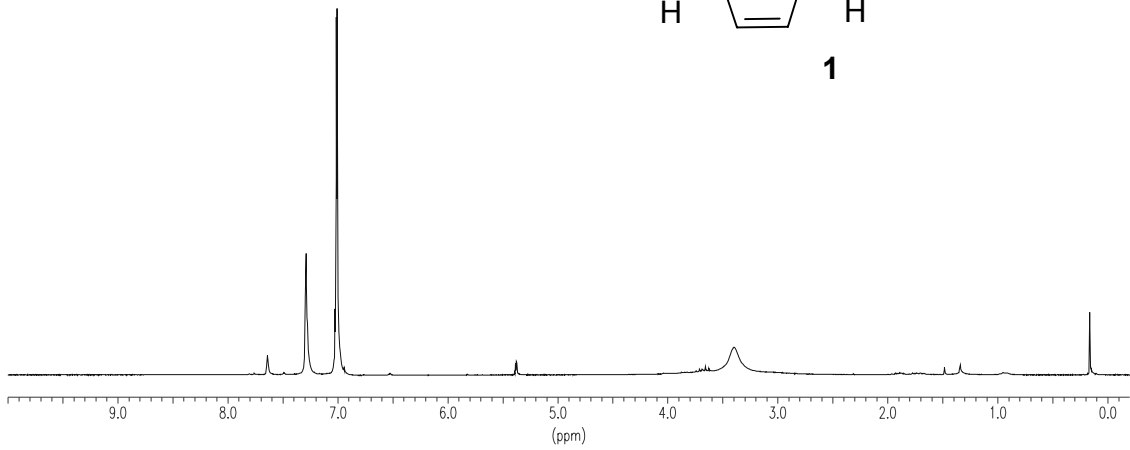
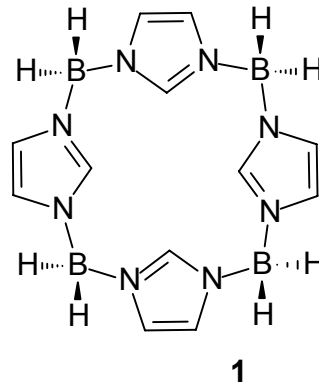
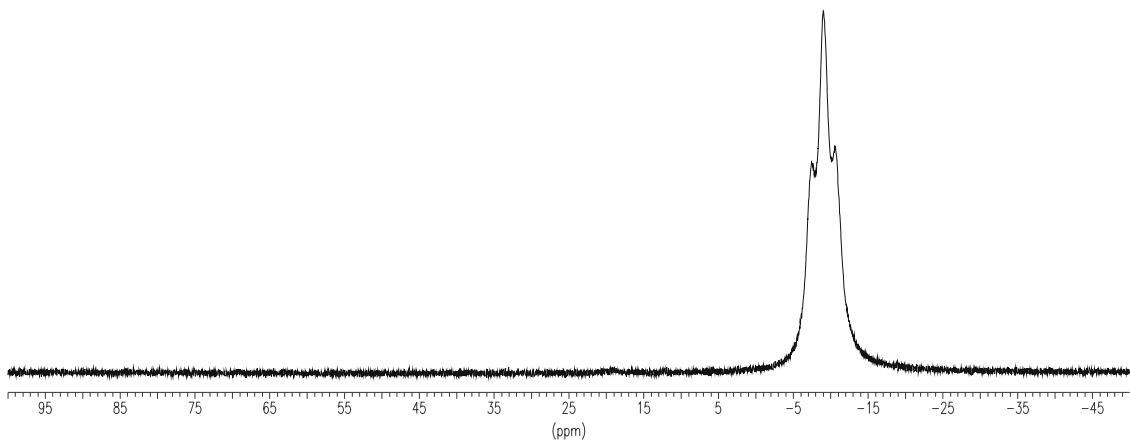


