

Figure S1.  $^1\text{H}$  NMR spectrum of compound 4

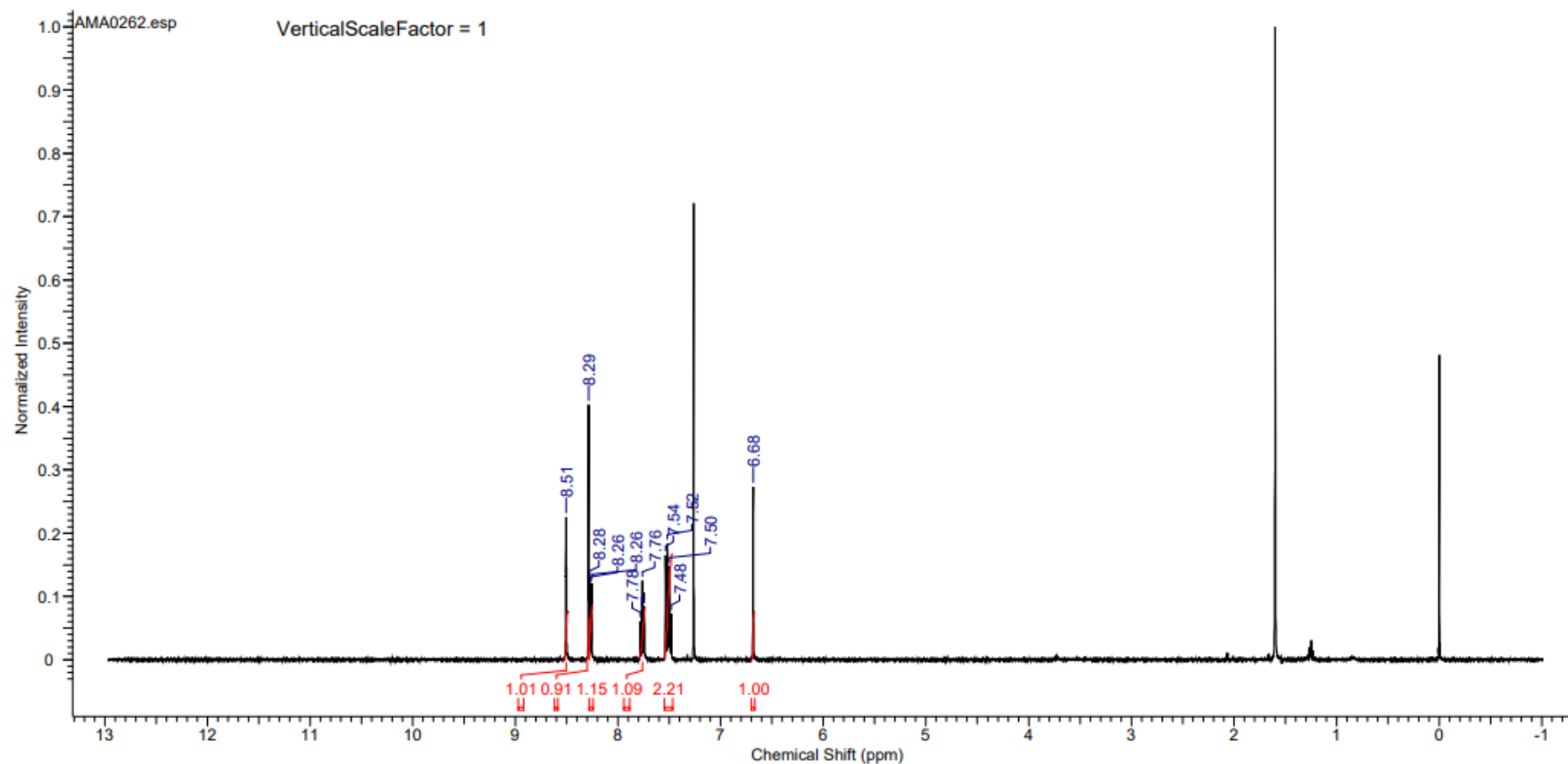
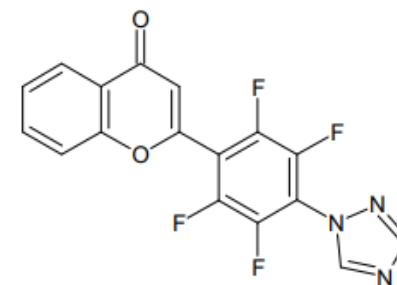


Figure S2.  $^{13}\text{C}$  NMR spectrum of compound 4

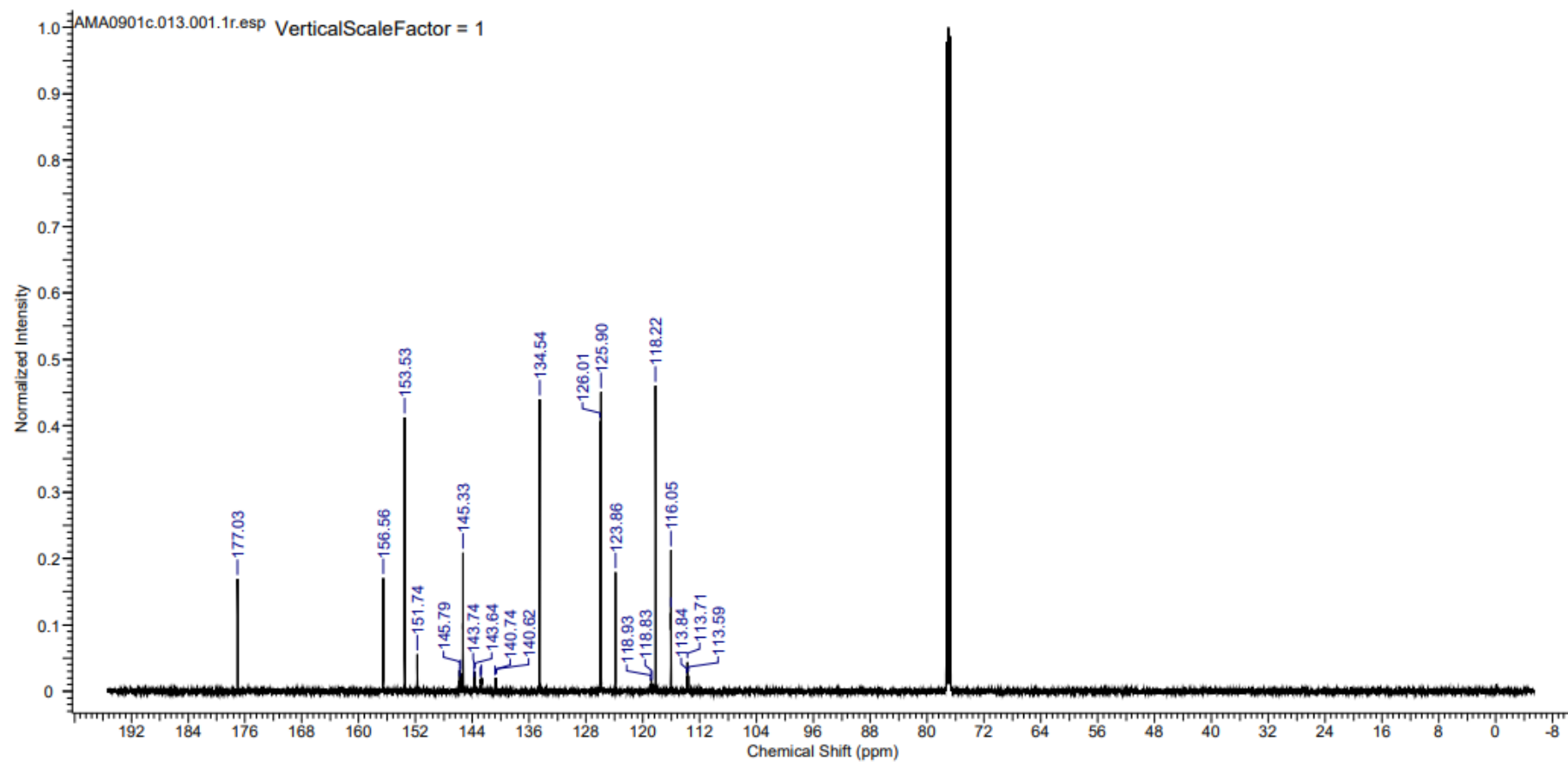
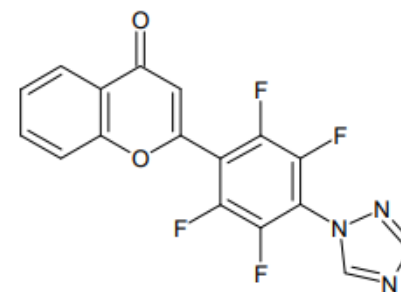


Figure S3.  $^{19}\text{F}$  NMR spectrum of compound 4

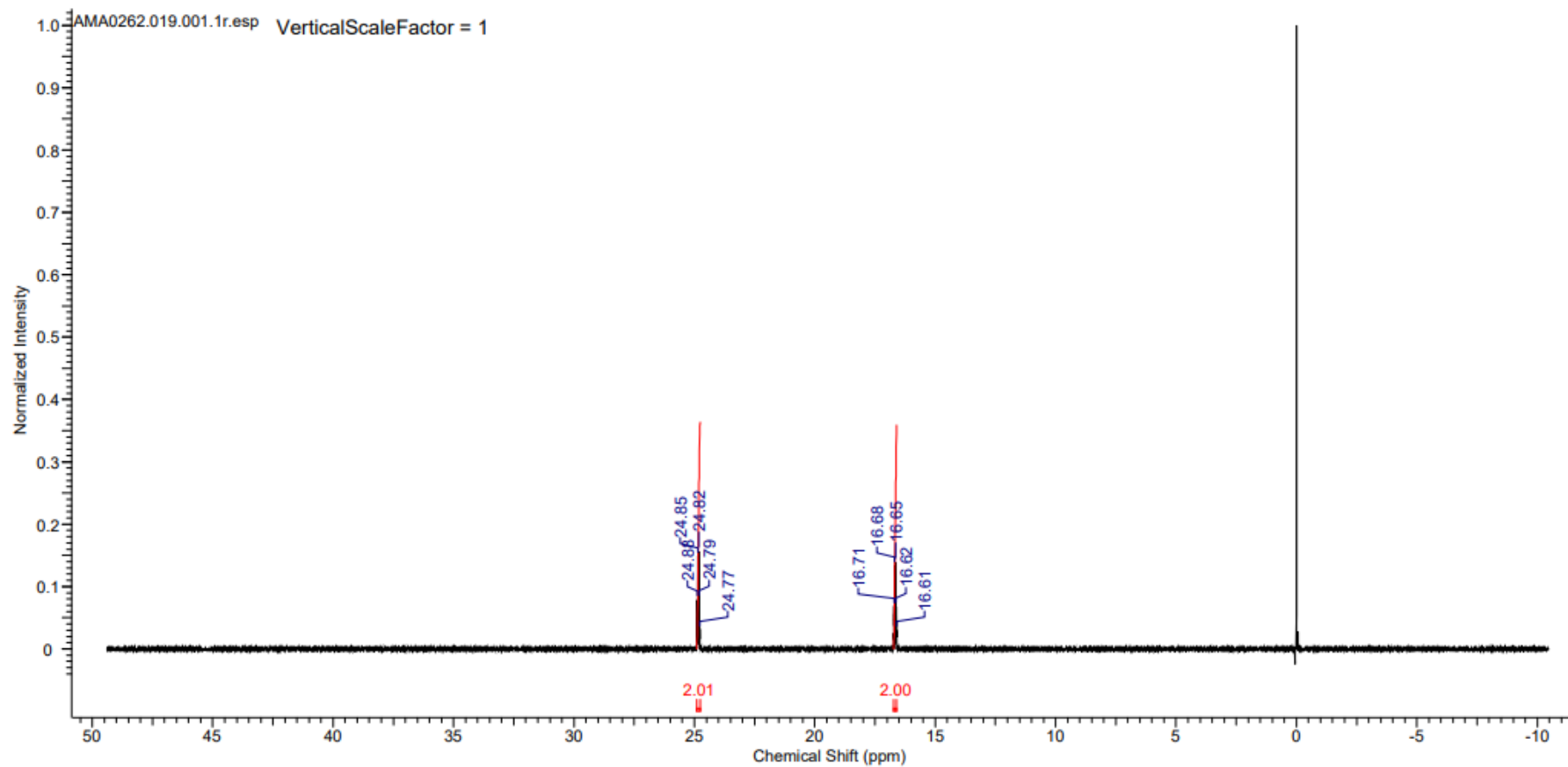
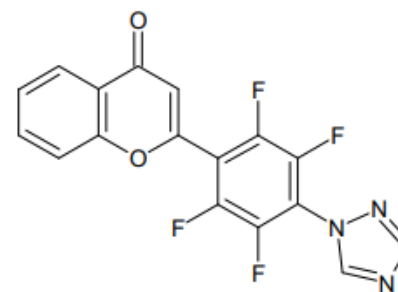


Figure S4.  $^1\text{H}$  NMR spectrum of compound 7

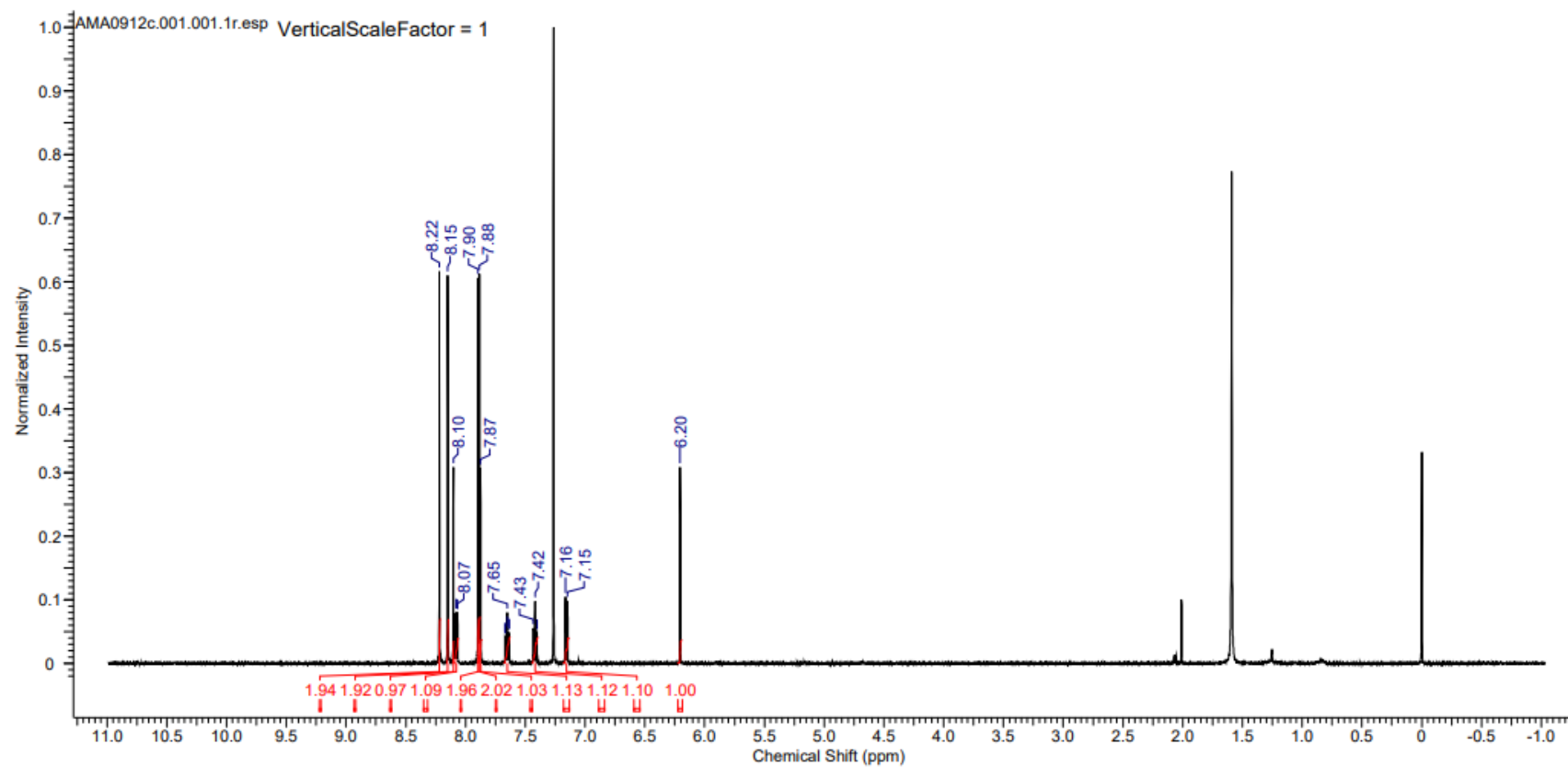
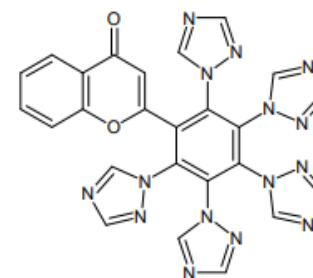


Figure S5.  $^{13}\text{C}$  NMR spectrum of compound 7

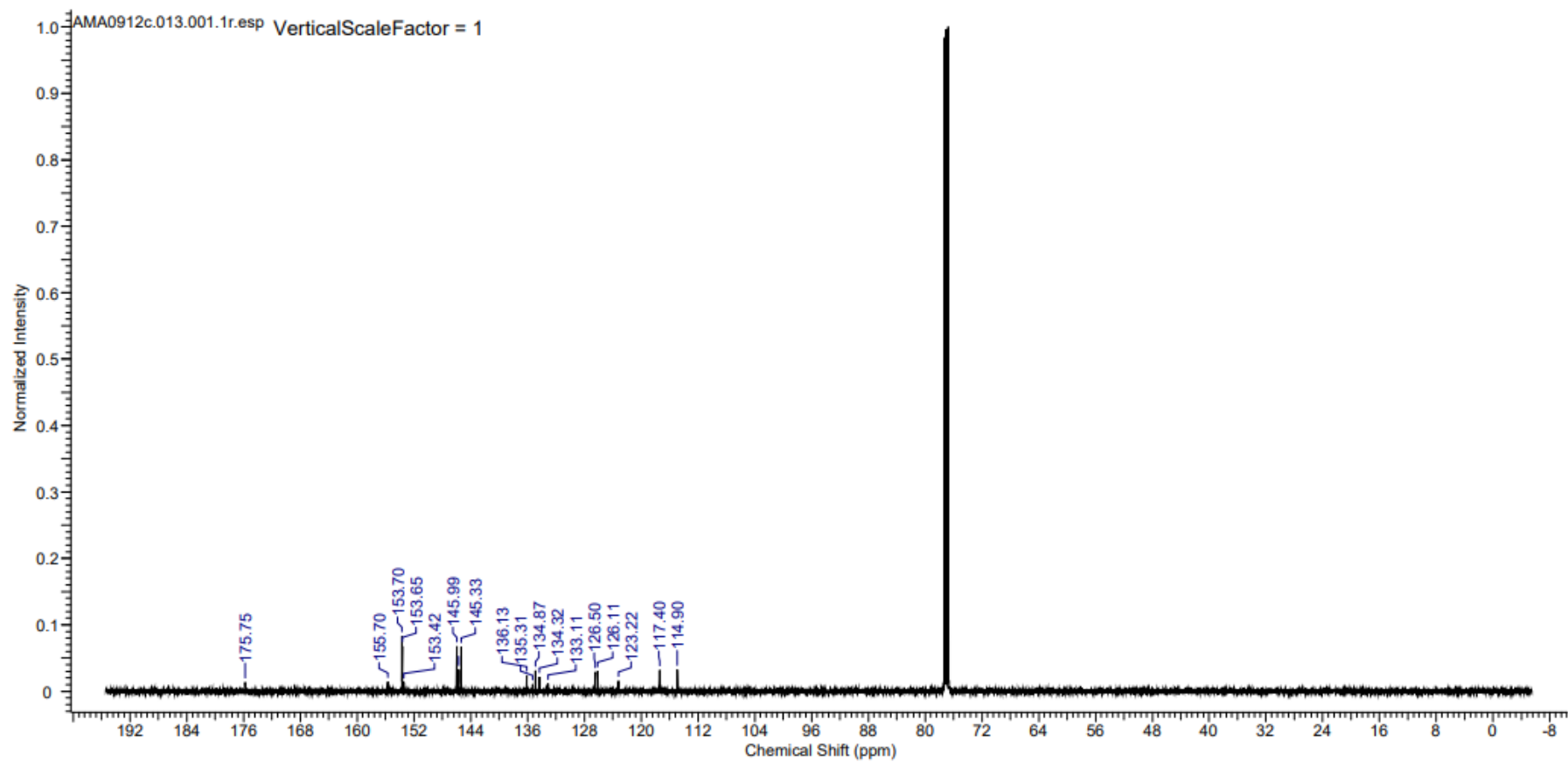
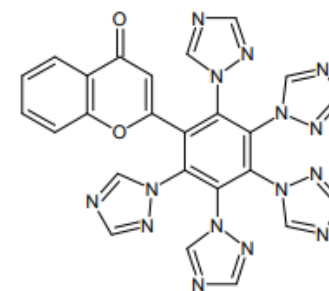


Figure S6.  $^1\text{H}$  NMR spectrum of compound 8

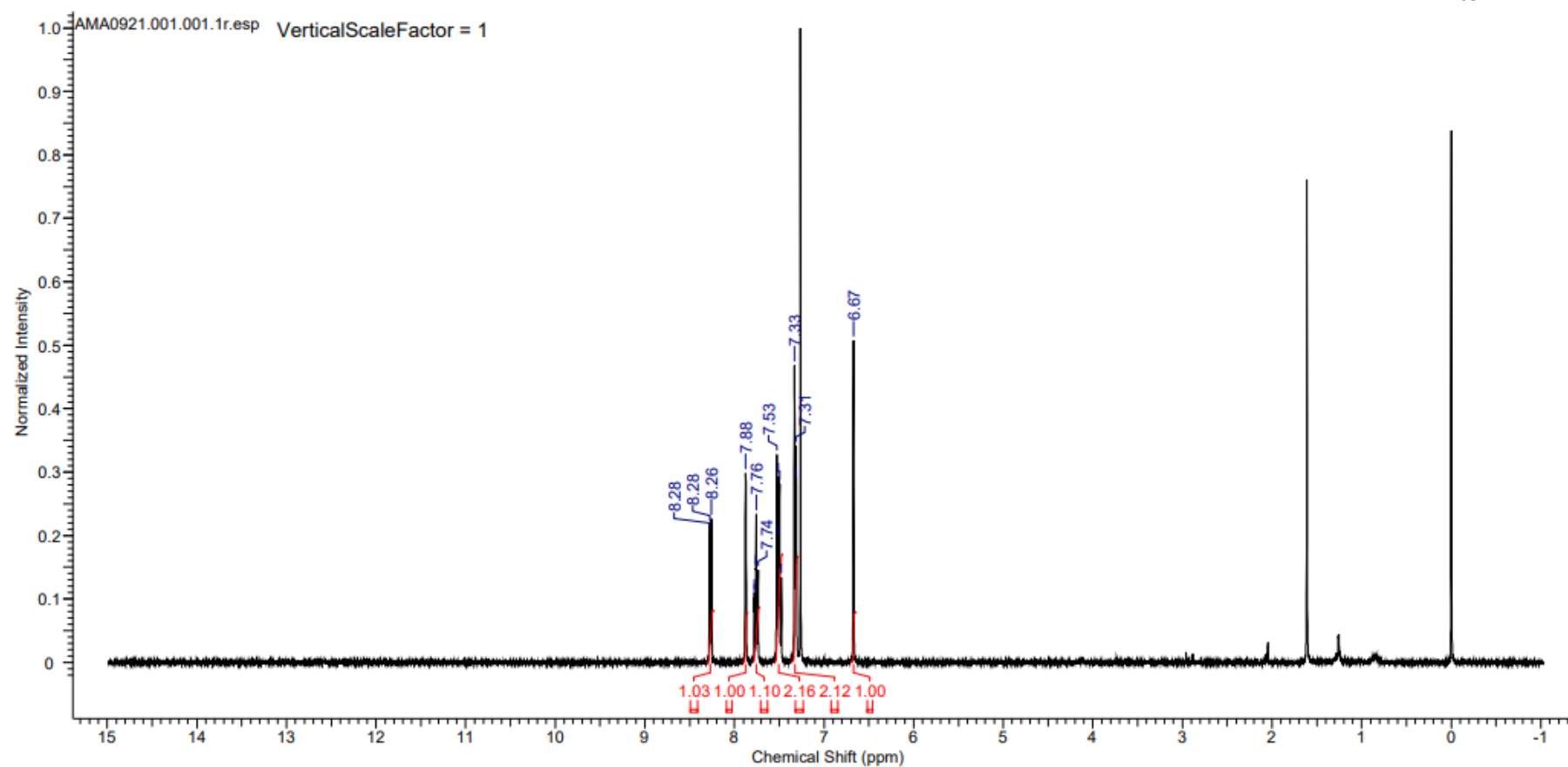
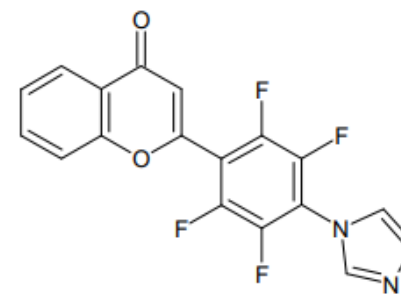


