

## Supporting information

**Synthesis of the stannyl porphyrins and porphyrin dimers via Stille coupling and their  
<sup>119</sup>Sn NMR and fluorescence properties**

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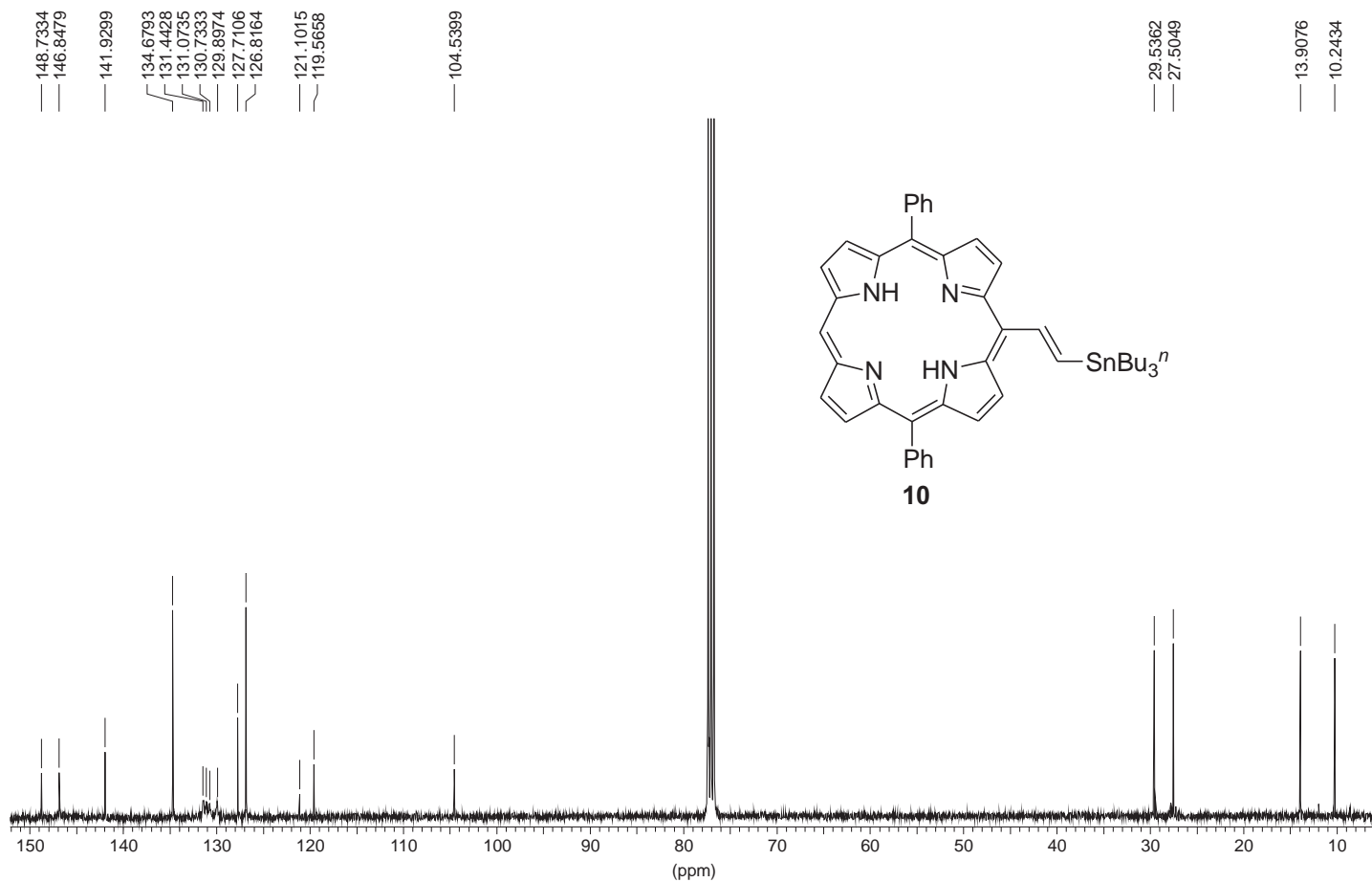
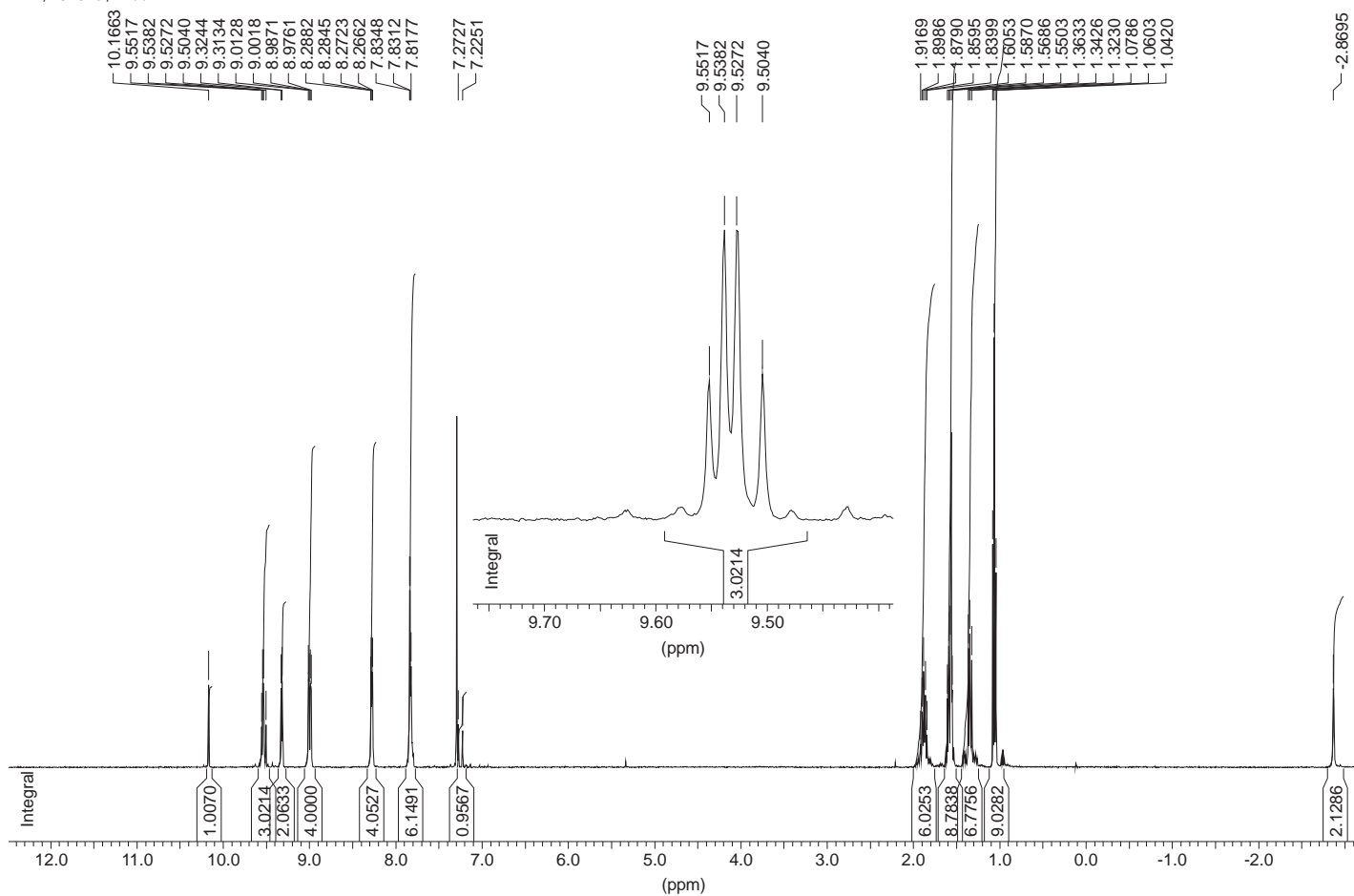
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### **General Information**

$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra were recorded on a Bruker DPX 400 (400 MHz for  $^1\text{H}$  NMR; 100.6 MHz for  $^{13}\text{C}$  NMR) and/or Bruker AV 600 (600 MHz for  $^1\text{H}$  NMR; 150.9 MHz for  $^{13}\text{C}$  NMR). Chemical shifts are reported in ppm referred to TMS set at 0.00 ppm. All photophysical measurements were performed in THF at concentration for all samples:  $7.39 \times 10^{-7}$  M. All fluorescence spectra were recorded on Perkin-Elmer Precisely LS55 spectrometer. Lifetime measurements were carried out on Fluorolog Horiba Jobin Yvon spectrometer using a laser beam: 370 nm (pulse  $<1$  ns) and 635 nm ( $<200$  ps). HRMS spectra were measured on MaldiQ-ToF Premier Micromass and Micromass/Waters Corp. USA liquid chromatography time-of-flight spectrometer equipped with ES source. UV-vis measurements were performed on Shimadzu MultiSpec-1501. Melting points were acquired on Stuart SMP10 melting point apparatus and are uncorrected. Thin layer chromatography (TLC) was performed on silica gel 60F<sub>254</sub> (Merck) pre-coated aluminum sheets. Flash chromatography was carried out using Fluka Silica Gel 60 (230-400 mesh). Anhydrous THF distilled over sodium/benzophenone and dichloromethane dried over P<sub>2</sub>O<sub>5</sub> were used. All commercial chemicals were supplied by Aldrich and used without further purification.

$^{13}\text{C}$ , 100 MHz,  $\text{CDCl}_3$  $^1\text{H}$ ,  $\text{CDCl}_3$ , 400 MHz

Compound 10: DEPT (above); <sup>1</sup>H-<sup>119</sup>Sn HSQC (below)

