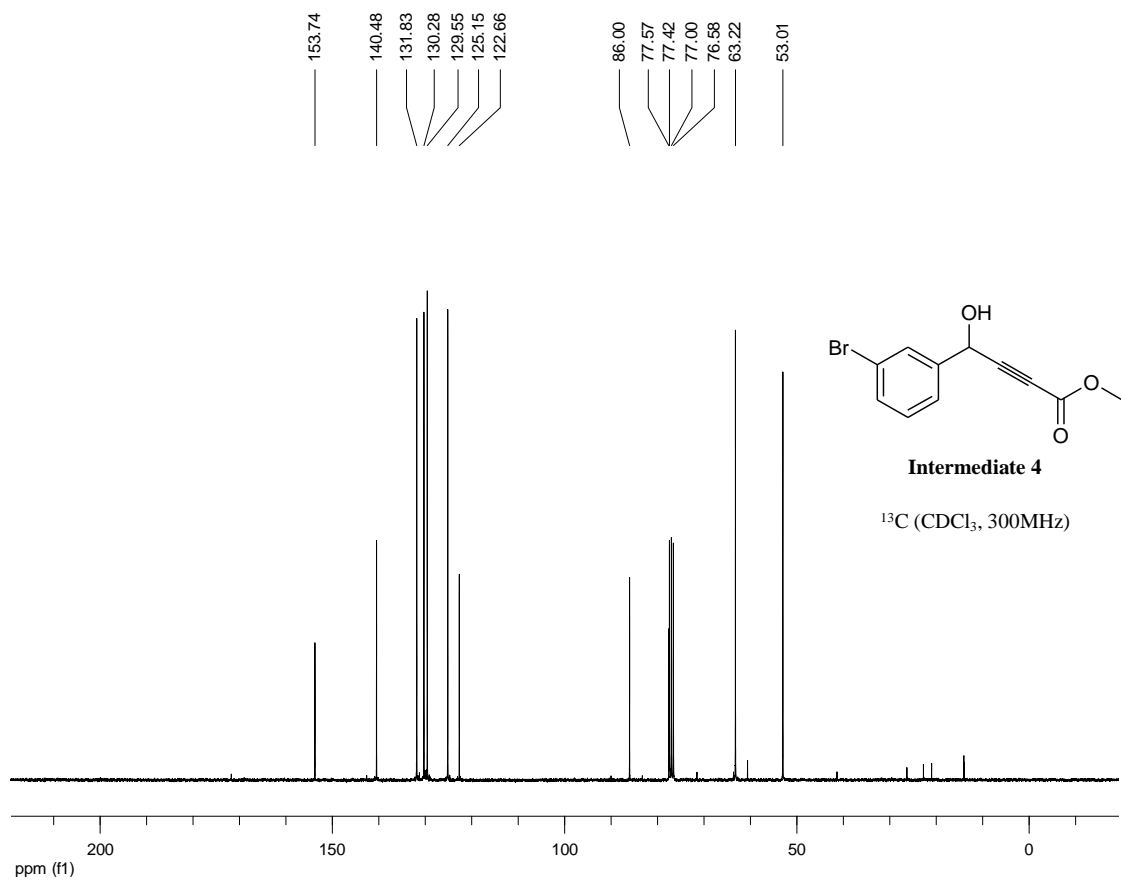
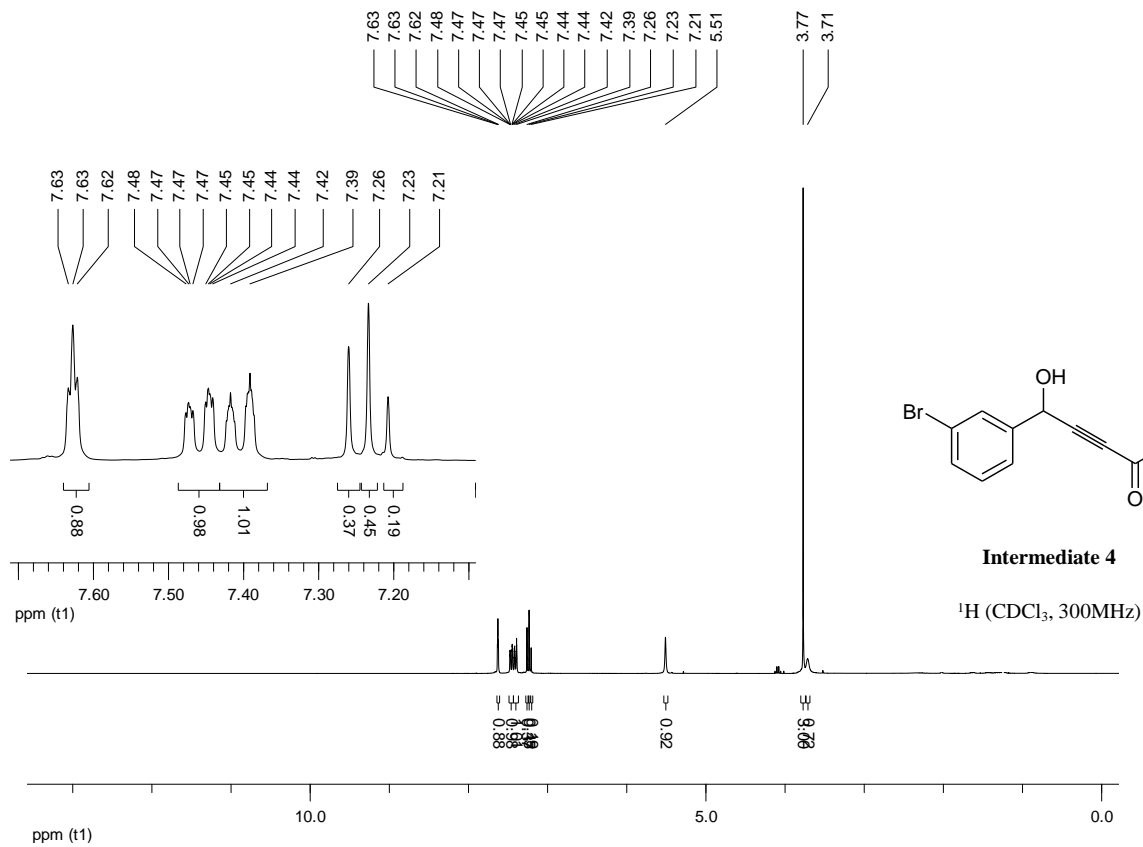
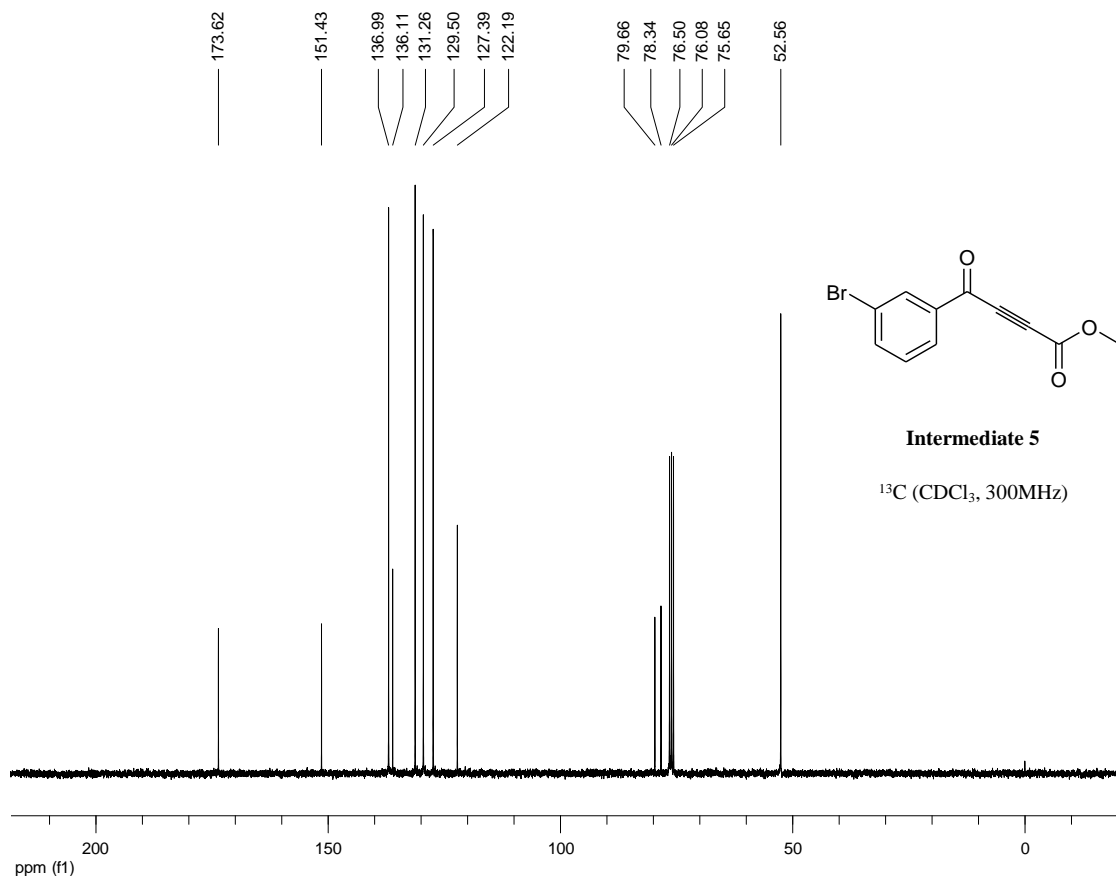
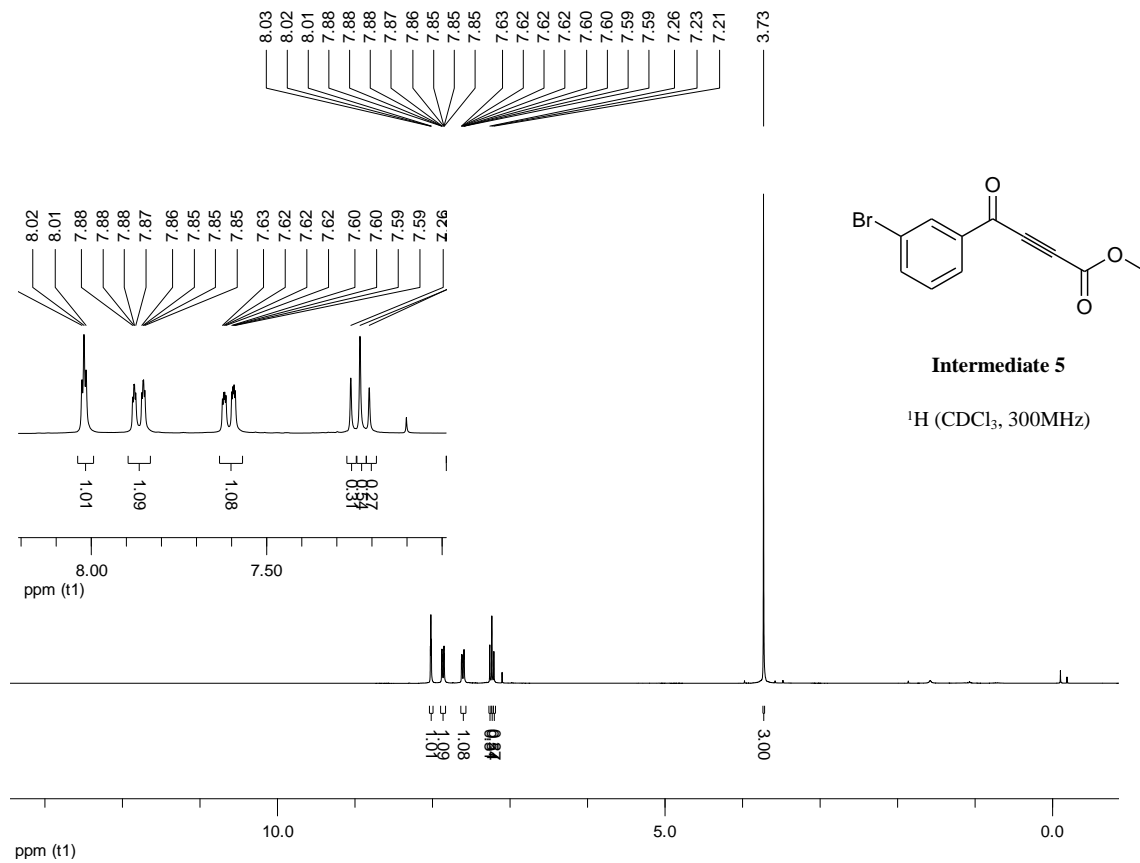
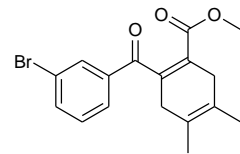
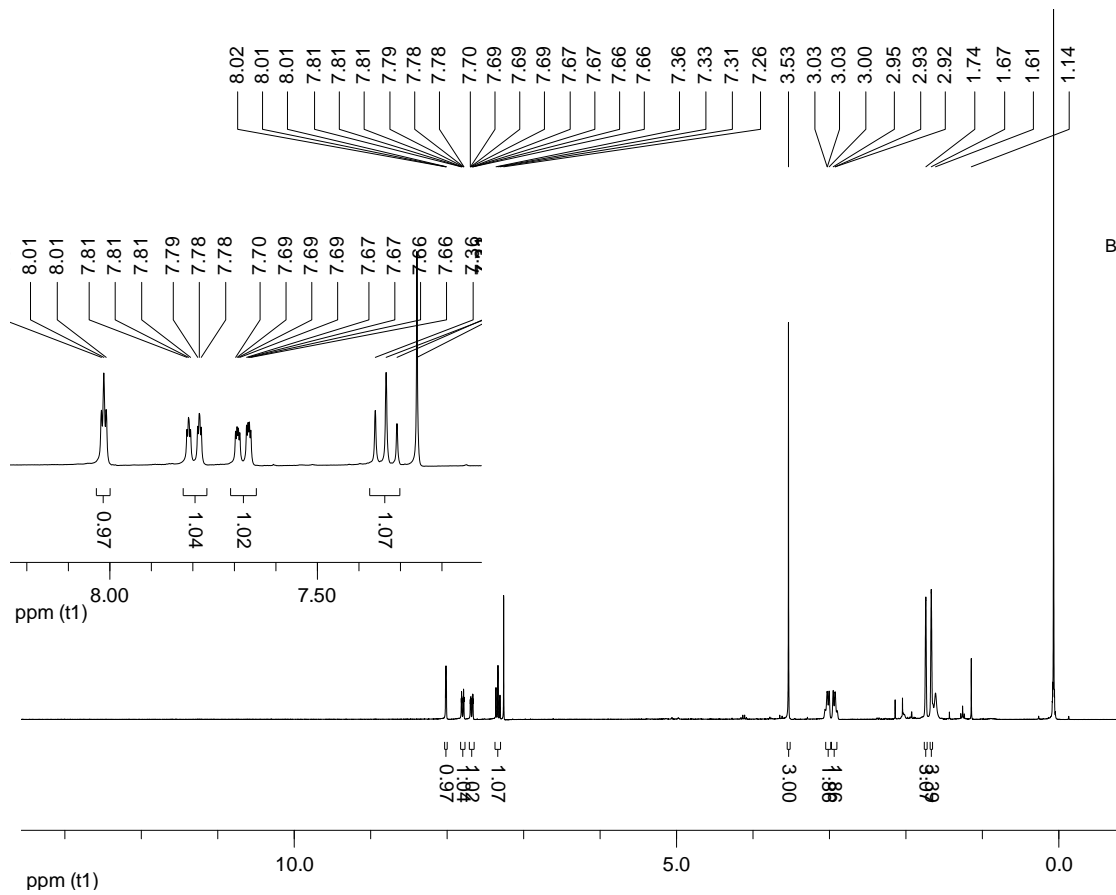


**Additional File 1:** Proton (H), carbon (C) and fluorine (F) NMR spectra for intermediates **4** to **18** and for compounds **A1** to **A5**.

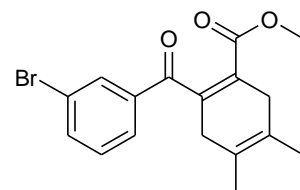
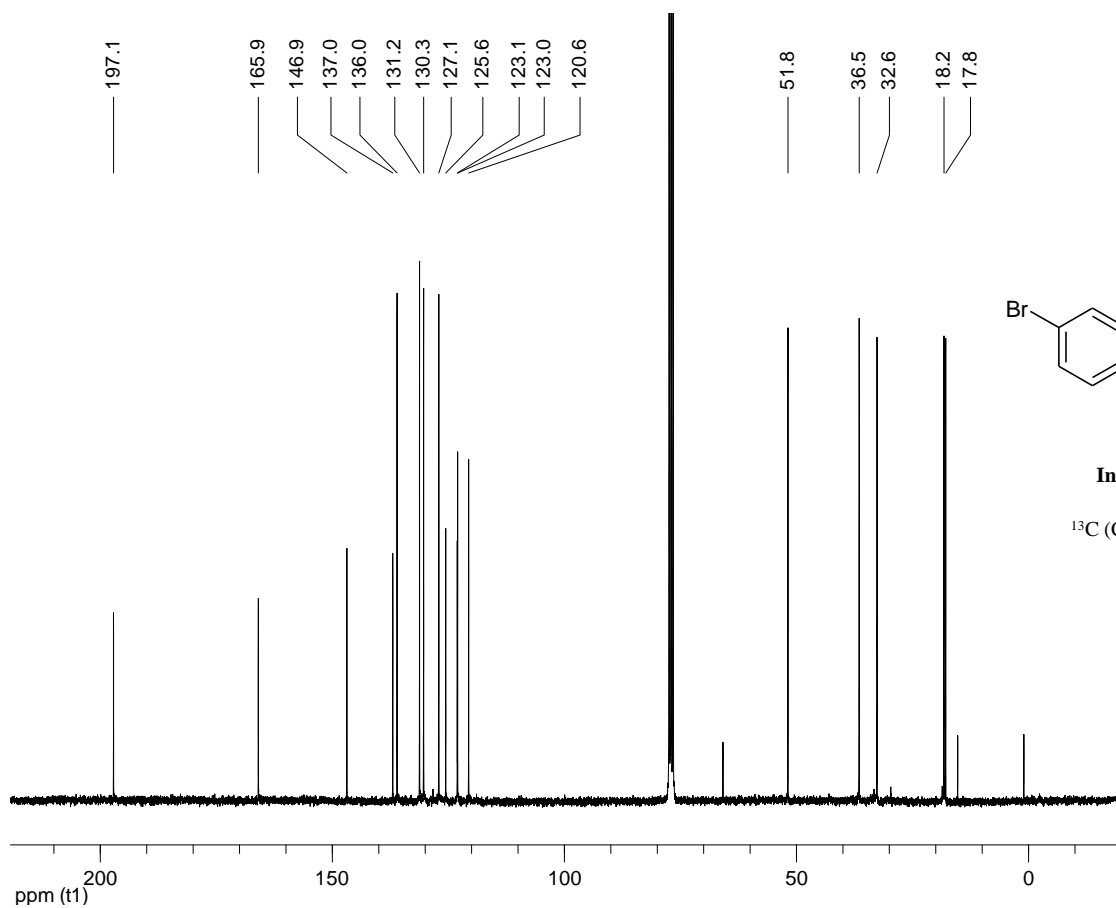