Figure S7.  $^{13}\text{C}$  NMR spectrum of compound 8

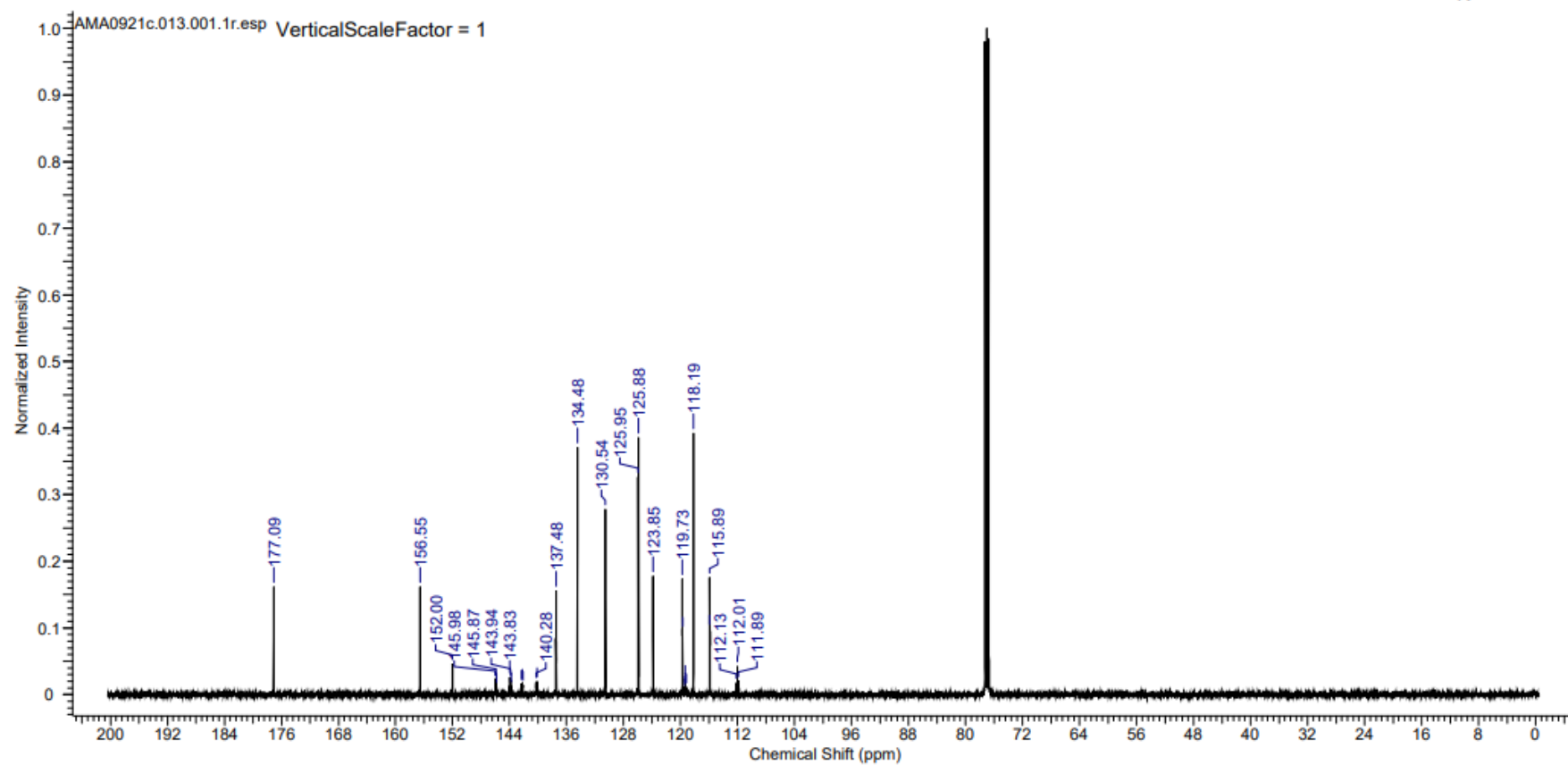
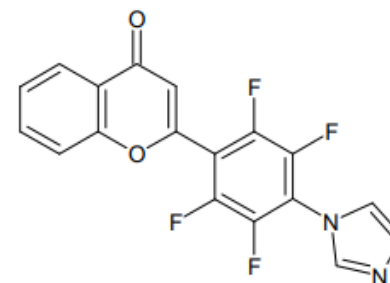


Figure S8.  $^{19}\text{F}$  NMR spectrum of compound 8

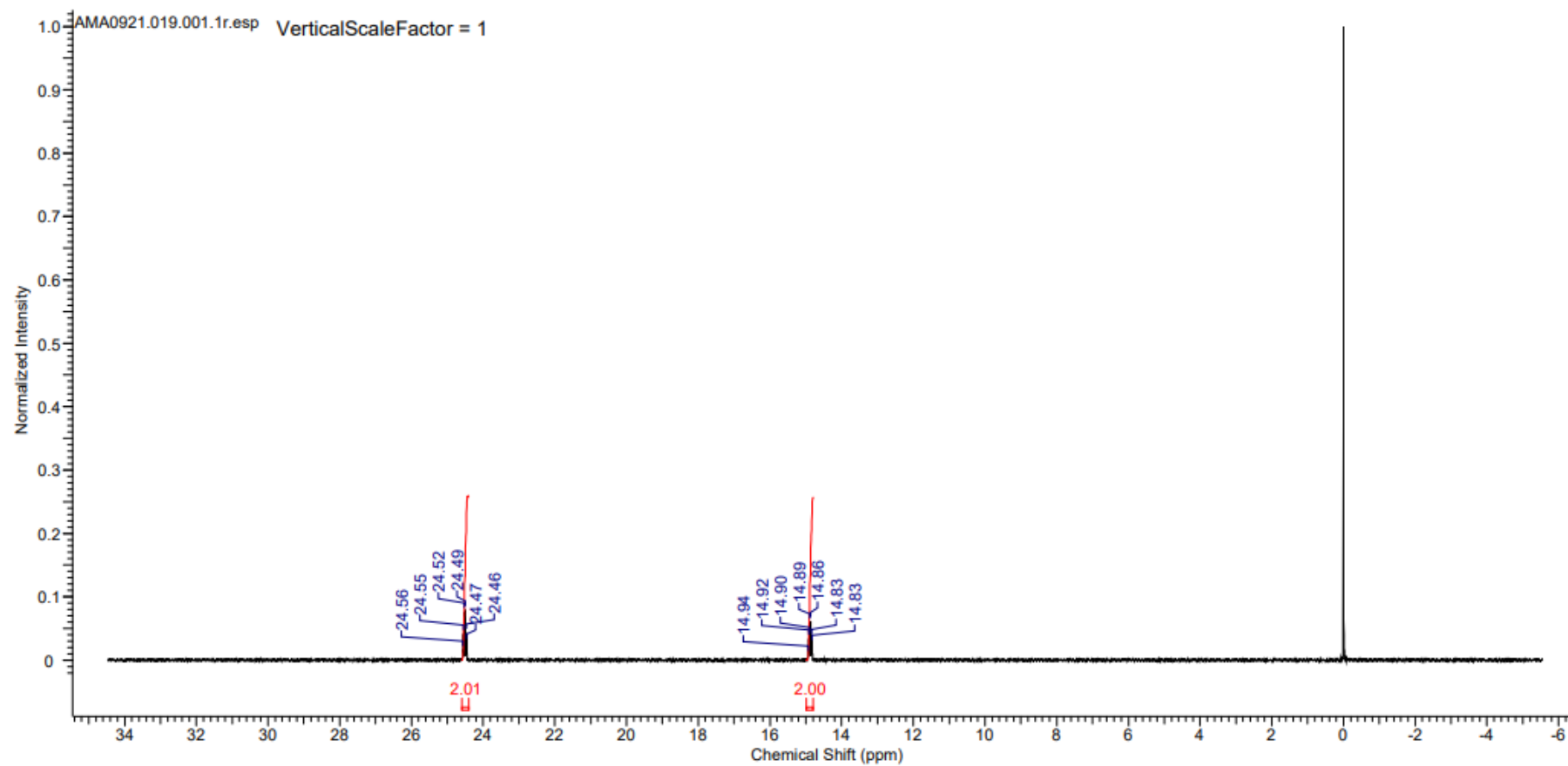
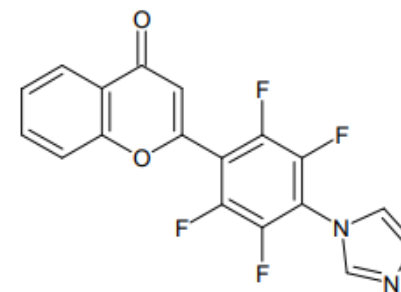




Figure S9.  $^1\text{H}$  NMR spectrum of compound 9

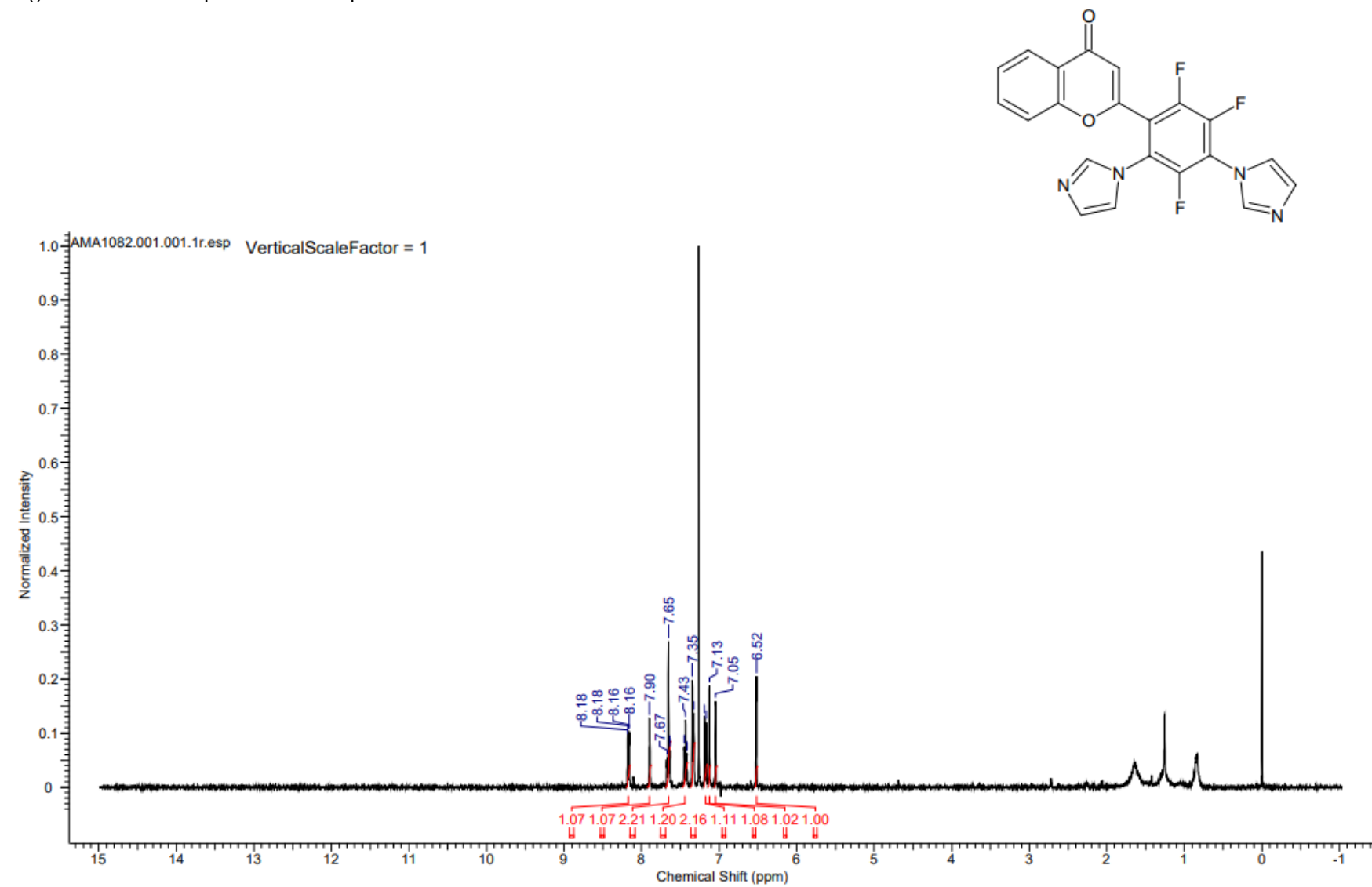


Figure S10.  $^{19}\text{F}$  NMR spectrum of compound 9

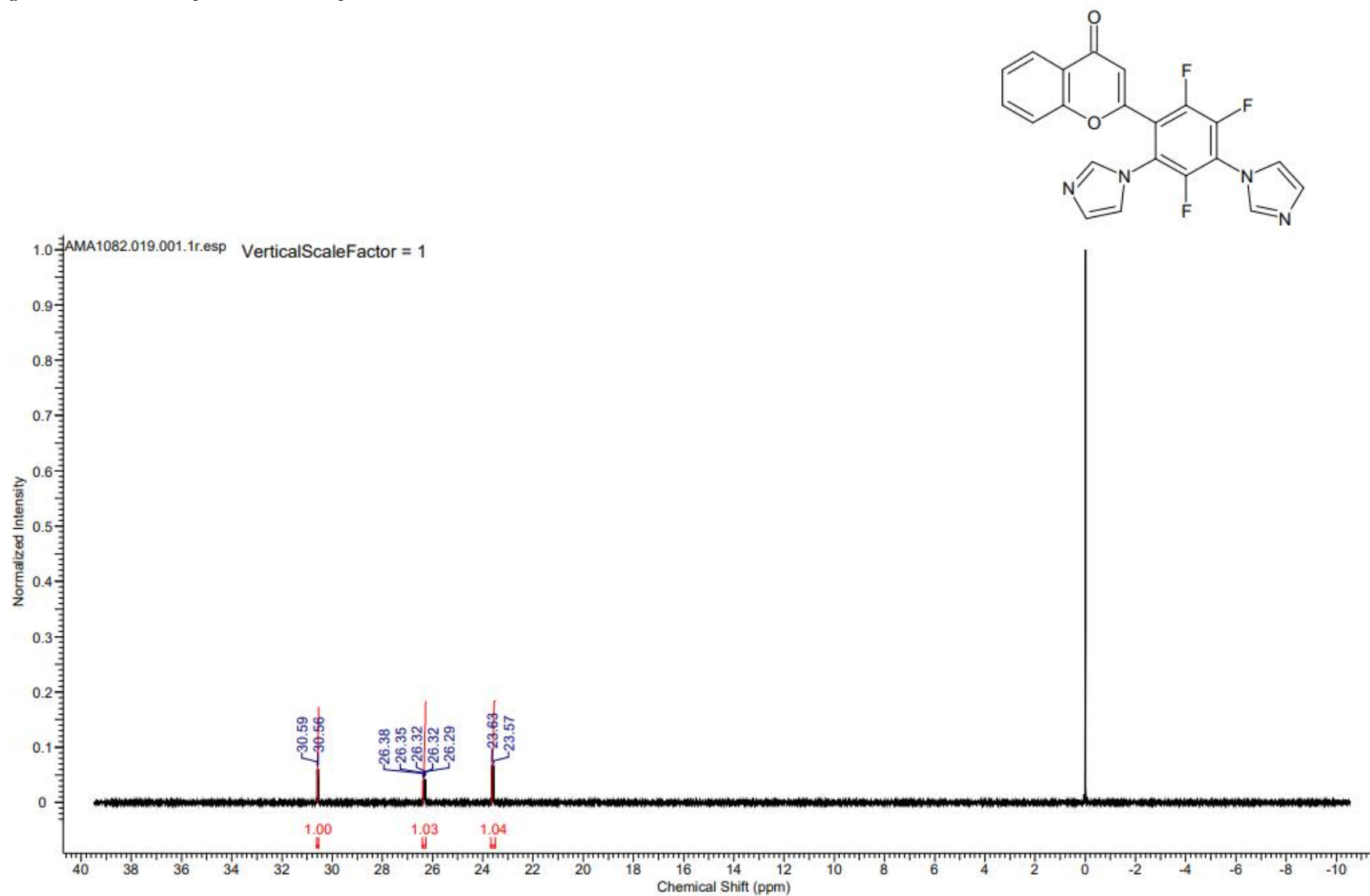


Figure S11. <sup>1</sup>H NMR spectrum of compound 10

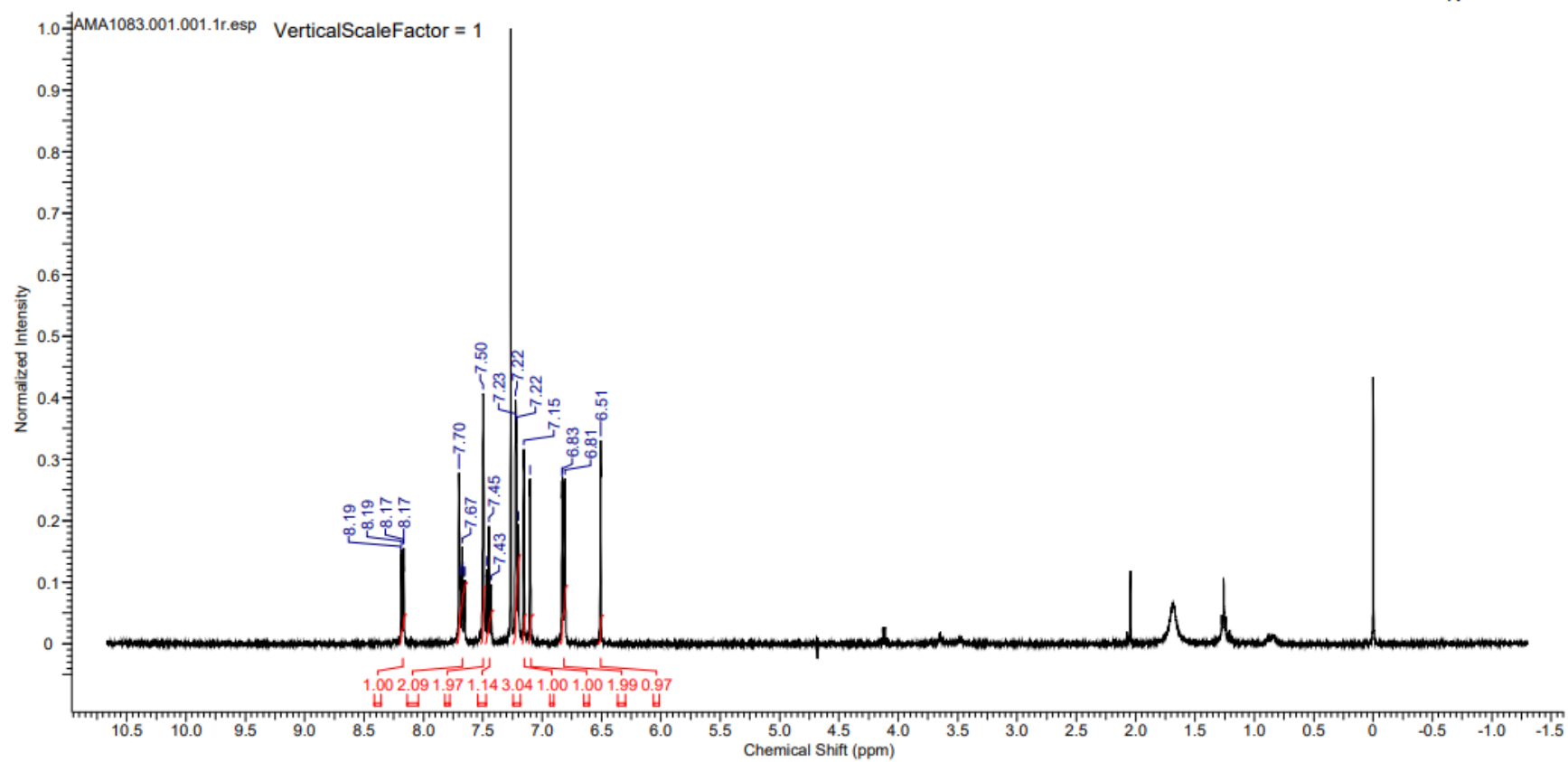
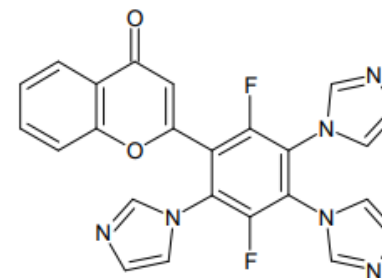


