

Figure S1.  $^1\text{H}$ -NMR spectra of methyl [(methylthio)carbonothioyl]oxyacetate **1a**.

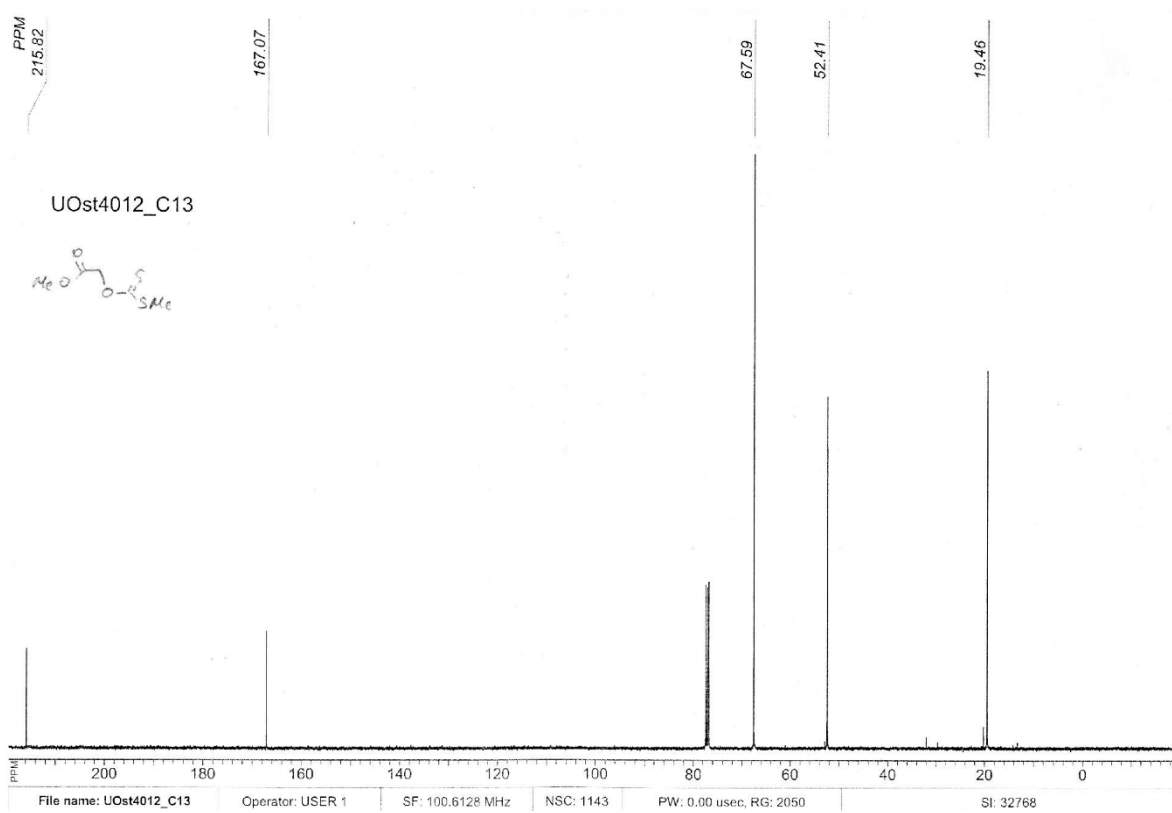


Figure S2.  $^{13}\text{C}$ -NMR spectra of methyl [(methylthio)carbonothioyl]oxyacetate **1a**.

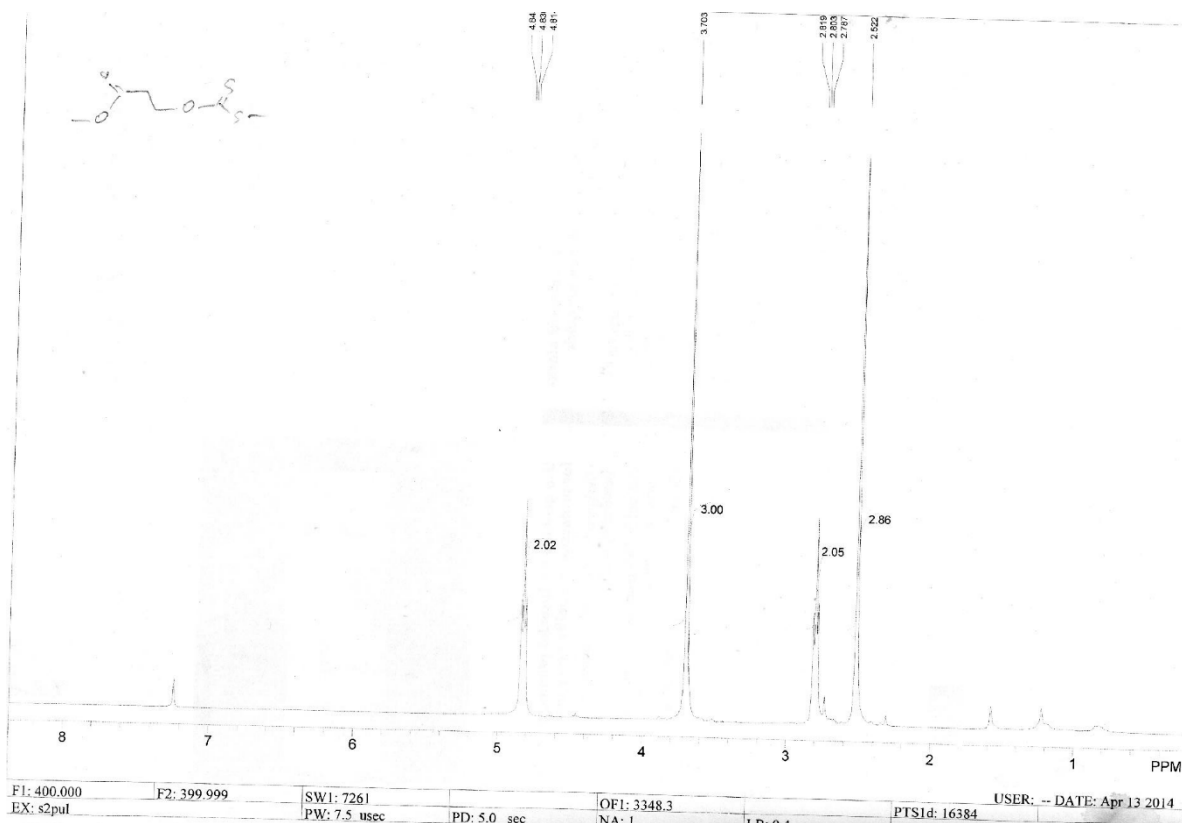


Figure S3.  $^1\text{H}$ -NMR spectra of methyl 3-((methylsulfanyl)carbonothioyl)oxy)propanoate **1b**.

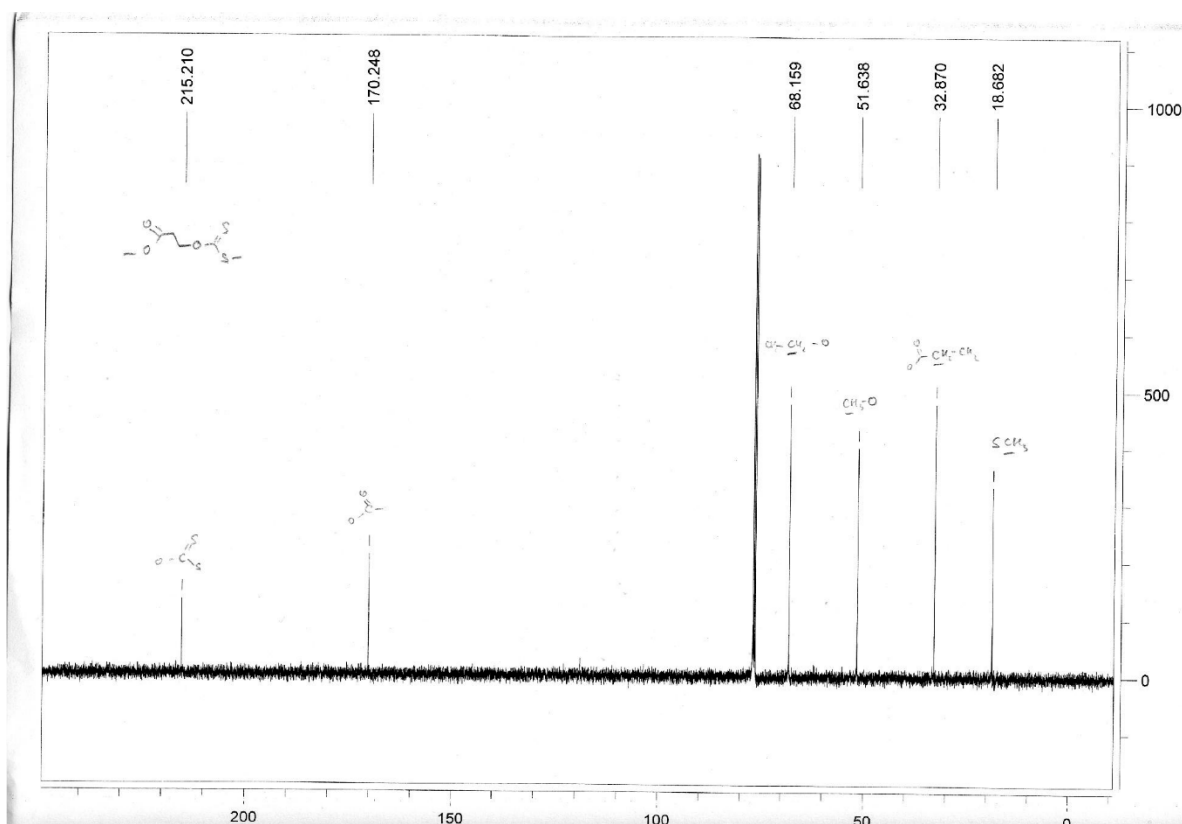


Figure S4.  $^{13}\text{C}$ -NMR spectra of methyl 3-((methylsulfanyl)carbonothioyl)oxy)propanoate **1b**.

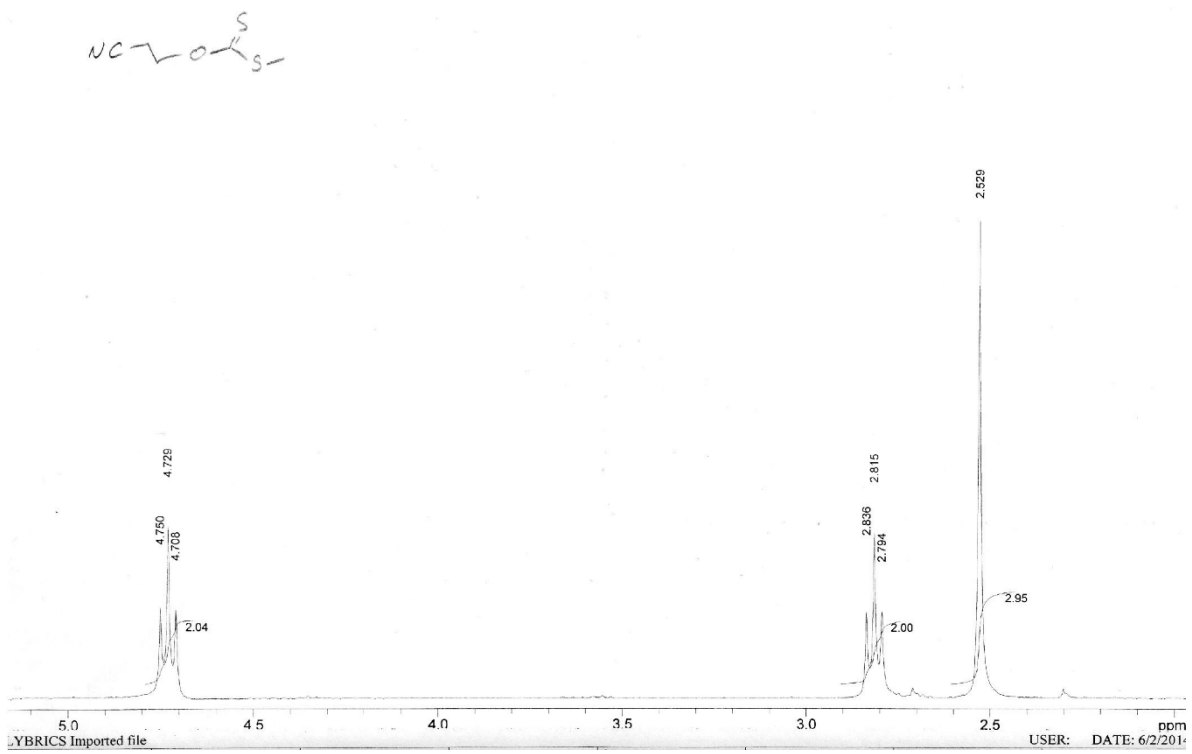


Figure S5. <sup>1</sup>H-NMR spectra of O-(2-cyanoethyl)-S-methyl-dithiocarbonate **1c**.

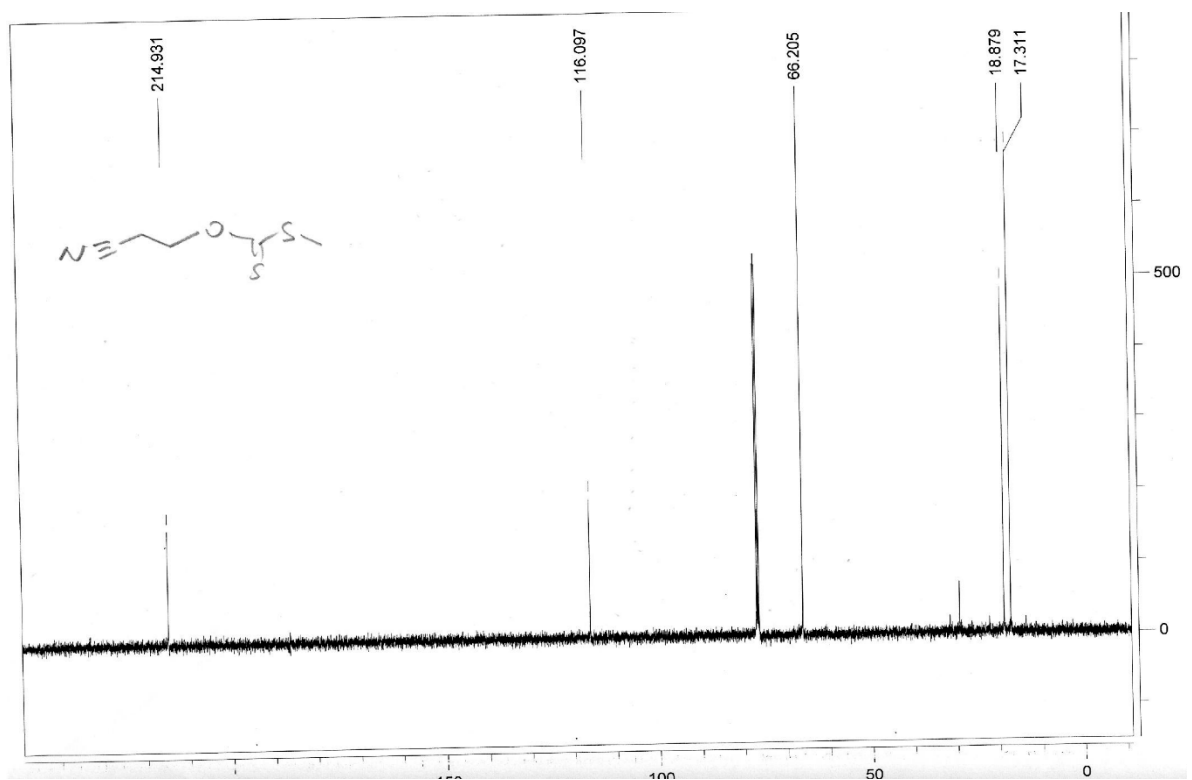
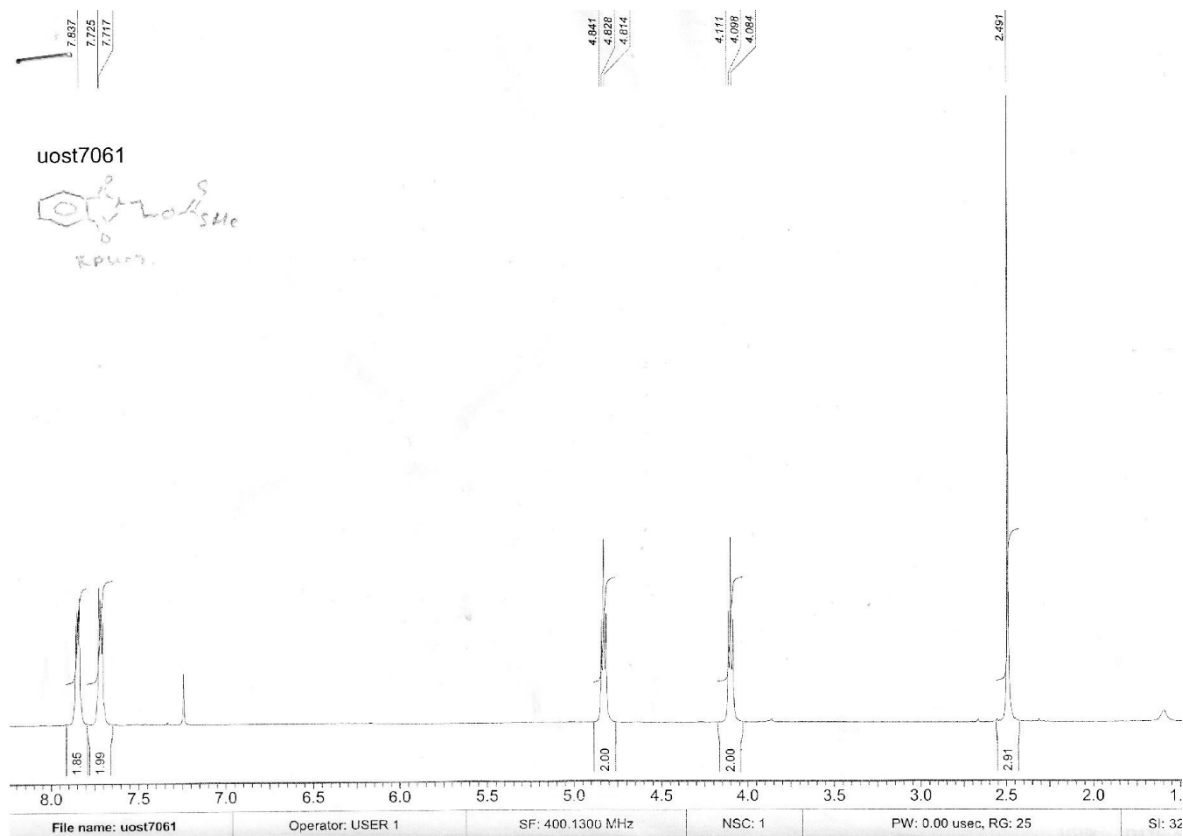
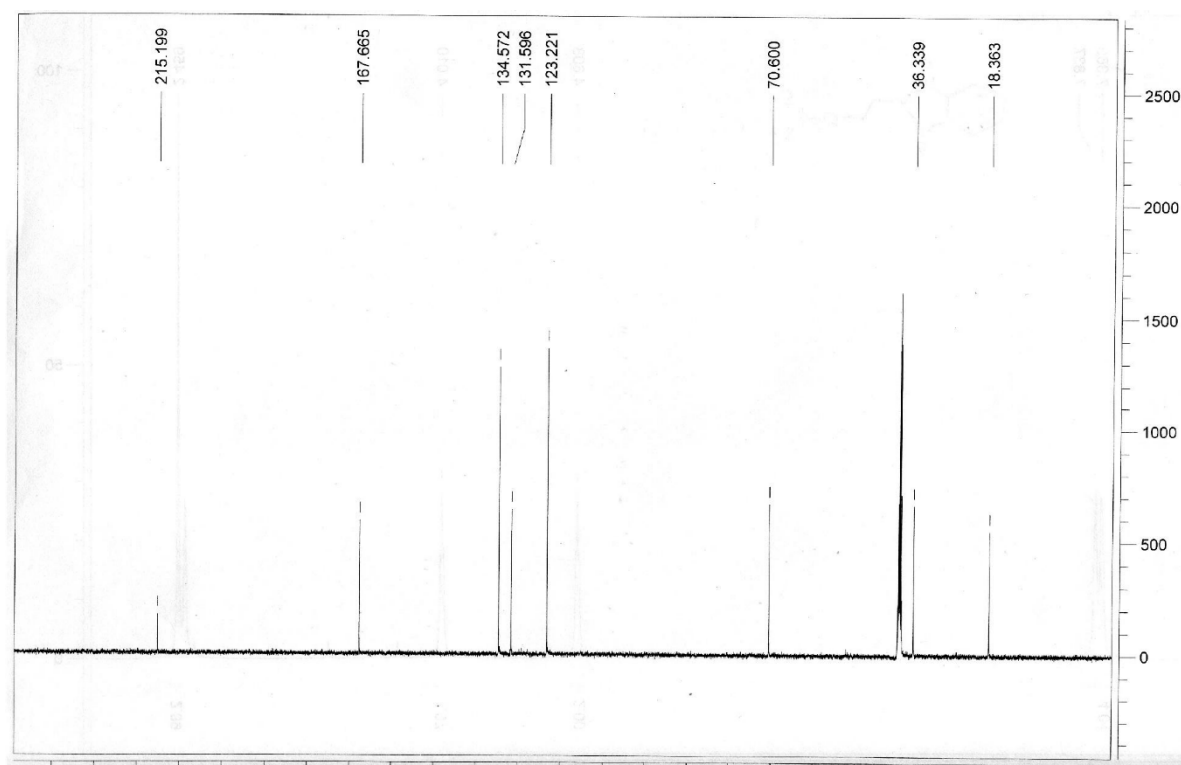


