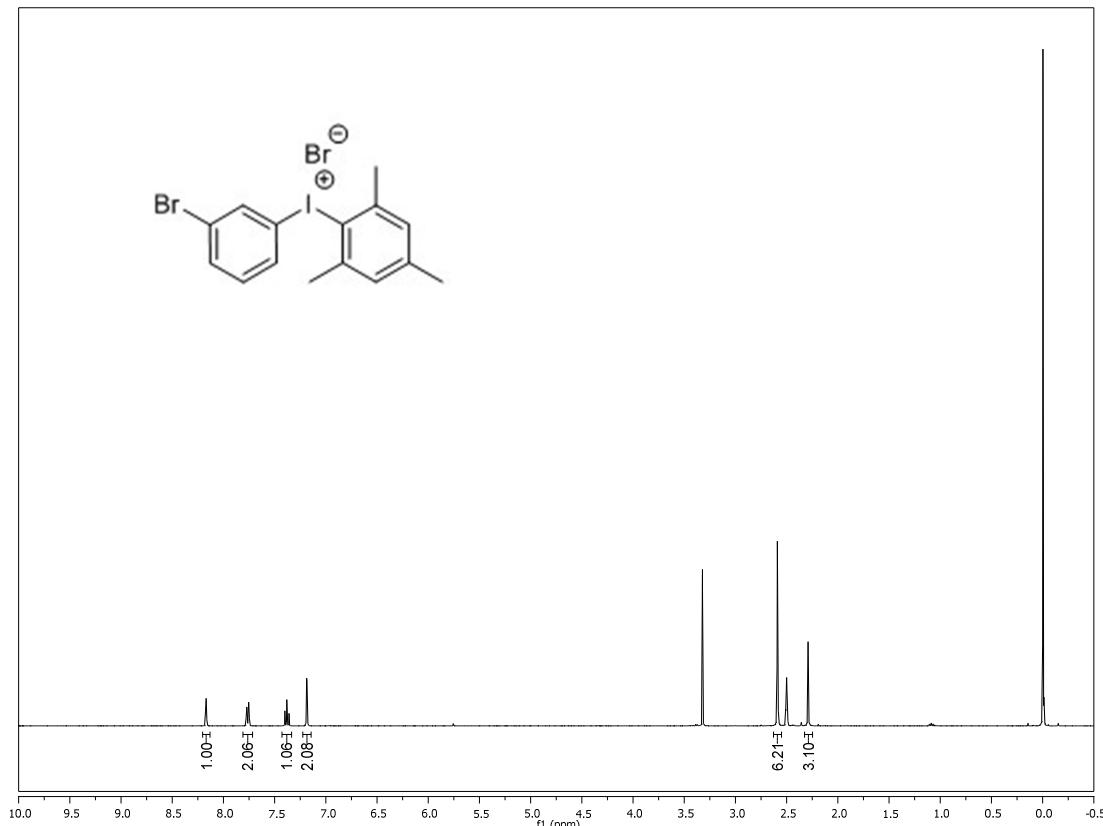
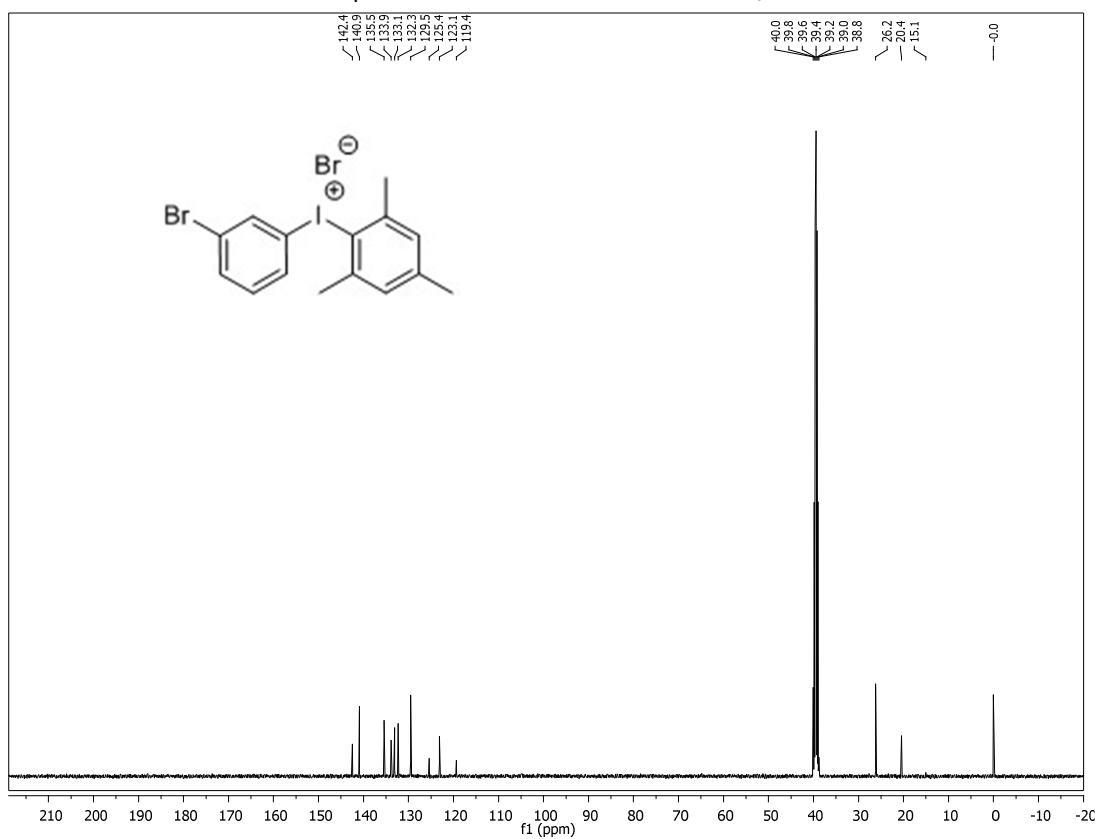


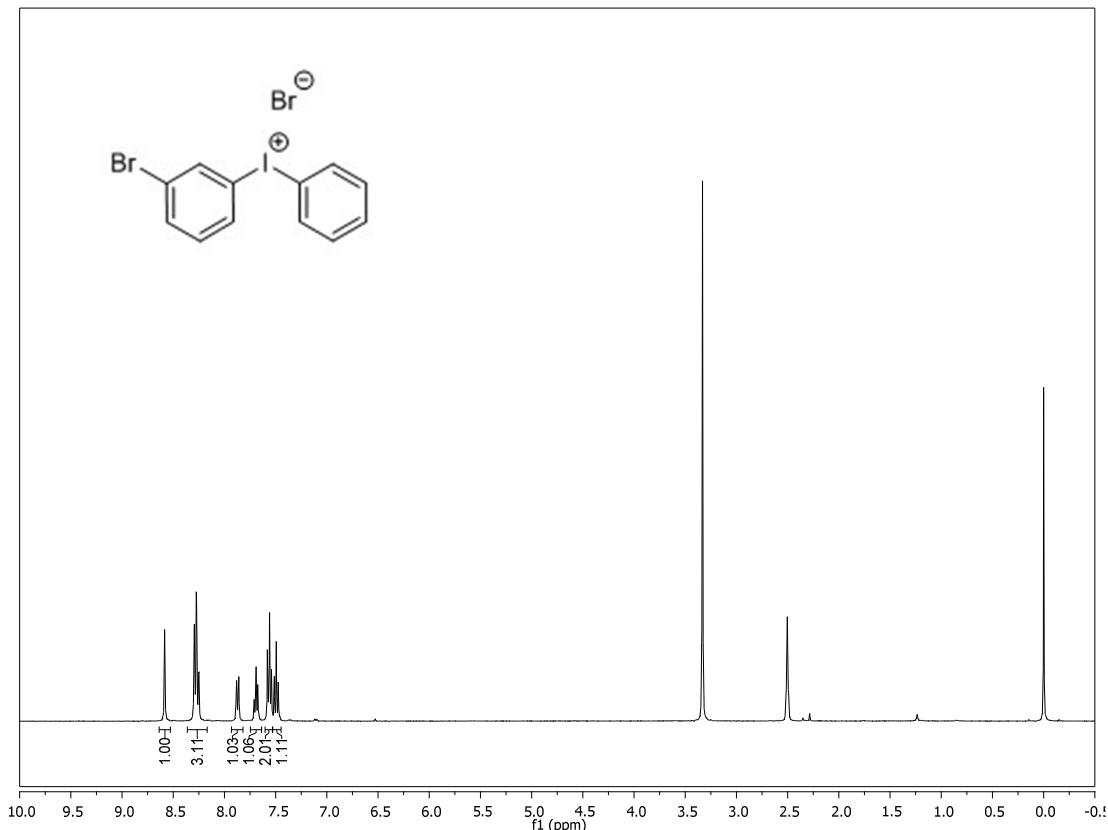
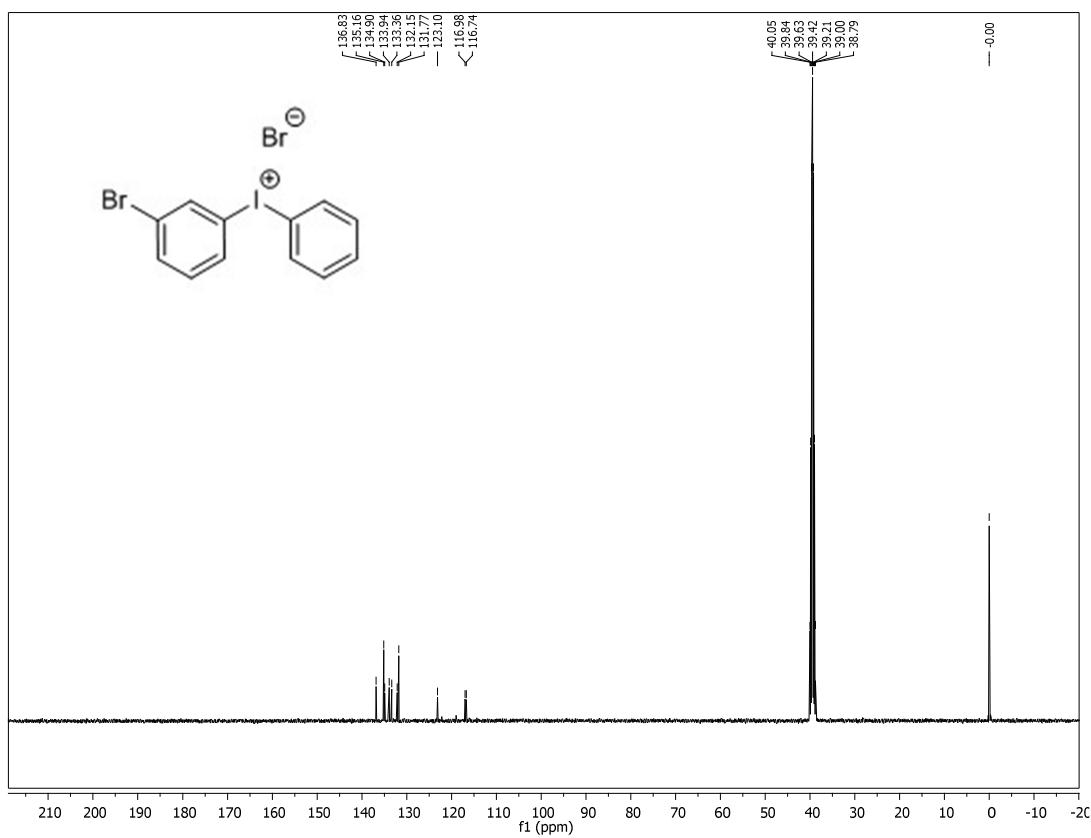
**Base Mediated Synthesis of Alkyl-aryl Ethers from the Reaction of Aliphatic Alcohols and Unsymmetric Diaryliodonium Salts**

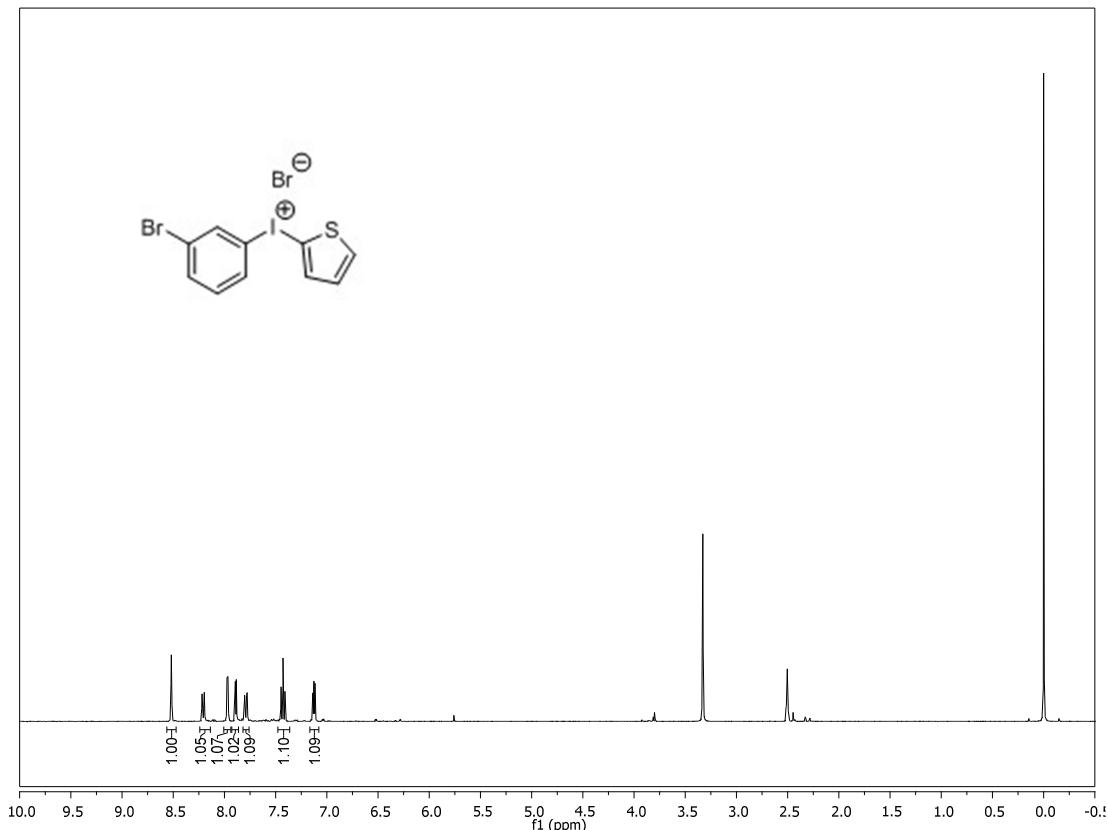
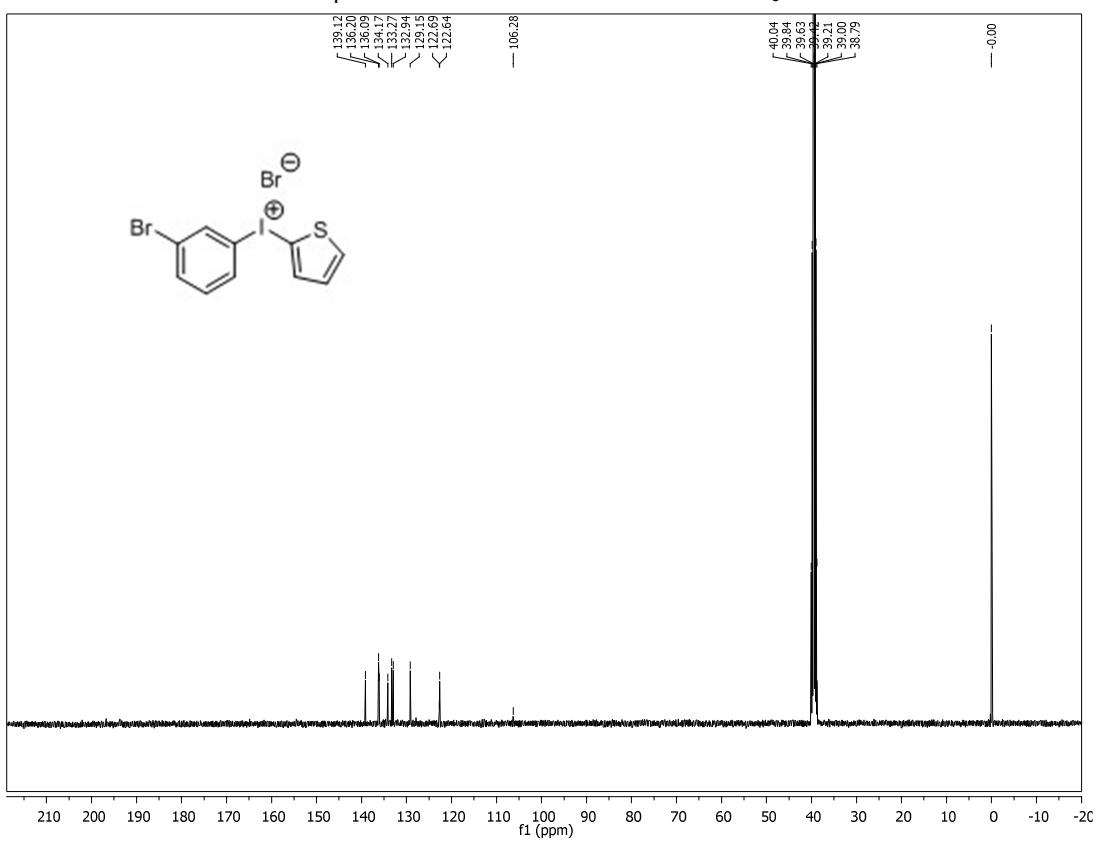
Sunil K. Sundalam and David R. Stuart\*

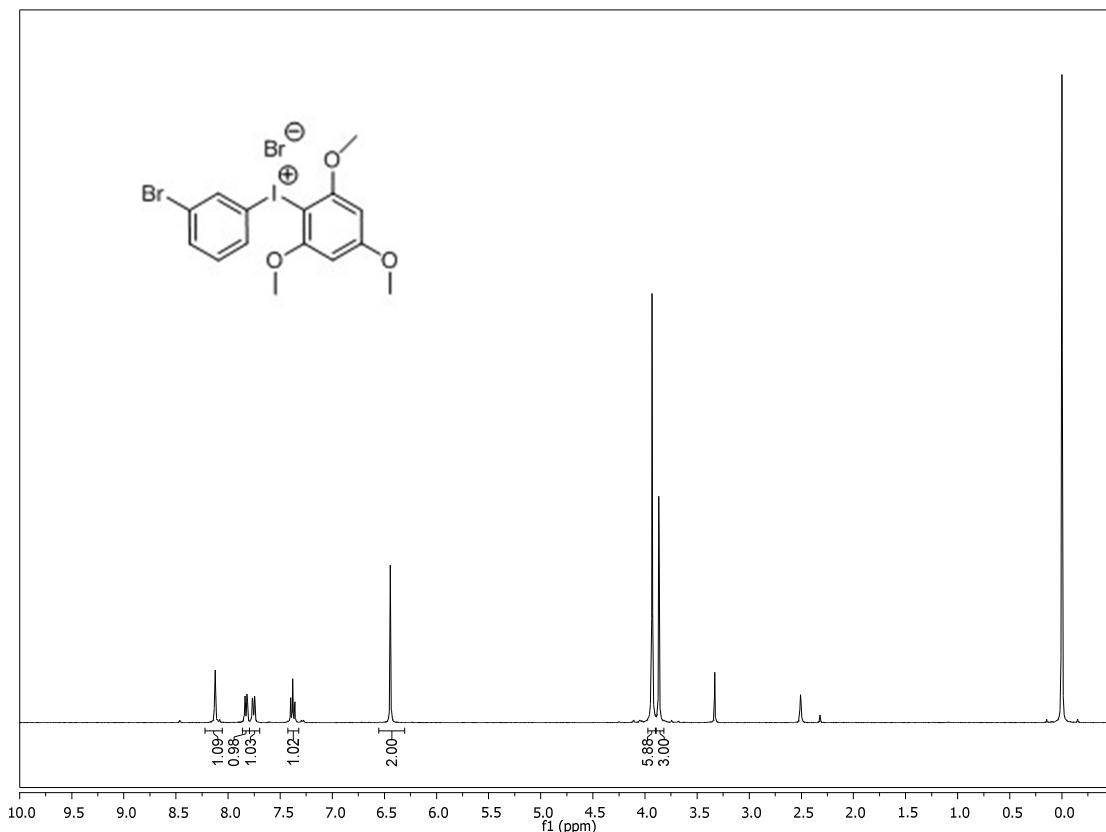
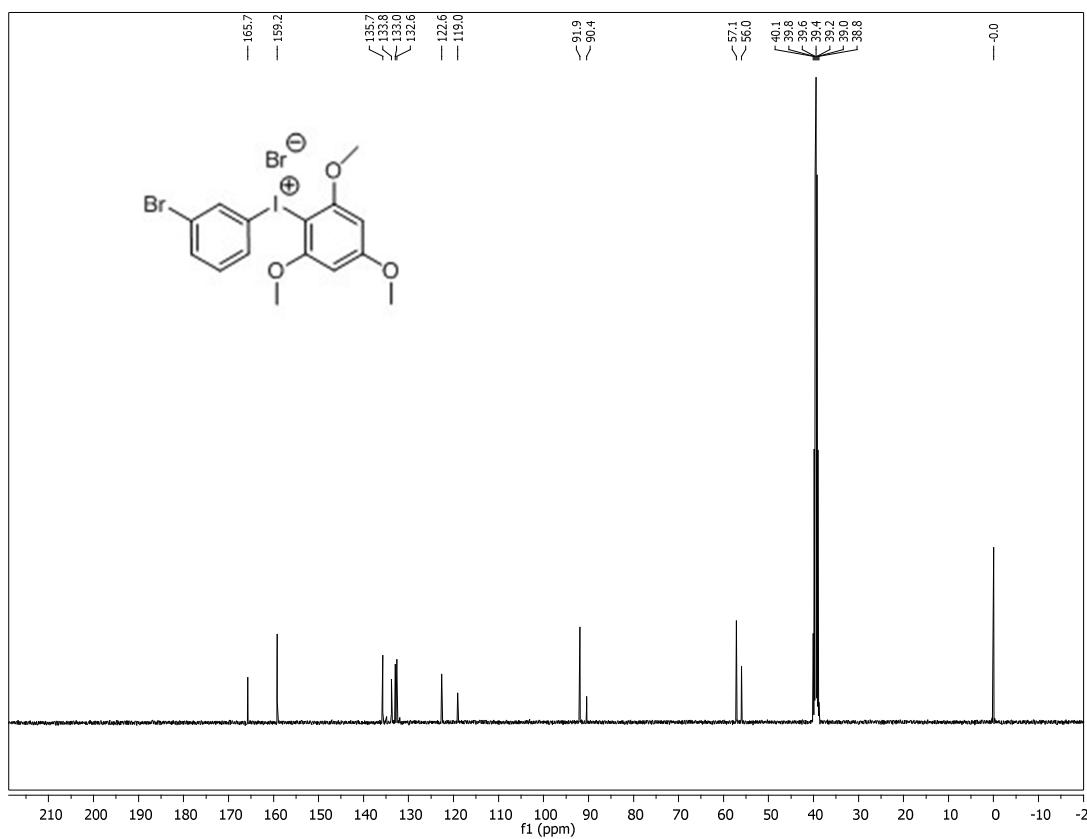
Department of Chemistry, Portland State University, Portland Oregon 97201, United States  
dstuart@pdx.edu

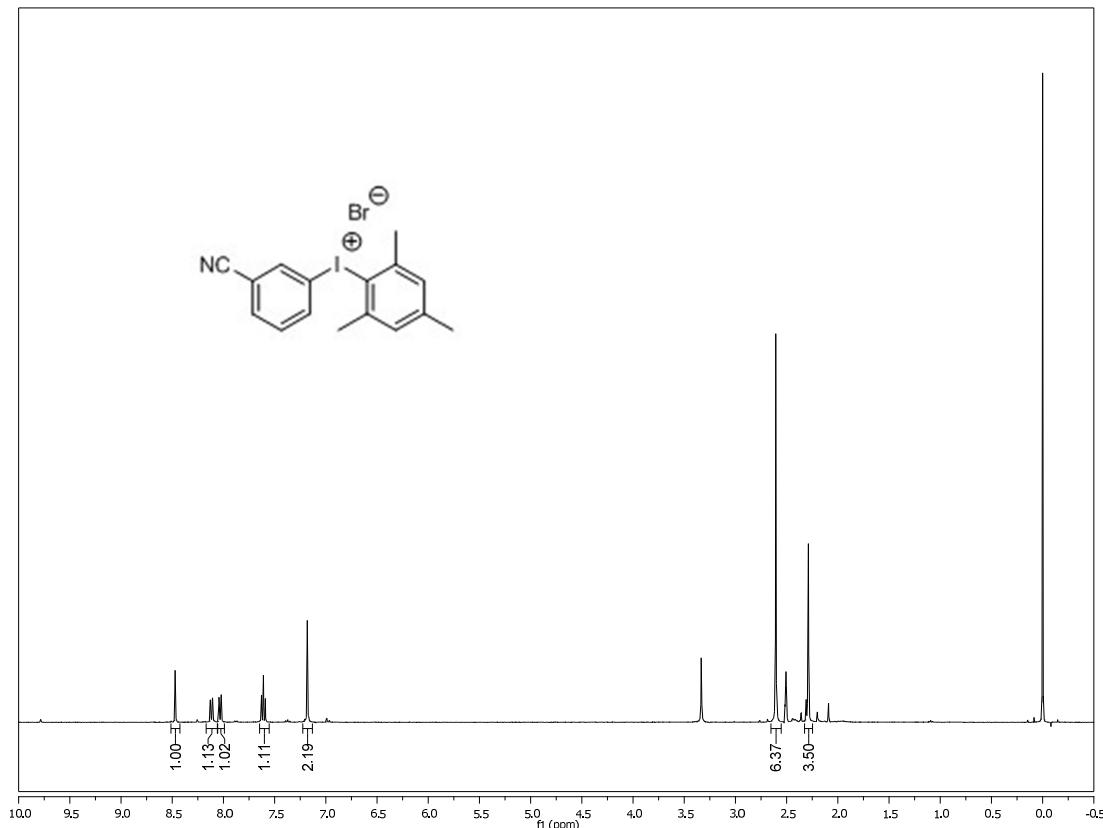
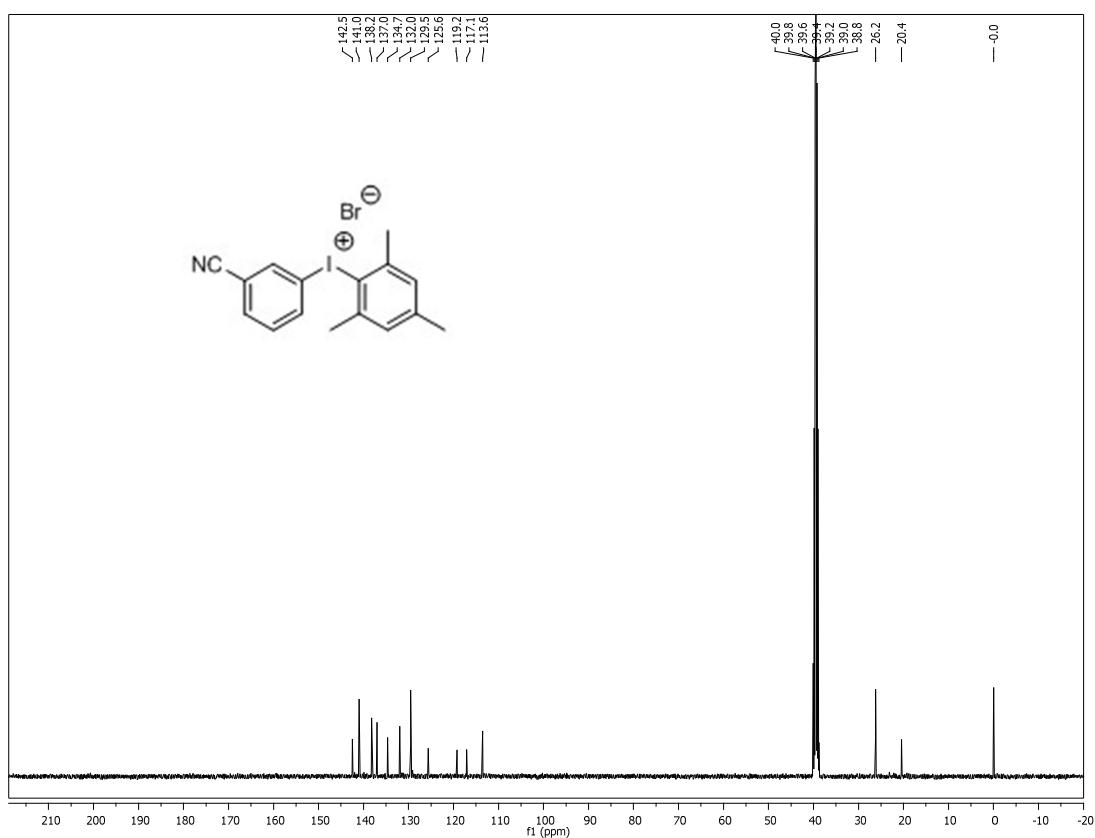
1. $^1\text{H}$ , $^{13}\text{C}$ and $^{19}\text{F}$ NMR spectra of diaryliodonium salts...	2 – 20
2. $^1\text{H}$ , $^{13}\text{C}$ and $^{19}\text{F}$ NMR spectra of alkyl-aryl ethers...	21 – 49

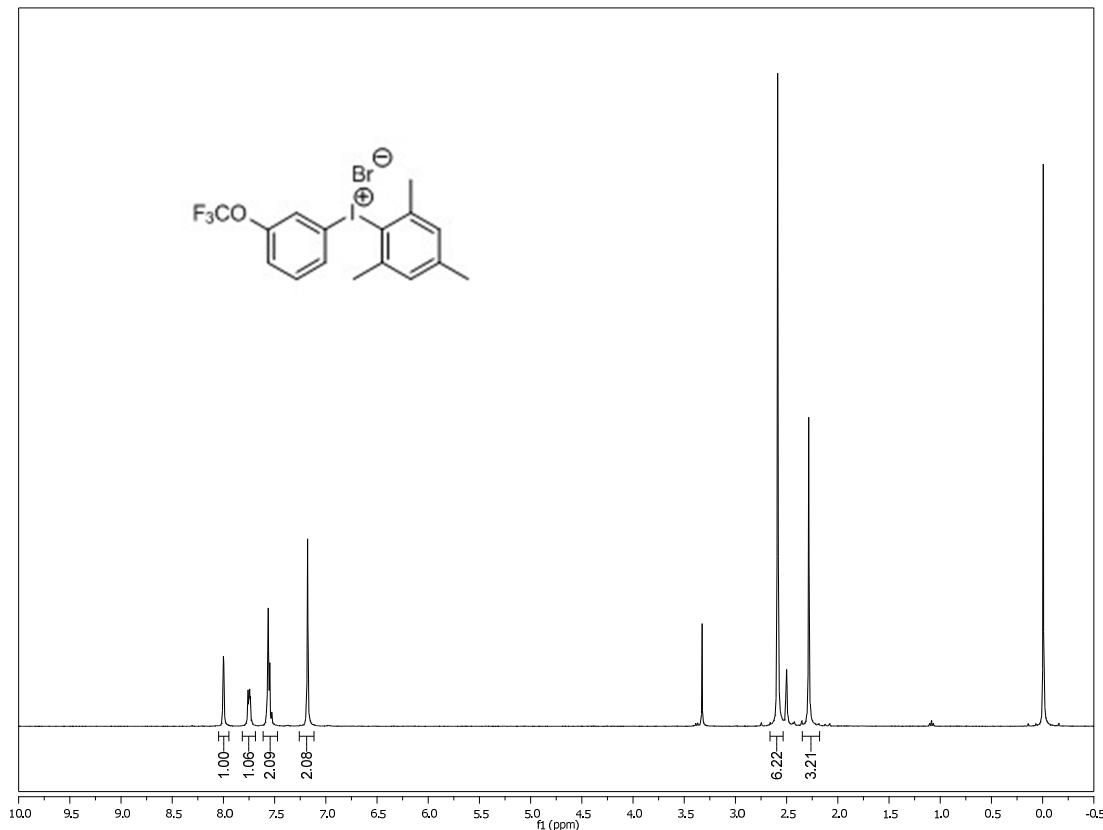
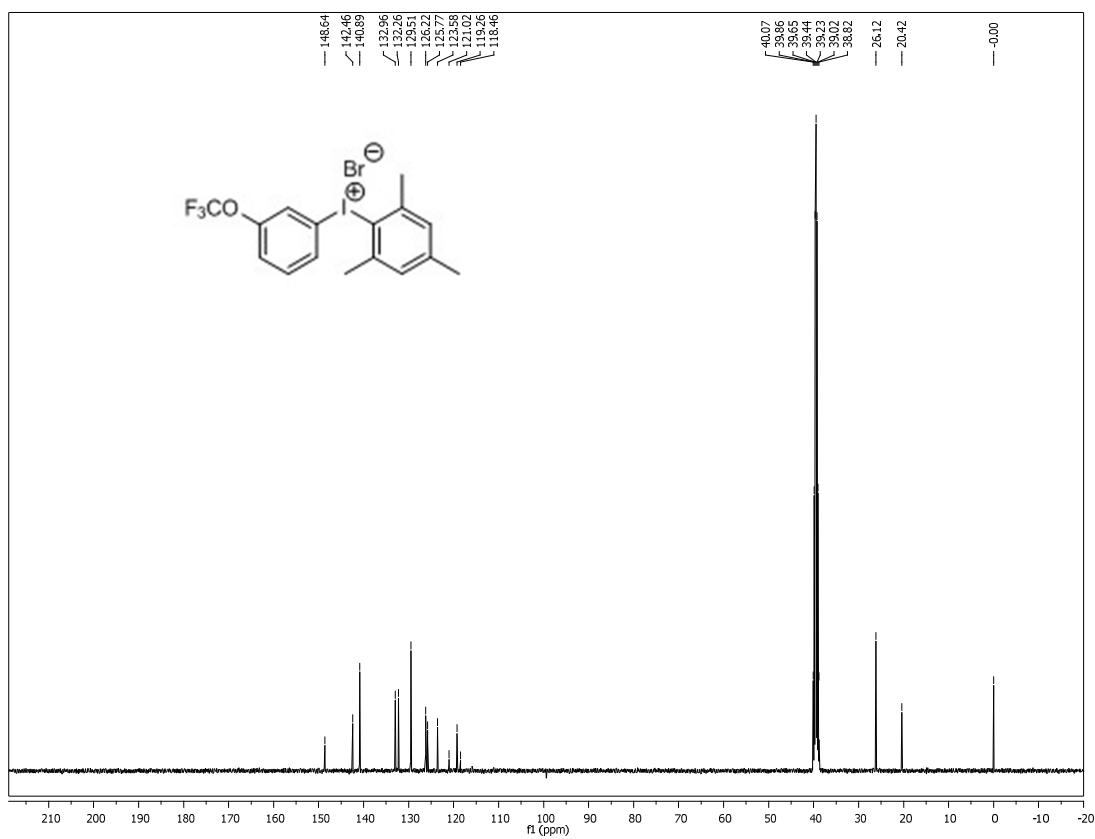
<sup>1</sup>H NMR spectrum of 1a at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1a at 100 MHz in DMSO-d<sub>6</sub> at 298K