DEPT, 150.9 MHz, CDCl<sub>3</sub>

148.6946

146.8935

134.6865

127.7153

126.8257

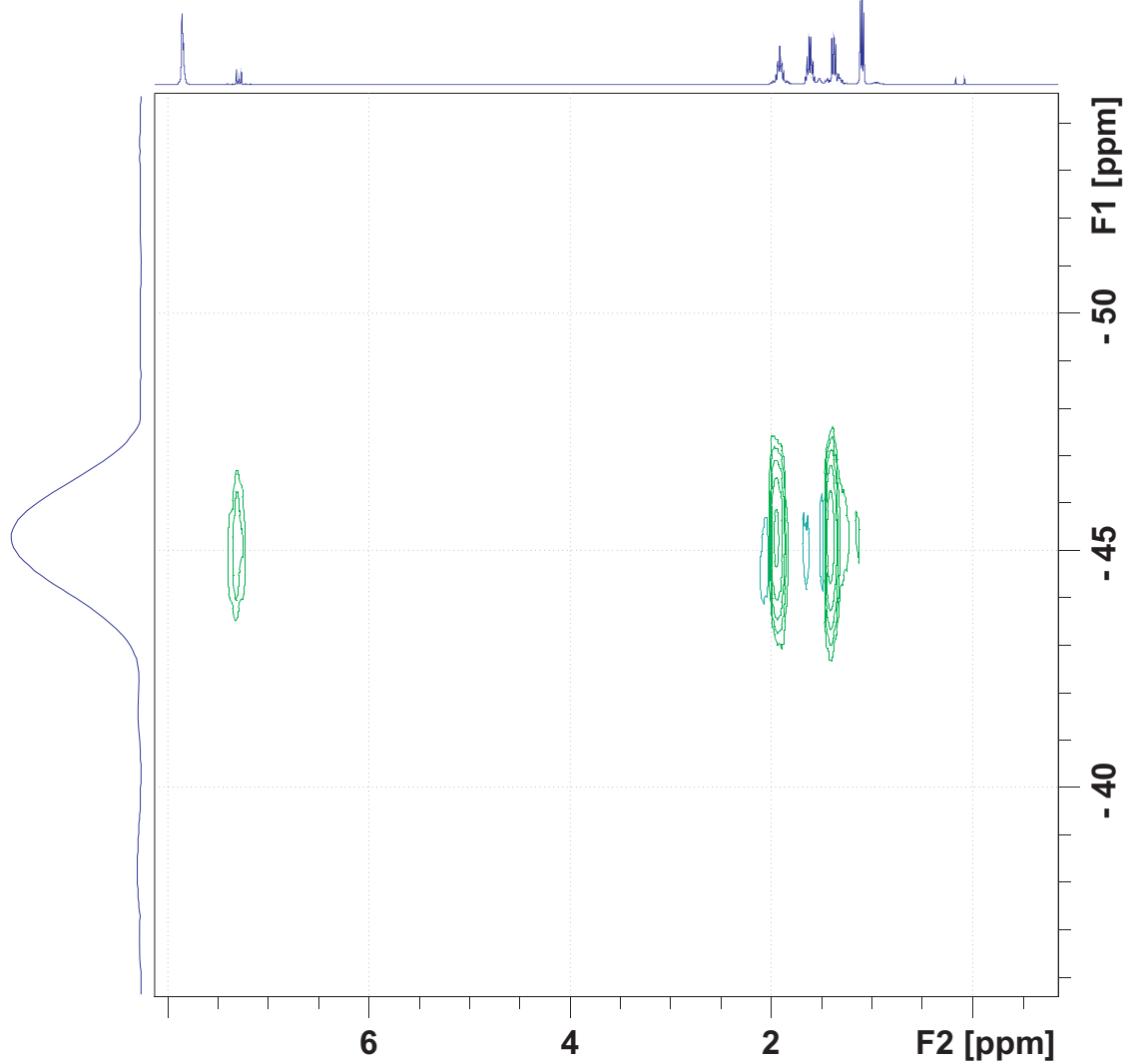
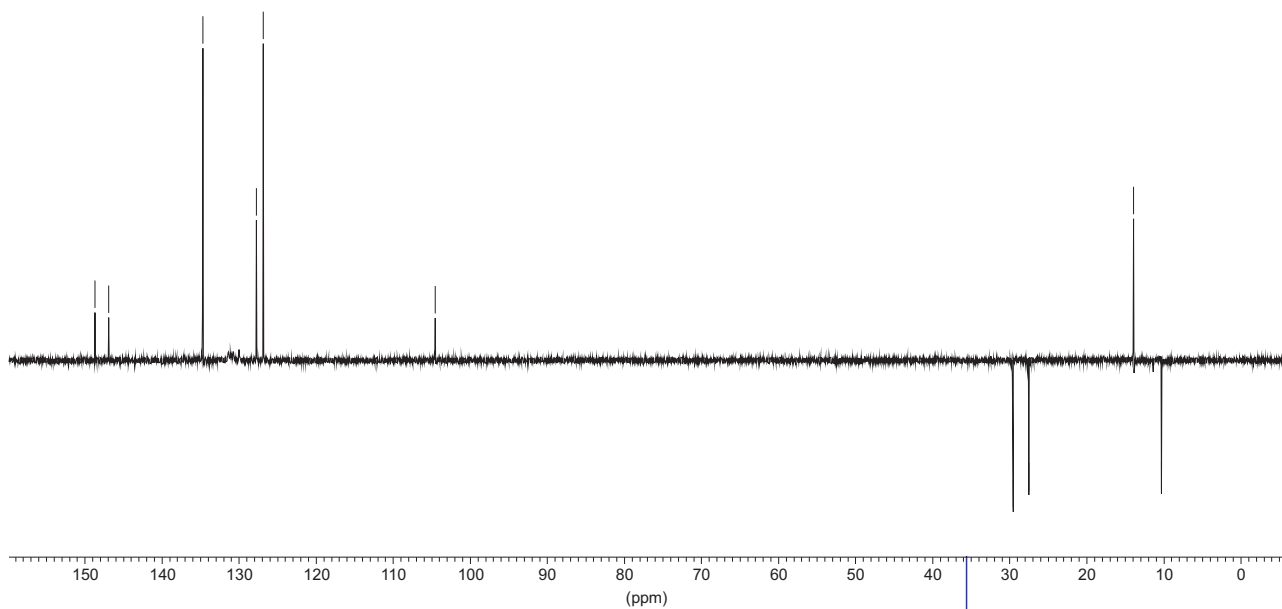
104.5557