Figure S12.  $^{13}\text{C}$  NMR spectrum of compound 10

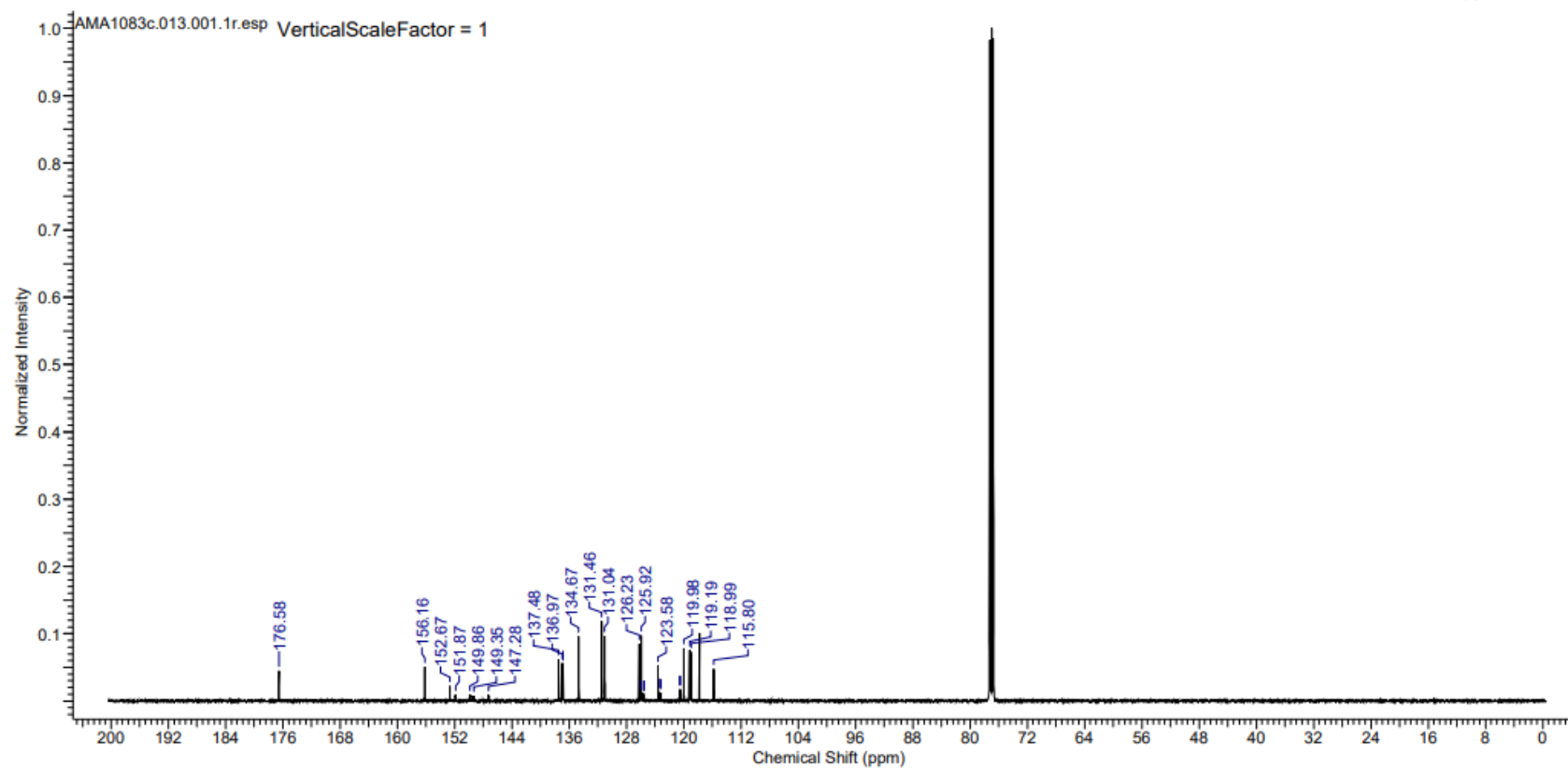
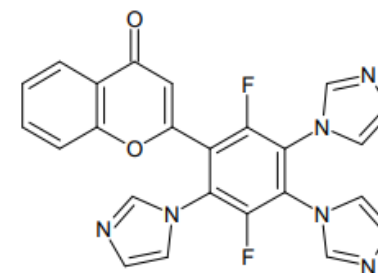


Figure S13.  $^{19}\text{F}$  NMR spectrum of compound **10**

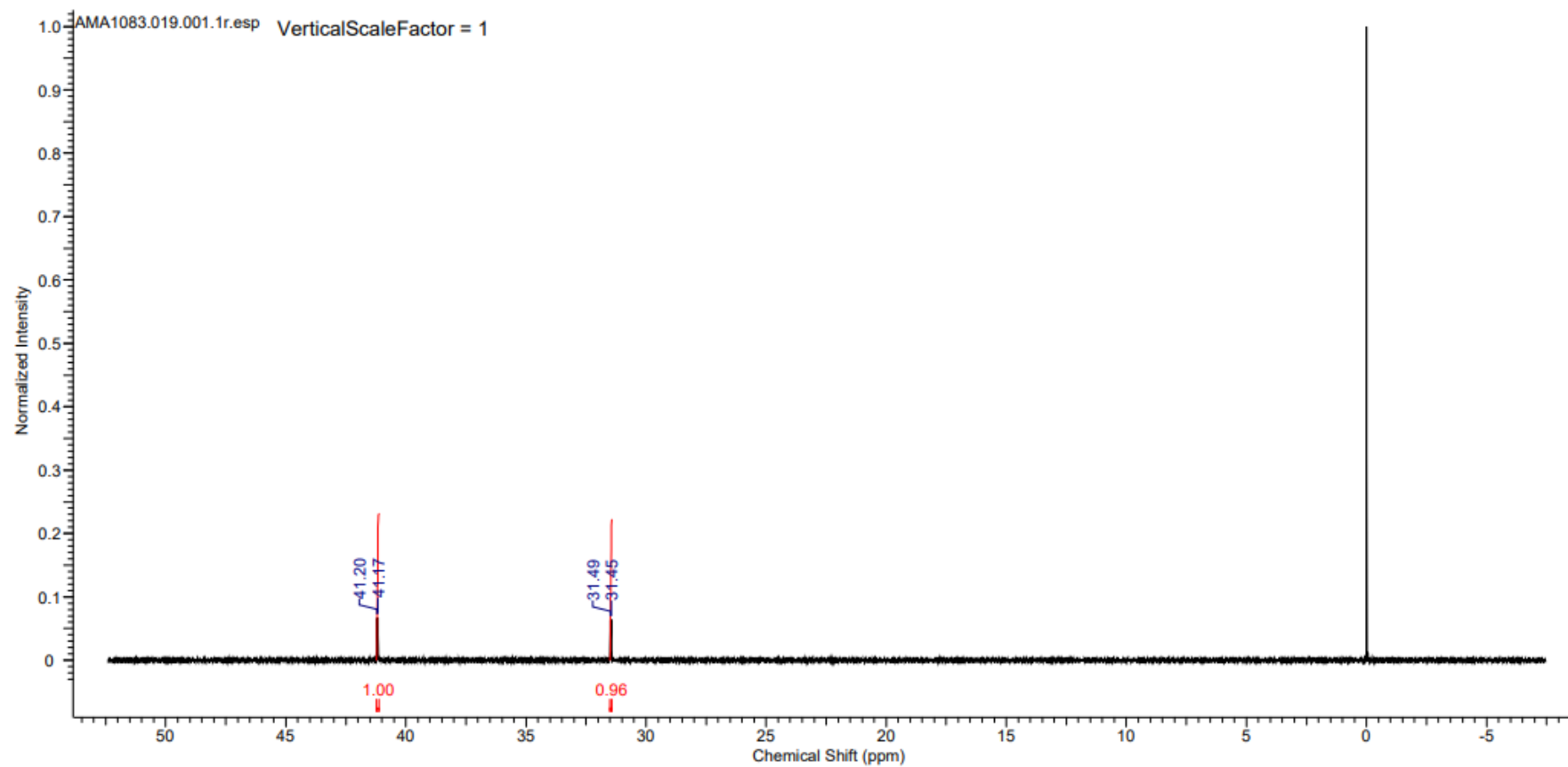
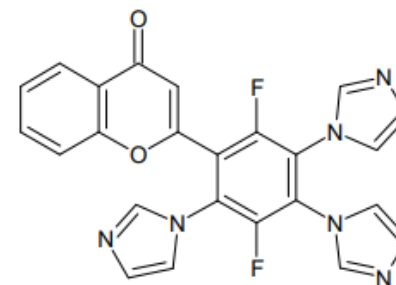


Figure S14. <sup>1</sup>H NMR spectrum of compound **11**

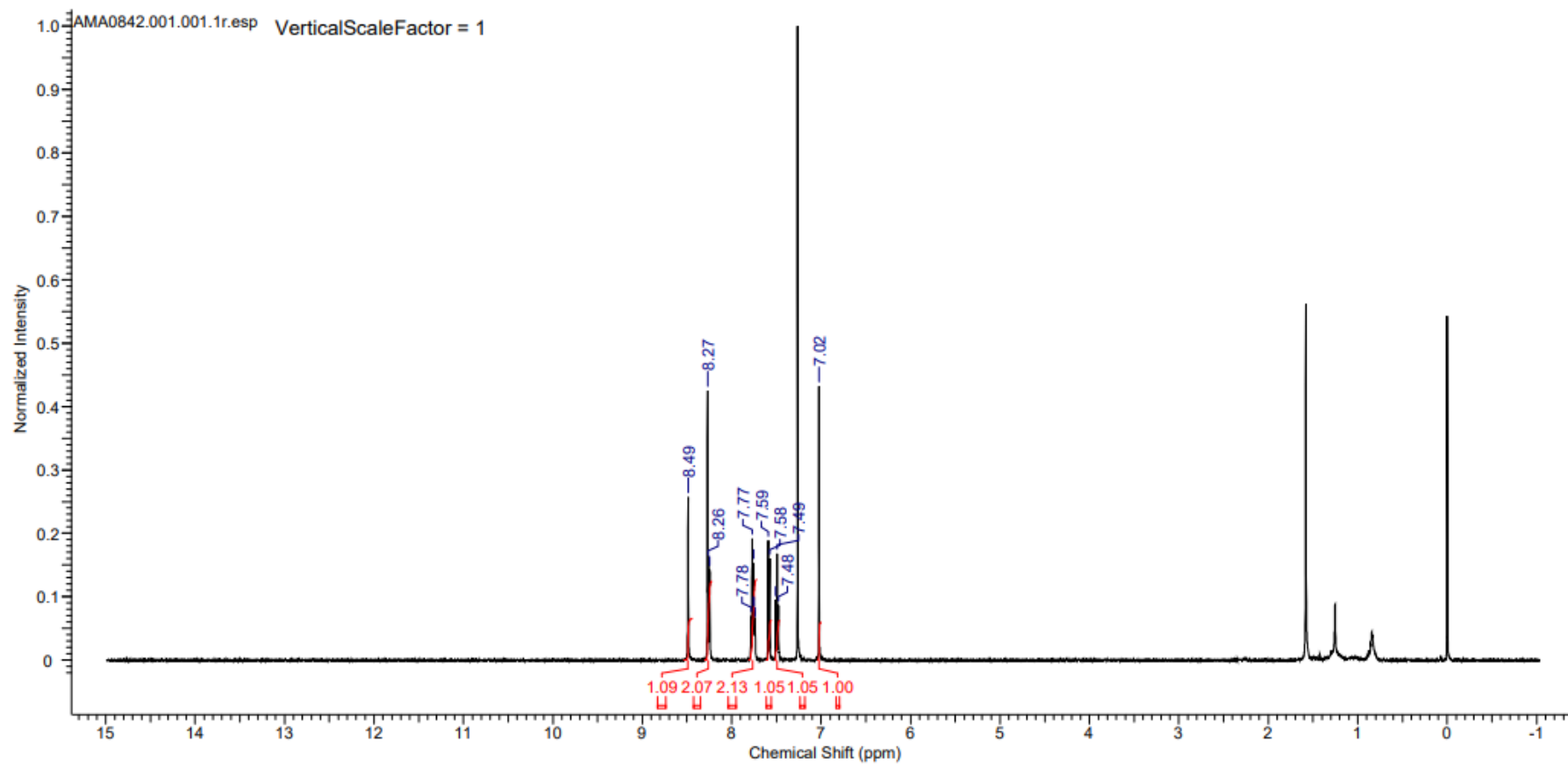
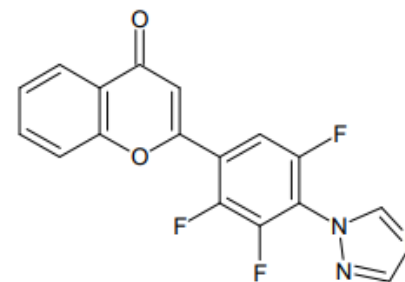


Figure S15.  $^{13}\text{C}$  NMR spectrum of compound 11

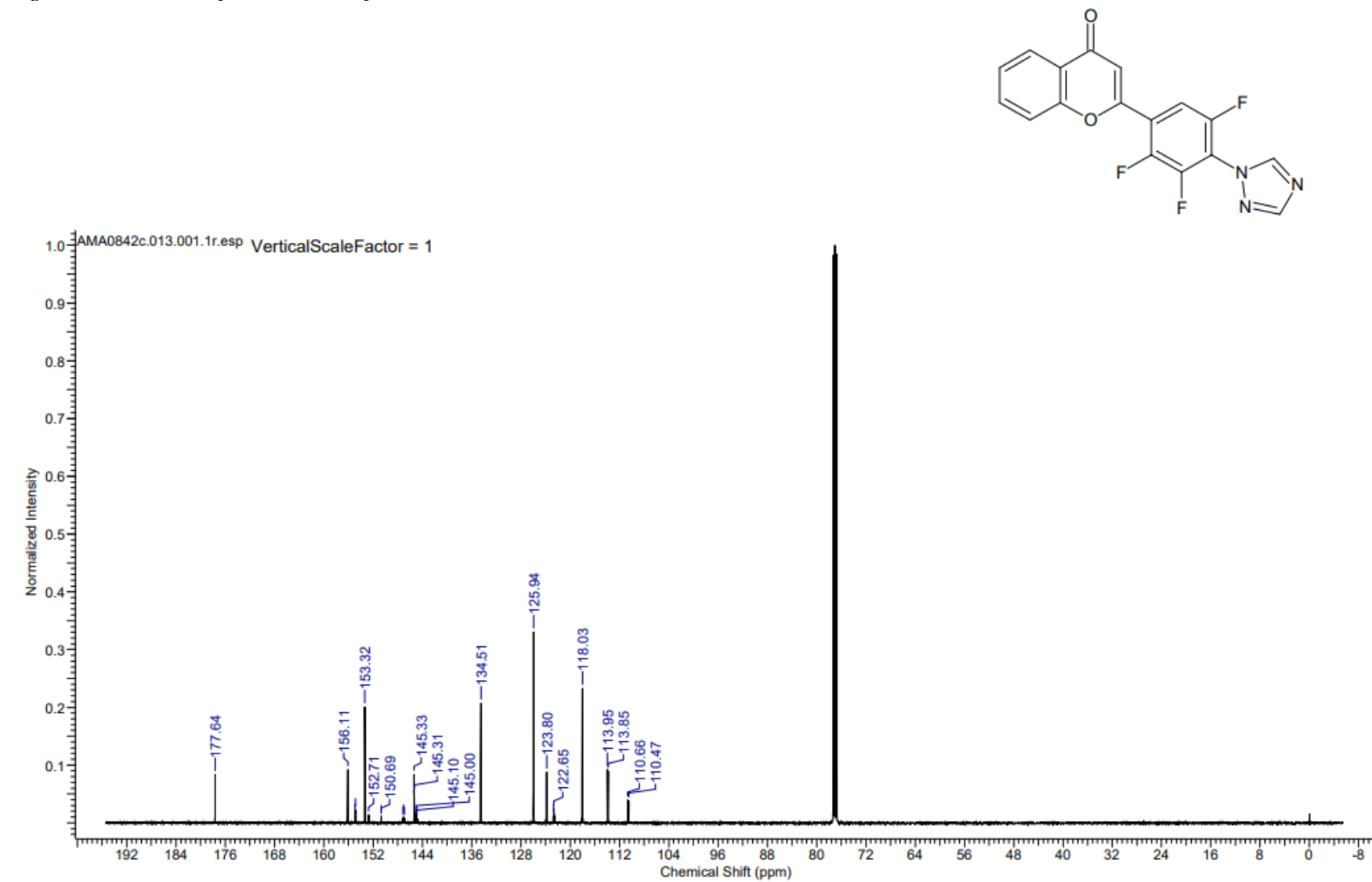


Figure S16.  $^{19}\text{F}$  NMR spectrum of compound **11**

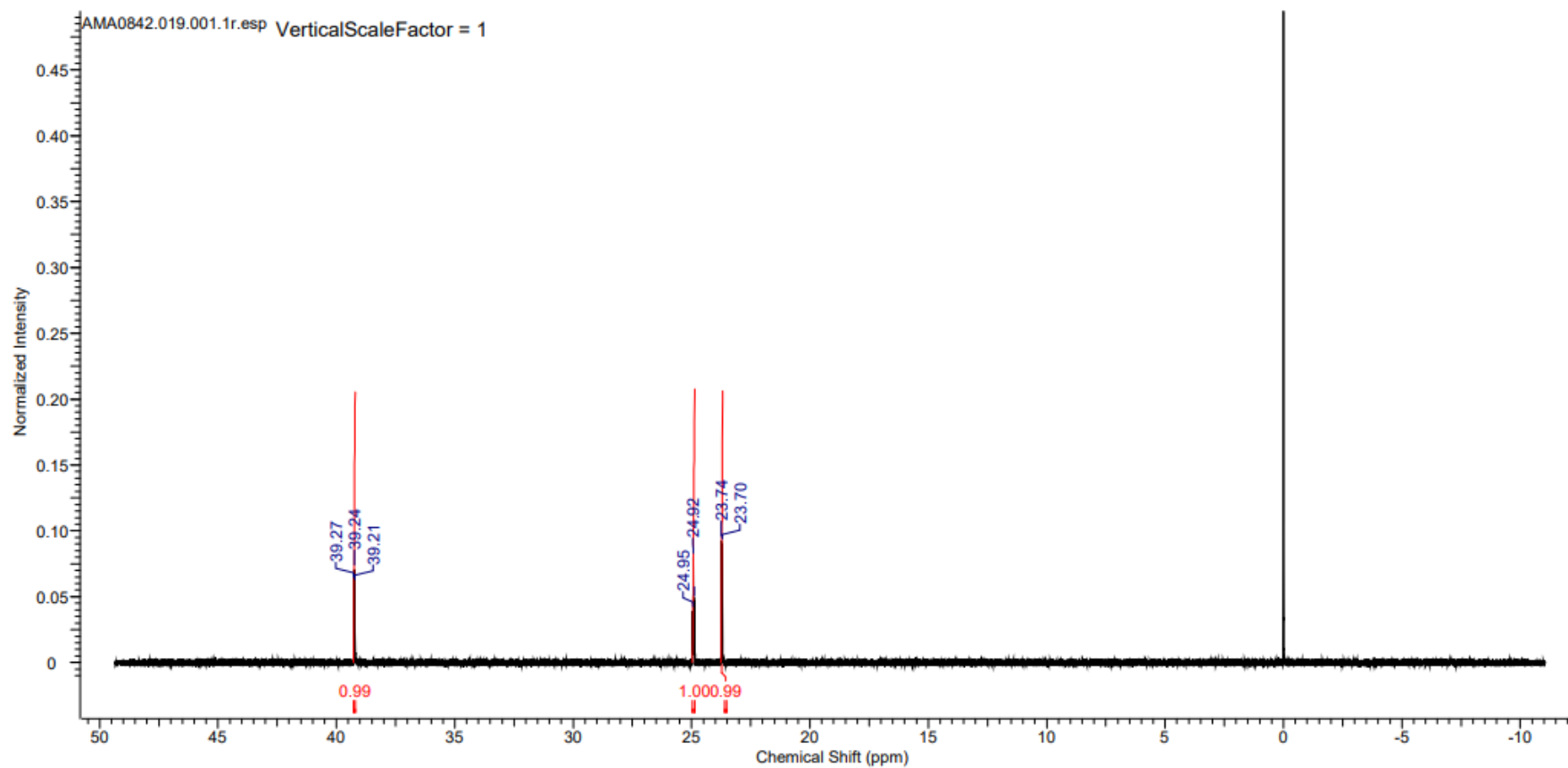
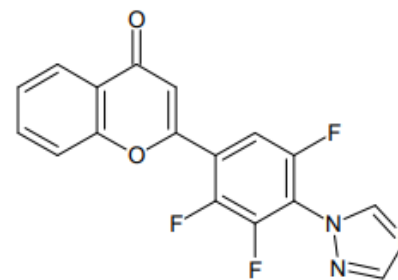