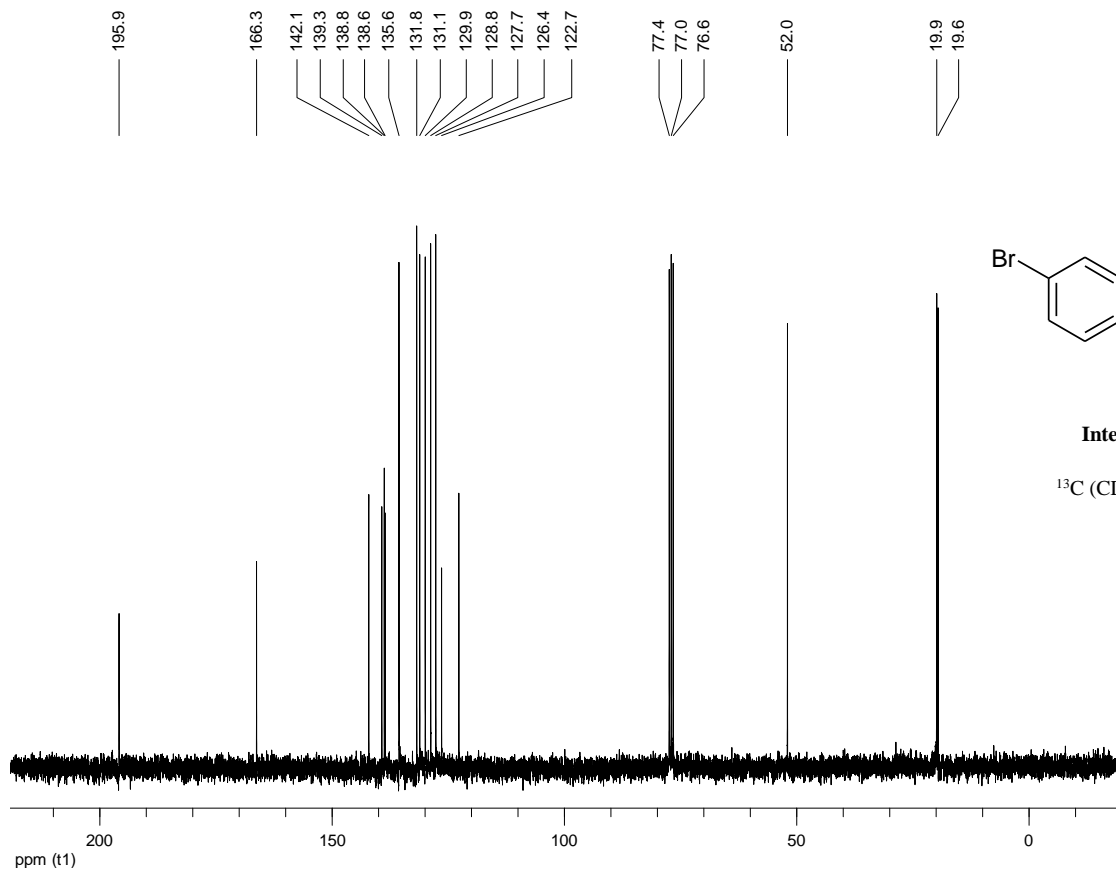
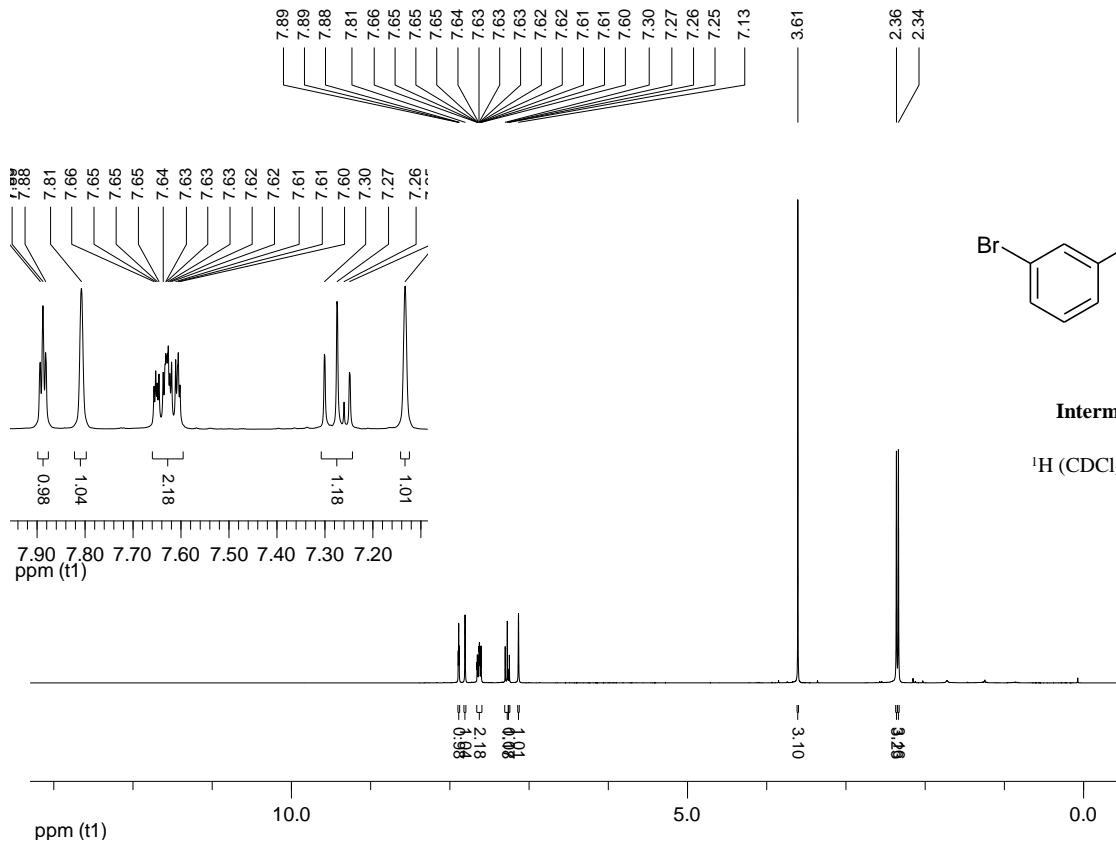
**Intermediate 6**

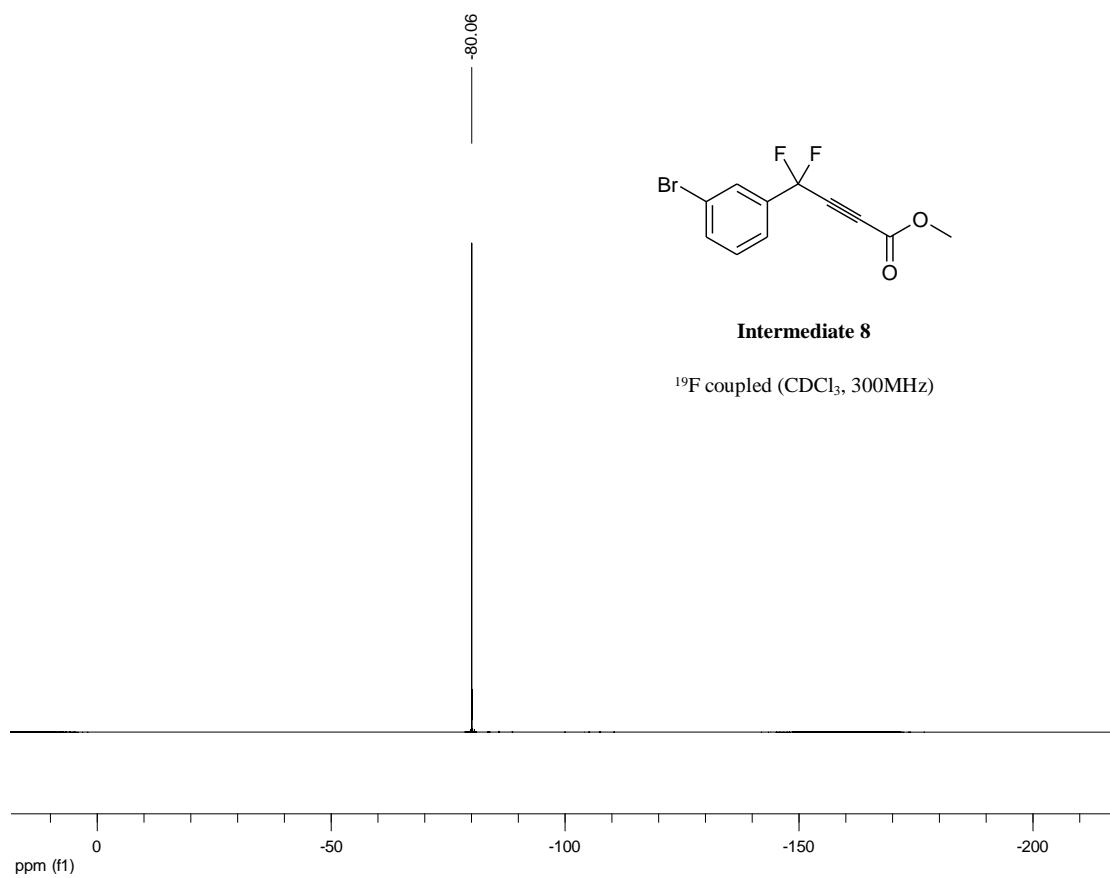
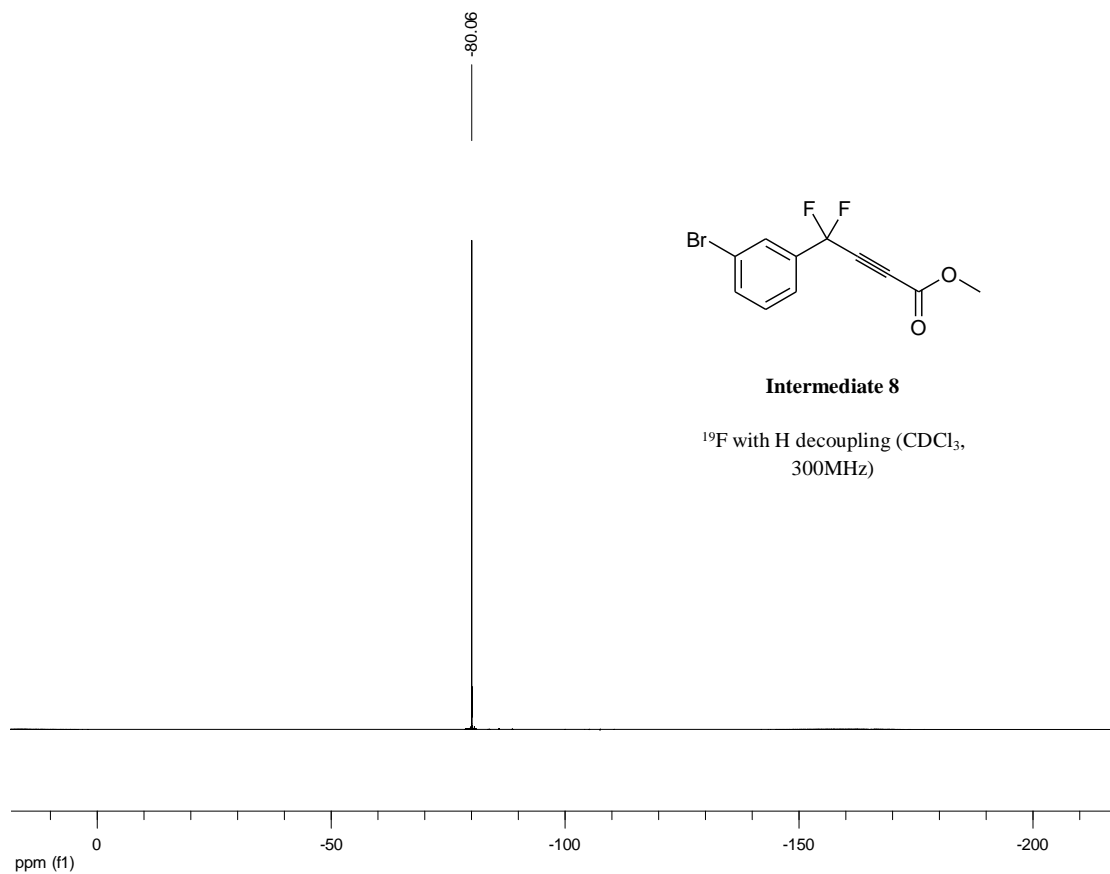
<sup>1</sup>H (CDCl<sub>3</sub>, 300MHz)

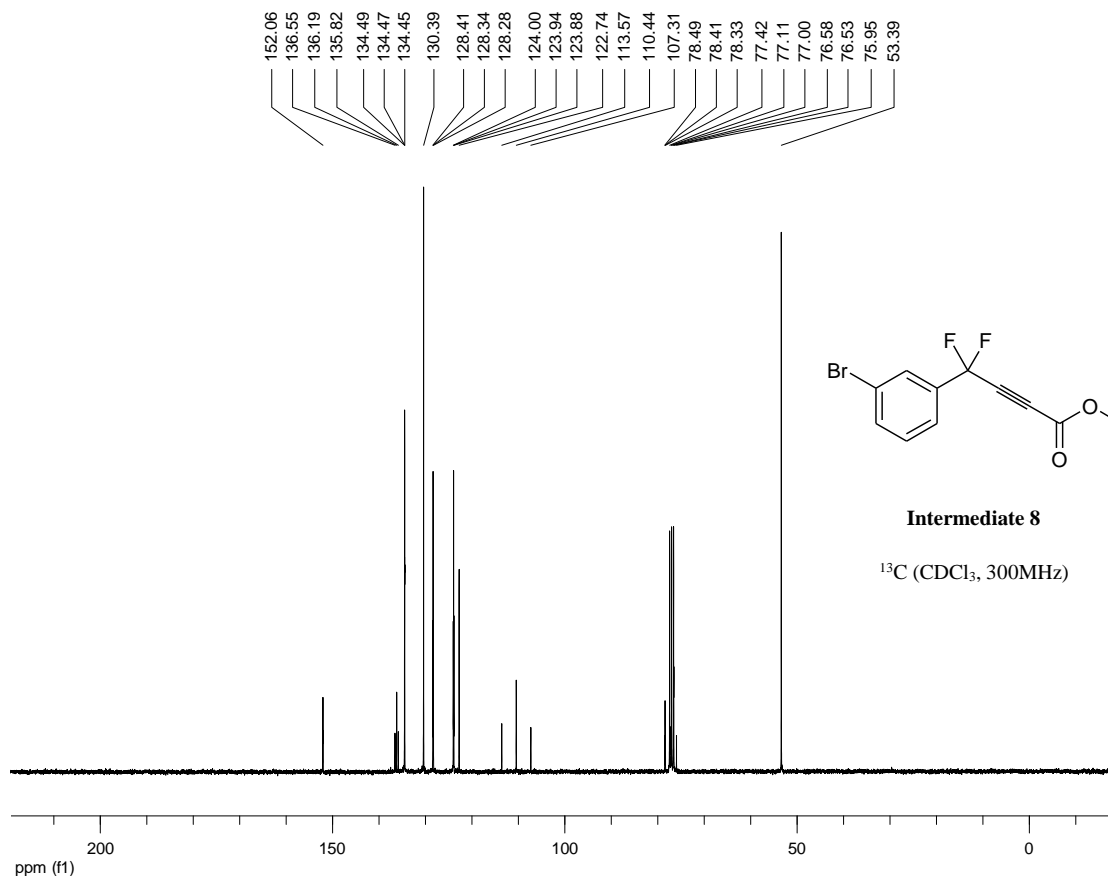
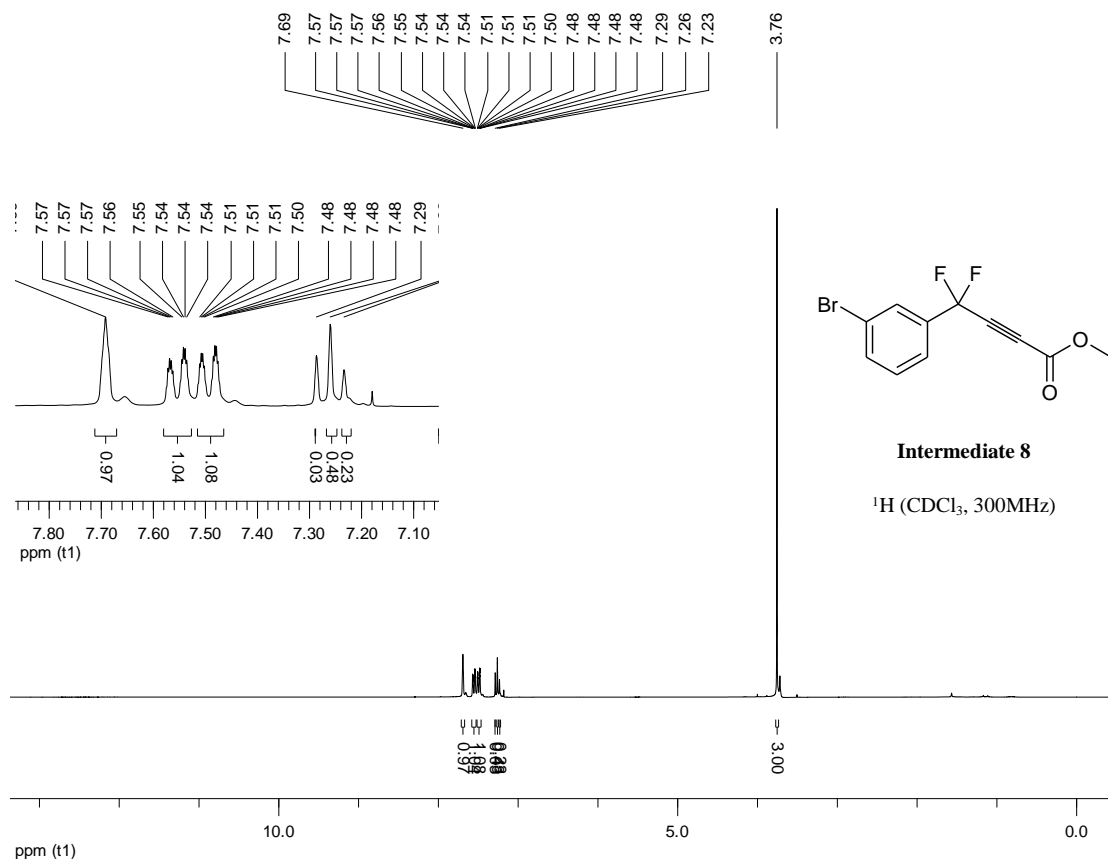