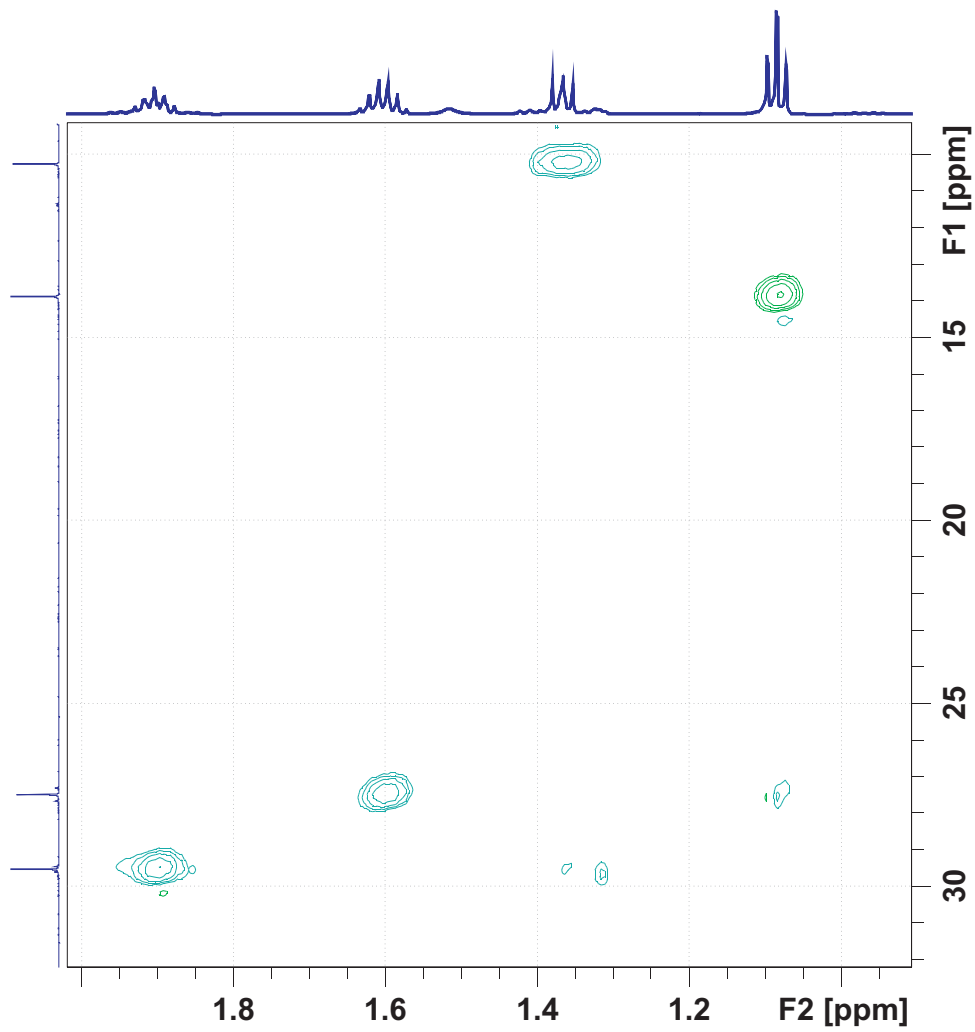
29.5495

27.5150

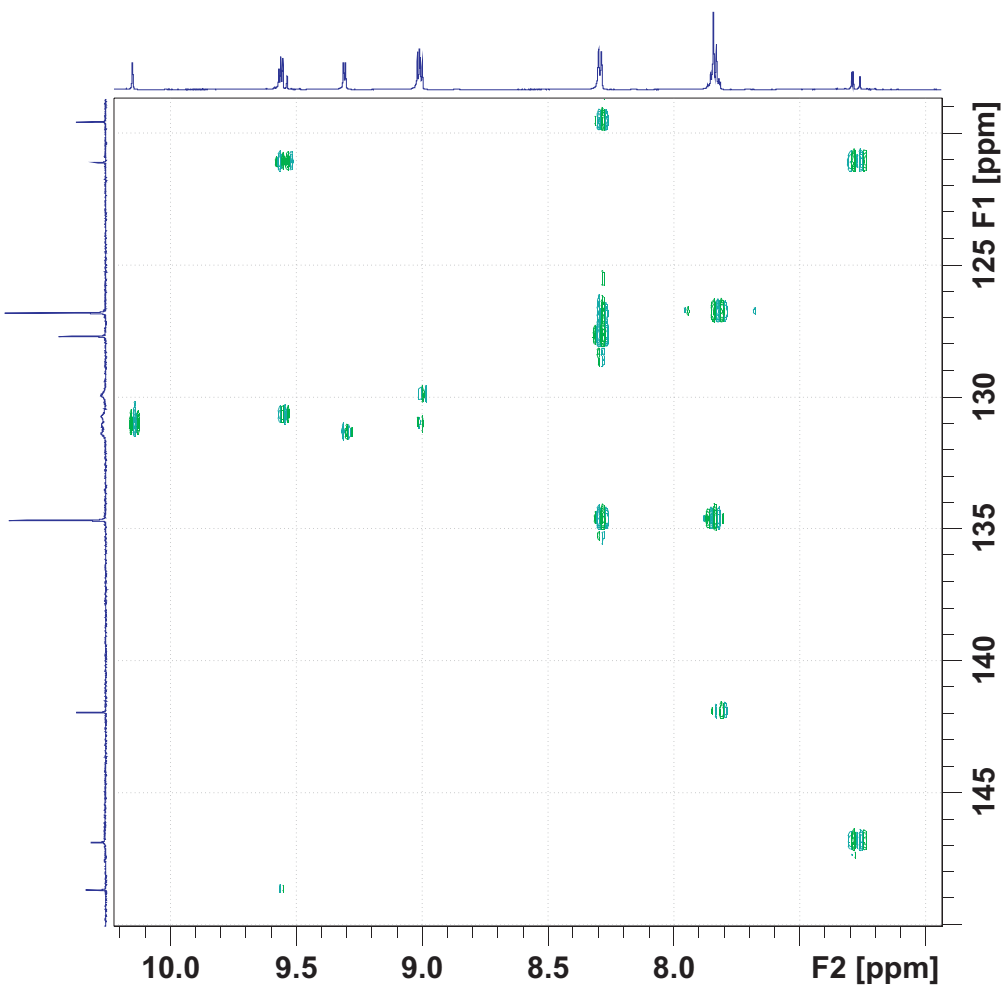
13.9080

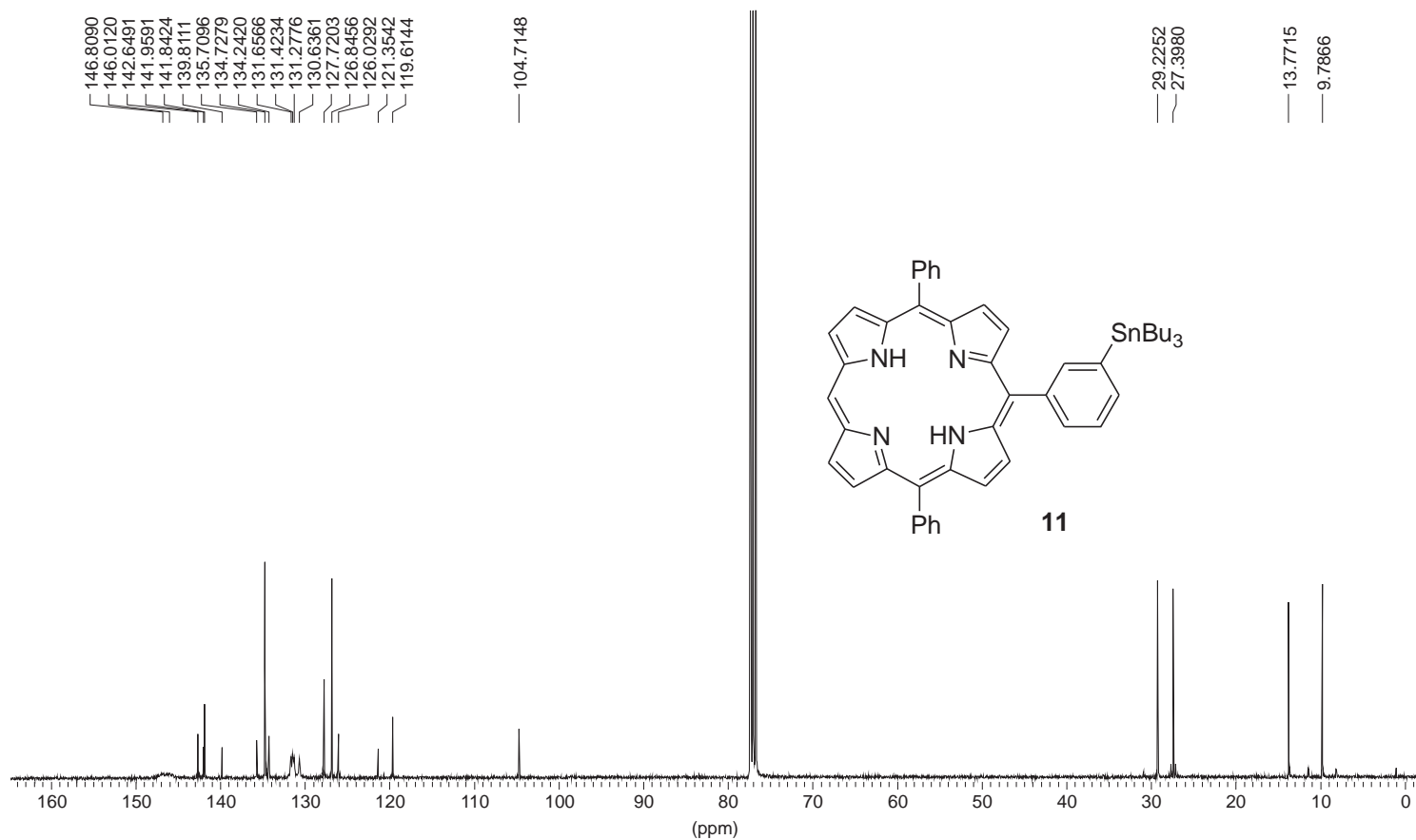
10.2766



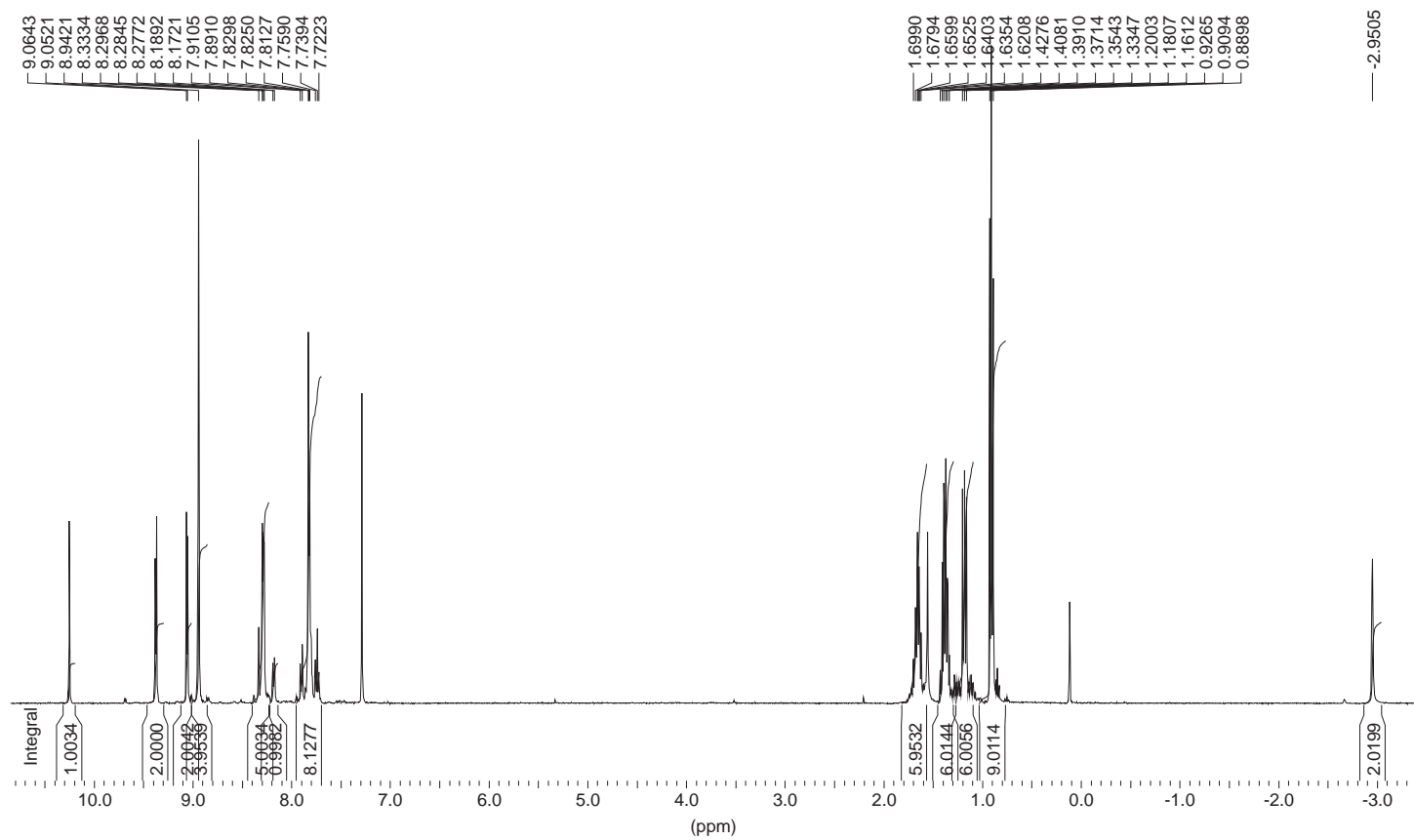


Compound 10:  
1H/13C HMBC for aromatic region

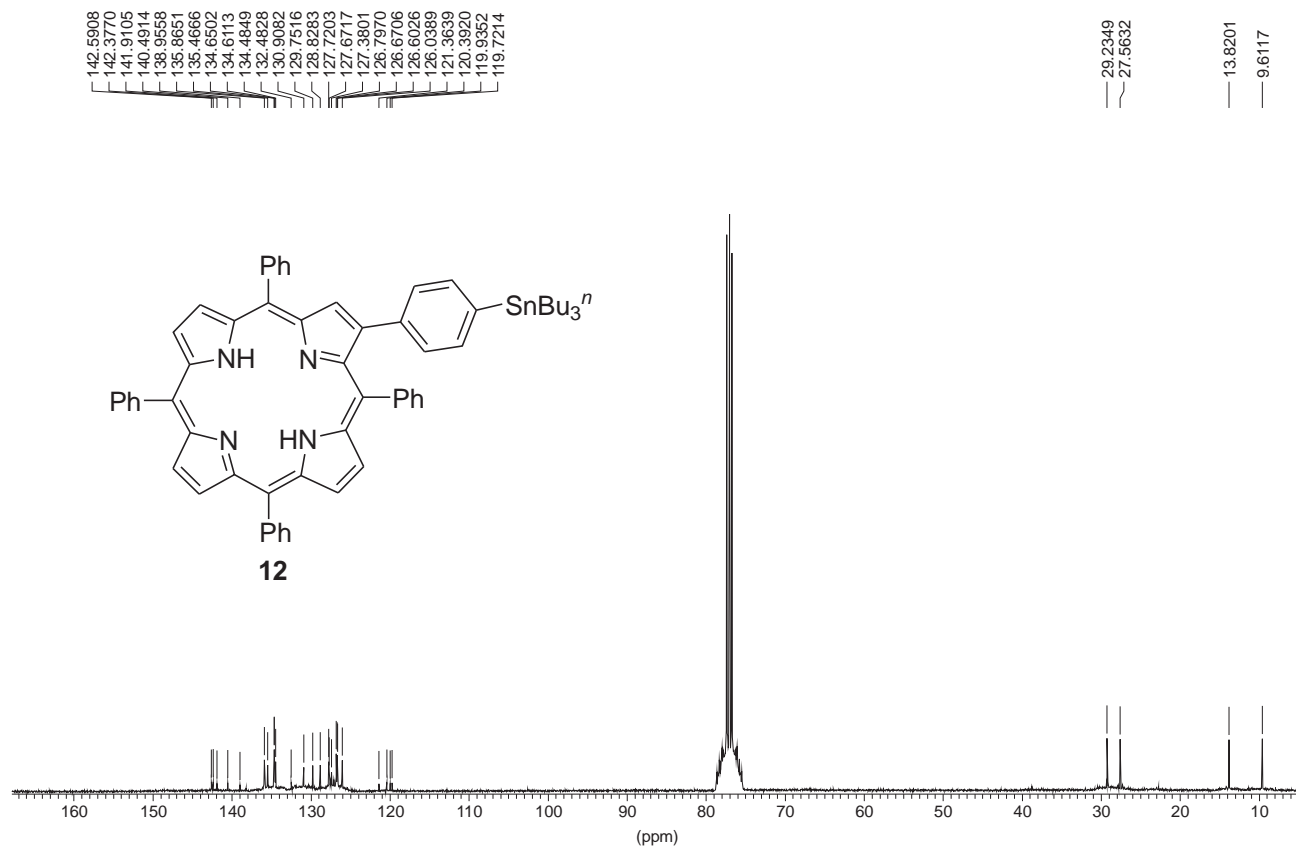




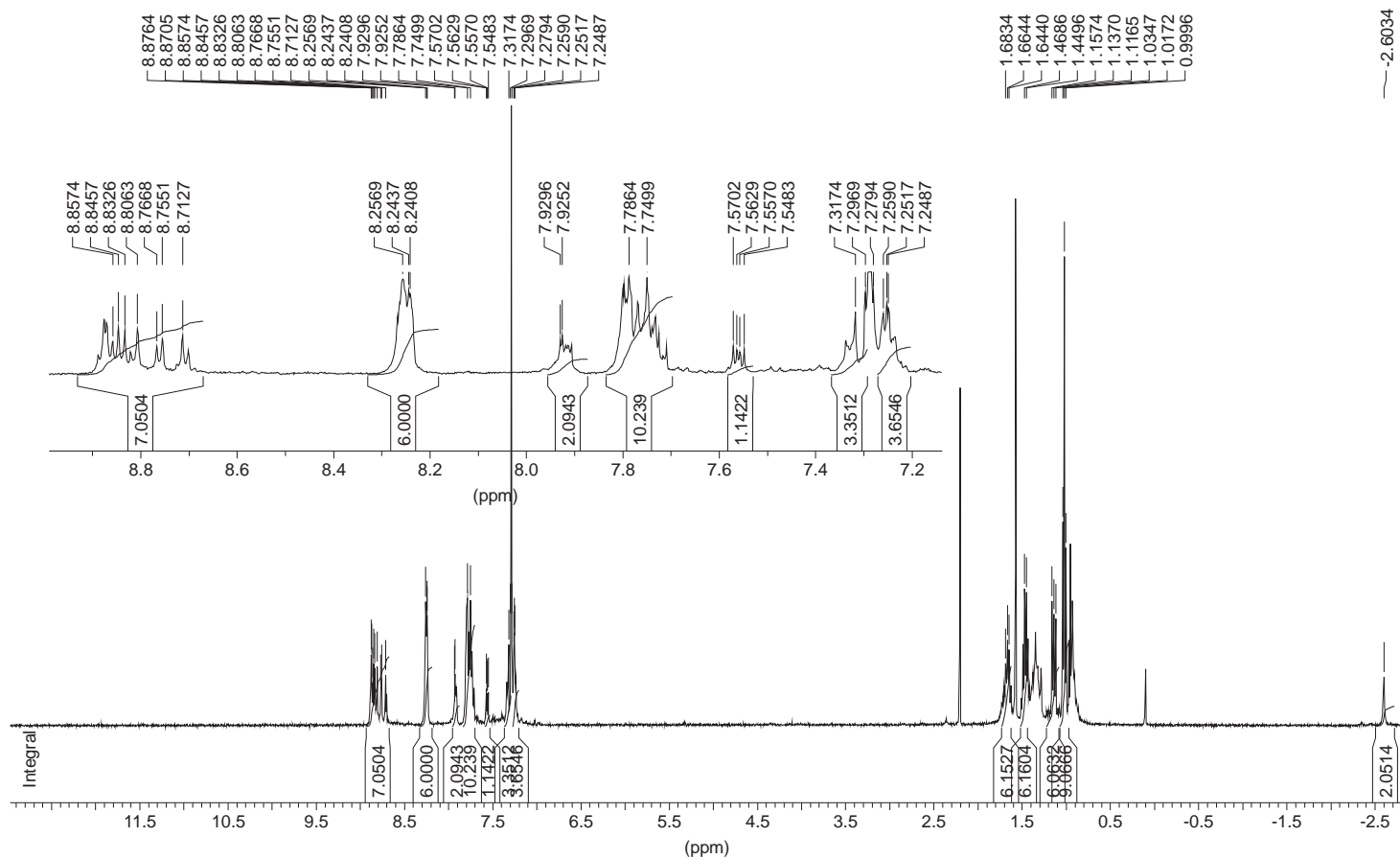
<sup>1</sup>H, CDCl<sub>3</sub>, 400 Mhz