Figure S17.  $^1\text{H}$  NMR spectrum of compound **14**

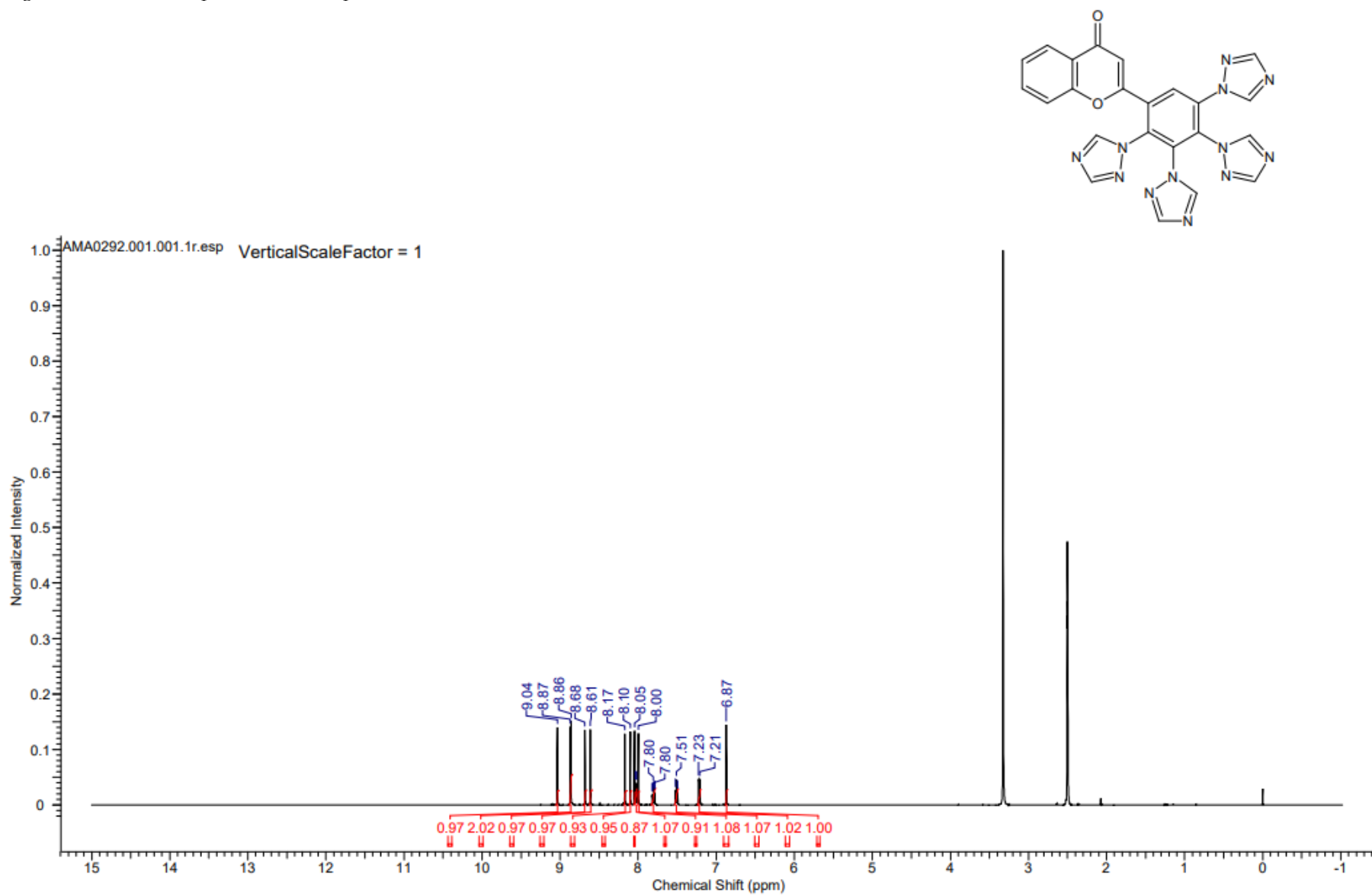


Figure S18.  $^{13}\text{C}$  NMR spectrum of compound **14**

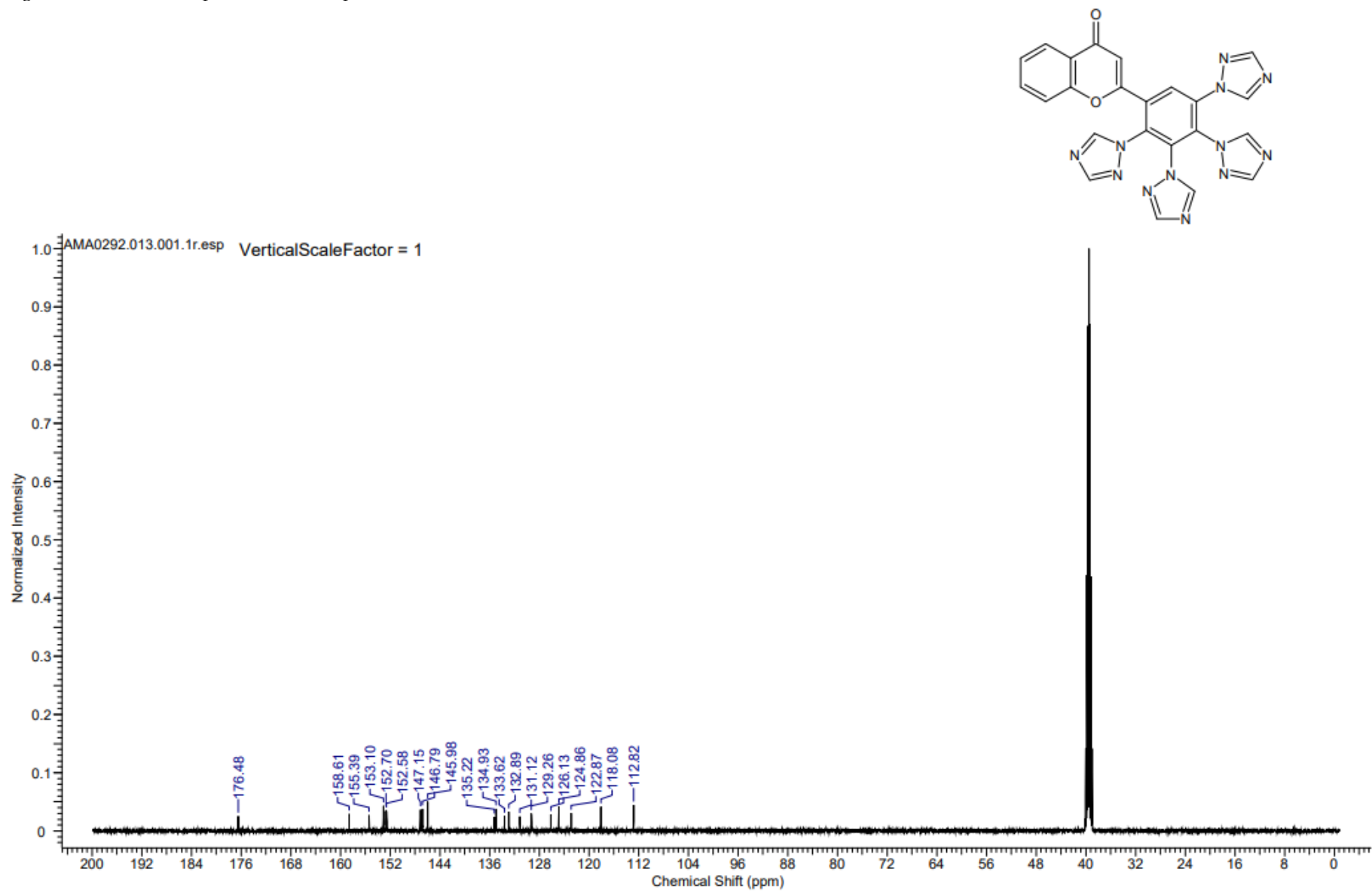


Figure S19.  $^1\text{H}$  NMR spectrum of compound 15

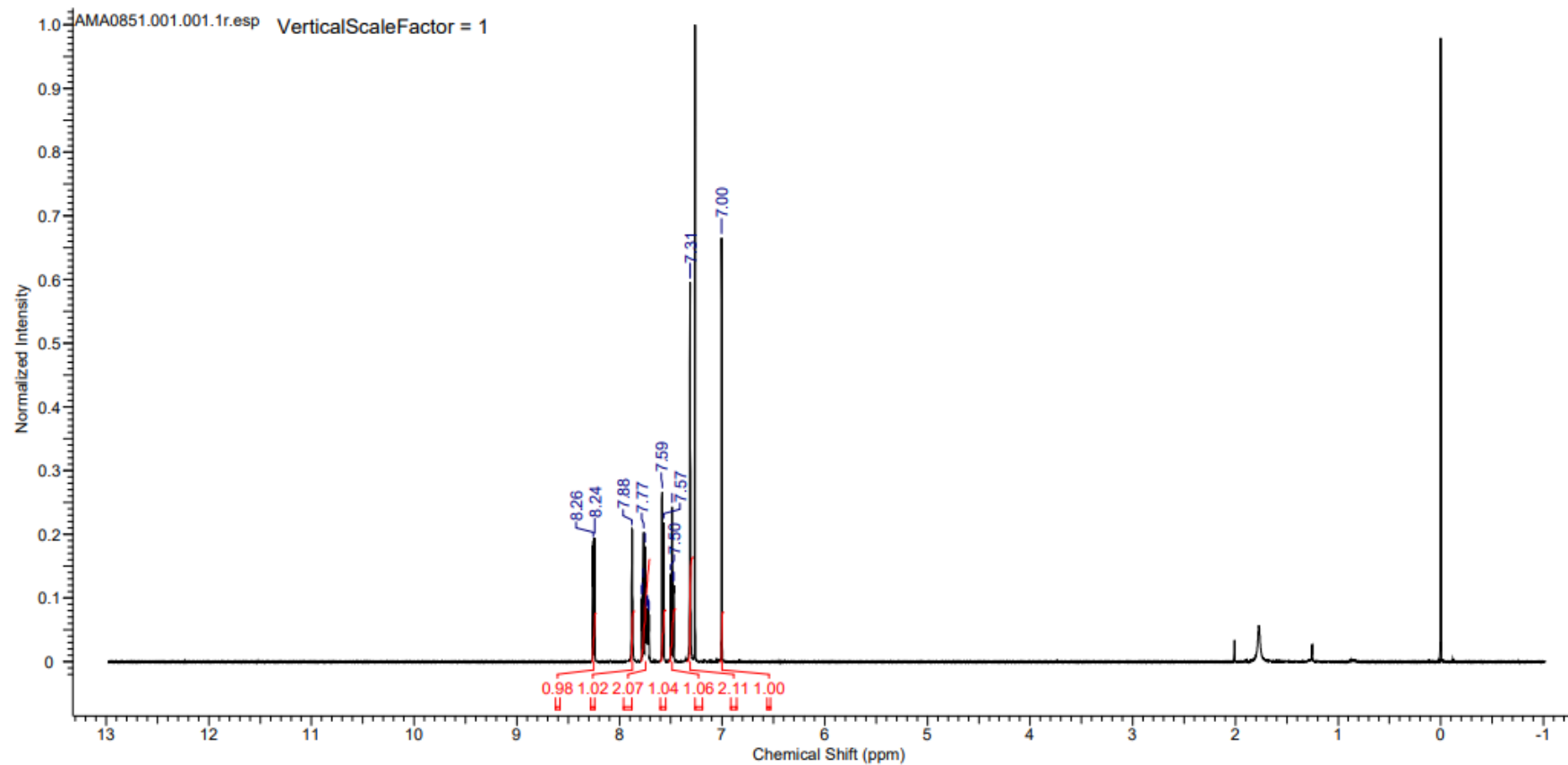
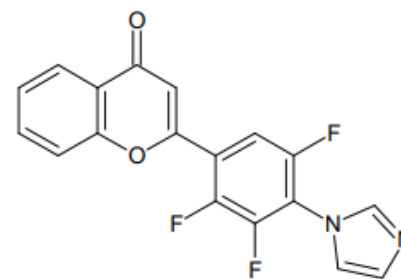


Figure S20.  $^{13}\text{C}$  NMR spectrum of compound **15**

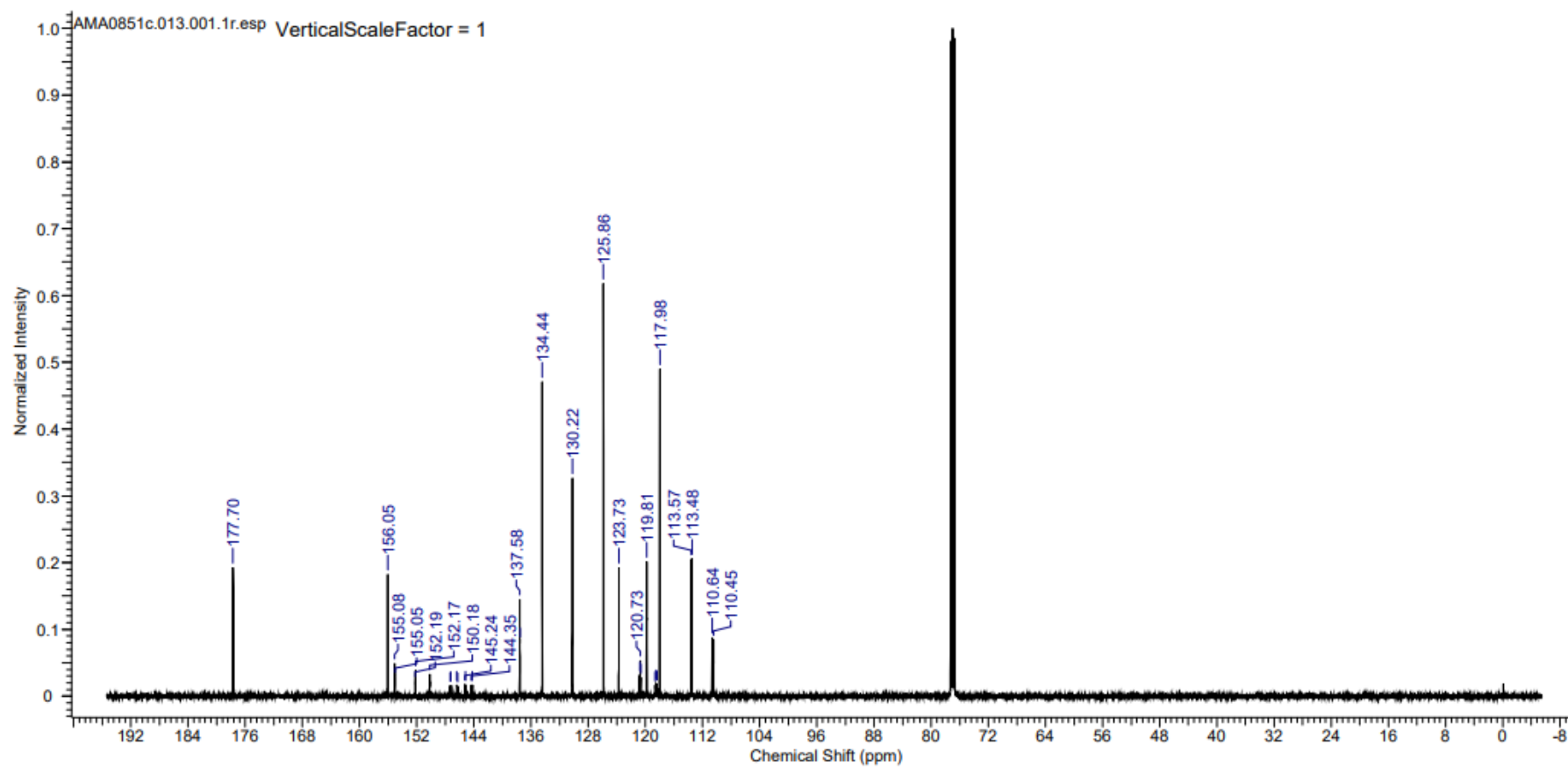
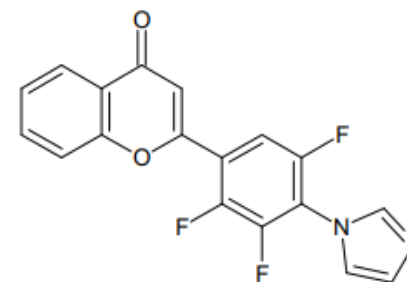


Figure S21.  $^{19}\text{F}$  NMR spectrum of compound 15

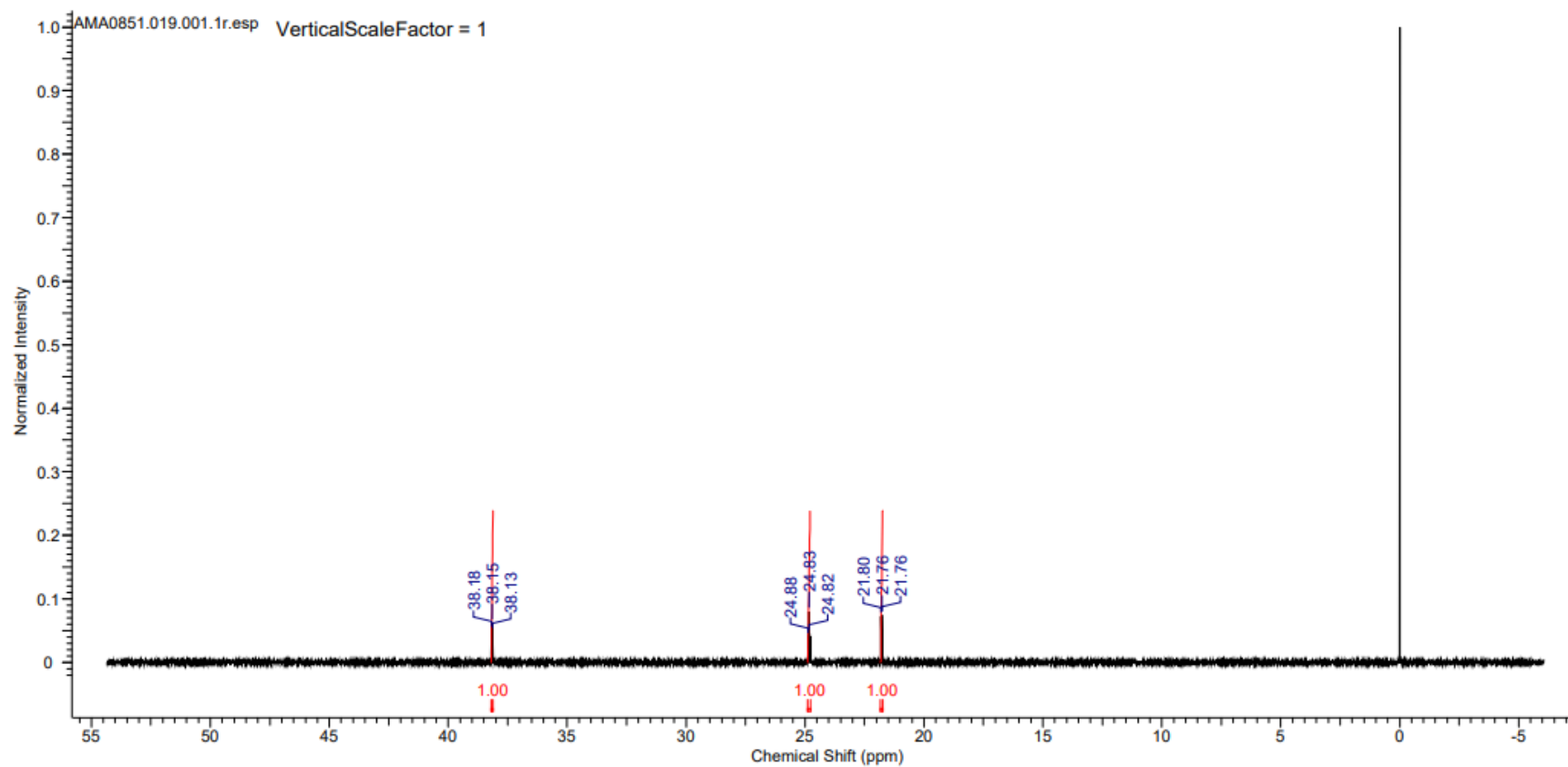
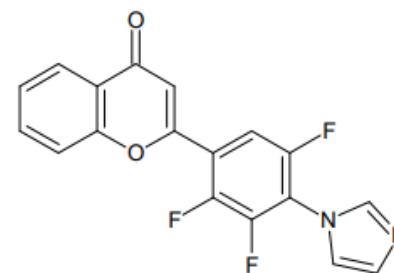


Figure S22. <sup>1</sup>H NMR spectrum of compound 17

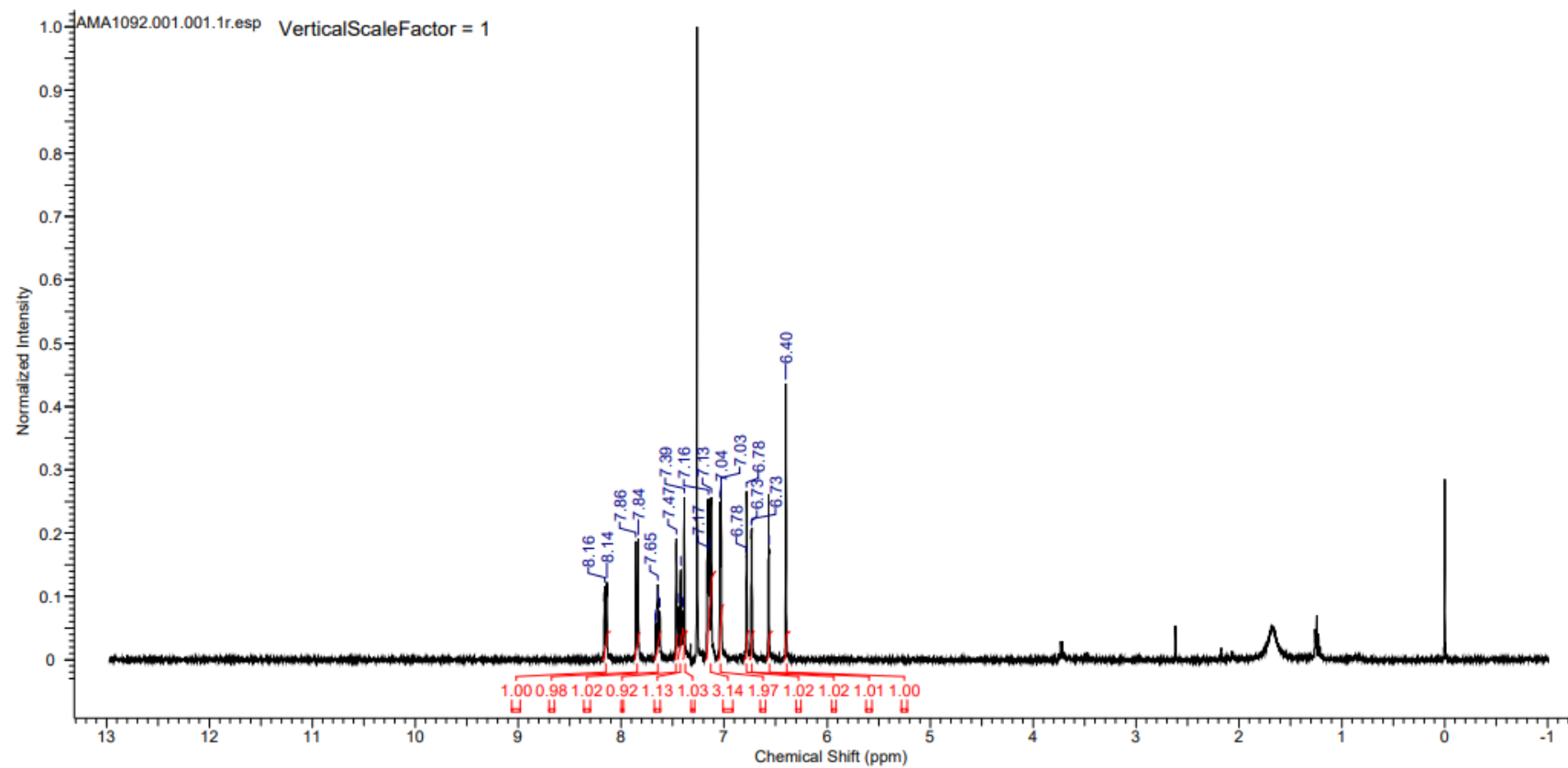
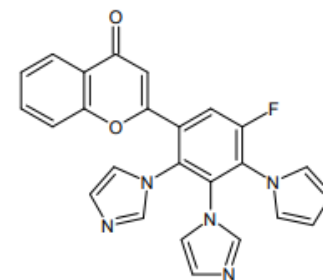


Figure S23.  $^{13}\text{C}$  NMR spectrum of compound **17**

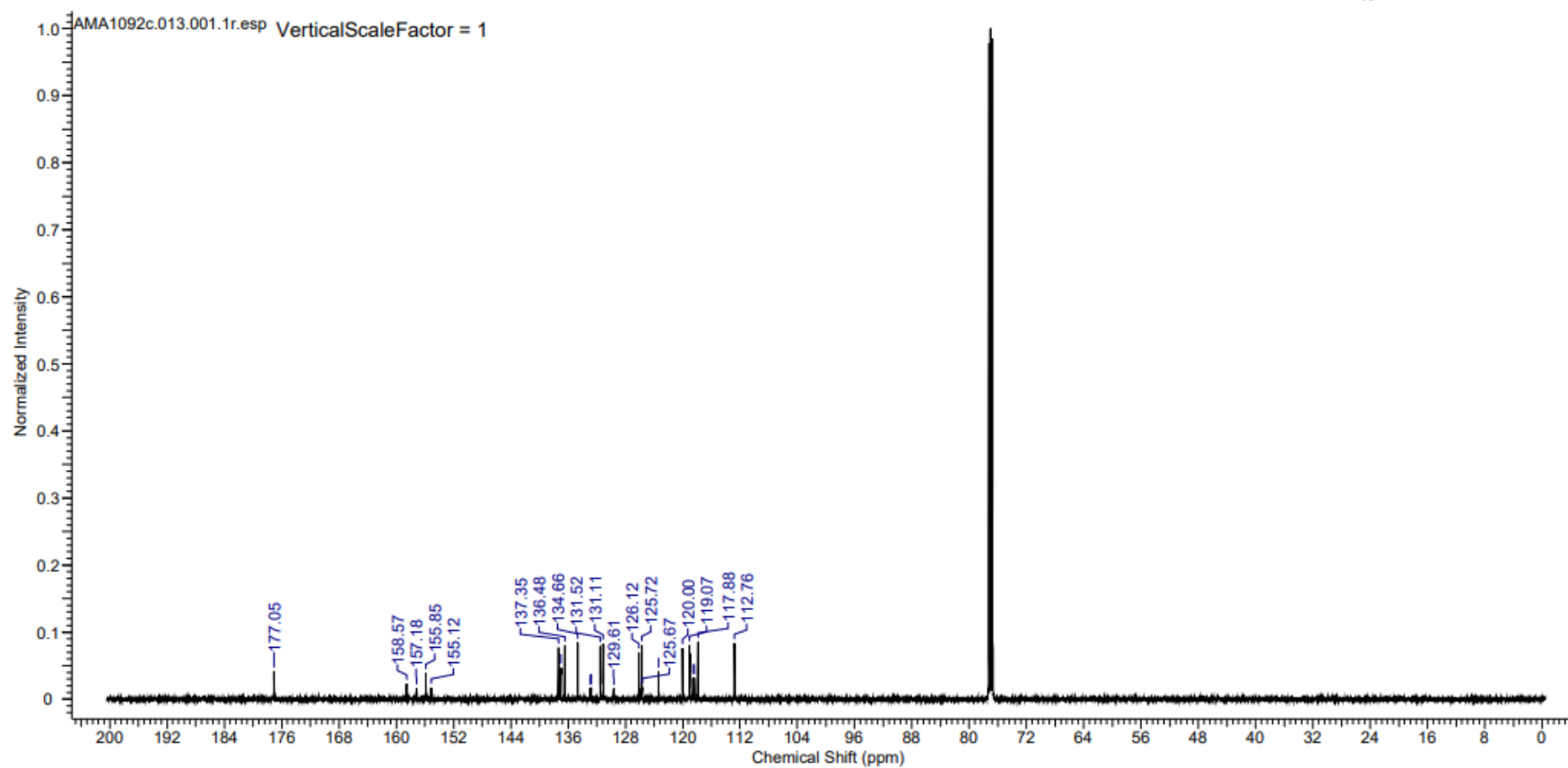
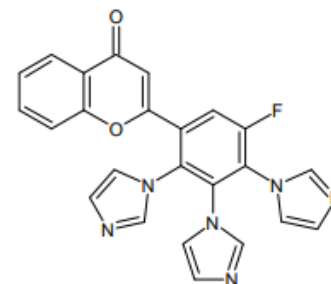