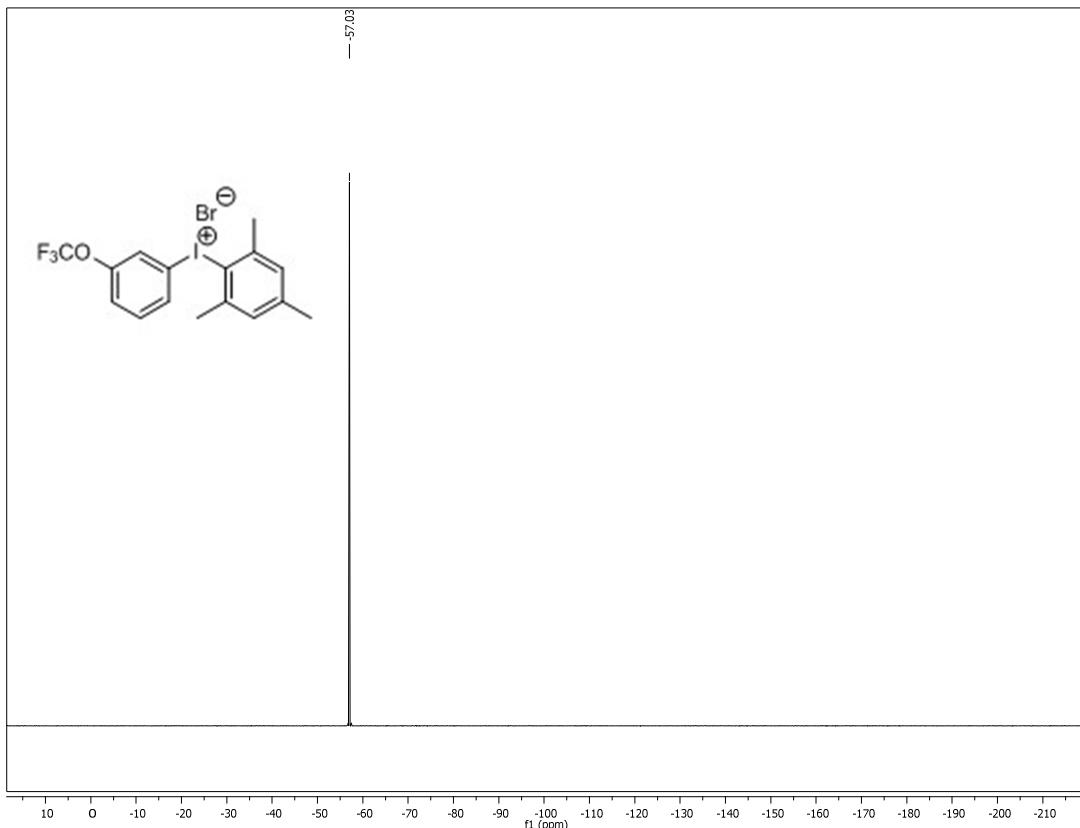
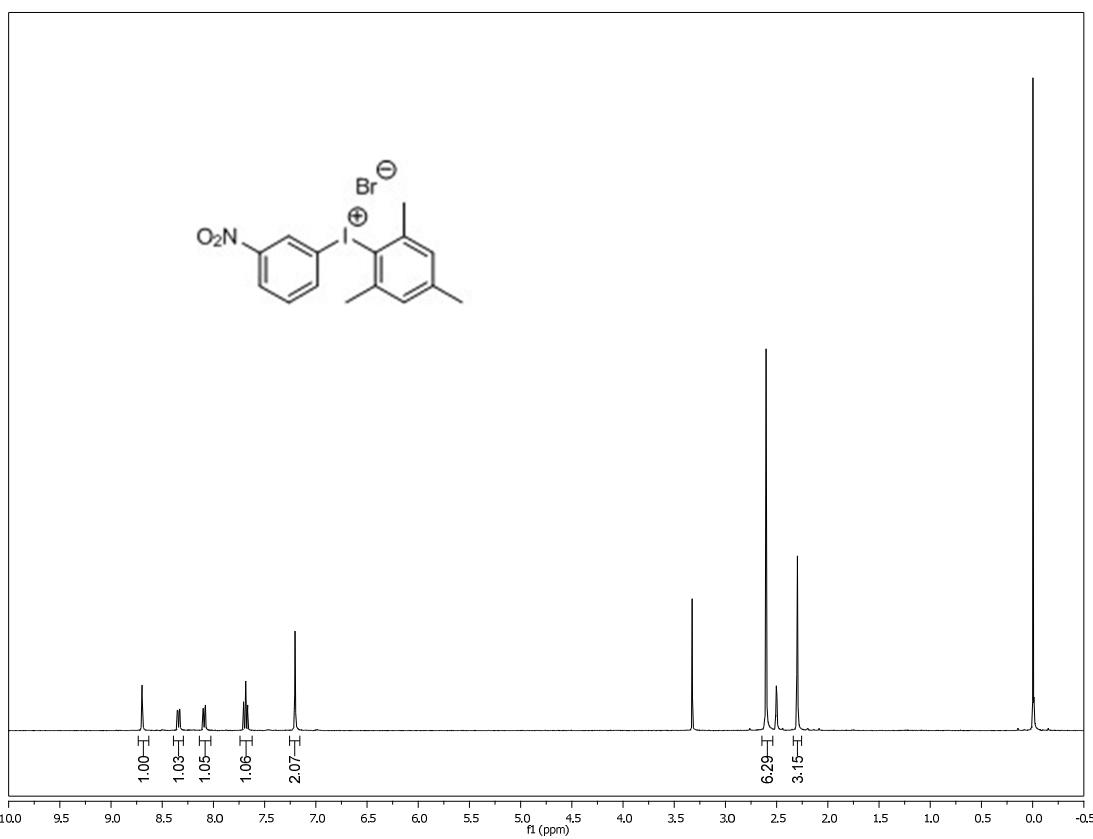
<sup>1</sup>H NMR spectrum of 1a-Ph at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1a-Ph at 100 MHz in DMSO-d<sub>6</sub> at 298K

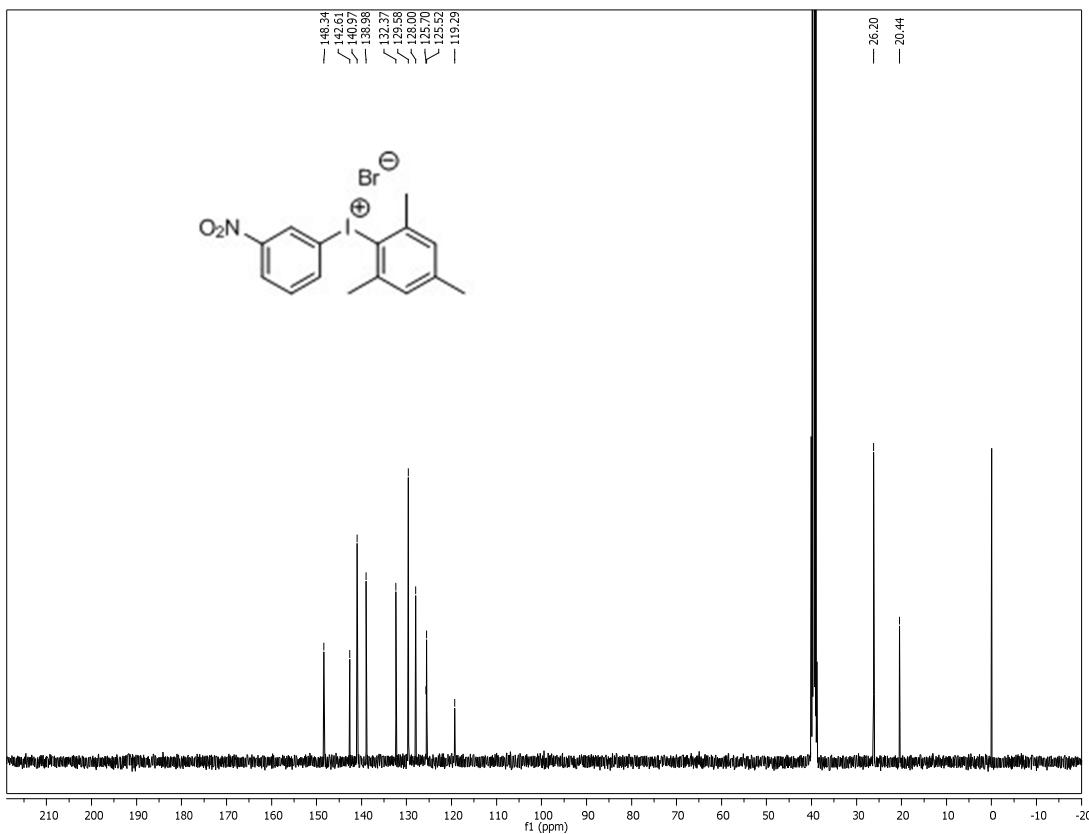
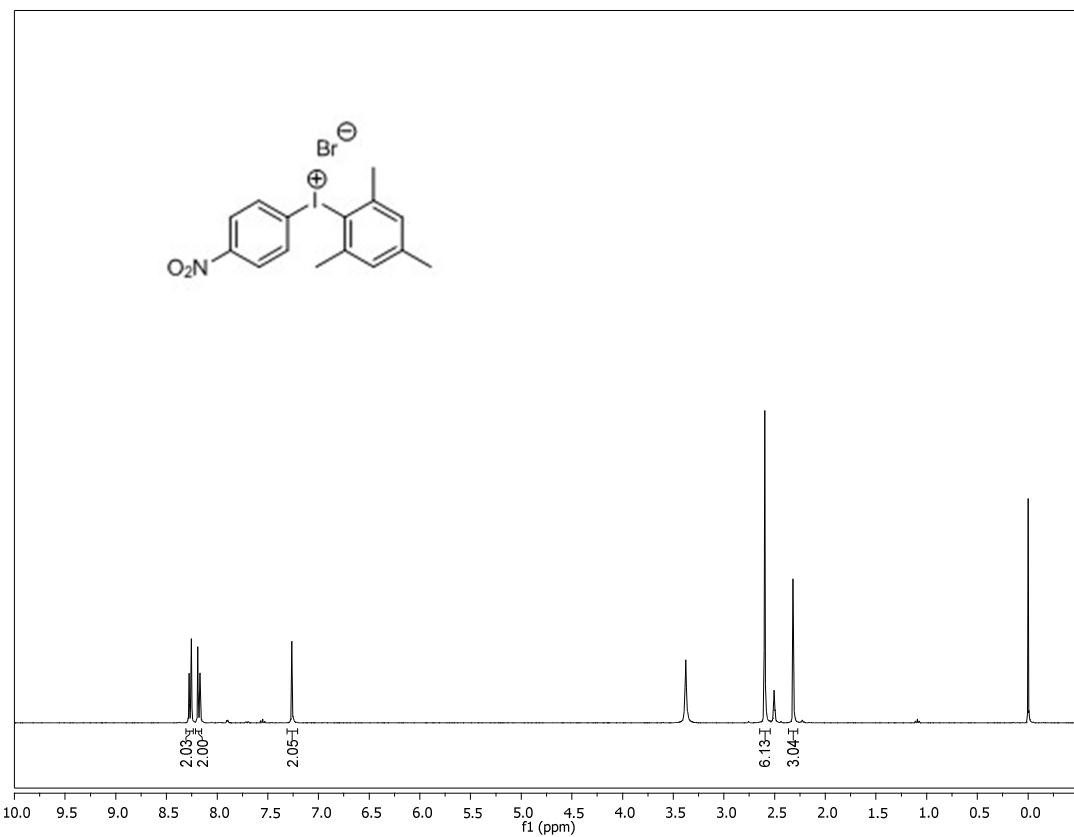
<sup>1</sup>H NMR spectrum of 1a-Th at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1a-Th at 100 MHz in DMSO-d<sub>6</sub> at 298K

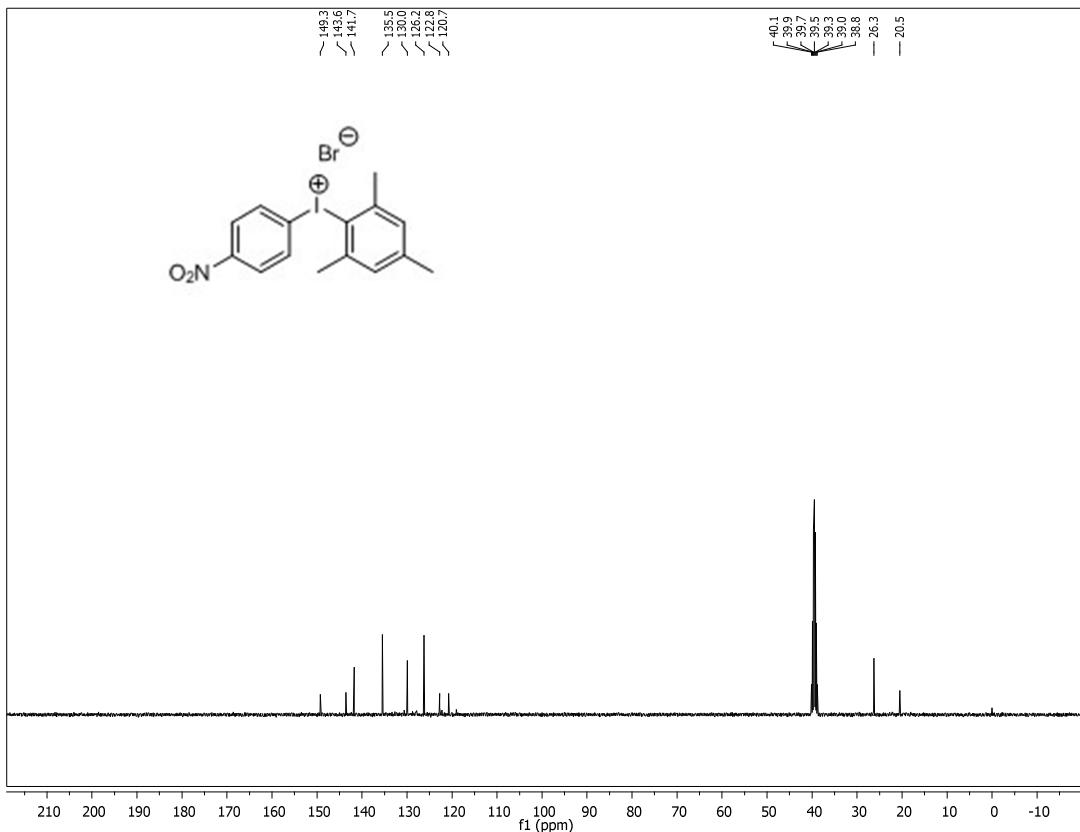
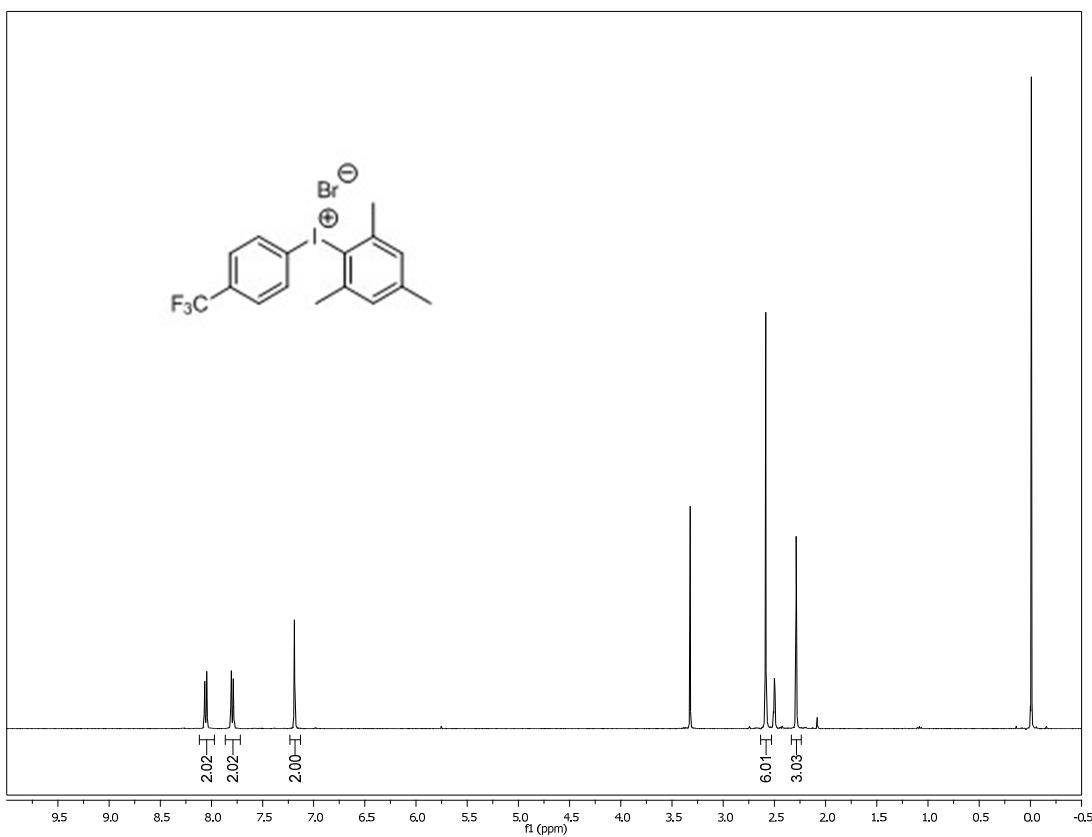
<sup>1</sup>H NMR spectrum of 1a-TMB at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1a-TMB at 400 MHz in DMSO-d<sub>6</sub> at 298K

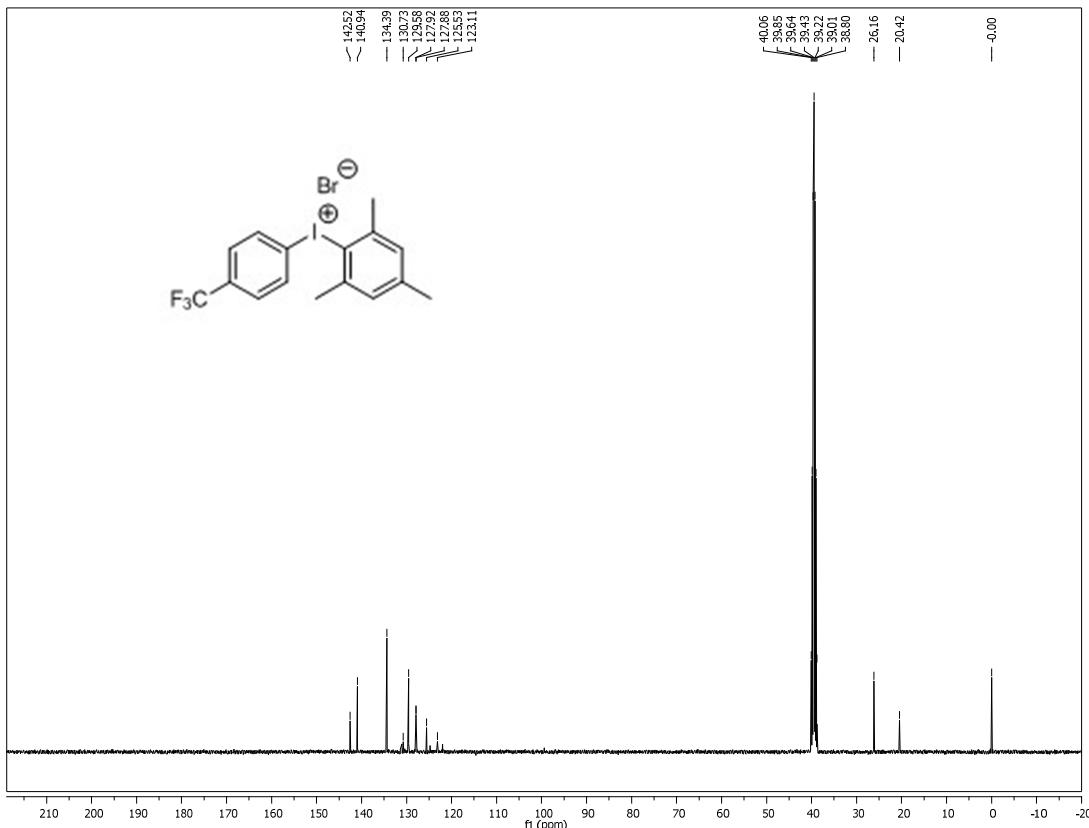
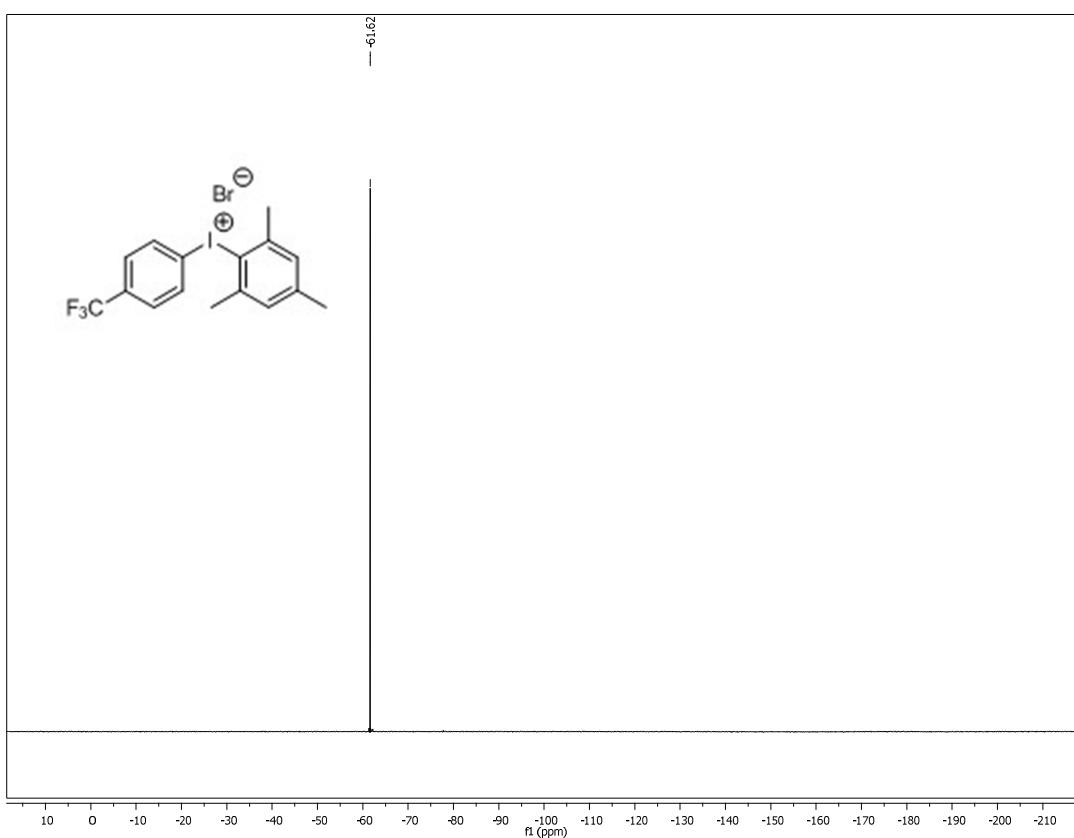
<sup>1</sup>H NMR spectrum of 1b at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1b at 100 MHz in DMSO-d<sub>6</sub> at 298K

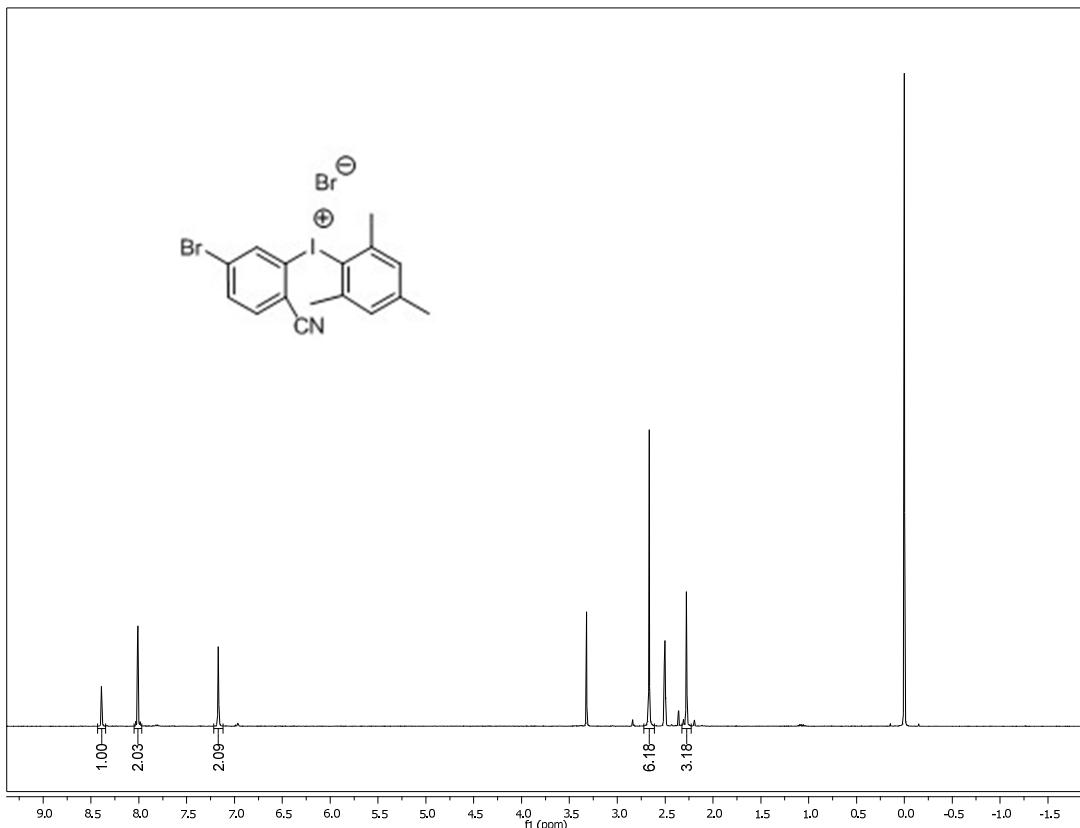
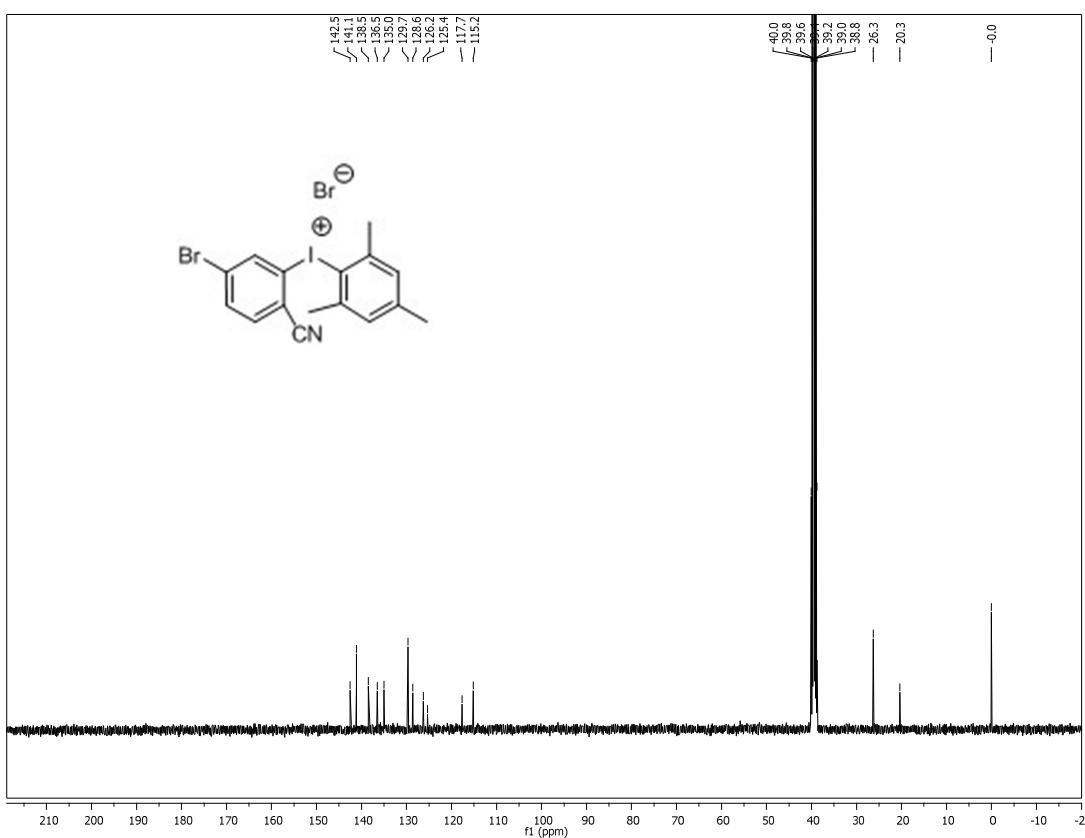
<sup>1</sup>H NMR spectrum of 1c at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1c at 100 MHz in DMSO-d<sub>6</sub> at 298K

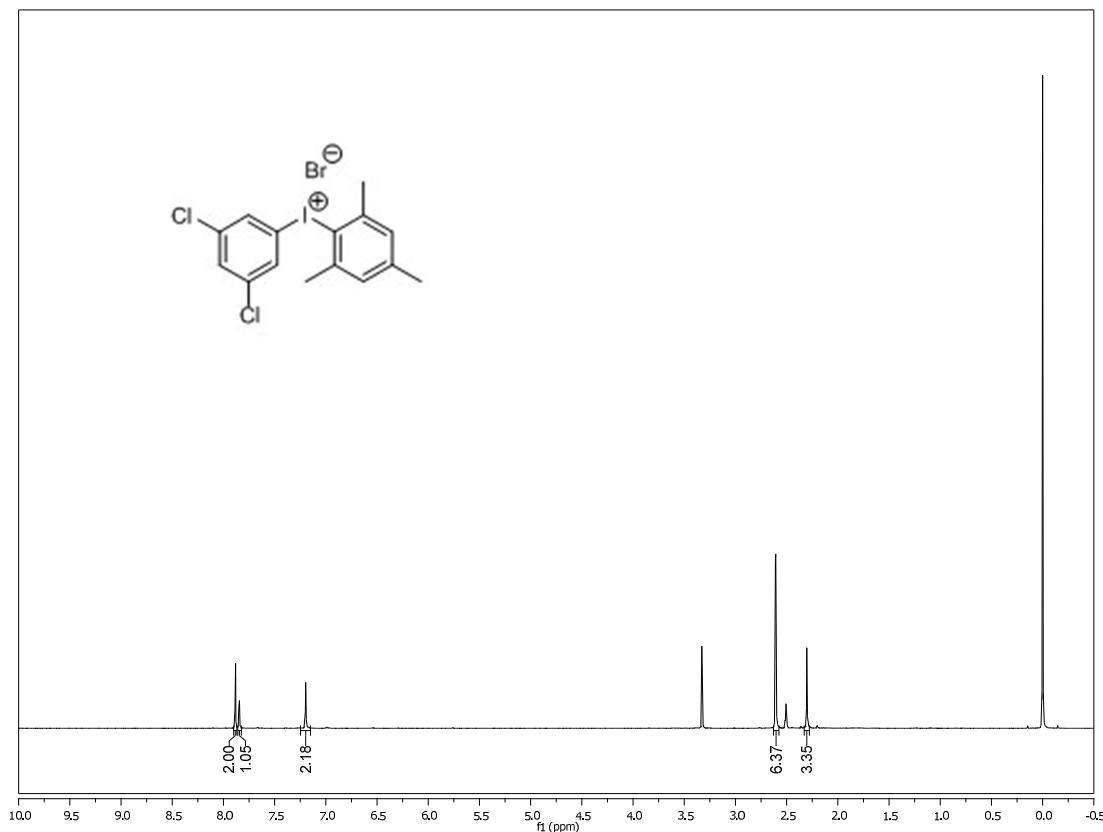
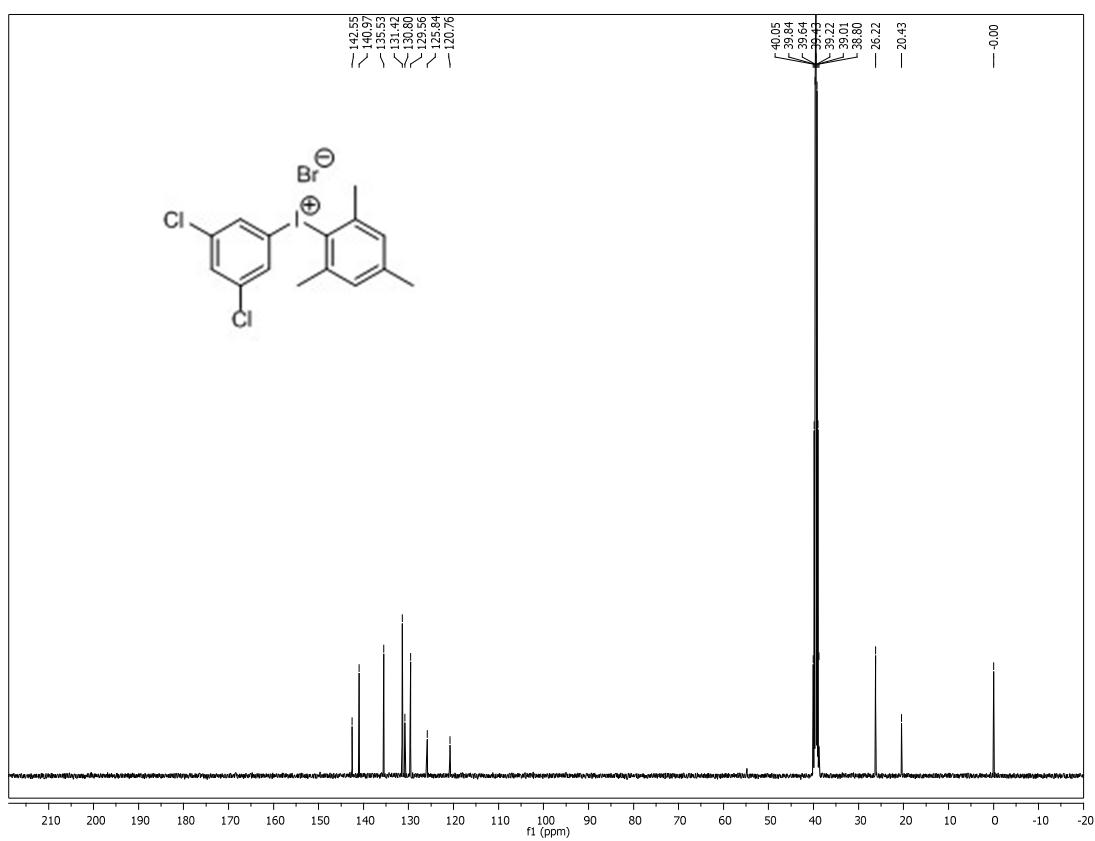
<sup>19</sup>F NMR spectrum of 1c at 377 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1d at 400 MHz in DMSO-d<sub>6</sub> at 298K