<sup>13</sup>C, 100 MHz, CDCl<sub>3</sub>



<sup>1</sup>H, CDCl<sub>3</sub>, 400 MHz

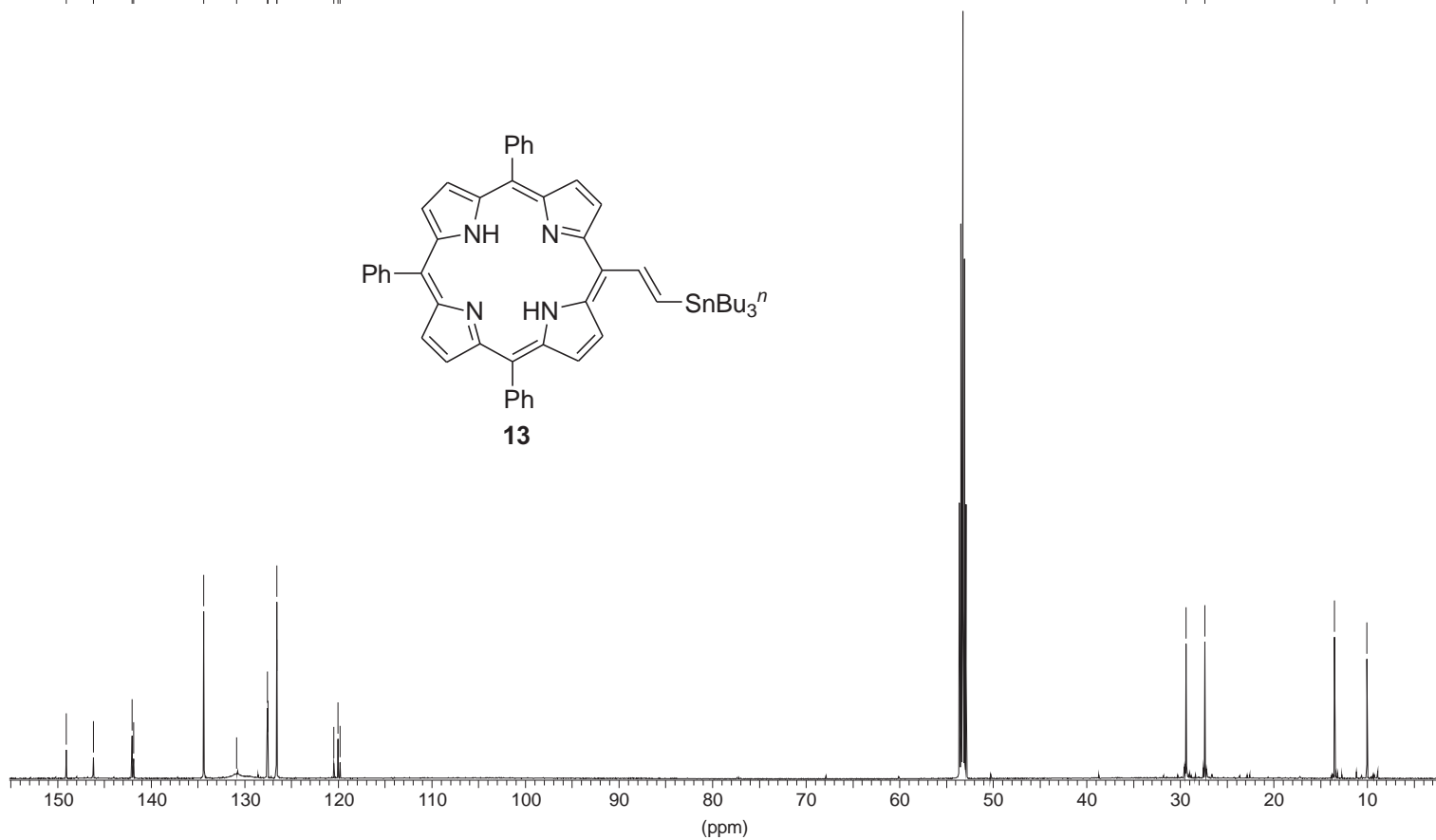
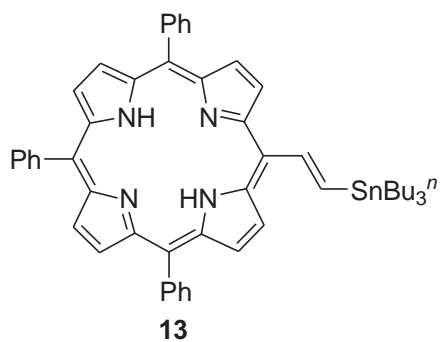


100 MHz, <sup>13</sup>C, CD<sub>2</sub>Cl<sub>2</sub>

149.0958  
146.1717  
142.0517  
141.8694  
134.3585  
130.8510  
127.5696  
127.5332  
126.5779  
126.5560  
120.4817  
120.0077  
119.7890

29.3601  
27.3475

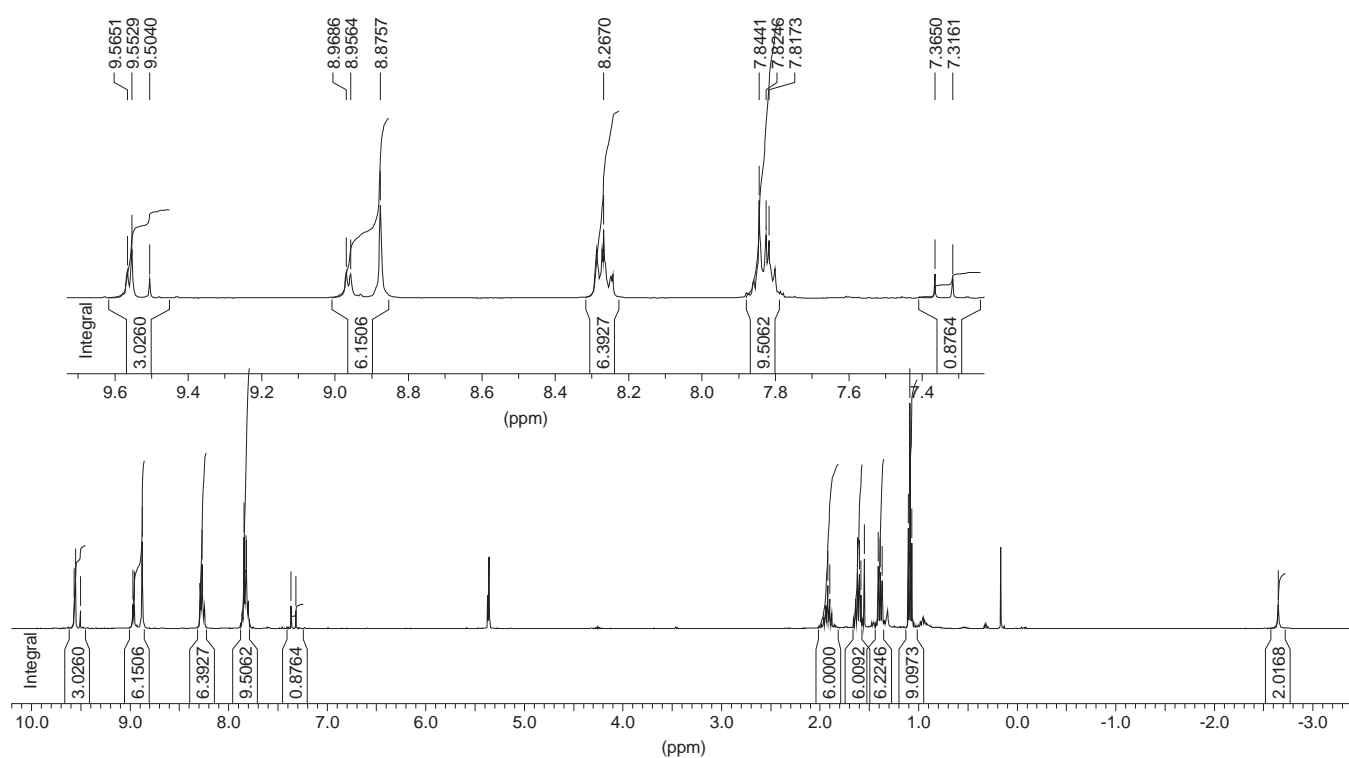
13.4779  
10.0288

1H, 400 MHz, CD<sub>2</sub>Cl<sub>2</sub>

9.5651  
9.5529  
9.5040  
8.9686  
8.9564  
8.8757  
8.2670  
7.8441  
7.8246  
7.8173  
7.3650  
7.3161

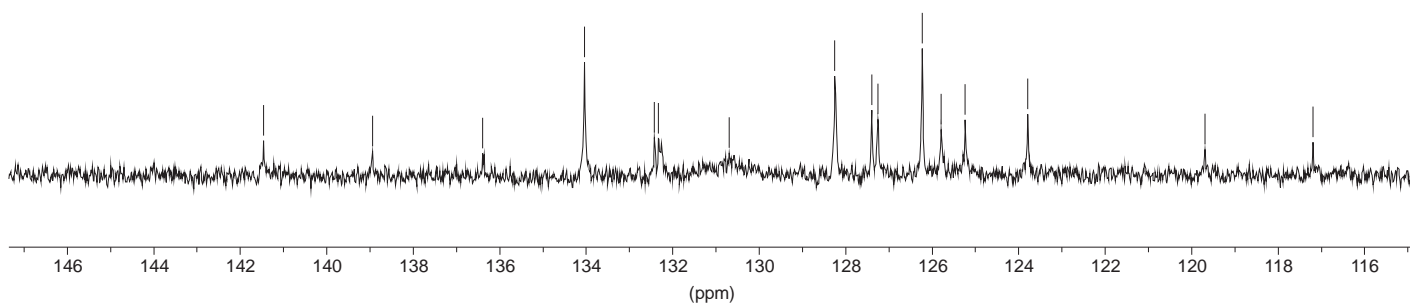
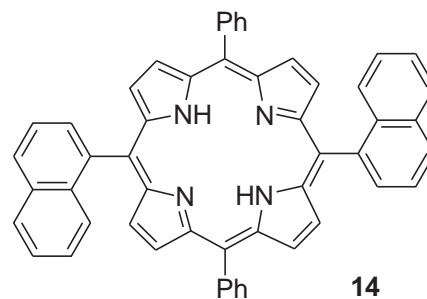
1.9211  
1.9015  
1.6204  
1.6008  
1.5837  
1.5495  
1.4102  
1.3882  
1.3686  
1.1046  
1.0875  
1.0679

-2.6502

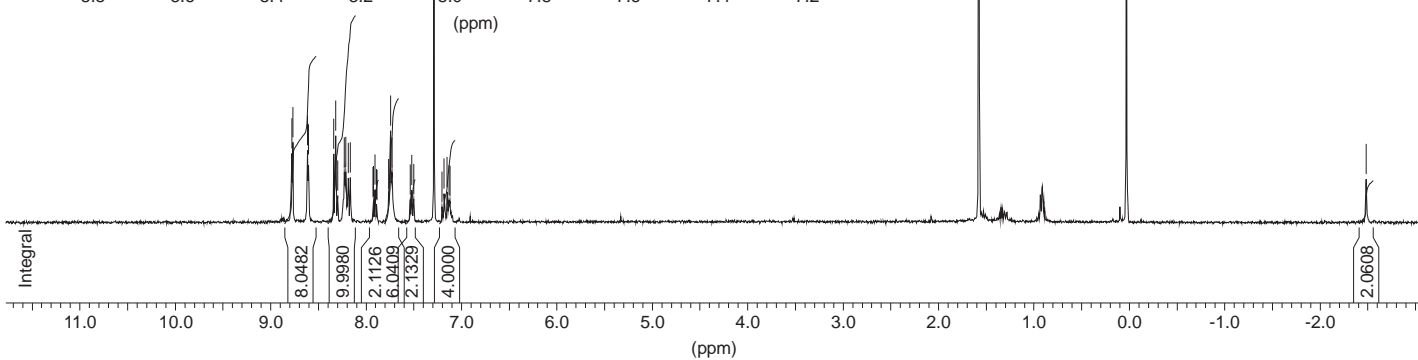
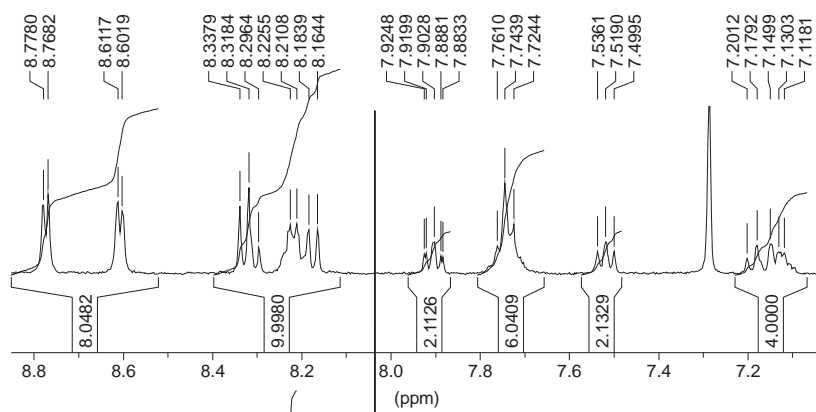
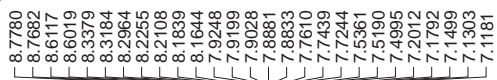