Figure S24.  $^{19}\text{F}$  NMR spectrum of compound 17

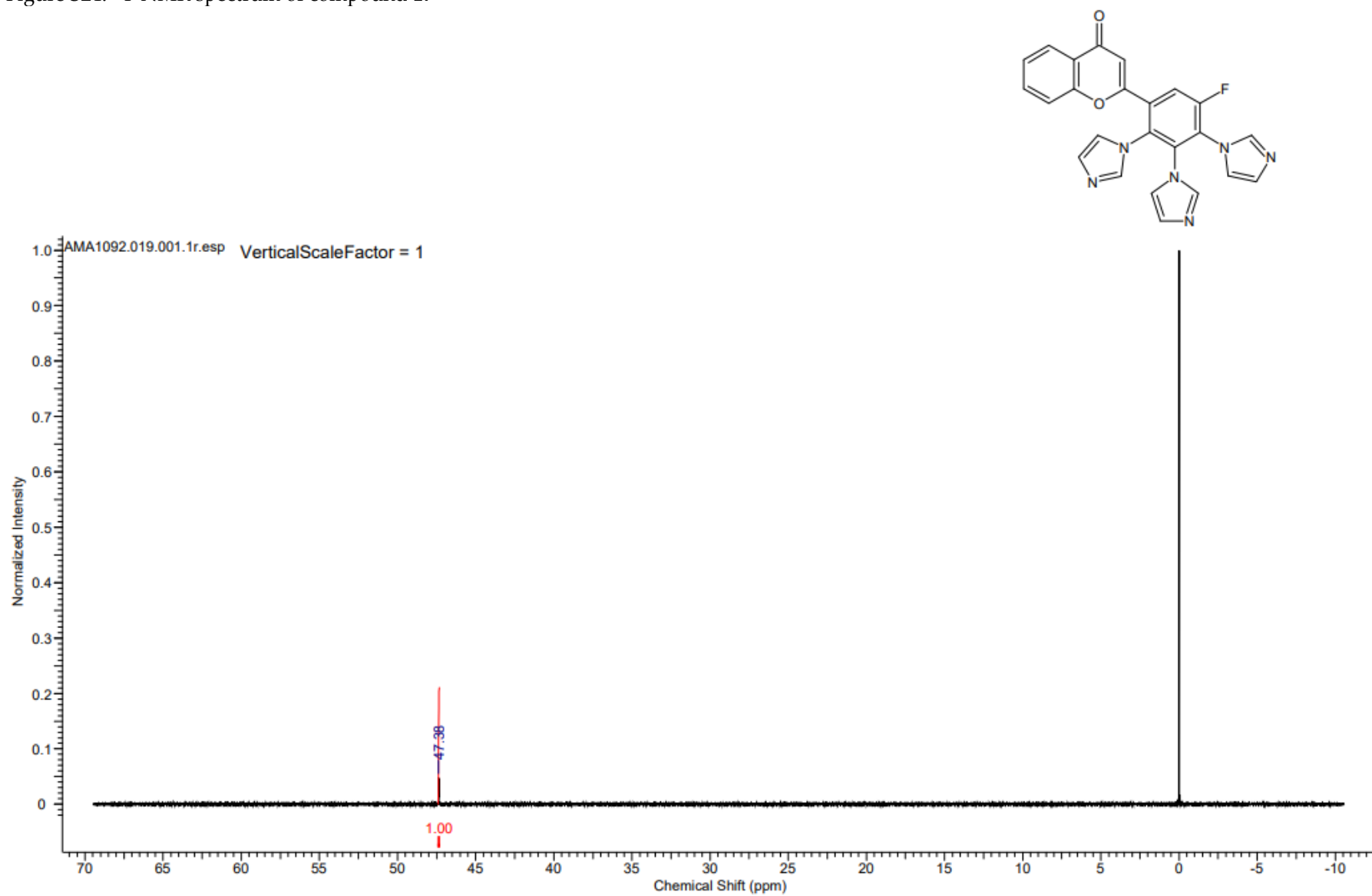




Figure S25.  $^1\text{H}$  NMR spectrum of compound **18**

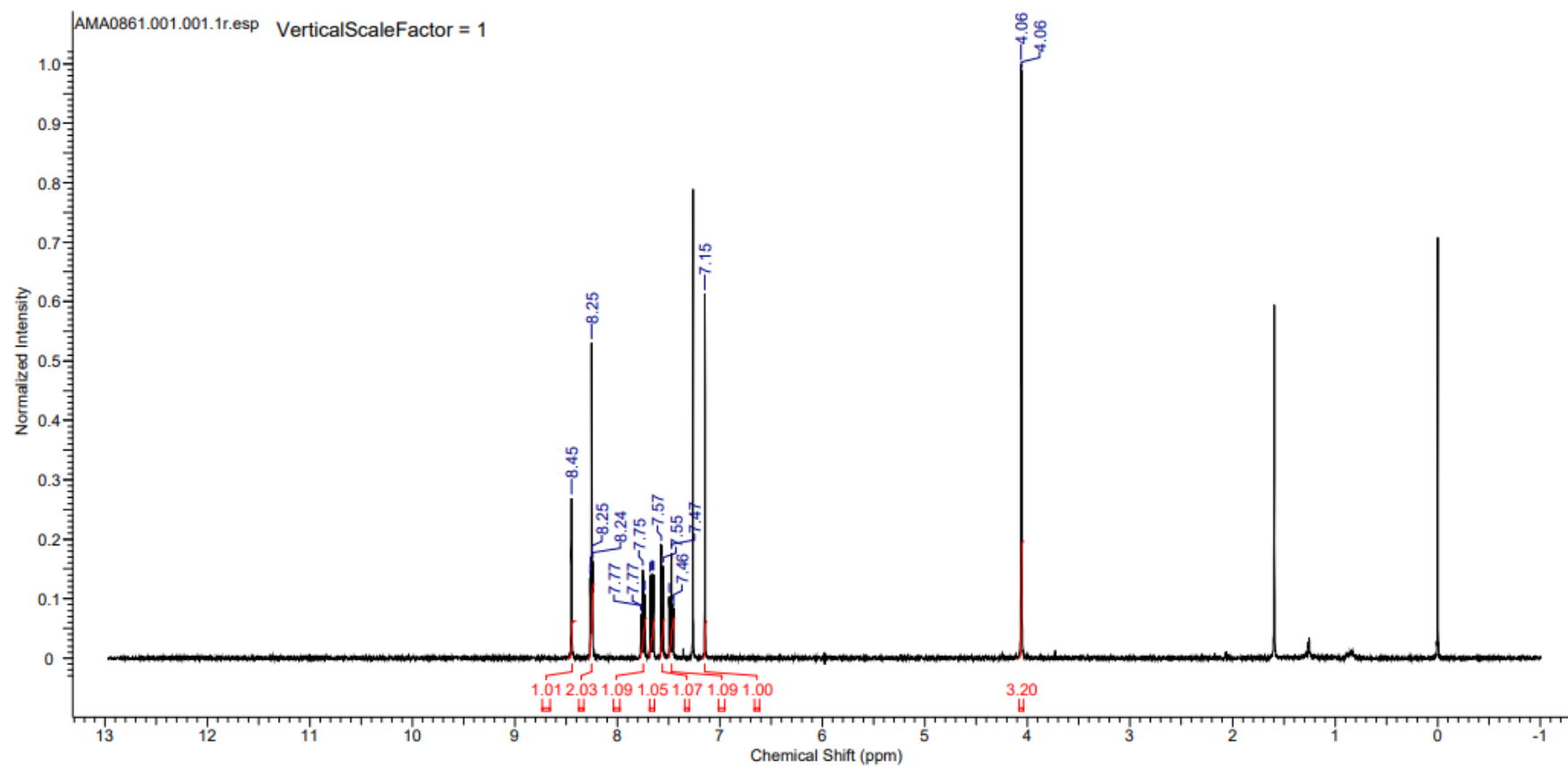
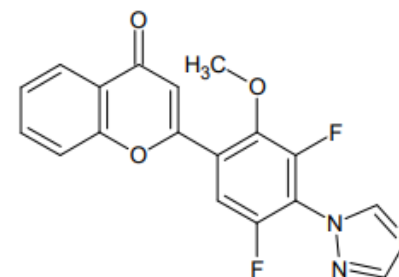


Figure S26.  $^{13}\text{C}$  NMR spectrum of compound **18**

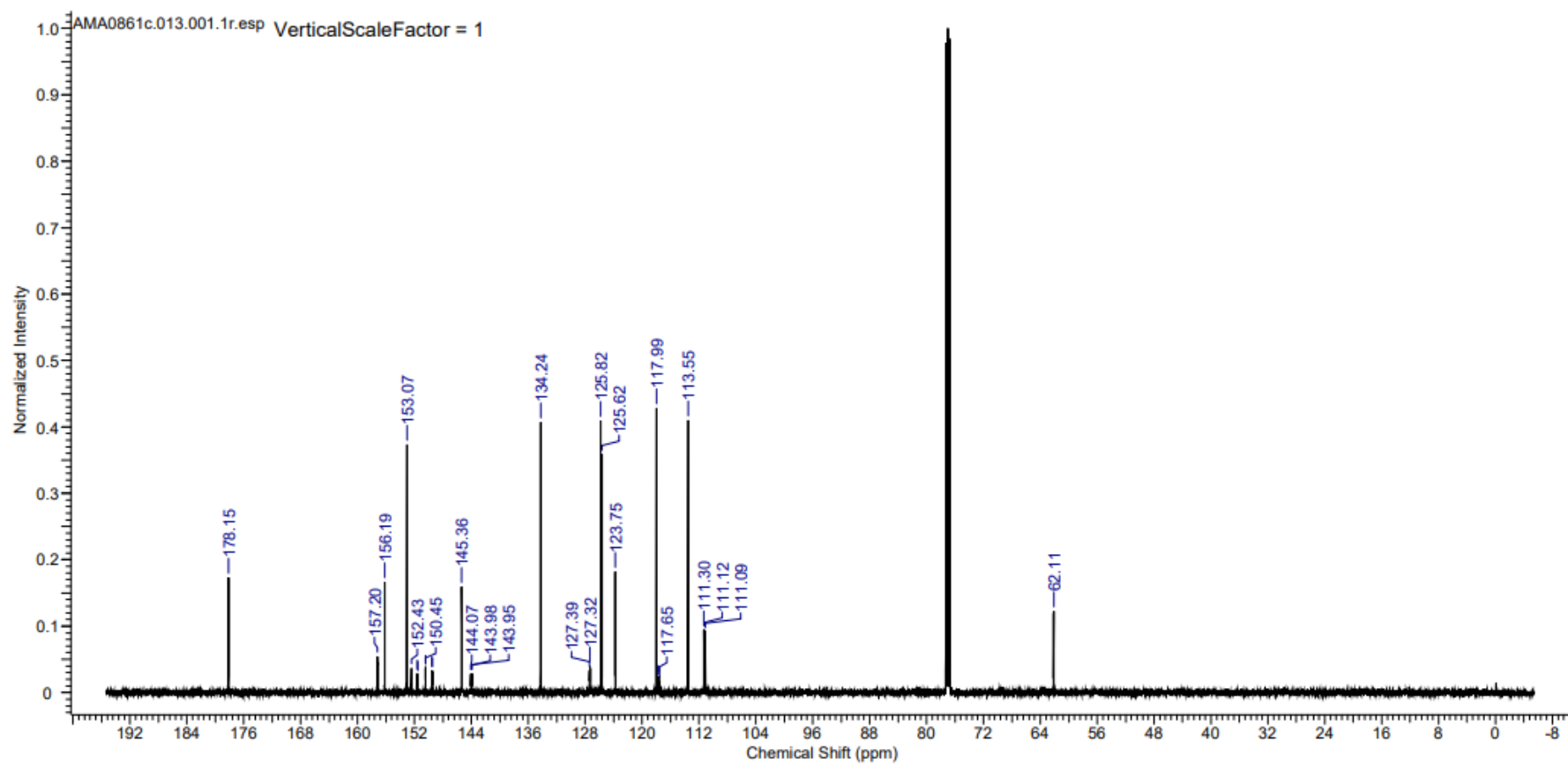
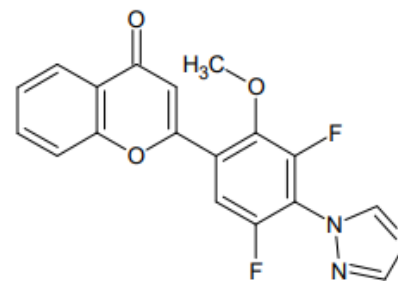


Figure S27.  $^{19}\text{F}$  NMR spectrum of compound **18**

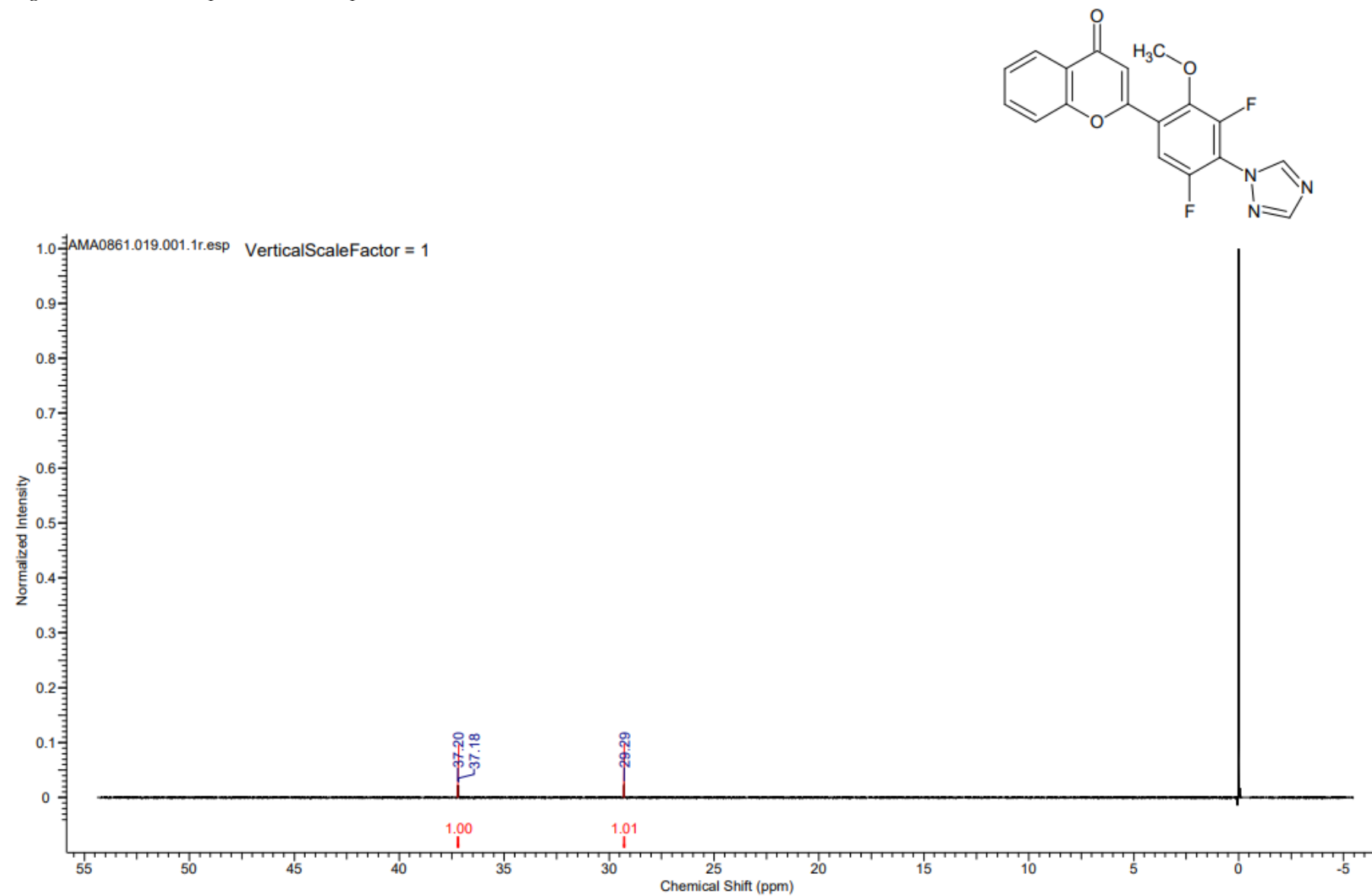


Figure S28.  $^1\text{H}$  NMR spectrum of compound **19**

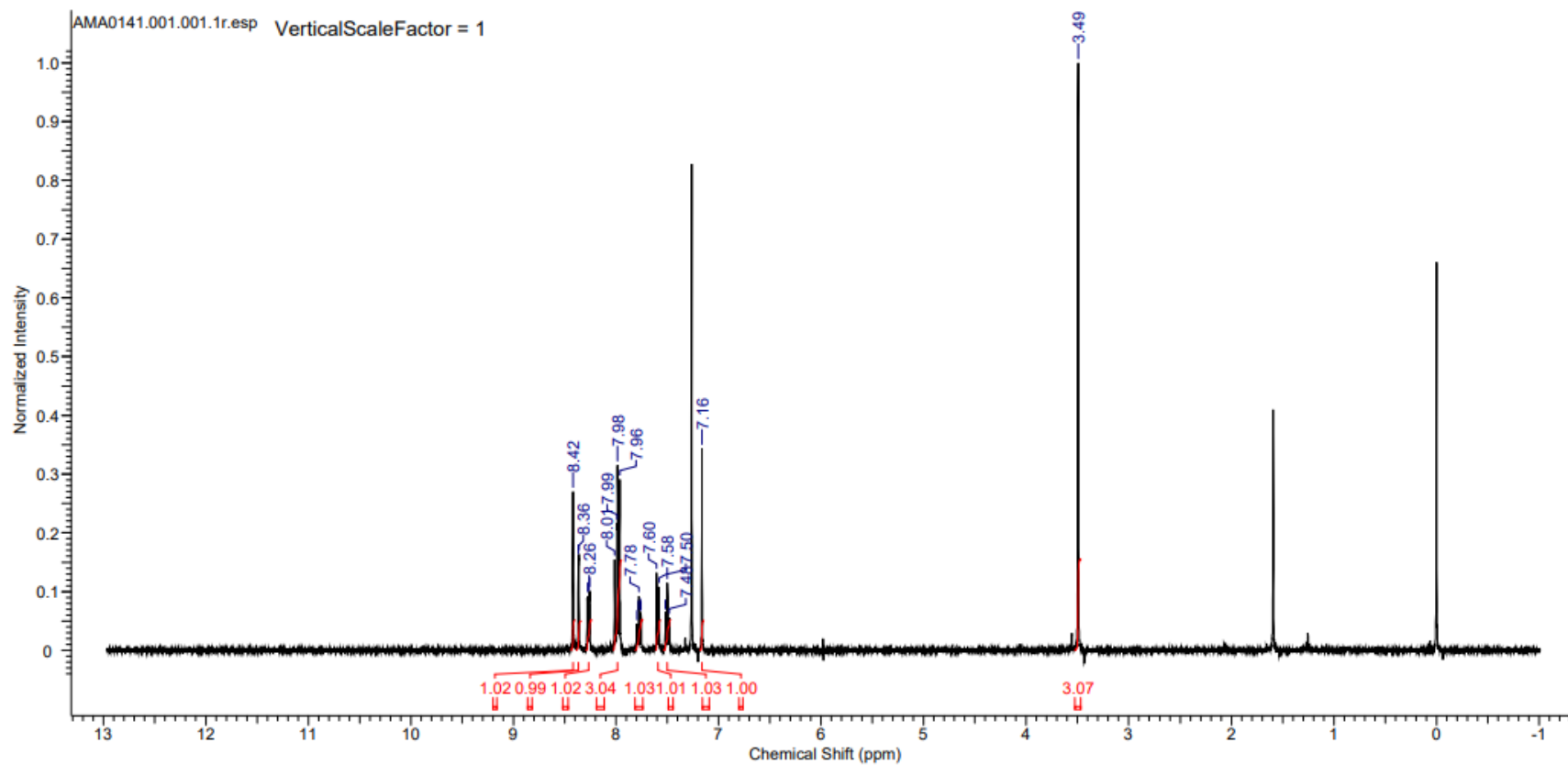
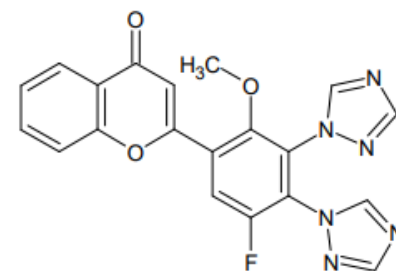


Figure S29.  $^{13}\text{C}$  NMR spectrum of compound **19**

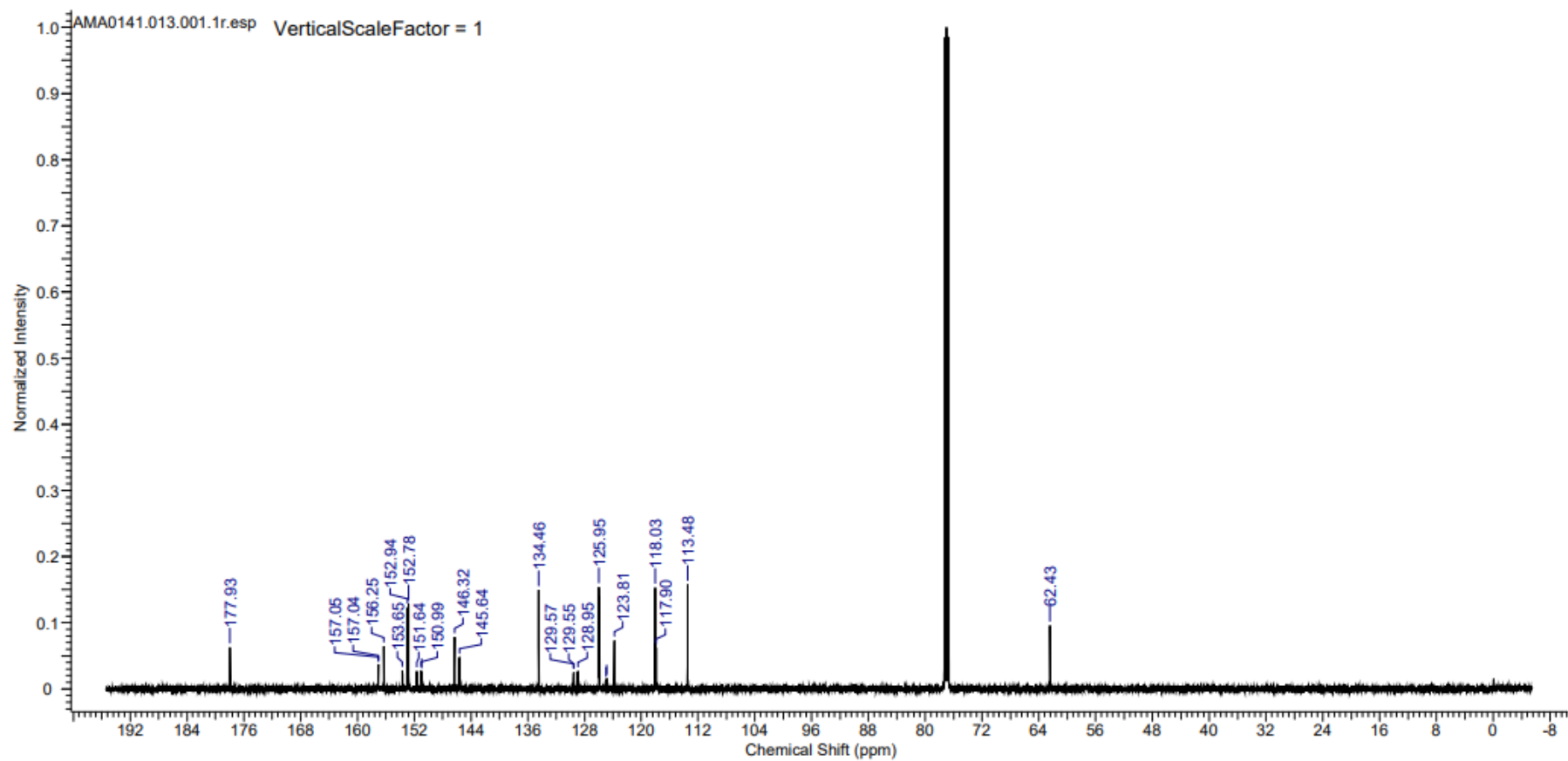
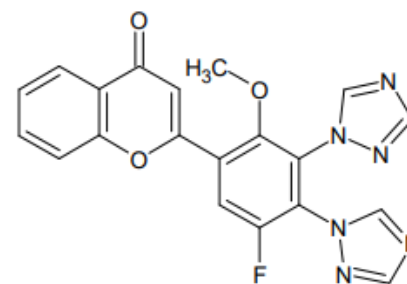