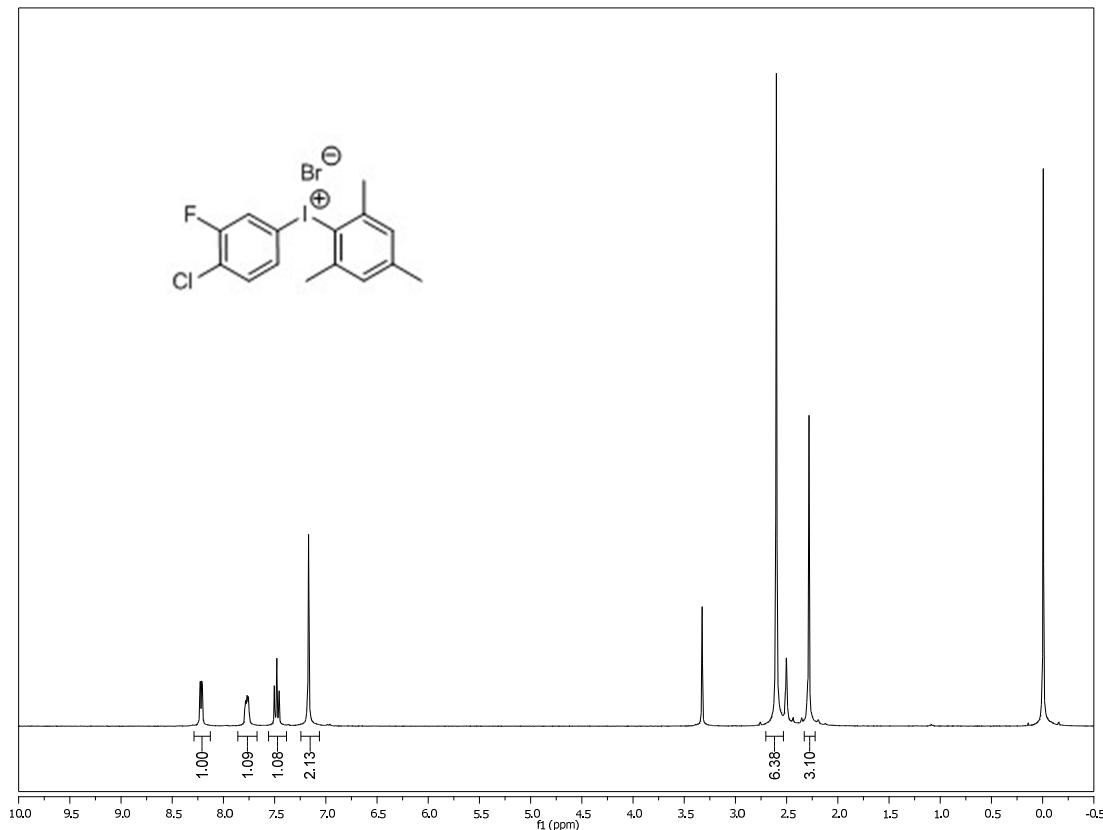
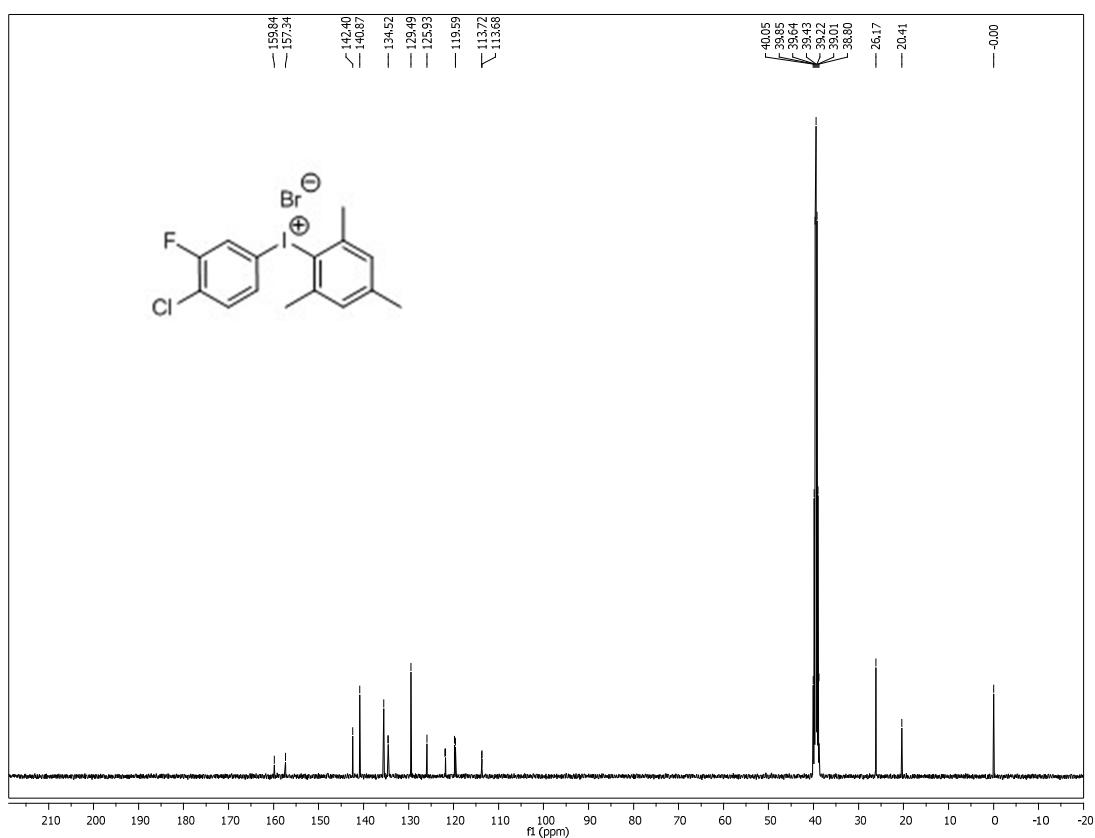
<sup>13</sup>C NMR spectrum of 1d at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1e at 400 MHz in DMSO-d<sub>6</sub> at 298K

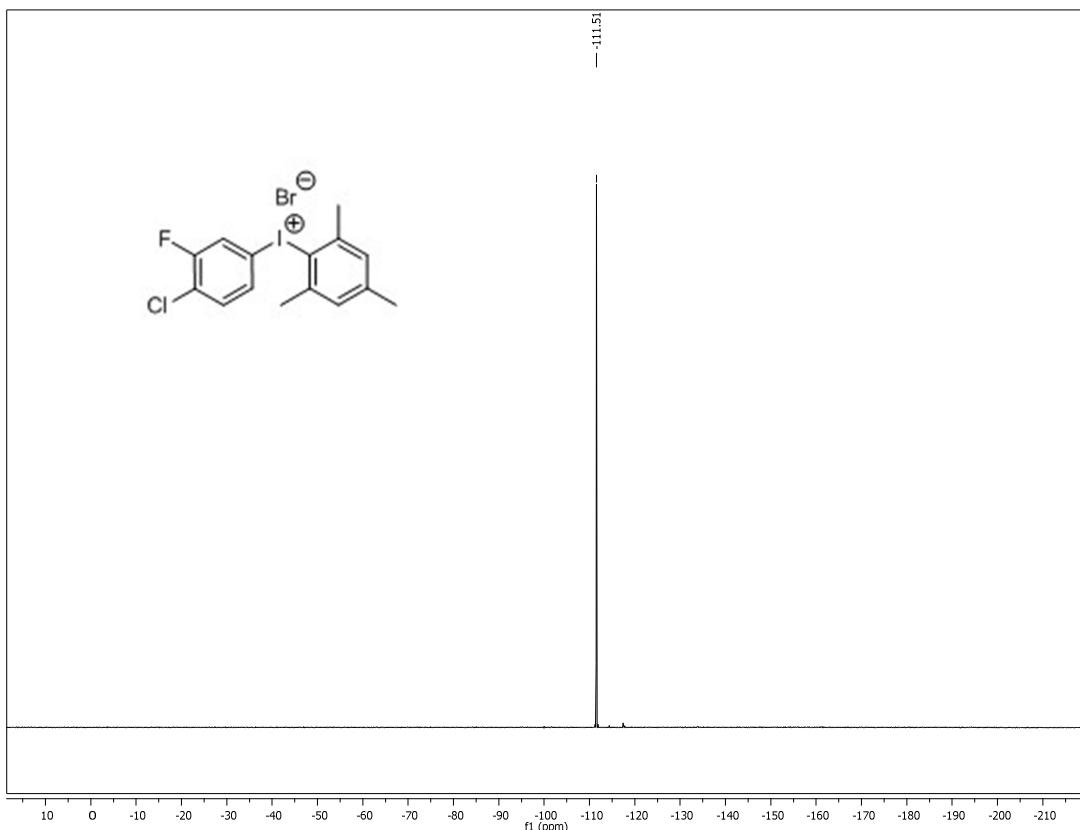
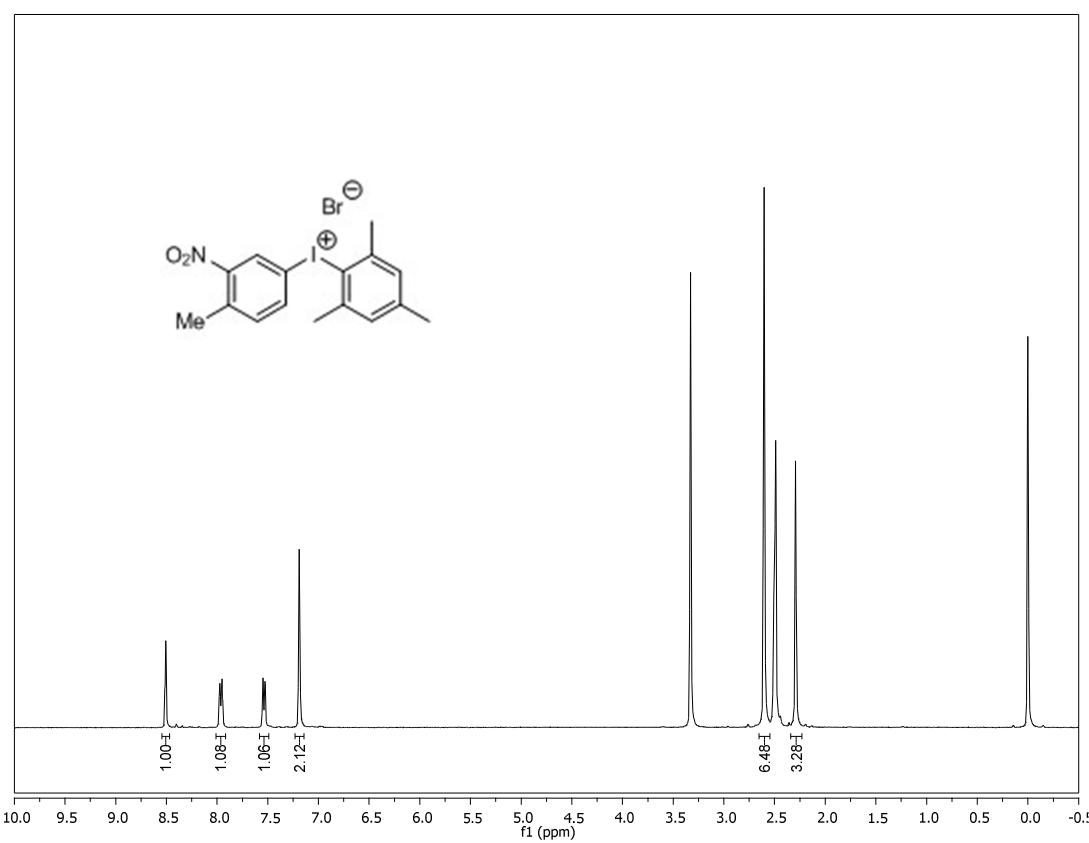
<sup>13</sup>C NMR spectrum of 1e at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1f at 400 MHz in DMSO-d<sub>6</sub> at 298K

<sup>13</sup>C NMR spectrum of 1f at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>19</sup>F NMR spectrum of 1f at 377 MHz in DMSO-d<sub>6</sub> at 298K

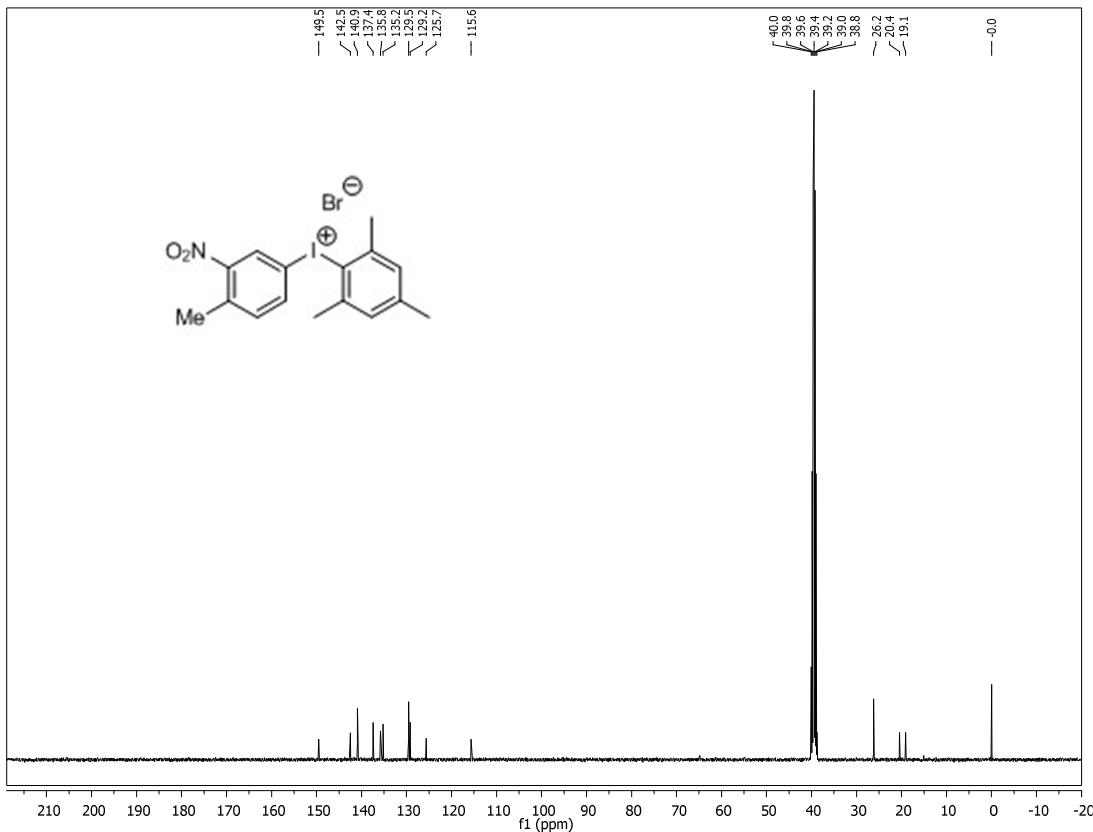
<sup>1</sup>H NMR spectrum of 1g at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1g at 100 MHz in DMSO-d<sub>6</sub> at 298K

<sup>1</sup>H NMR spectrum of 1h at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1h at 100 MHz in DMSO-d<sub>6</sub> at 298K

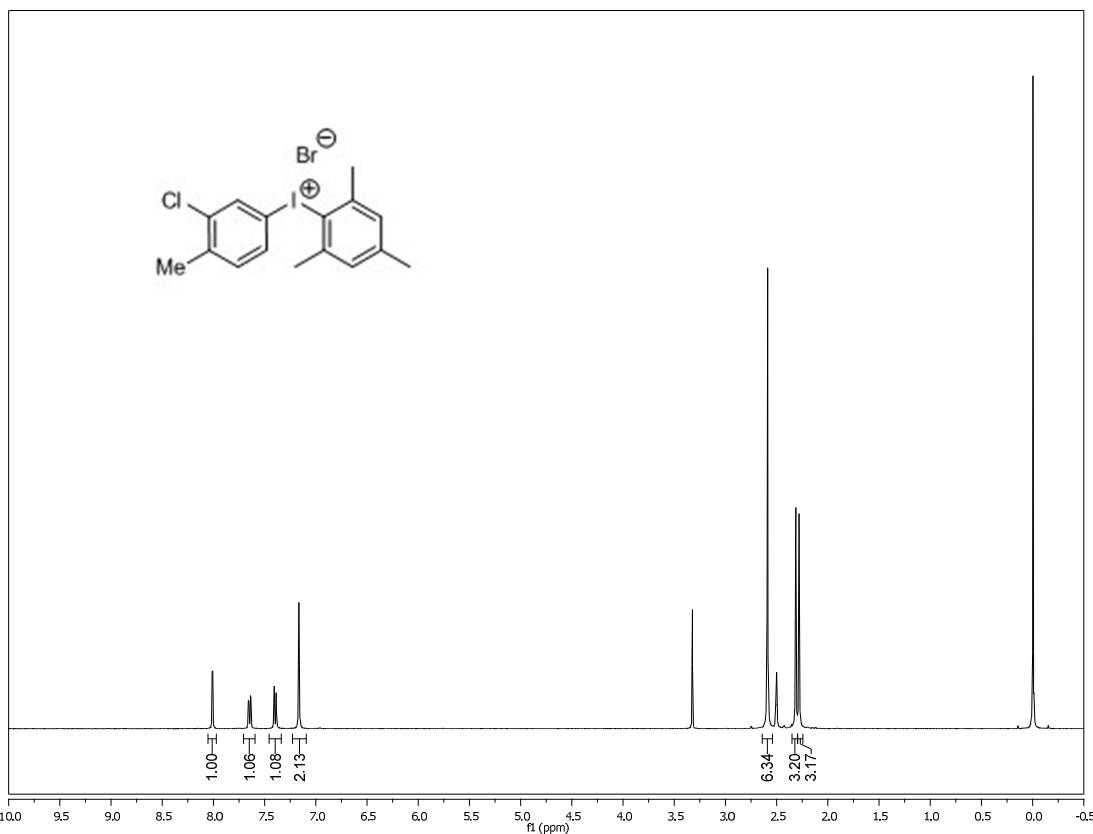
<sup>1</sup>H NMR spectrum of 1i at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1i at 100 MHz in DMSO-d<sub>6</sub> at 298K

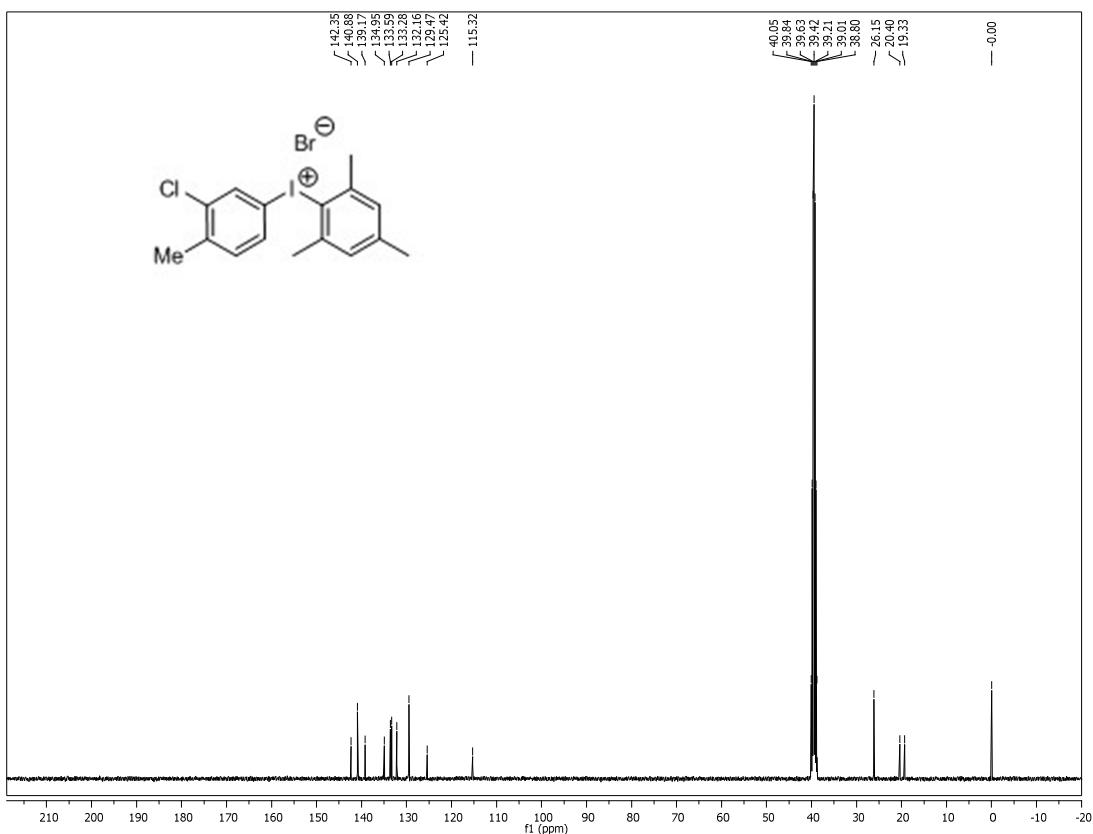
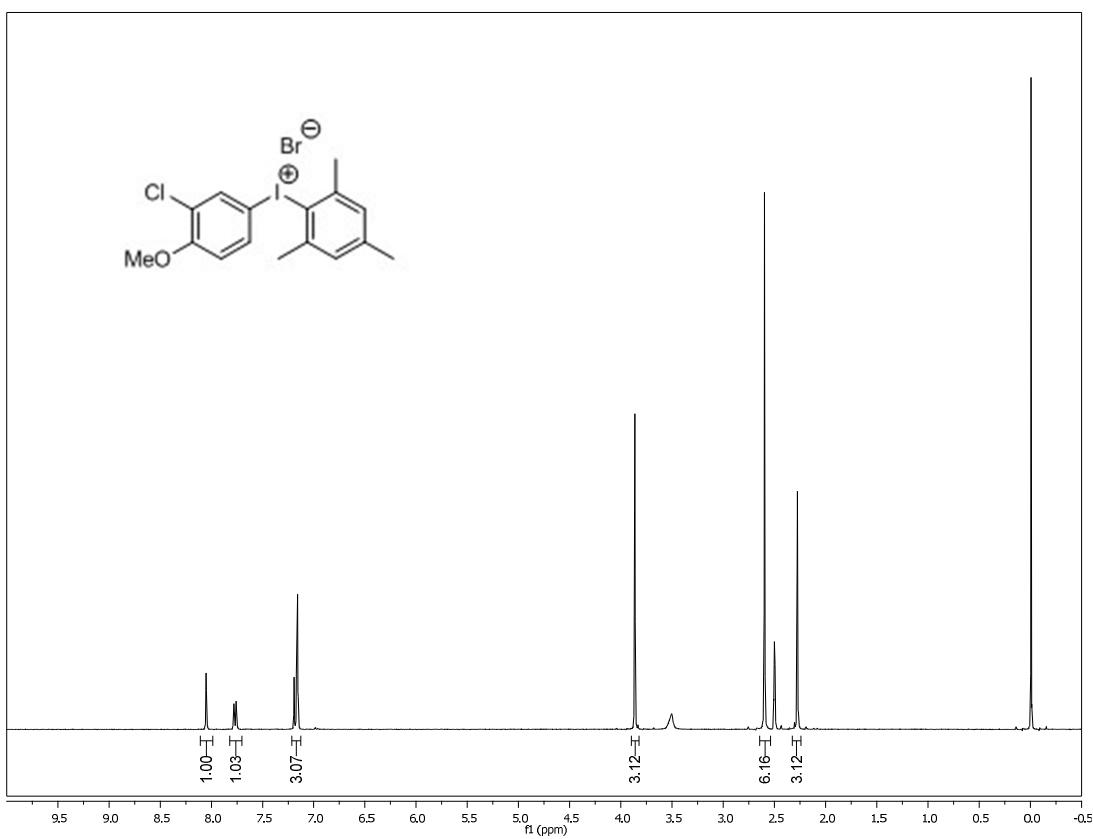
<sup>19</sup>F NMR spectrum of 1i at 377 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1j at 400 MHz in DMSO-d<sub>6</sub> at 298K

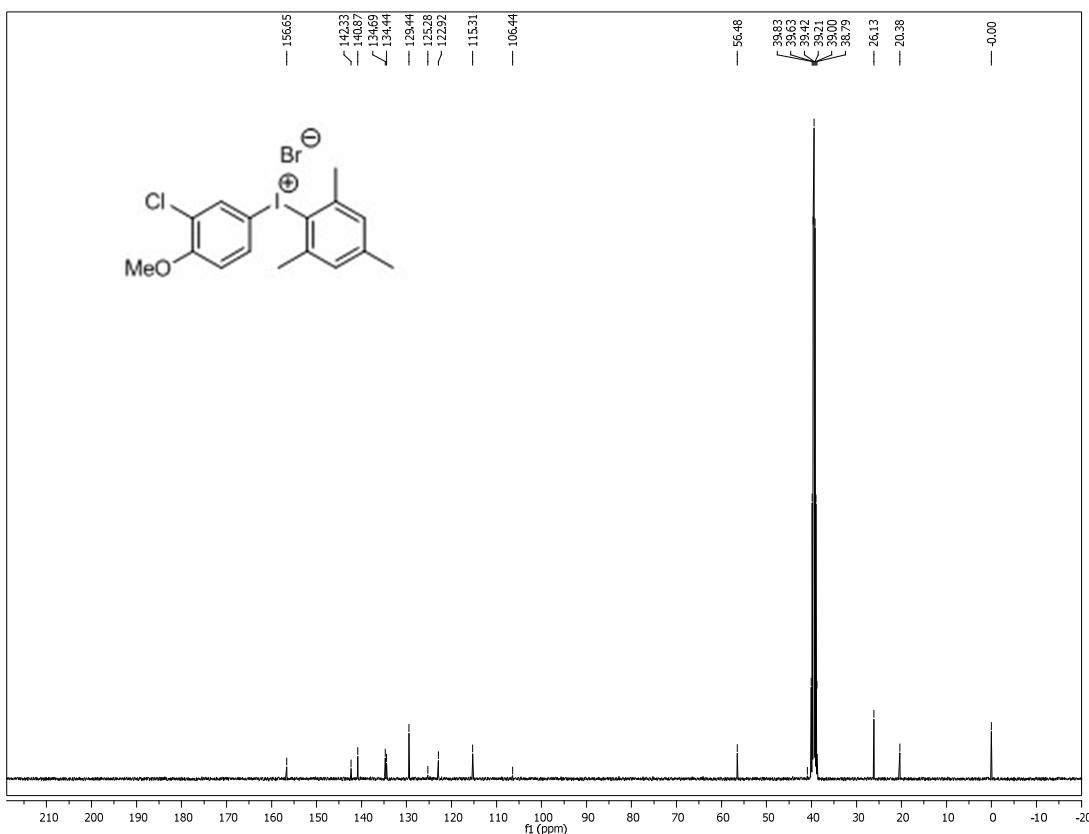
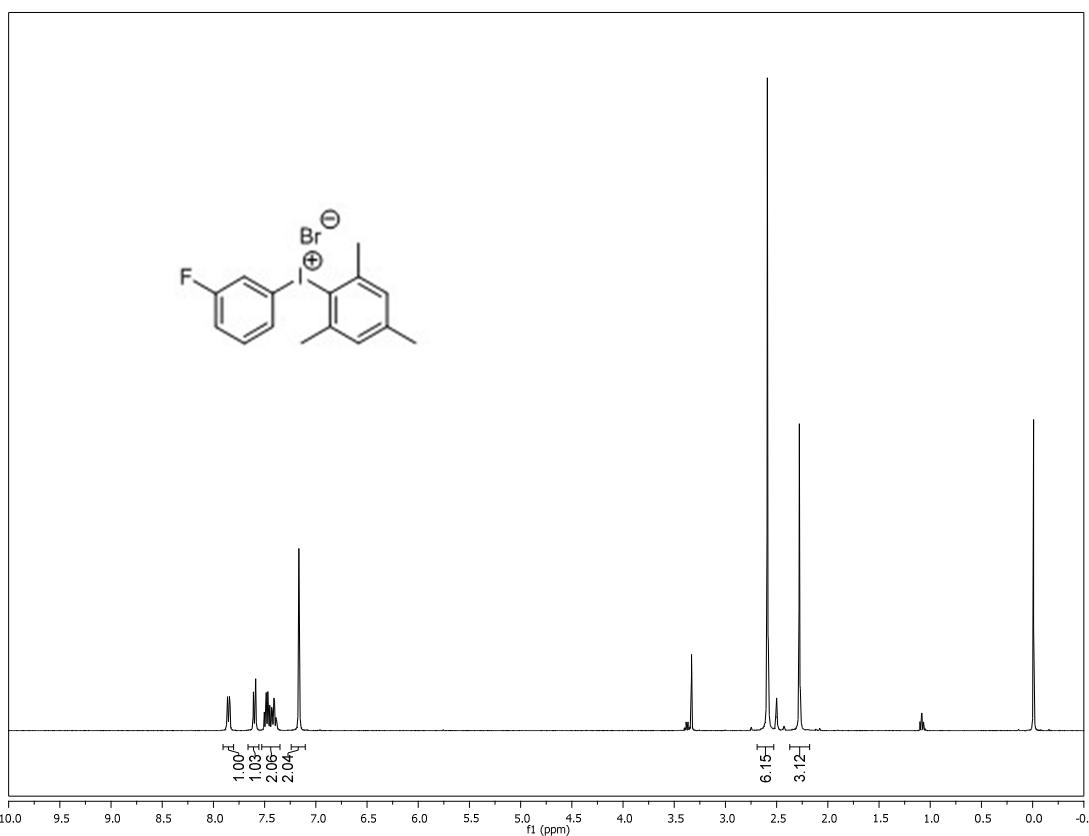
<sup>13</sup>C NMR spectrum of 1j at 100 MHz in DMSO-d<sub>6</sub> at 298K

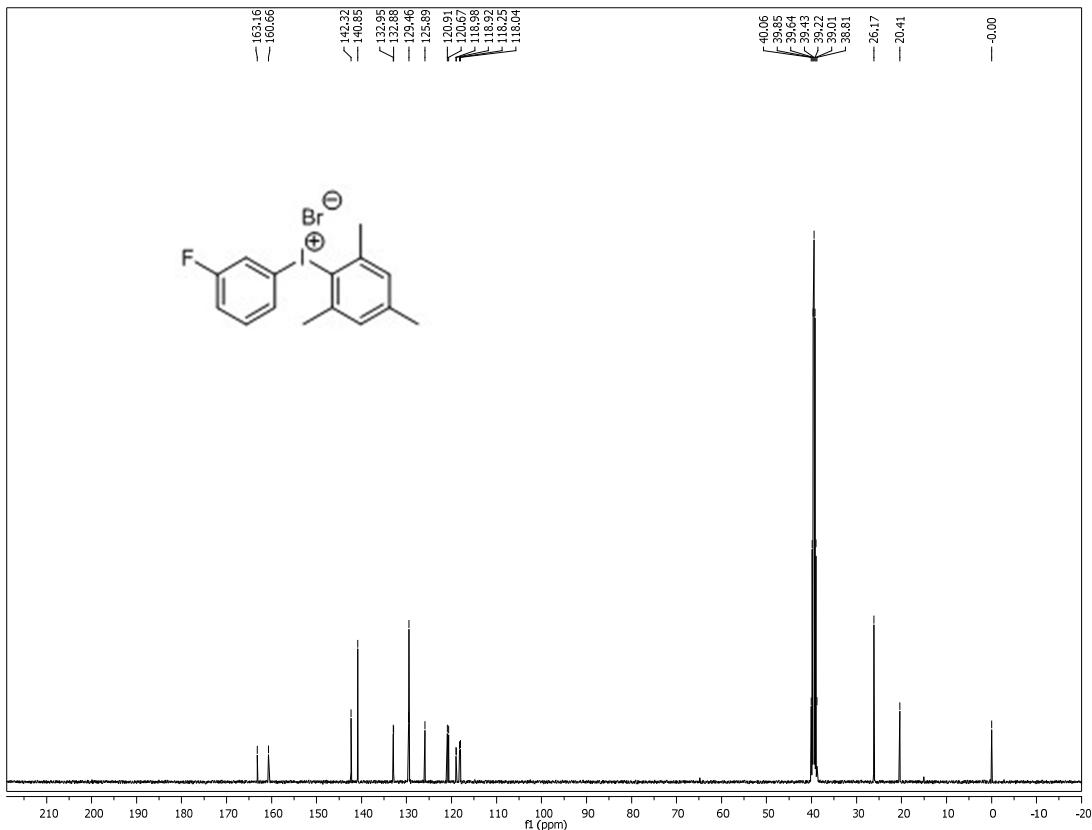
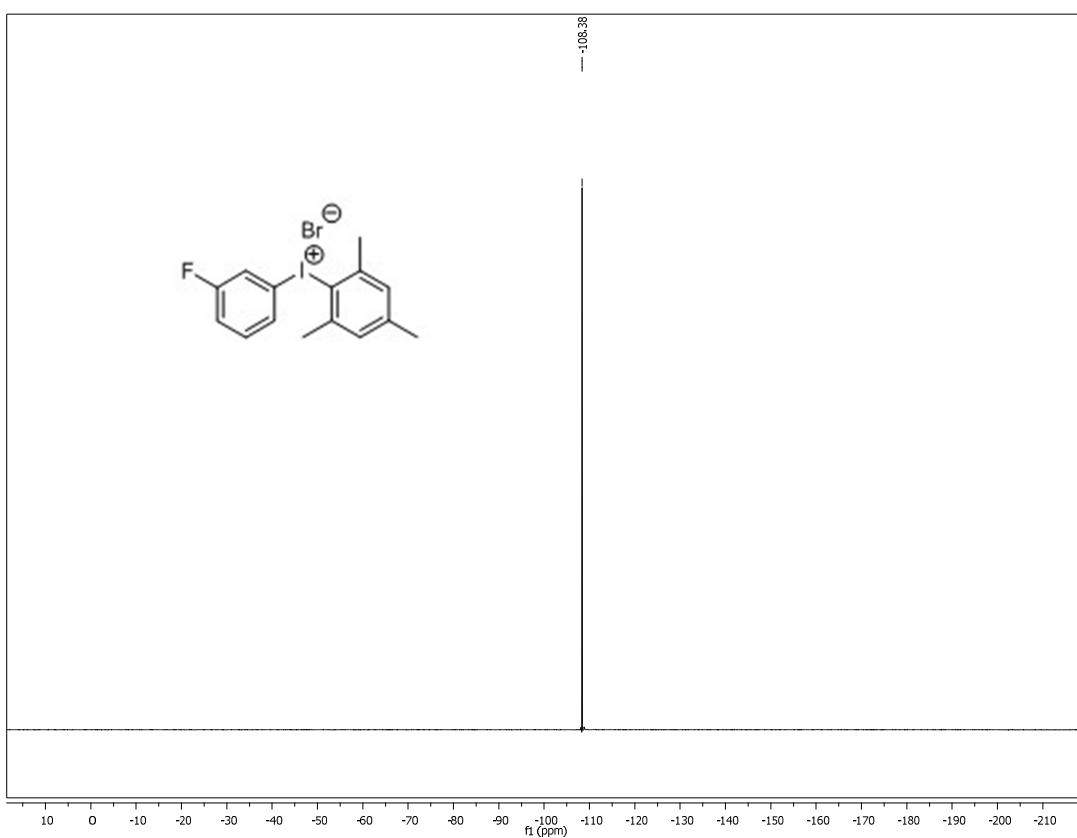