## 8 Spektrenanhang

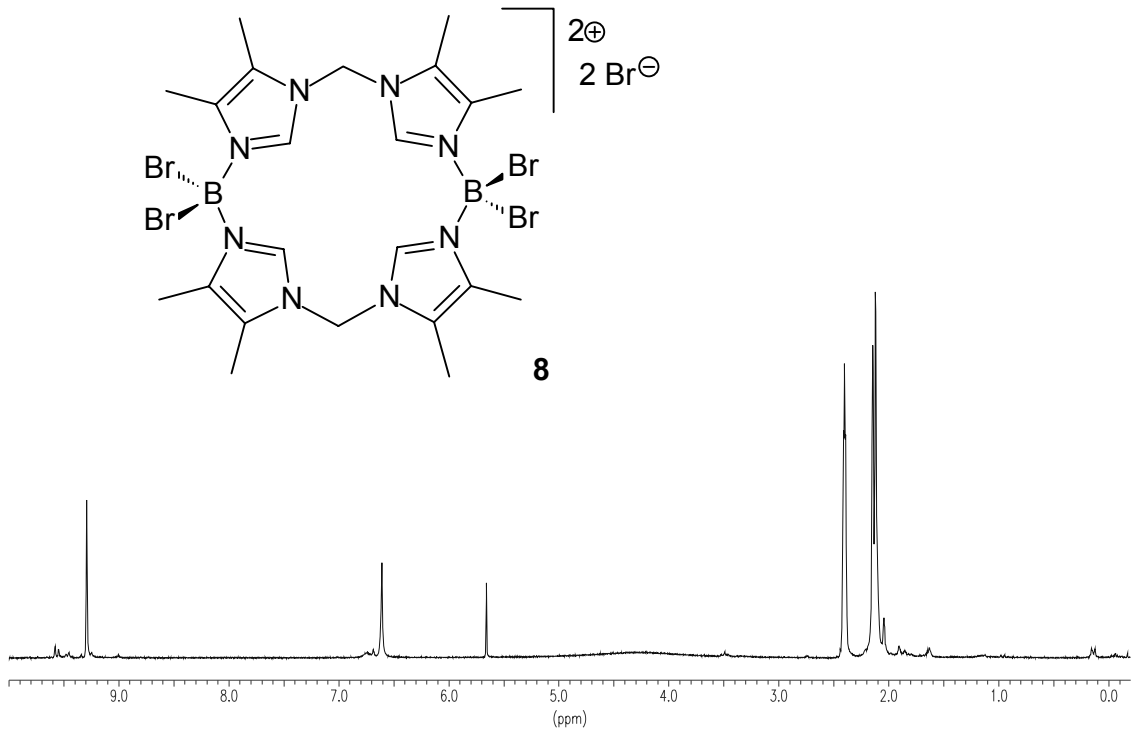
$^1\text{H}$ - und $^{11}\text{B}$ -NMR-Spektrum von <b>1</b>	S. 143
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>8</b>	S. 144
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>10</b>	S. 145
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>11</b>	S. 146
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>14</b>	S. 147
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>16</b>	S. 148
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>18</b>	S. 159
$^1\text{H}$ - und $^{13}\text{C}$ -NMR-Spektrum von <b>20</b>	S. 150
$^1\text{H}$ - und $^{11}\text{B}$ -NMR-Spektrum von <b>22</b>	S. 151
$^1\text{H}$ -NMR-Spektrum von <b>23a</b>	S. 152
$^1\text{H}$ -NMR-Spektrum von <b>25</b>	S. 152
$^1\text{H}$ -NMR-Spektrum von <b>26</b>	S. 153
$^1\text{H}$ -NMR-Spektrum von <b>29</b> und <b>31</b>	S. 153
$^1\text{H}$ -NMR-Spektrum von <b>34</b>	S. 154
$^1\text{H}$ -NMR-Spektrum von <b>36</b>	S. 154
$^1\text{H}$ -NMR-Spektrum von <b>35</b> und <b>23a</b>	S. 155



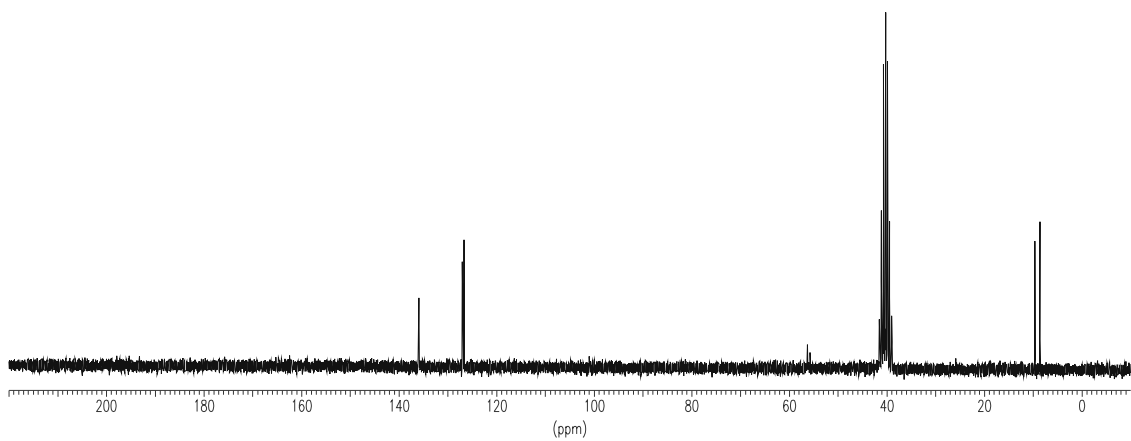
$^1\text{H}$ -NMR-Spektrum von **1** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )