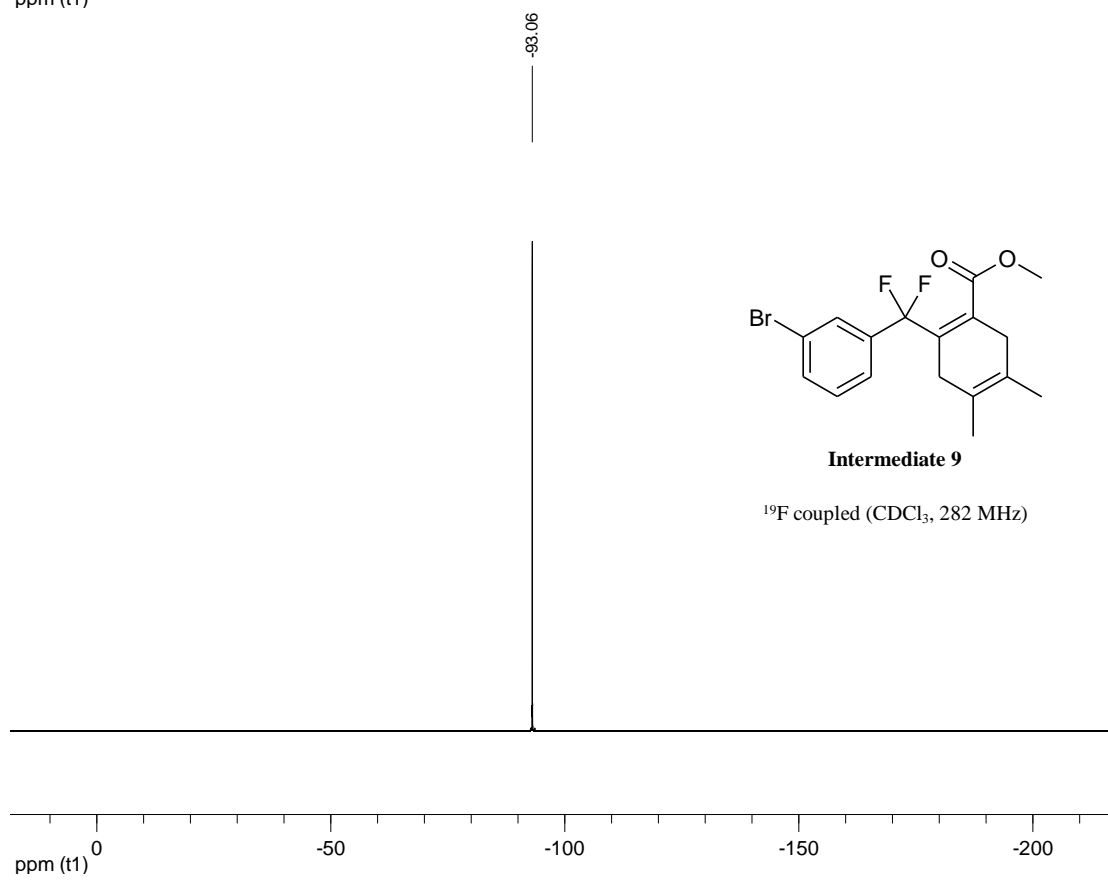
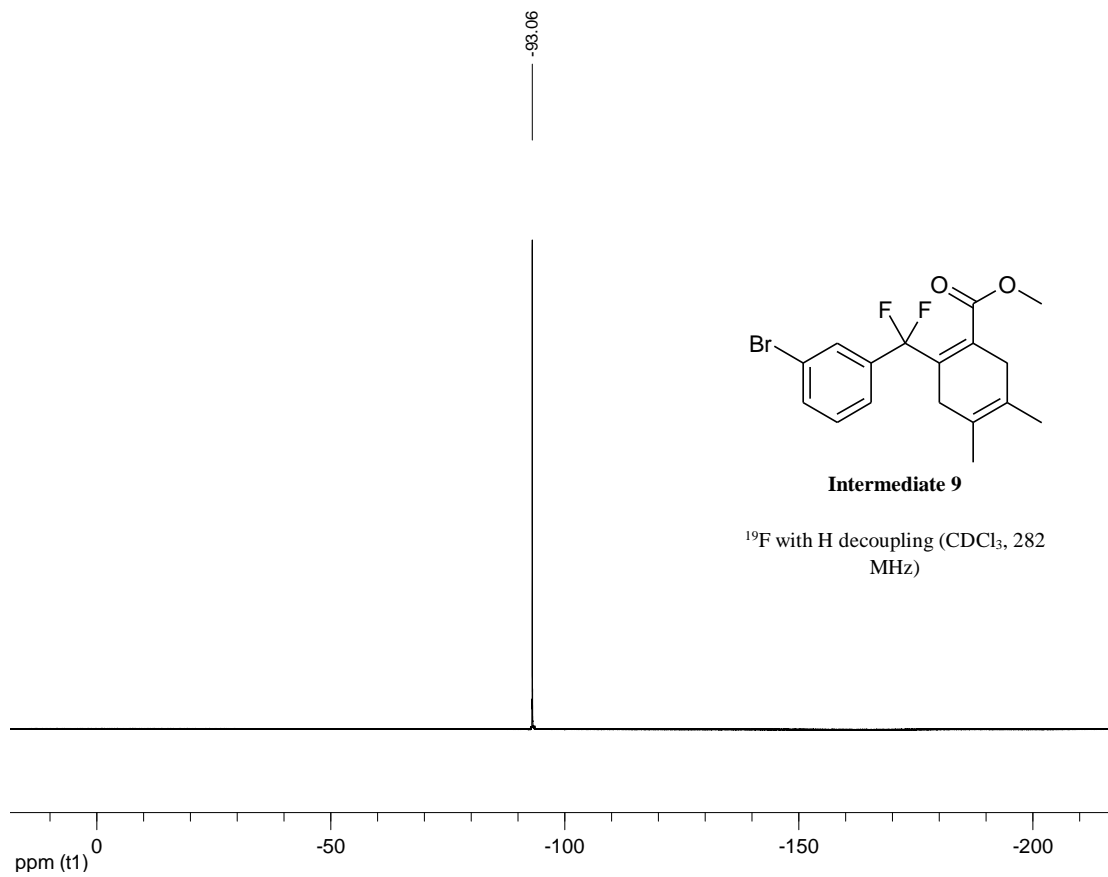
**Intermediate 6**

<sup>13</sup>C (CDCl<sub>3</sub>, 75 MHz)

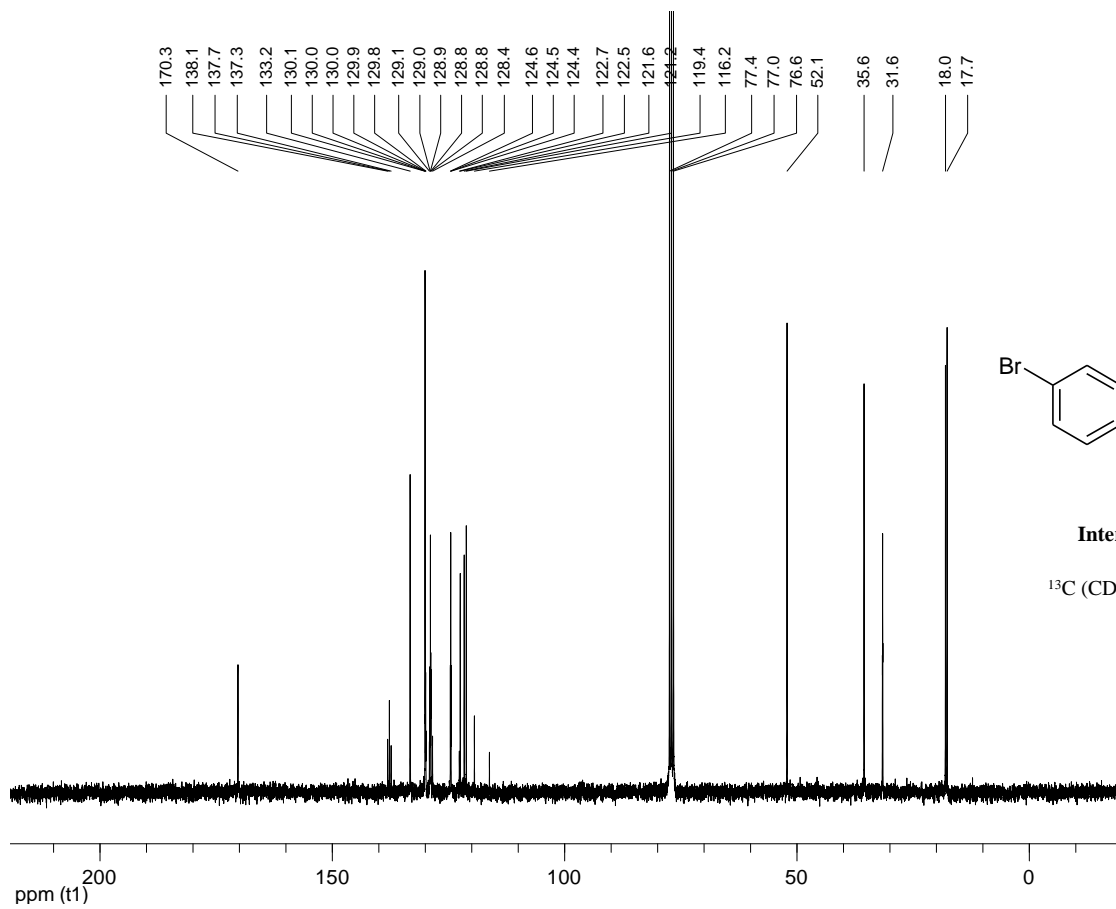
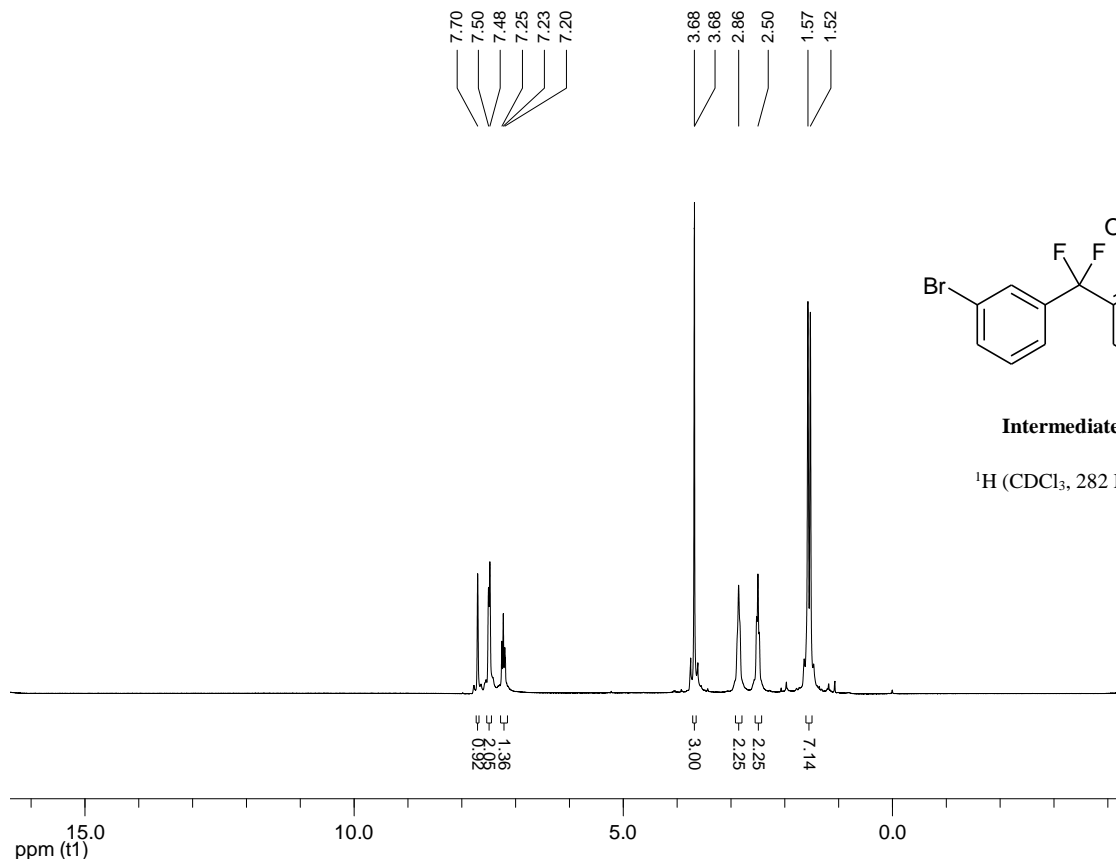


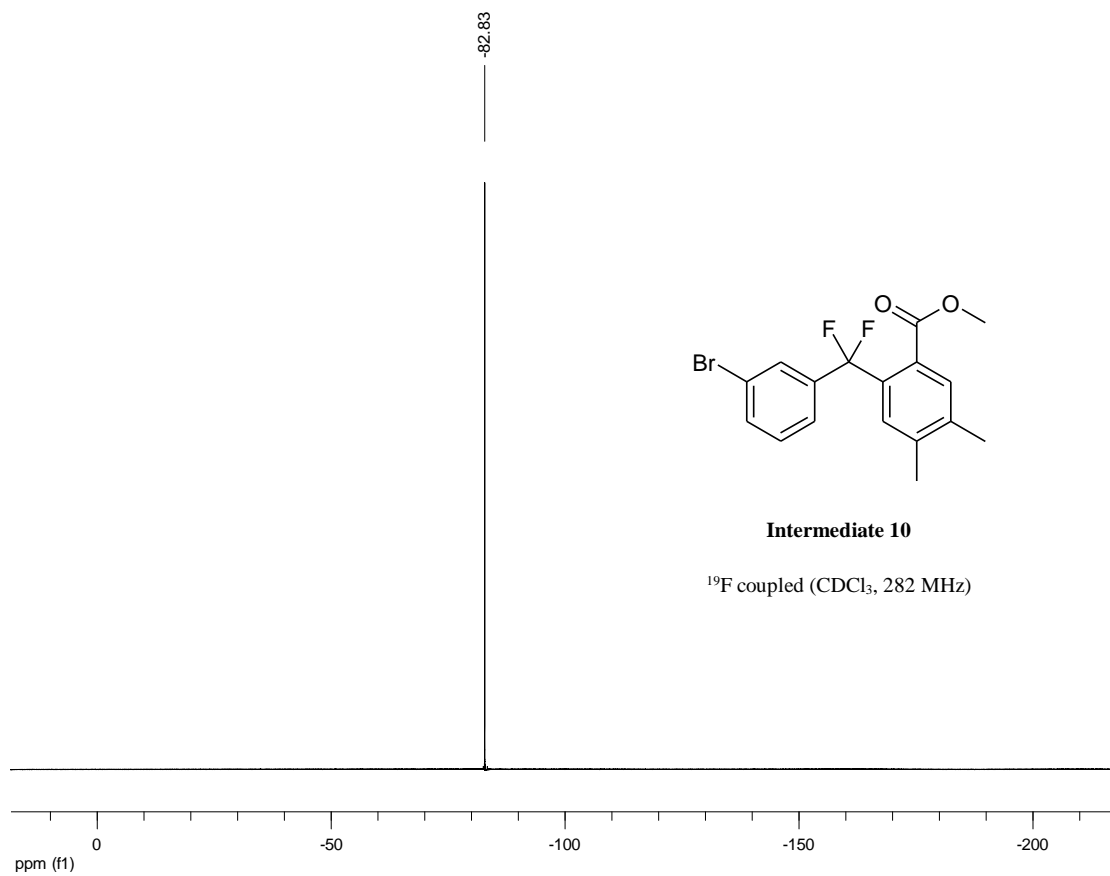
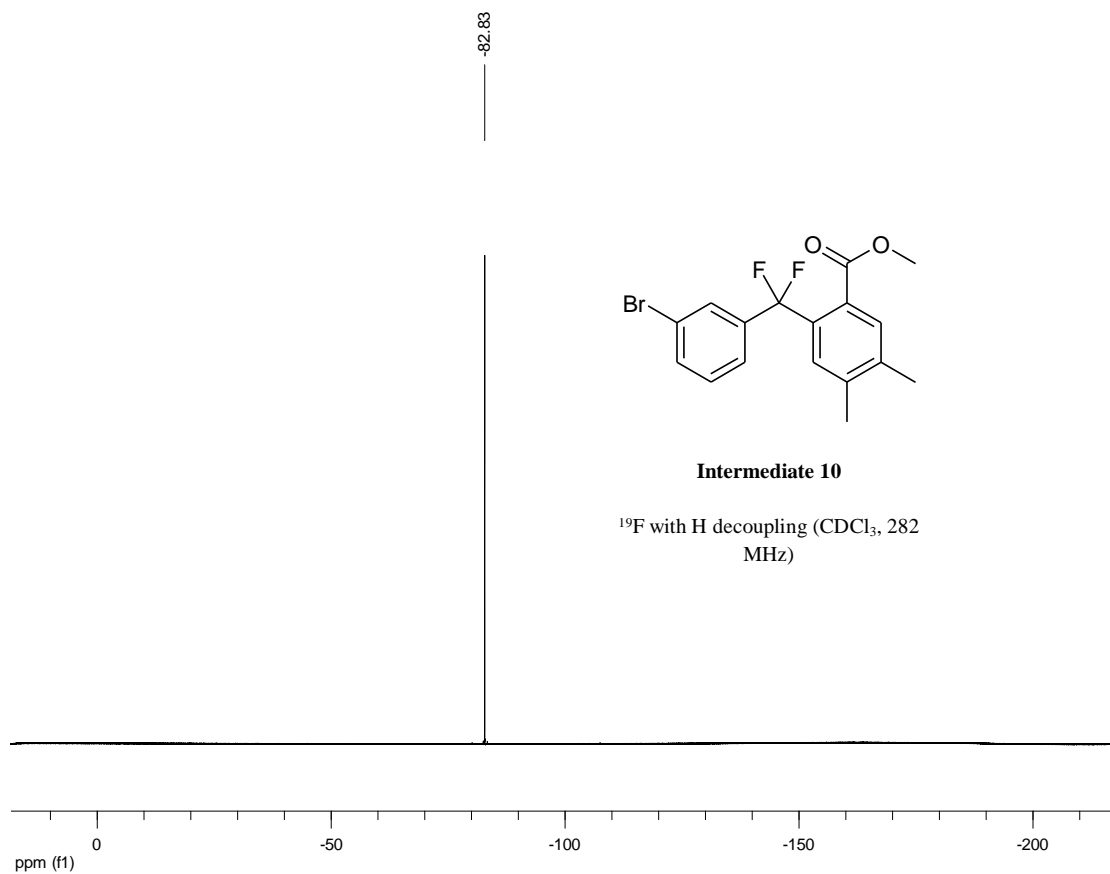


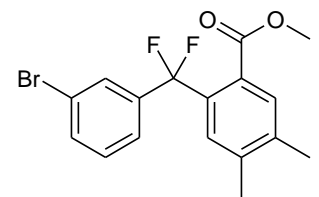
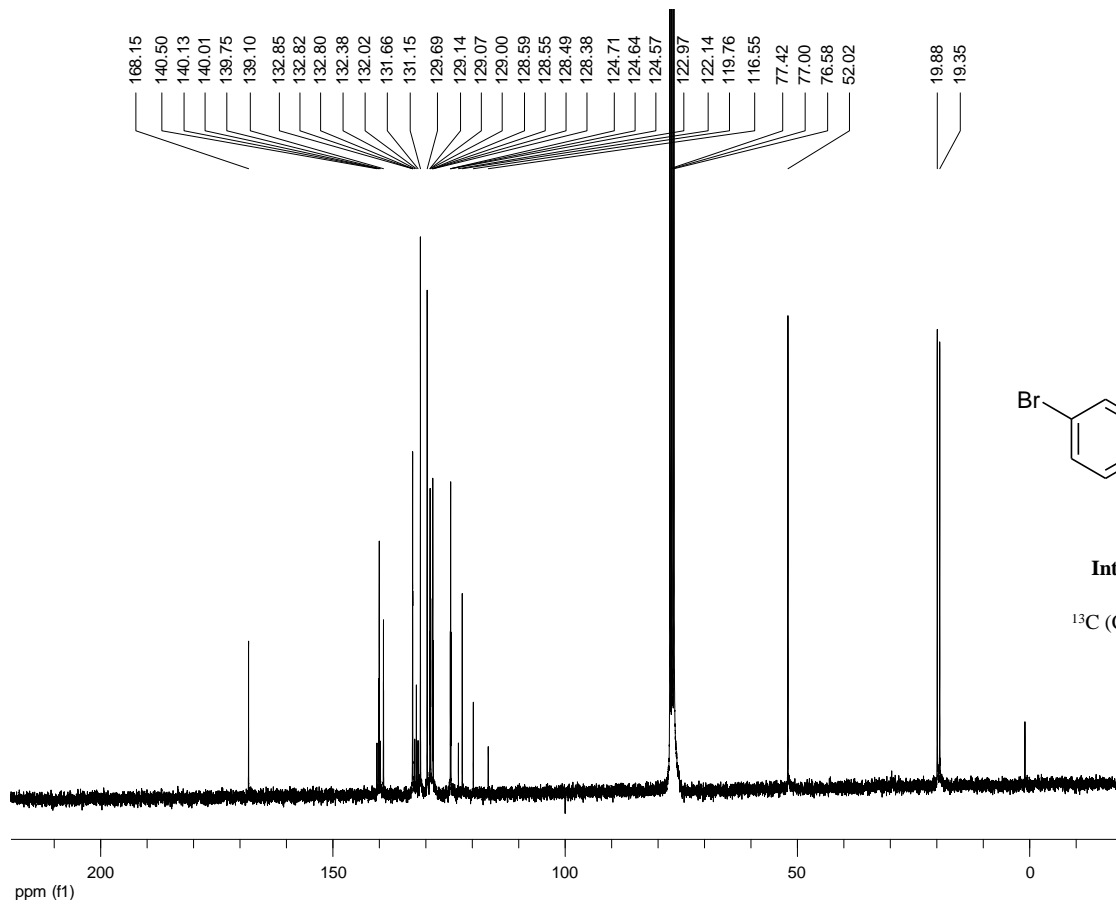
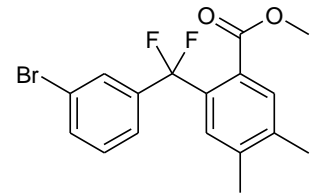
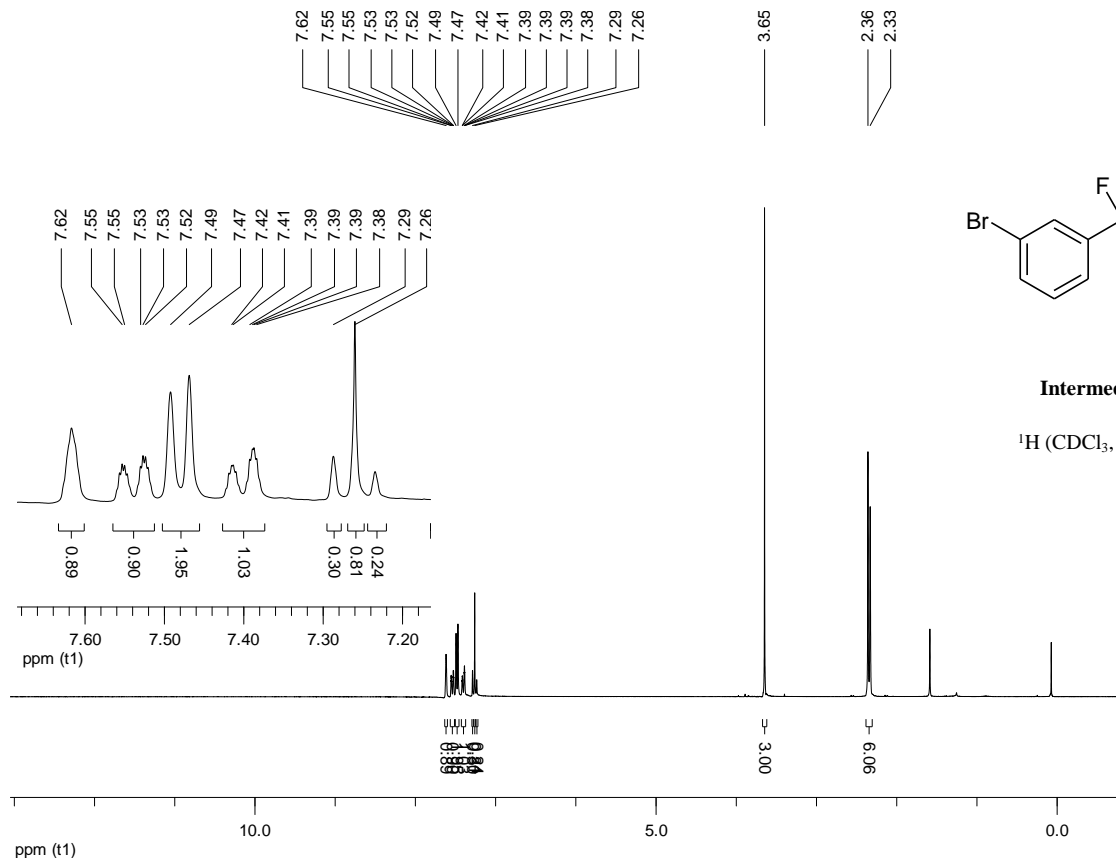