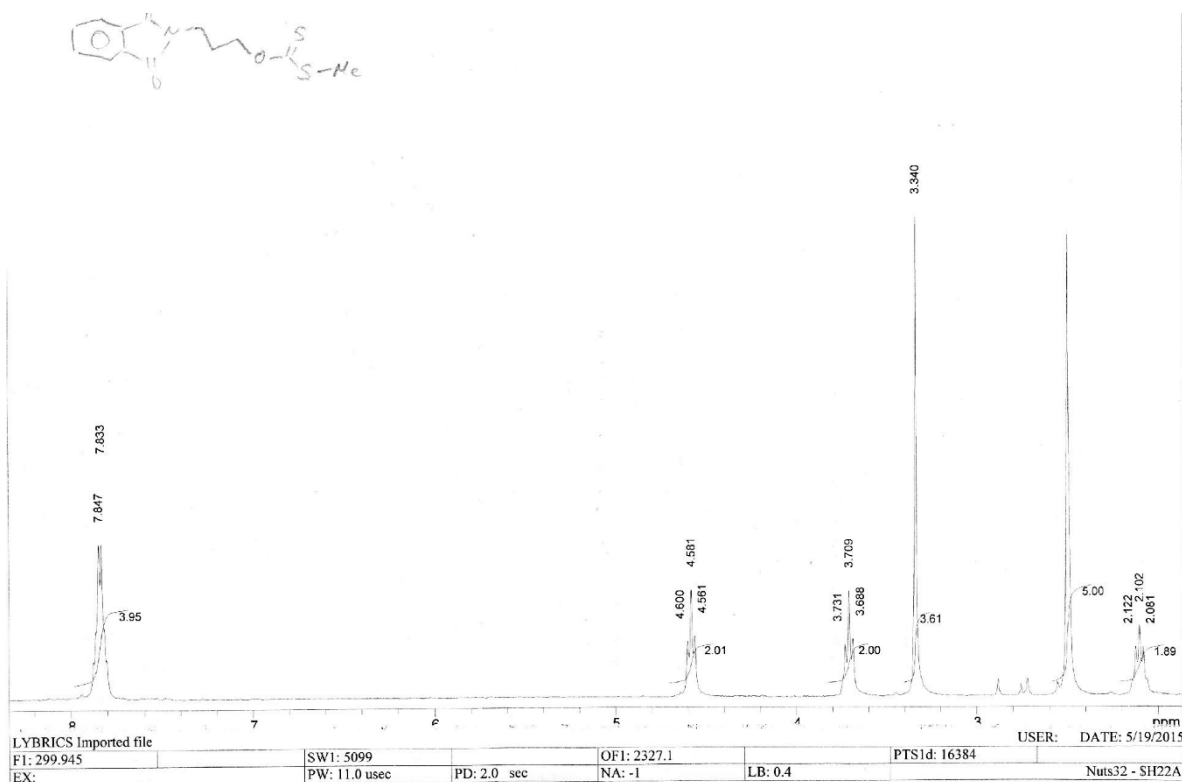
Figure S6. <sup>13</sup>C-NMR spectra of O-(2-cyanoethyl)-S-methyl-dithiocarbonate **1c**.



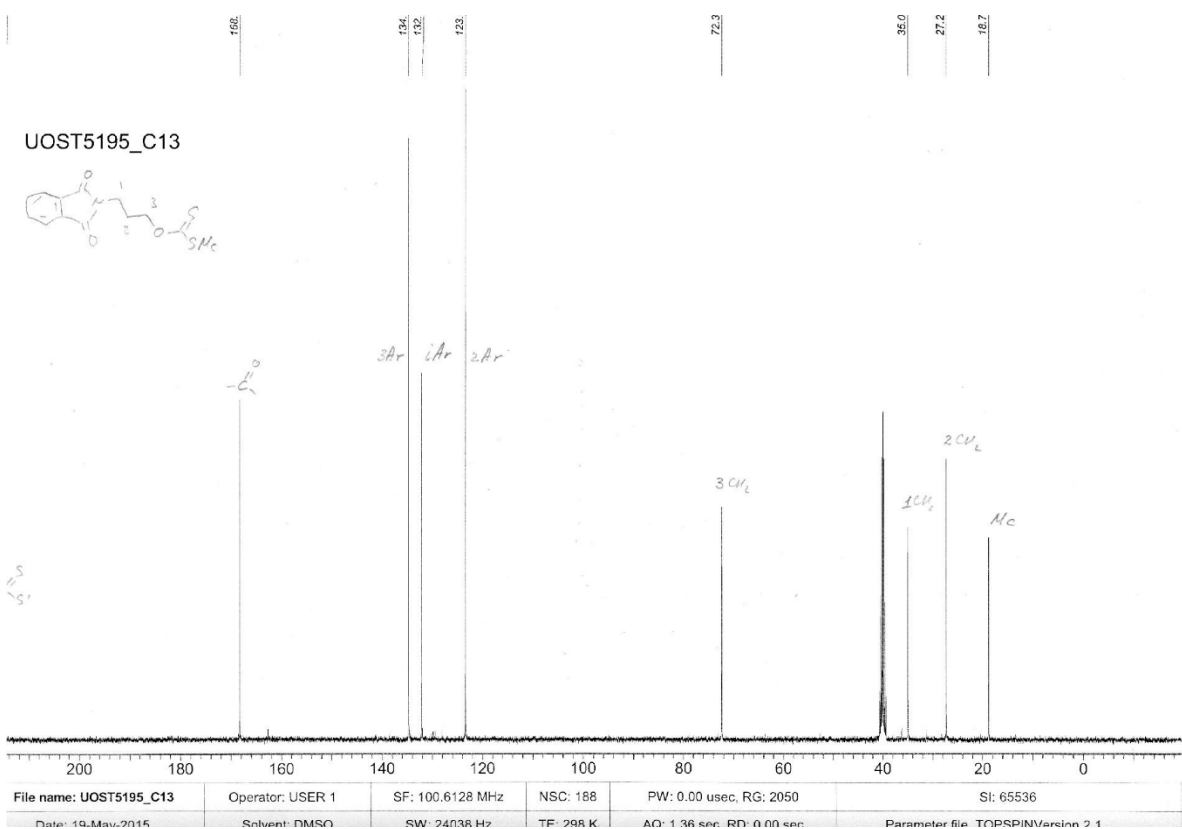
**Figure S7.**  $^1\text{H-NMR}$  spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl] S-methylthiocarbonate **1d**.



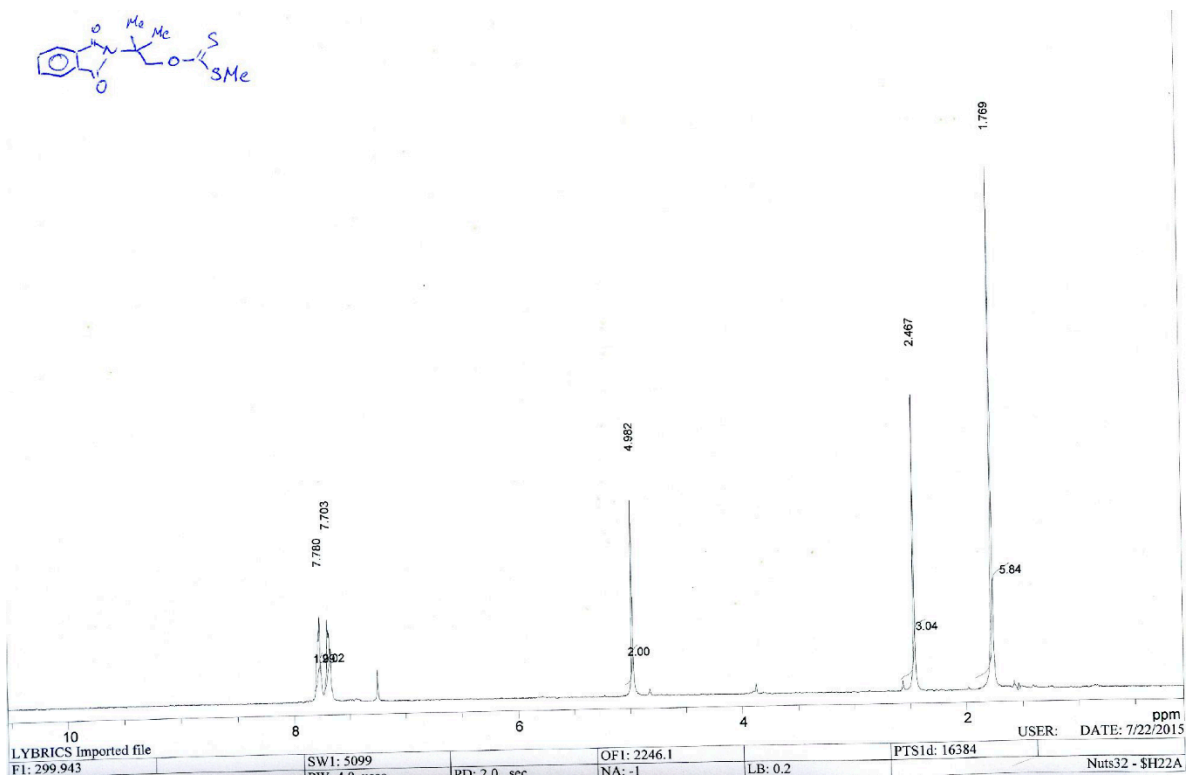
**Figure S8.**  $^{13}\text{C-NMR}$  spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethyl] S-methylthiocarbonate **1d**.



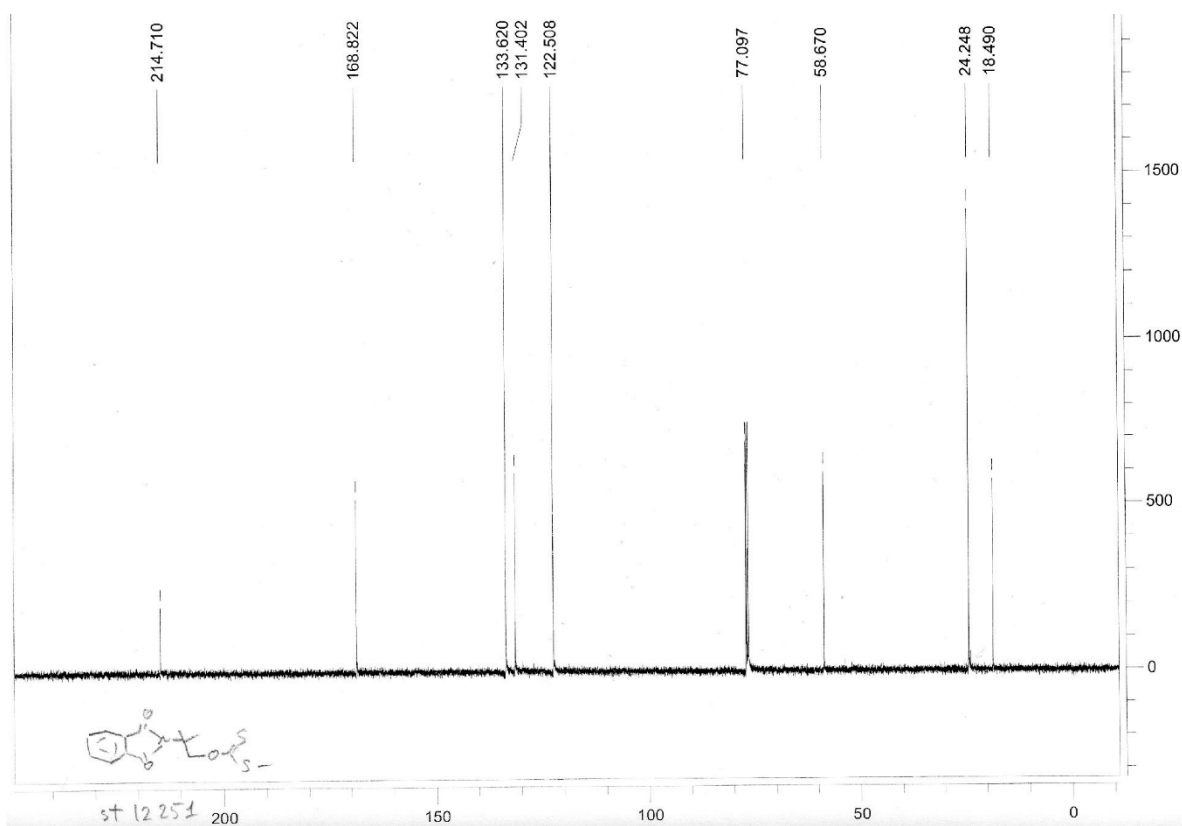
**Figure S9.**  $^1\text{H-NMR}$  spectra of O-[3-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)propyl] S-methylthiocarbonate **1e**.



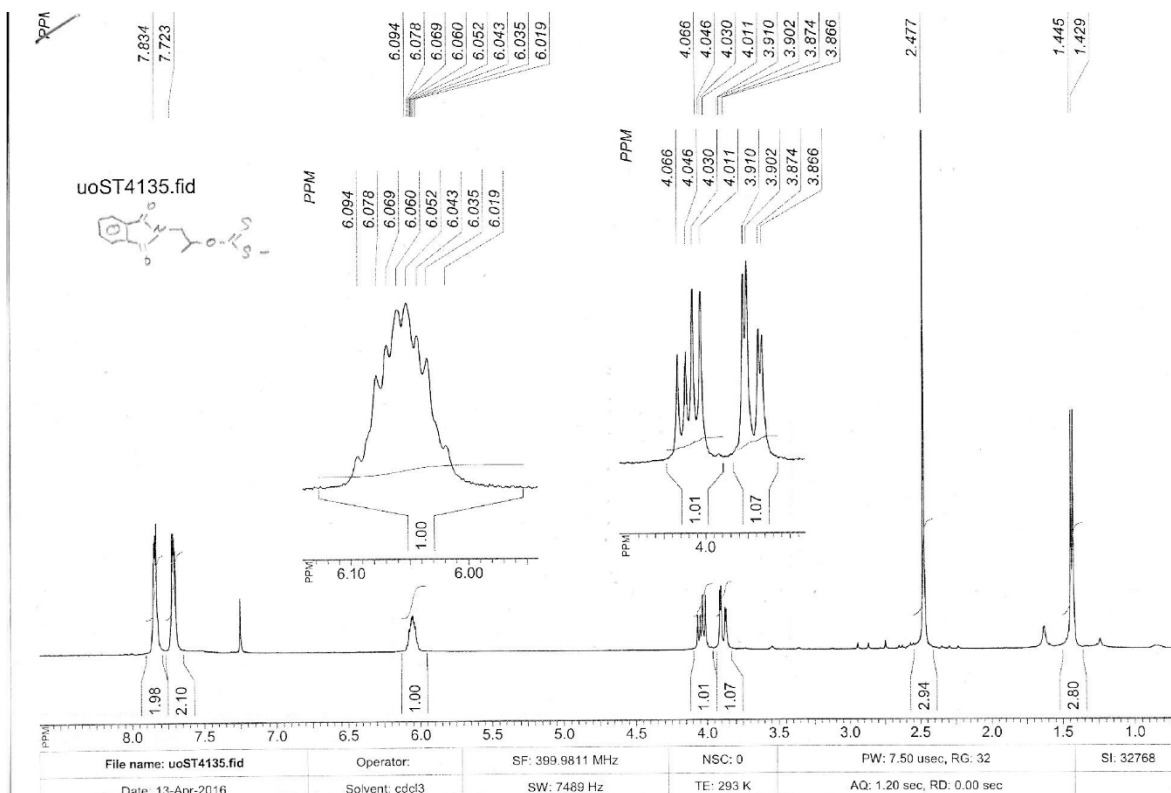
**Figure S10.**  $^{13}\text{C-NMR}$  spectra of O-[3-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)propyl] S-methylthiocarbonate **1e**.