<sup>13</sup>C, CDCl<sub>3</sub>, 100.6 MHz



<sup>1</sup>H, CDCl<sub>3</sub>, 400 MHz



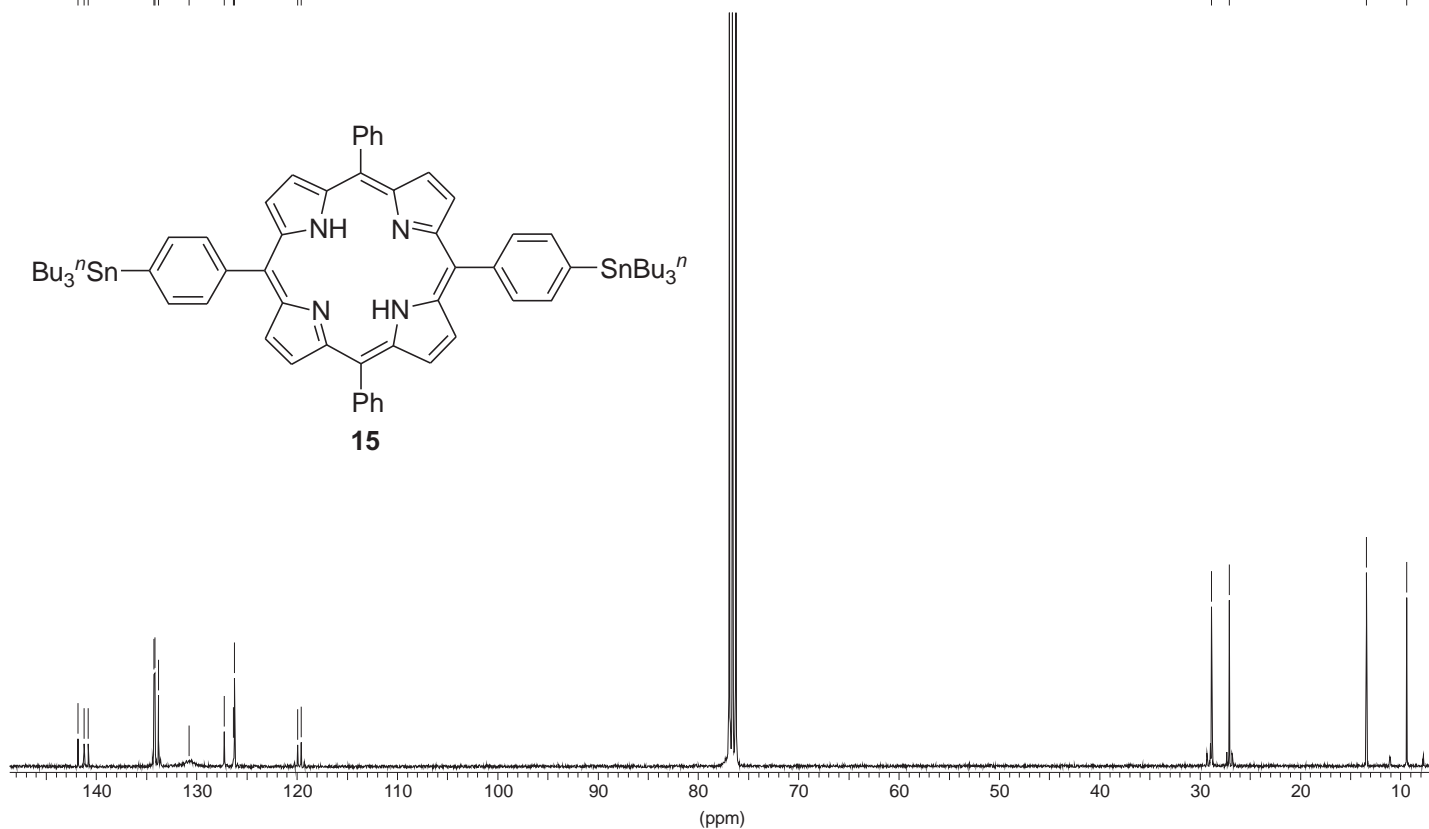
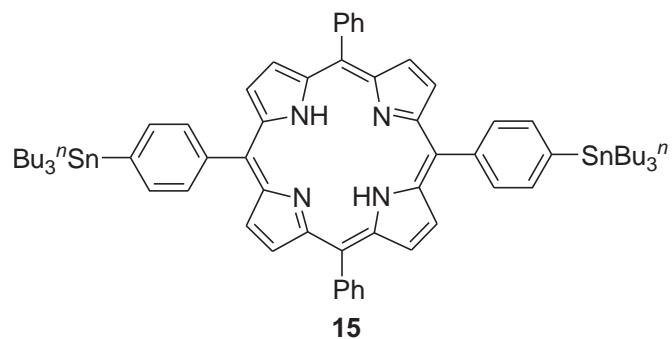
-2.4840

$^{13}\text{C}$ ,  $\text{CDCl}_3$ , 100 MHz

141.8168  
141.2179  
140.7832  
134.2532  
134.1662  
133.7992  
130.7467  
127.2305  
126.3225  
126.2259  
119.9374  
119.5800

28.8457  
27.0586

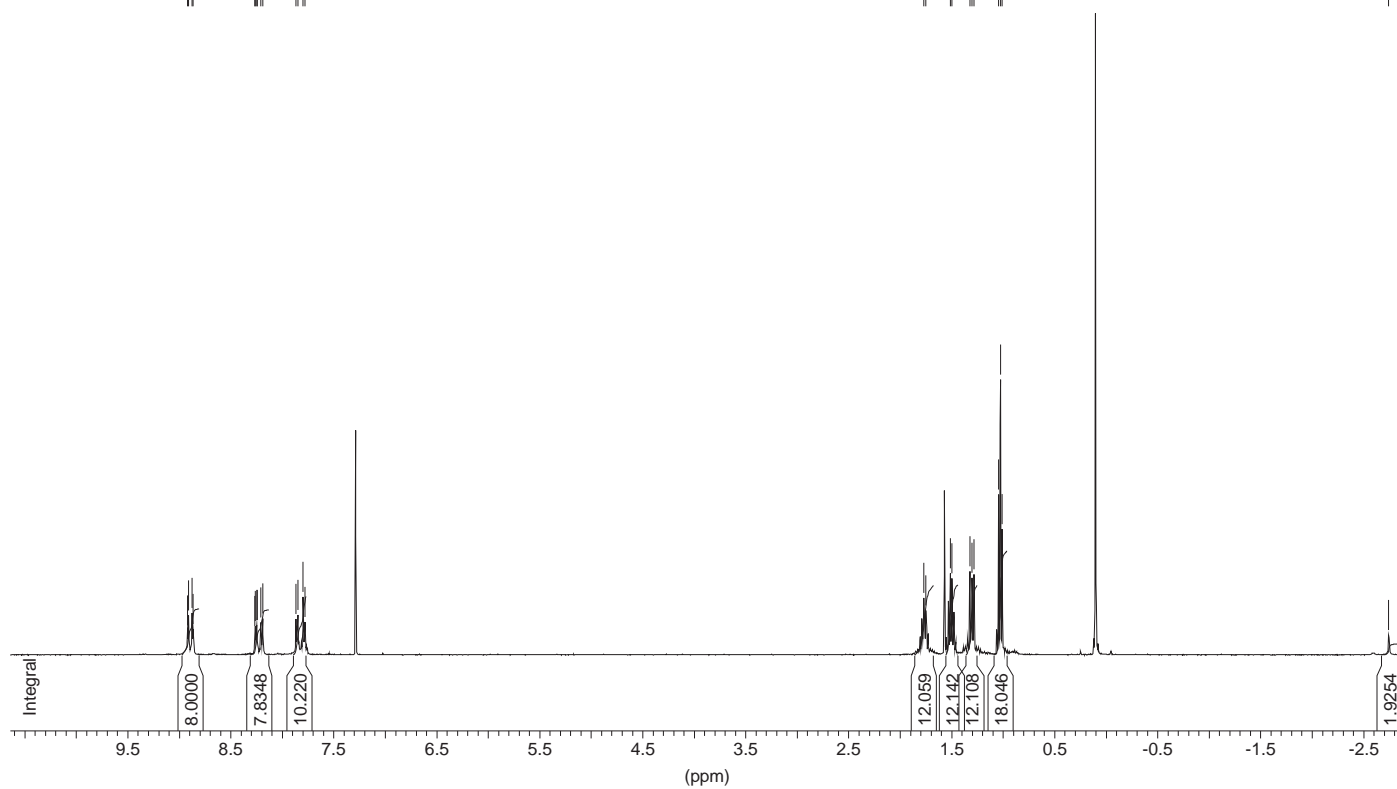
13.3900  
9.3909

 $^1\text{H}$ ,  $\text{CDCl}_3$ , 400 MHz

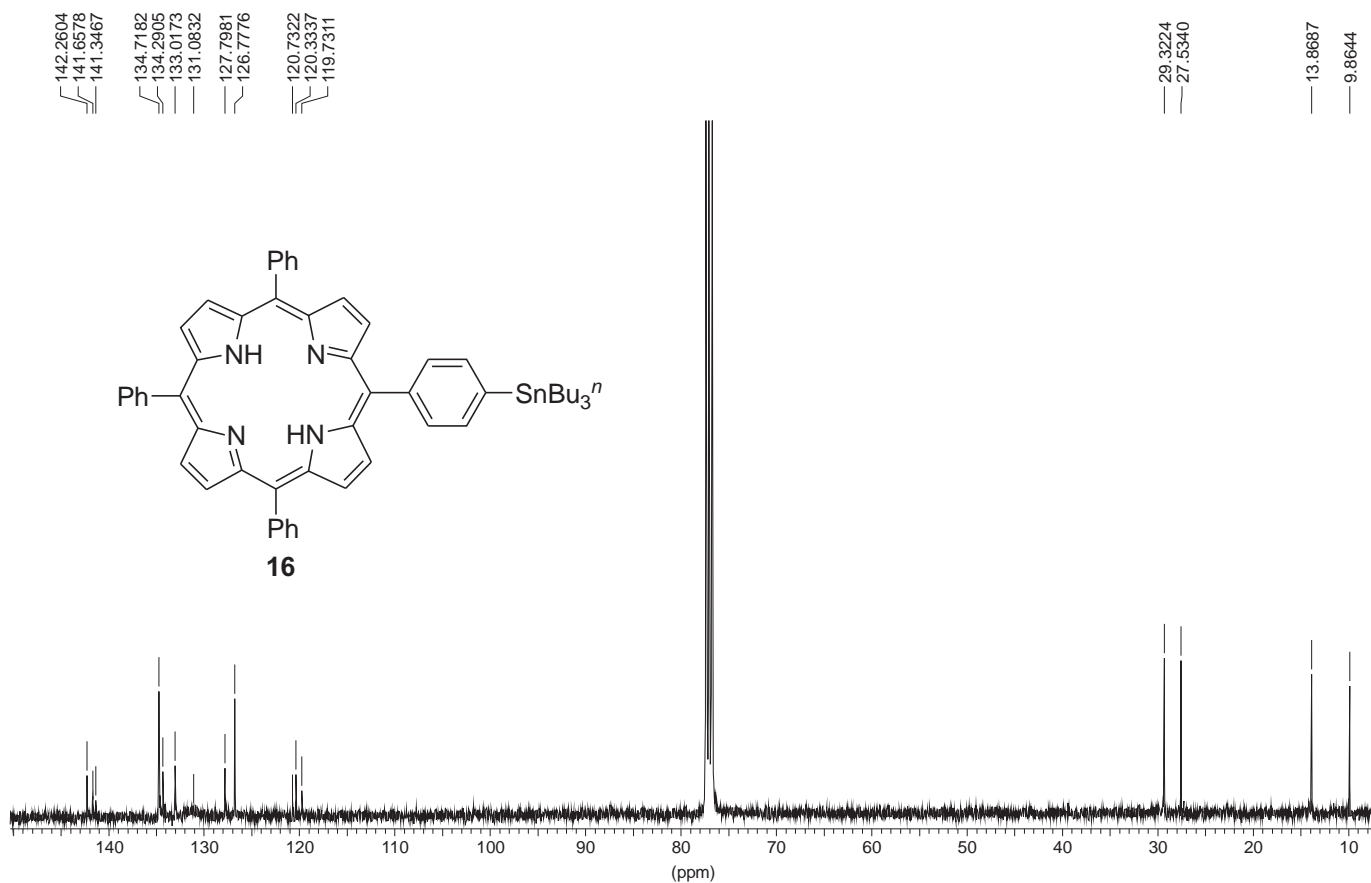
8.9173  
8.9056  
8.8749  
8.8632  
8.2642  
8.2613  
8.2467  
8.2408  
8.2072  
8.1868  
7.8653  
7.8449  
7.7952  
7.7762