Figure S30.  $^{19}\text{F}$  NMR spectrum of compound **19**

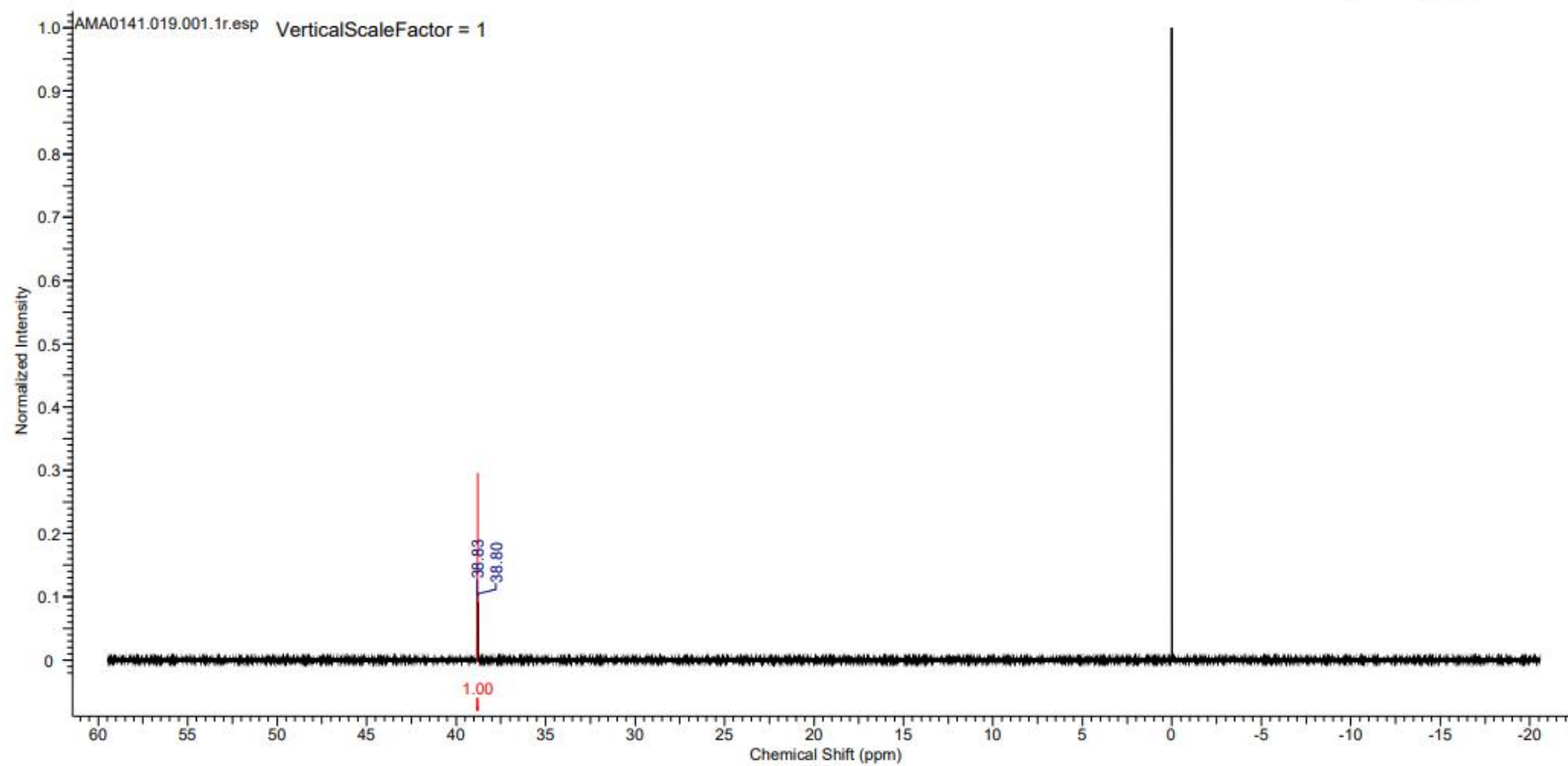
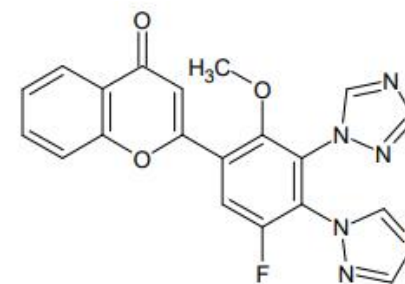


Figure S31. <sup>1</sup>H NMR spectrum of compound 22

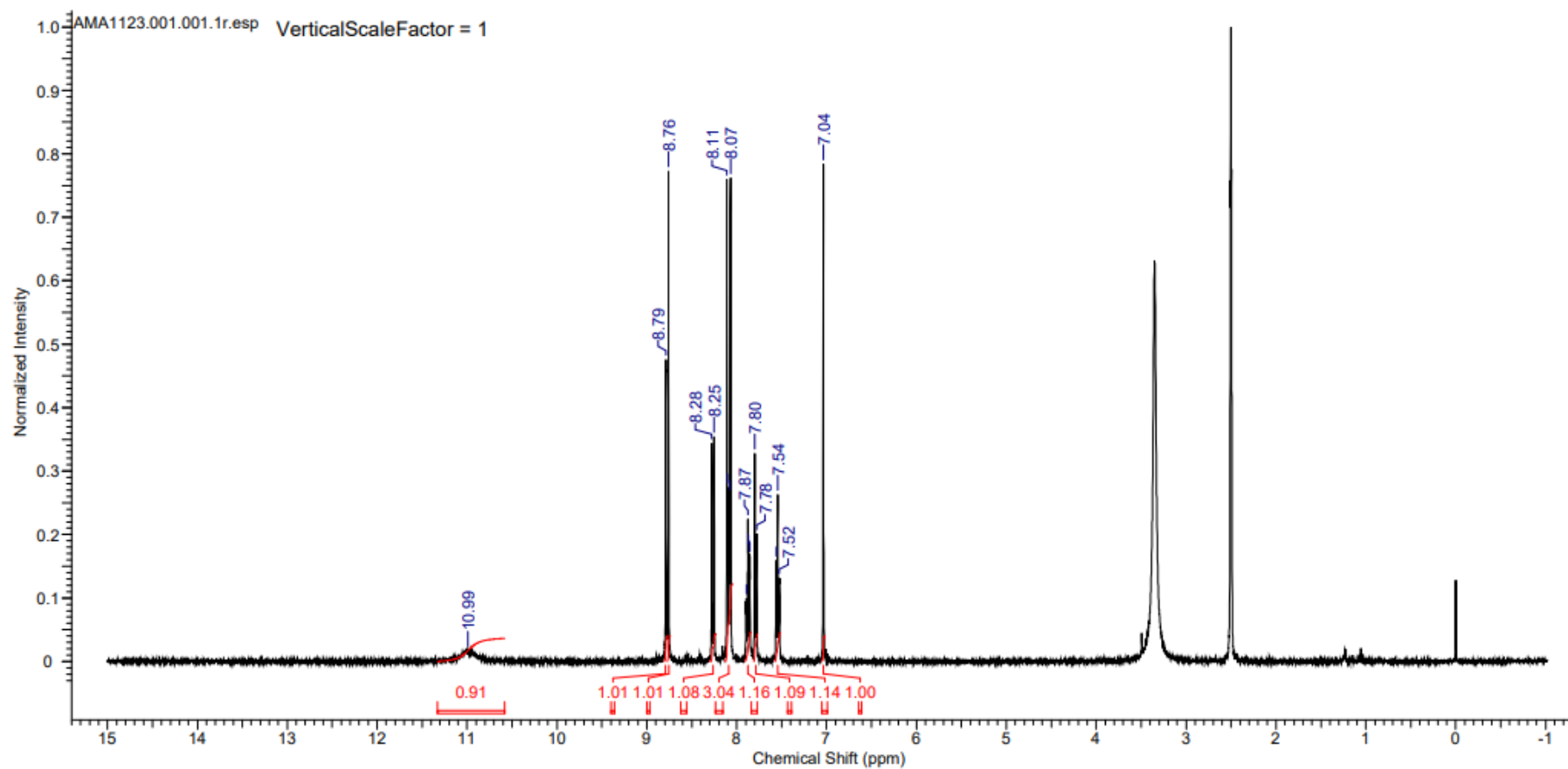
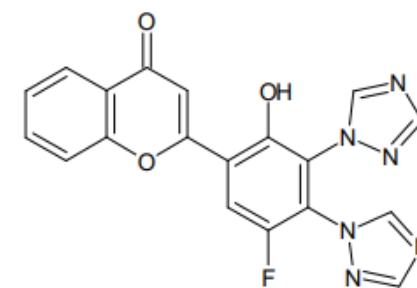


Figure S32.  $^{13}\text{C}$  NMR spectrum of compound **22**

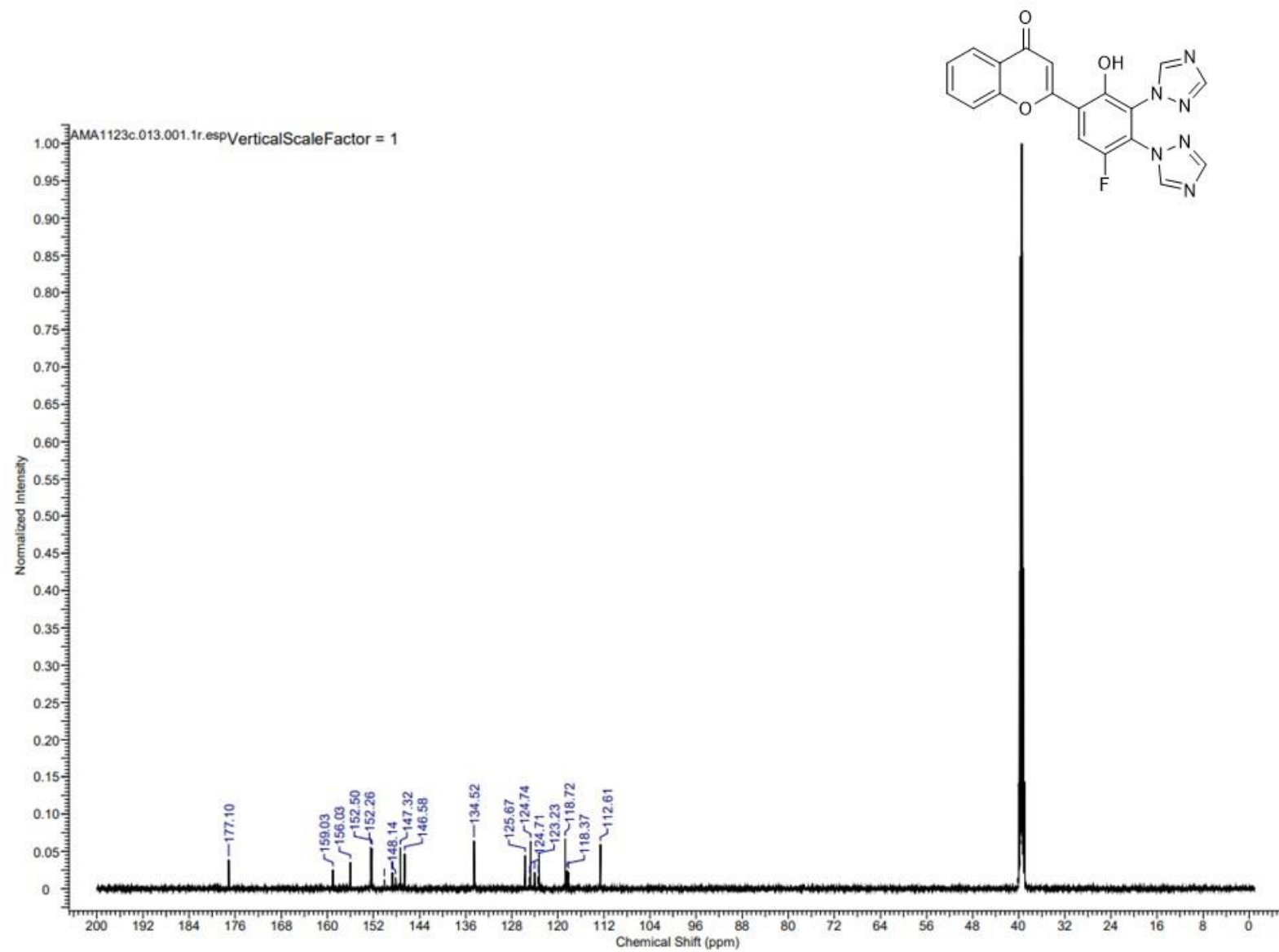




Figure S33.  $^{19}\text{F}$  NMR spectrum of compound 22

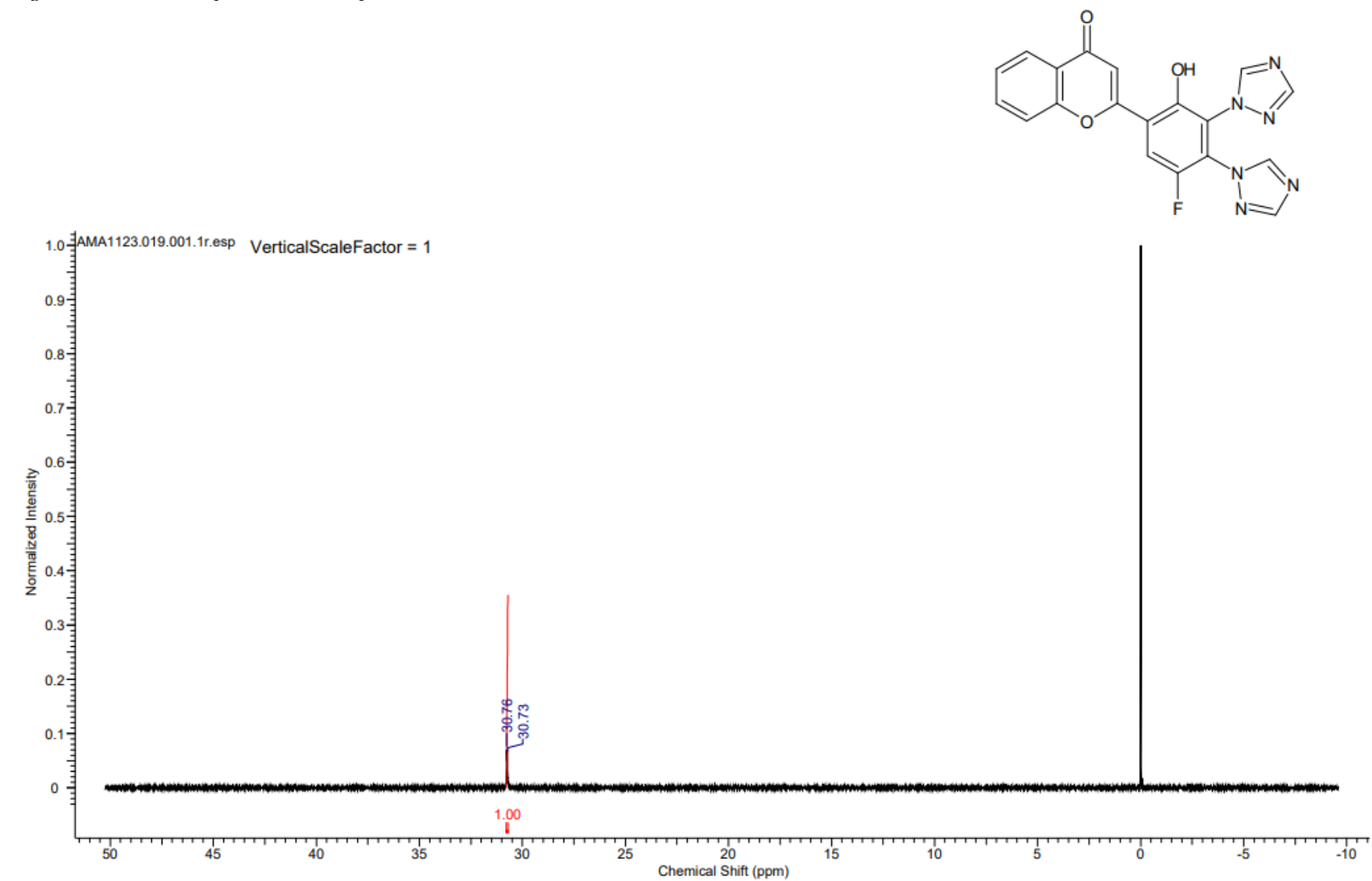


Figure S34. <sup>1</sup>H NMR spectrum of compound 23

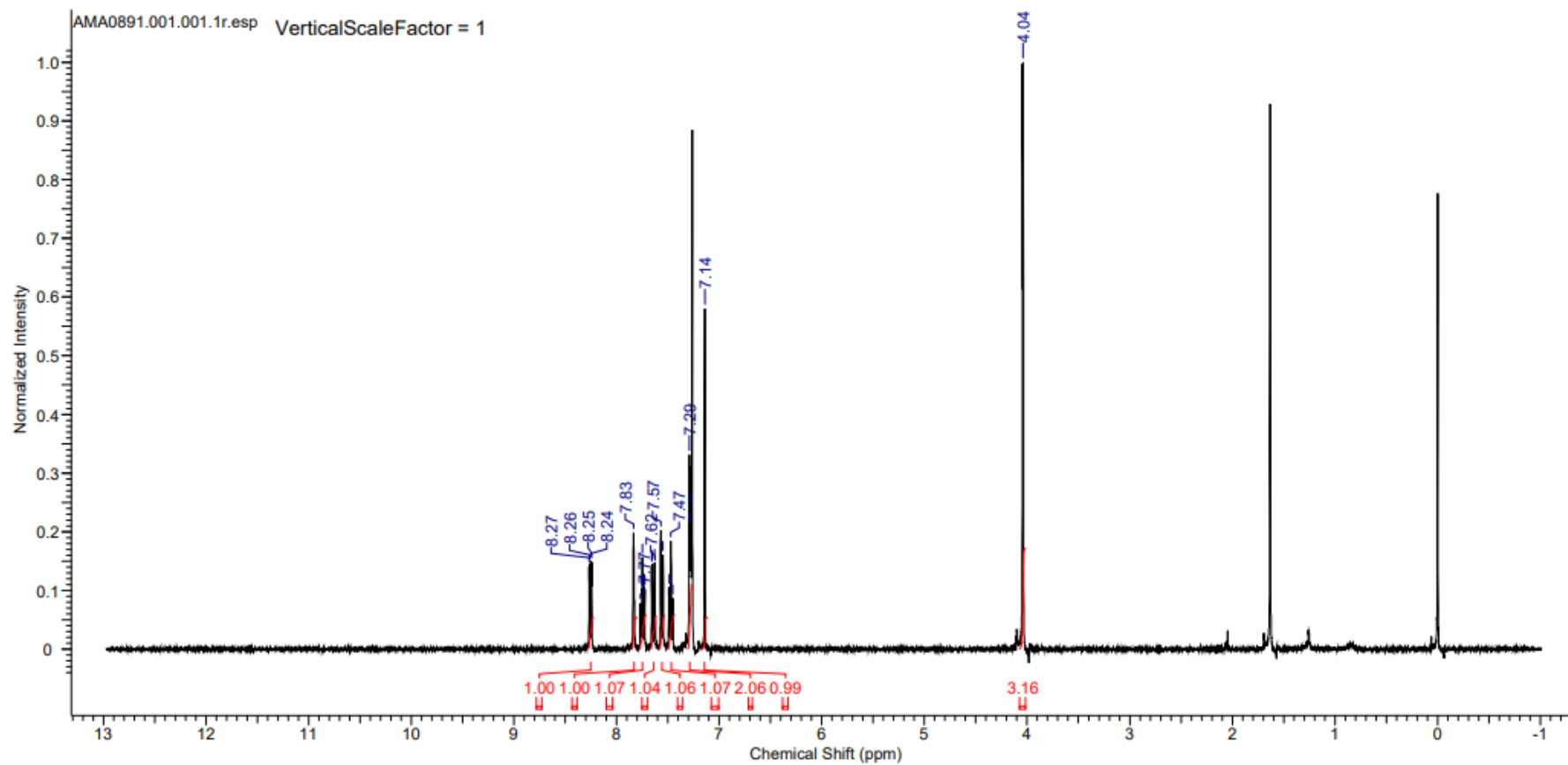
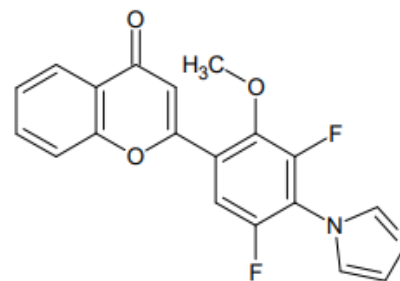