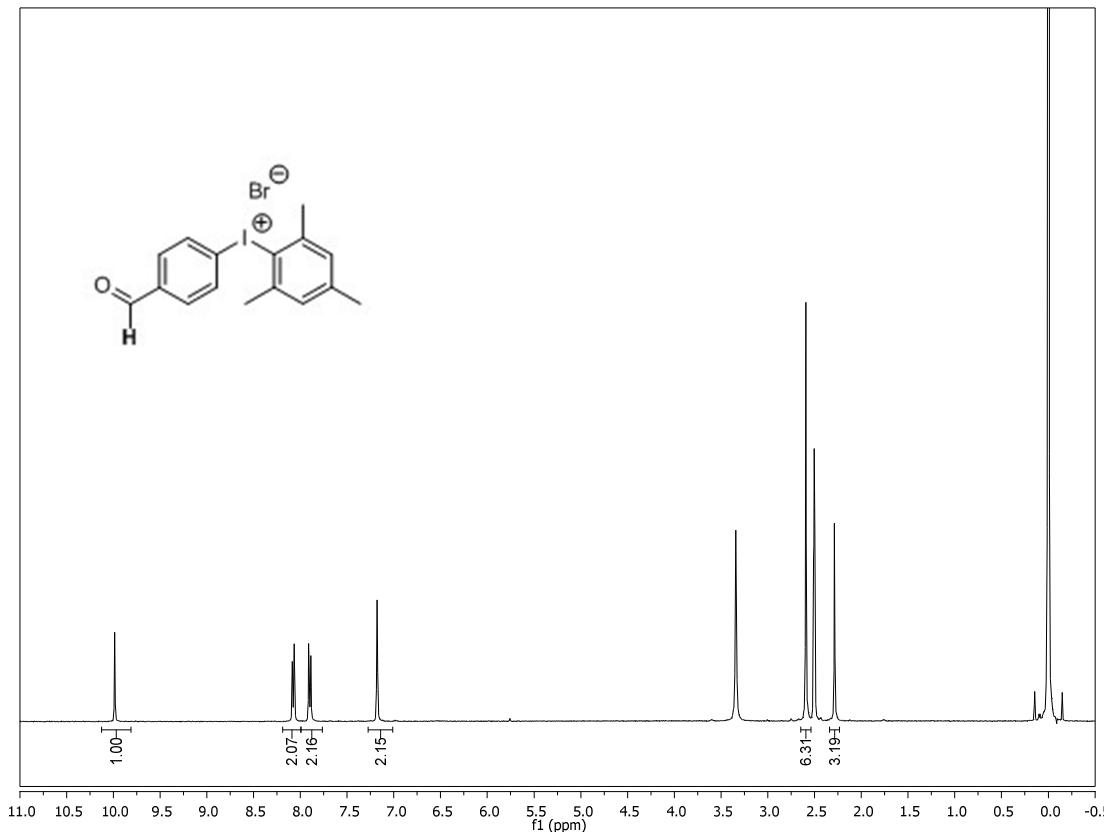
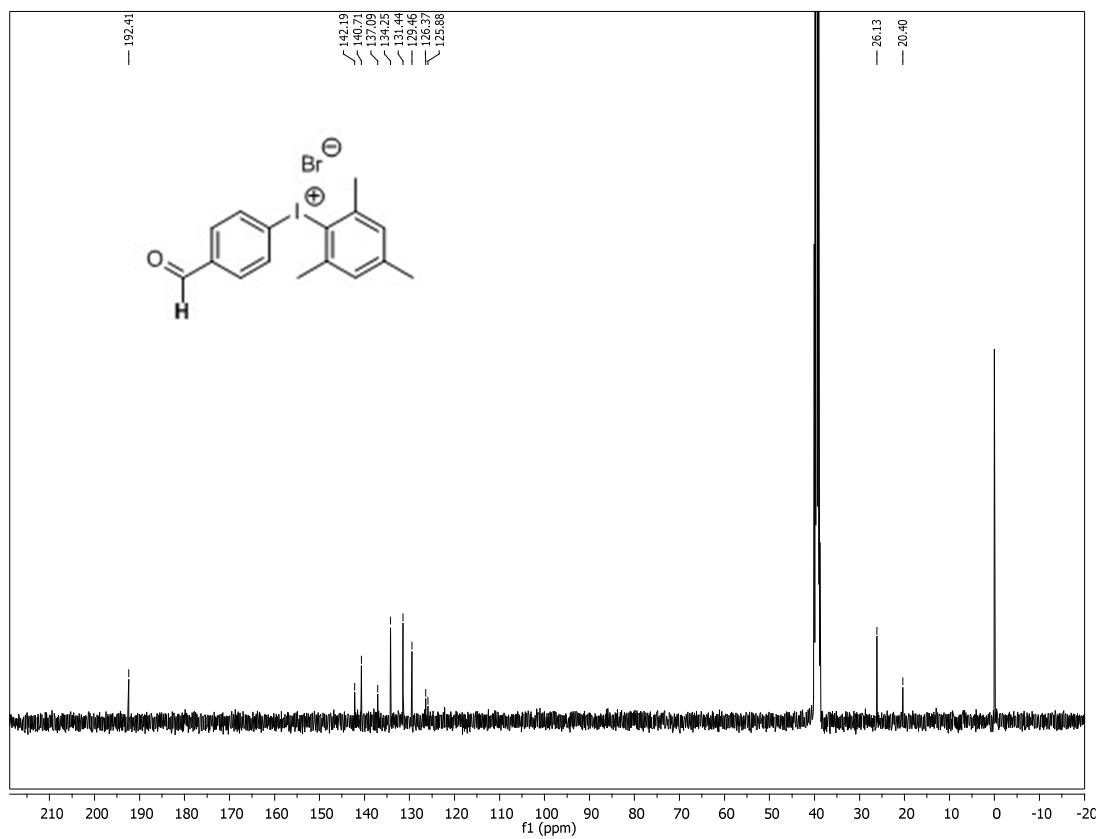
<sup>1</sup>H NMR spectrum of 1k at 400 MHz in DMSO-*d*<sub>6</sub> at 298K

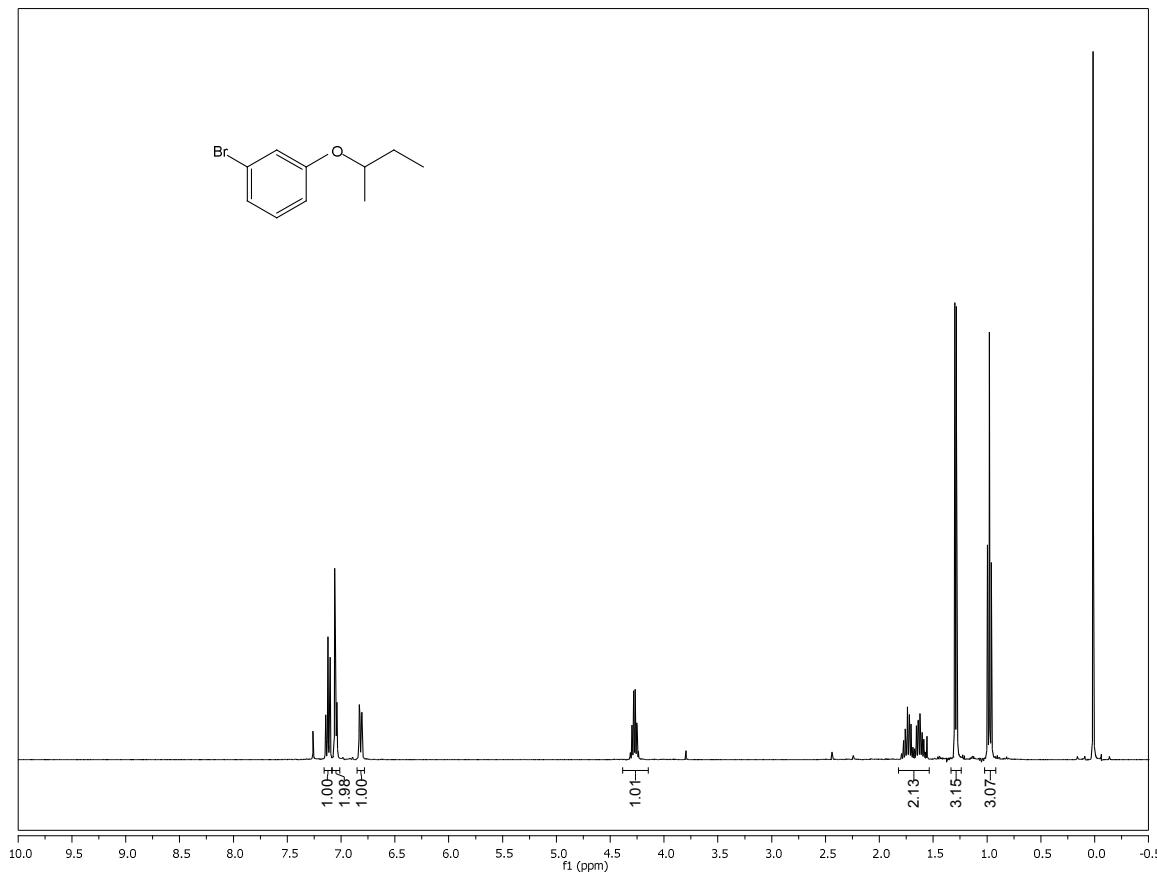
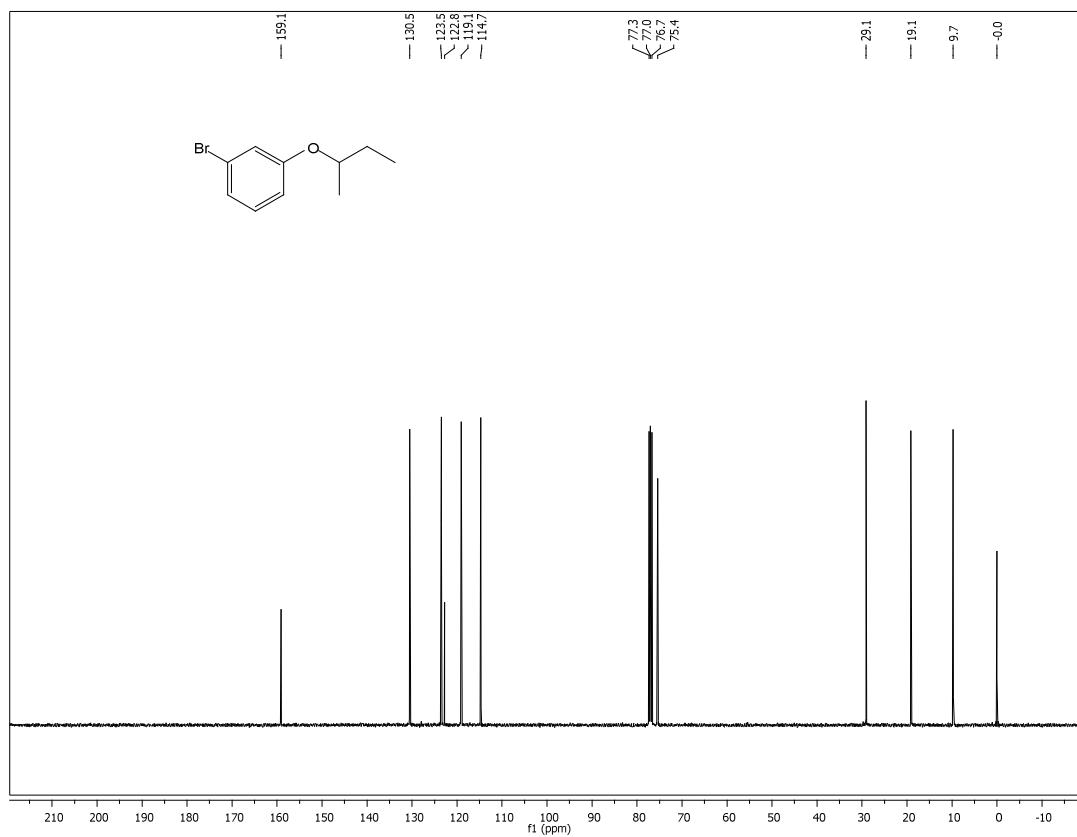


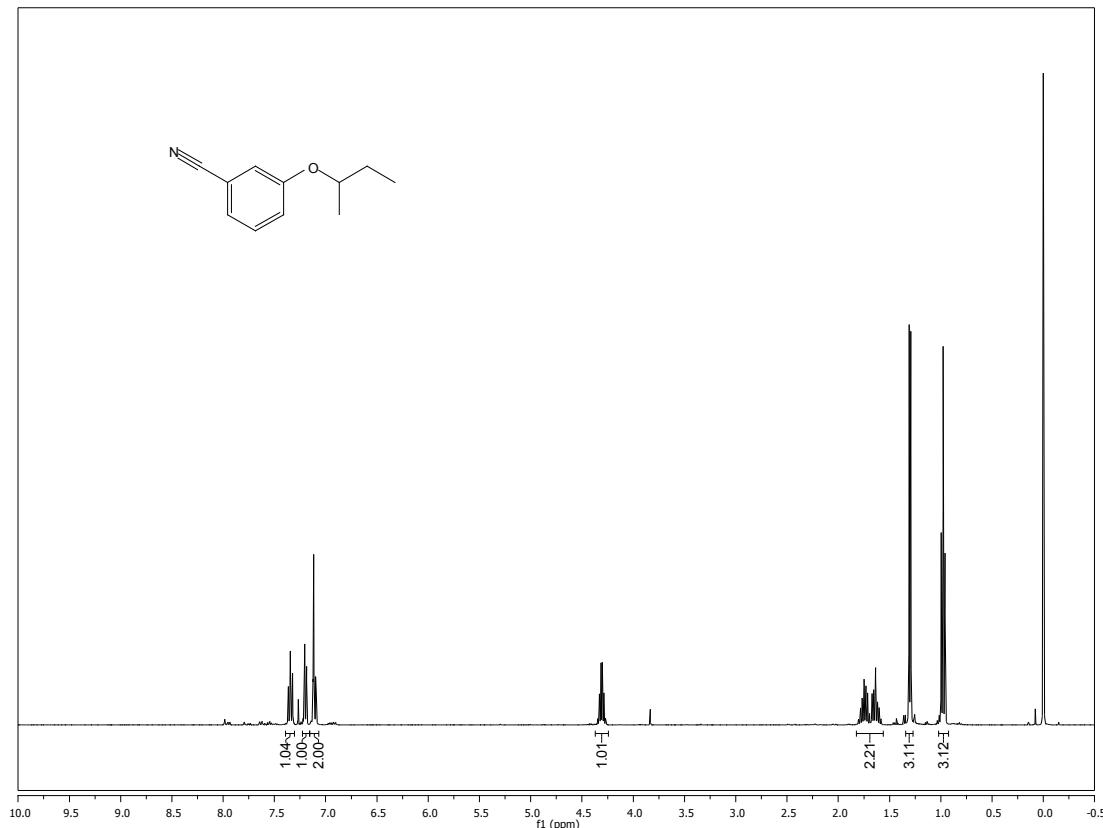
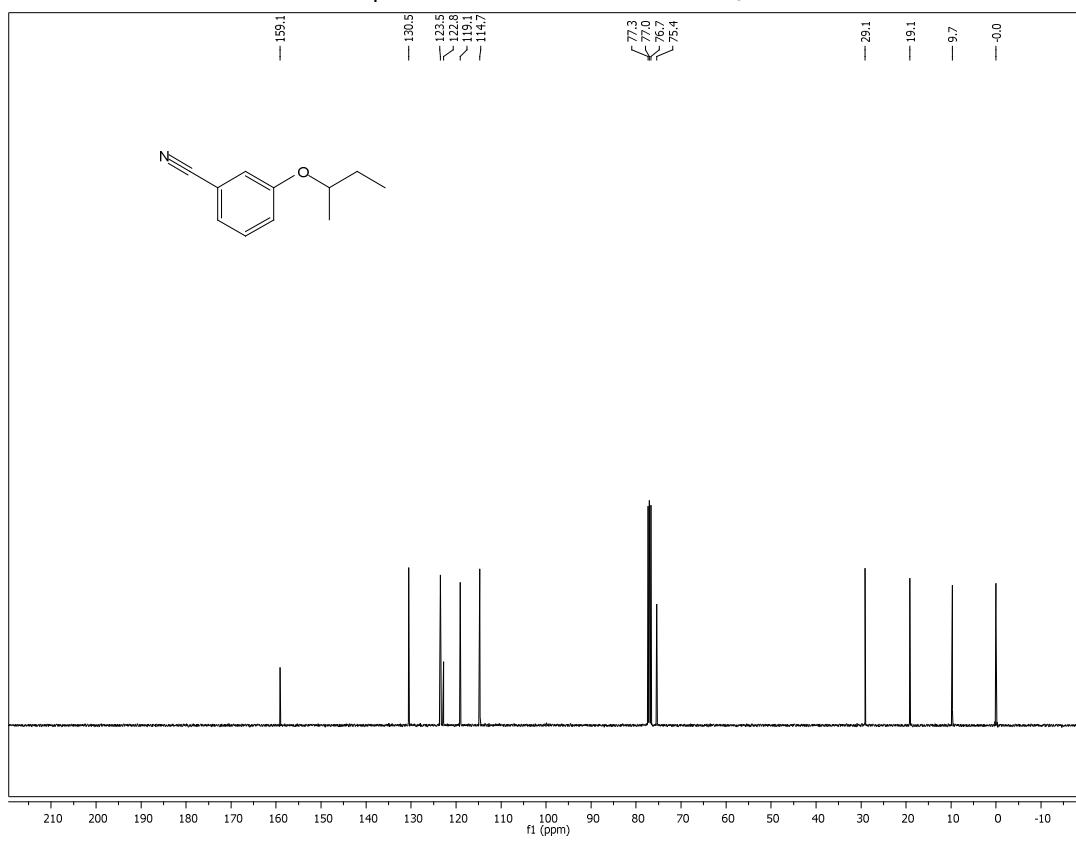
<sup>13</sup>C NMR spectrum of 1k at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1l at 400 MHz in DMSO-d<sub>6</sub> at 298K

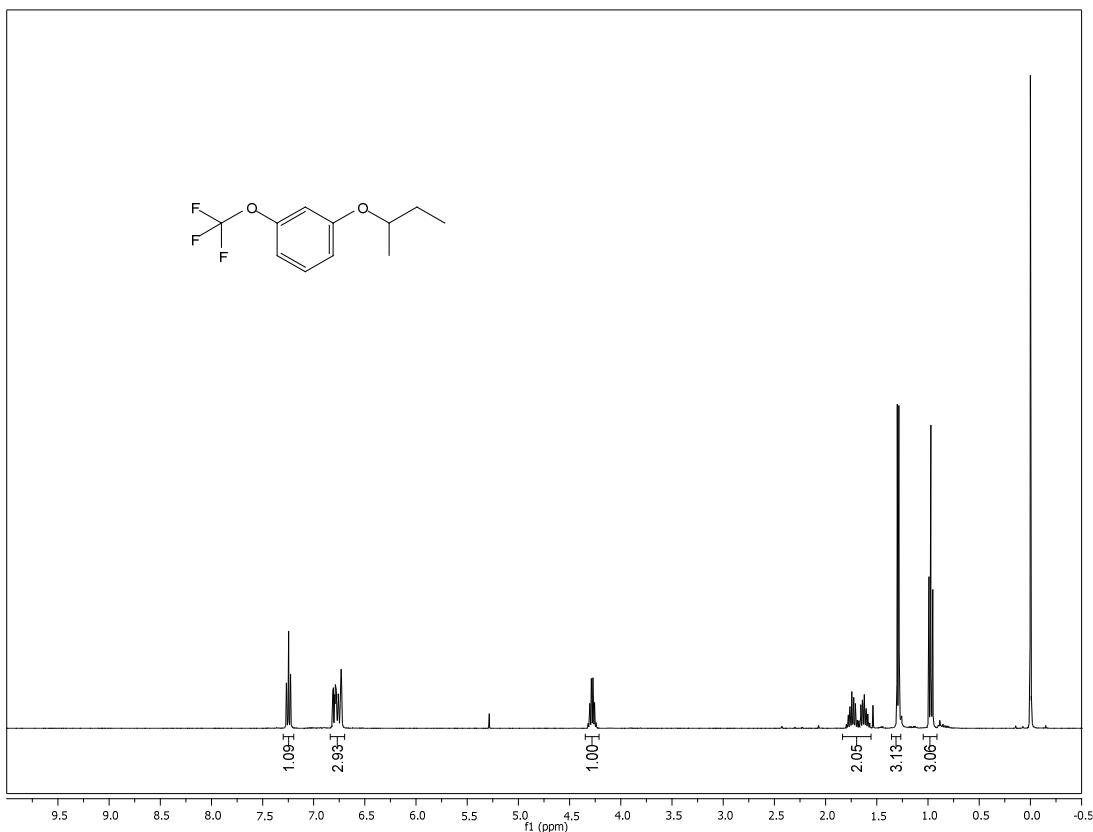
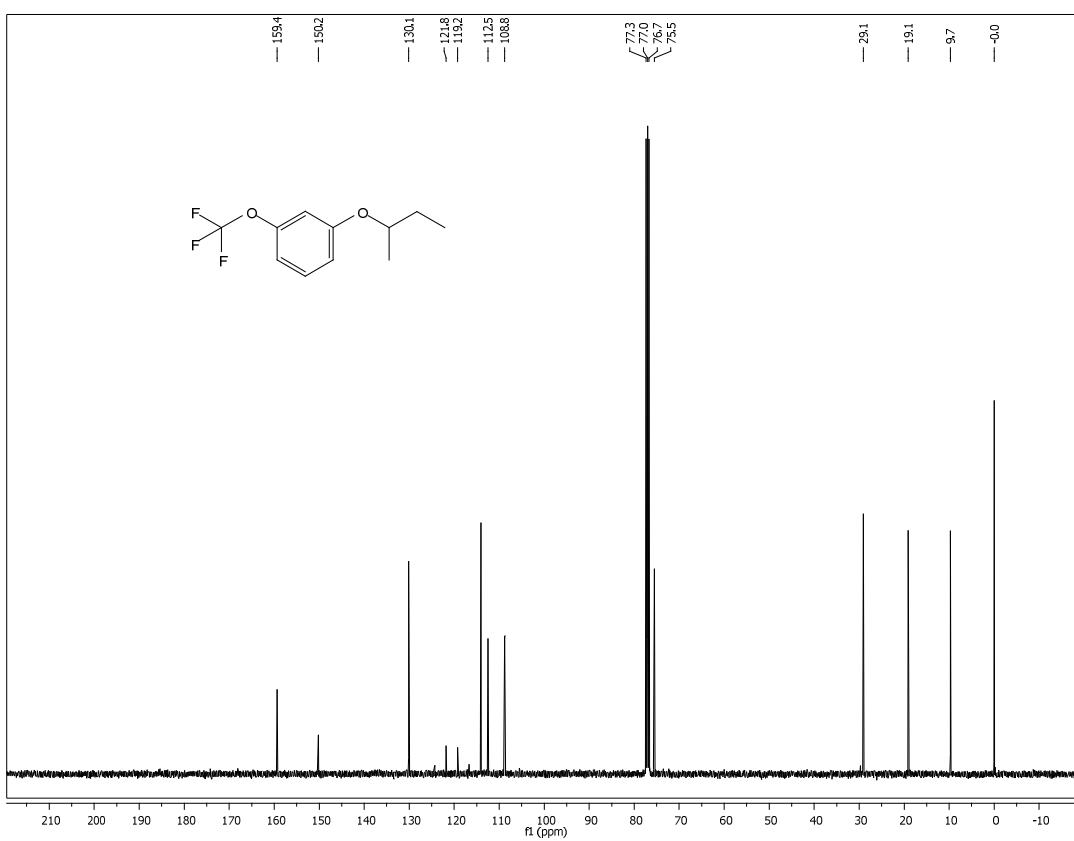
<sup>13</sup>C NMR spectrum of 1l at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>1</sup>H NMR spectrum of 1m at 400 MHz in DMSO-d<sub>6</sub> at 298K

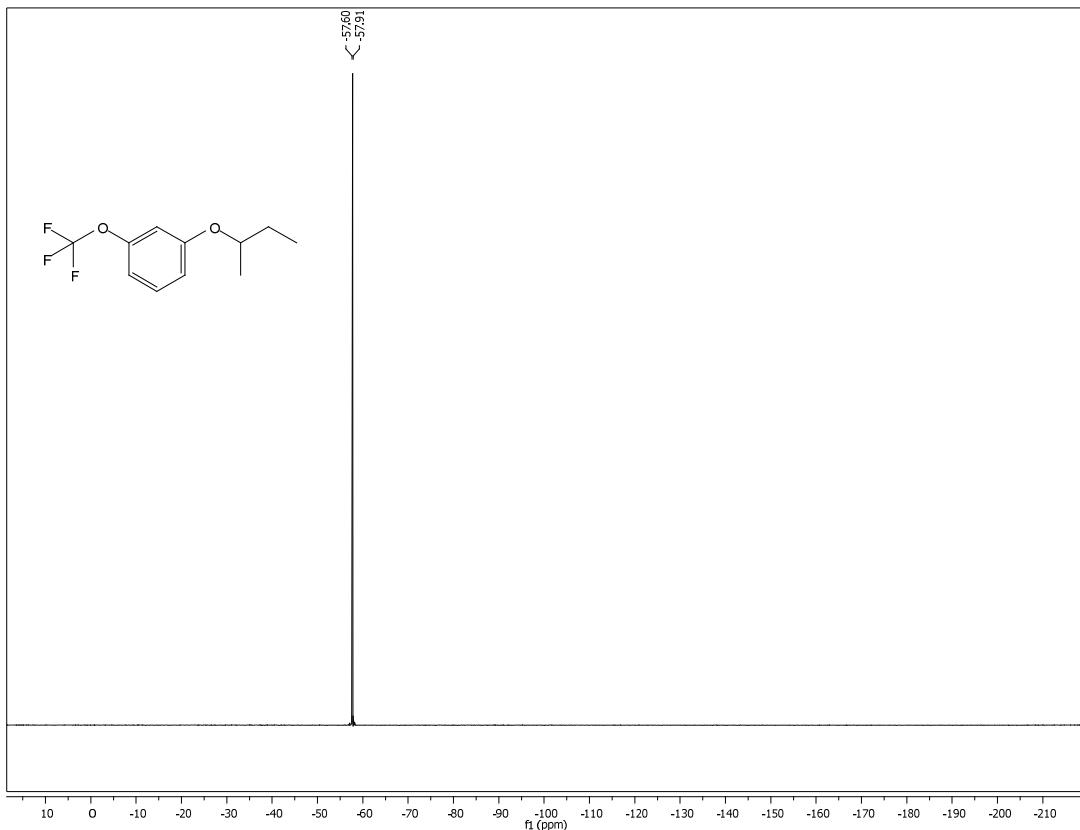
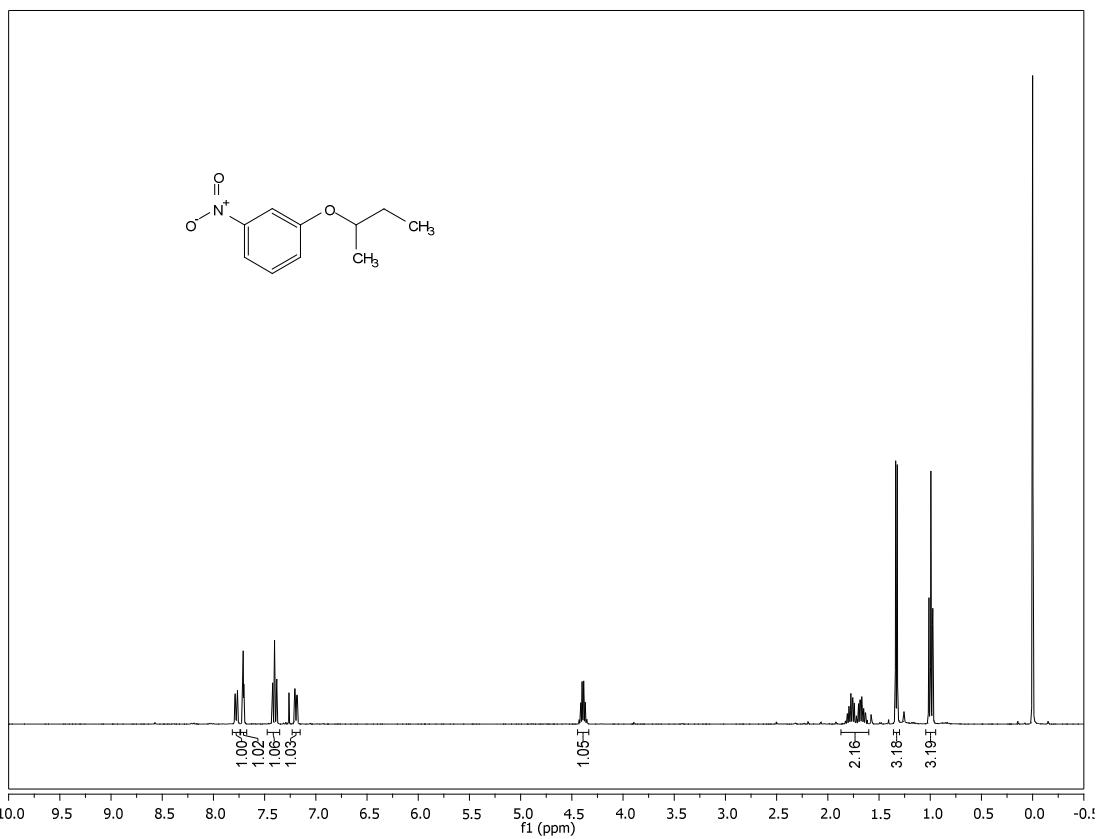
<sup>13</sup>C NMR spectrum of 1m at 100 MHz in DMSO-d<sub>6</sub> at 298K<sup>19</sup>F NMR spectrum of 1m at 377 MHz in DMSO-d<sub>6</sub> at 298K

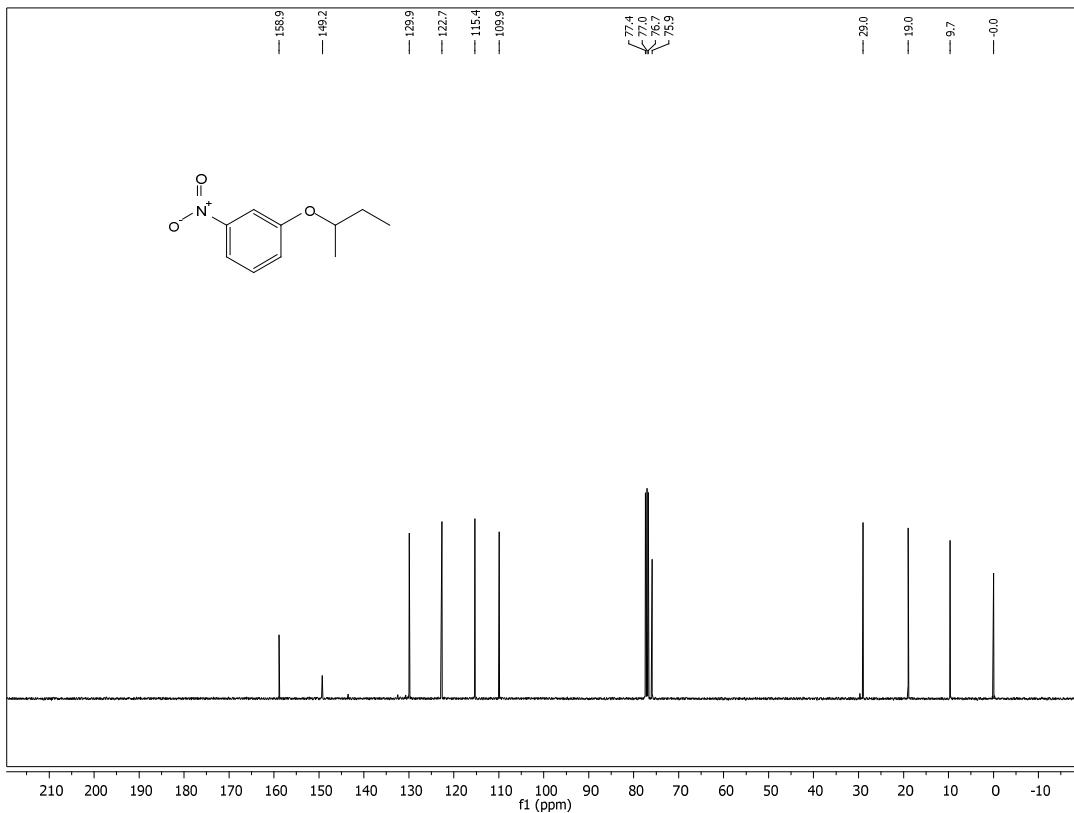
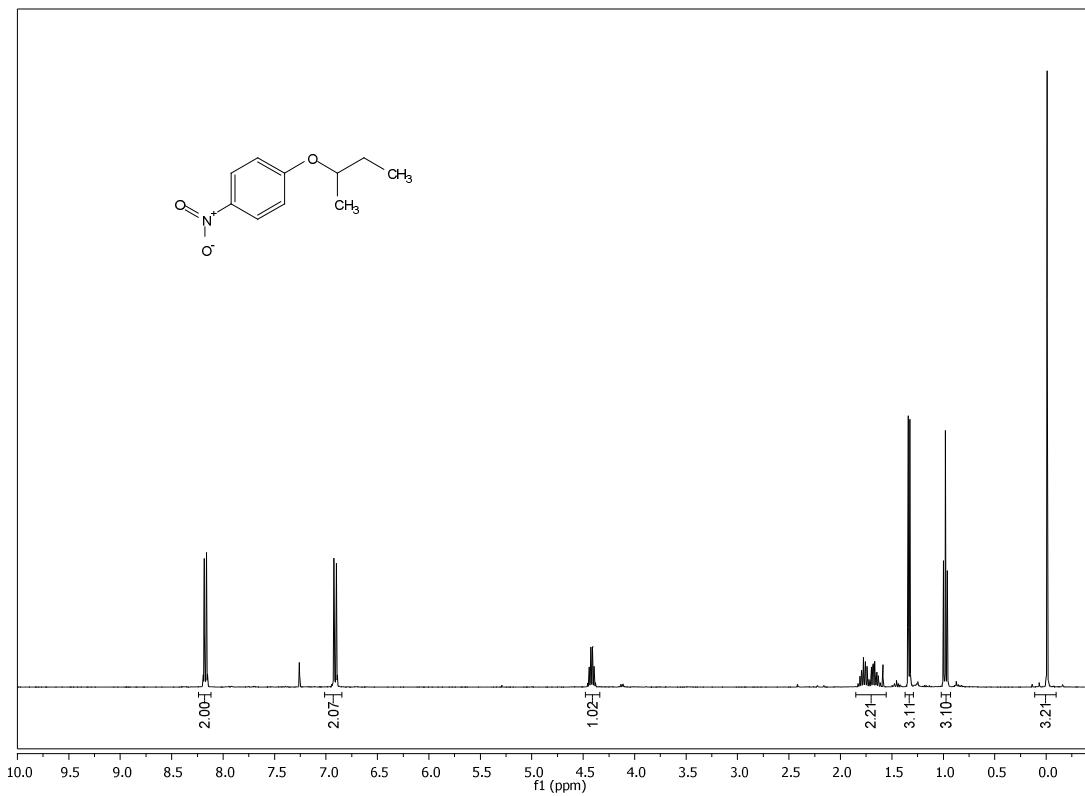
<sup>1</sup>H NMR spectrum of 1n at 400 MHz in DMSO-d<sub>6</sub> at 298K<sup>13</sup>C NMR spectrum of 1n at 100 MHz in DMSO-d<sub>6</sub> at 298K