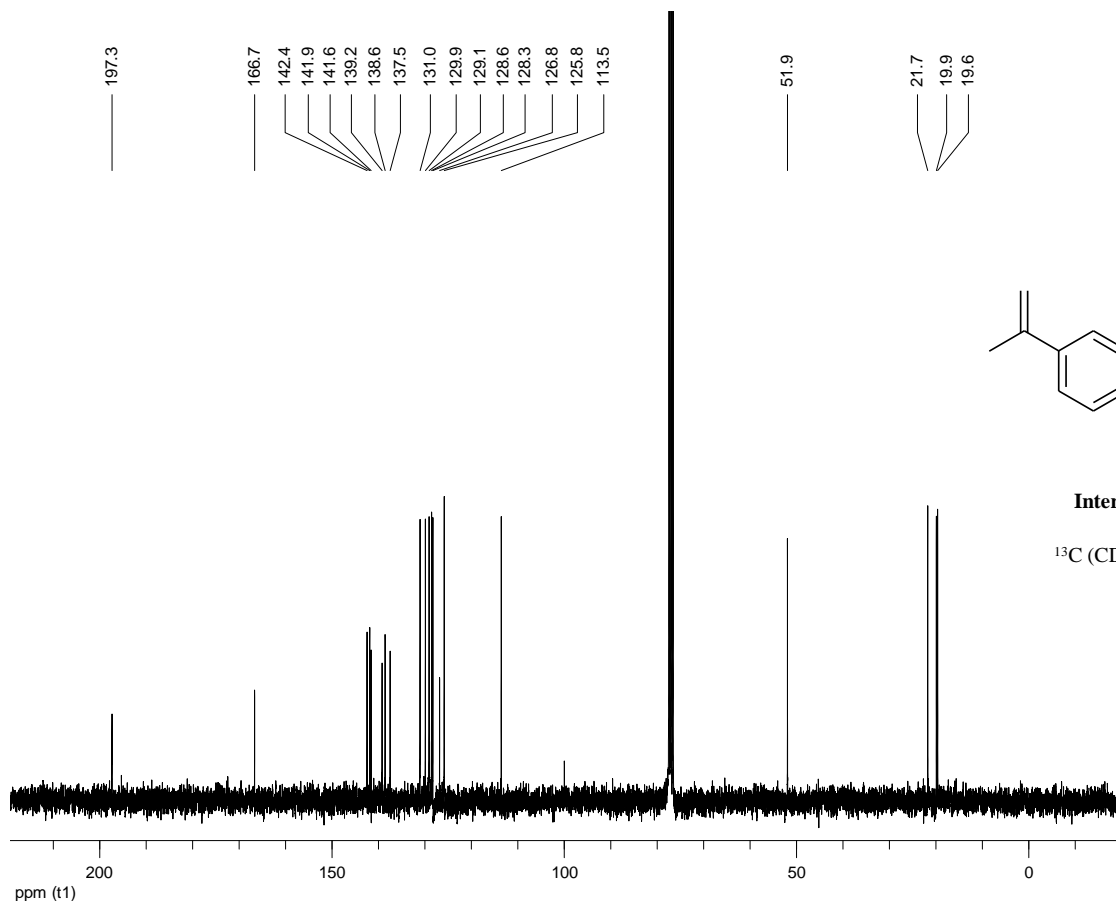
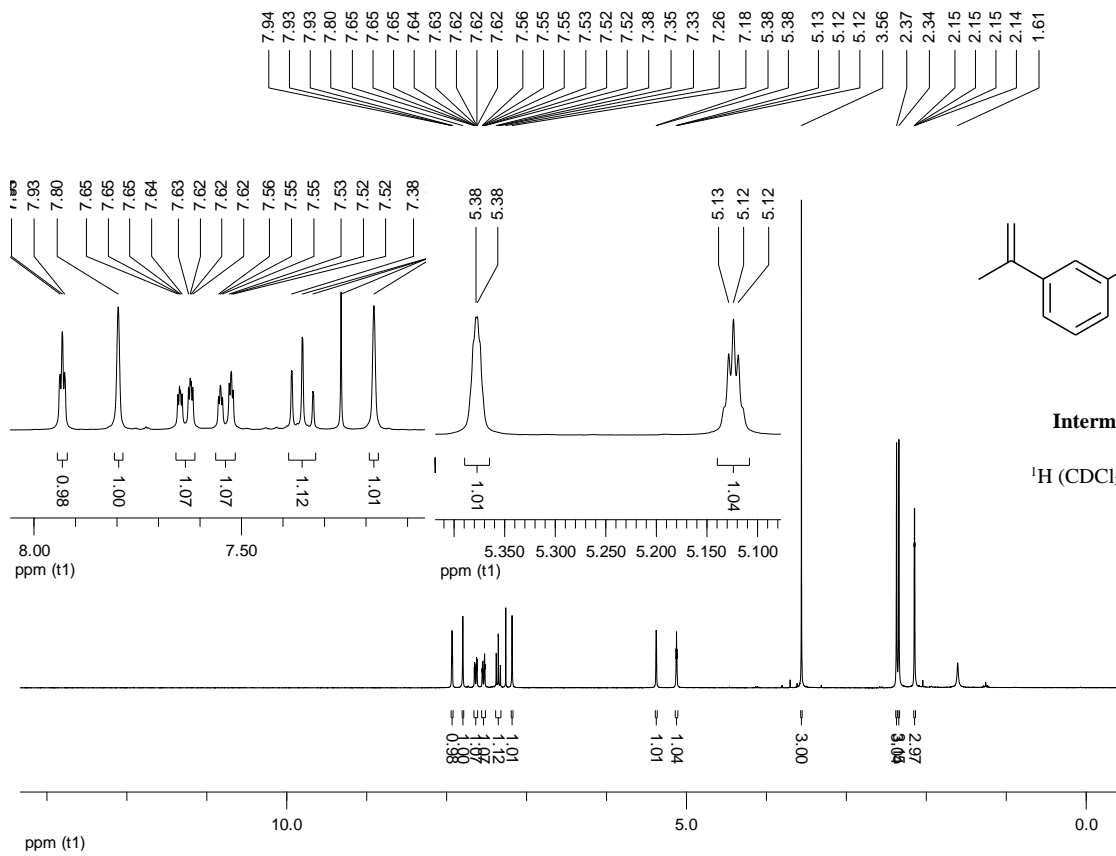


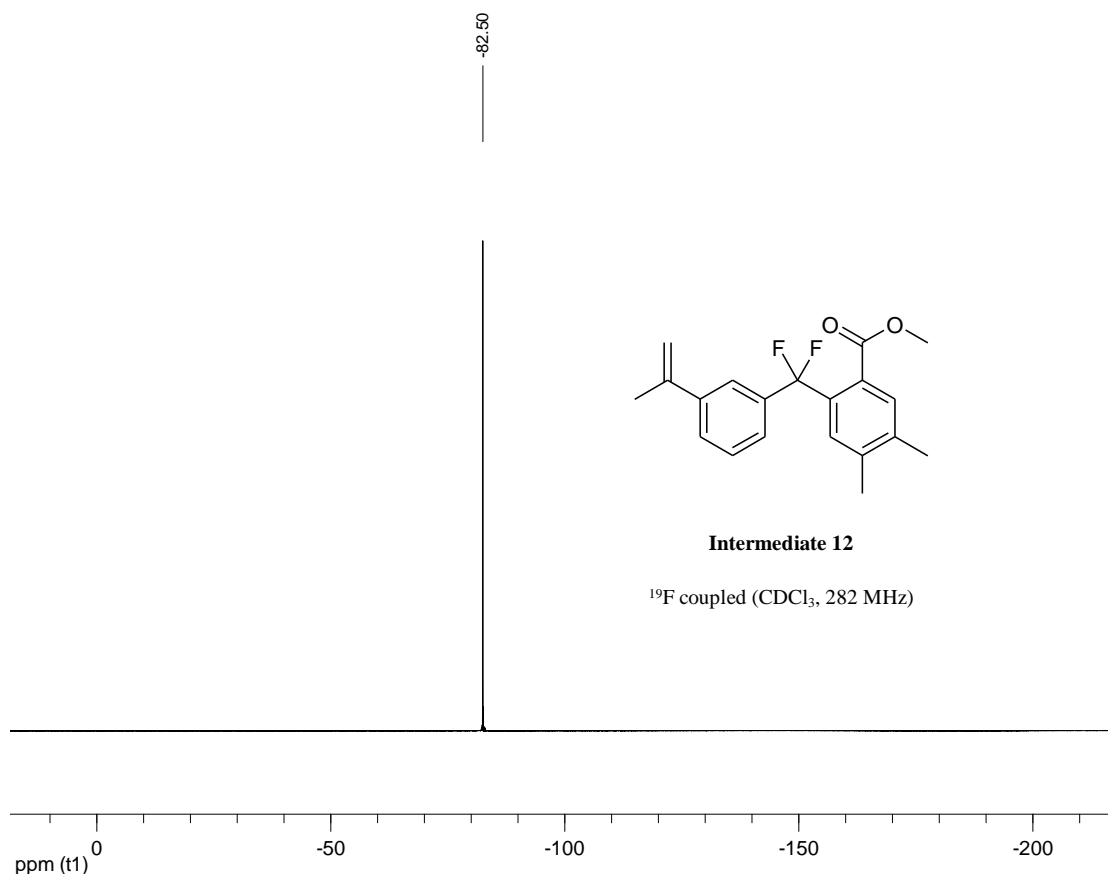
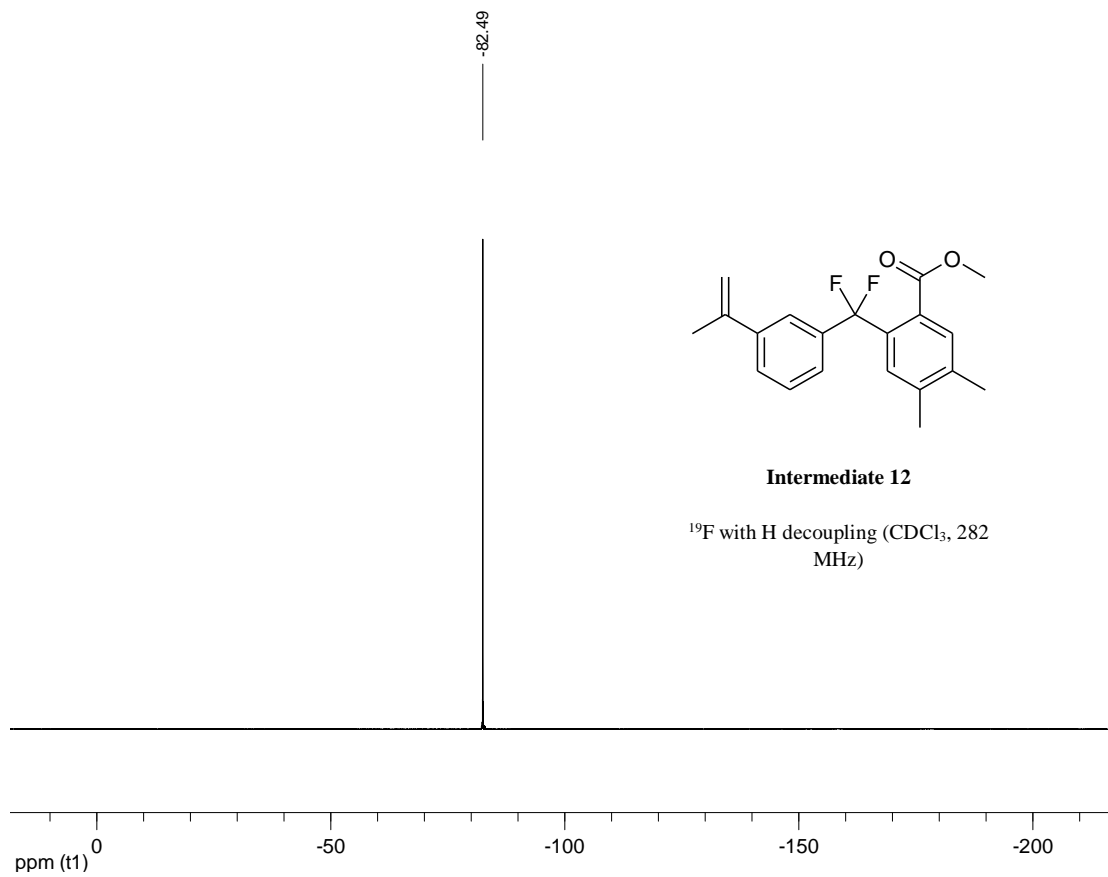


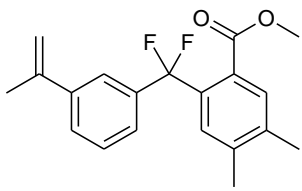
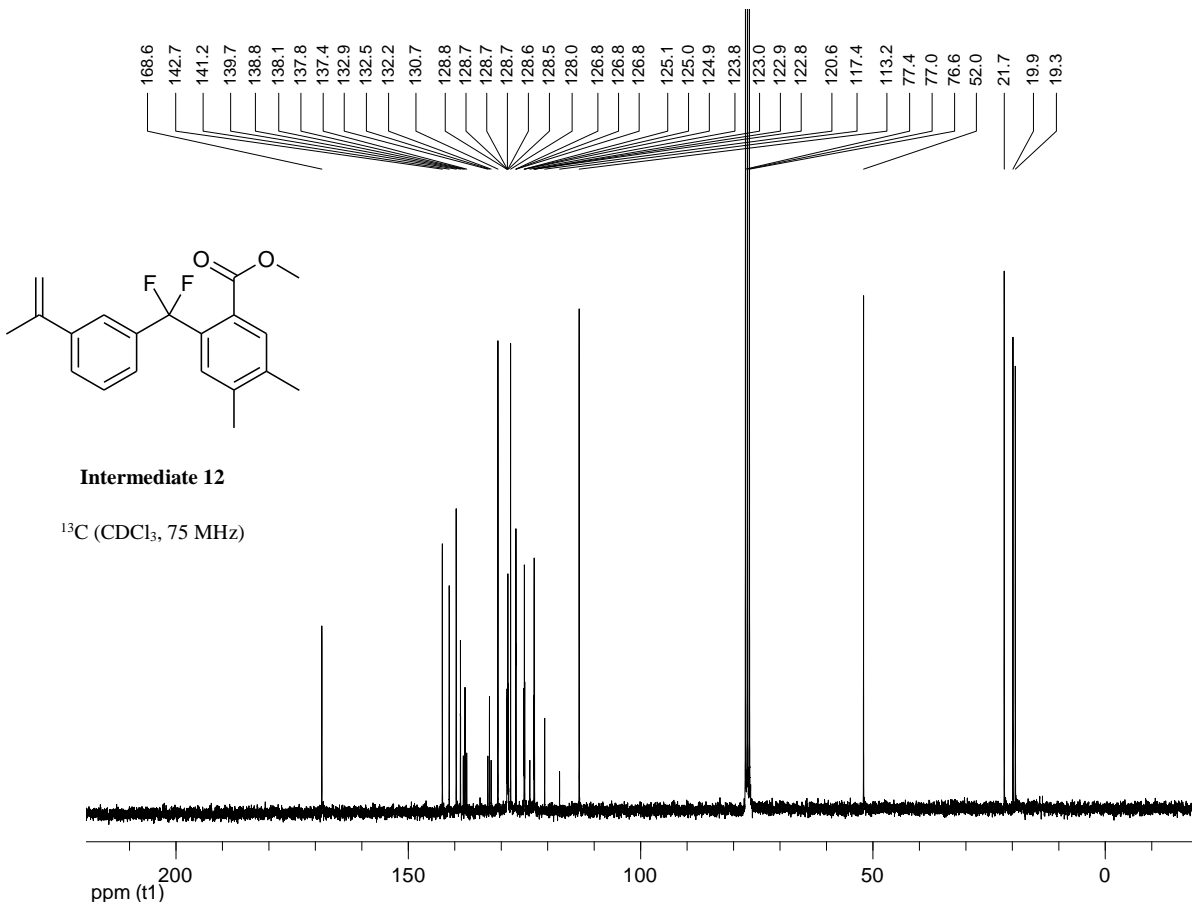
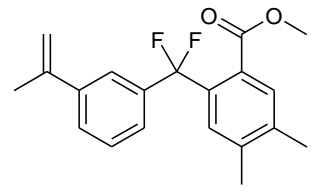
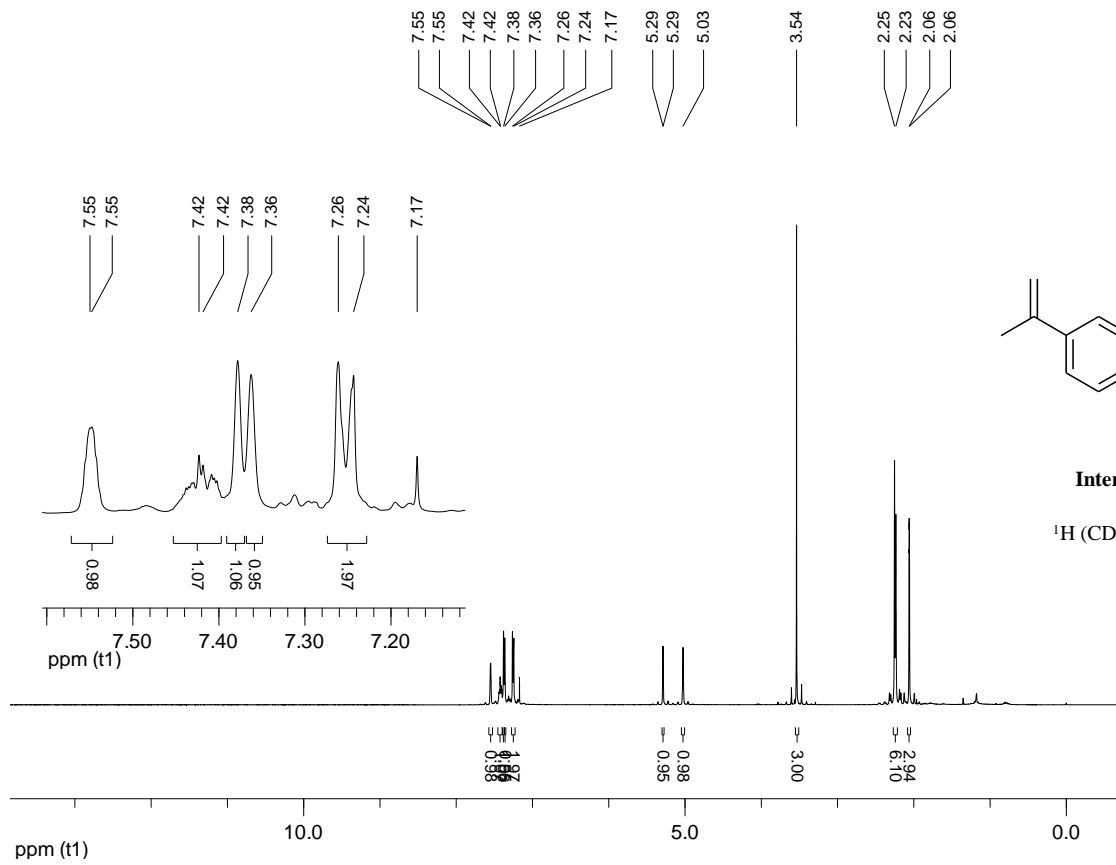