Figure S35.  $^{13}\text{C}$  NMR spectrum of compound 23

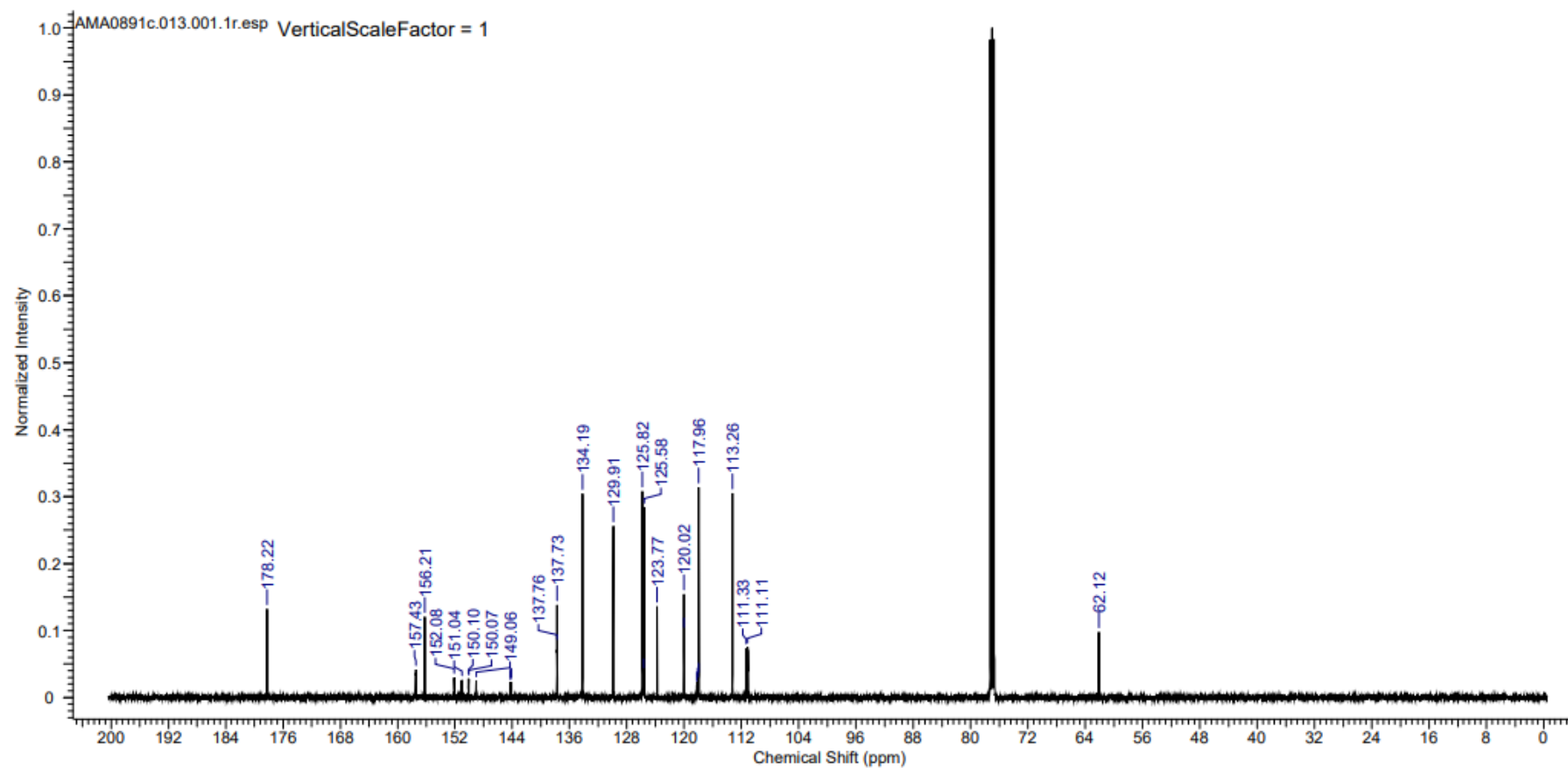
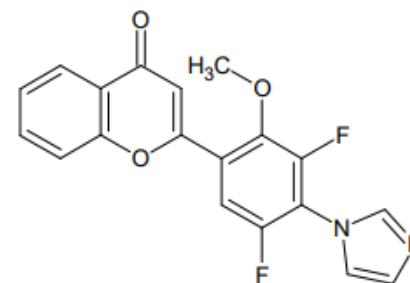


Figure S36.  $^{19}\text{F}$  NMR spectrum of compound 23

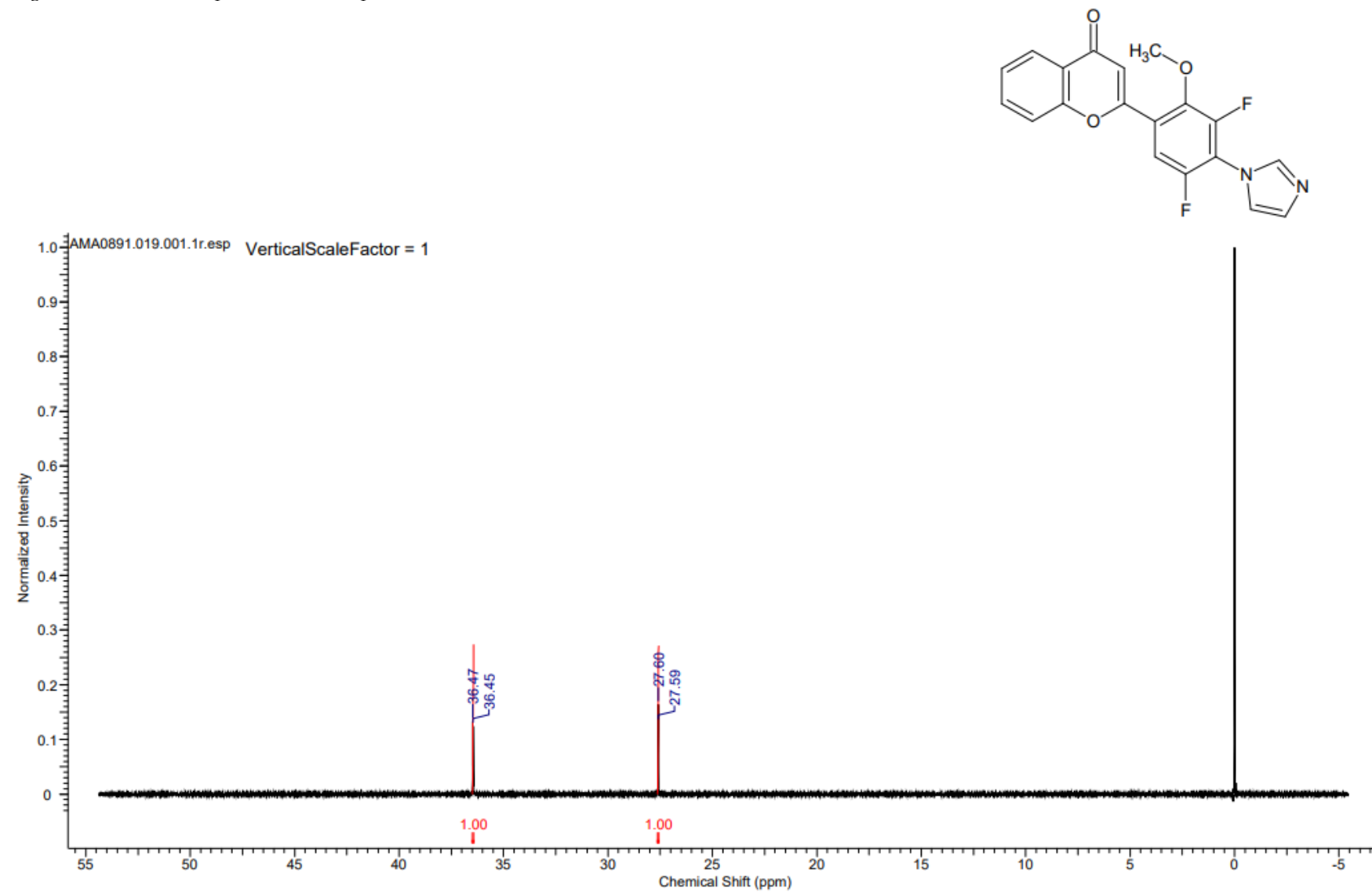


Figure S37. <sup>1</sup>H NMR spectrum of compound 26

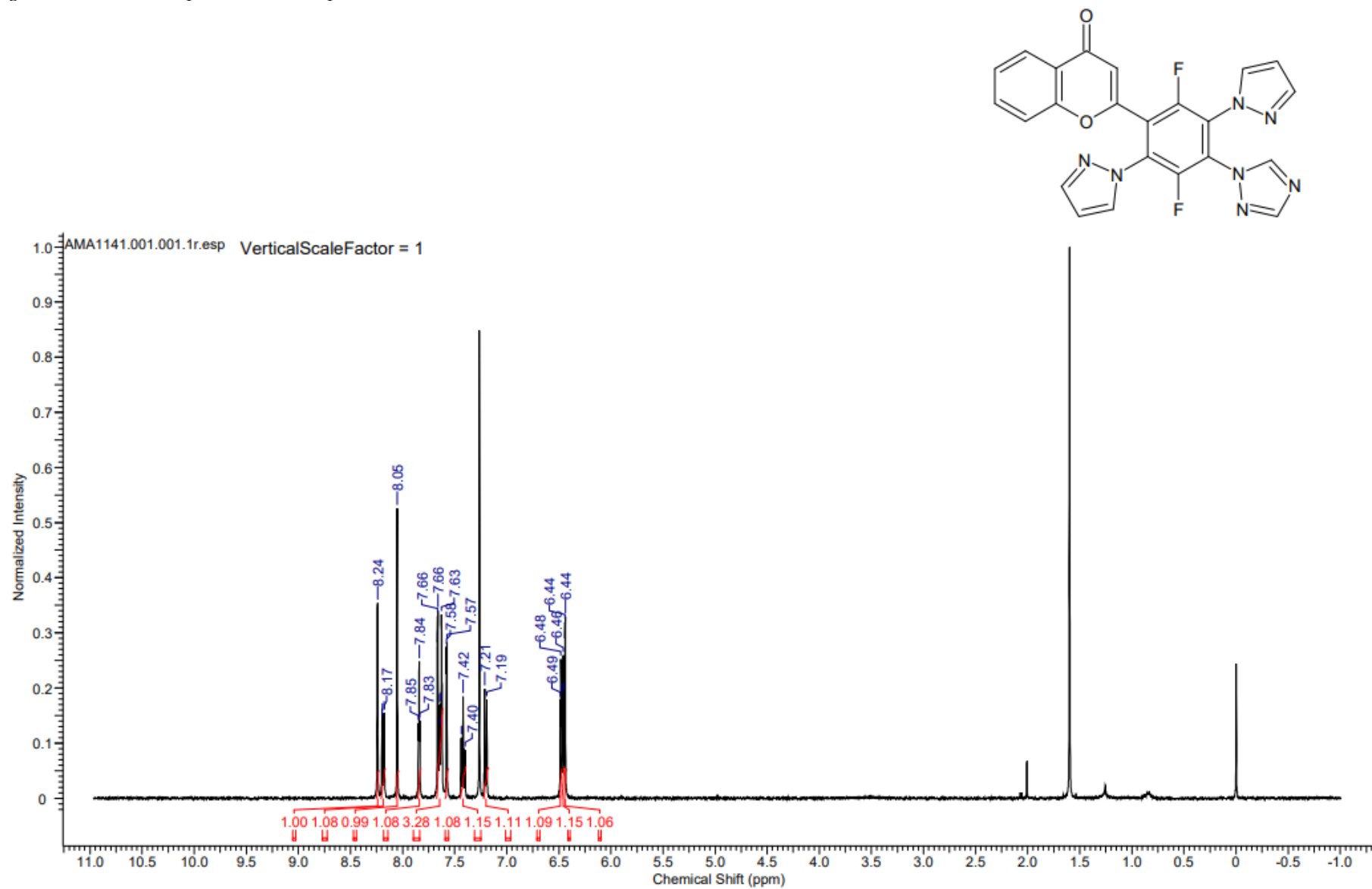


Figure S38.  $^{13}\text{C}$  NMR spectrum of compound 26

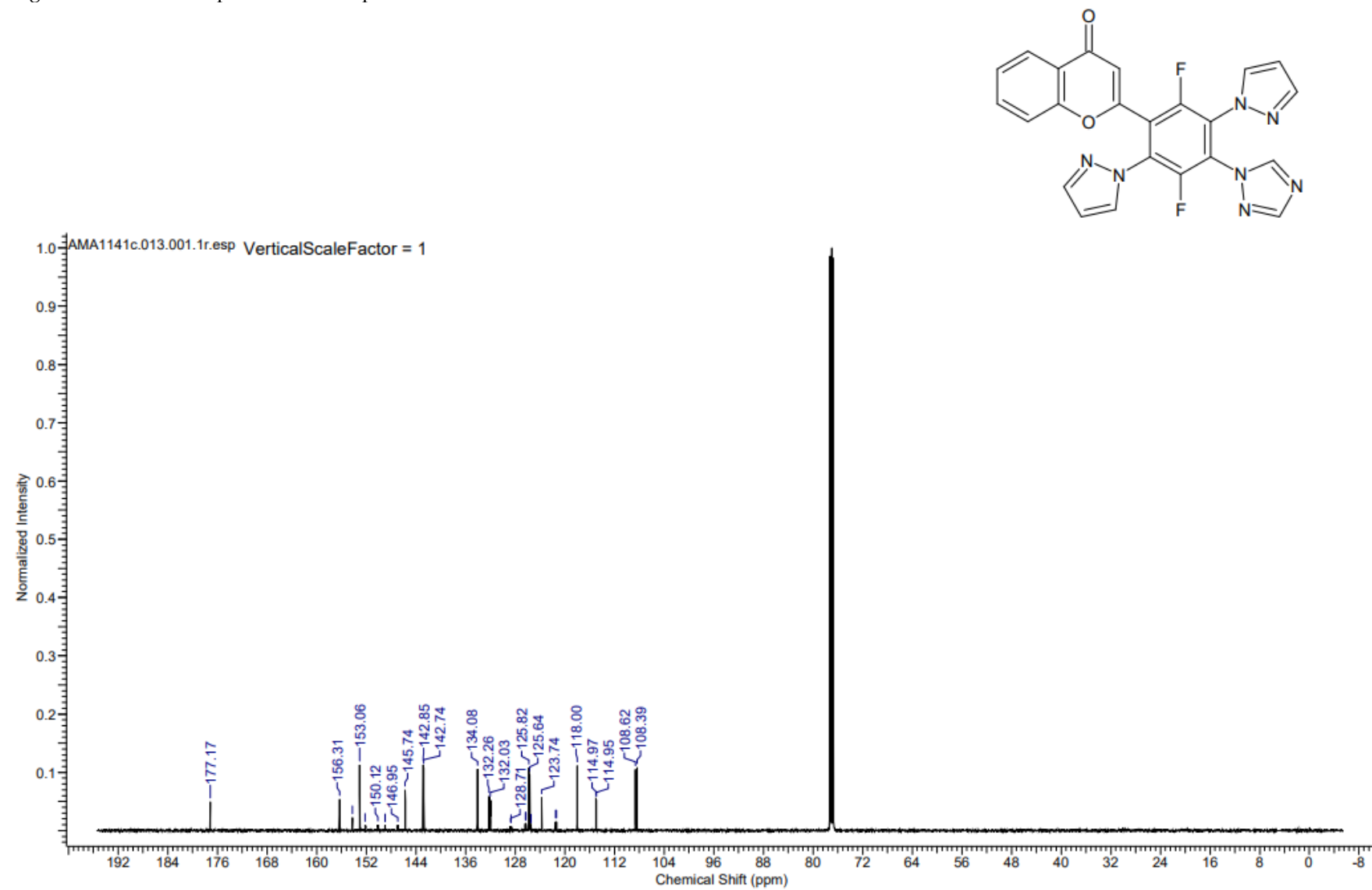


Figure S39.  $^{19}\text{F}$  NMR spectrum of compound 26

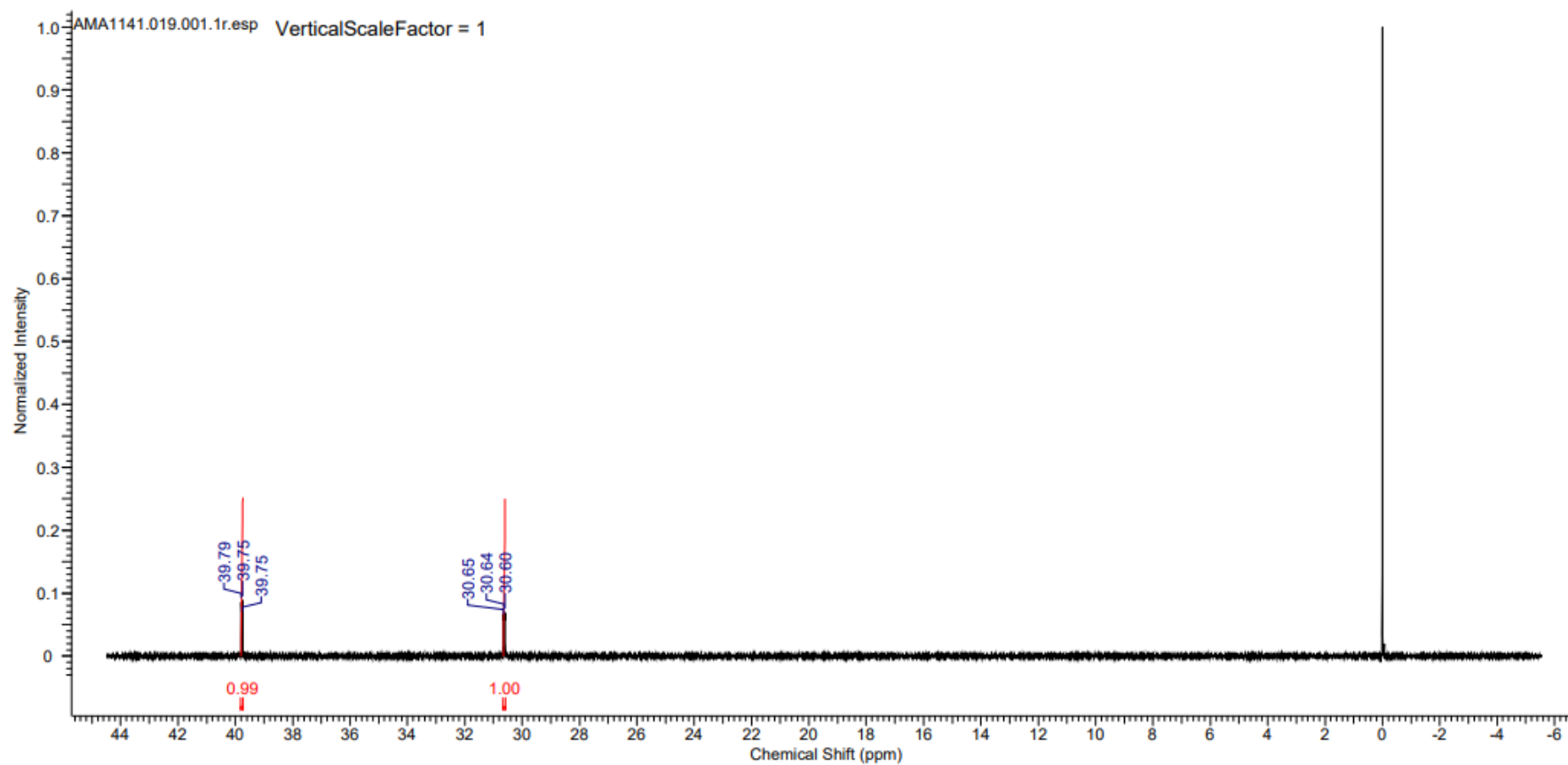
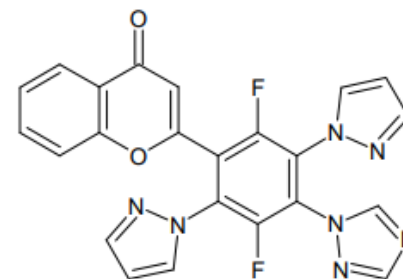


Figure S40. <sup>1</sup>H NMR spectrum of compound 27

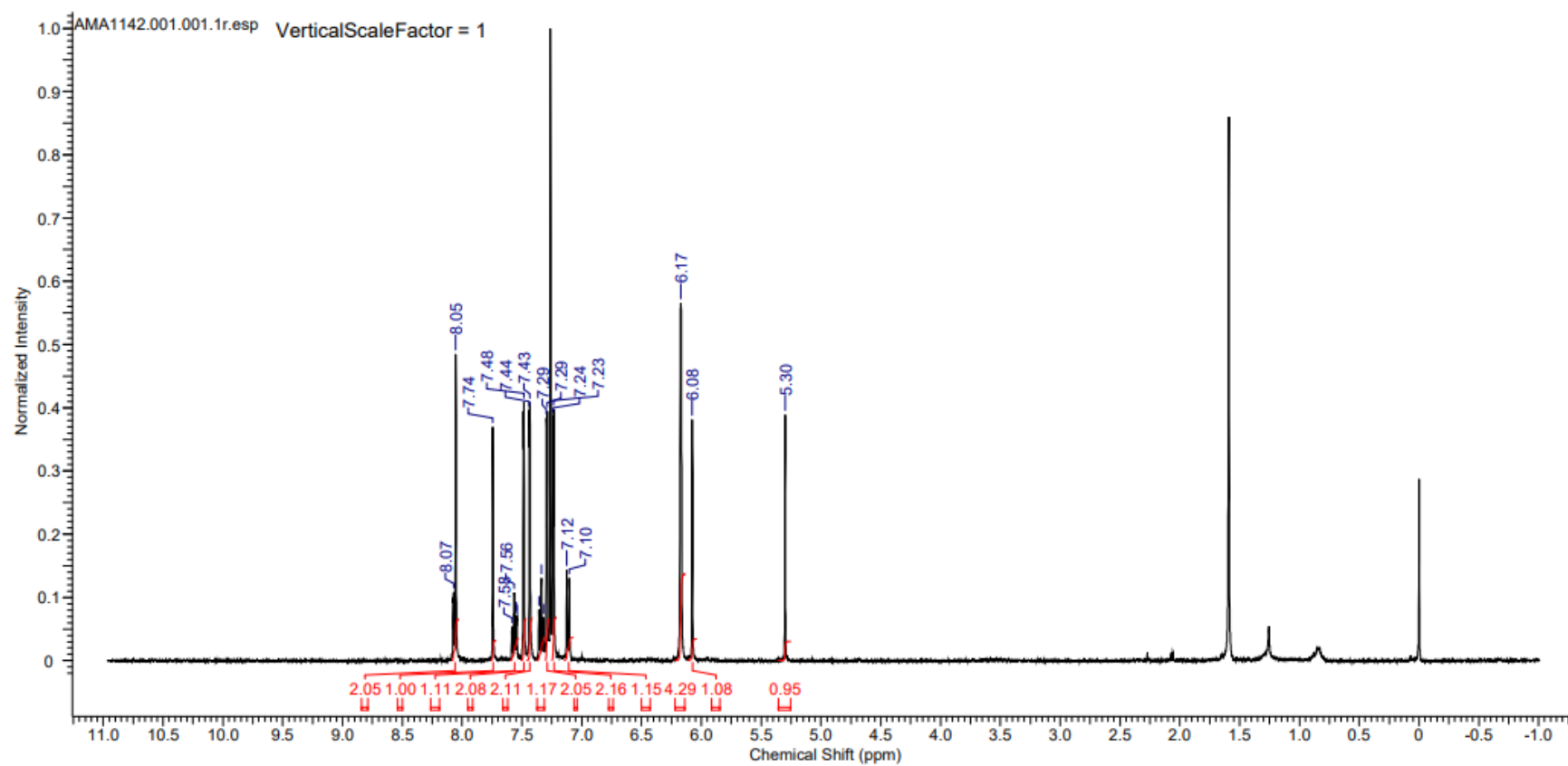
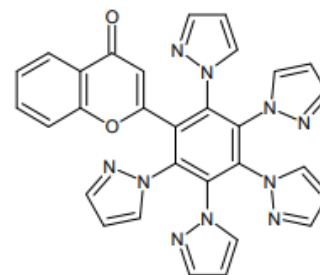