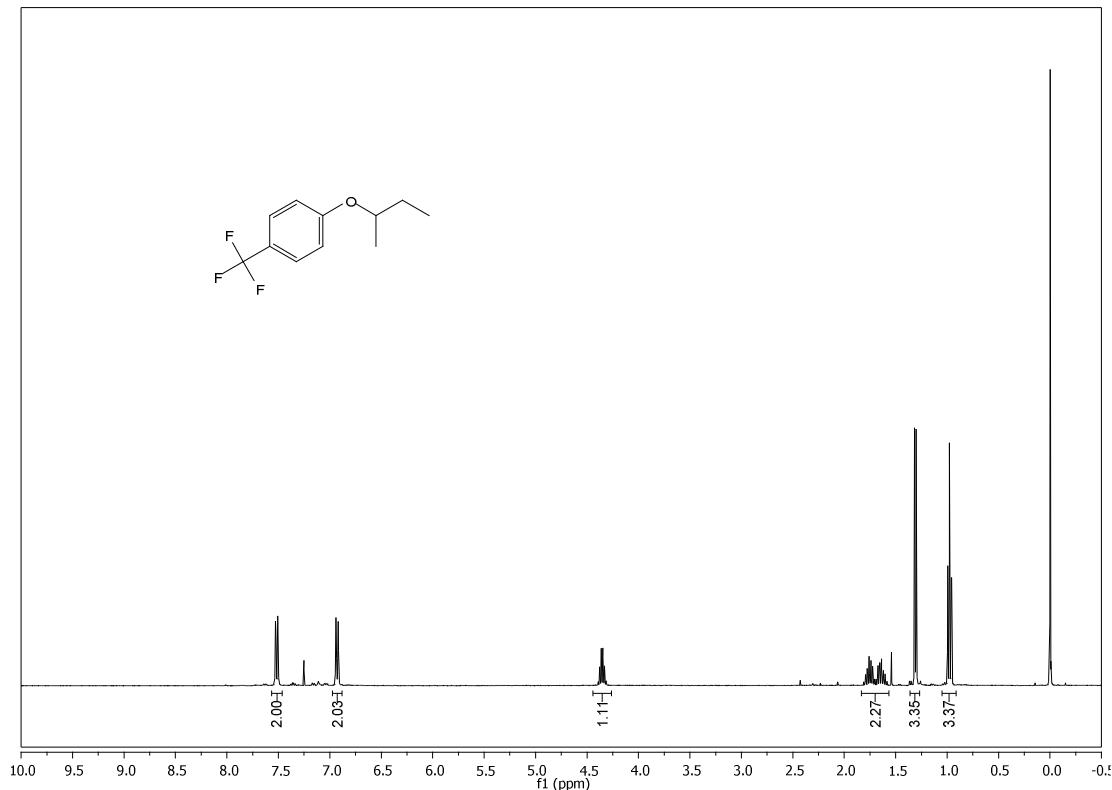
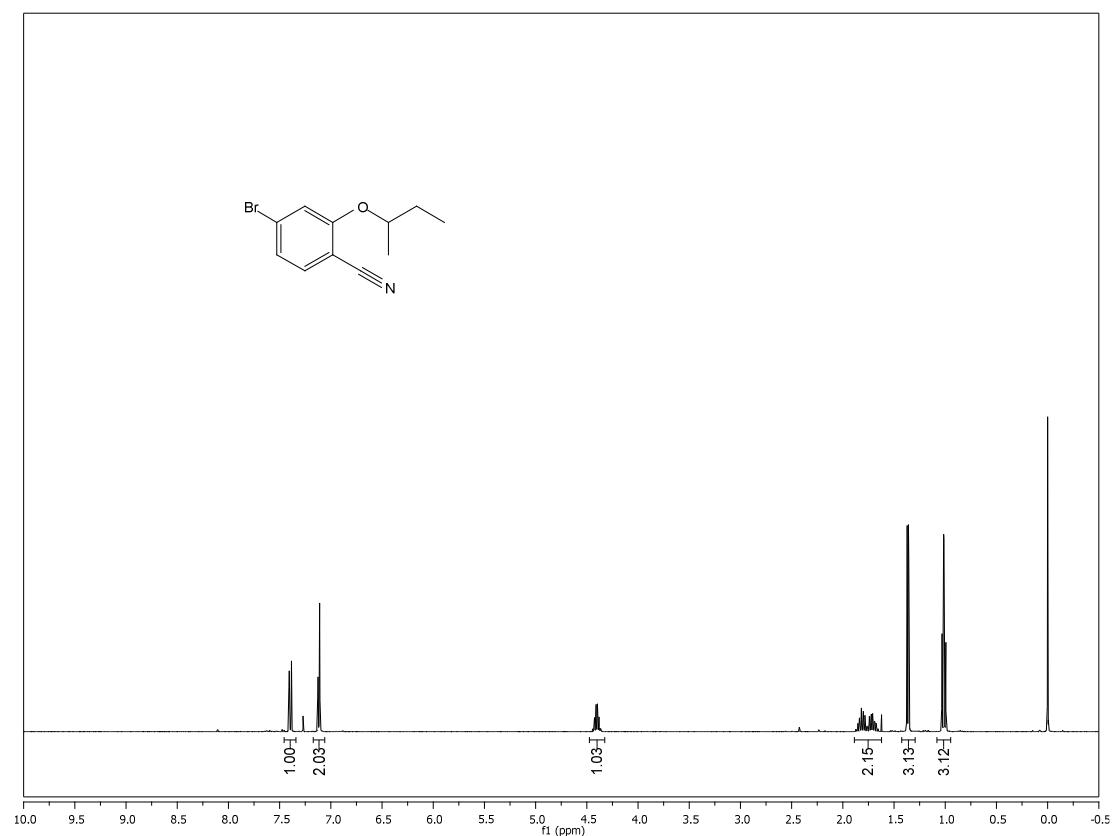
<sup>1</sup>H NMR spectrum of 3aa at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3aa at 100 MHz in CDI<sub>3</sub> at 298K

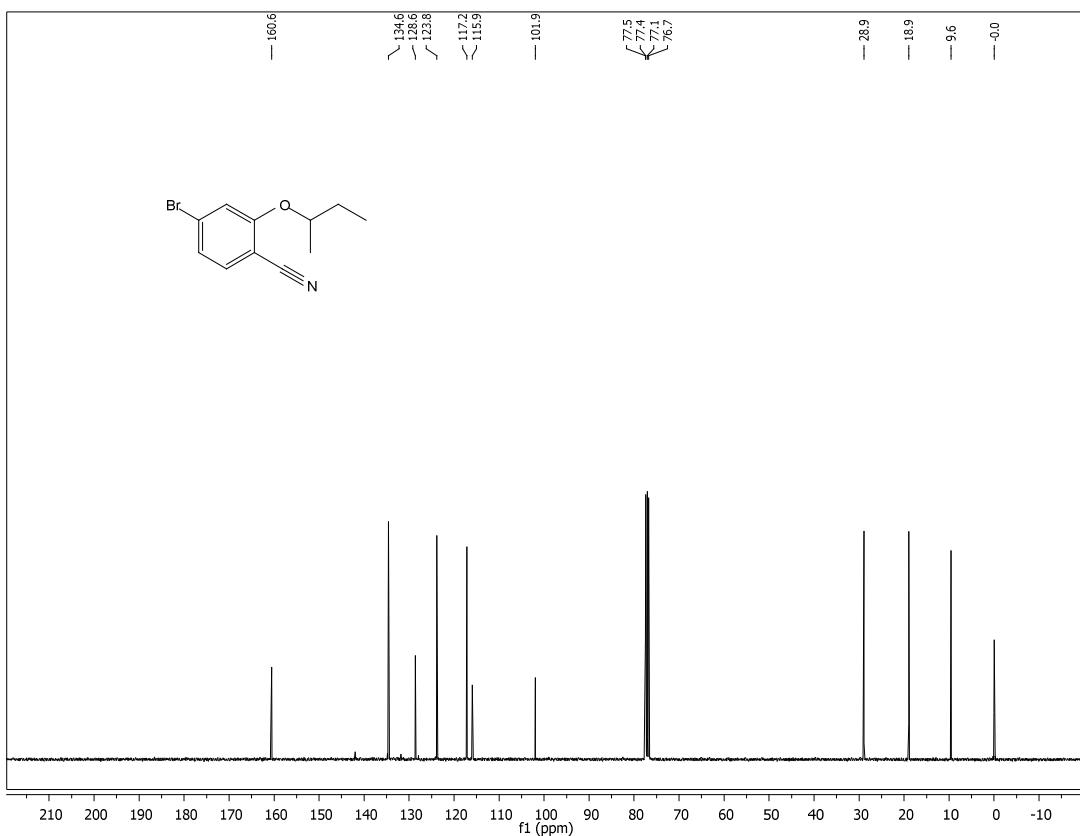
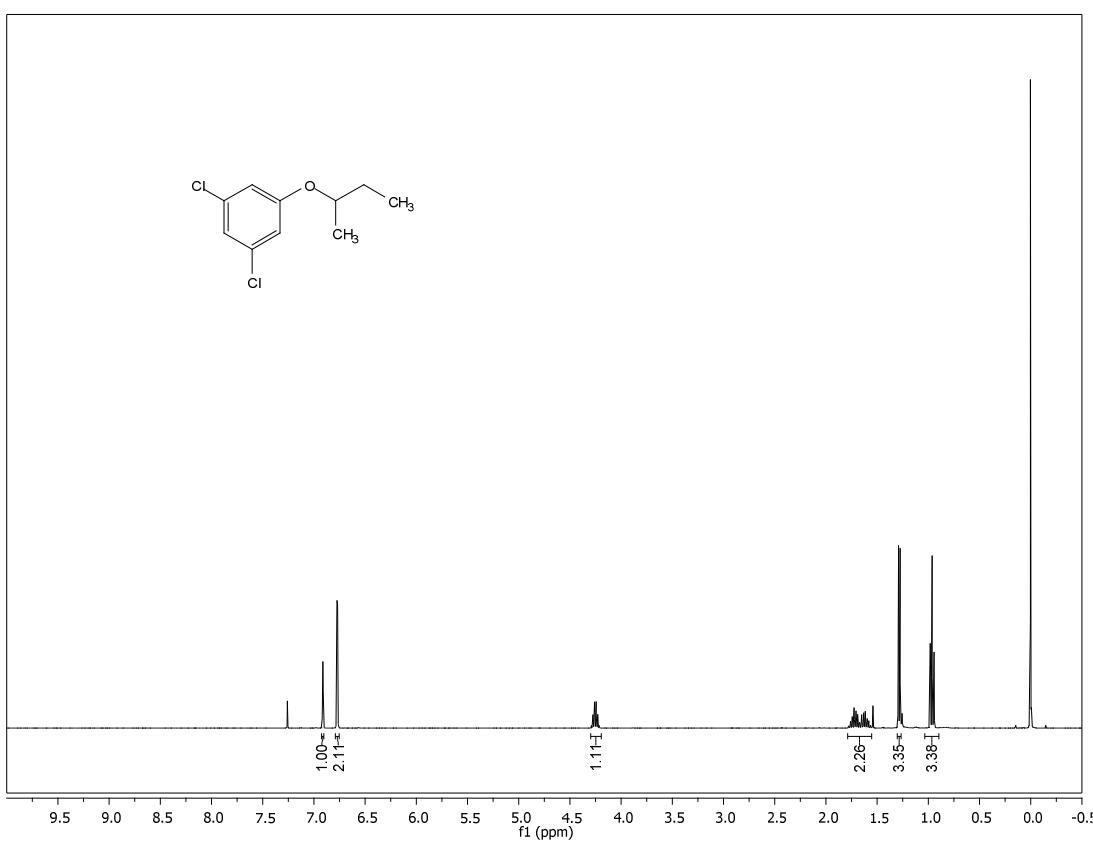
<sup>1</sup>H NMR spectrum of 3ba at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3ba at 100 MHz in CDI<sub>3</sub> at 298K

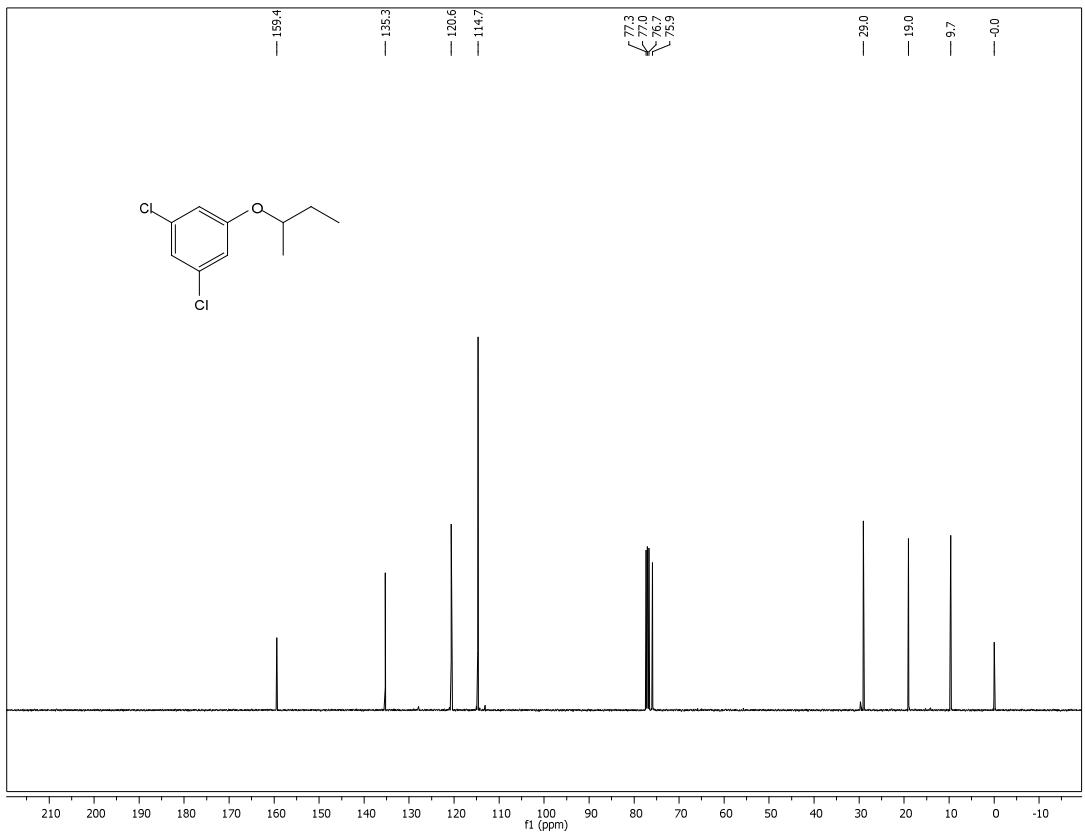
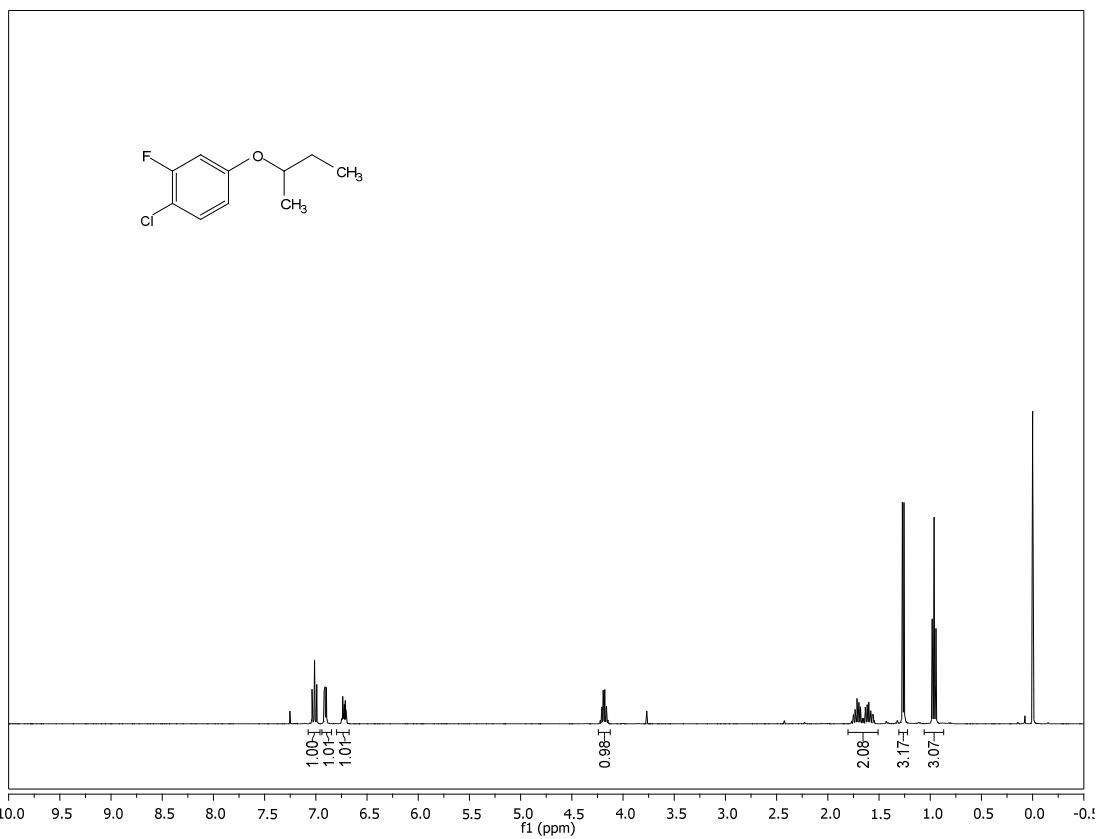
<sup>1</sup>H NMR spectrum of 3ca at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3ca at 100 MHz in CDI<sub>3</sub> at 298K

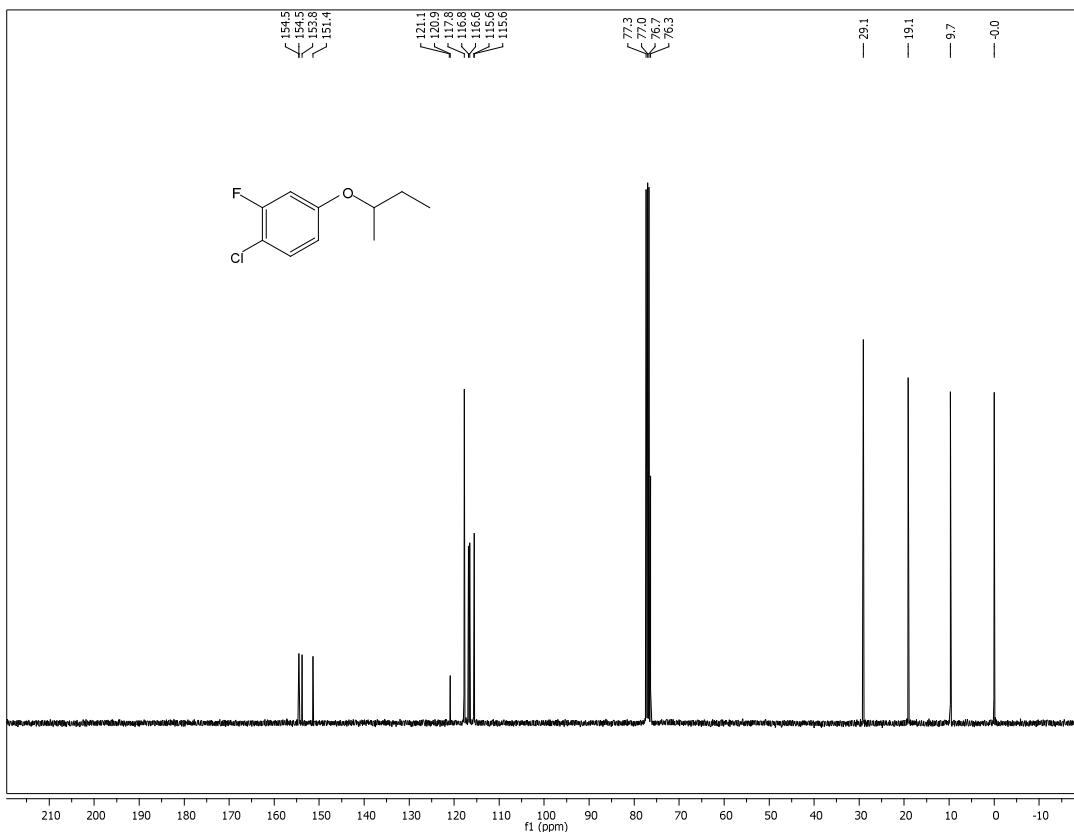
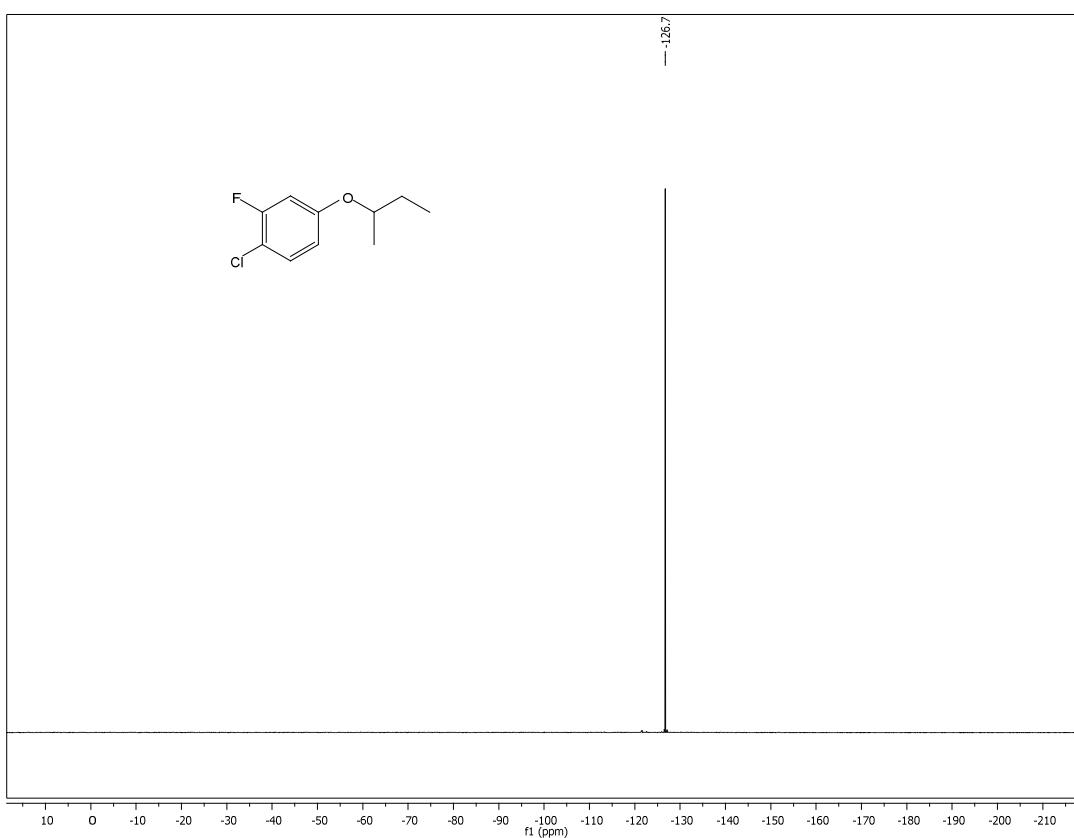
<sup>19</sup>F NMR spectrum of 3ca at 377 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3da at 400 MHz in CDI<sub>3</sub> at 298K

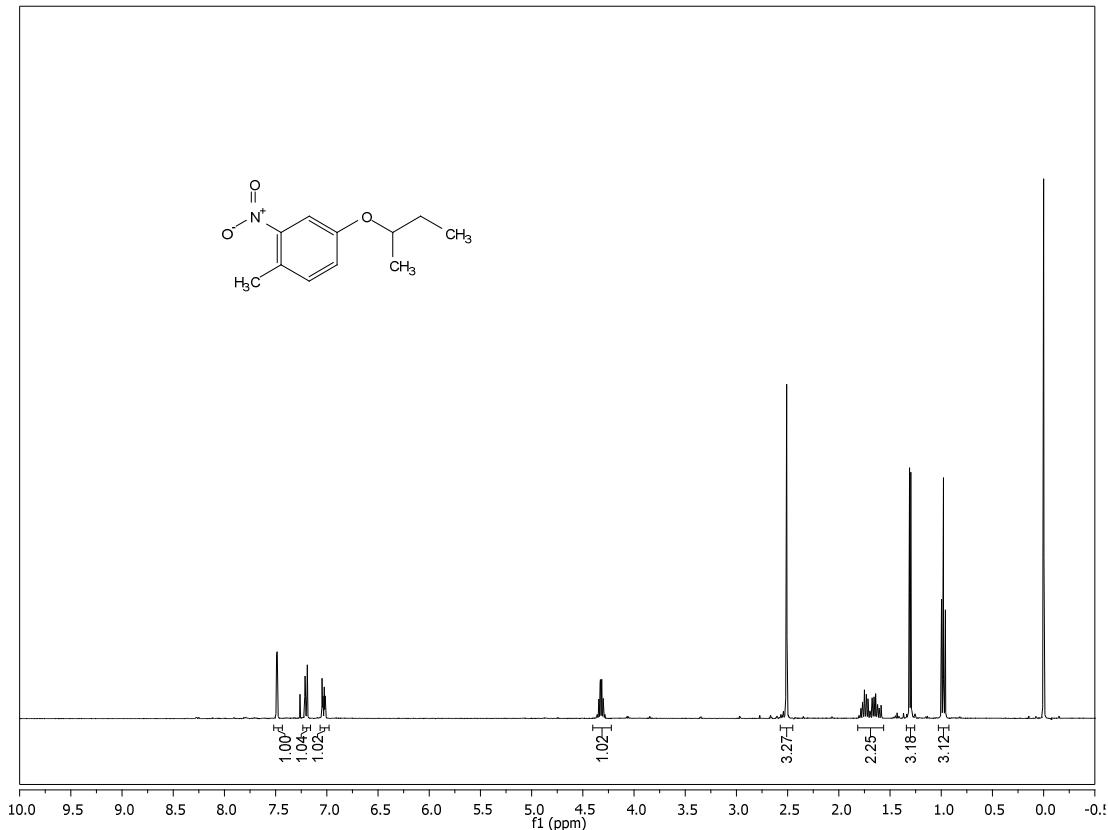
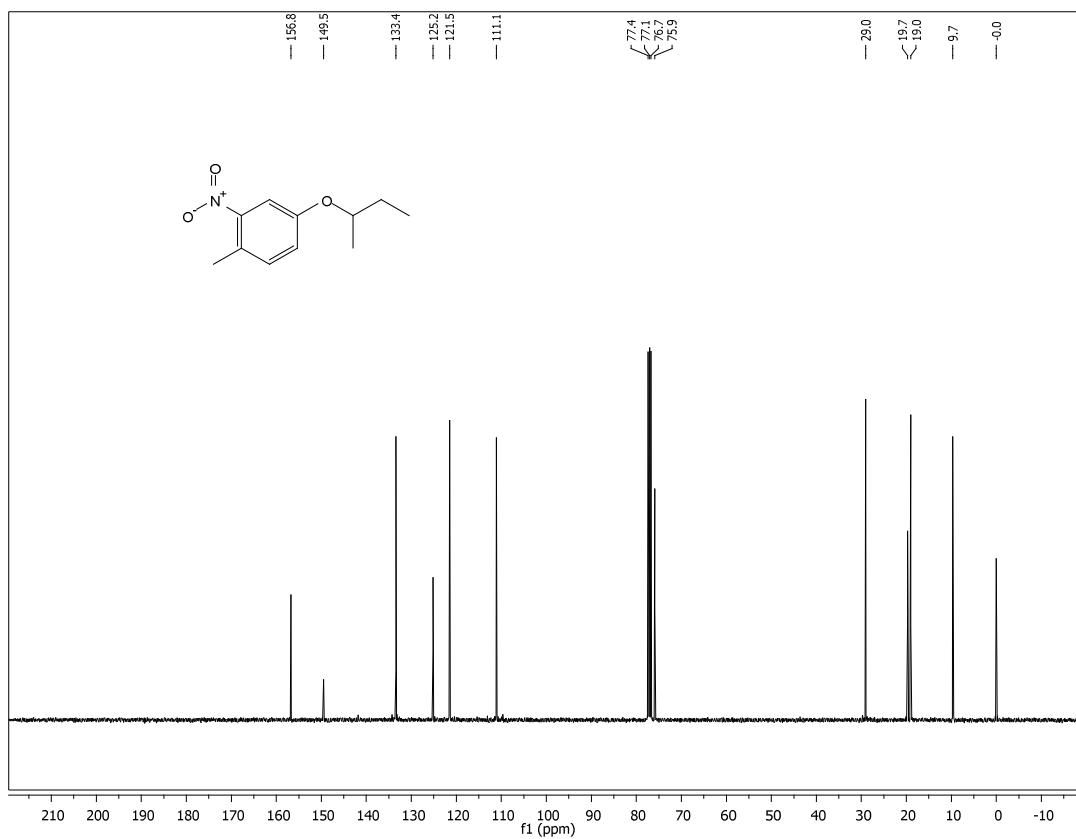
<sup>13</sup>C NMR spectrum of 3da at 100 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3ea at 400 MHz in CDI<sub>3</sub> at 298K

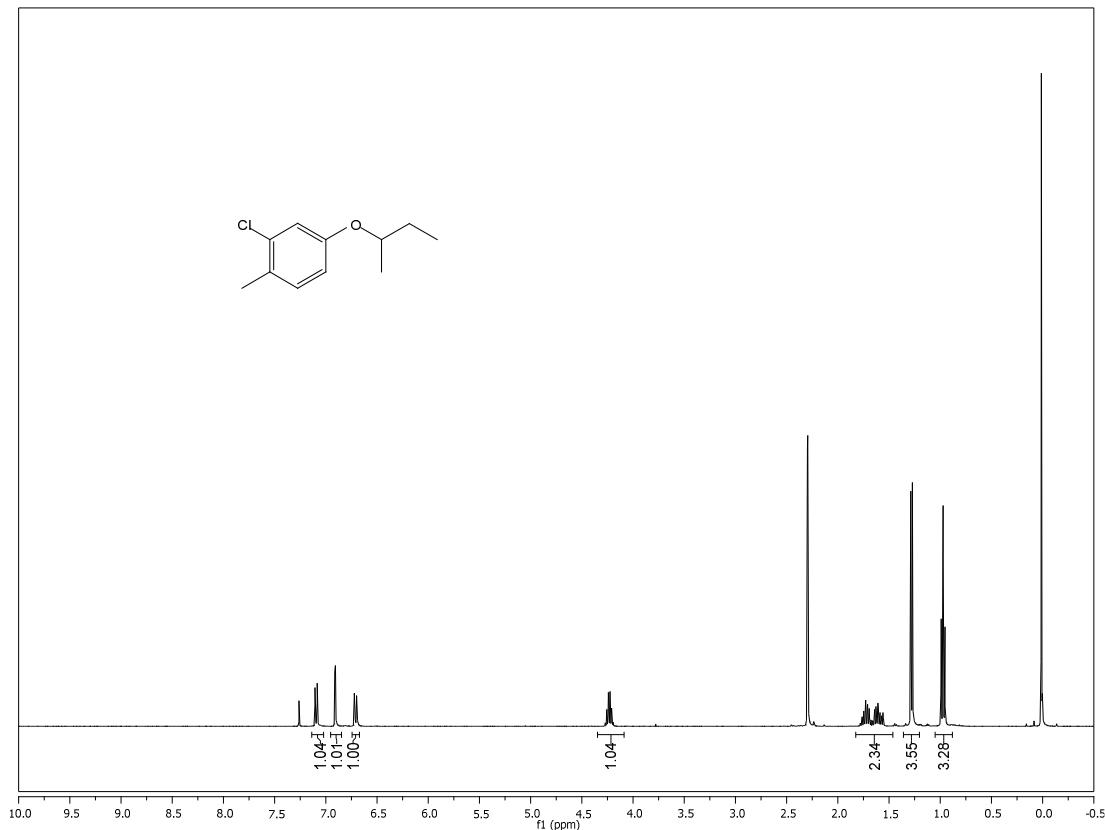
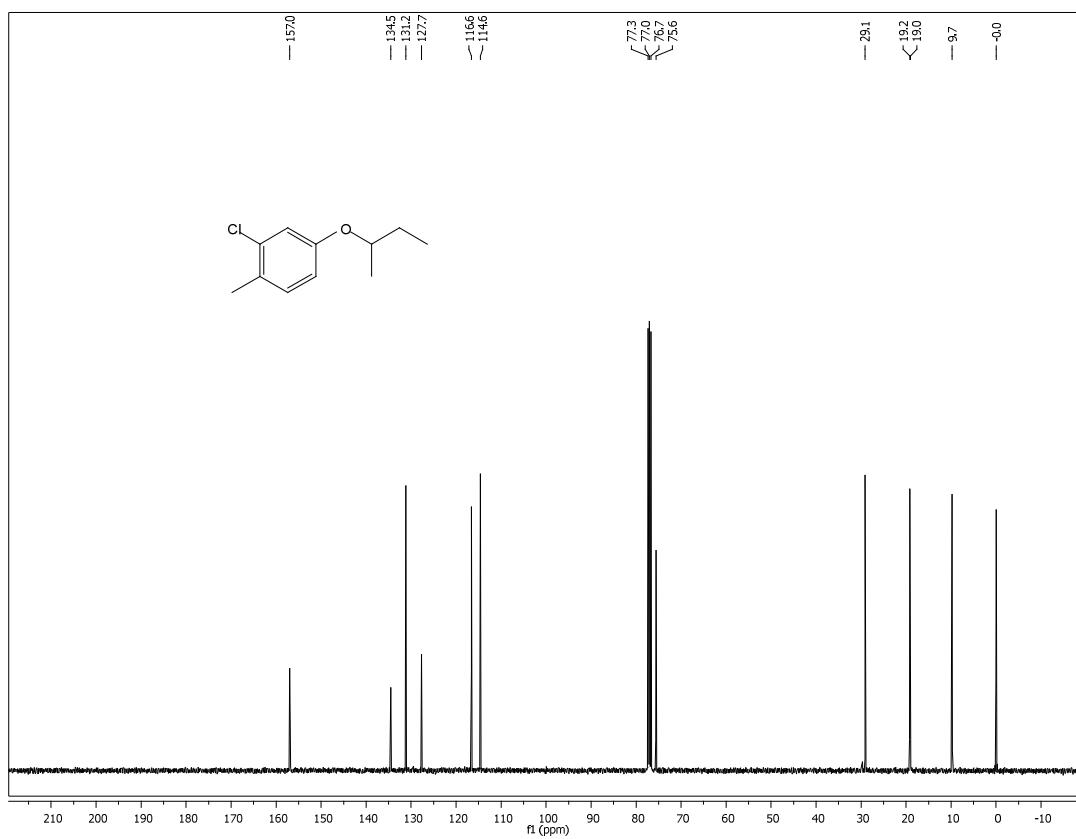
<sup>1</sup>H NMR spectrum of 3fa at 400 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3ga at 400 MHz in CDI<sub>3</sub> at 298K