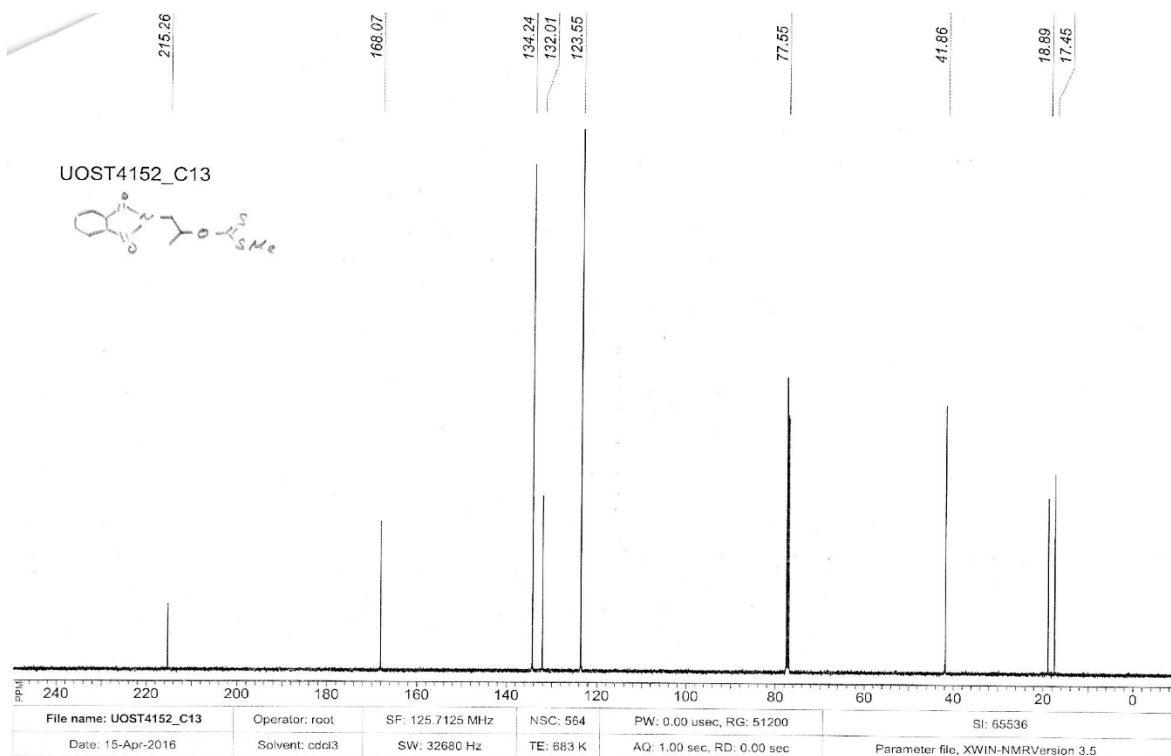
**Figure S11.** <sup>1</sup>H-NMR spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-2-methylpropyl] S-methylthiocarbonate **1f**.



**Figure S12.** <sup>13</sup>C-NMR spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-2-methylpropyl] S-methylthiocarbonate **1f**.



**Figure S13.** <sup>1</sup>H-NMR spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-1-methylethyl] S-methylthiocarbonate **1g**.



**Figure S14.** <sup>13</sup>C-NMR spectra of O-[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)-1-methylethyl] S-methylthiocarbonate **1g**.

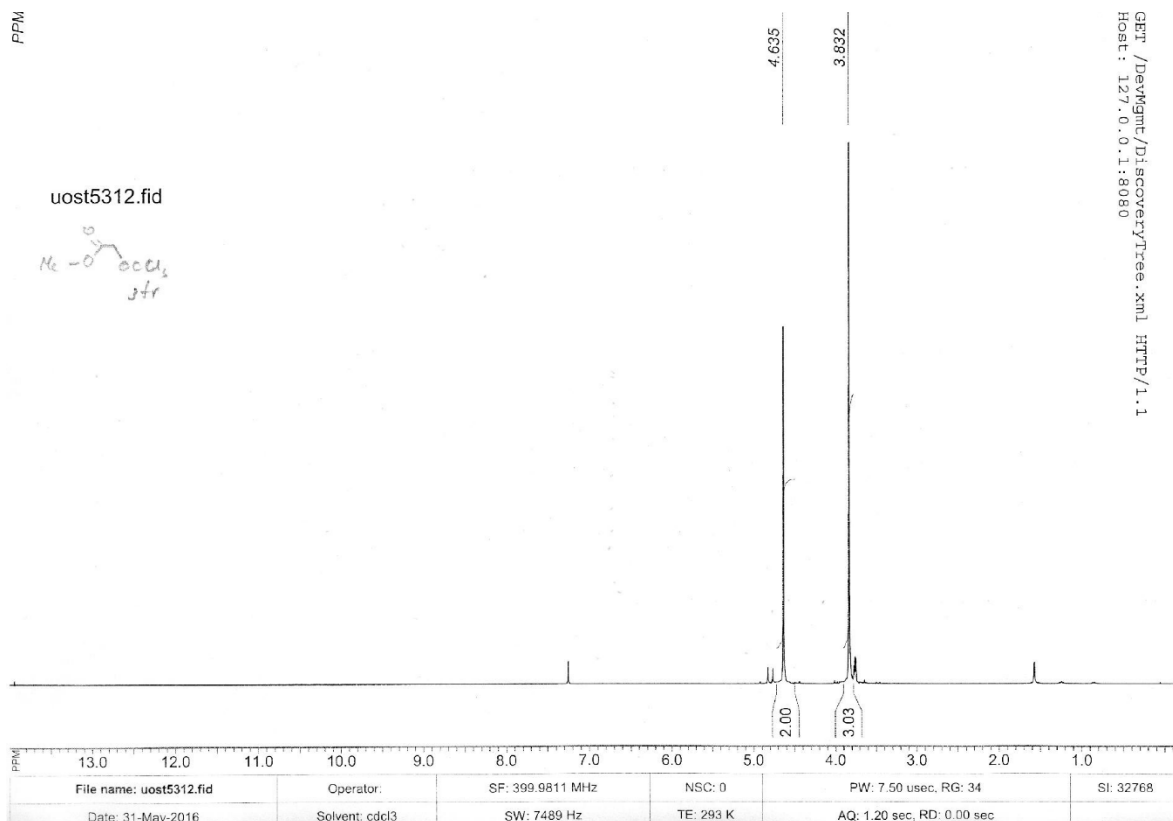


Figure S15. <sup>1</sup>H-NMR spectra of methyl (trichloromethoxy)acetate 2a.

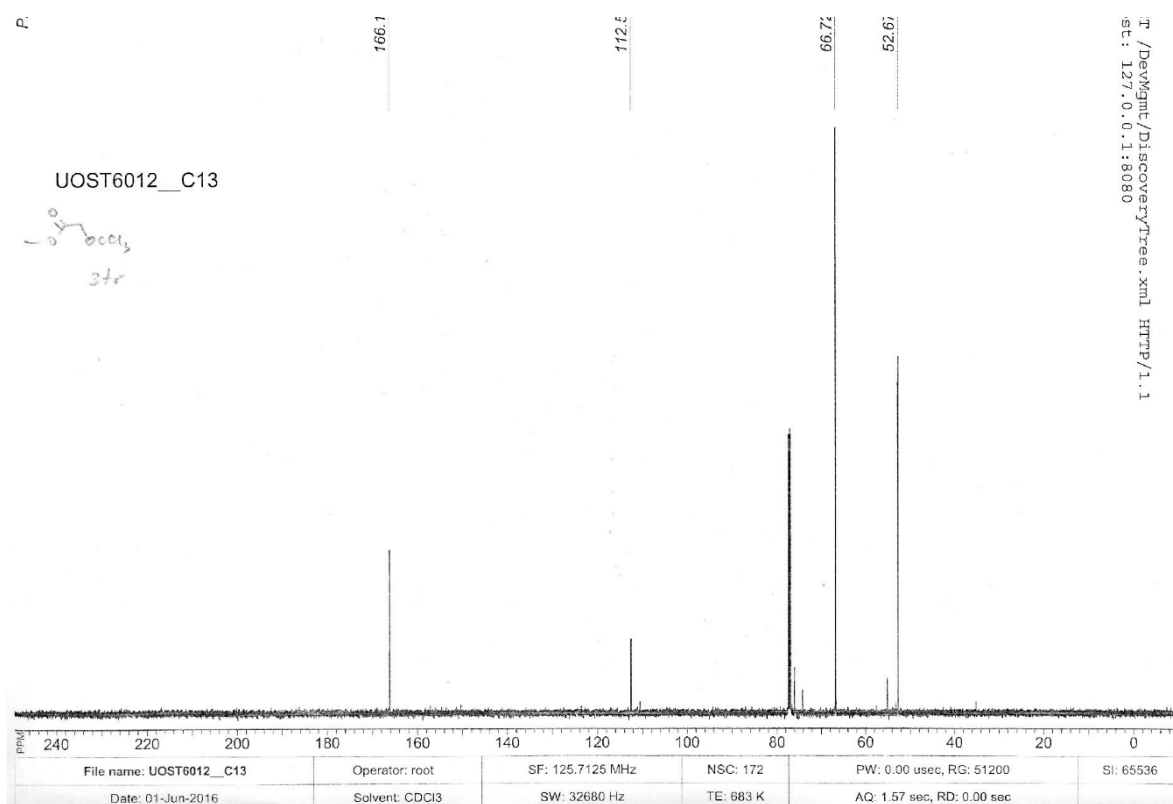


Figure S16. <sup>13</sup>C-NMR spectra of methyl (trichloromethoxy)acetate 2a.



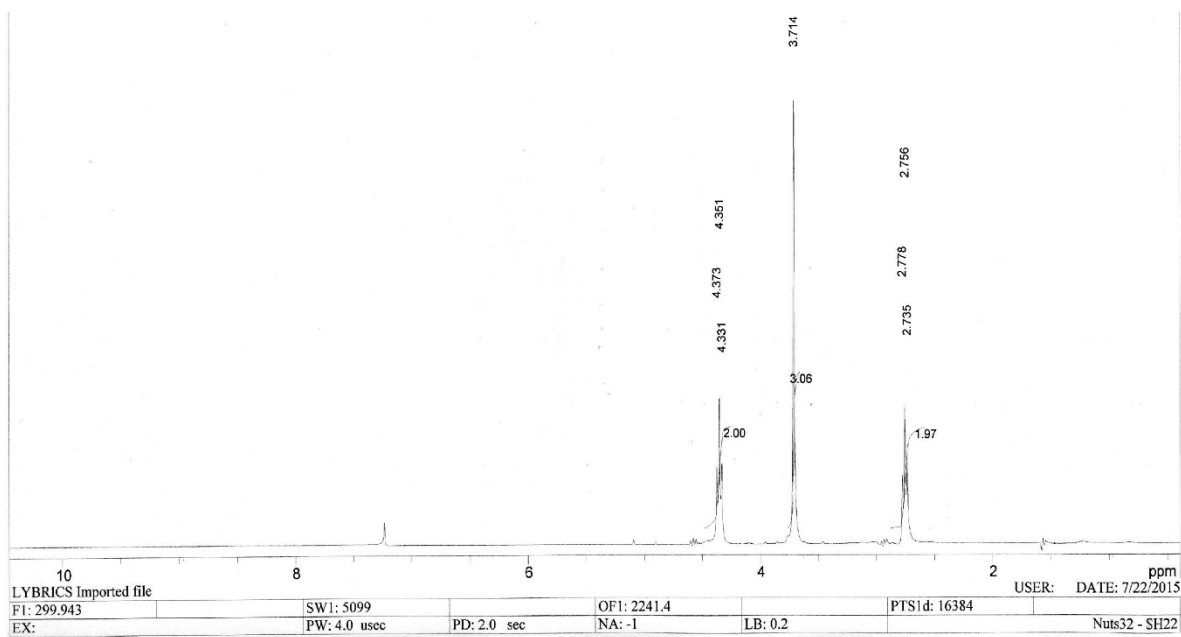


Figure S17.  $^1\text{H}$ -NMR spectra of methyl 3-(trichloromethoxy)propanoate **2b**.

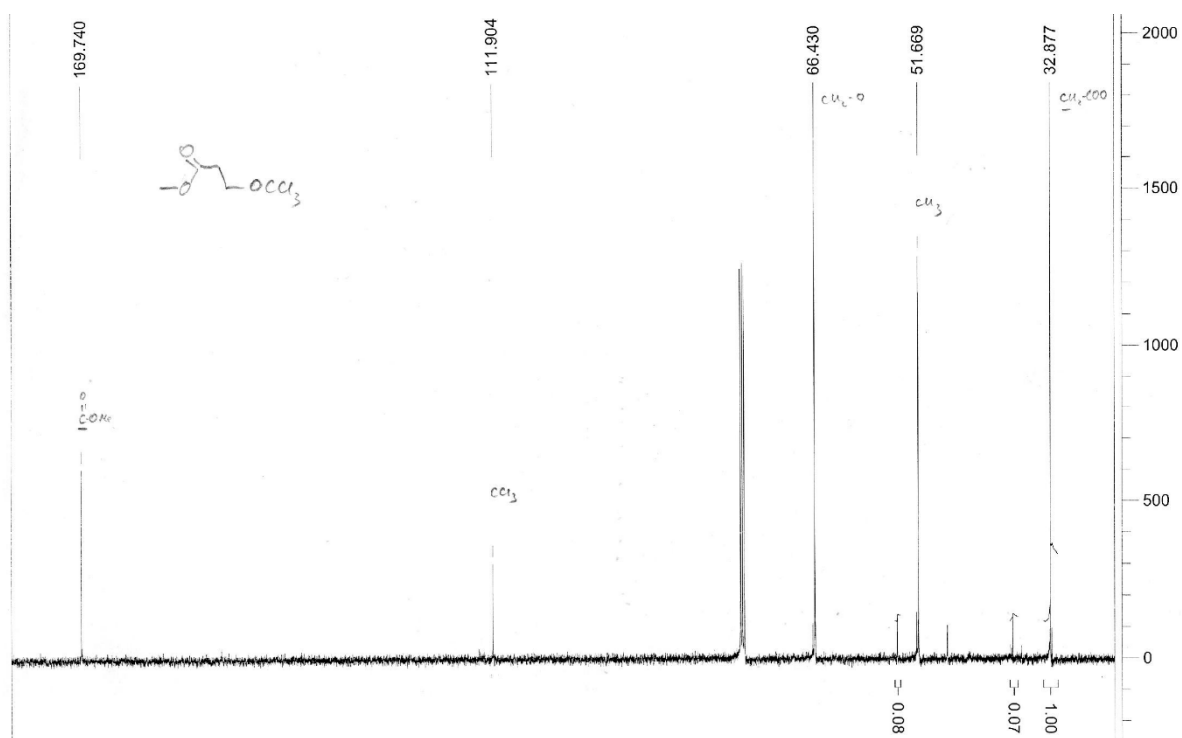


Figure S18.  $^{13}\text{C}$ -NMR spectra of methyl 3-(trichloromethoxy)propanoate **2b**.

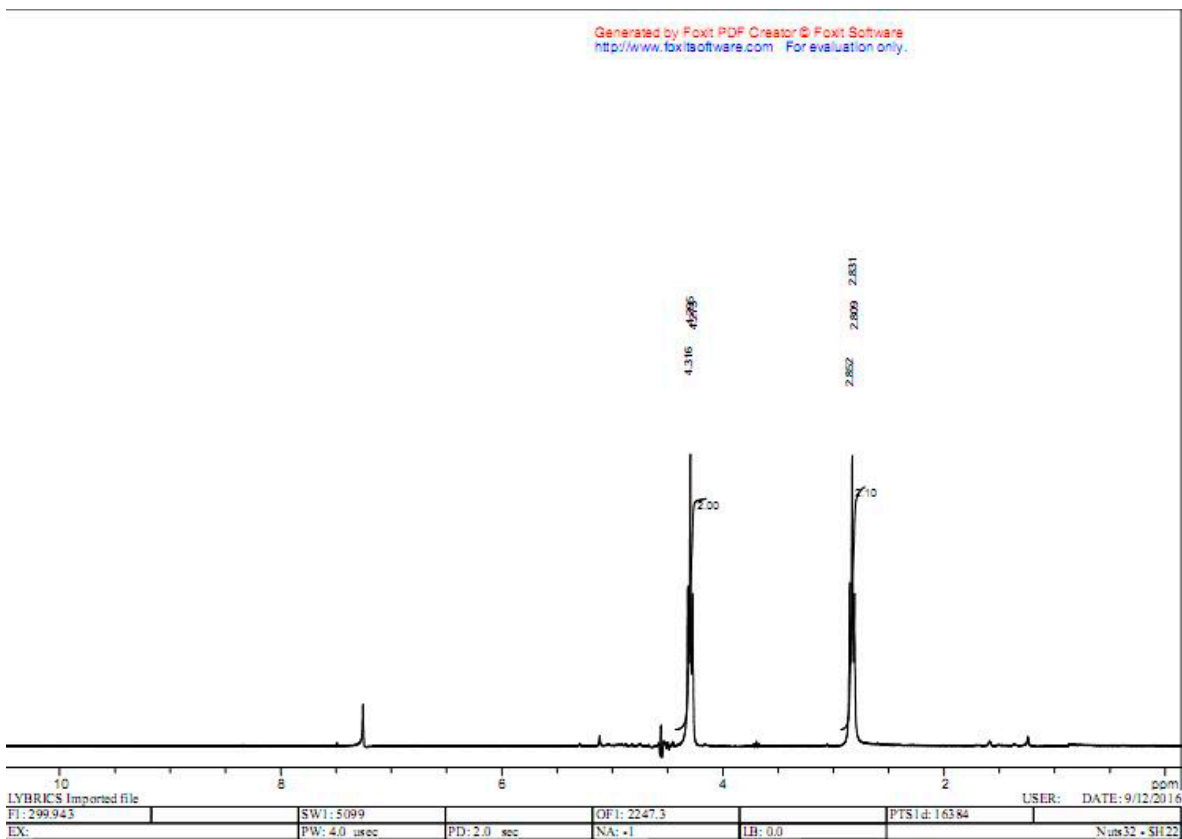


Figure S19.  $^1\text{H}$ -NMR spectra of 3-(trichloromethoxy)propanenitrile **2c**.

