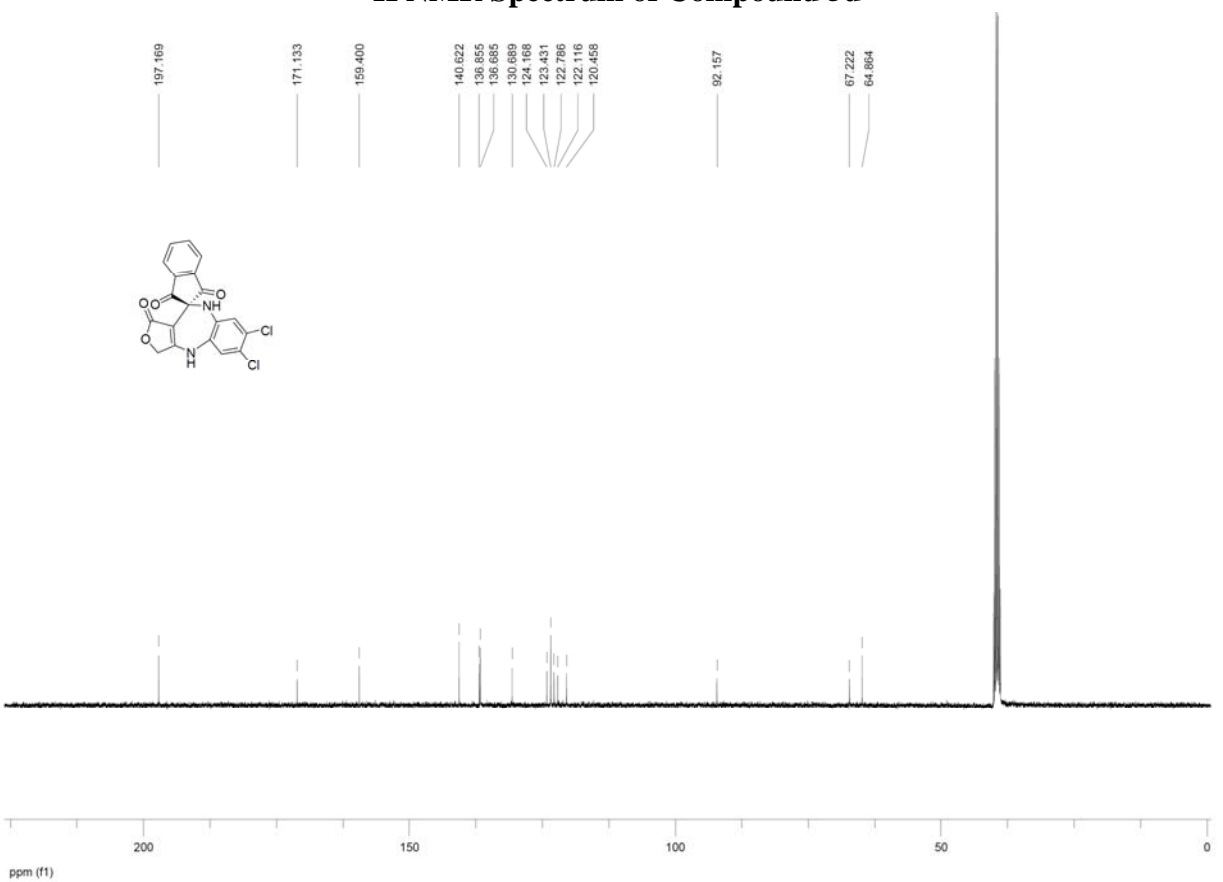
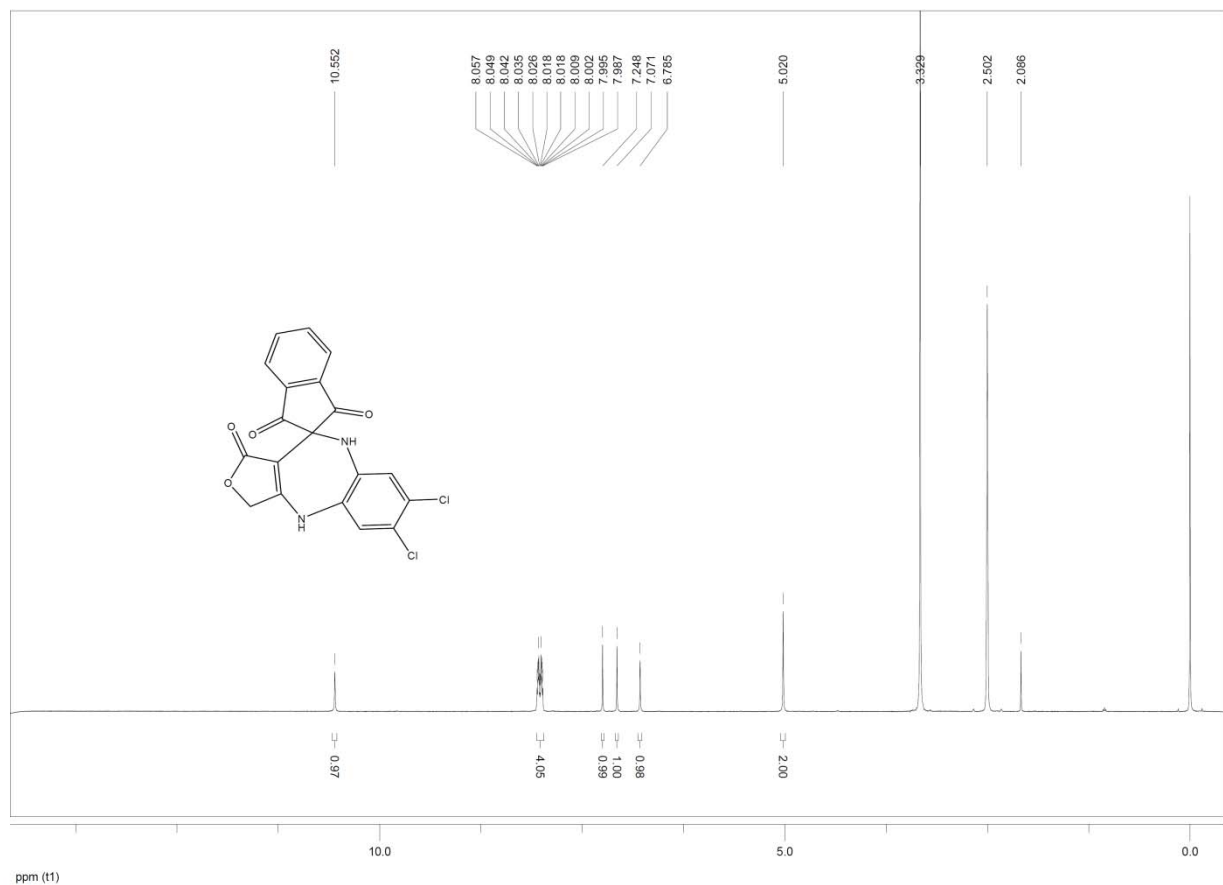