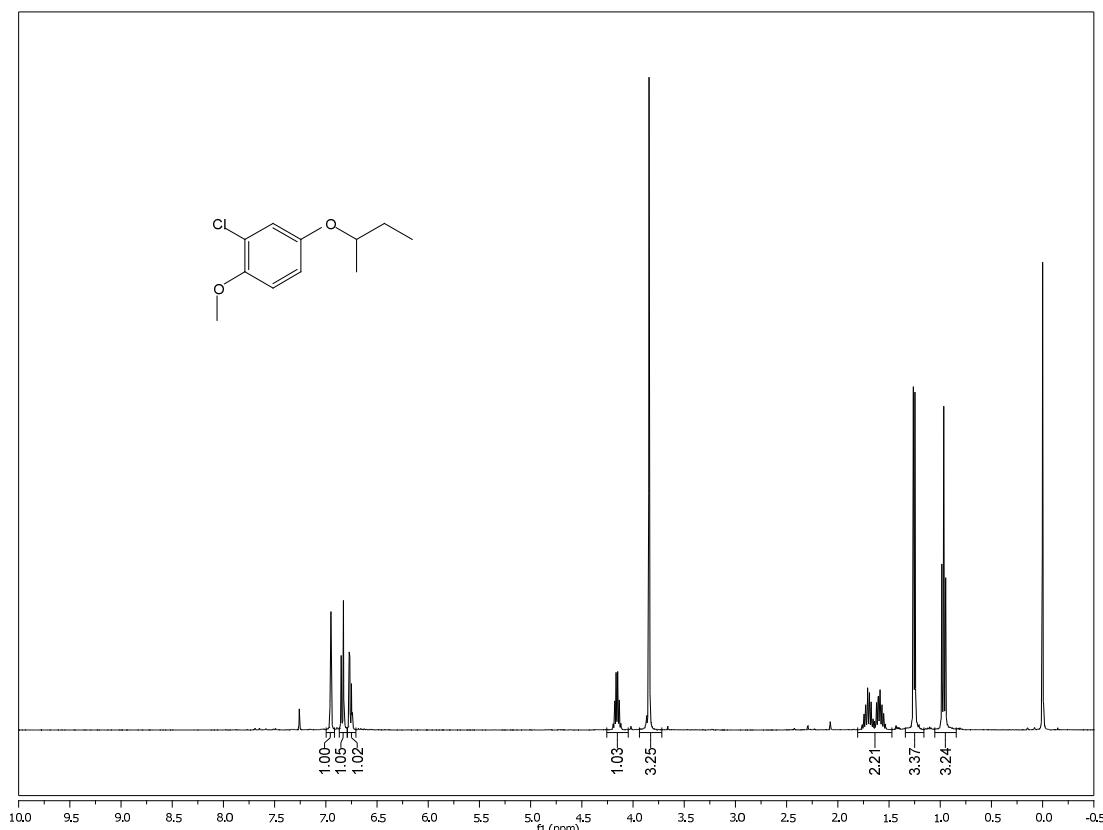
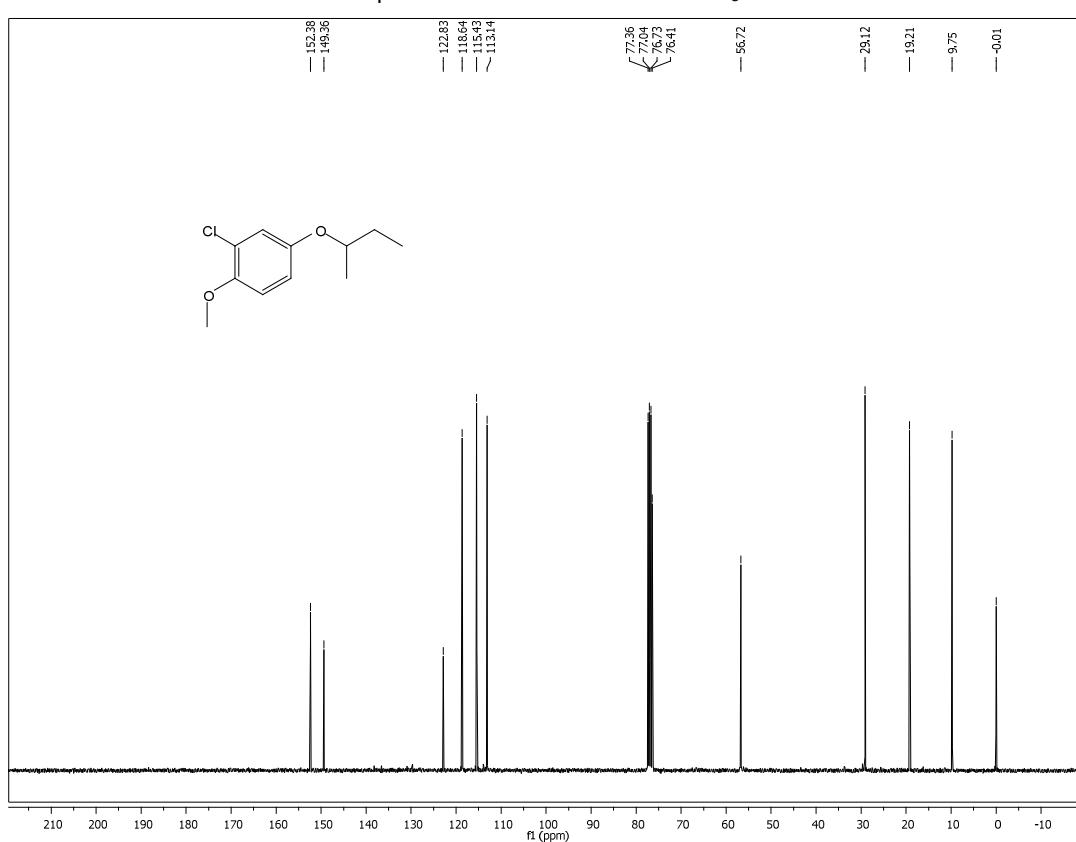
<sup>13</sup>C NMR spectrum of 3ga at 100 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3ha at 400 MHz in CDI<sub>3</sub> at 298K

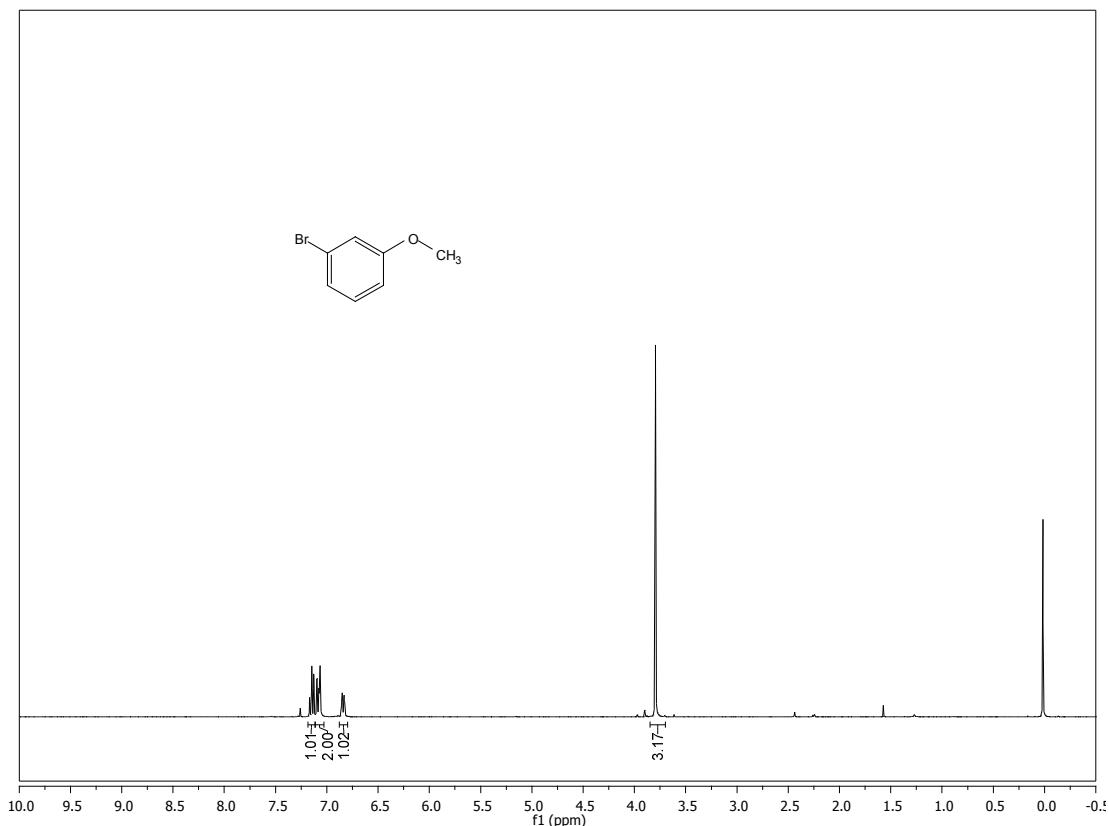
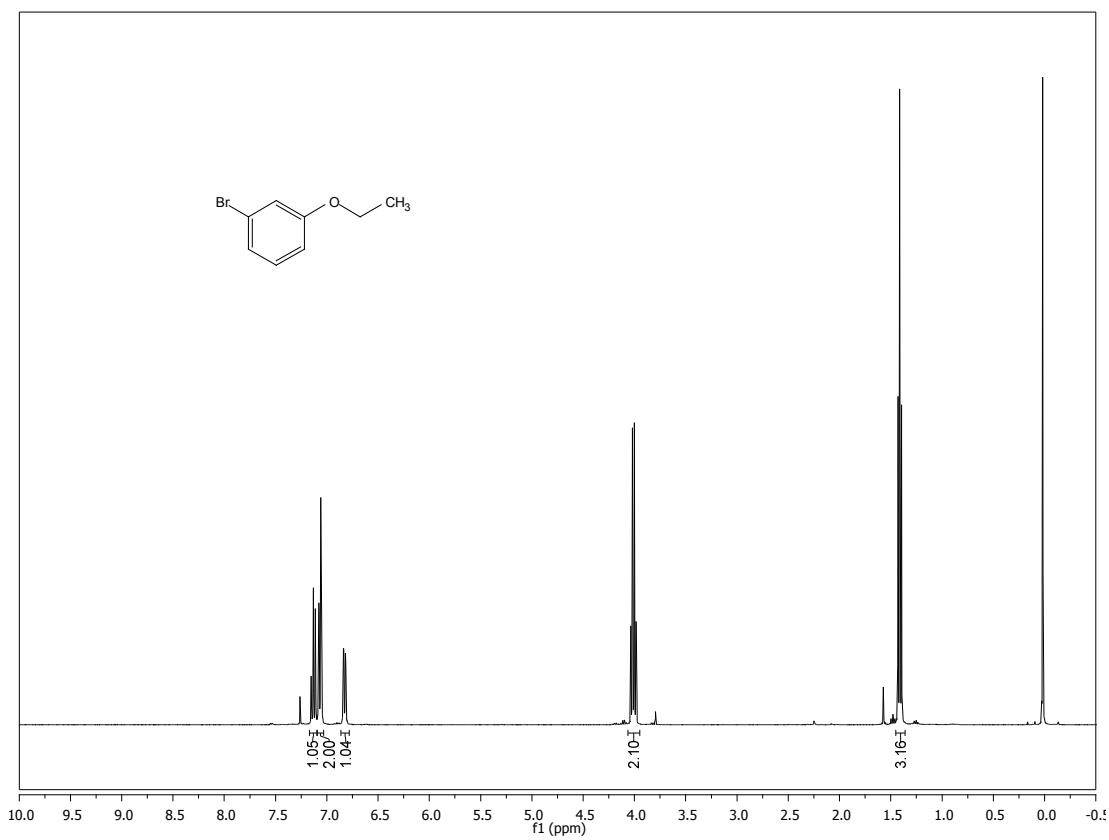
<sup>13</sup>C NMR spectrum of 3ha at 100 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3ia at 400 MHz in CDI<sub>3</sub> at 298K

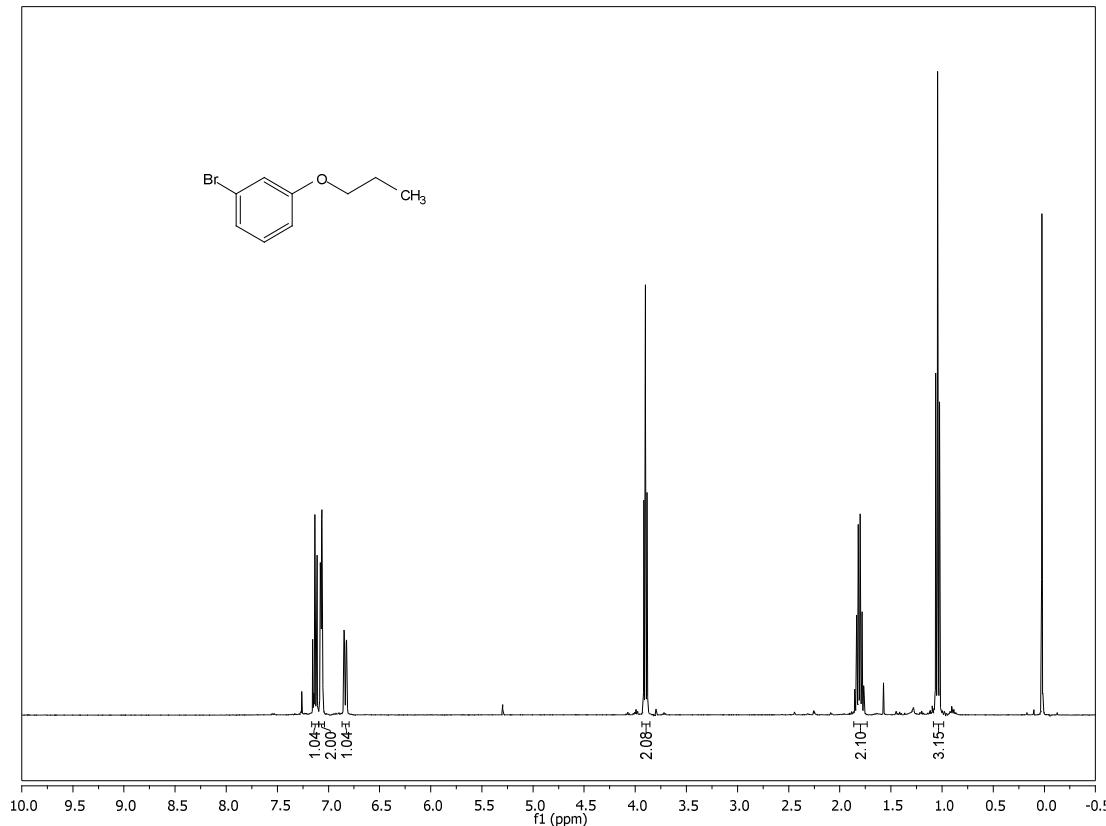
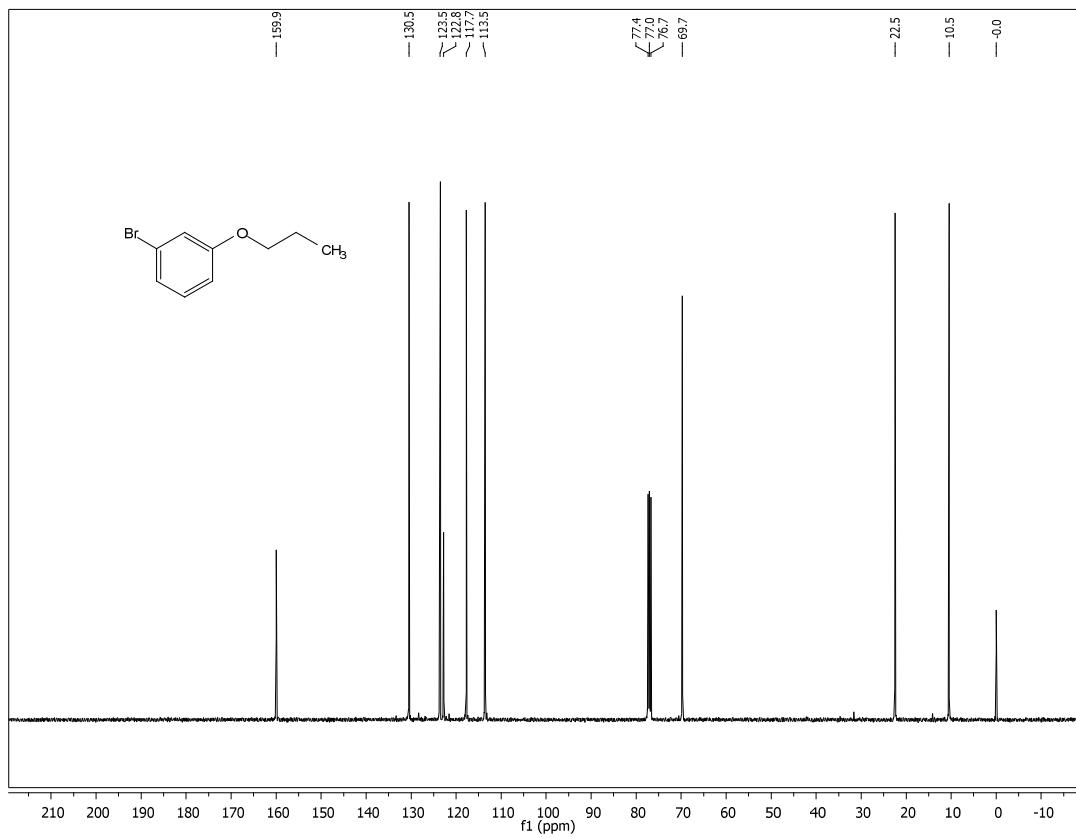
<sup>13</sup>C NMR spectrum of 3ia at 100 MHz in CDI<sub>3</sub> at 298K<sup>19</sup>F NMR spectrum of 3ia at 377 MHz in CDI<sub>3</sub> at 298K

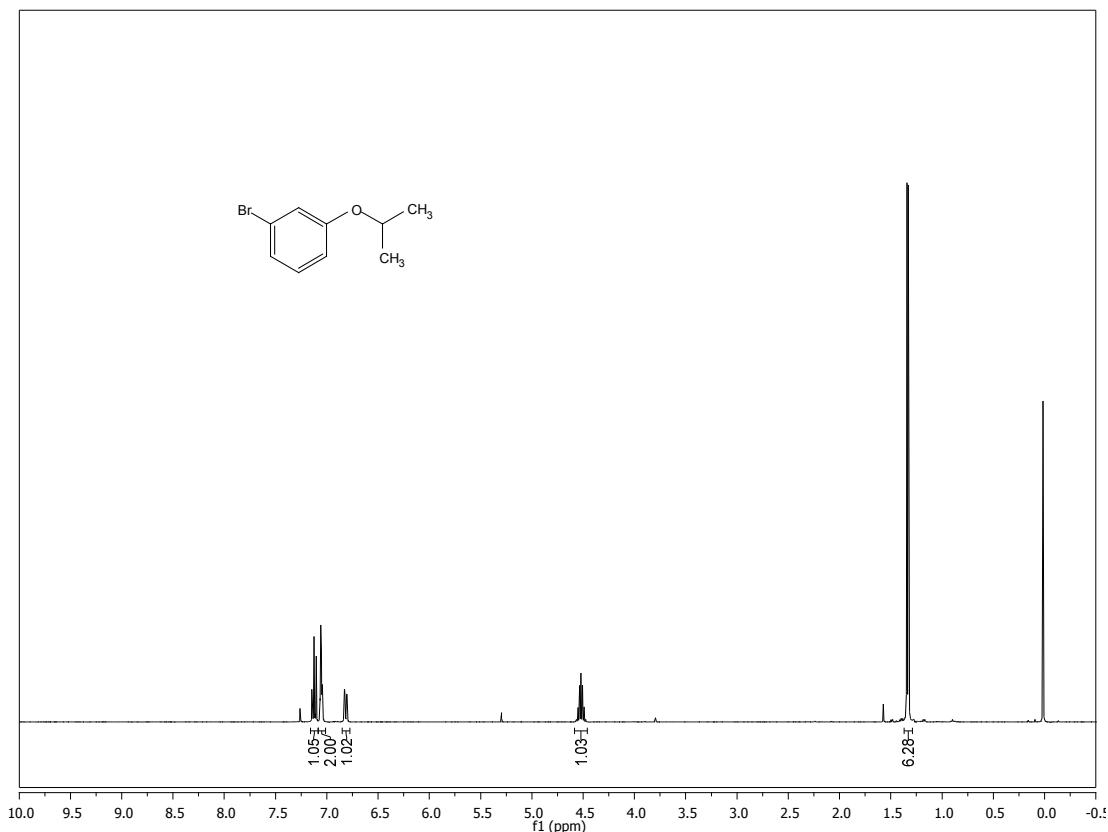
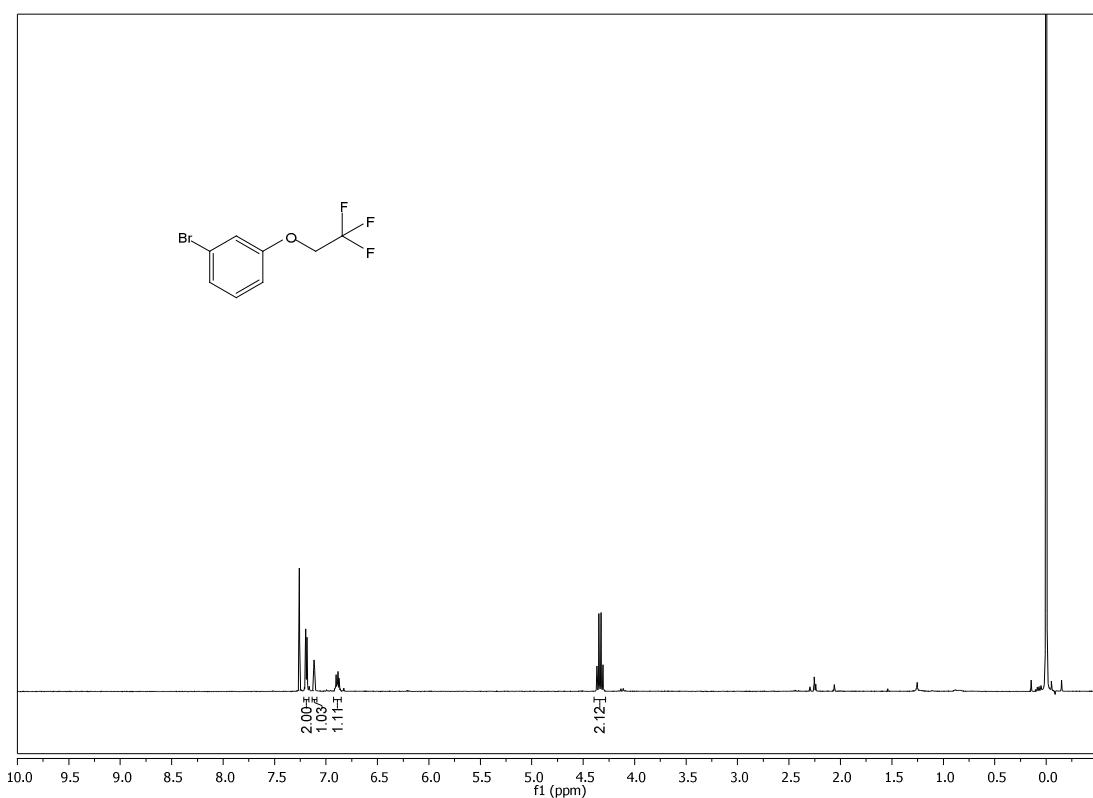
<sup>1</sup>H NMR spectrum of 3ja at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3ja at 100 MHz in CDI<sub>3</sub> at 298K

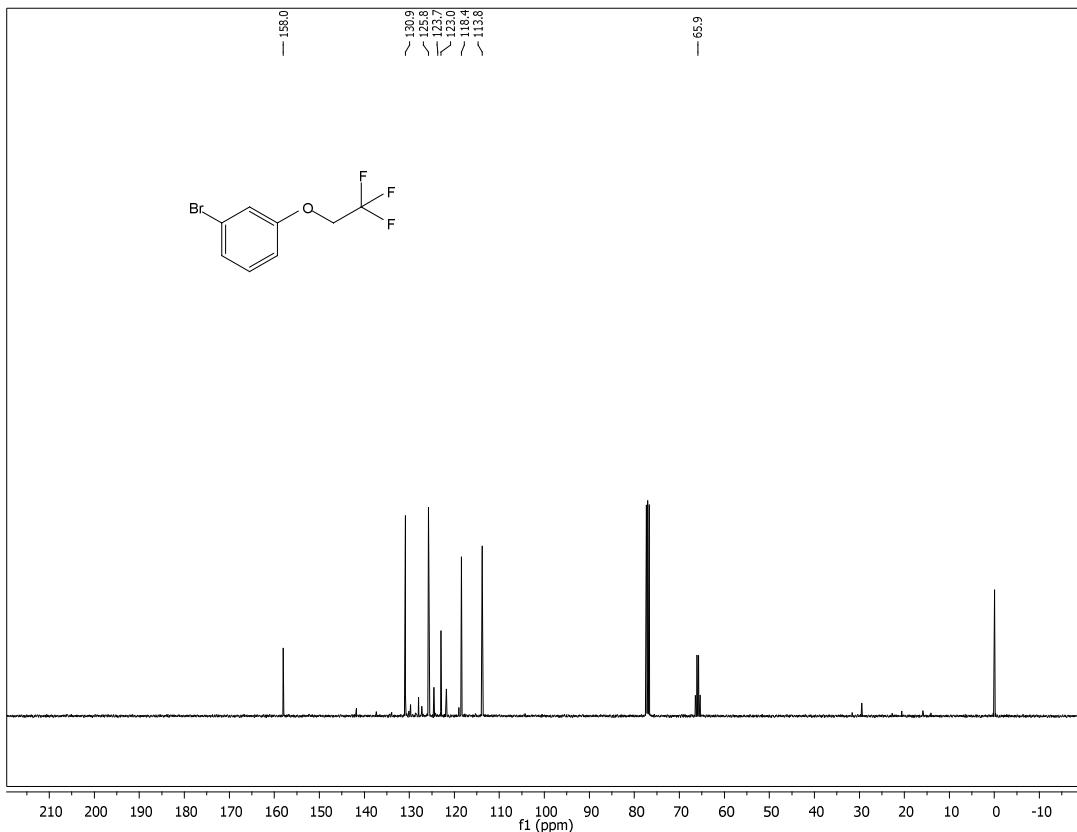
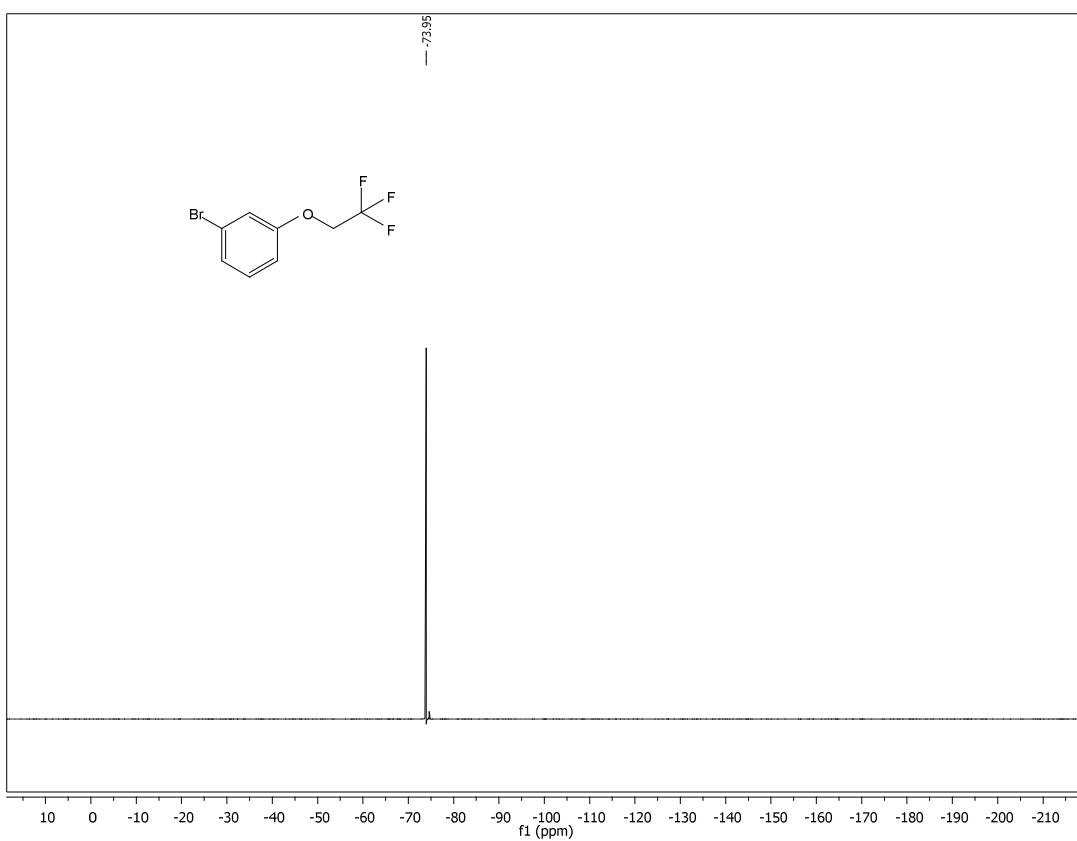
<sup>1</sup>H NMR spectrum of 3ka at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3ka at 100 MHz in CDI<sub>3</sub> at 298K