Figure S41.  $^{13}\text{C}$  NMR spectrum of compound 27

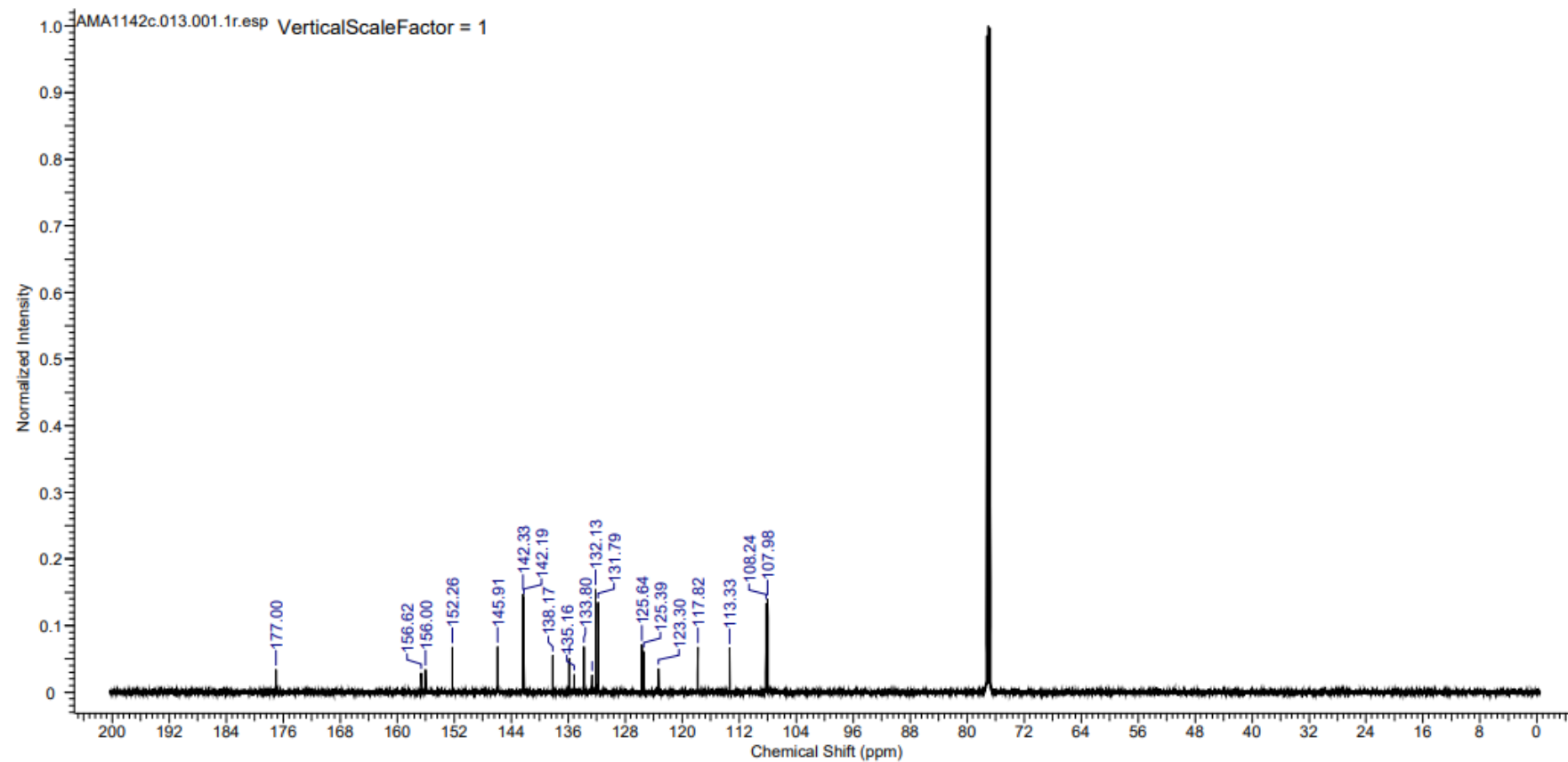
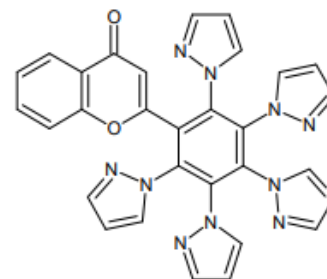


Figure S42. <sup>1</sup>H NMR spectrum of compound 28

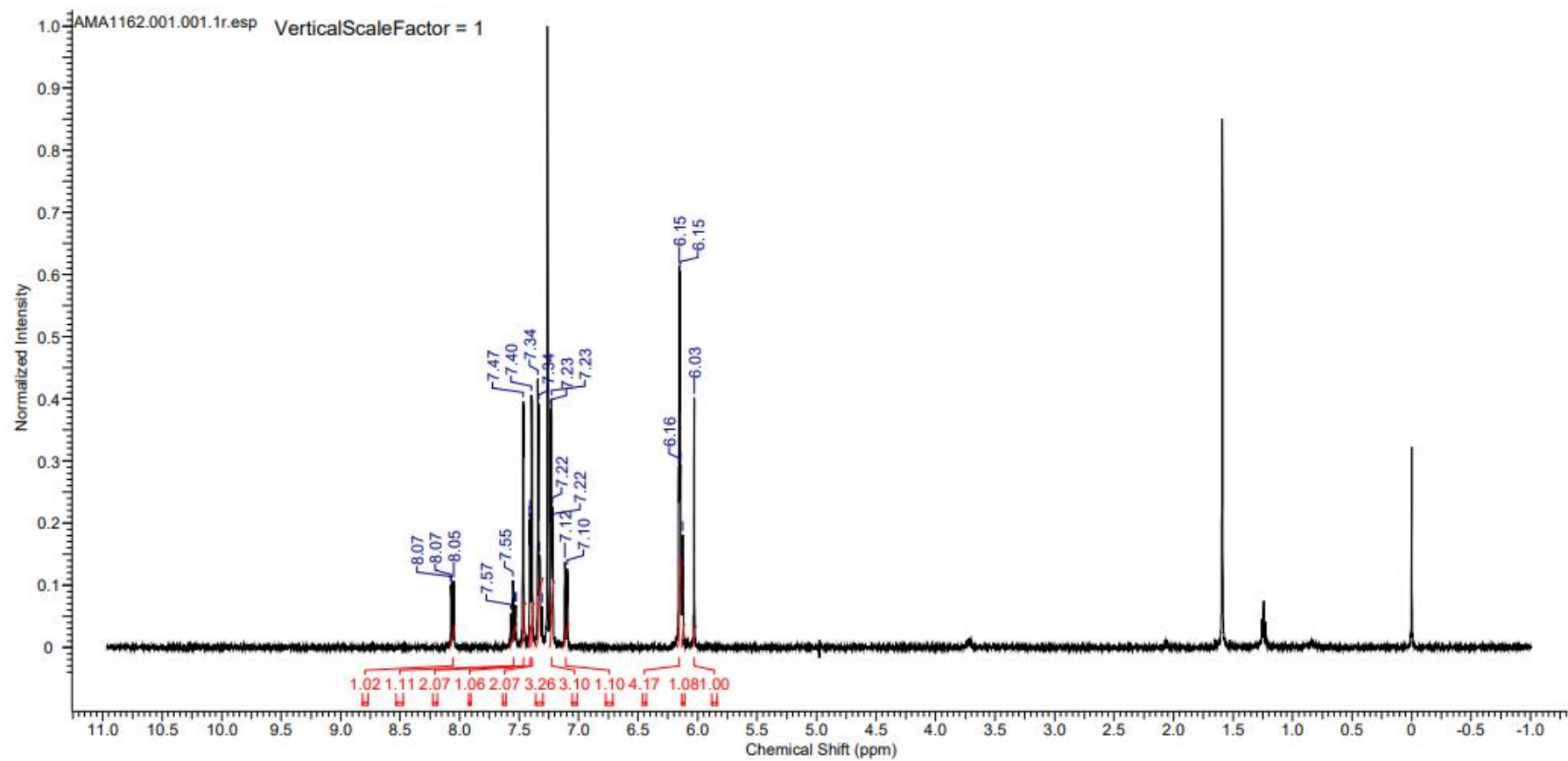
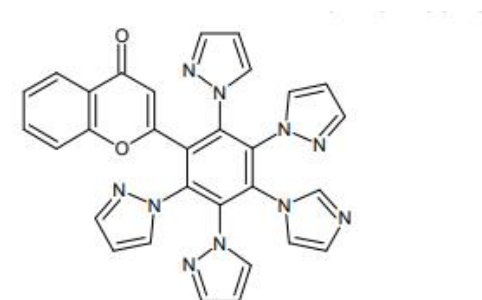


Figure S43.  $^{13}\text{C}$  NMR spectrum of compound 28

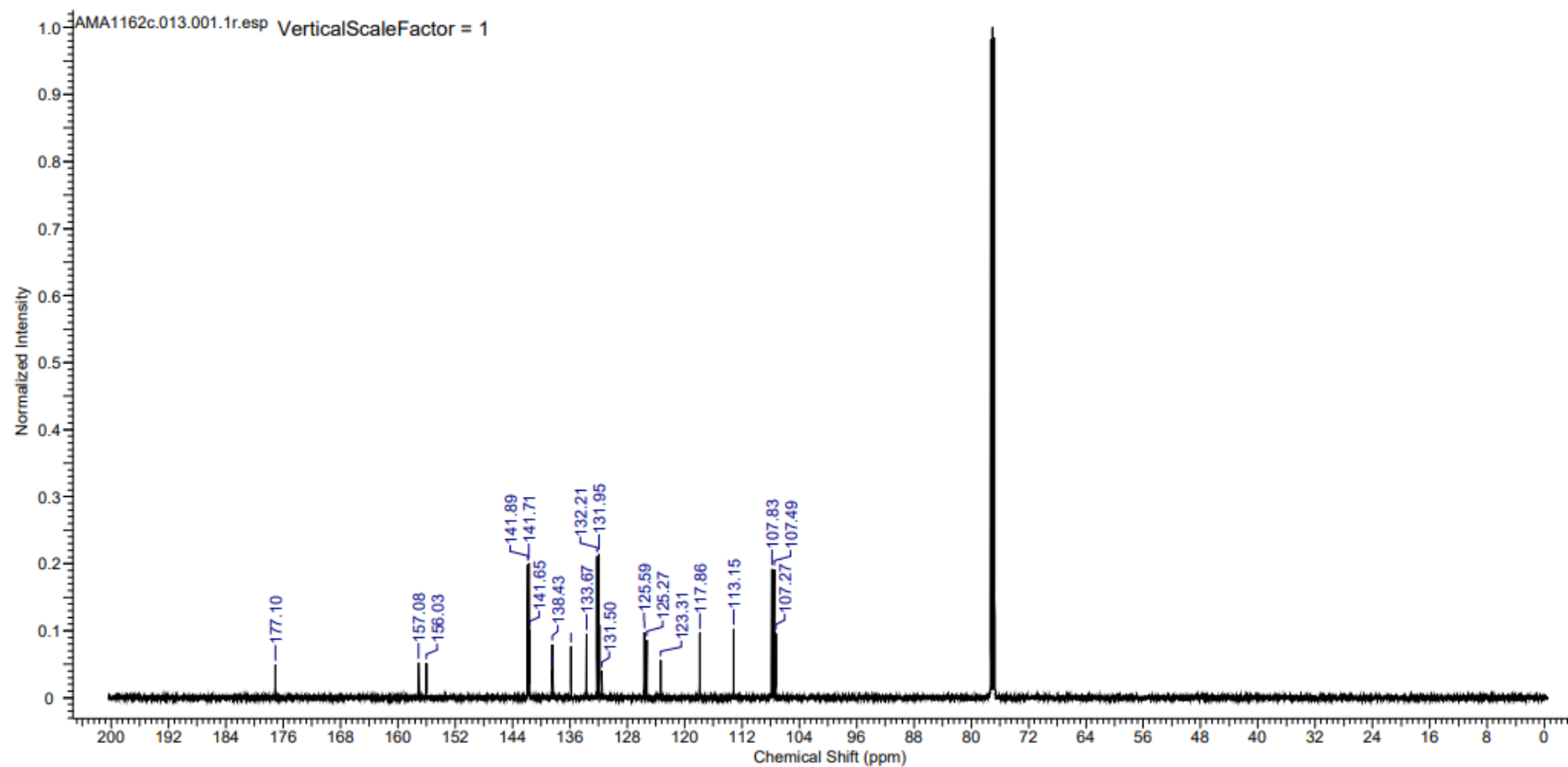
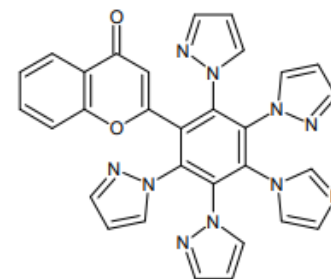


Figure S44. <sup>1</sup>H NMR spectrum of compound **29**

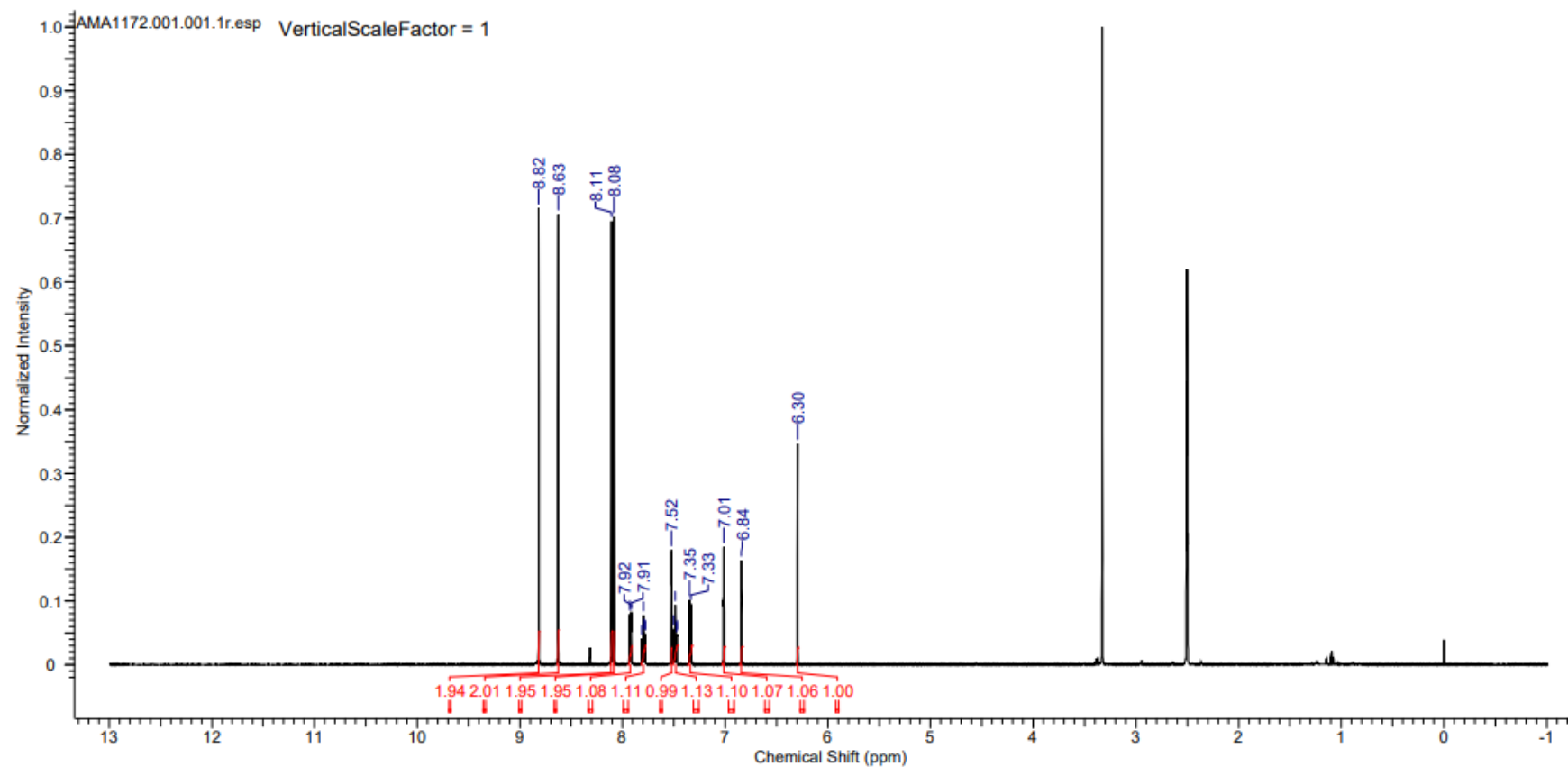
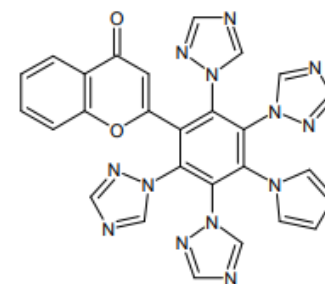


Figure S45.  $^{13}\text{C}$  NMR spectrum of compound **29**

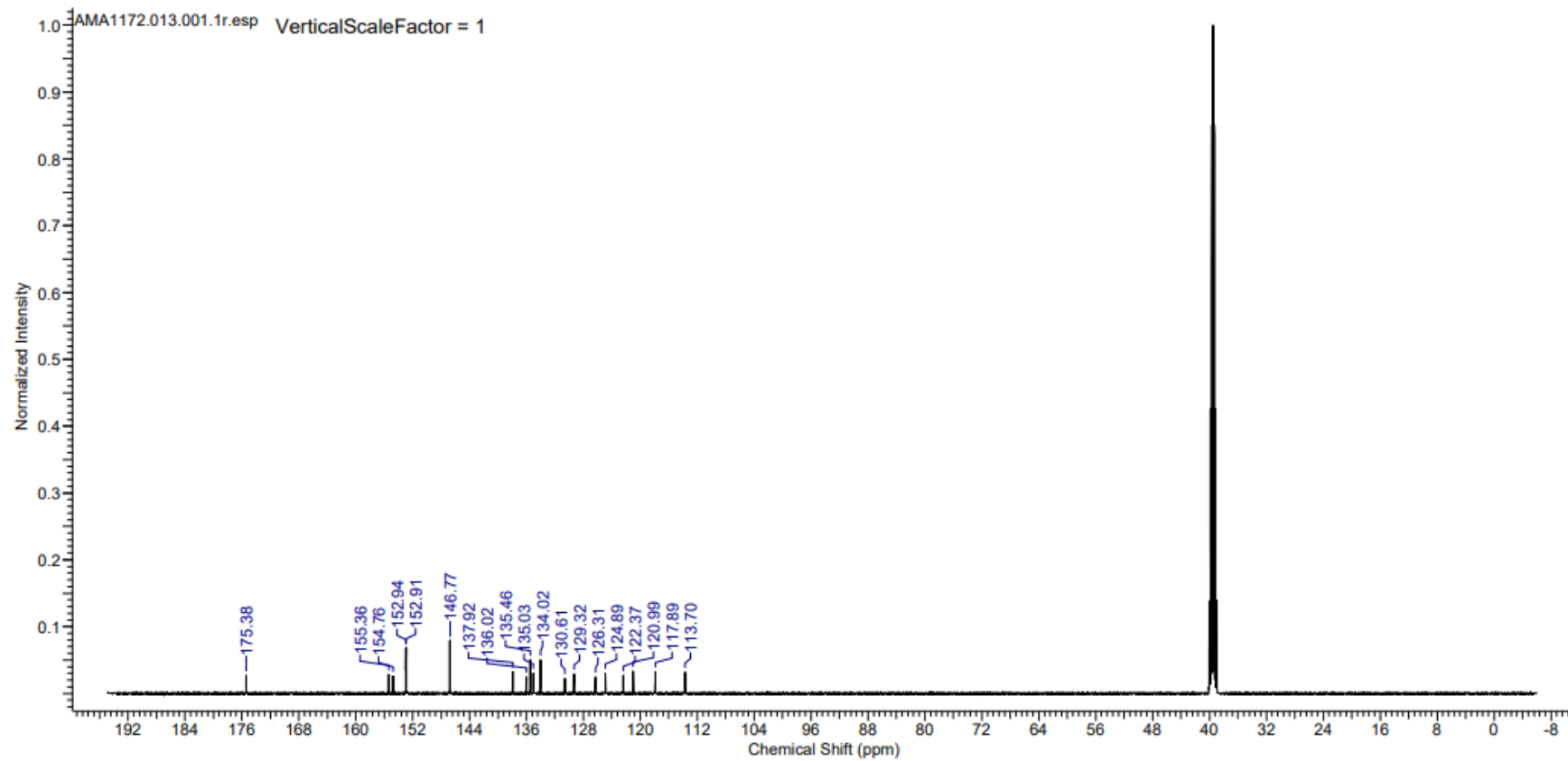
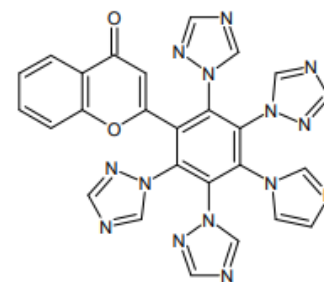


Figure S46. <sup>1</sup>H NMR spectrum of compound 31

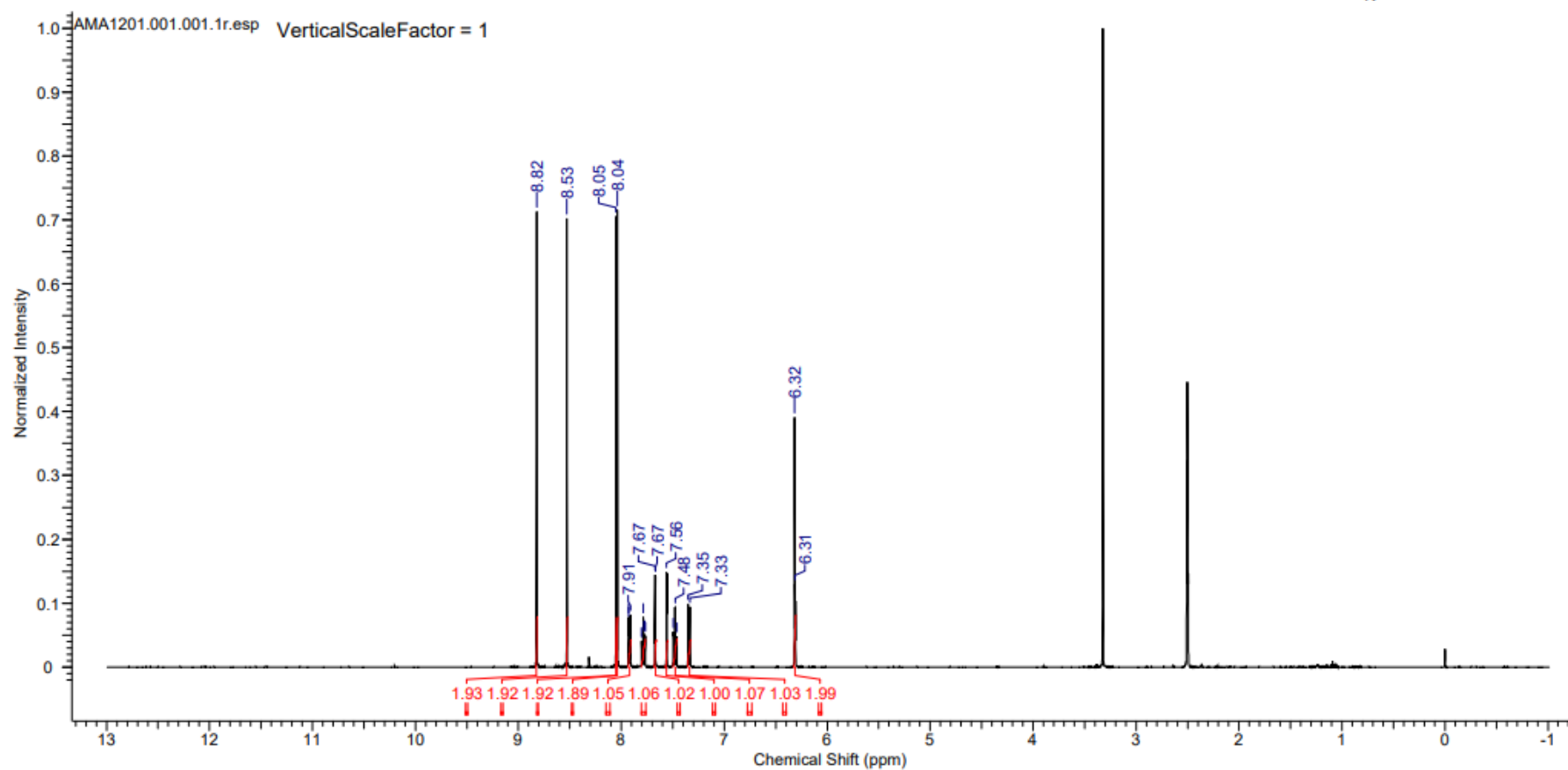
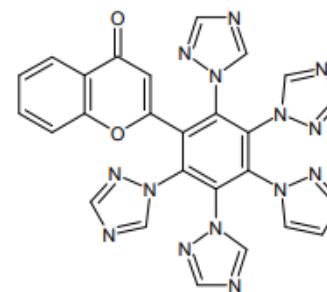


Figure S47.  $^{13}\text{C}$  NMR spectrum of compound **31**