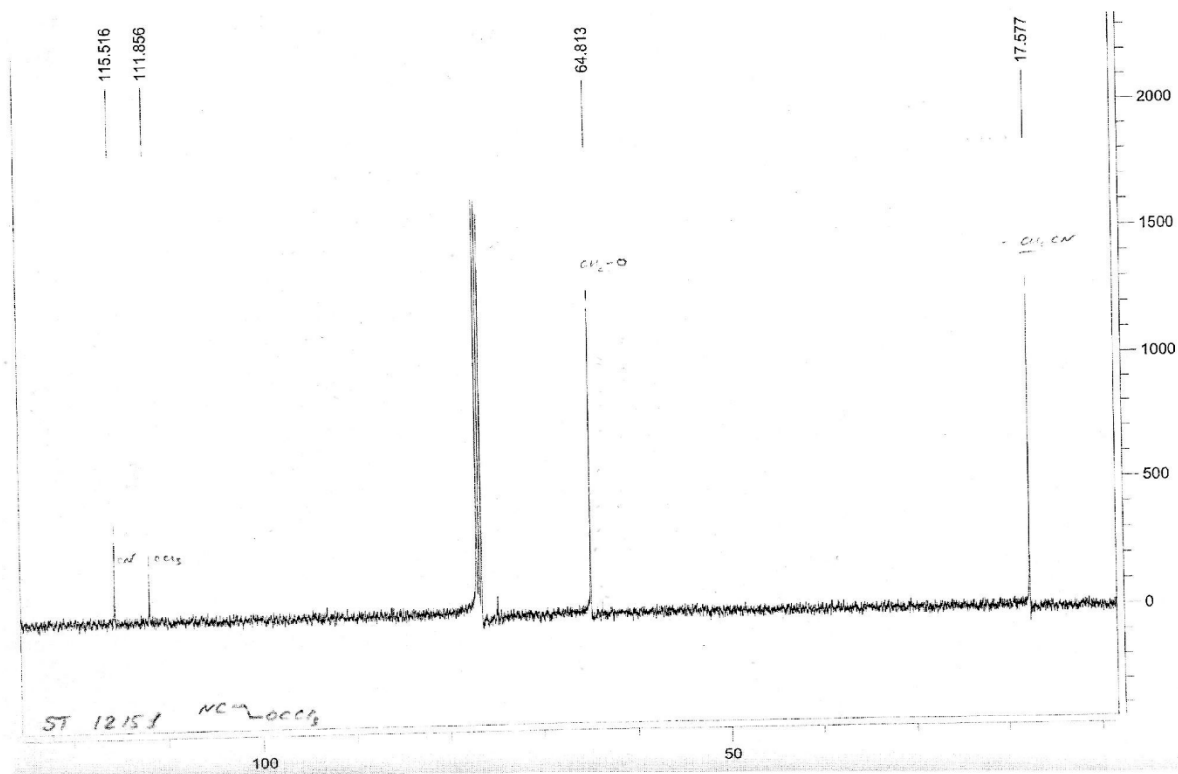


Figure S20.  $^{13}\text{C}$ -NMR spectra of 3-(trichloromethoxy)propanenitrile **2c**.

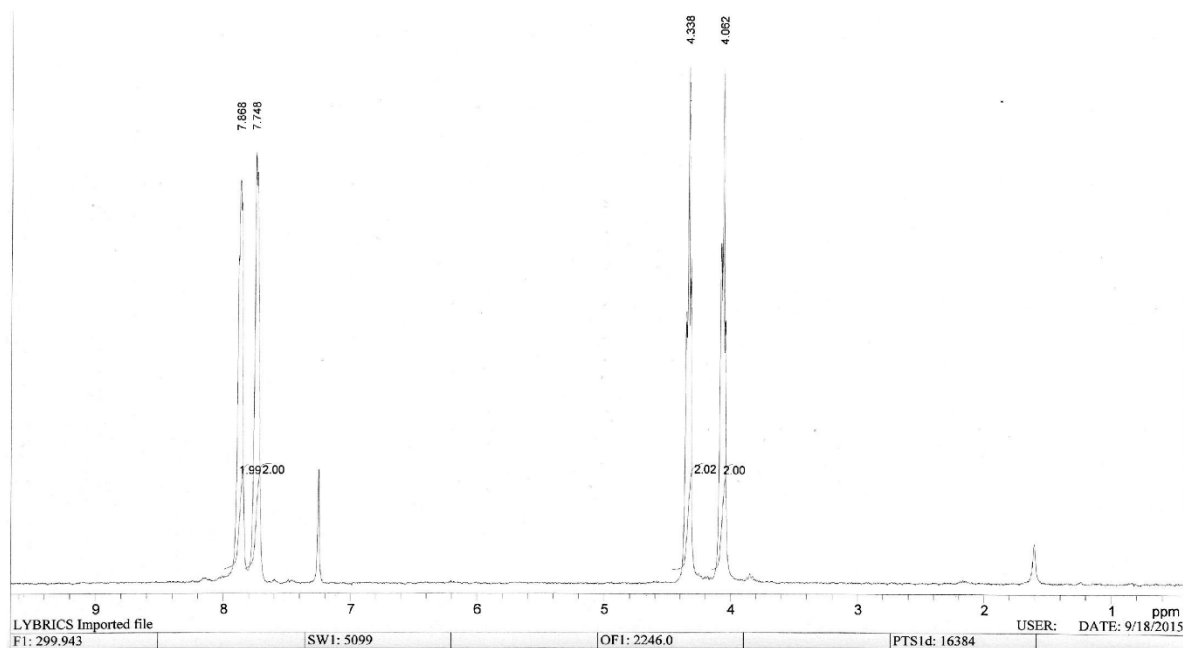


Figure S21. <sup>1</sup>H-NMR spectra of 2-[2-(trichloromethoxy)ethyl]-1H-isindole-1,3(2H)-dione **2d**.

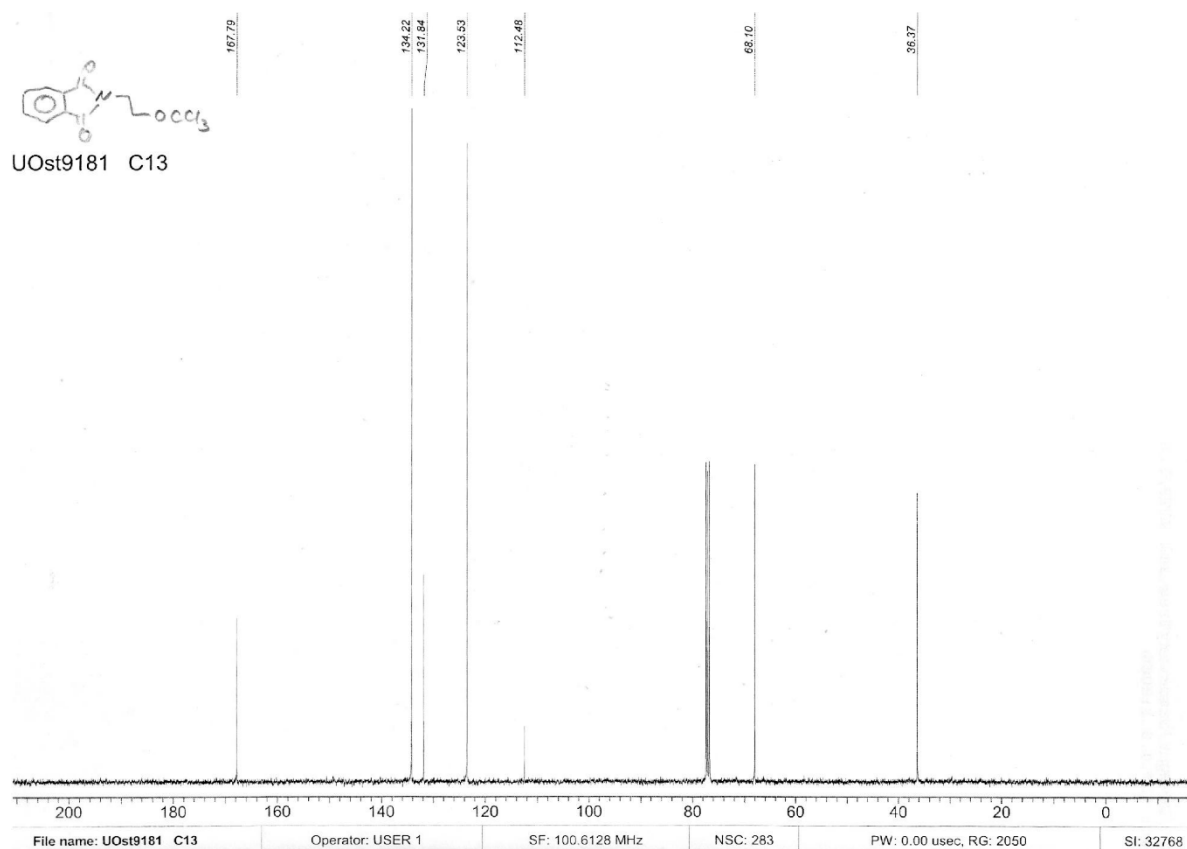


Figure S22. <sup>13</sup>C-NMR spectra of 2-[2-(trichloromethoxy)ethyl]-1H-isindole-1,3(2H)-dione **2d**.

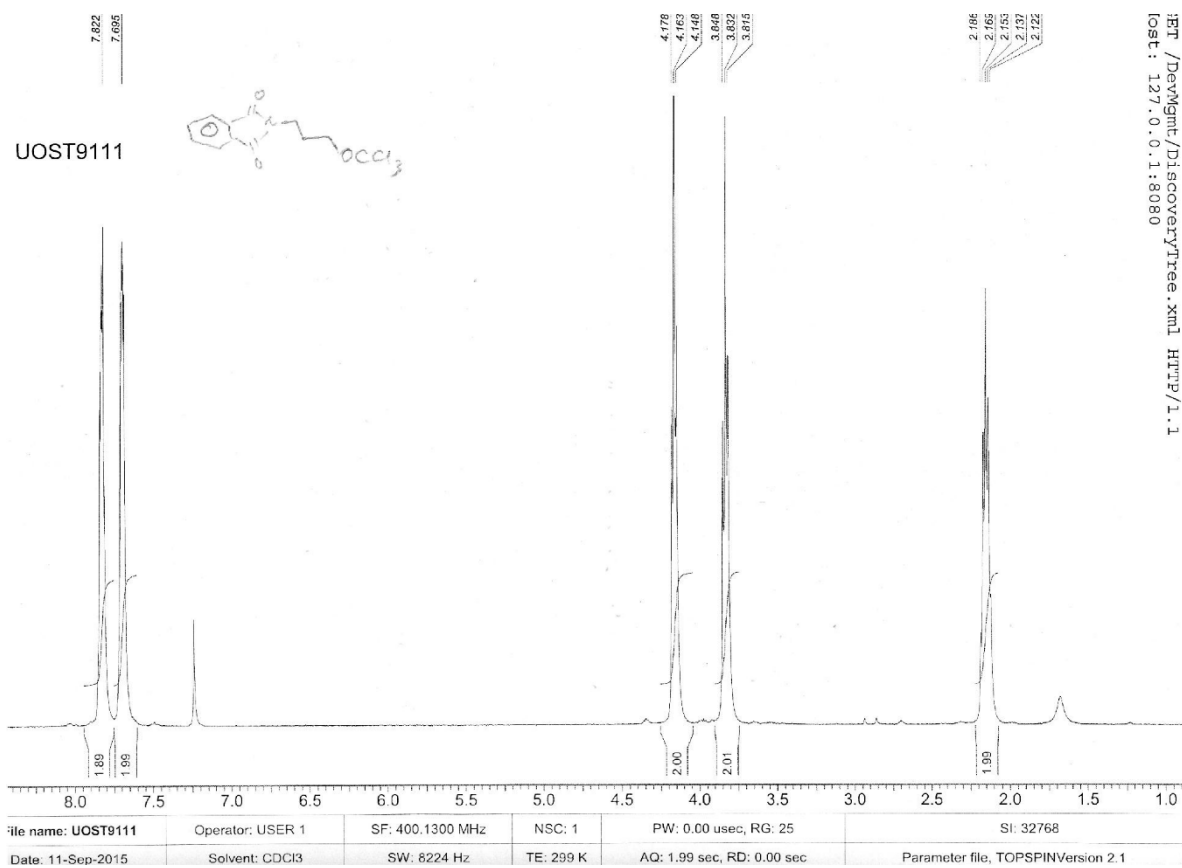


Figure S23. <sup>1</sup>H-NMR spectra of 2-[3-(trichloromethoxy)propyl]-1H-isoindole-1,3(2H)-dione **2e**.

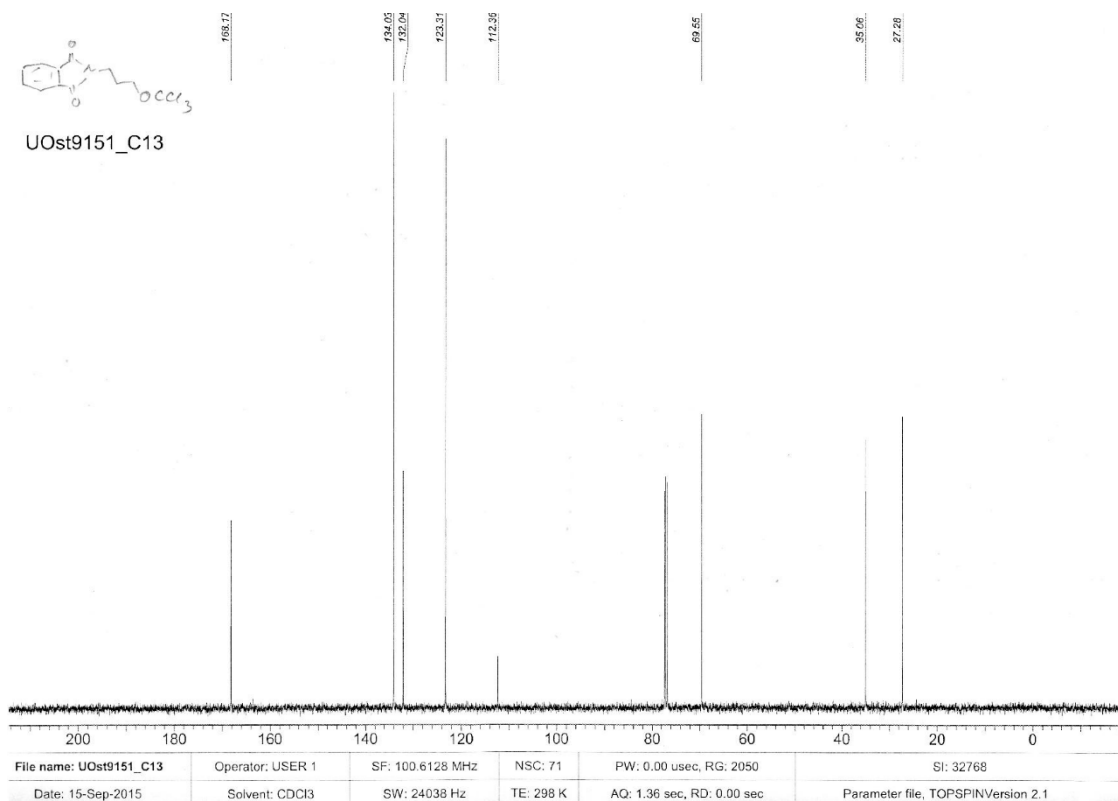
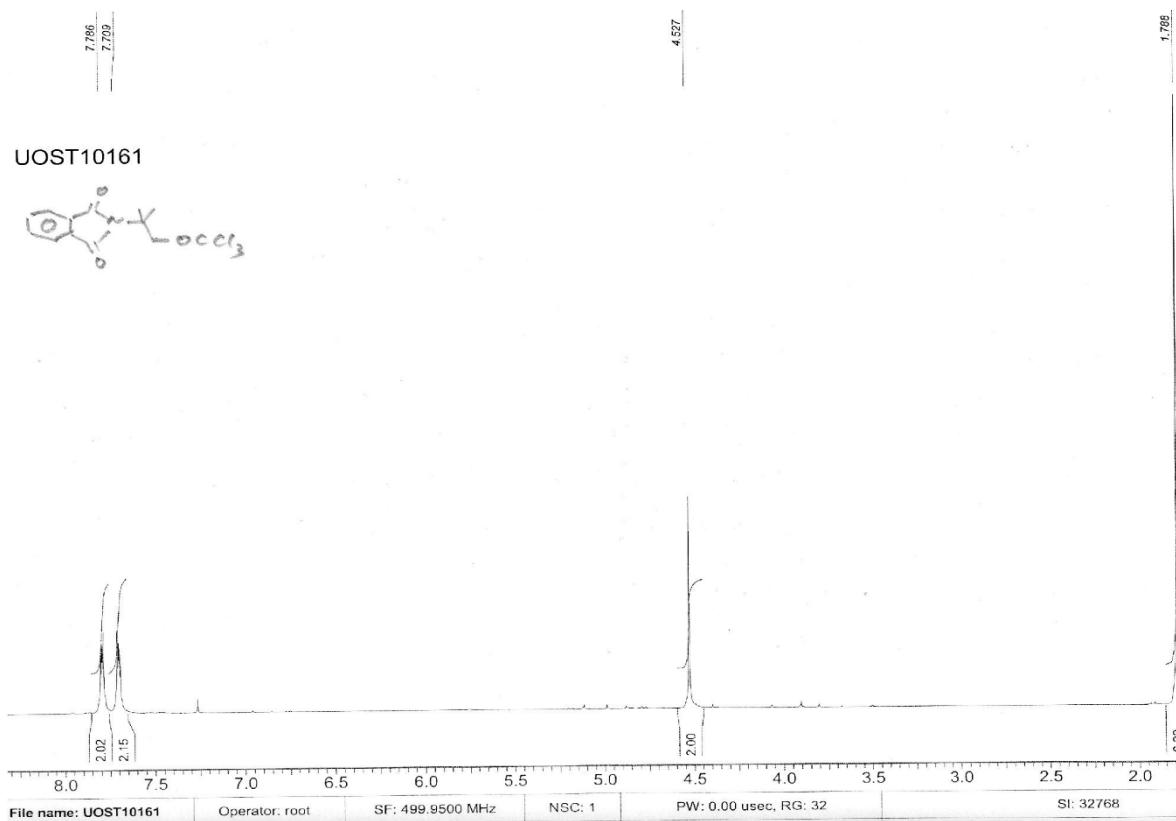
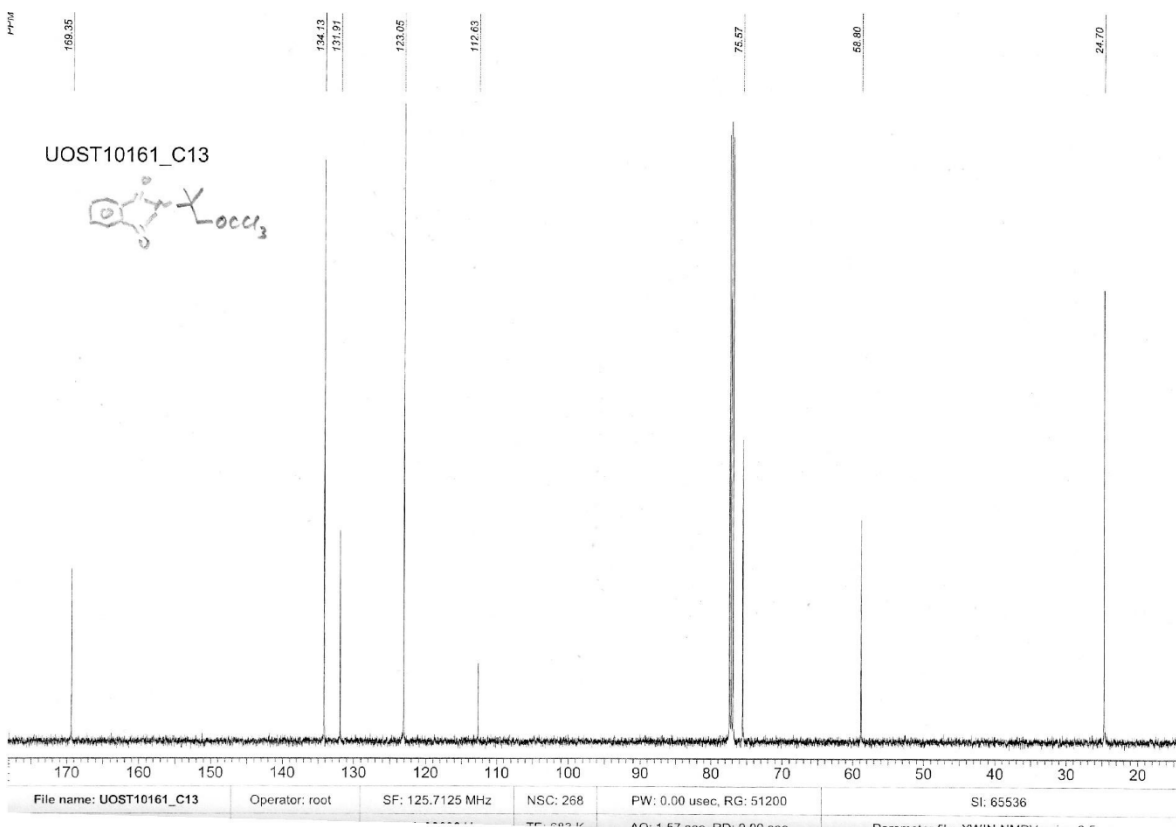