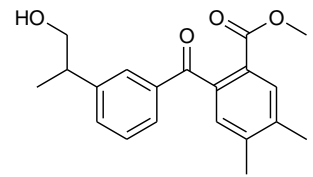
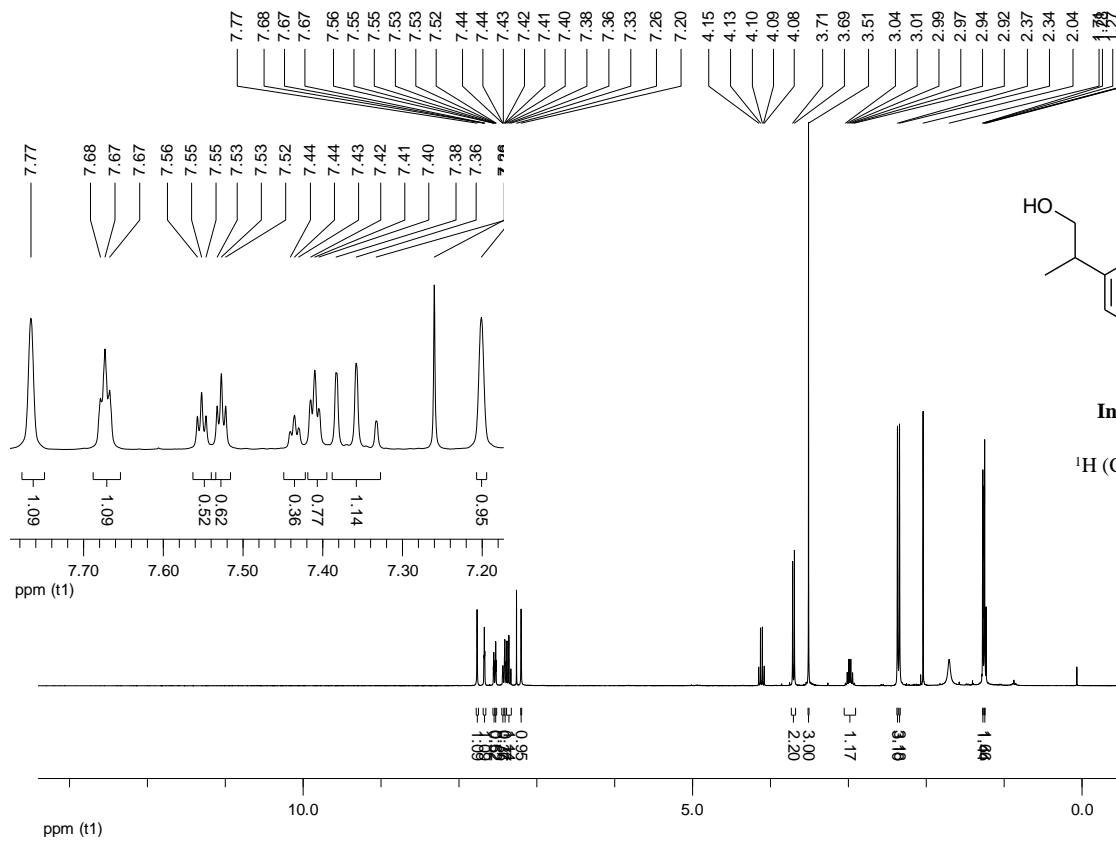






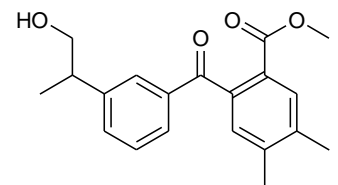
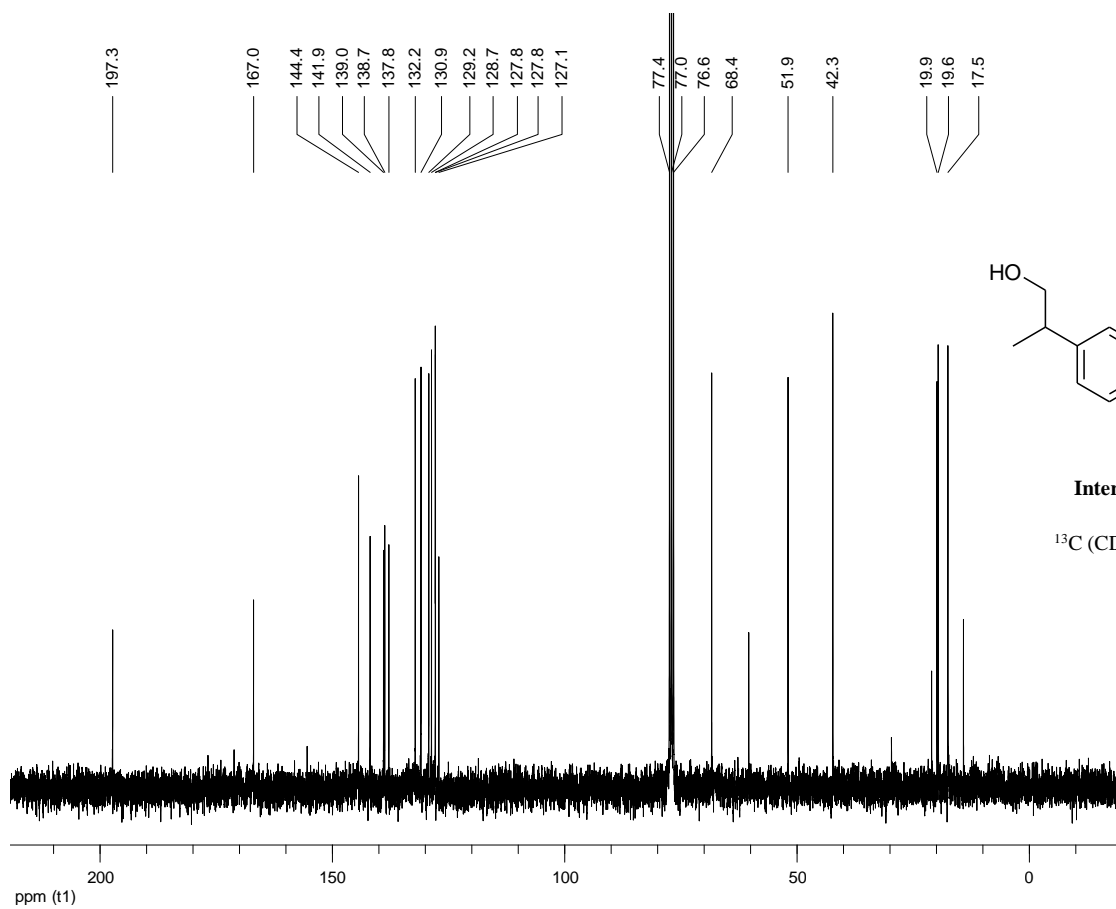






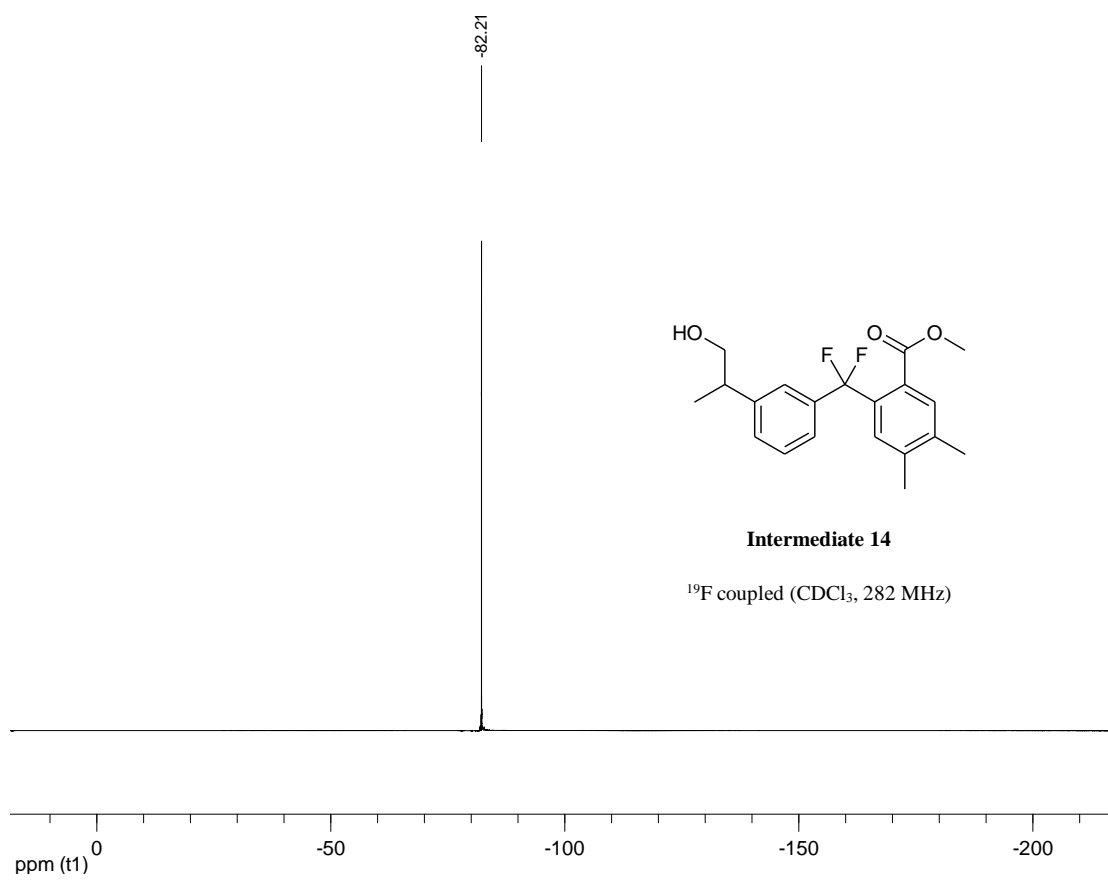
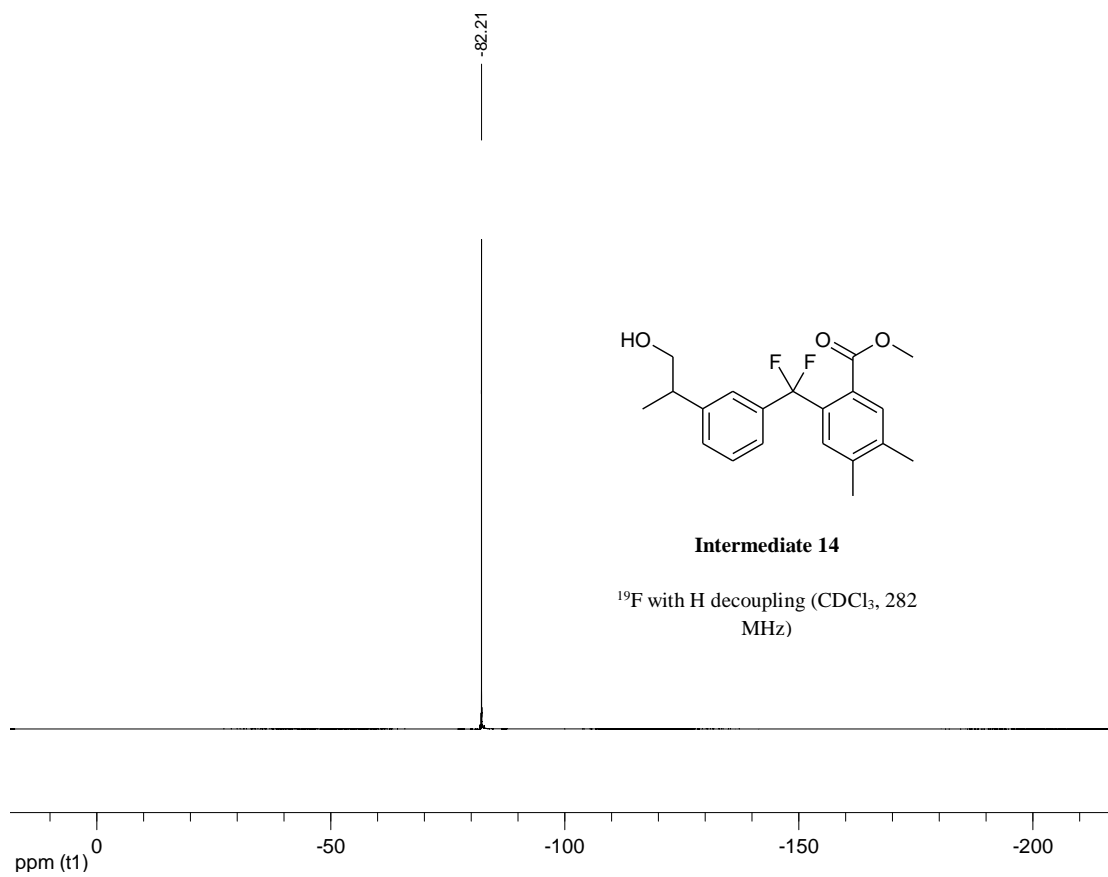
**Intermediate 13**

<sup>1</sup>H (CDCl<sub>3</sub>, 300 MHz)

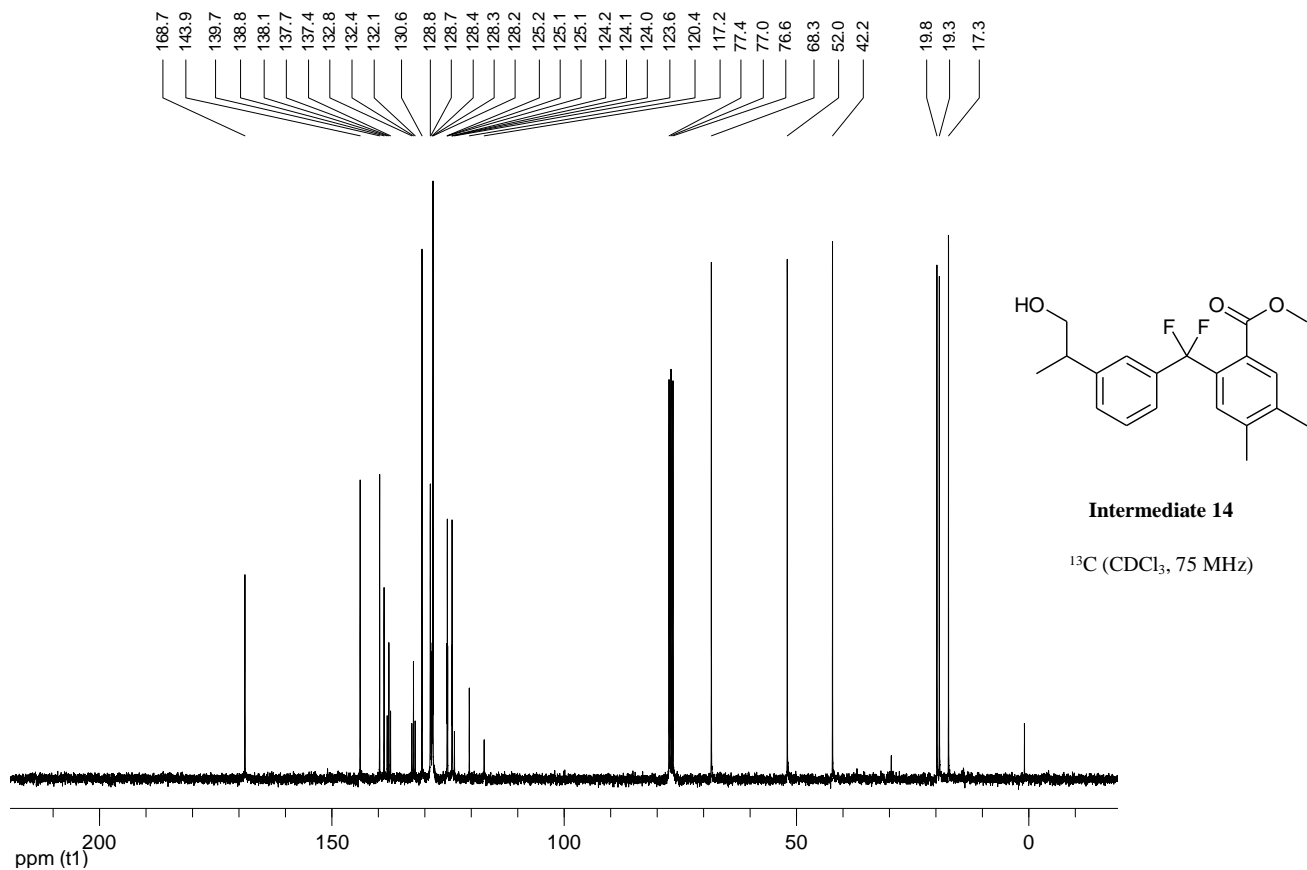
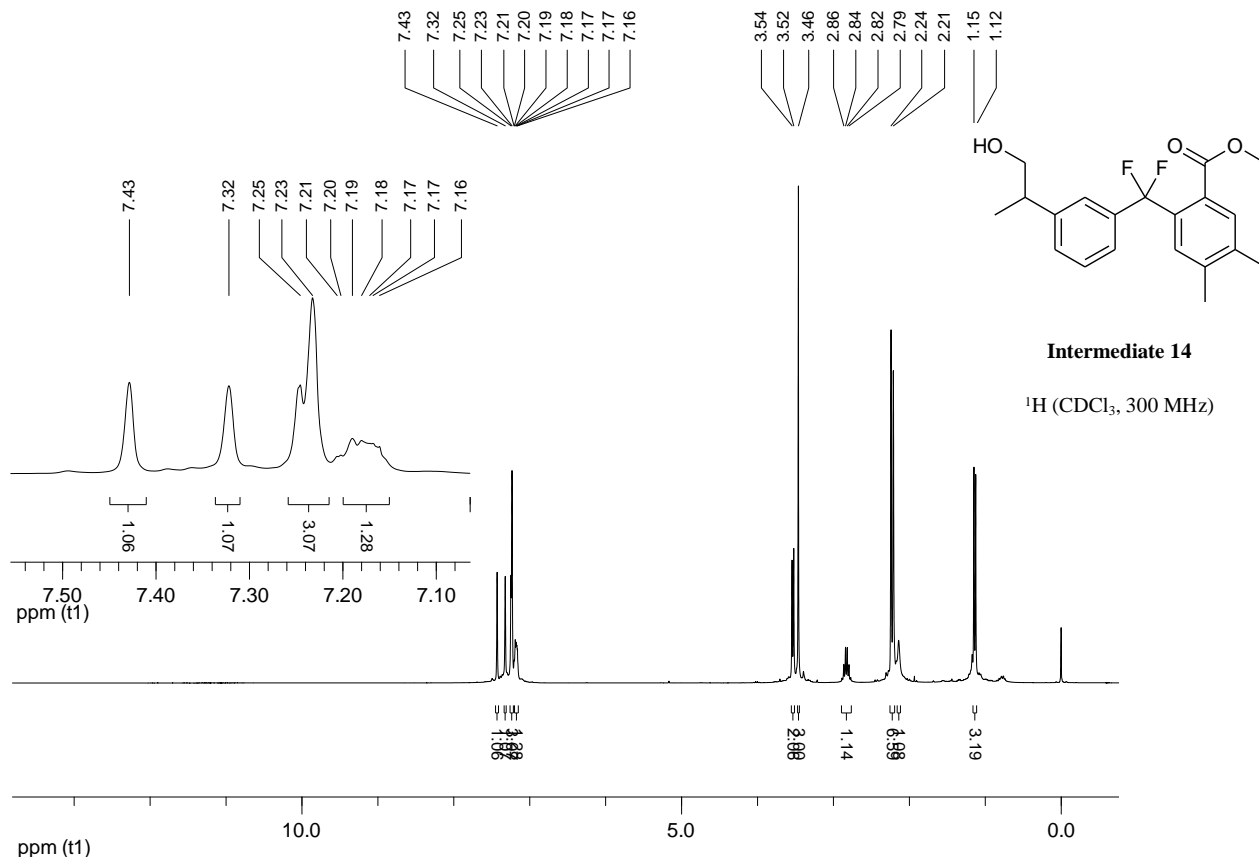