1.7667  
1.7477  
1.5125  
1.4949  
1.3225  
1.3021  
1.2816  
1.0449  
1.0259  
1.0084

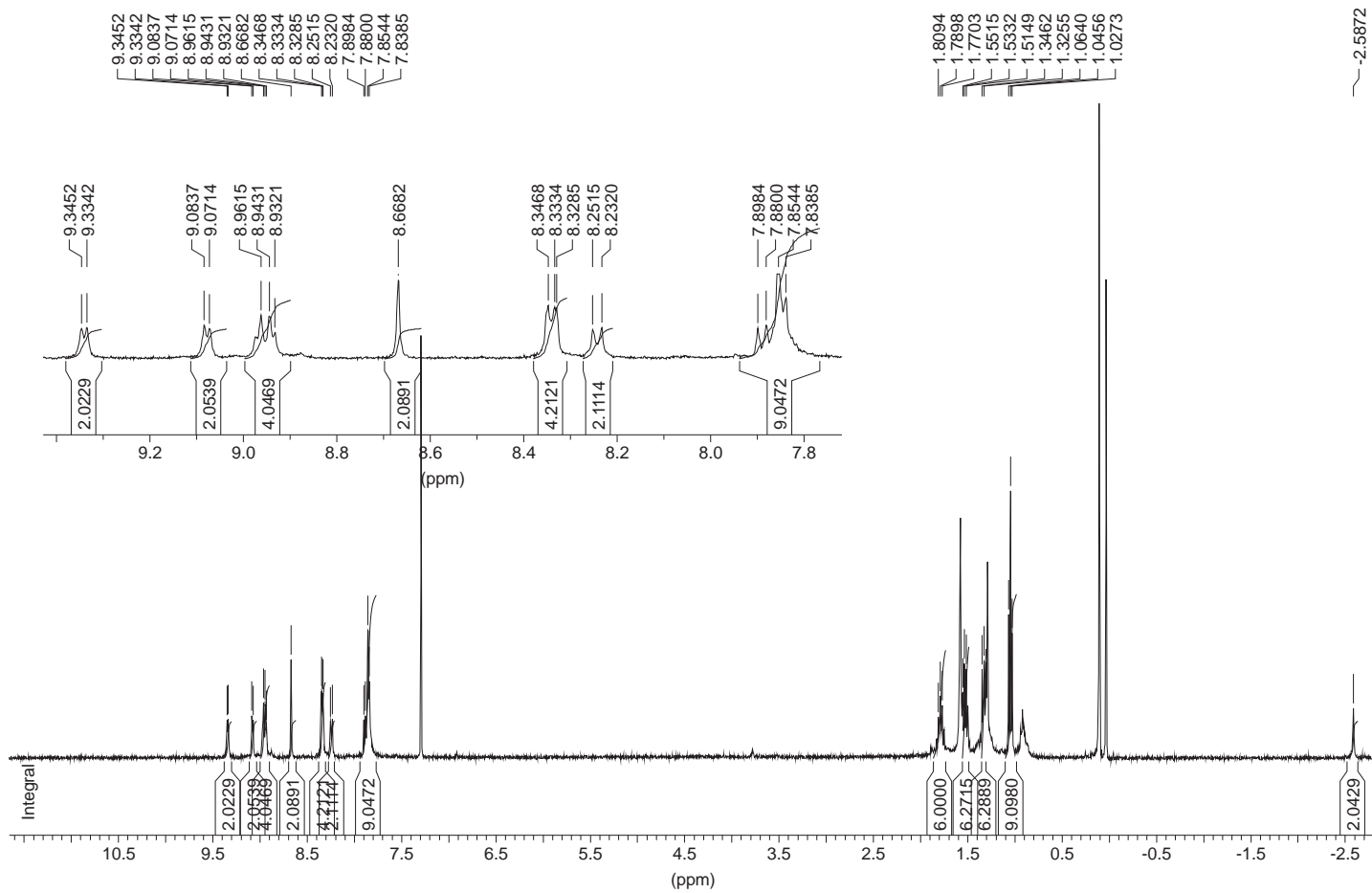
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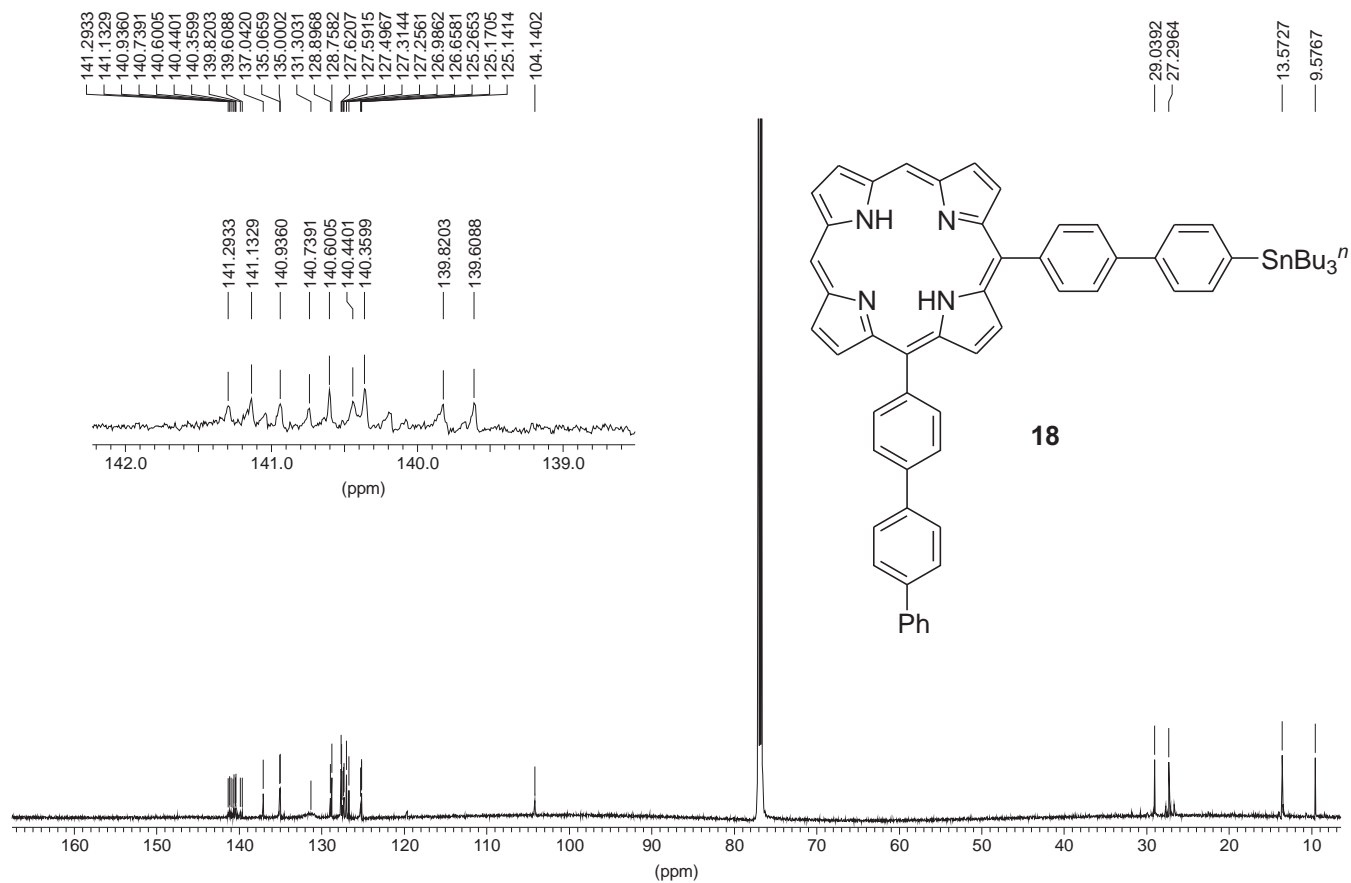
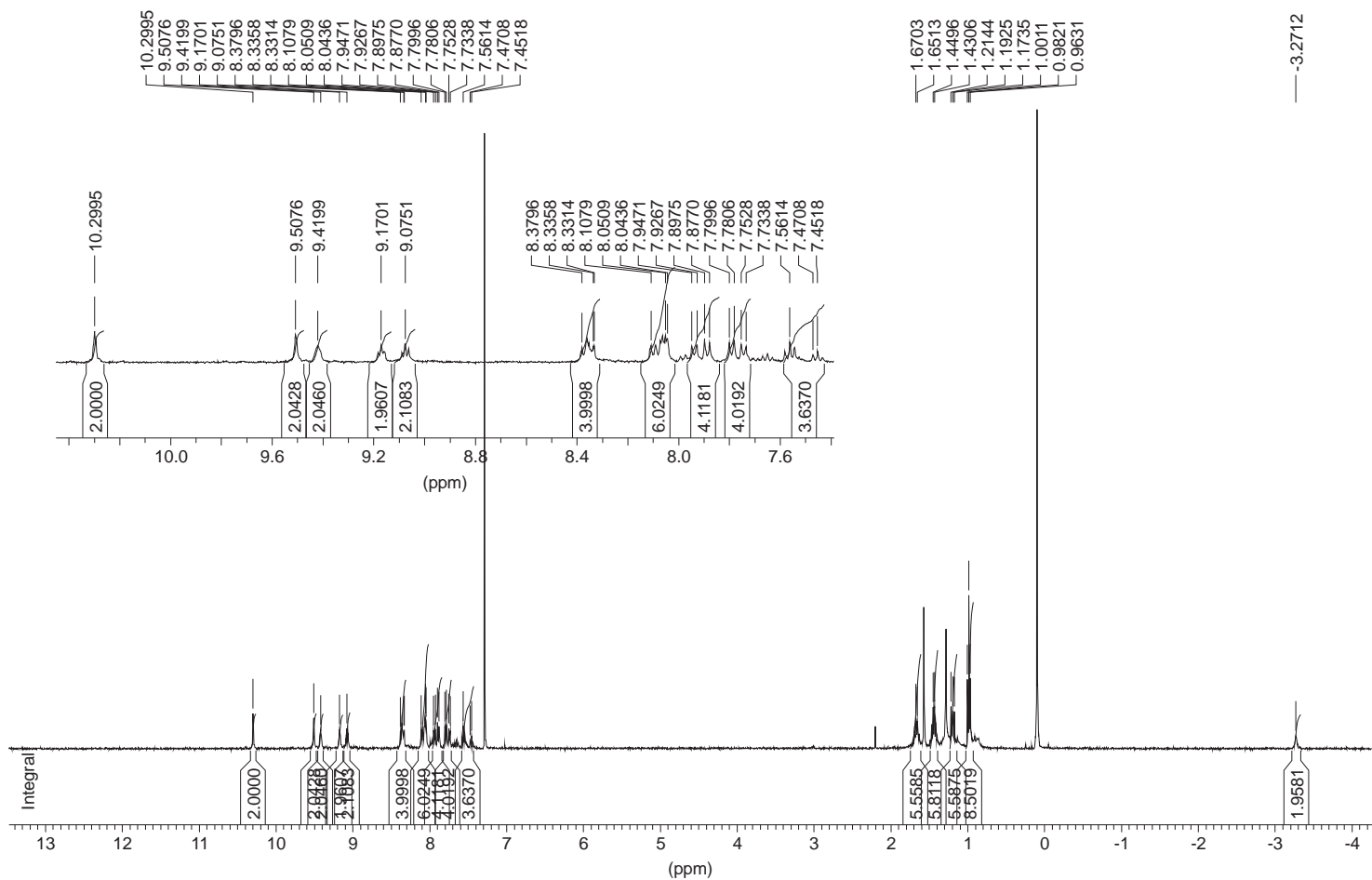


13C, 100 MHz, CDCl3



1H, 400 MHz, CDCl3



$^{13}\text{C}$ ,  $\text{CDCl}_3$ , 100 MHz $^1\text{H}$ , 400 MHz,  $\text{CDCl}_3$ 