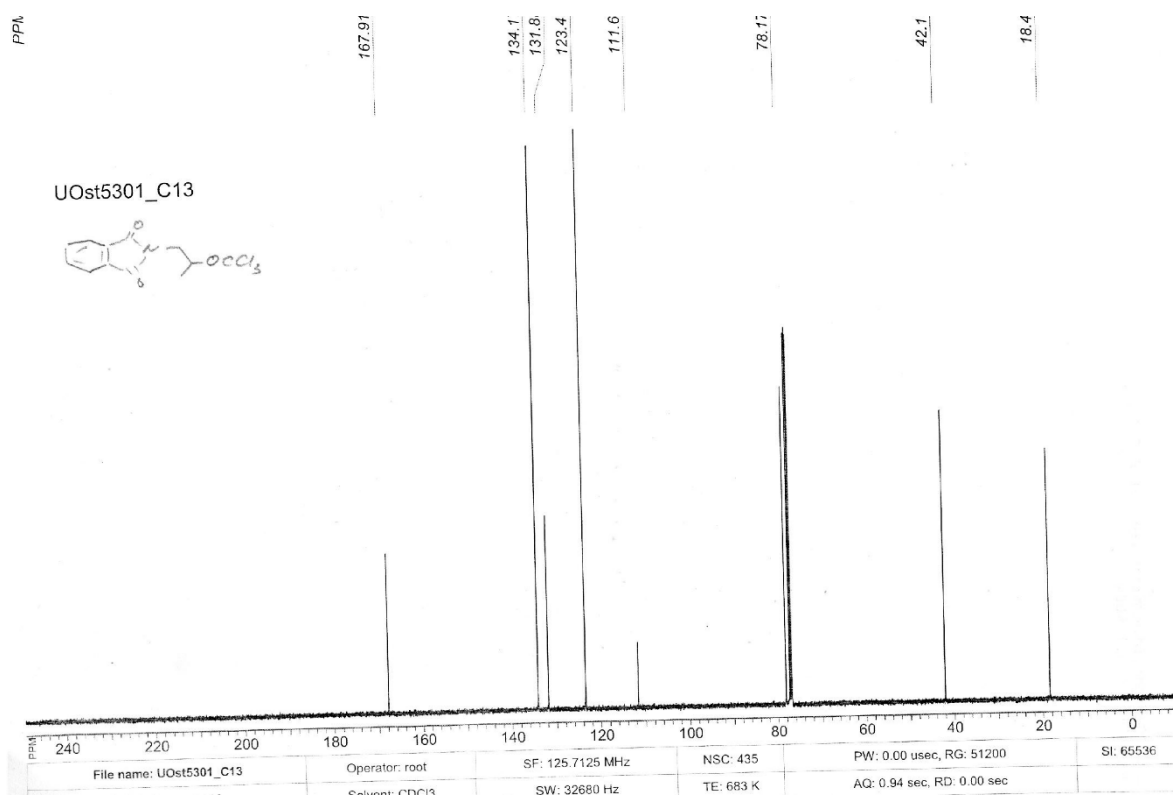
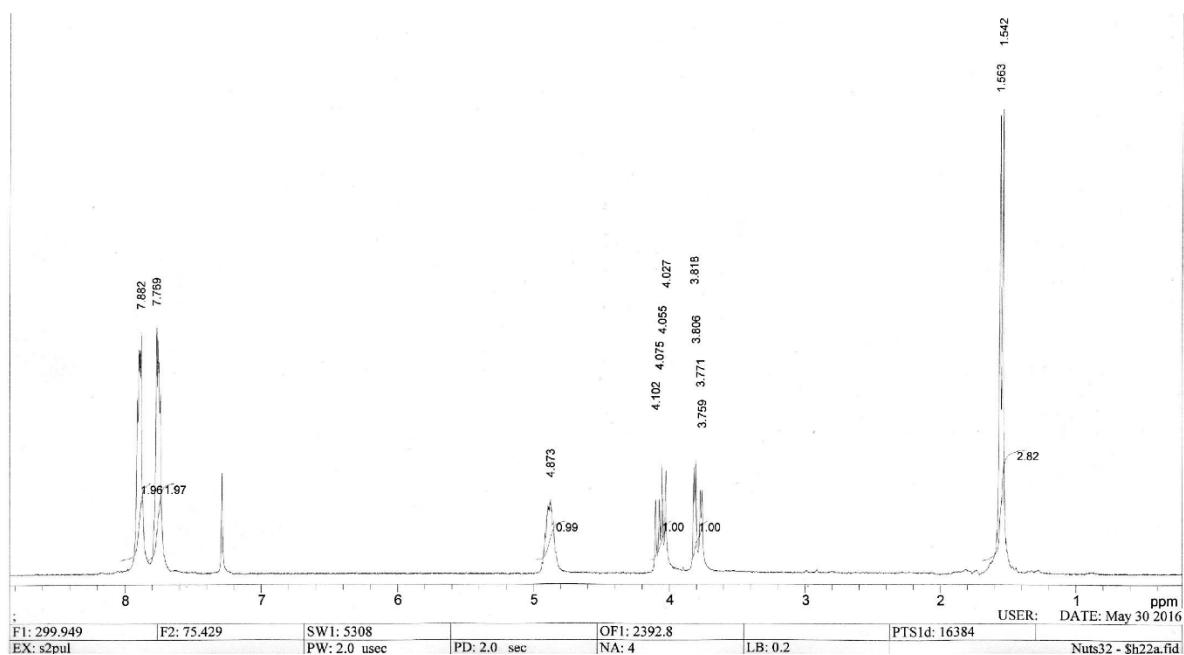
Figure S24. <sup>13</sup>C-NMR spectra of 2-[3-(trichloromethoxy)propyl]-1H-isoindole-1,3(2H)-dione **2e**.



**Figure S25.** <sup>1</sup>H-NMR spectra of 2-[1,1-Dimethyl-2-(trichloromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione 2f.



**Figure S26.** <sup>13</sup>C-NMR spectra of 2-[1,1-Dimethyl-2-(trichloromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione 2f.



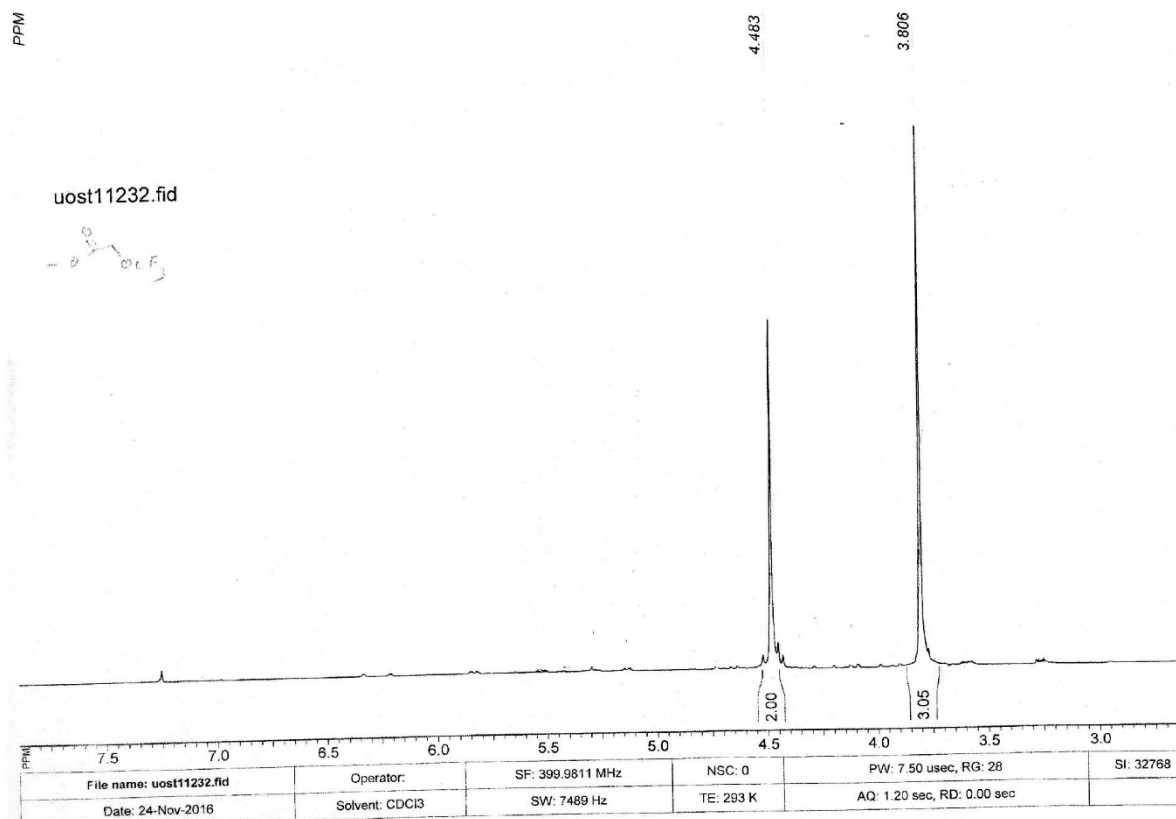


Figure S29.  $^1\text{H}$ -NMR spectra of methyl (trifluoromethoxy)acetate **3a**.

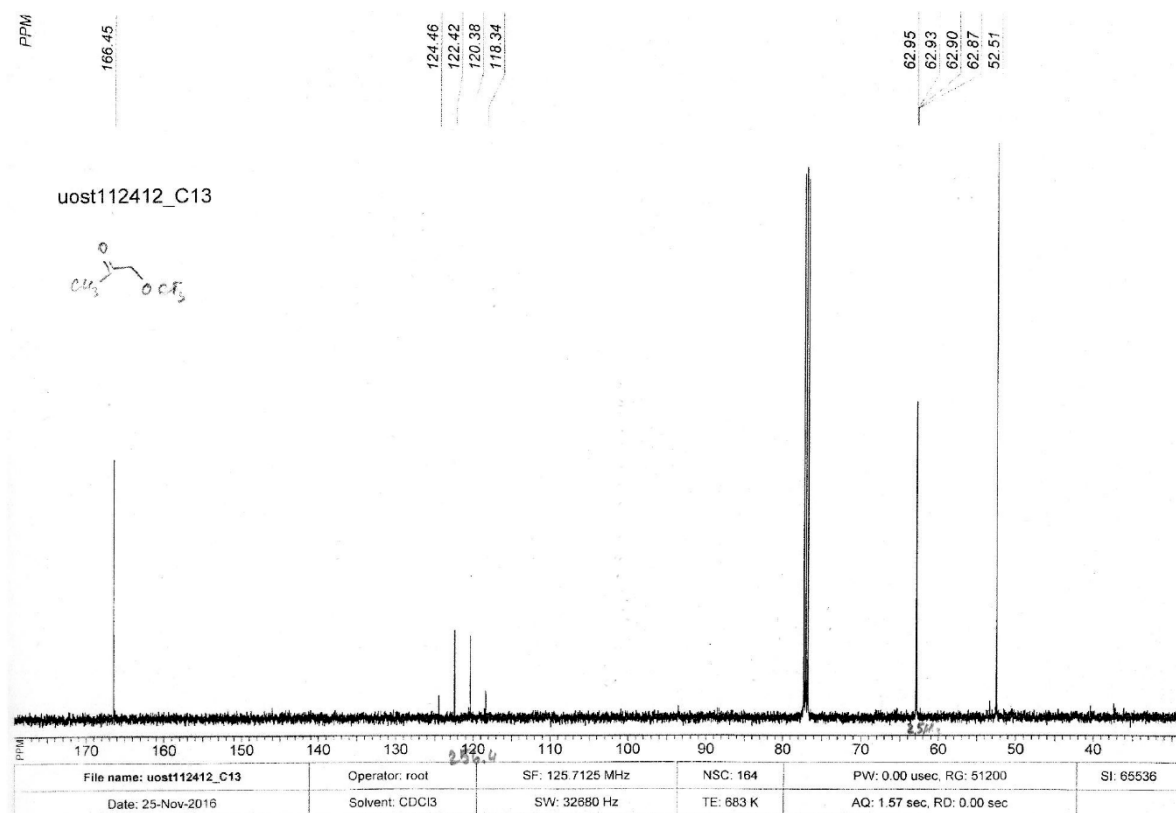


Figure S30.  $^{13}\text{C}$ -NMR spectra of methyl (trifluoromethoxy)acetate **3a**.

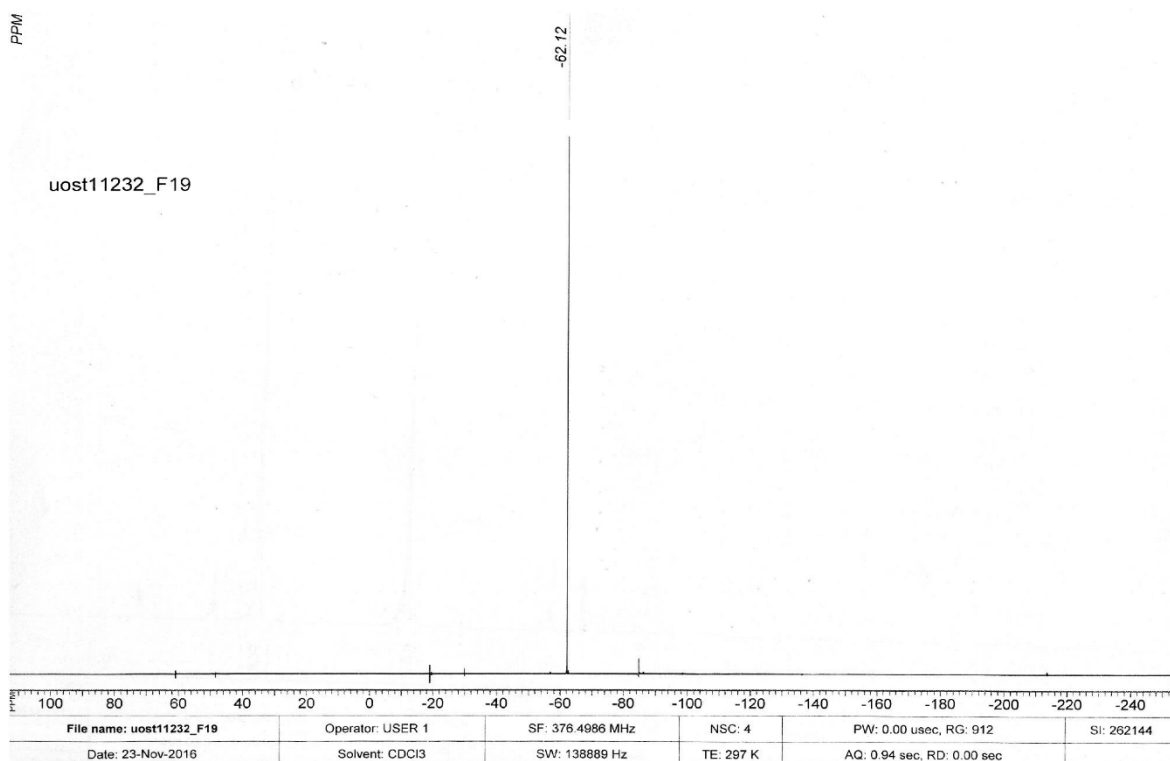


Figure S31.  $^{19}\text{F}$ -NMR spectra of methyl (trifluoromethoxy)acetate **3a**.