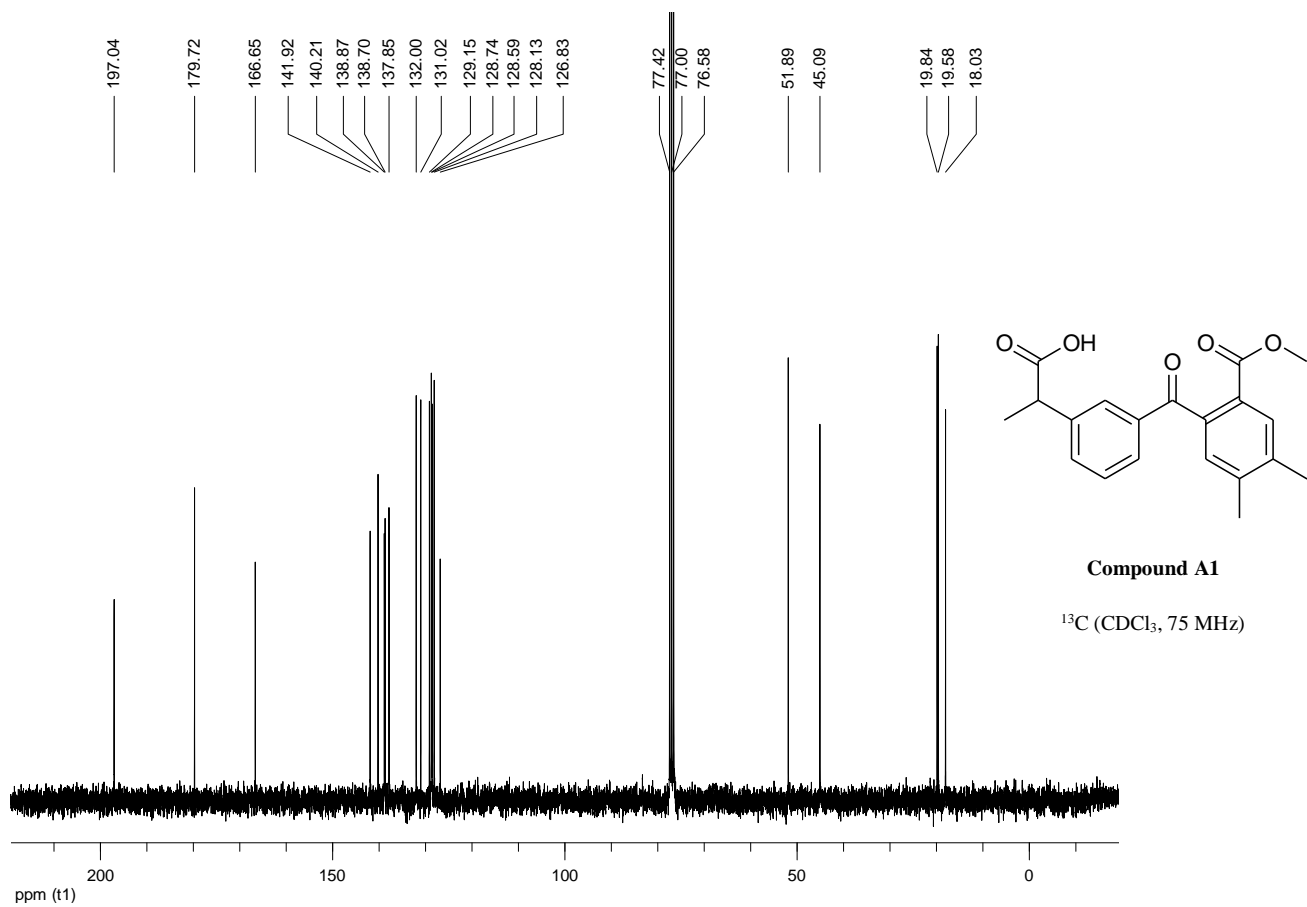
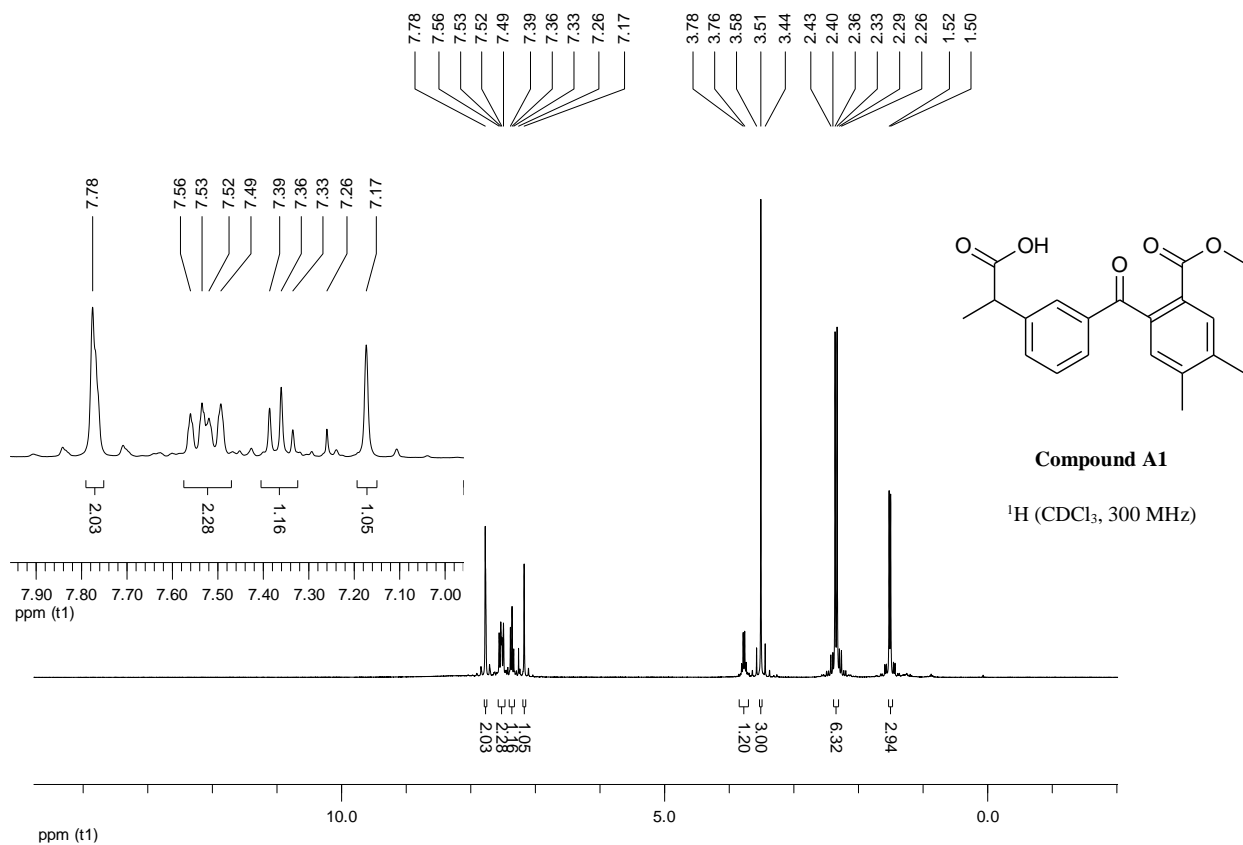
**Intermediate 13**

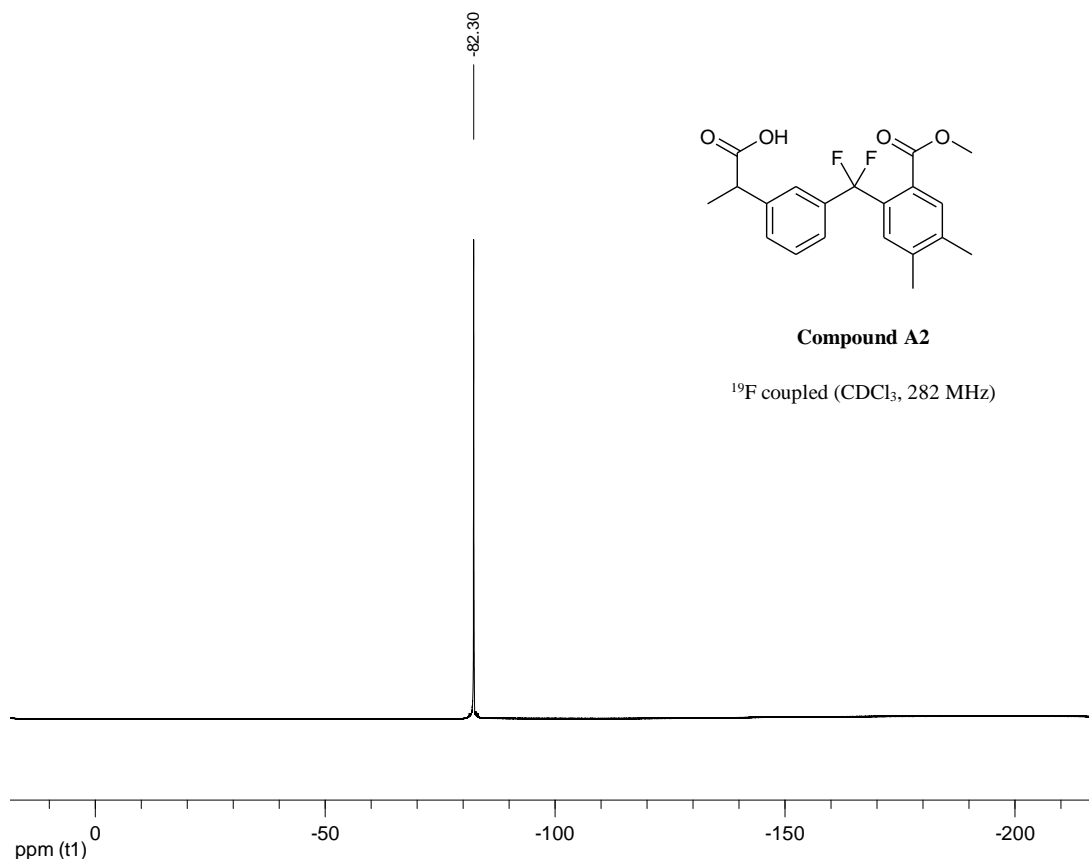
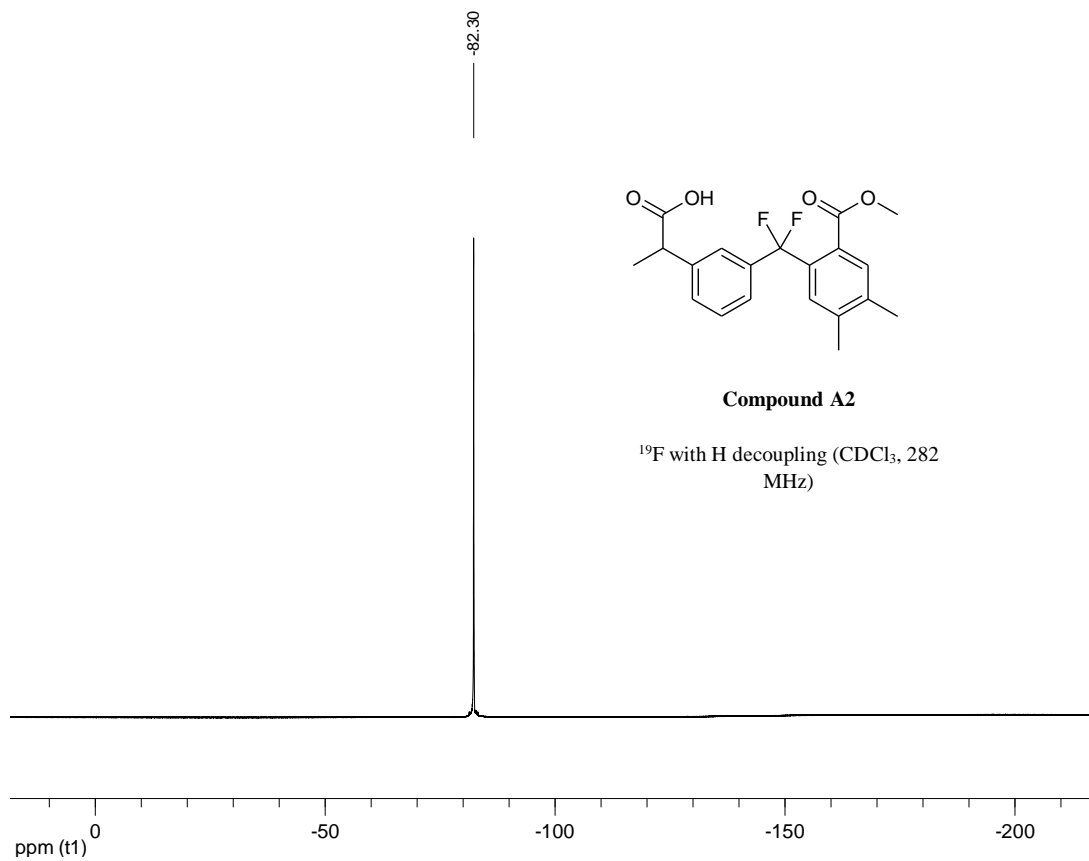
<sup>13</sup>C (CDCl<sub>3</sub>, 75 MHz)

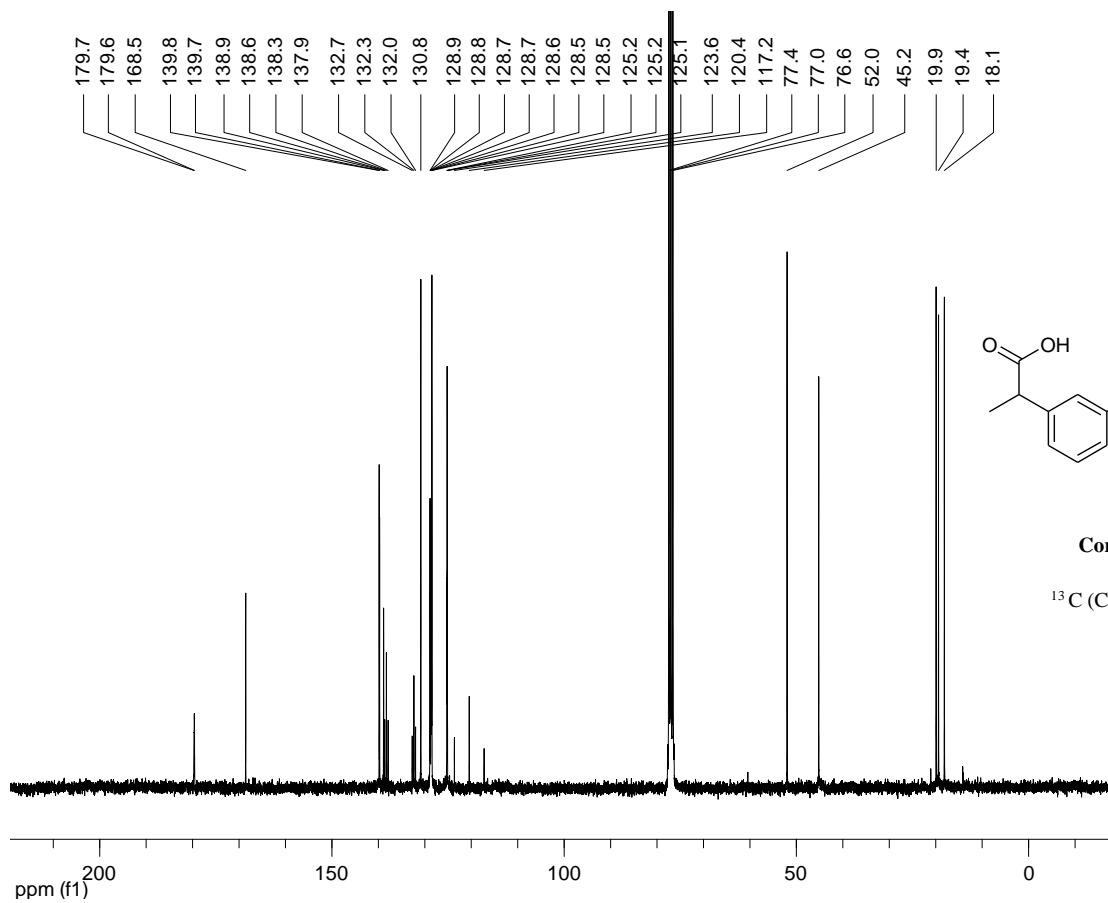
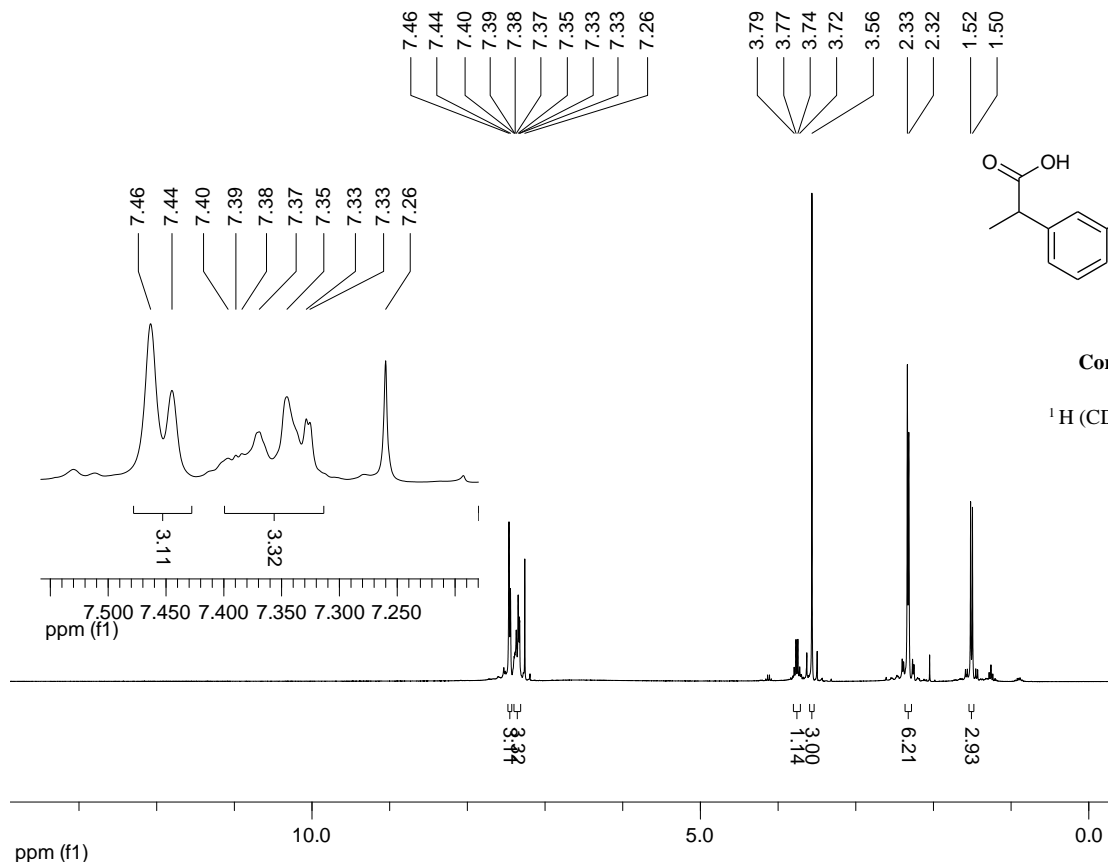