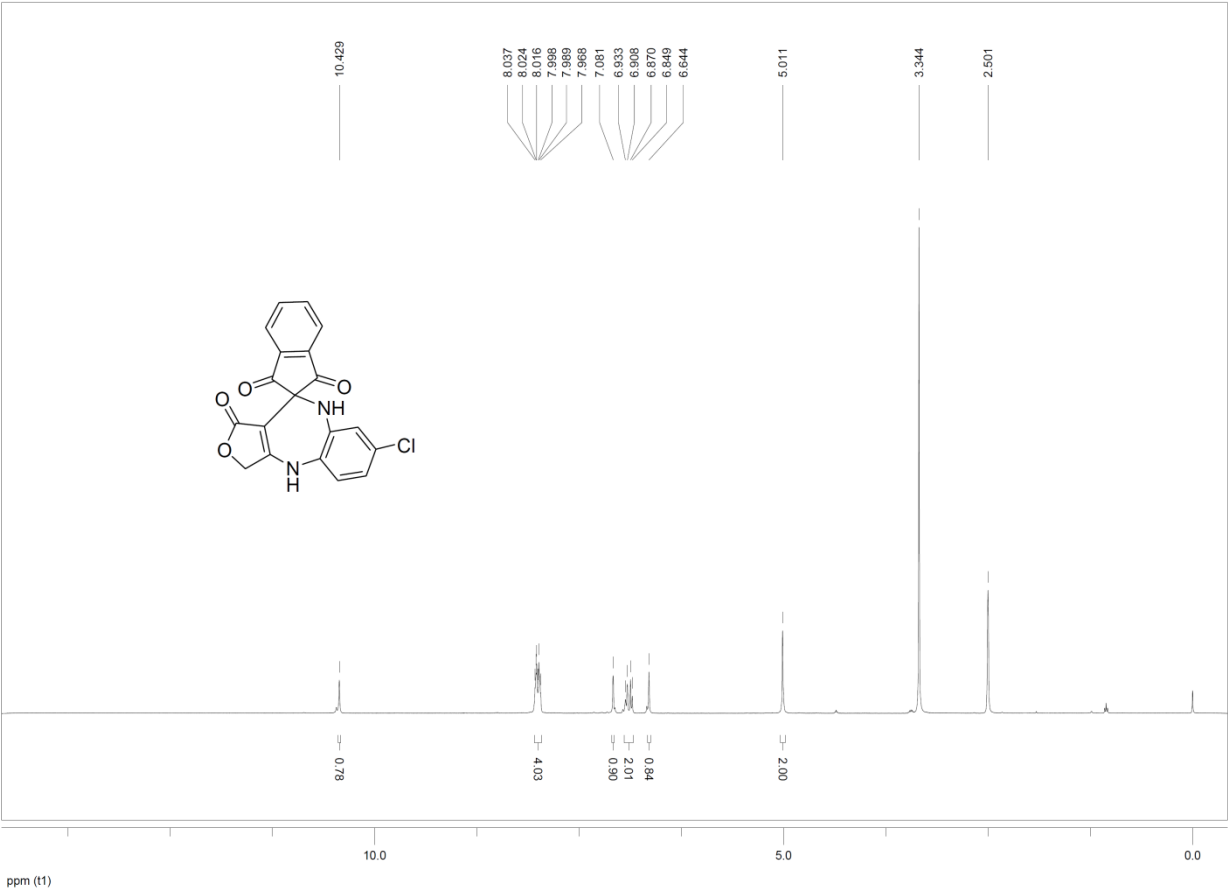


¹H NMR Spectrum of Compound 5c

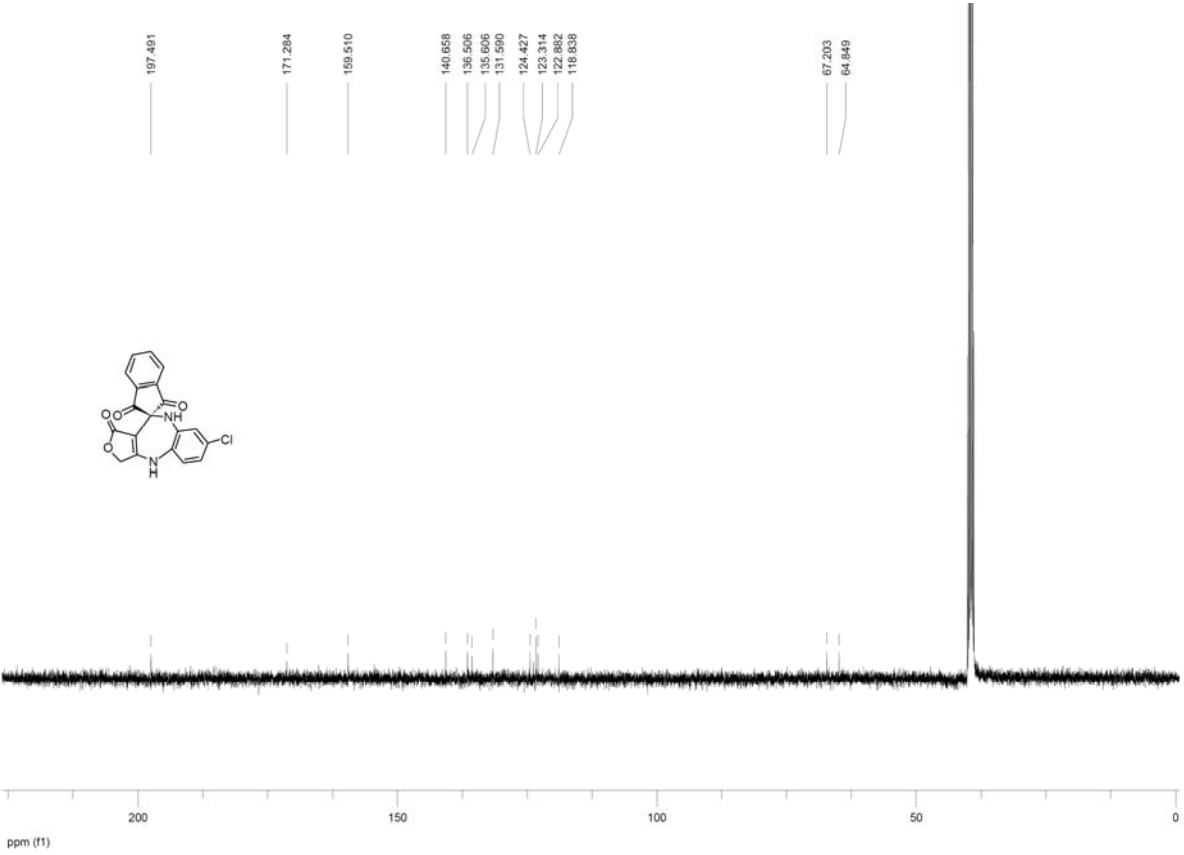


¹³C NMR Spectrum of Compound 5c





¹H NMR Spectrum of Compound 5e



¹³C NMR Spectrum of Compound 5e