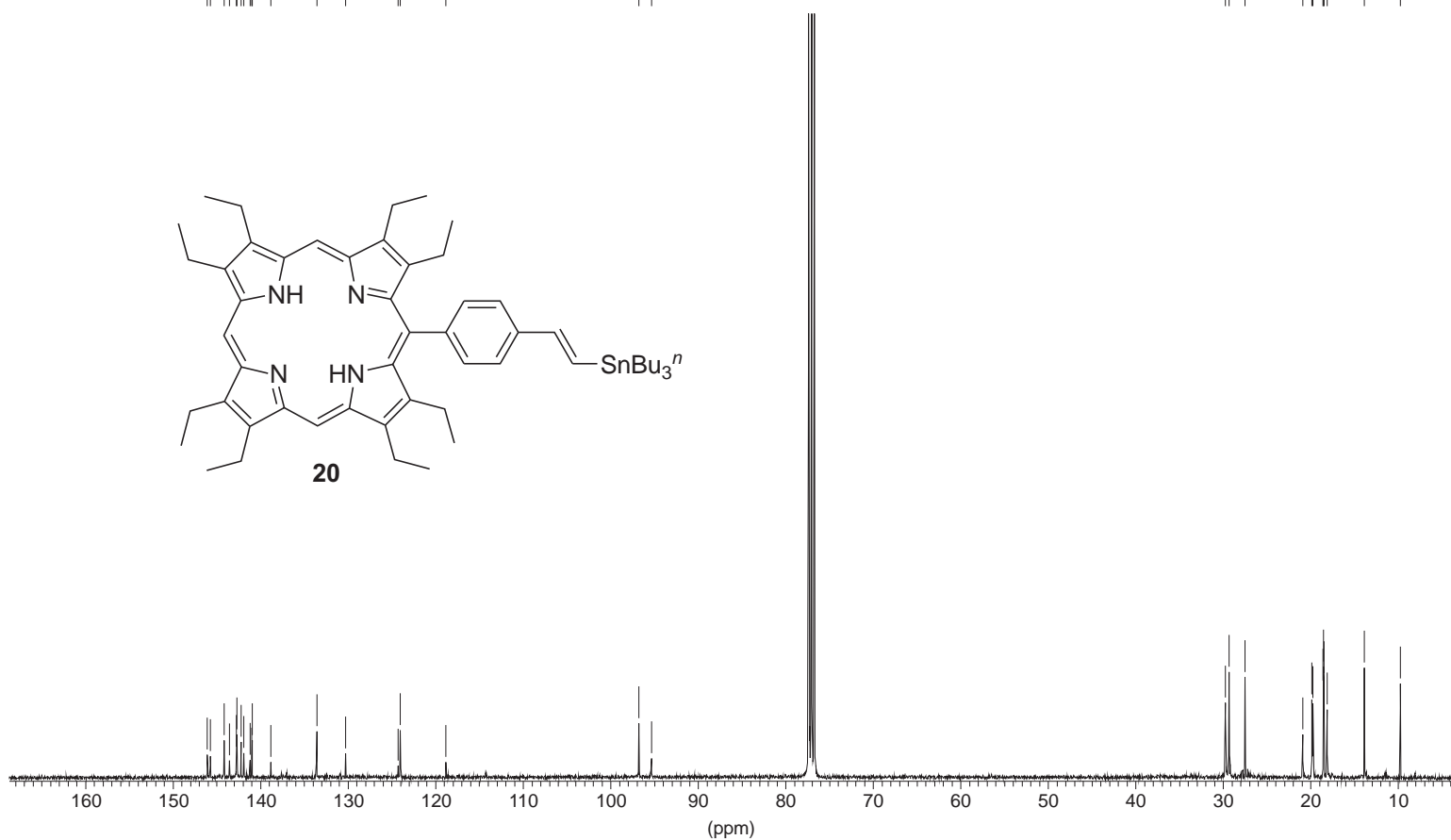
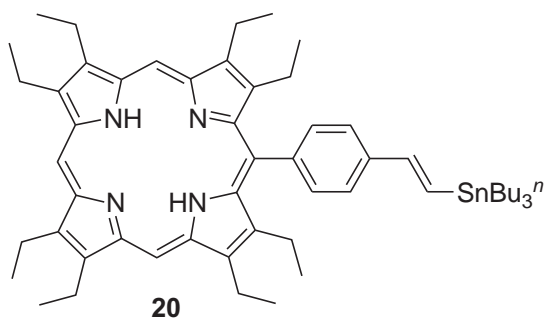
100 Mhz, <sup>13</sup>C, CDCl<sub>3</sub>

146.0606  
145.7107  
144.1362  
143.5433  
142.7463  
142.7172  
142.2215  
141.8910  
141.1912  
140.9871  
140.9580  
138.8100

133.5713  
130.2765  
124.2408  
124.0173  
118.7980

96.7353  
95.3357

29.7403  
29.2932  
27.4757  
20.9152  
19.8461  
19.7489  
18.5729  
18.5534  
18.4757  
18.1161  
13.8493  
9.7672

<sup>1</sup>H, CDCl<sub>3</sub>, 400 MHz

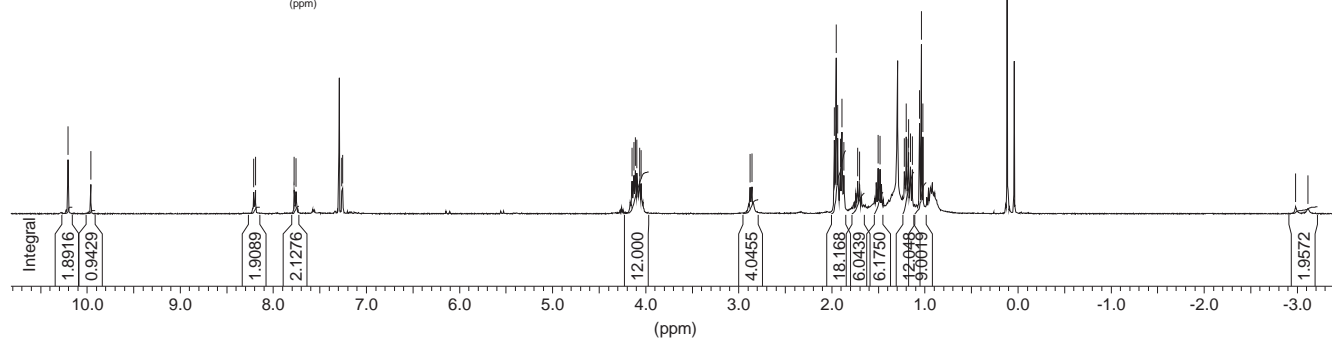
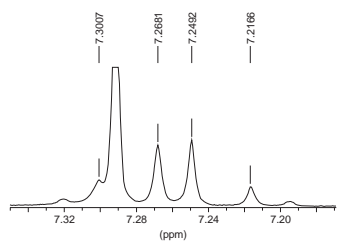
10.2017  
9.9591

8.2096  
8.1895  
7.7732  
7.7537  
7.2615  
7.2527

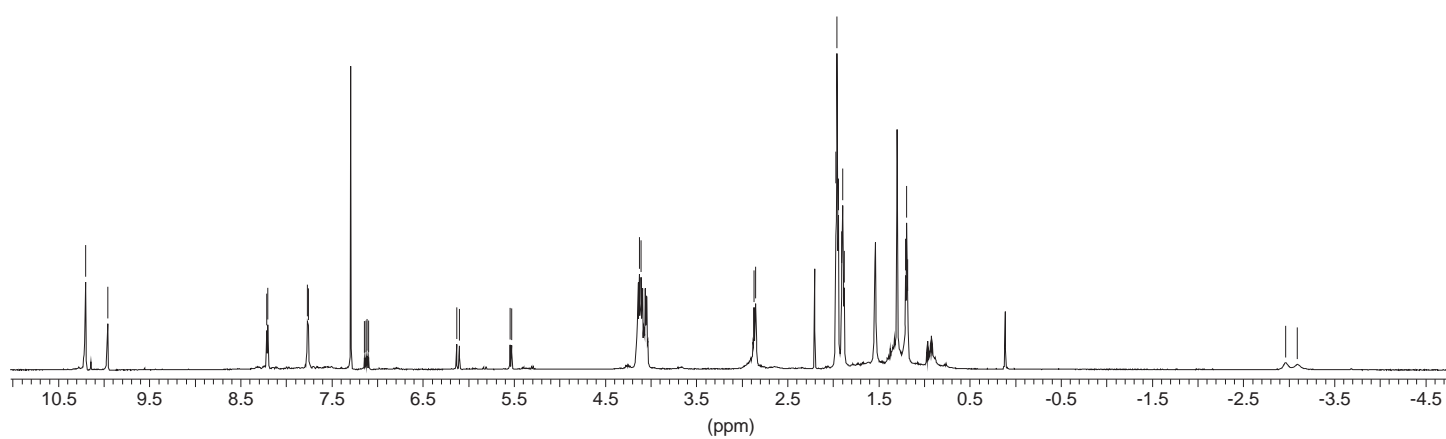
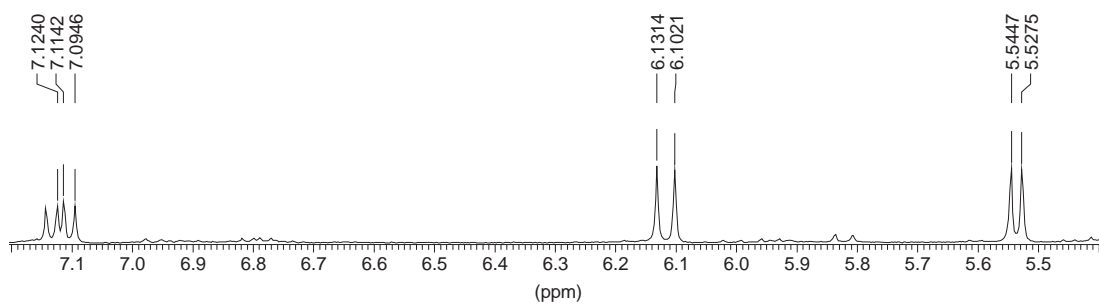
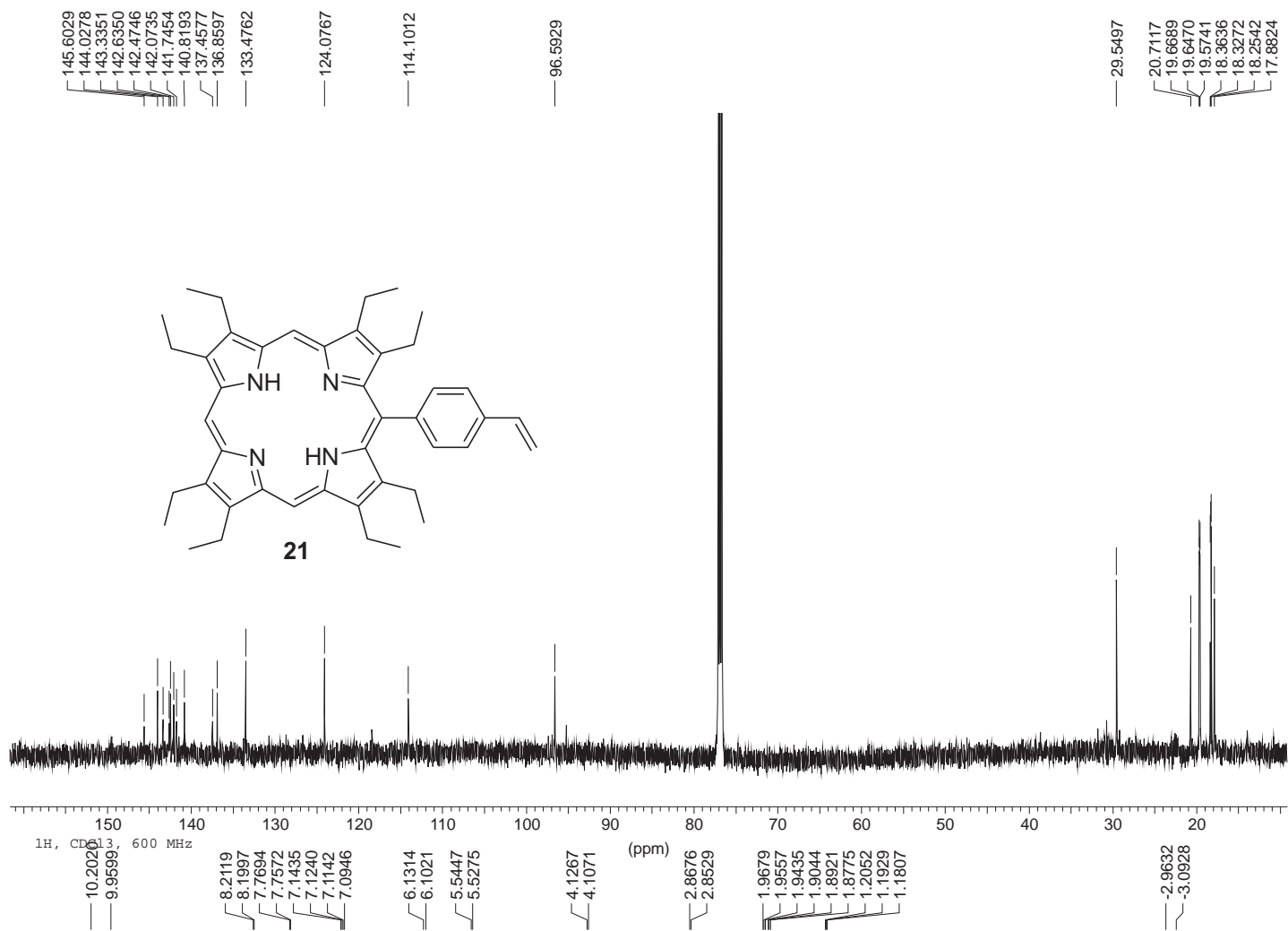
4.1444  
4.1256  
4.1105  
4.0917  
4.0647  
4.0453