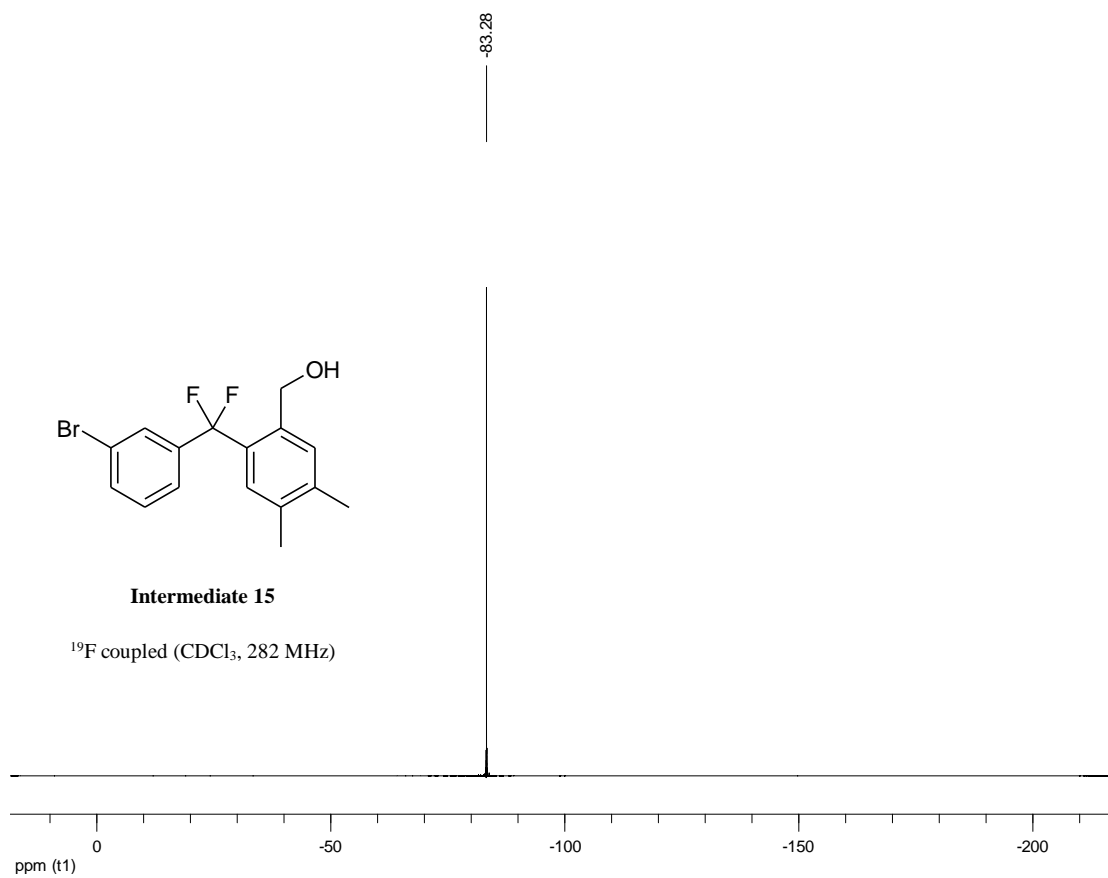
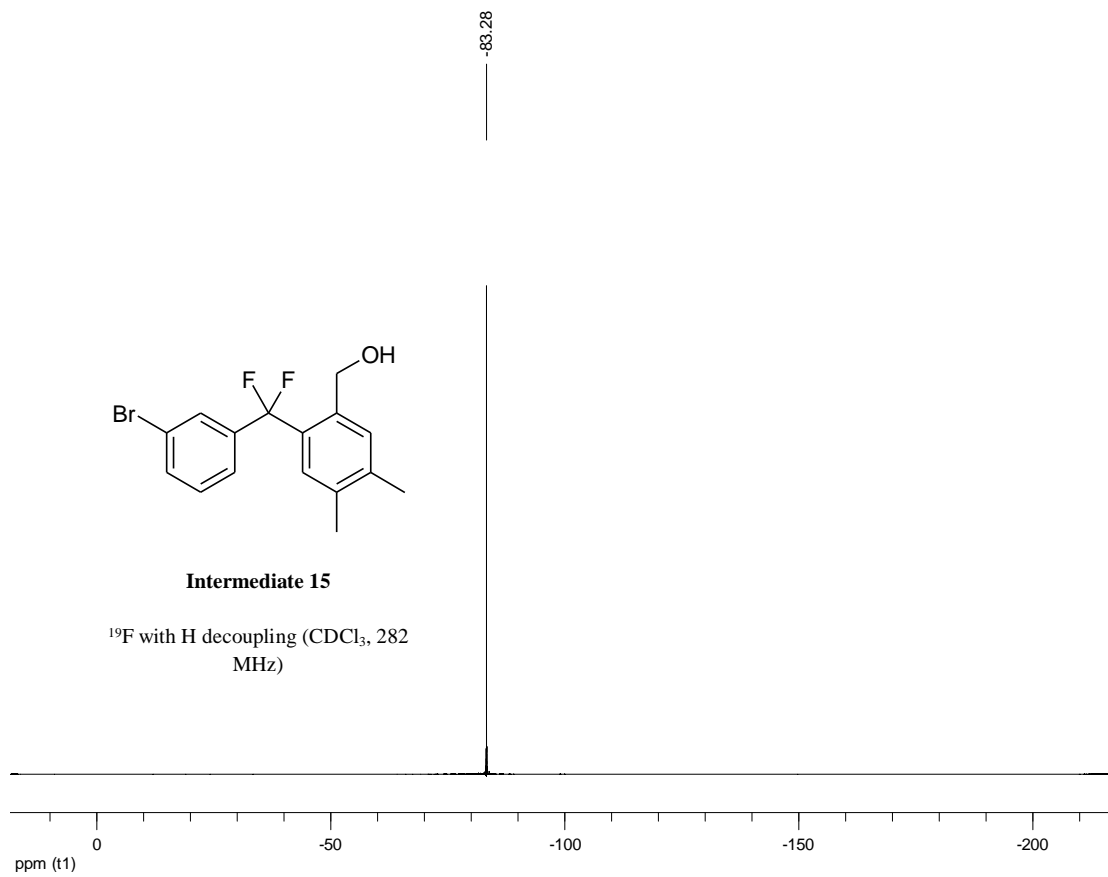


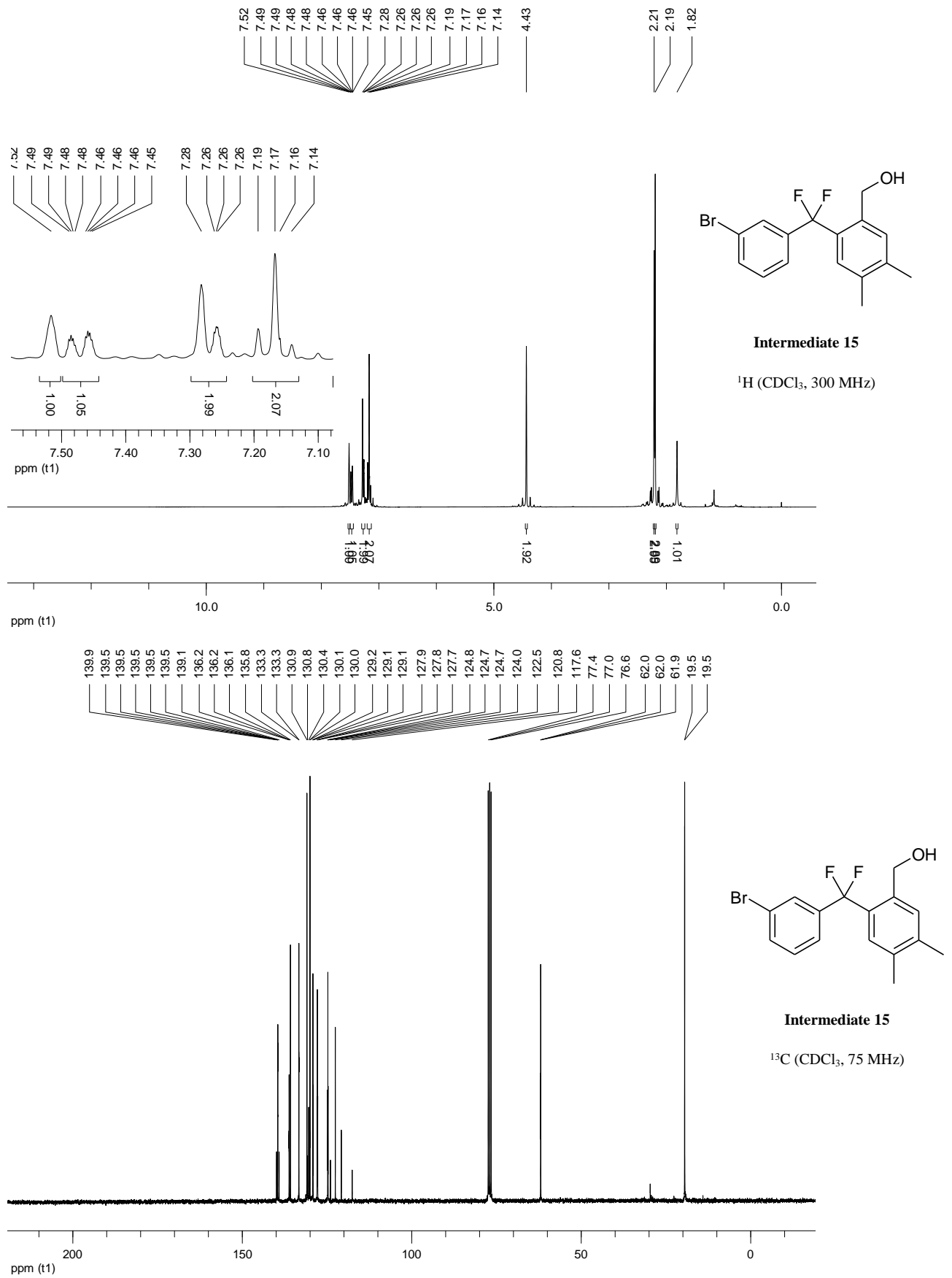


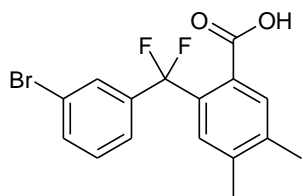






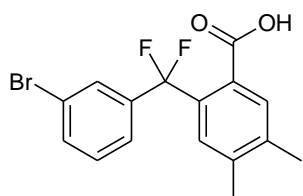
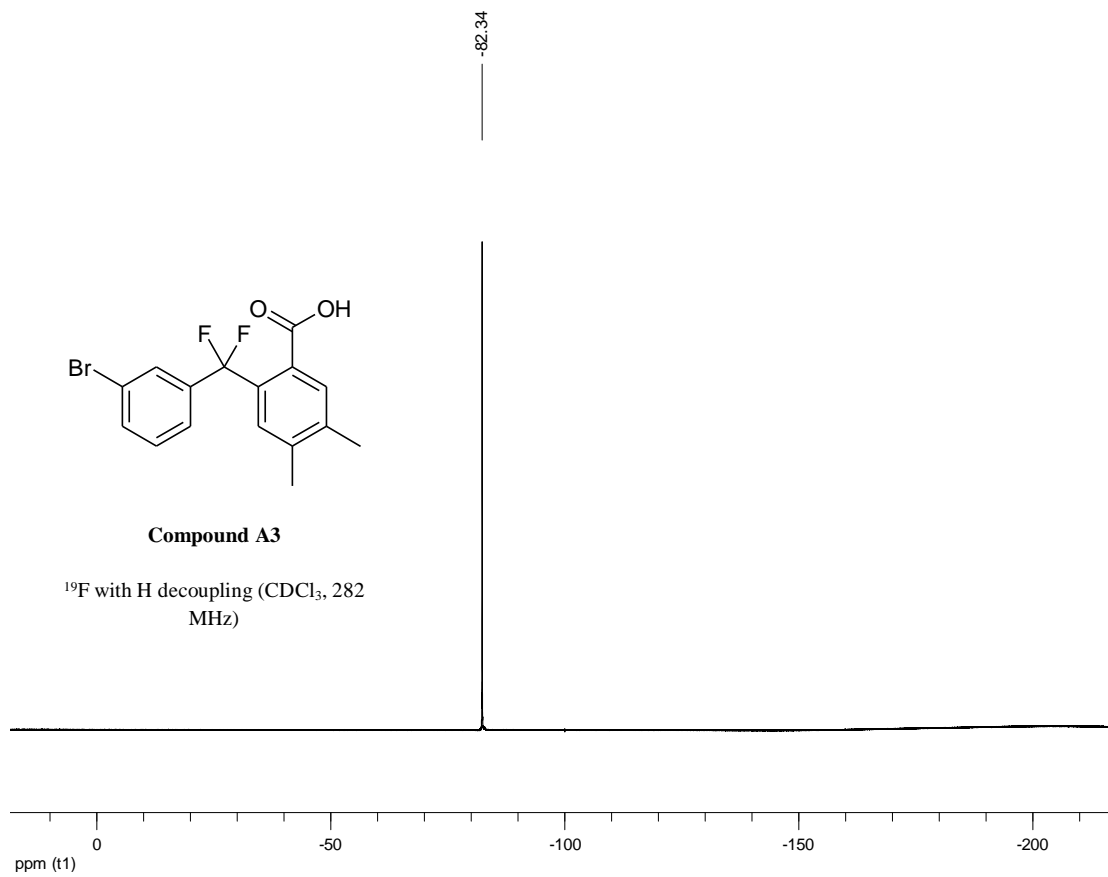