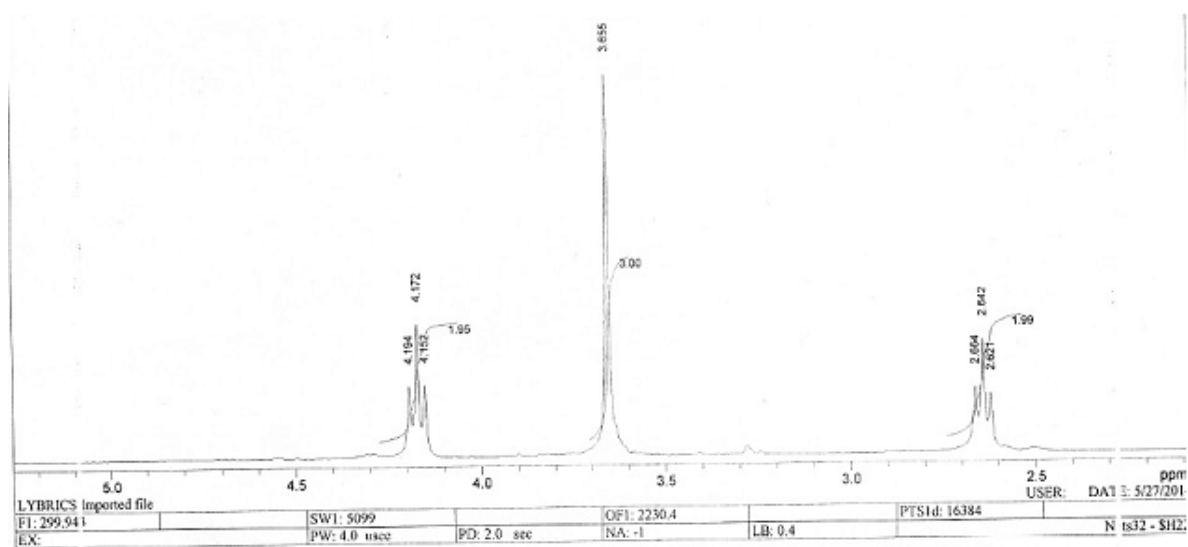


Figure S32.  $^1\text{H}$ -NMR spectra of methyl 3-(trifluoromethoxy)propanoate **3b**.



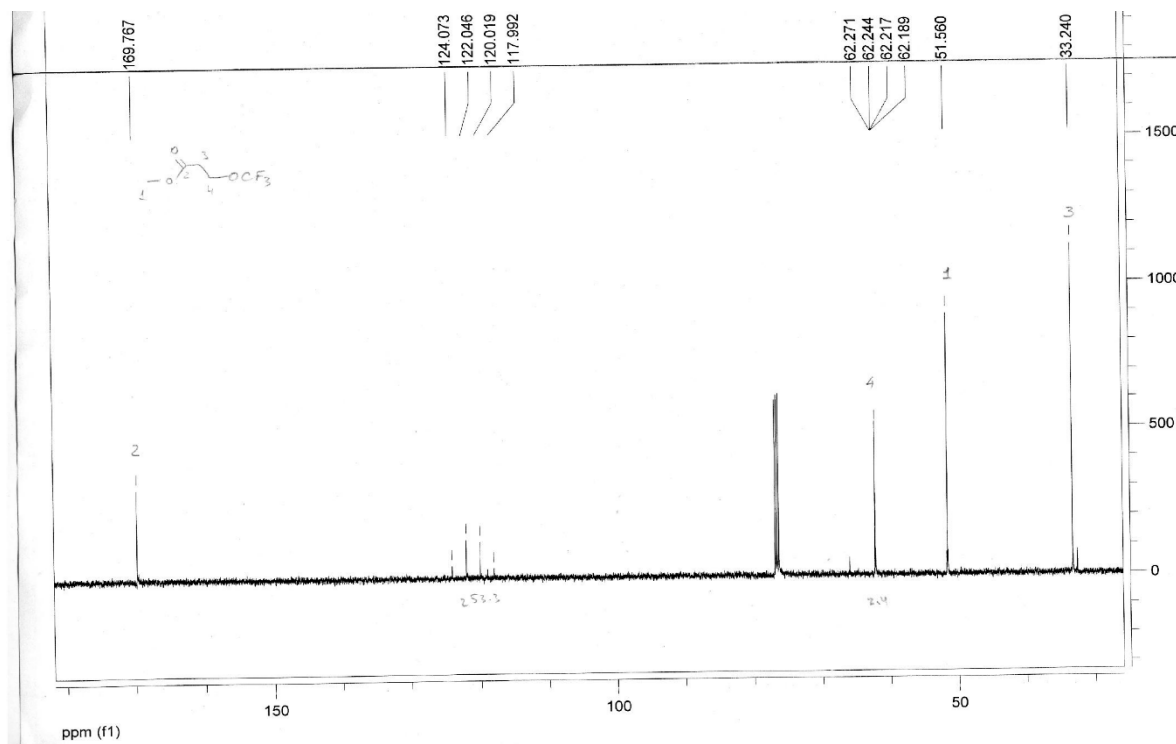


Figure S33. <sup>13</sup>C-NMR spectra of methyl 3-(trifluoromethoxy)propanoate **3b**.

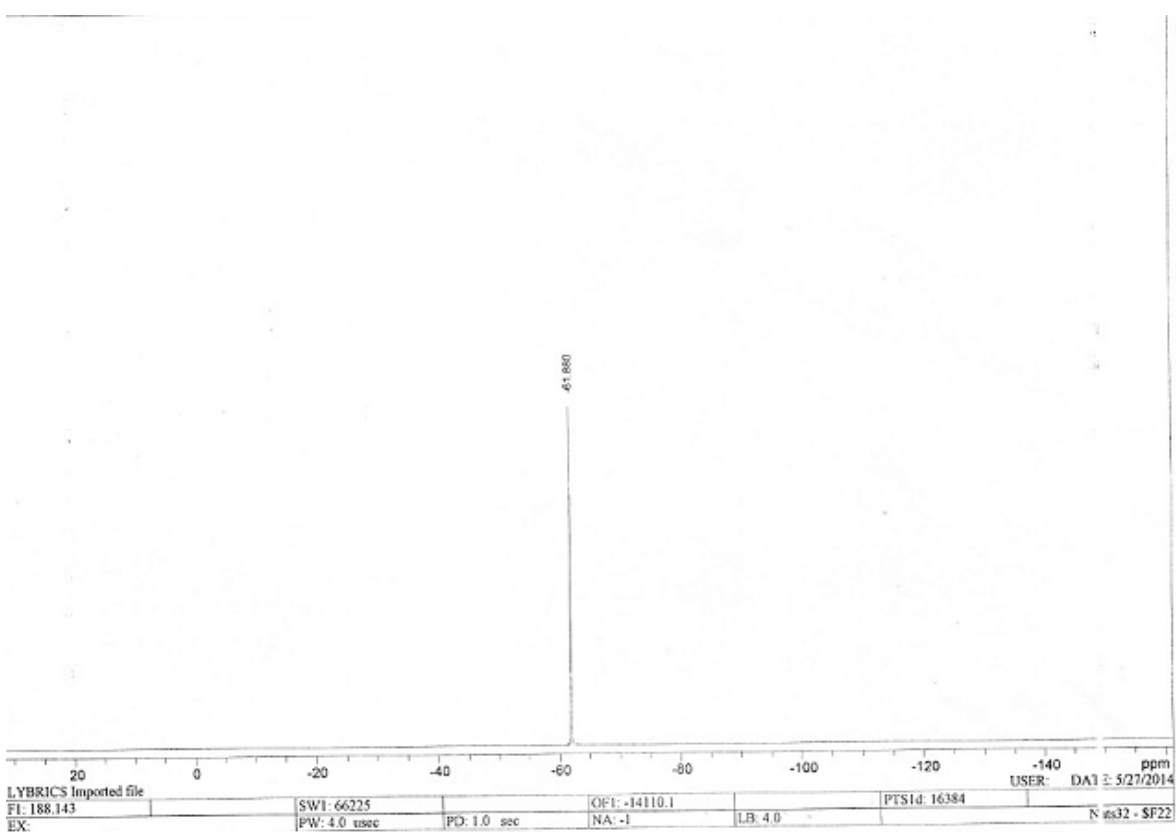


Figure S34. <sup>19</sup>F-NMR spectra of methyl 3-(trifluoromethoxy)propanoate **3b**.

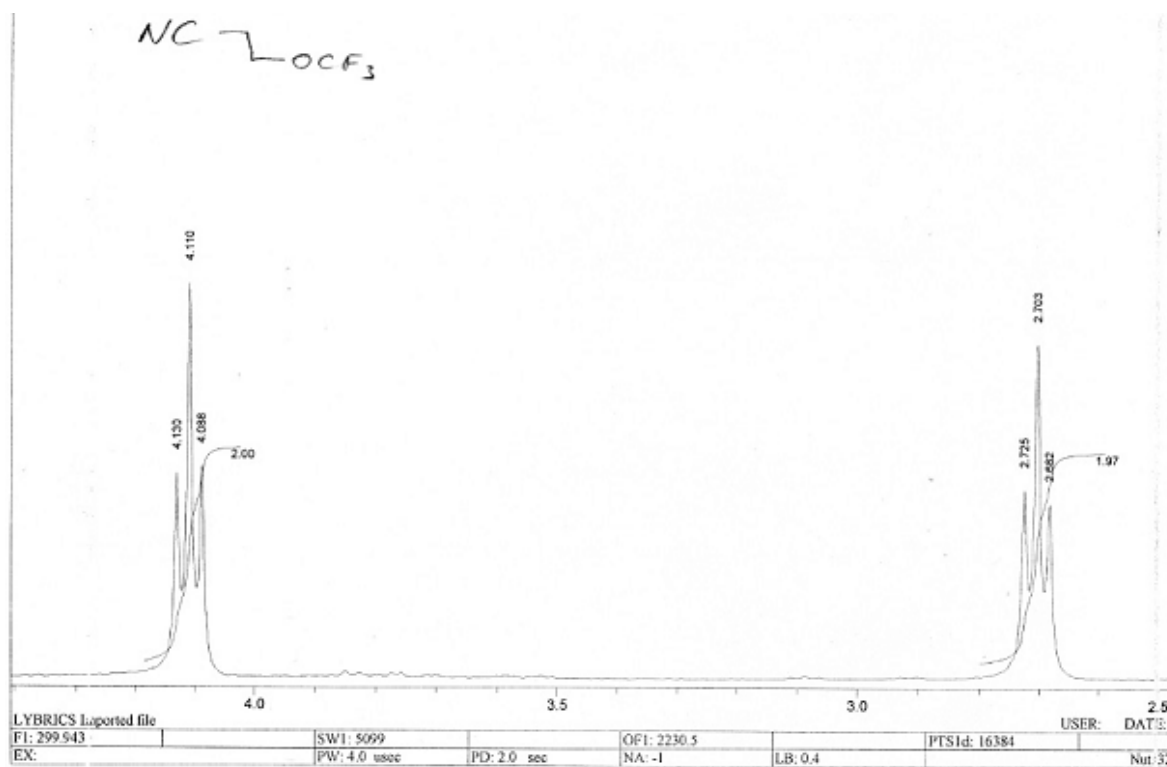


Figure S35. <sup>1</sup>H-NMR spectra of 3-(trifluoromethoxy)propanenitrile 3c.

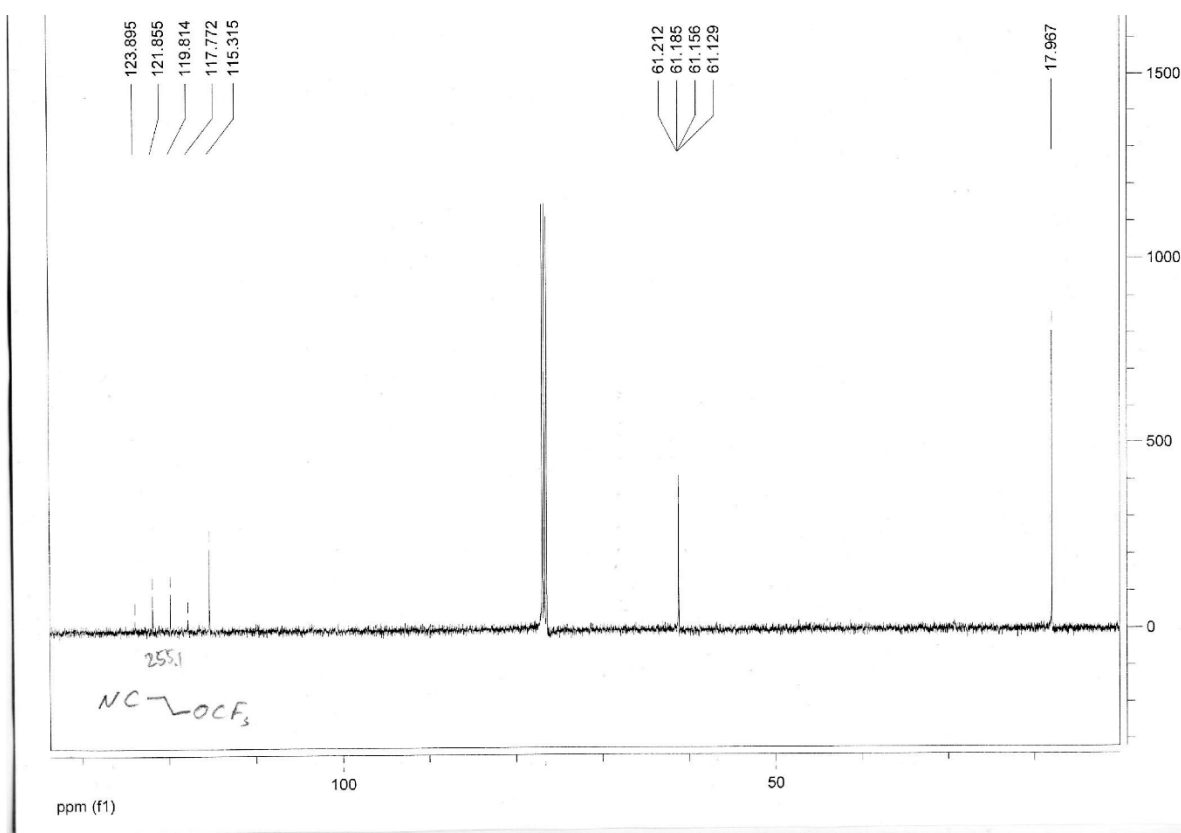


Figure S36. <sup>13</sup>C-NMR spectra of 3-(trifluoromethoxy)propanenitrile 3c.

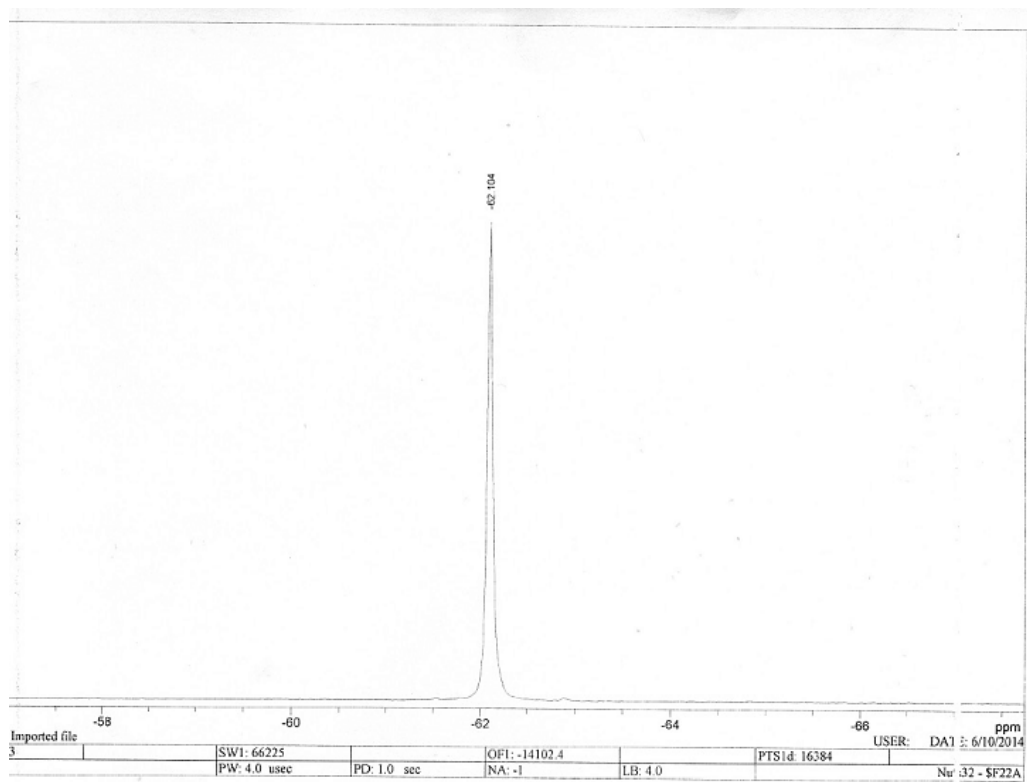


Figure S37.  $^{19}\text{F}$ -NMR spectra of 3-(trifluoromethoxy)propanenitrile **3c**.