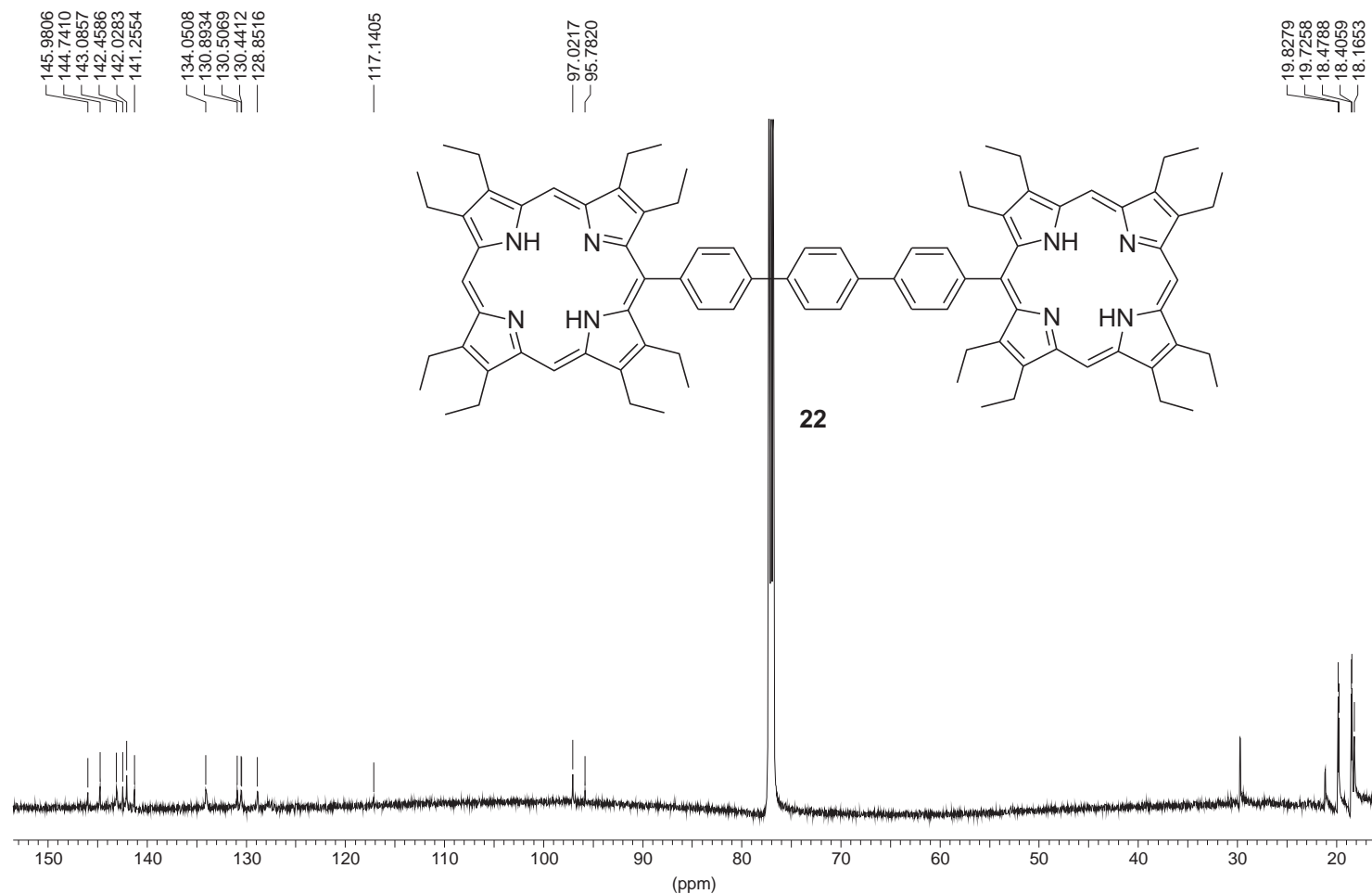
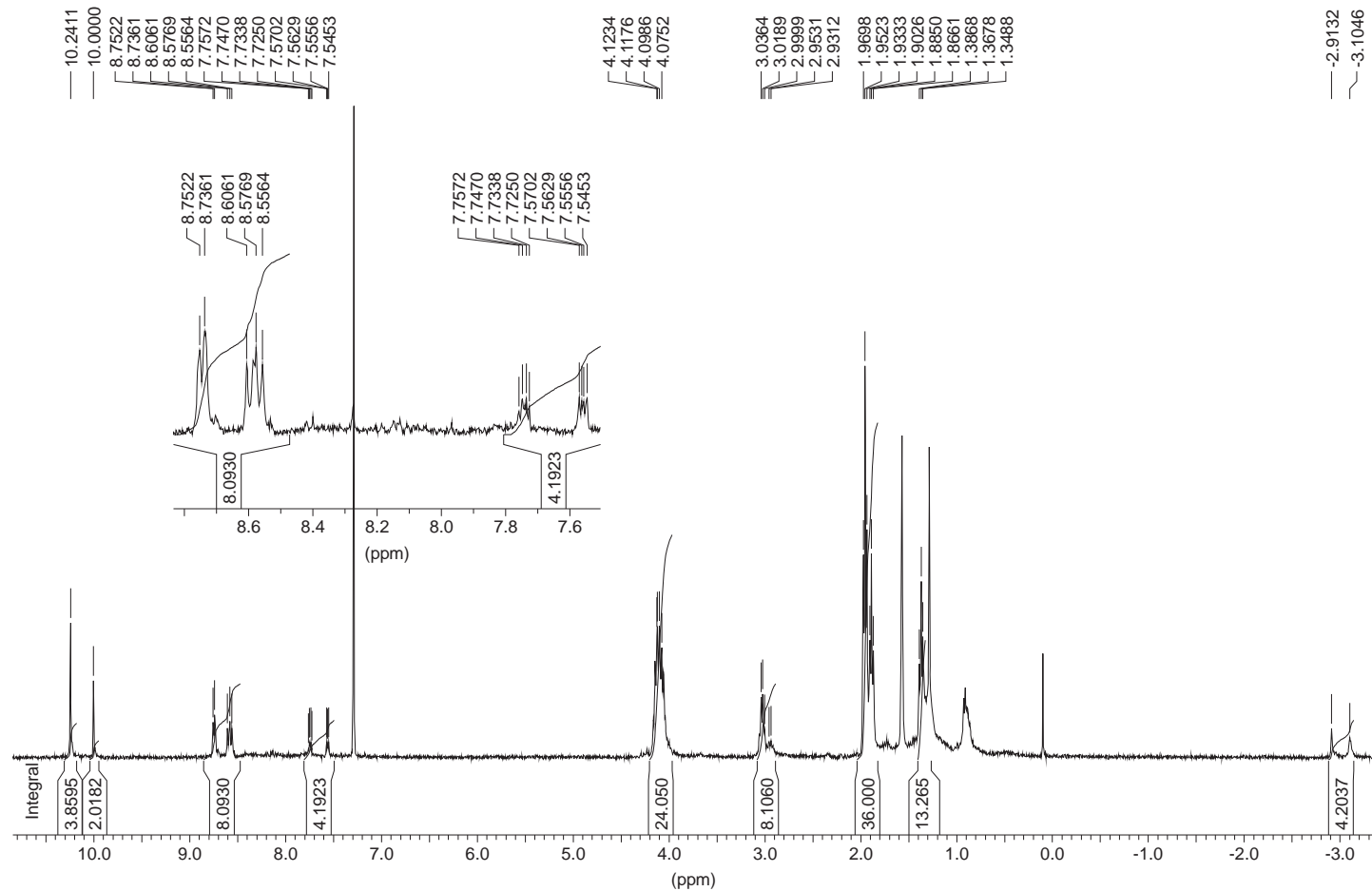
2.8758  
2.8570  
1.9723  
1.9528  
1.9340  
1.8882  
1.8694  
1.7208  
1.7014  
1.5007  
1.4819  
1.2179  
1.1997  
1.1809  
1.1740  
1.1533  
1.1332  
1.0561  
1.0379  
1.0198

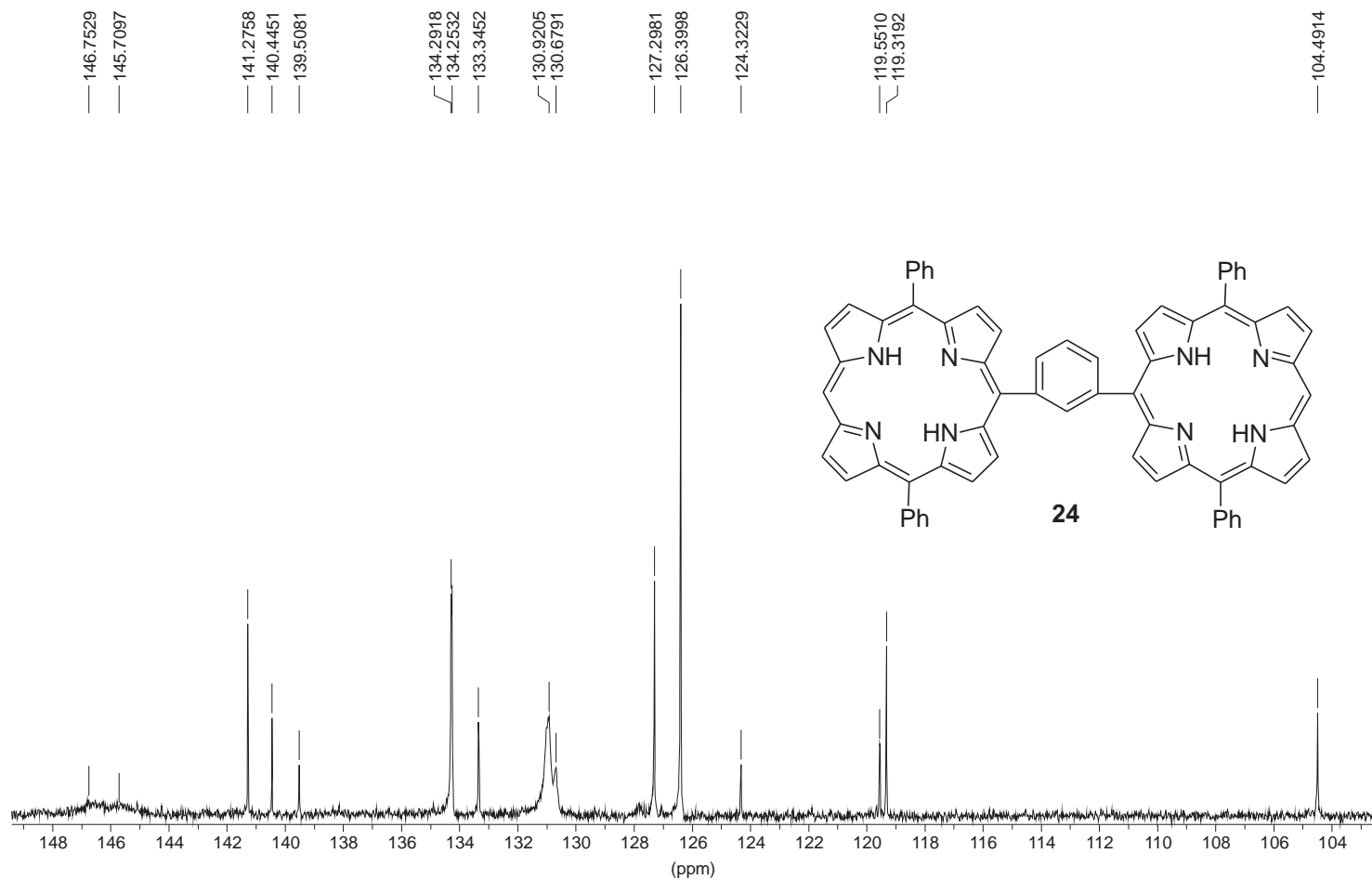
-2.9853  
-3.1169



13C, 150 MHz, CDCl3



$^{13}\text{C}$ ,  $\text{CDCl}_3$ , 150.9 MHz $^1\text{H}$ , 400 MHz,  $\text{CDCl}_3$ 

13C, CDCl<sub>3</sub>, 100.6 Mhz1H, CDCl<sub>3</sub>, 400 MHz