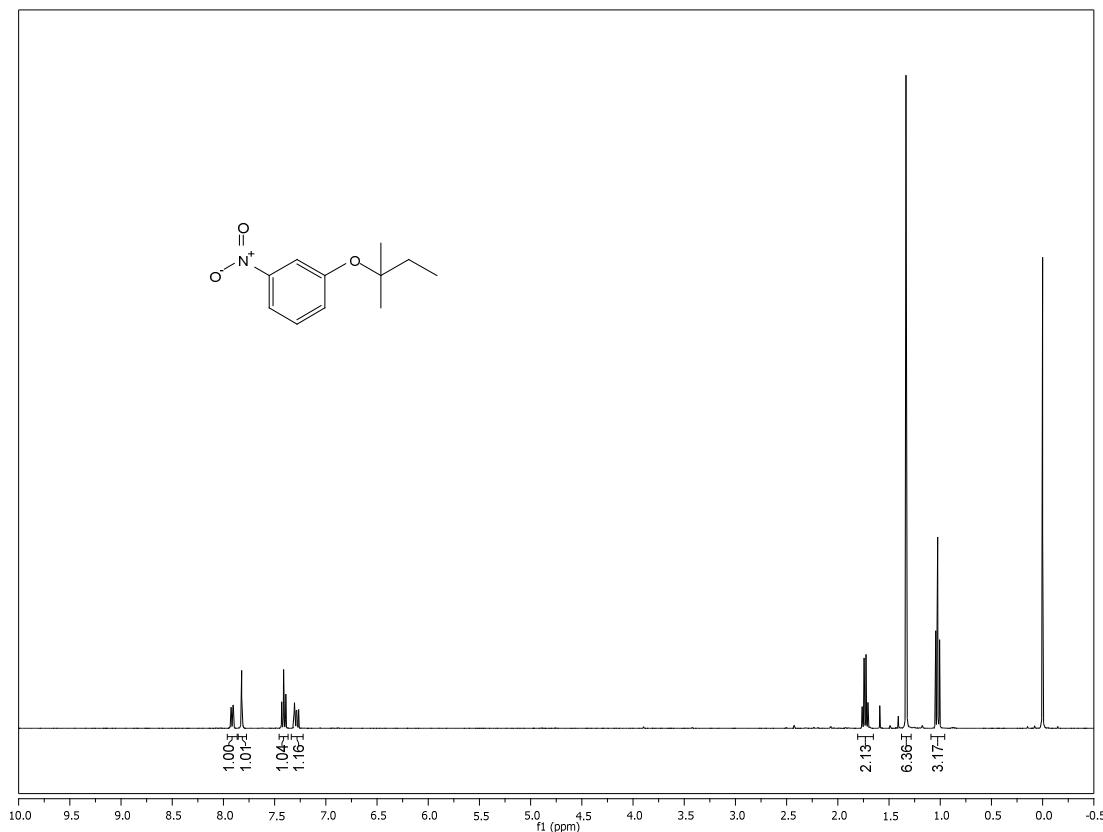
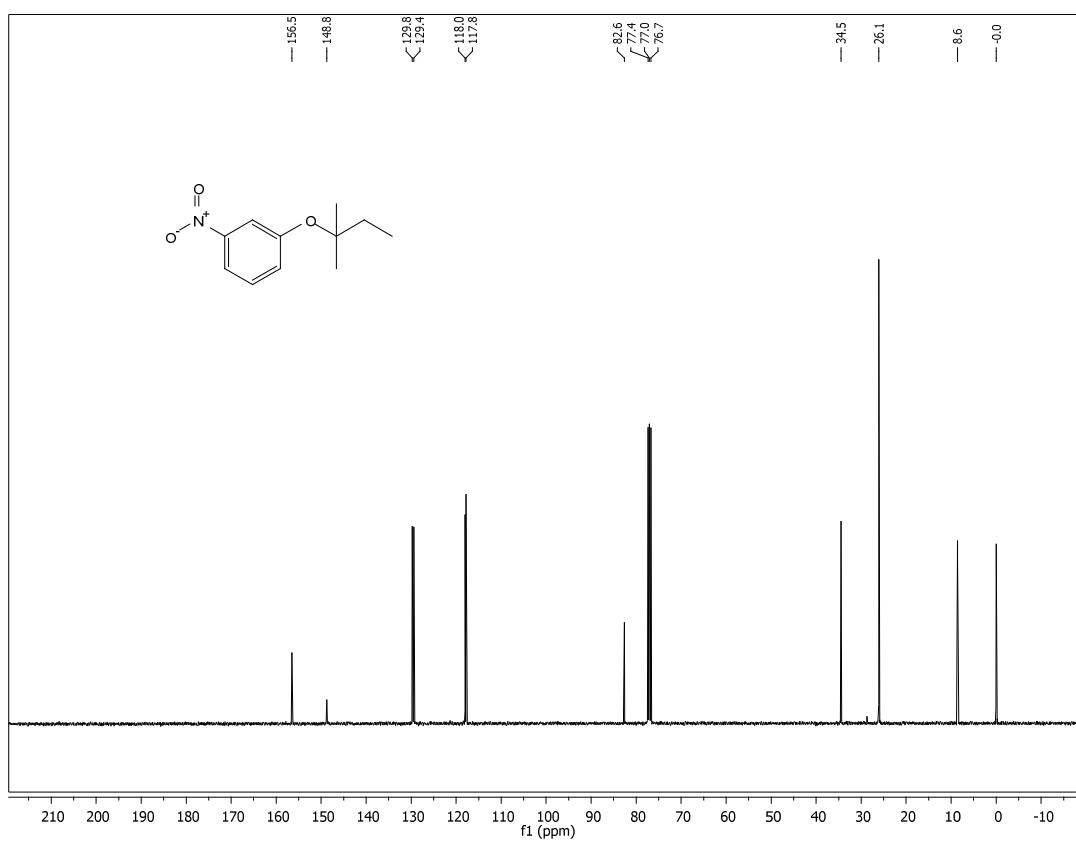
<sup>1</sup>H NMR spectrum of 3la at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3la at 100 MHz in CDI<sub>3</sub> at 298K

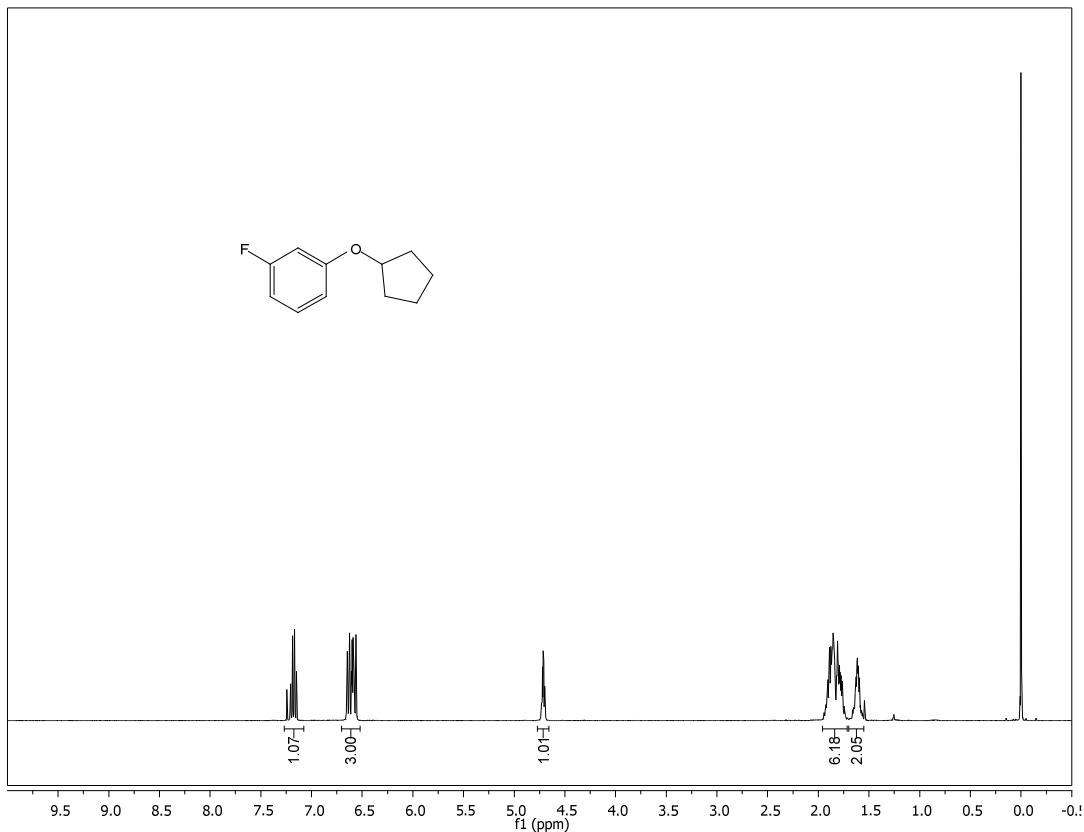
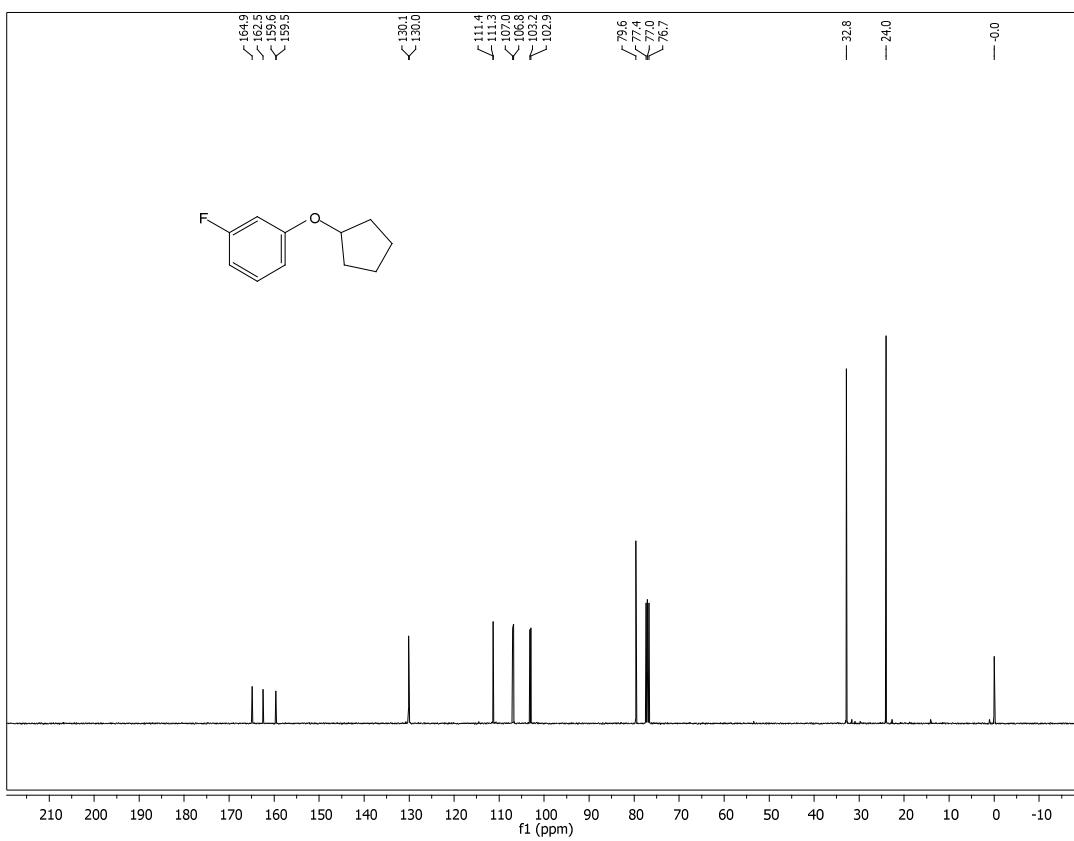
$^1\text{H}$  NMR spectrum of 3ab at 400 MHz in  $\text{CDI}_3$  at 298K $^1\text{H}$  NMR spectrum of 3ac at 400 MHz in  $\text{CDI}_3$  at 298K

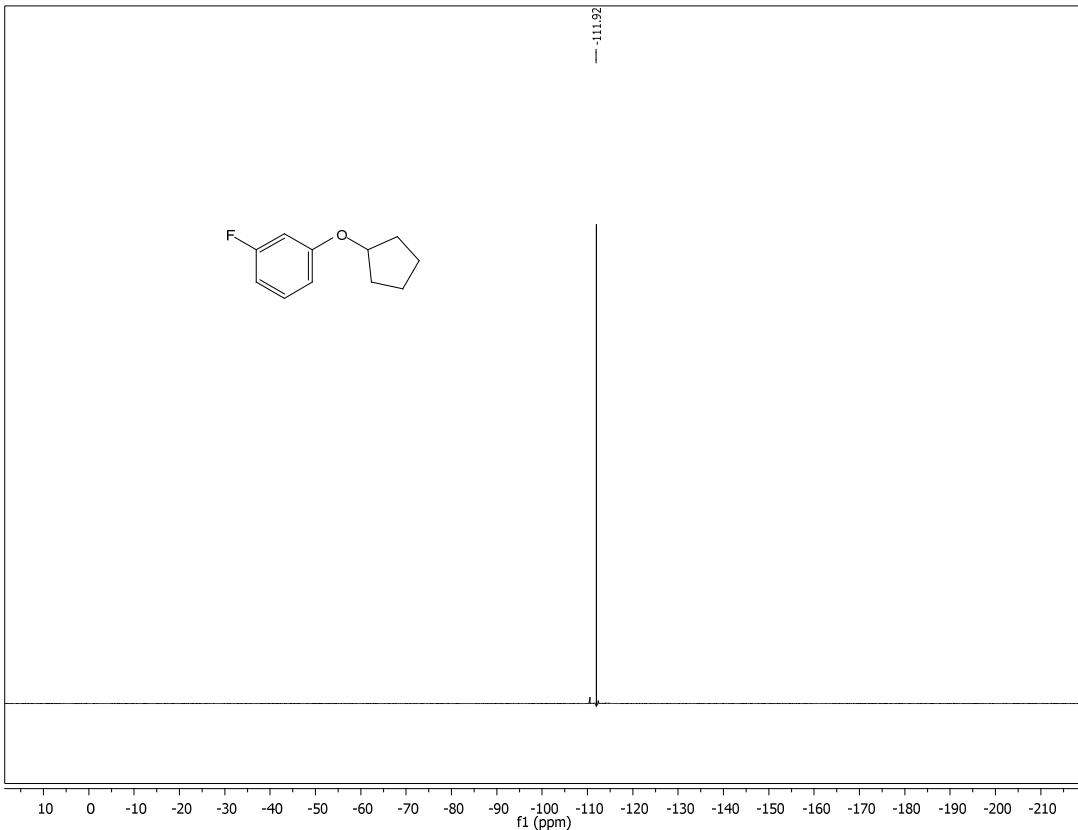
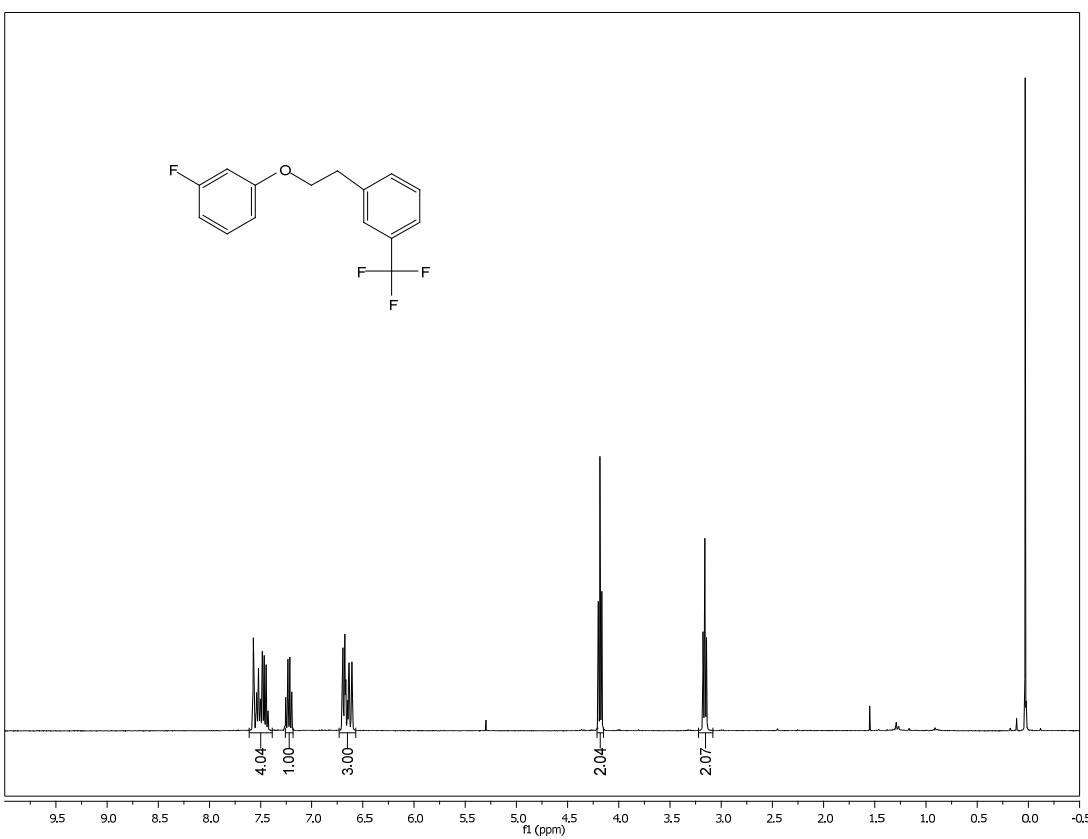
$^1\text{H}$  NMR spectrum of 3ad at 400MHz in  $\text{CDI}_3$  at 298K $^{13}\text{C}$  NMR spectrum of 3ad at 100 MHz in  $\text{CDI}_3$  at 298K

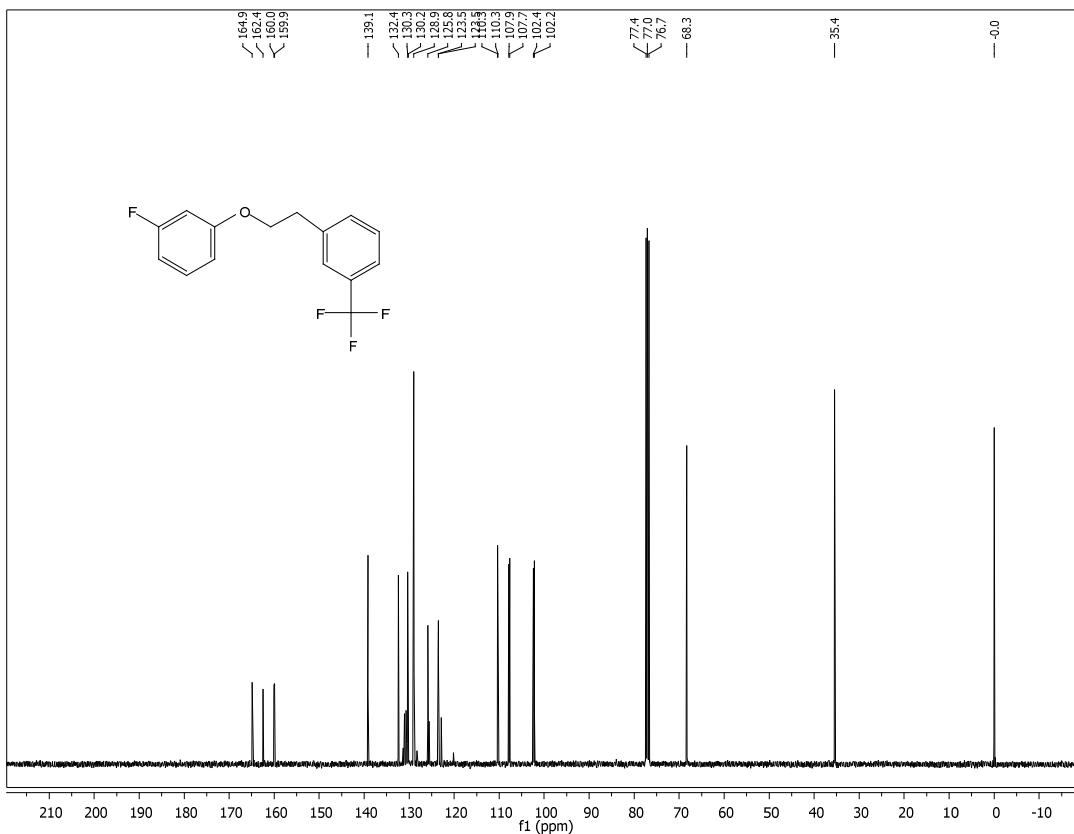
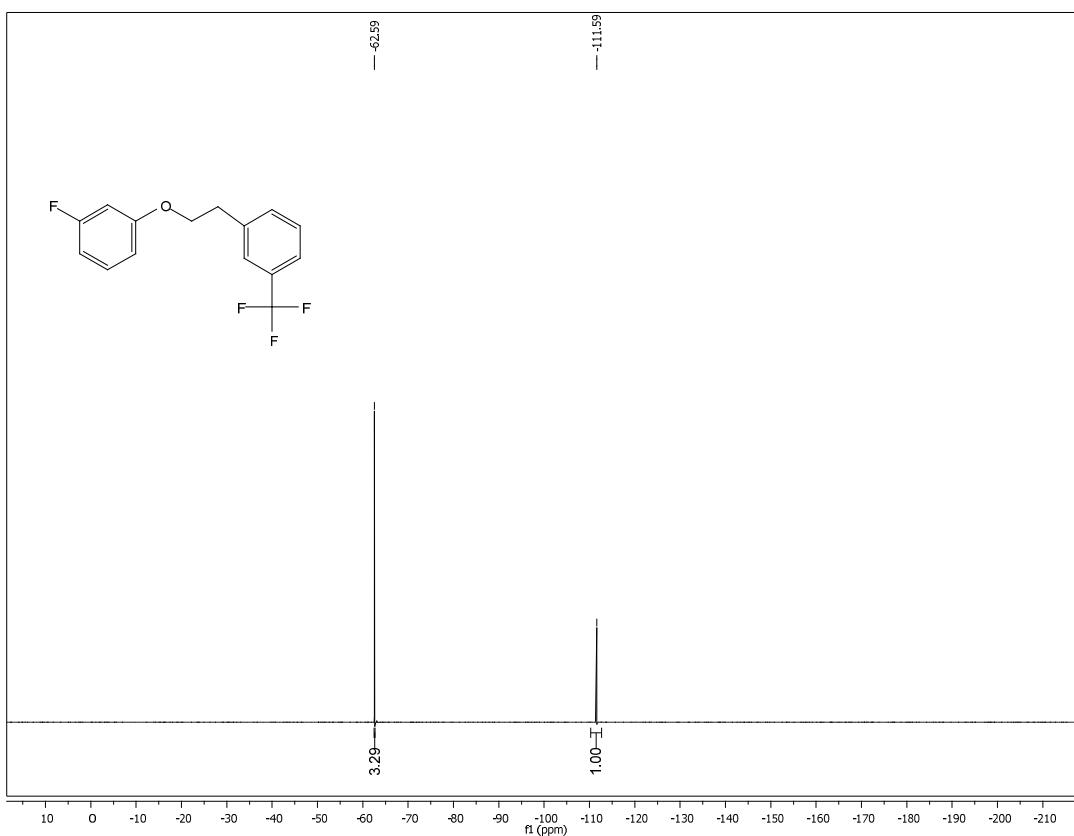
$^1\text{H}$  NMR spectrum of 3ae at 400 MHz in  $\text{CDI}_3$  at 298K $^1\text{H}$  NMR spectrum of 3af at 400 MHz in  $\text{CDI}_3$  at 298K

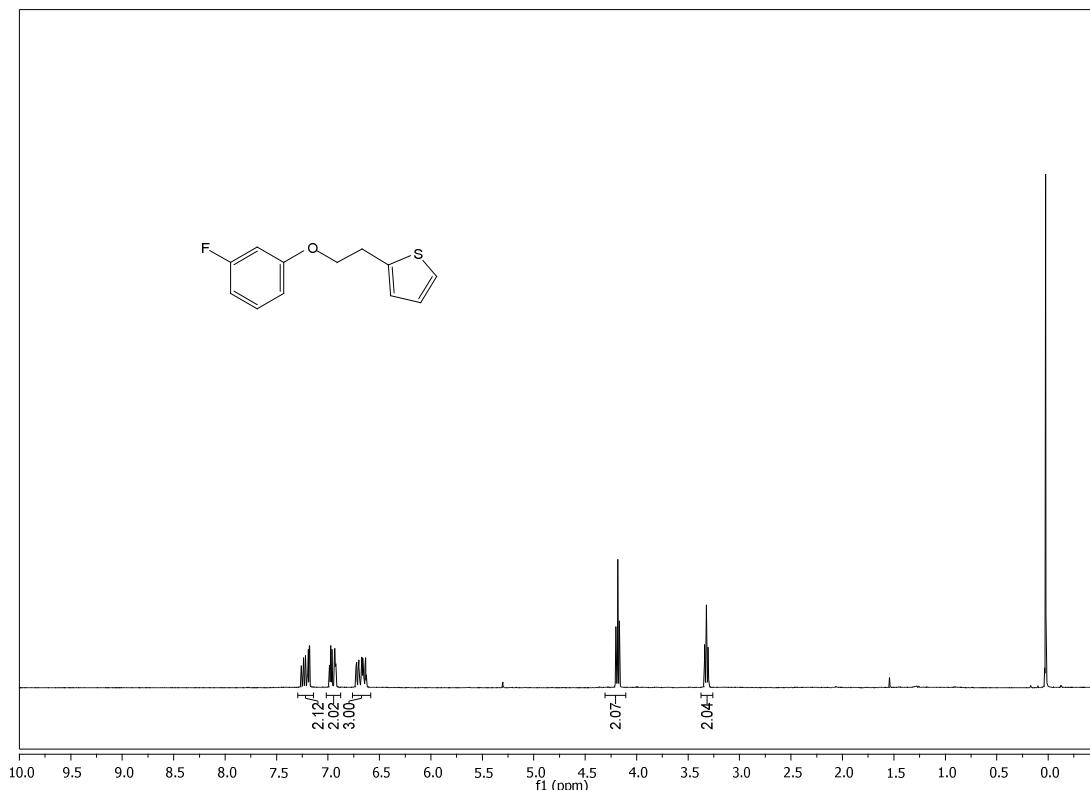
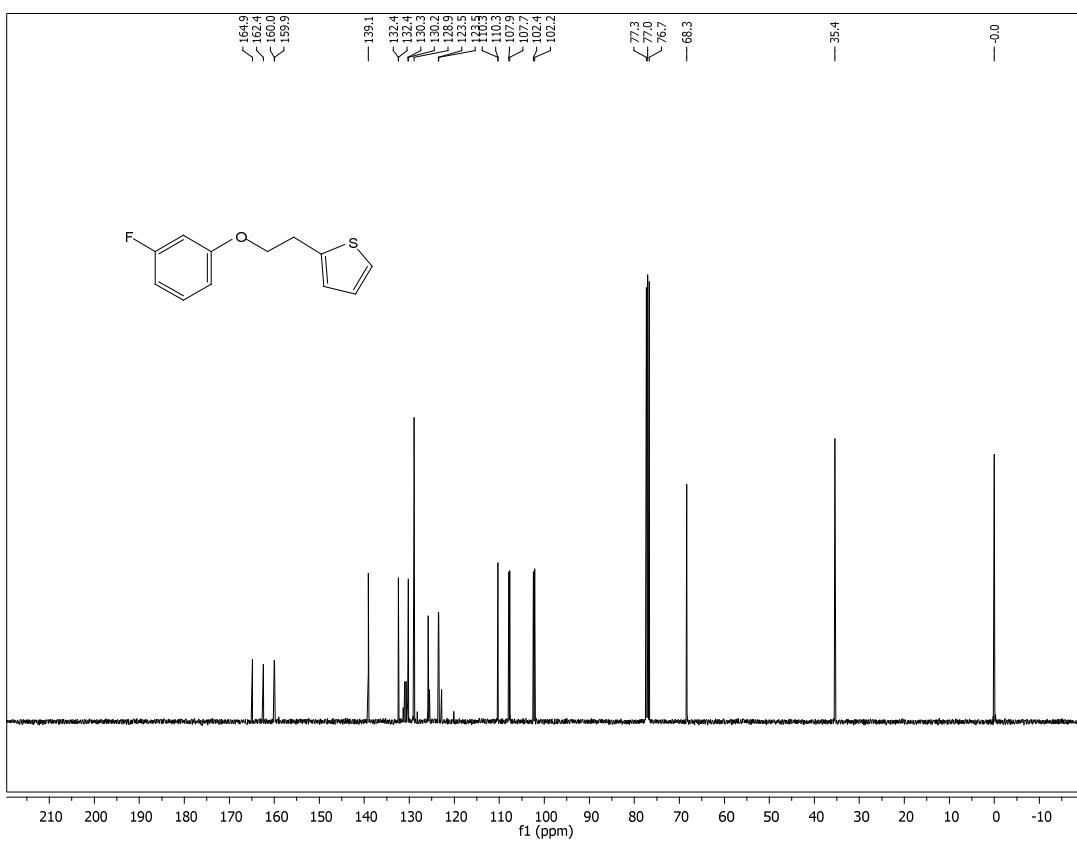
<sup>13</sup>C NMR spectrum of 3af at 100 MHz in CDI<sub>3</sub> at 298K<sup>19</sup>F NMR spectrum of 3af at 377 MHz in CDI<sub>3</sub> at 298K

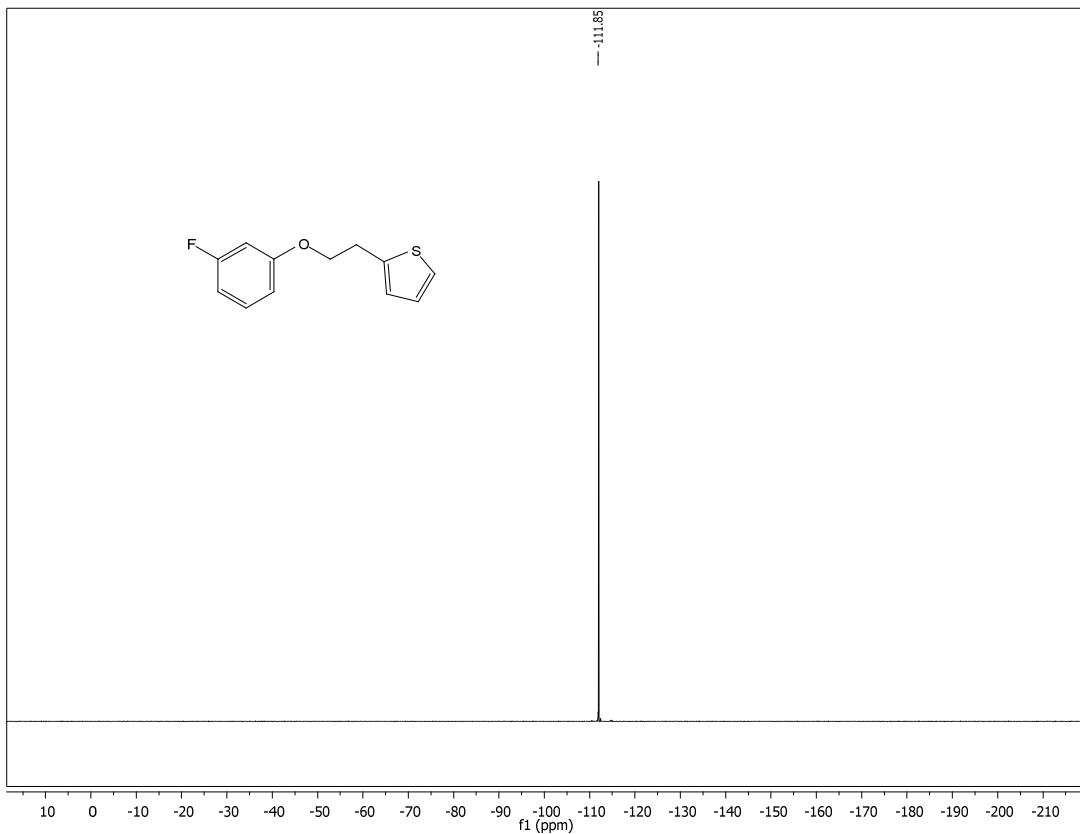
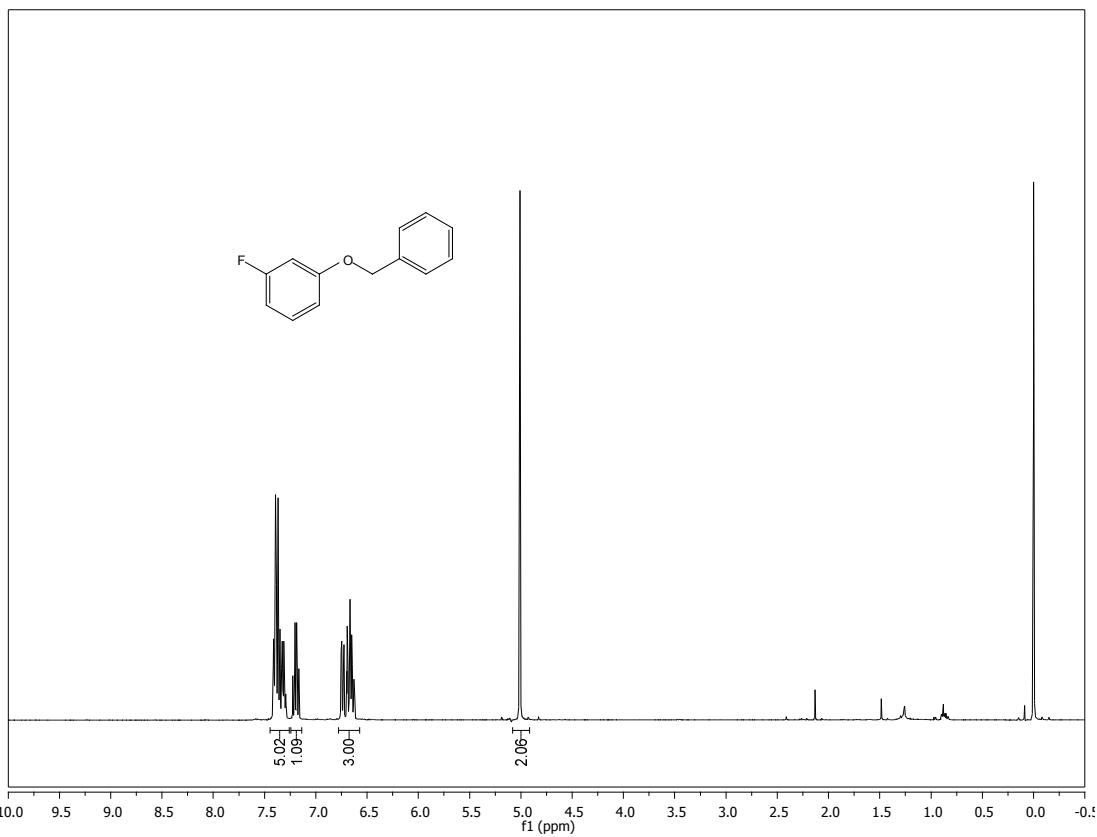
<sup>1</sup>H NMR spectrum of 3dg at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3dg at 100 MHz in CDI<sub>3</sub> at 298K