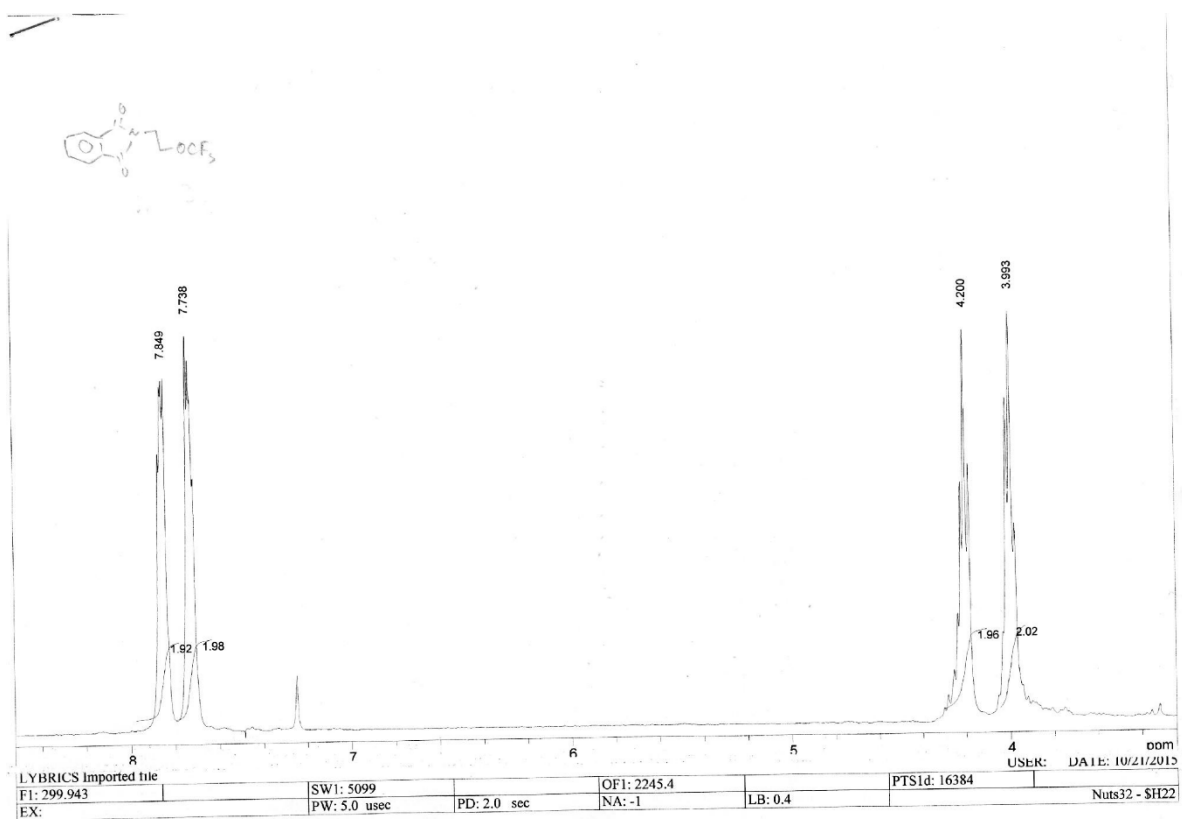


Figure S38.  $^1\text{H}$ -NMR spectra of 2-[2-(trifluoromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione **3d**.

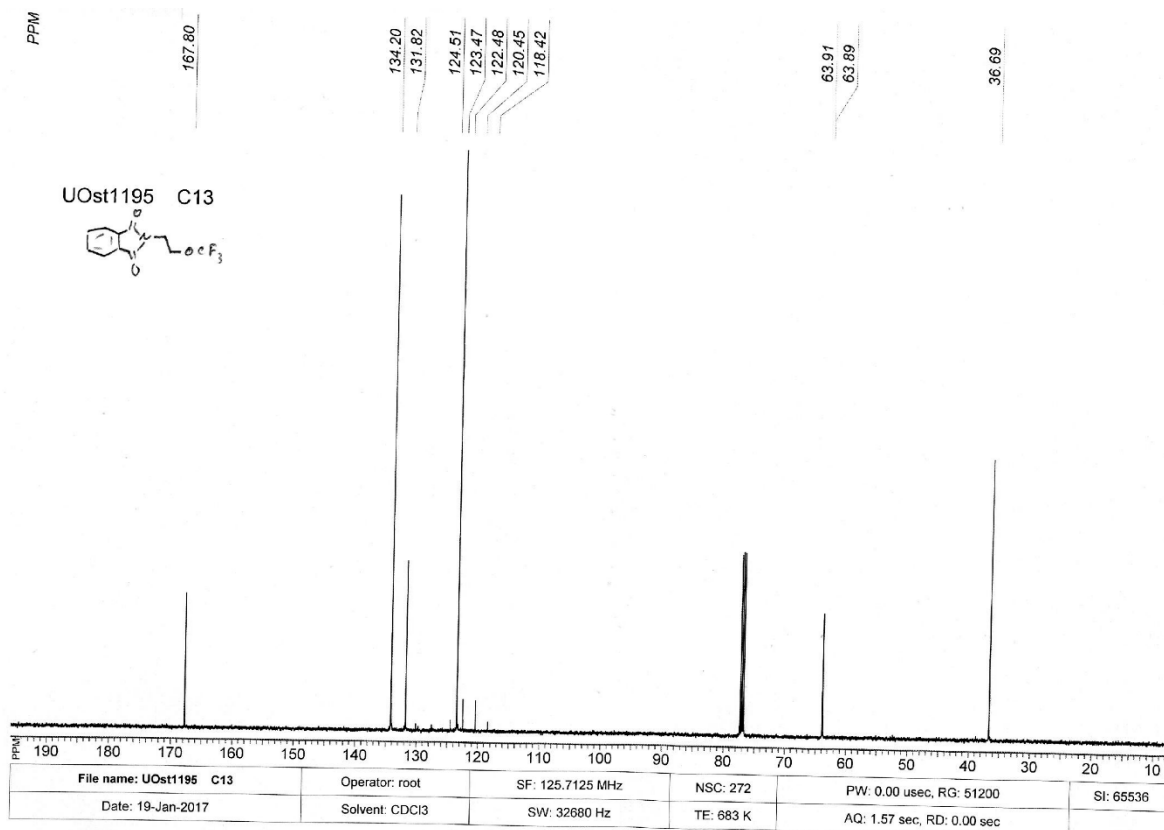


Figure S39. <sup>13</sup>C-NMR spectra of 2-[2-(trifluoromethoxy)ethyl]-1H-isindole-1,3(2H)-dione **3d**.

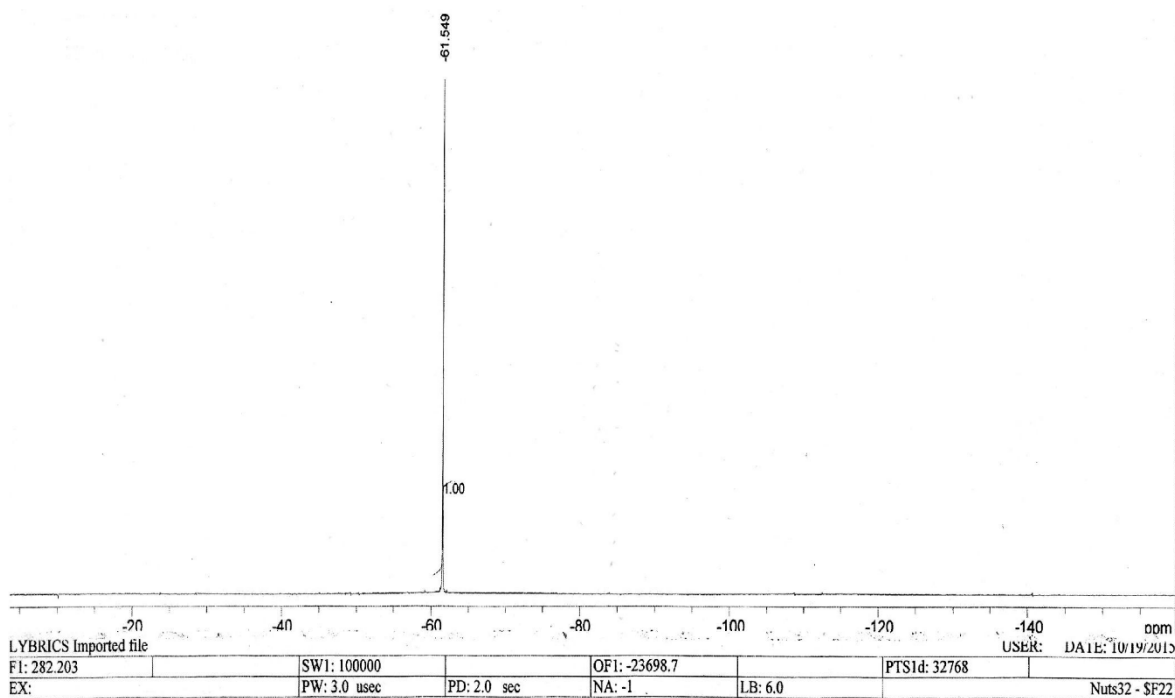


Figure S40. <sup>19</sup>F-NMR spectra of 2-[2-(trifluoromethoxy)ethyl]-1H-isindole-1,3(2H)-dione **3d**.

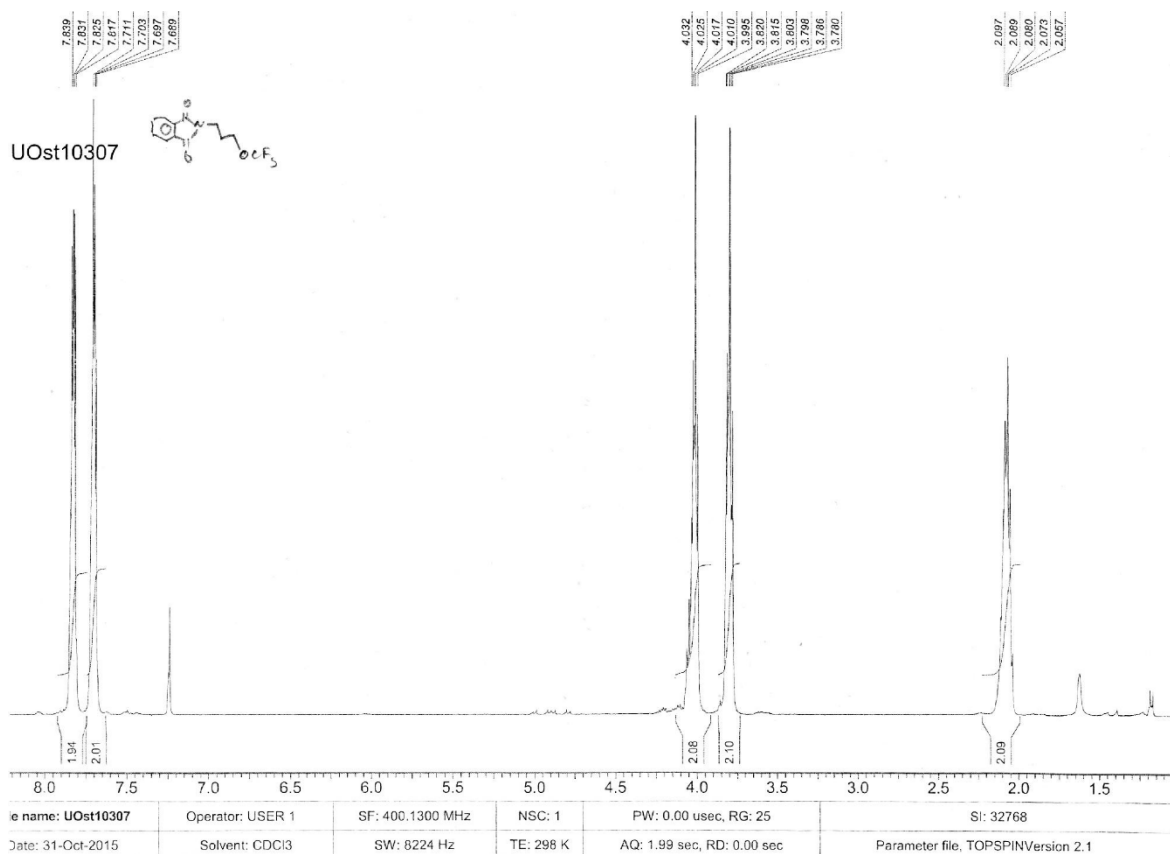


Figure S41. <sup>1</sup>H-NMR spectra of 2-[3-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione 3e.

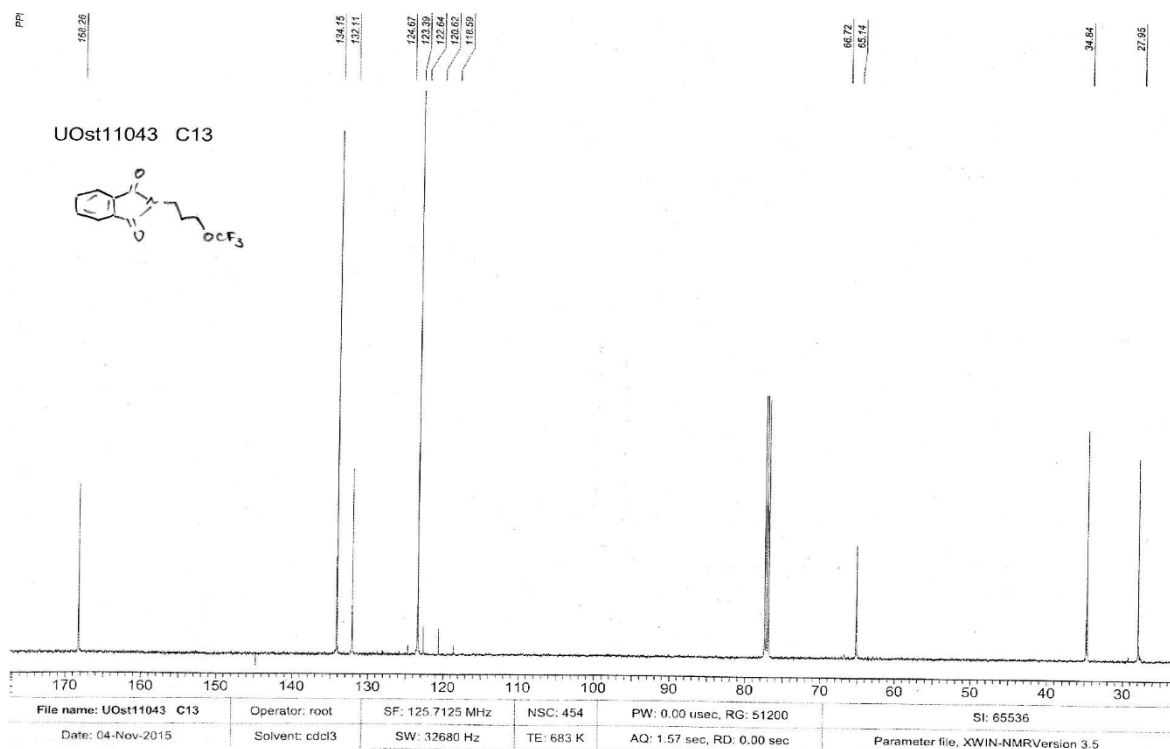


Figure S42. <sup>13</sup>C-NMR spectra of 2-[3-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione 3e.

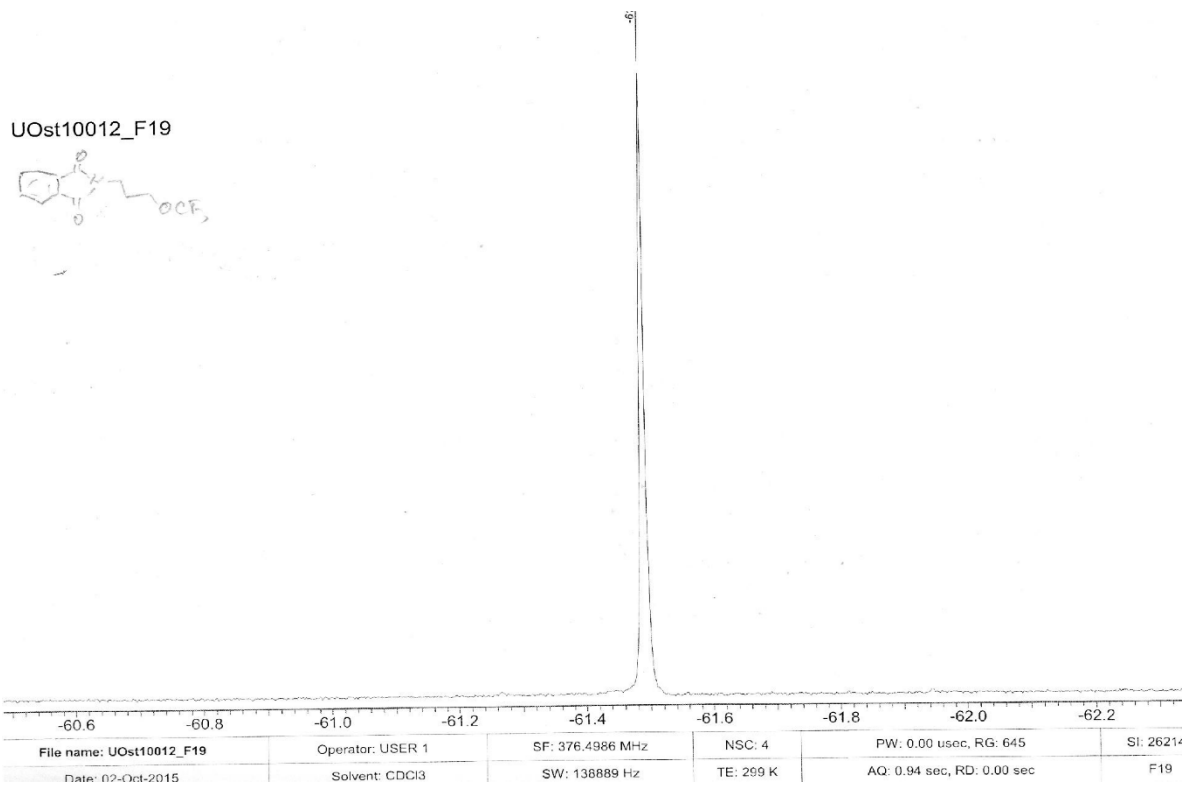


Figure S43.  $^{19}\text{F}$ -NMR spectra of 2-[3-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione 3e.