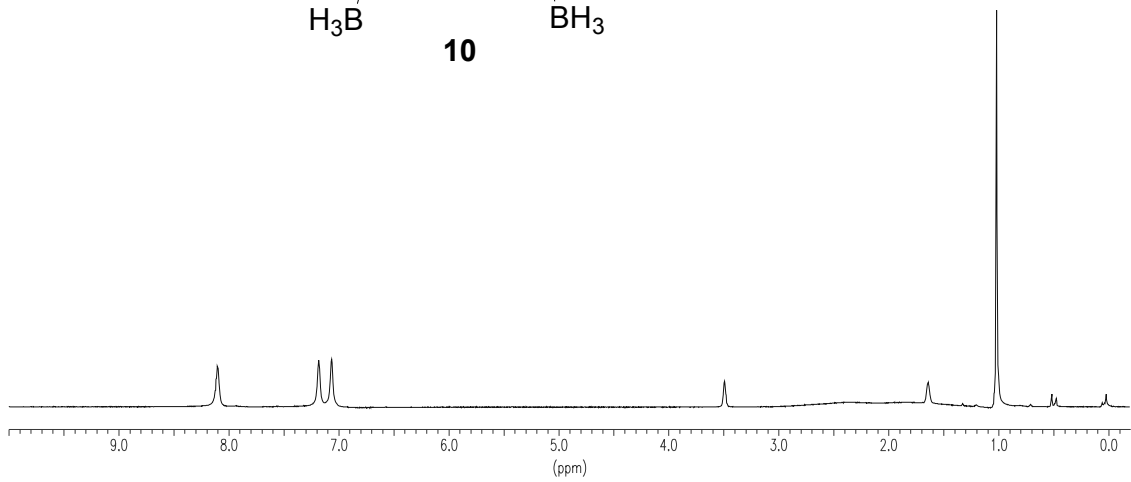
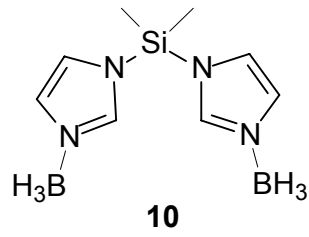
$^{11}\text{B}$ -NMR-Spektrum von **1** (64.2 MHz,  $\text{CD}_2\text{Cl}_2$ )



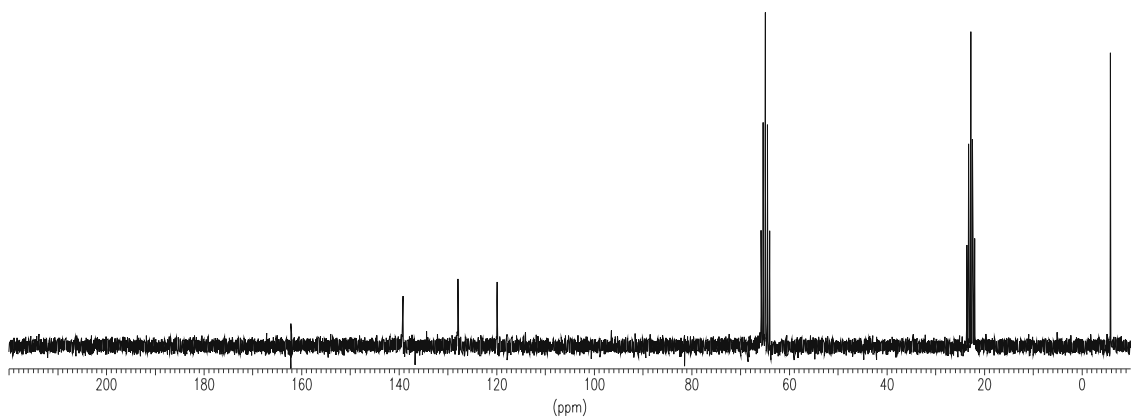
$^1\text{H-NMR}$ -Spektrum von **8** (200.1 MHz,  $\text{D}_6\text{-DMSO}$ )