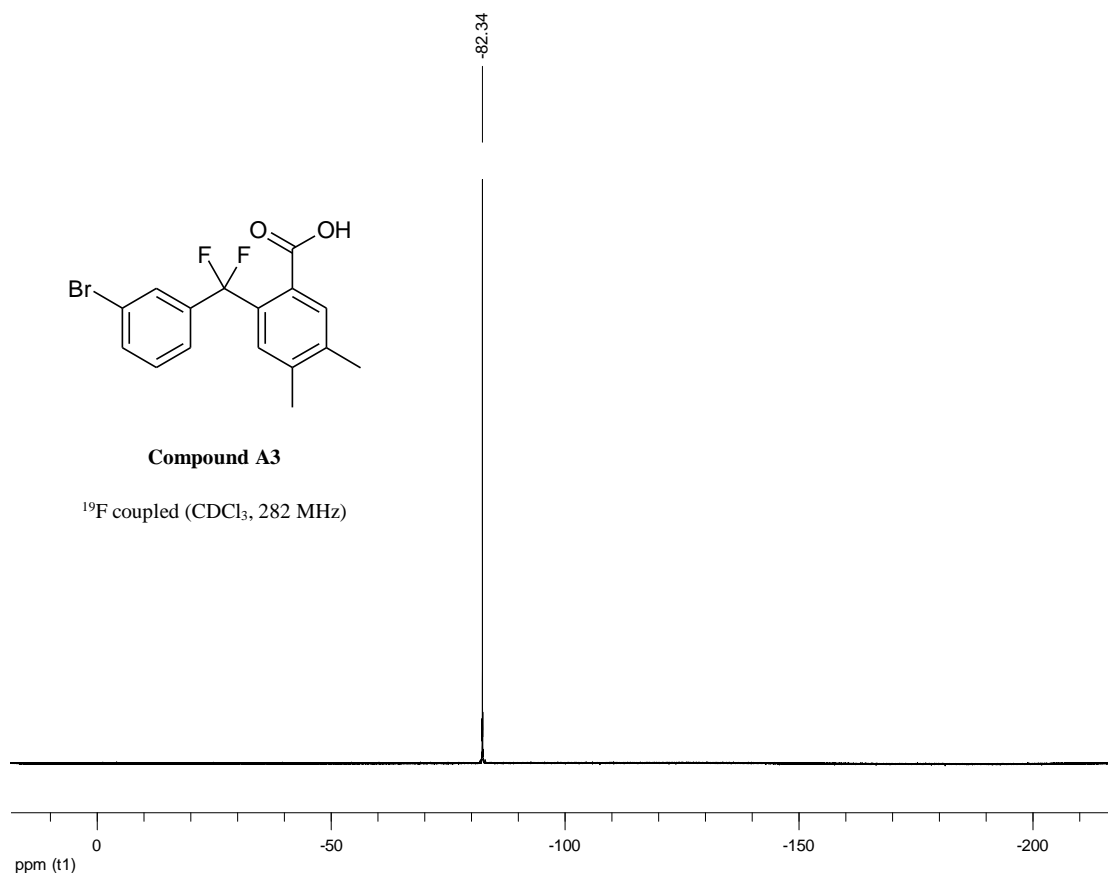
**Compound A3**

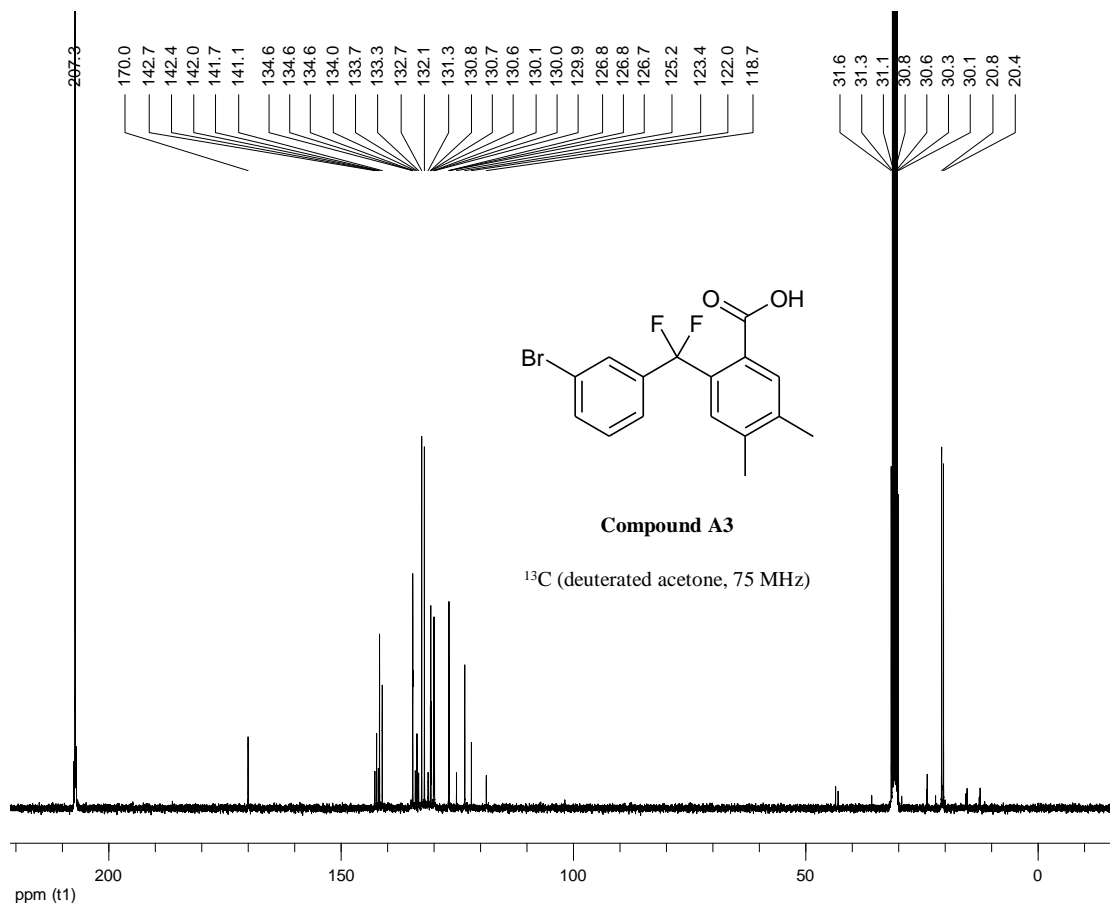
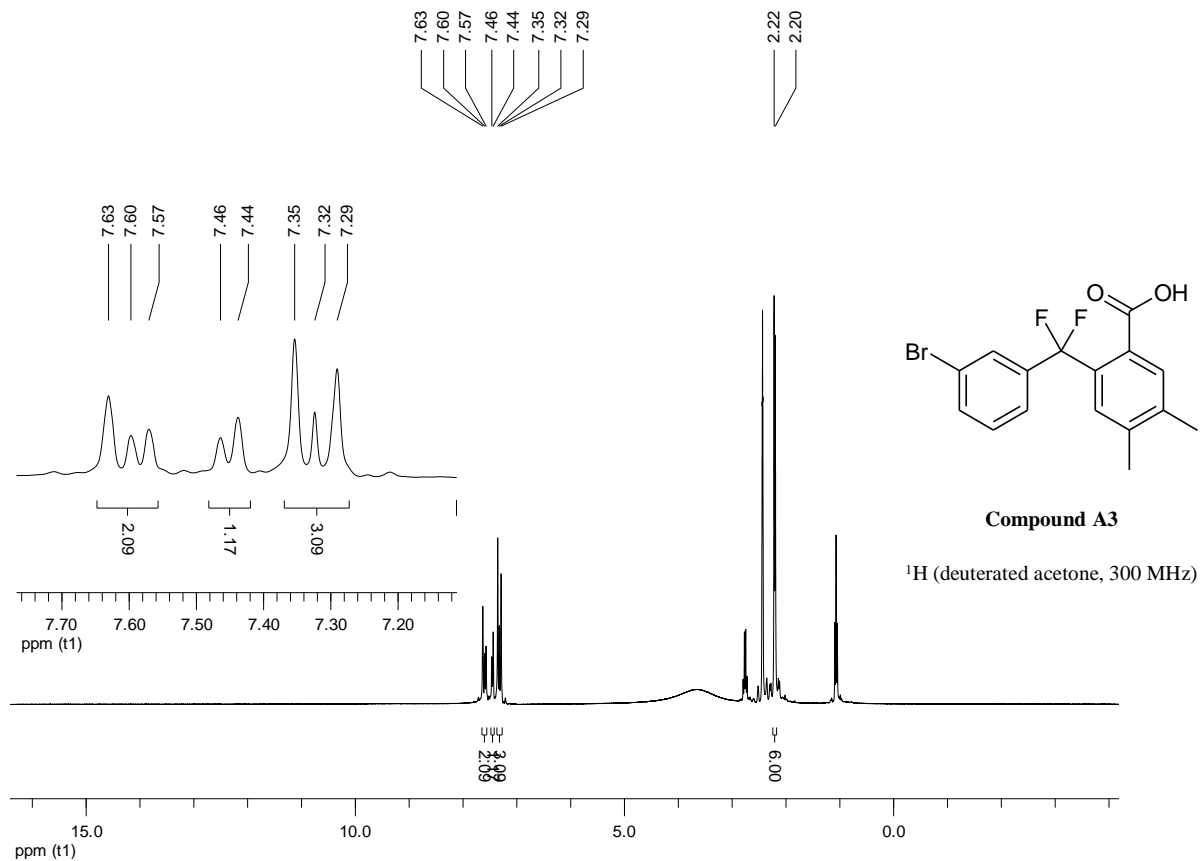
$^{19}\text{F}$  with H decoupling ( $\text{CDCl}_3$ , 282 MHz)



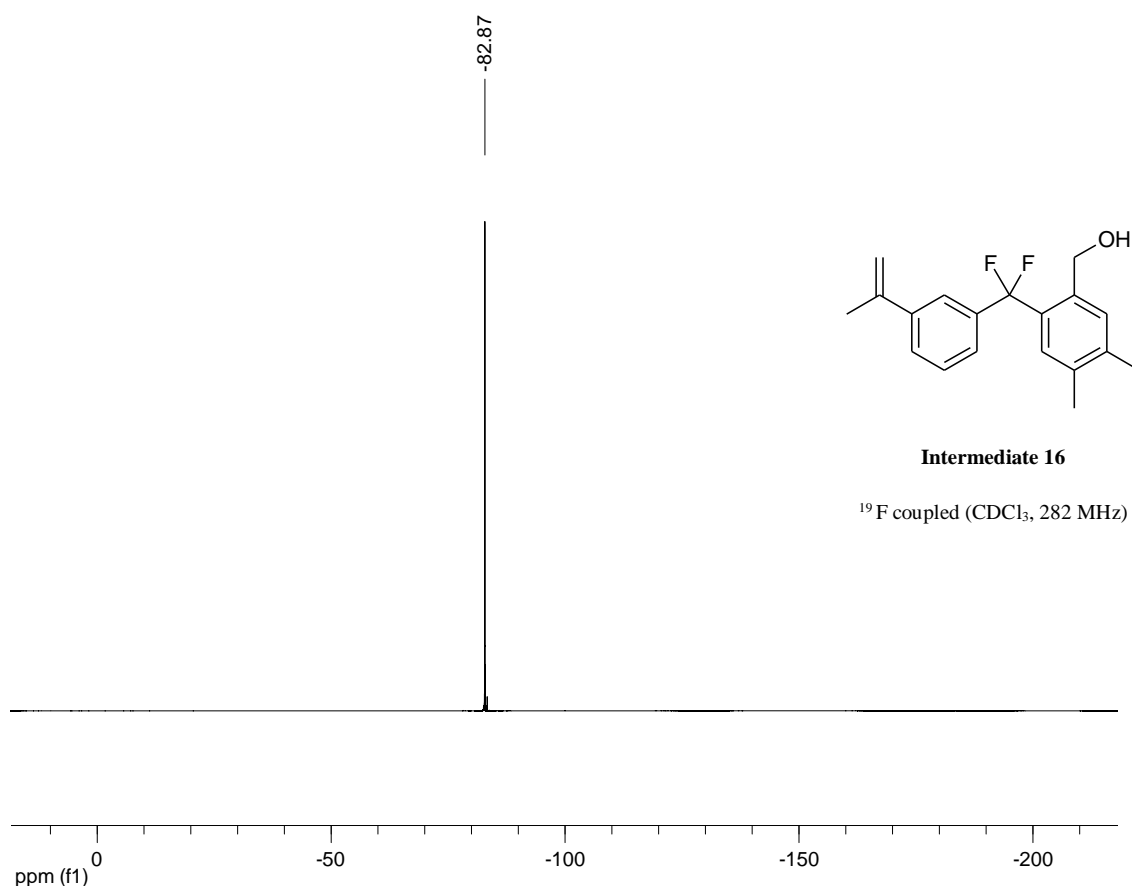
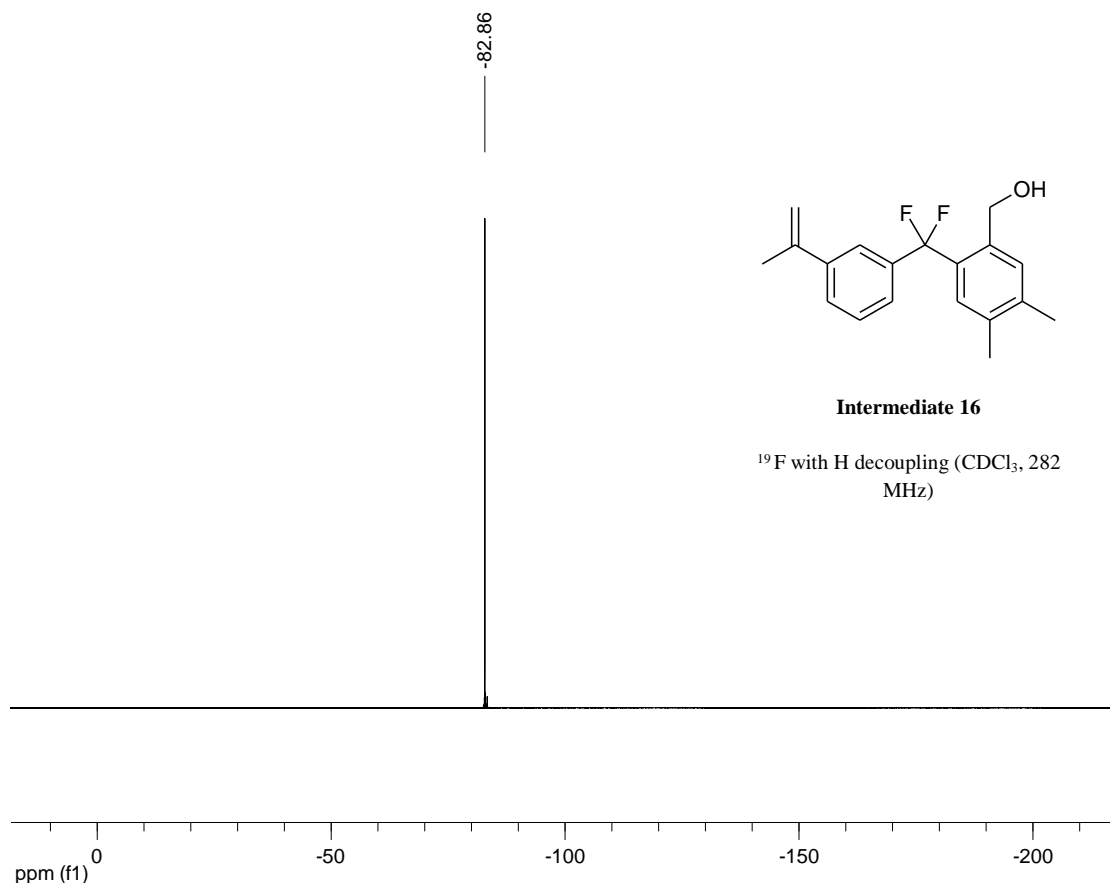
**Compound A3**

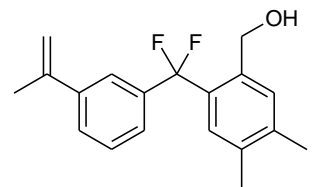
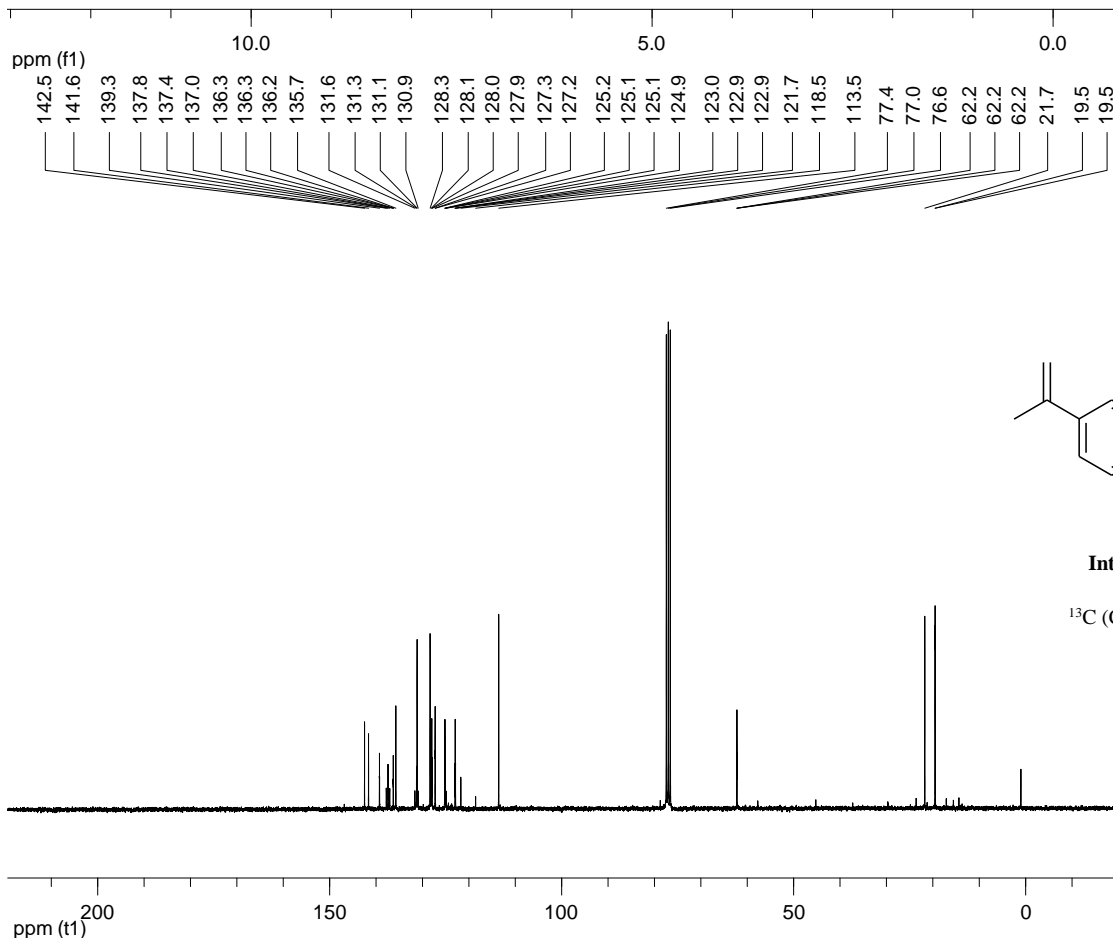
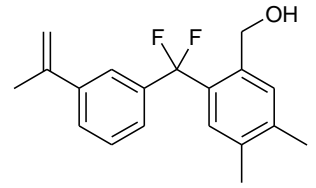
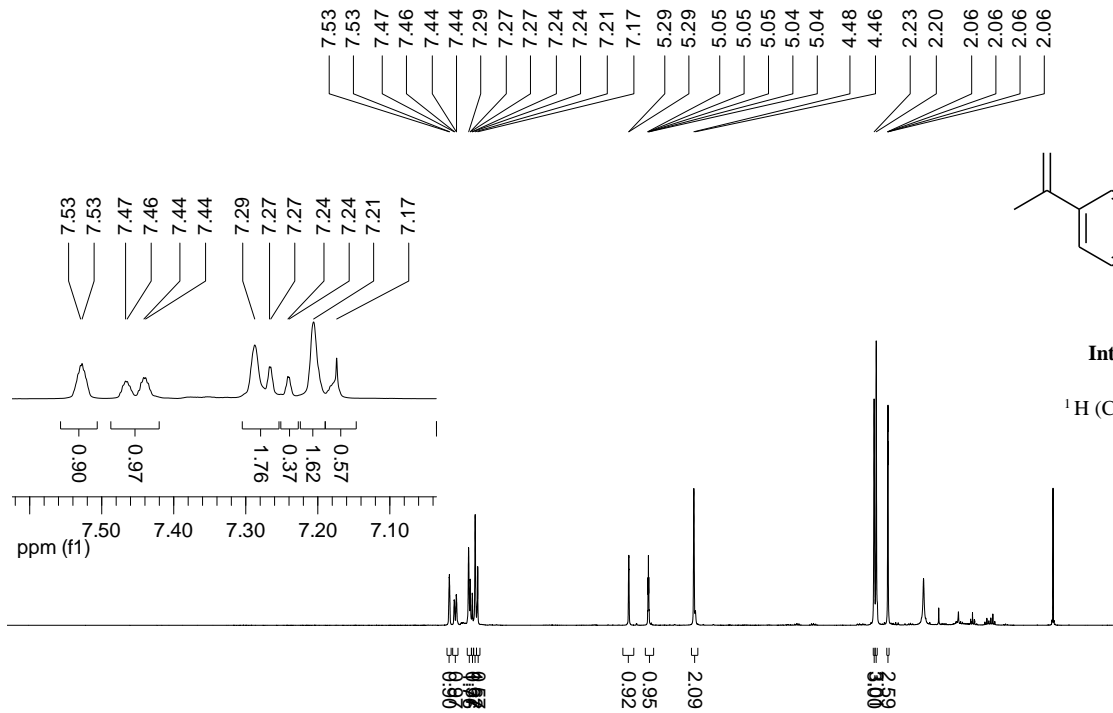
$^{19}\text{F}$  coupled ( $\text{CDCl}_3$ , 282 MHz)

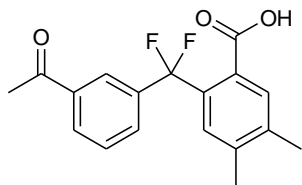






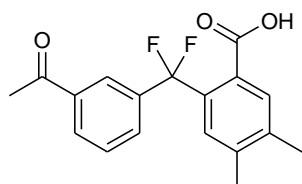
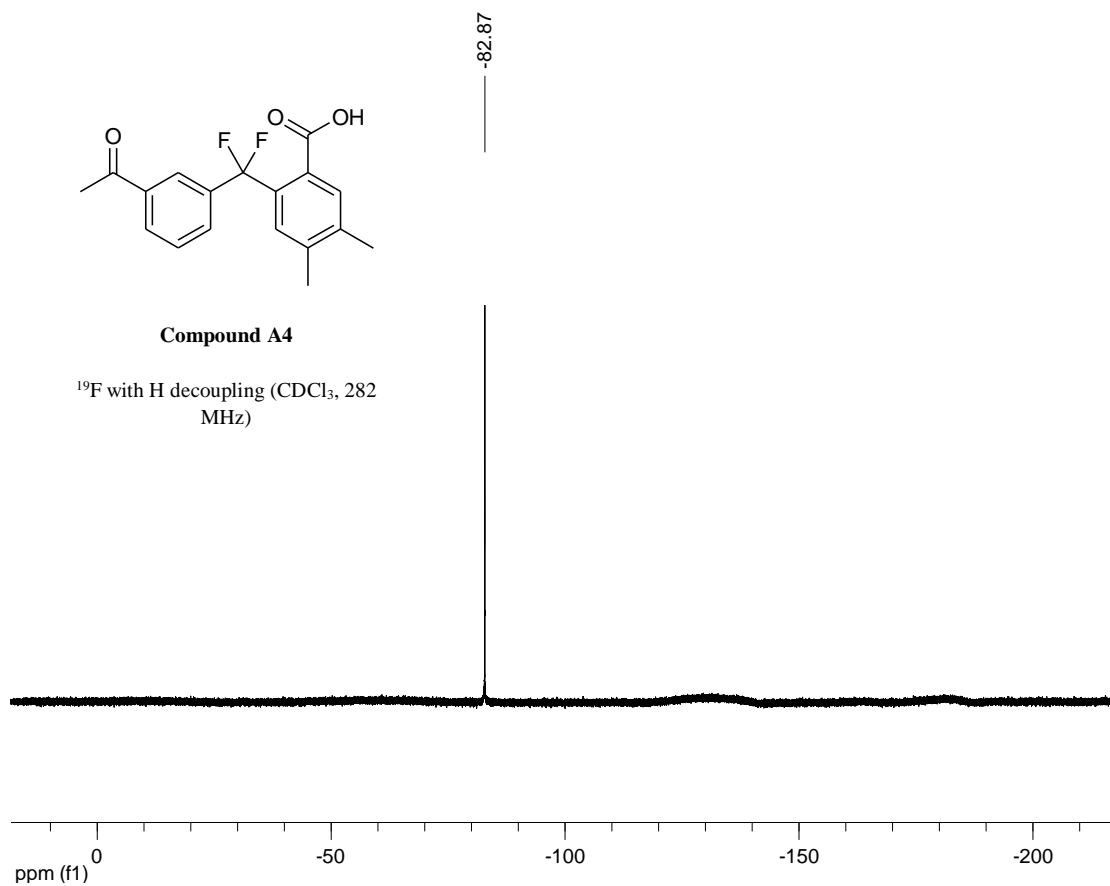






**Compound A4**

$^{19}\text{F}$  with H decoupling ( $\text{CDCl}_3$ , 282 MHz)



**Compound A4**

$^{19}\text{F}$  coupled ( $\text{CDCl}_3$ , 282 MHz)