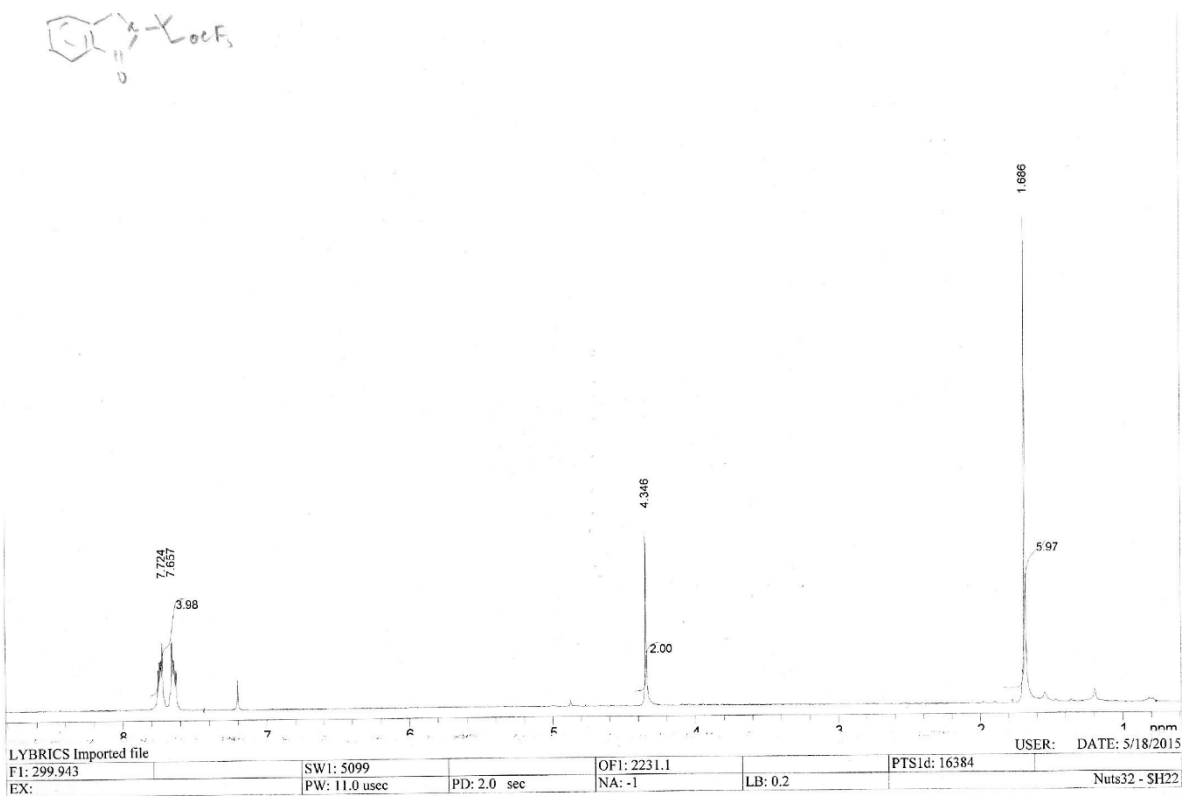
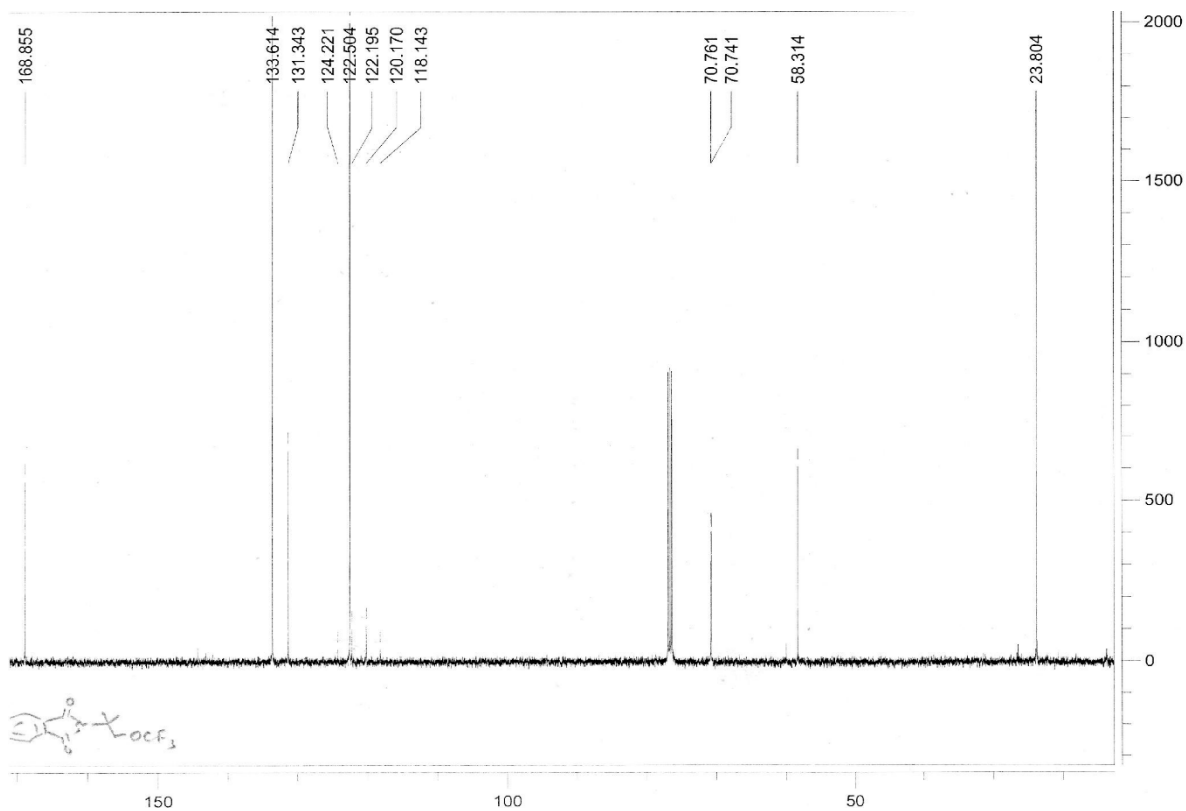
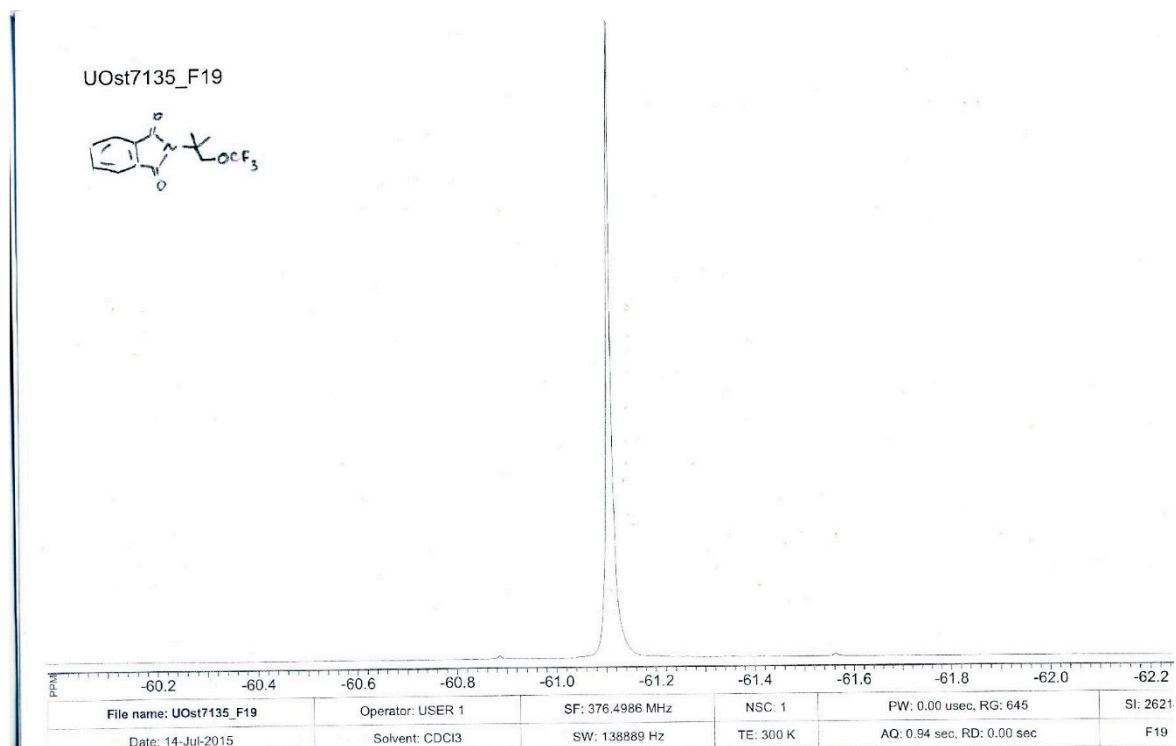


Figure S44.  $^1\text{H}$ -NMR spectra of 2-[1,1-dimethyl-2-(trifluoromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione 3f.



**Figure S45.**  $^{13}\text{C}$ -NMR spectra of 2-[1,1-dimethyl-2-(trifluoromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione **3f**.



**Figure S46.**  $^{19}\text{F}$ -NMR spectra of 2-[1,1-dimethyl-2-(trifluoromethoxy)ethyl]-1H-isoindole-1,3(2H)-dione **3f**.

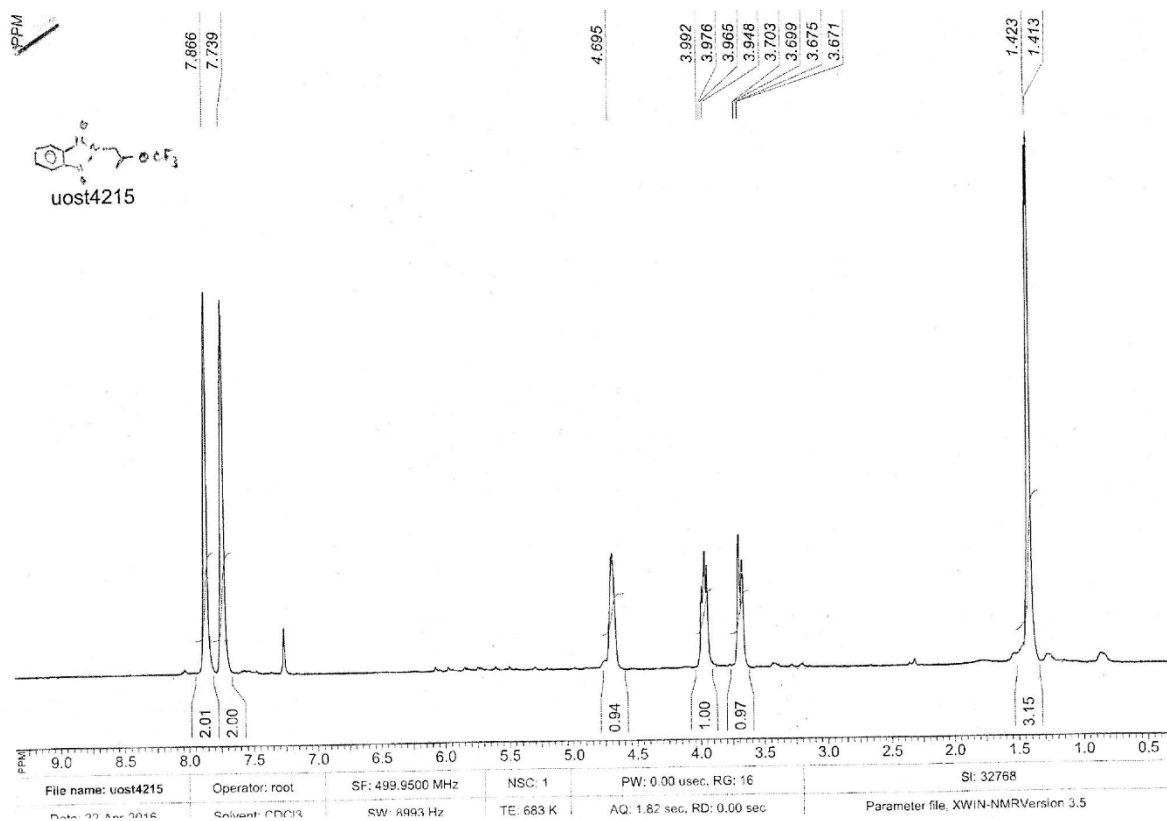


Figure S47.  $^1\text{H-NMR}$  spectra of 2-[2-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione **3g**.

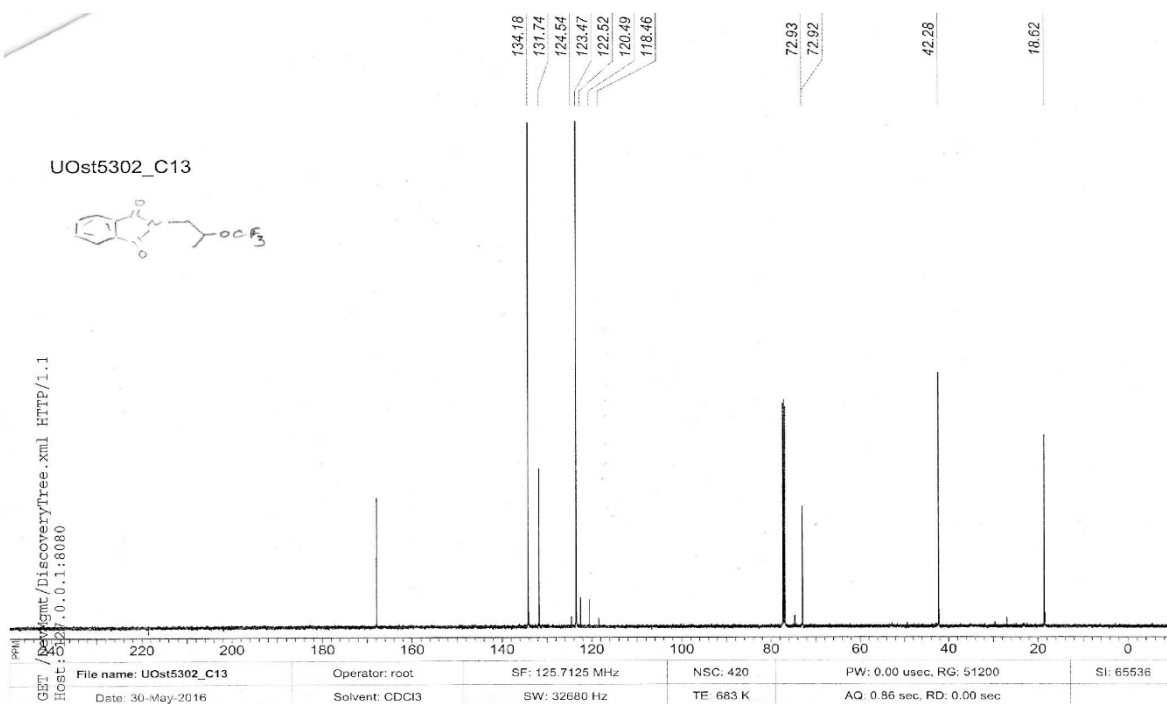
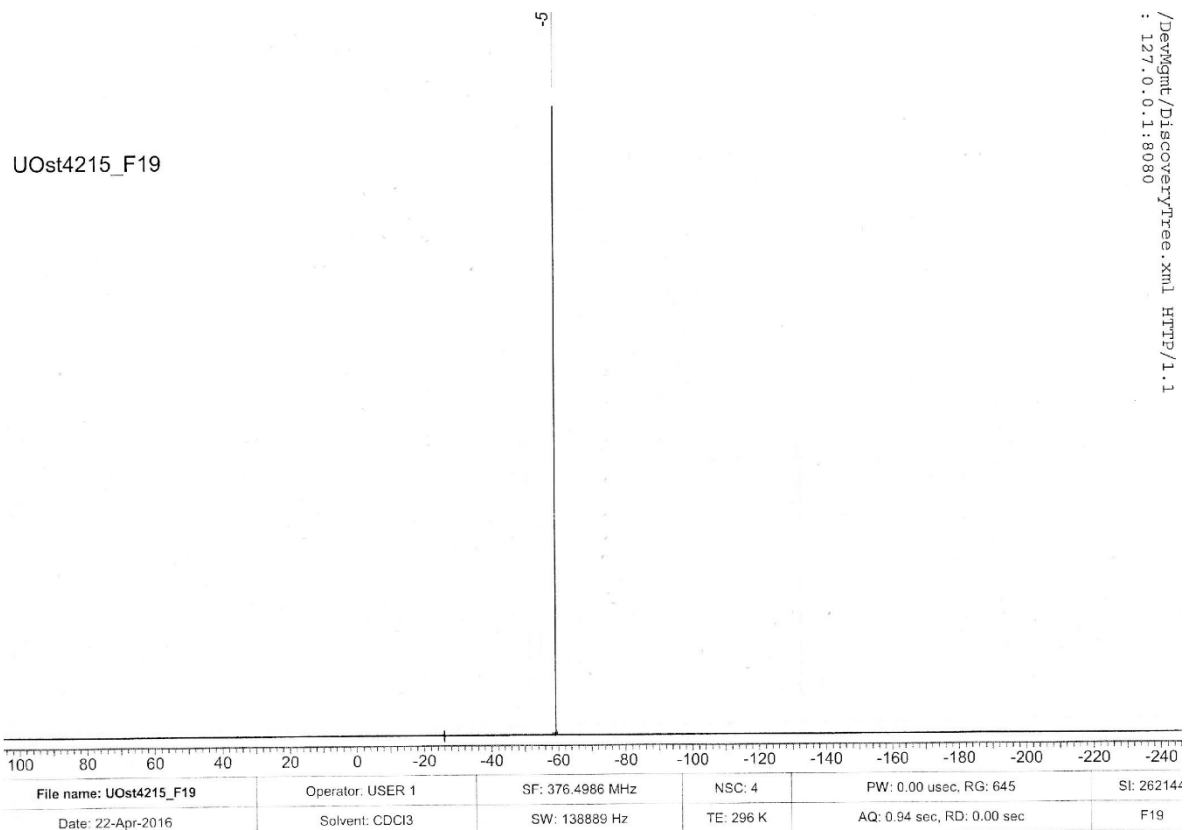


Figure S48.  $^{13}\text{C-NMR}$  spectra of 2-[2-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione **3g**.





**Figure S49.**  $^{19}\text{F}$ -NMR spectra of 2-[2-(trifluoromethoxy)propyl]-1H-isoindole-1,3(2H)-dione **3g**.