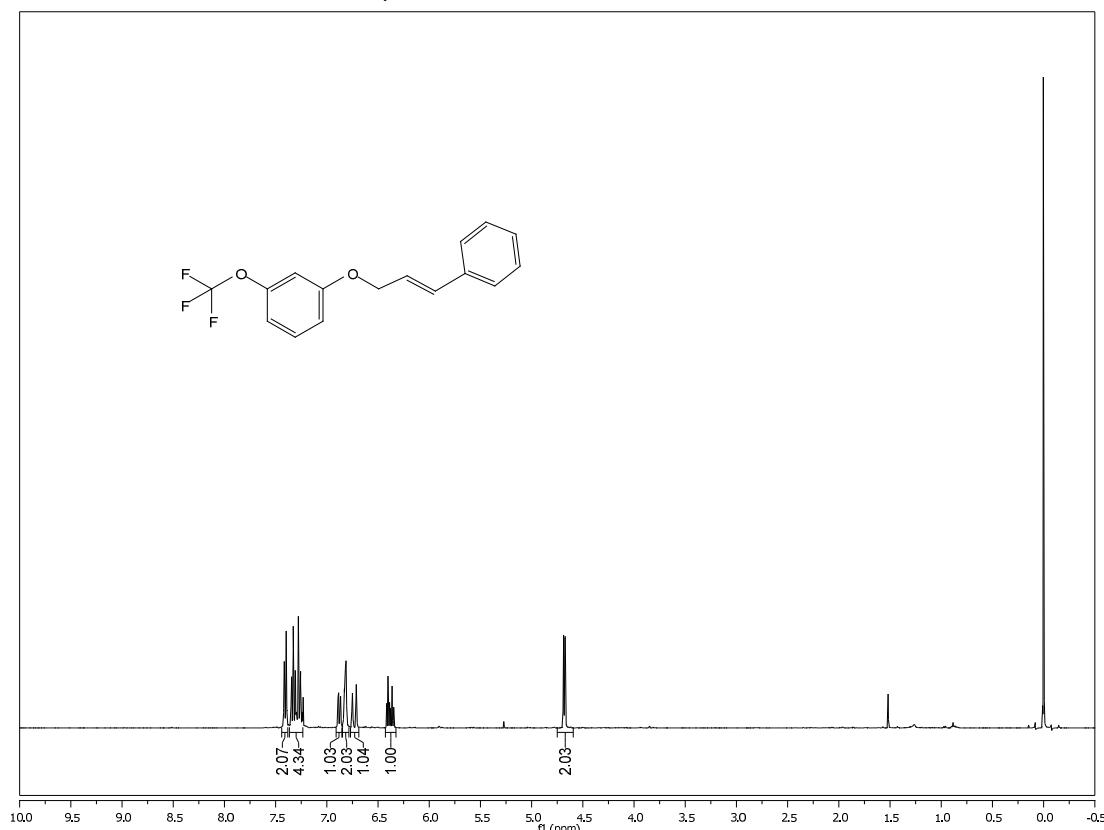
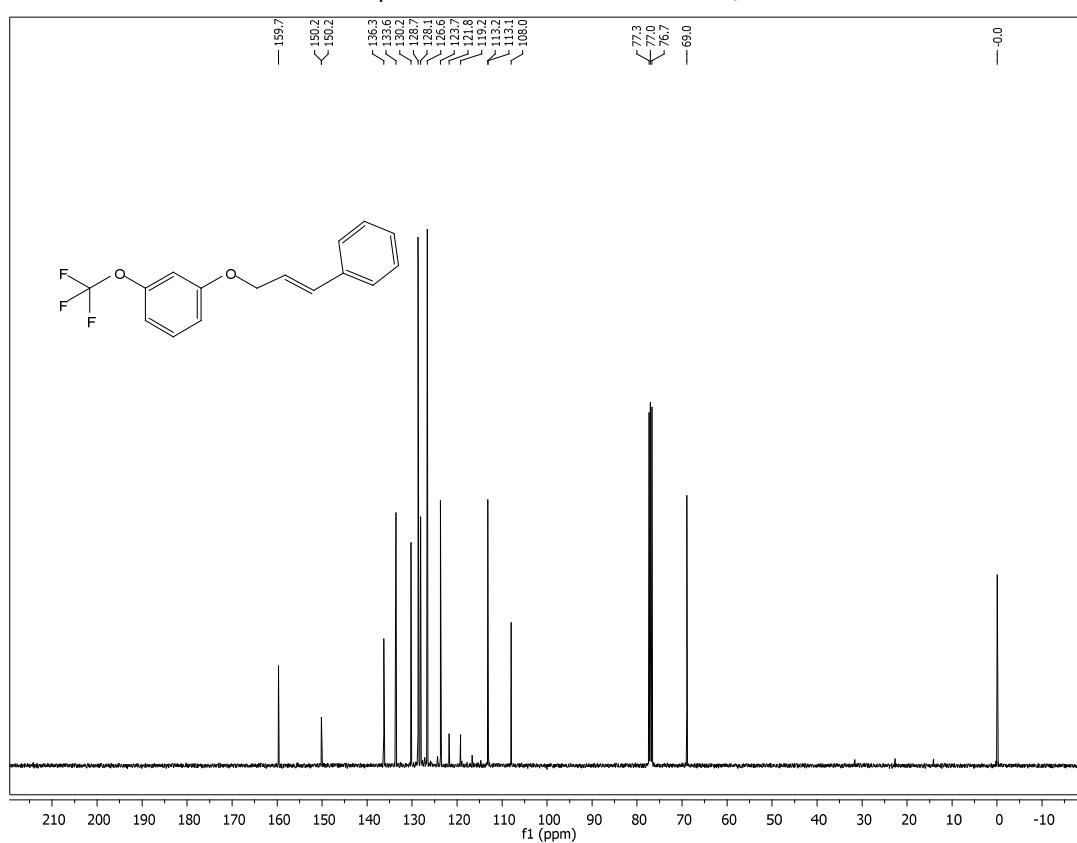
<sup>1</sup>H NMR spectrum of 3mh at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3mh at 100 MHz in CDI<sub>3</sub> at 298K

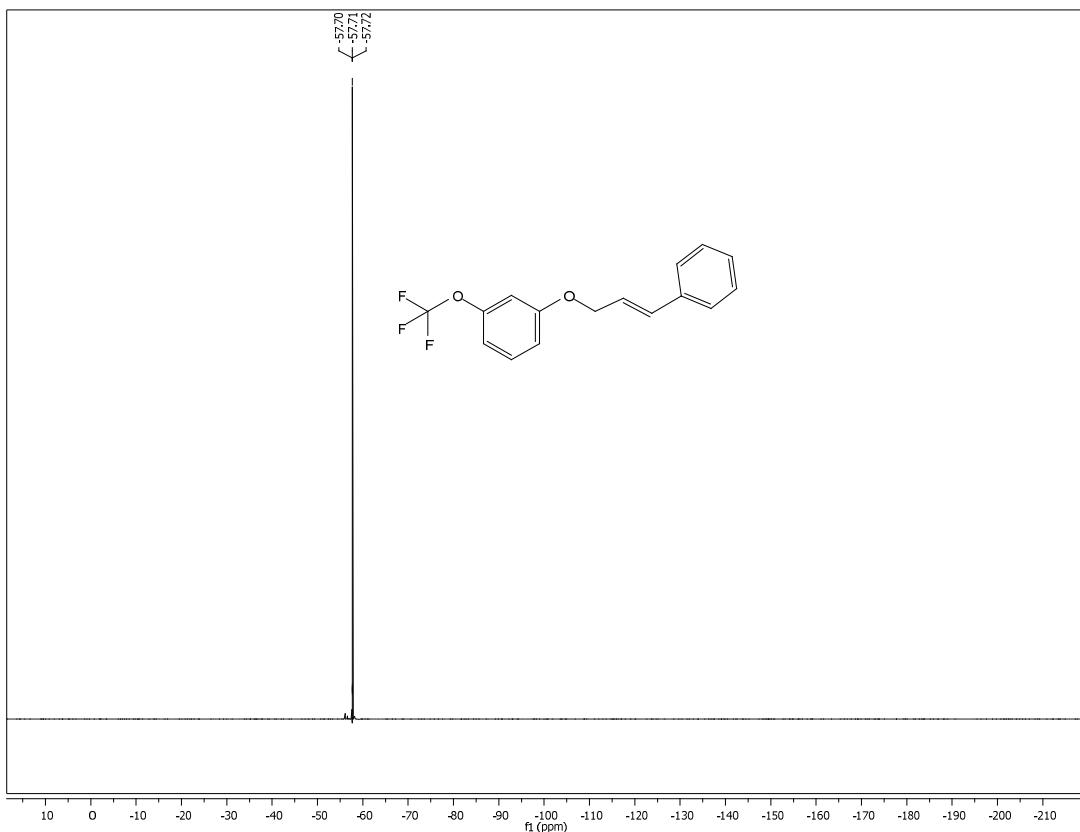
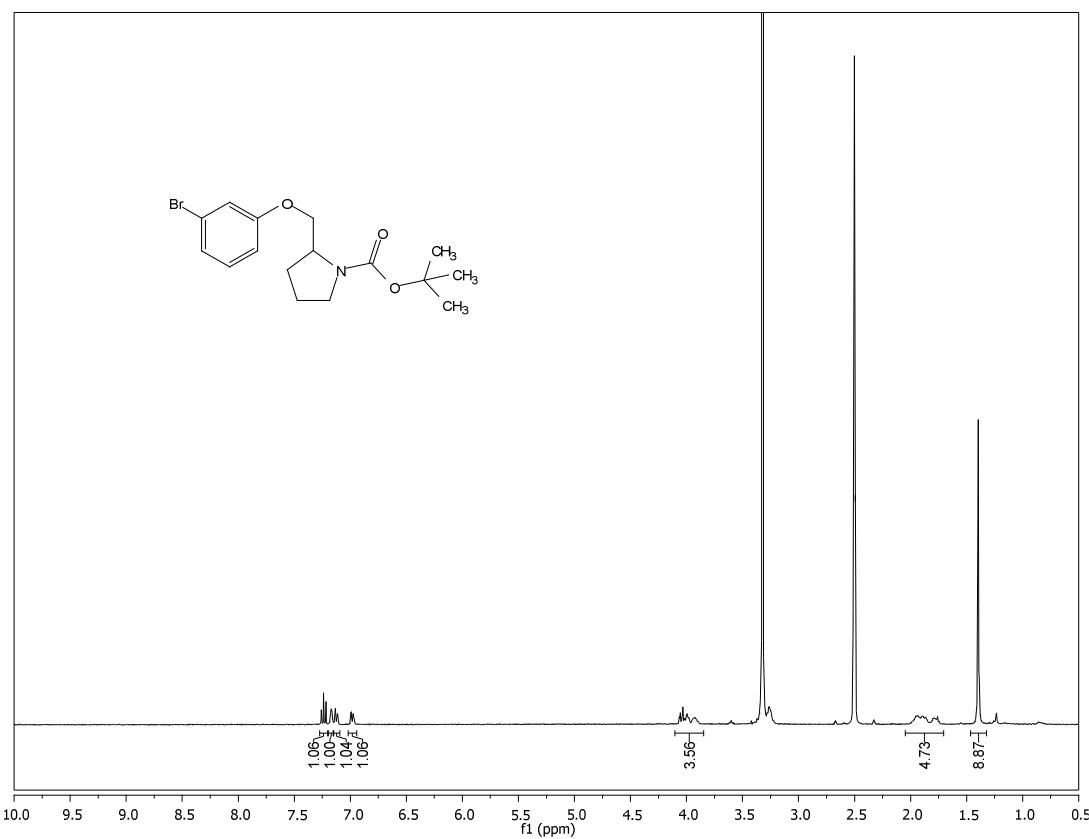
$^{19}\text{F}$  NMR spectrum of 3mh at 377 MHz in  $\text{CDI}_3$  at 298K $^1\text{H}$  NMR spectrum of 3mi at 400 MHz in  $\text{CDI}_3$  at 298K

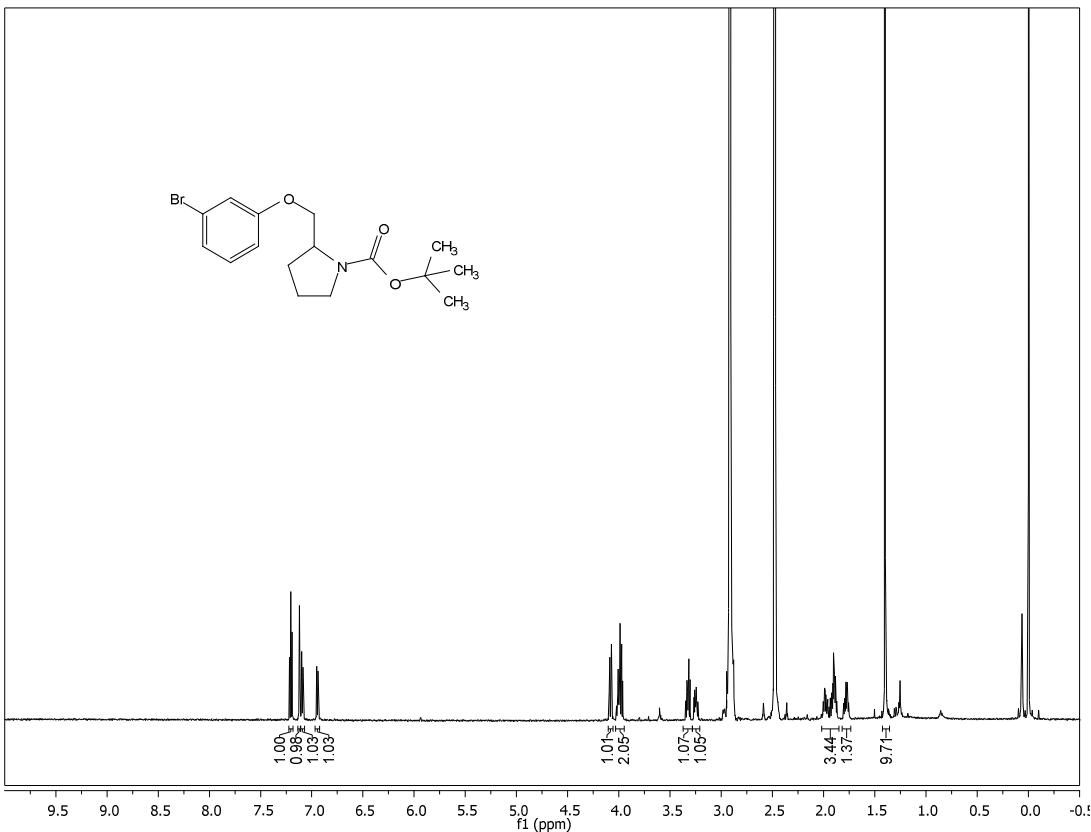
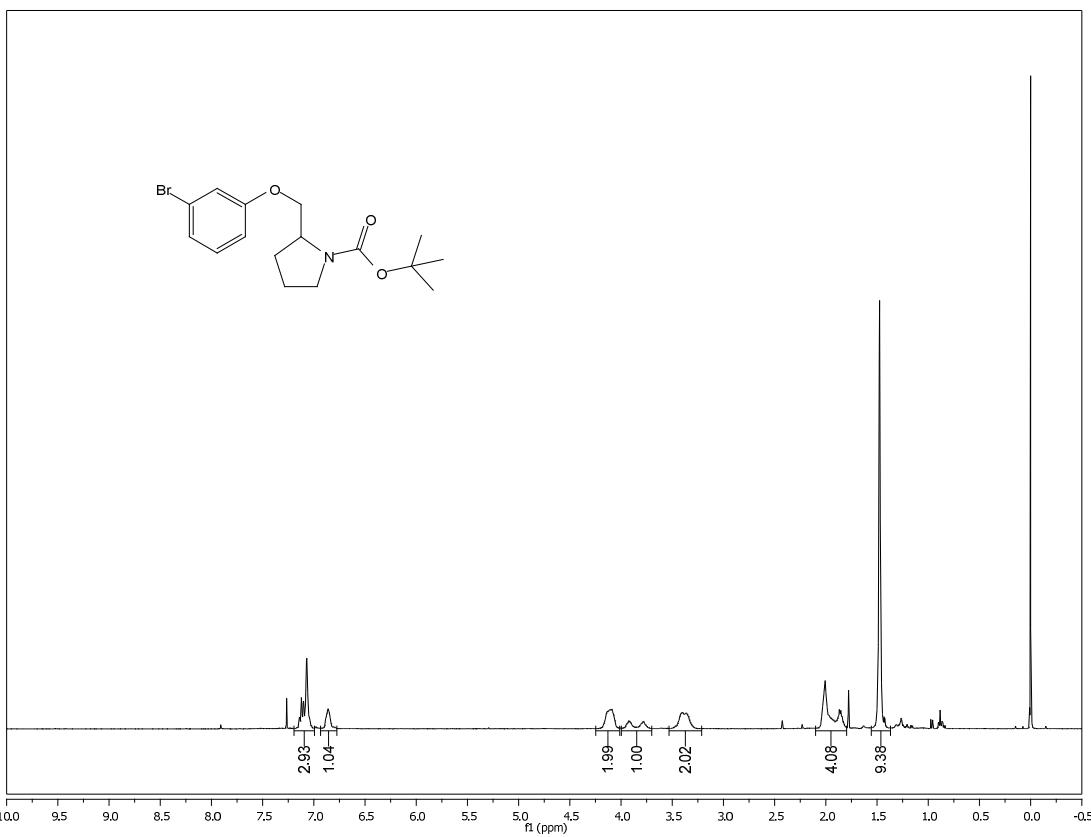
<sup>13</sup>C NMR spectrum of 3mi at 100 MHz in CDI<sub>3</sub> at 298K<sup>19</sup>F NMR spectrum of 3mi at 377 MHz in CDI<sub>3</sub> at 298K

<sup>1</sup>H NMR spectrum of 3mj at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3mj at 100 MHz in CDI<sub>3</sub> at 298K

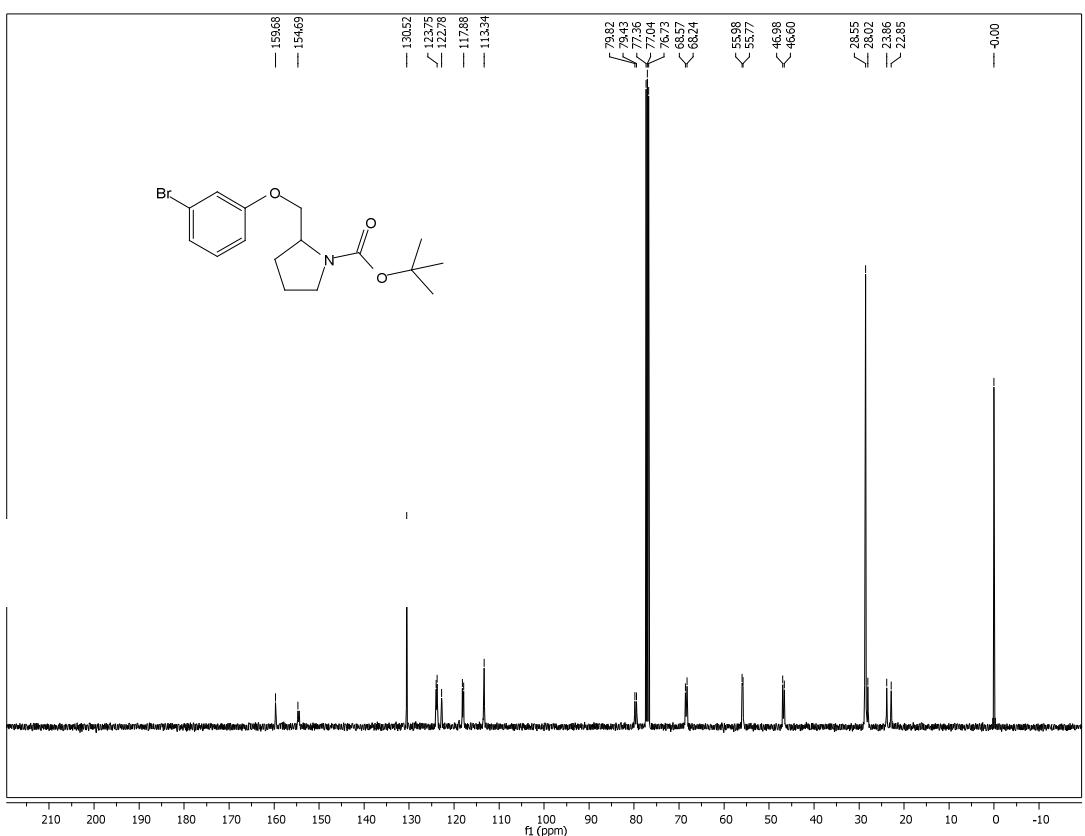
$^{19}\text{F}$  NMR spectrum of 3mj at 377 MHz in  $\text{CDI}_3$  298K $^1\text{H}$  NMR spectrum of 3mk at 400 MHz in  $\text{CDI}_3$  at 298K

<sup>1</sup>H NMR spectrum of 3cl at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 3cl at 100 MHz in CDI<sub>3</sub> at 298K

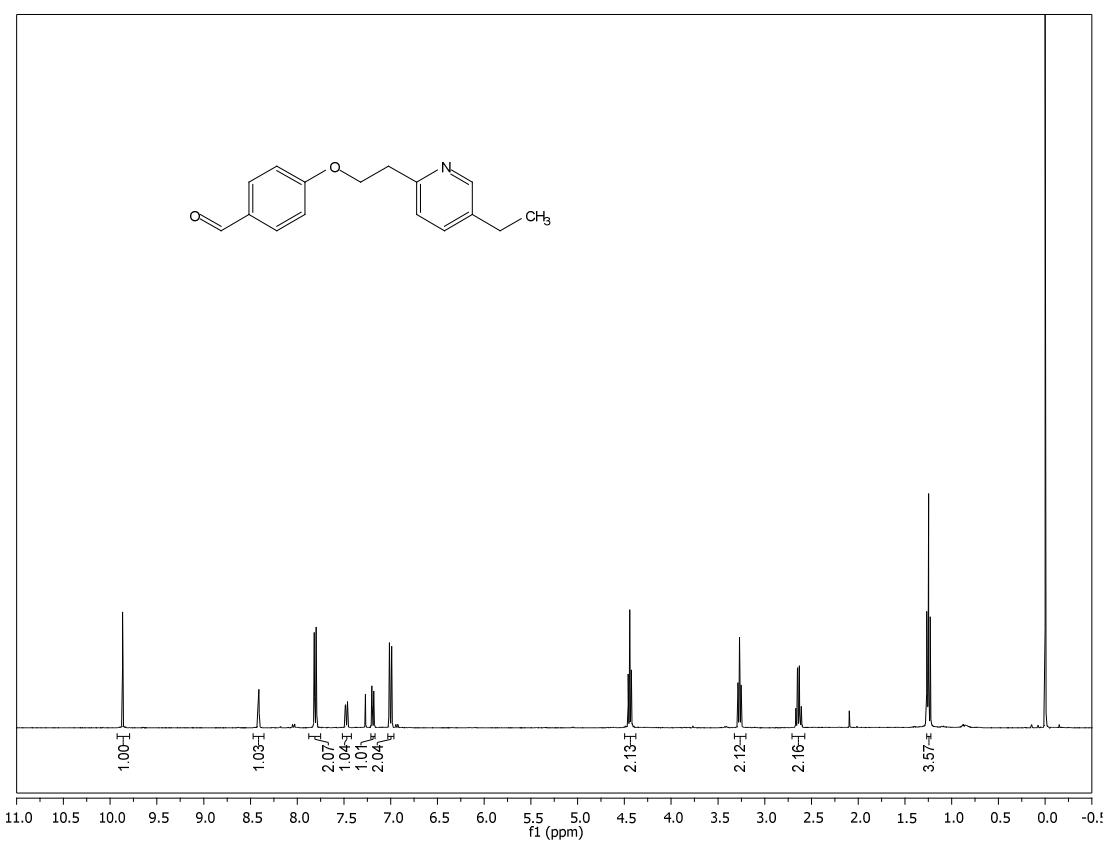
<sup>19</sup>F NMR spectrum of 3cl at 377 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 3am at 400 MHz in DMSO-*d*<sub>6</sub> at 298K

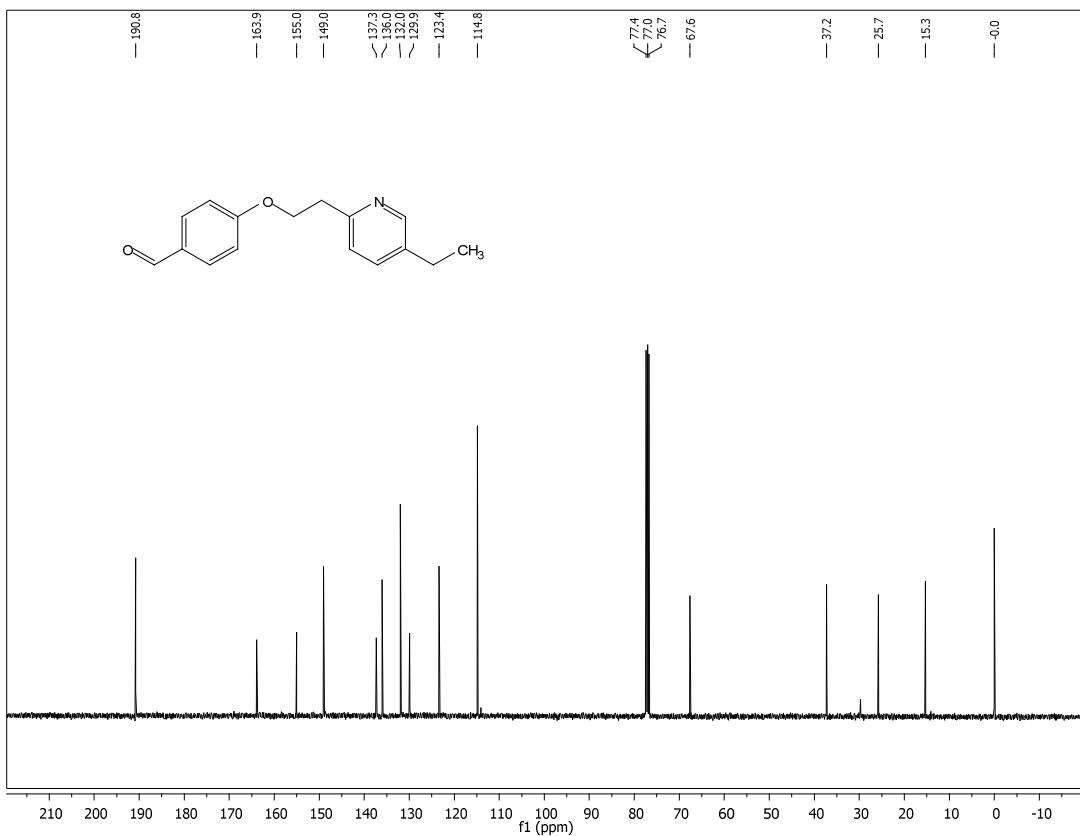
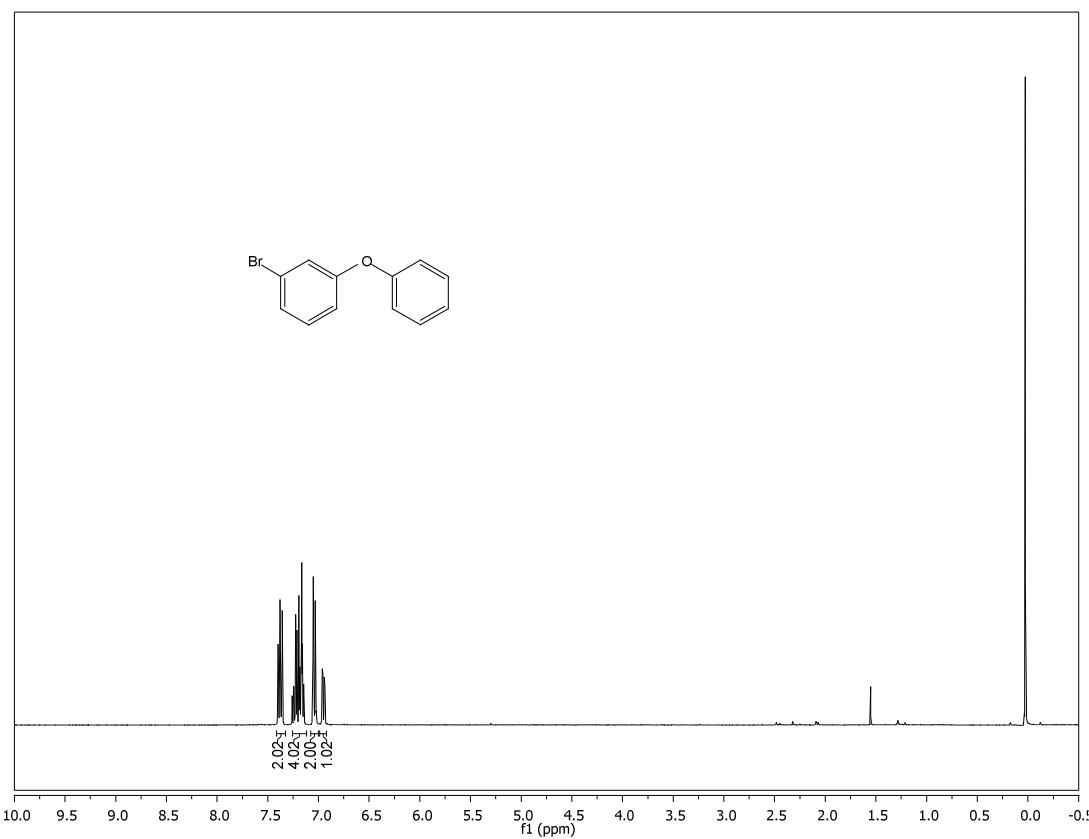
<sup>1</sup>H NMR spectrum of 3am at 400 MHz in DMSO-d<sub>6</sub> at 373K<sup>1</sup>H NMR spectrum of 3am at 400 MHz in CDI<sub>3</sub> at 298K

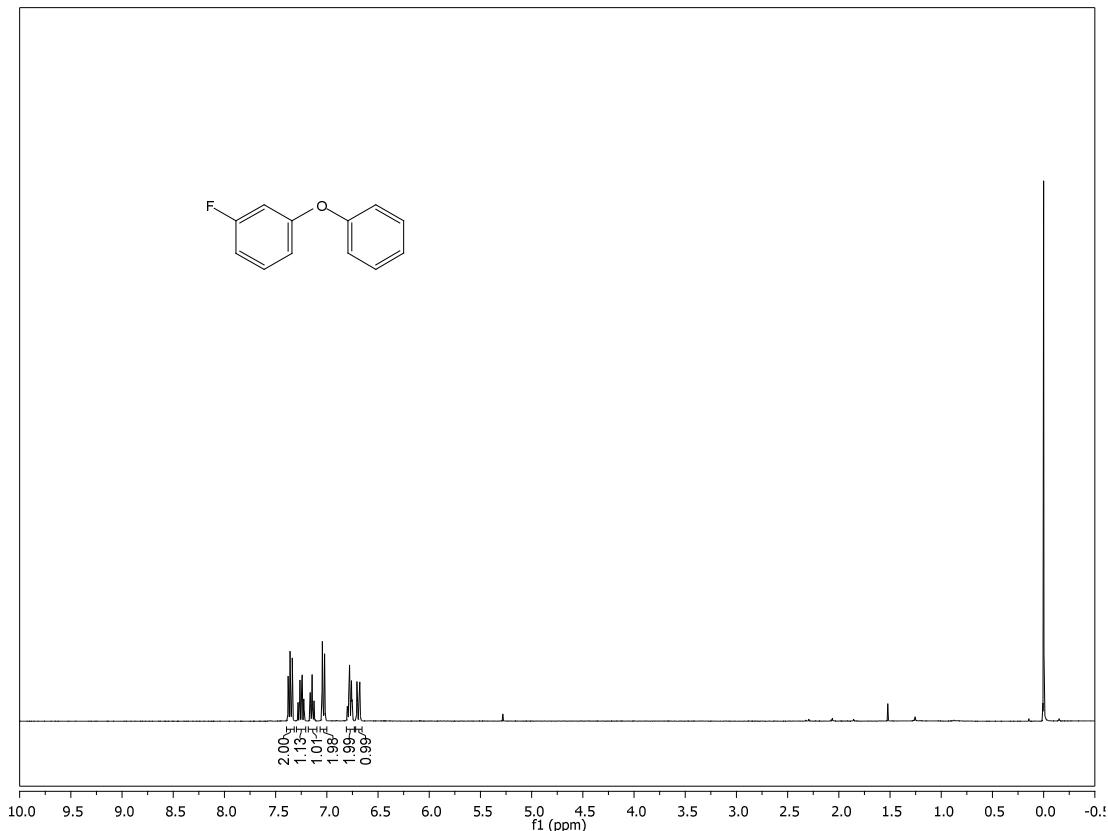
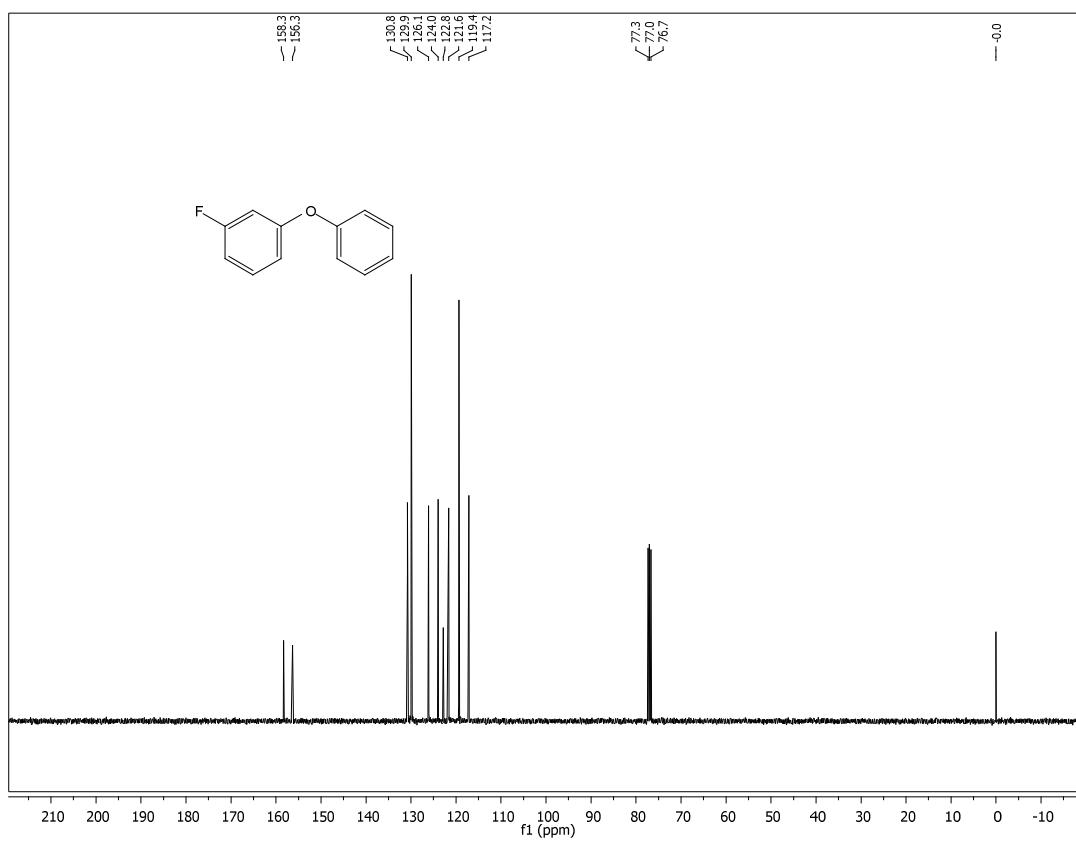
<sup>13</sup>C NMR spectrum of 3am at 100 MHz in CDI<sub>3</sub> at 298K



<sup>1</sup>H NMR spectrum of 3nn at 400 MHz in CDI<sub>3</sub> at 298K



<sup>13</sup>C NMR spectrum of 3nn at 100 MHz in CDI<sub>3</sub> at 298K<sup>1</sup>H NMR spectrum of 4aa at 400 MHz in CDI<sub>3</sub> at 298K

<sup>1</sup>H NMR spectrum of 4ma at 400 MHz in CDI<sub>3</sub> at 298K<sup>13</sup>C NMR spectrum of 4ma at 100 MHz in CDI<sub>3</sub> at 298K

<sup>19</sup>F NMR spectrum of 4ma at 377 MHz in CDI<sub>3</sub> at 298K