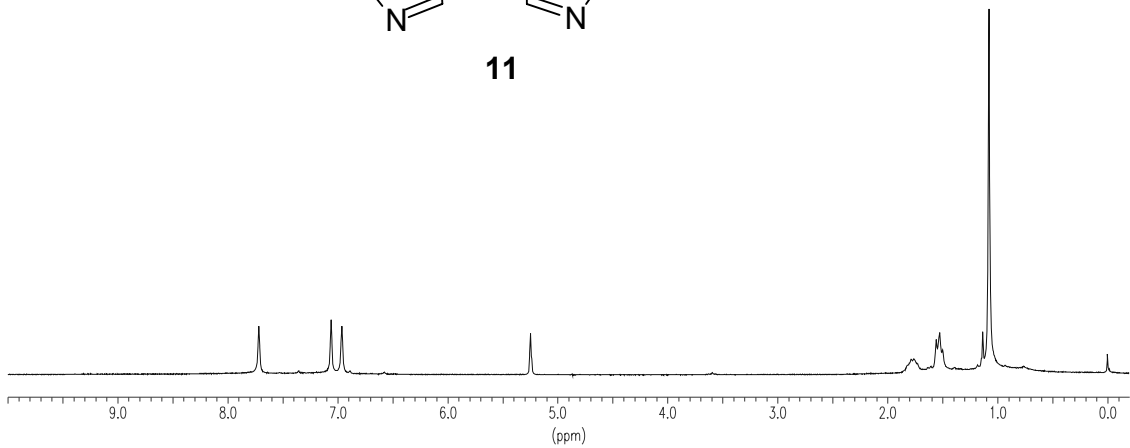
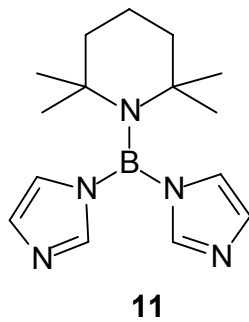
$^{13}\text{C-NMR}$ -Spektrum von **8** (50.3 MHz,  $\text{D}_6\text{-DMSO}$ )



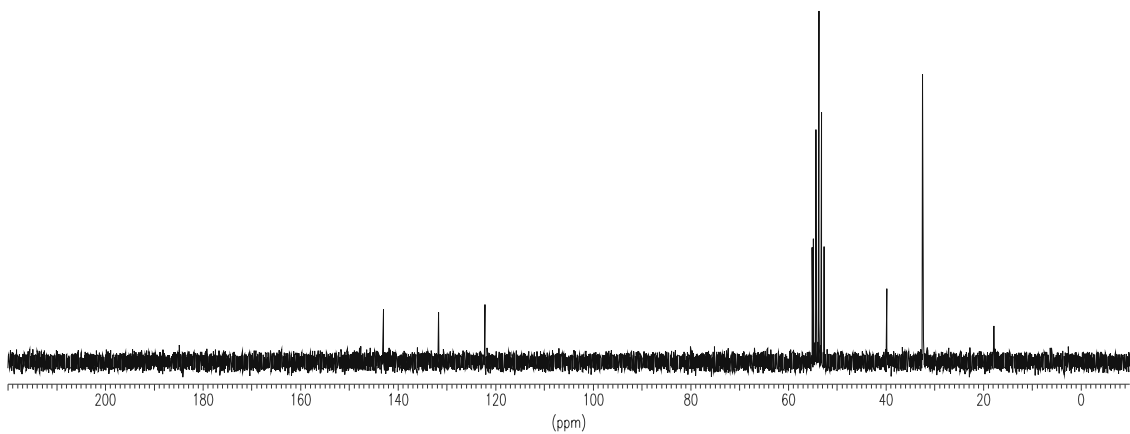
$^1\text{H}$ - und  $^{13}\text{C}$ -NMR-Spektrum von **10** (200.1 MHz,  $\text{D}_8\text{-THF}$ )



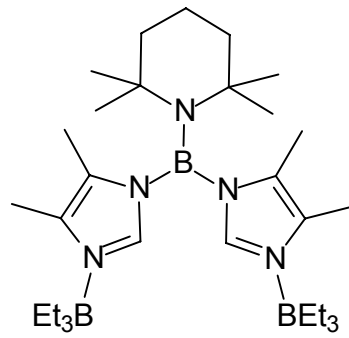
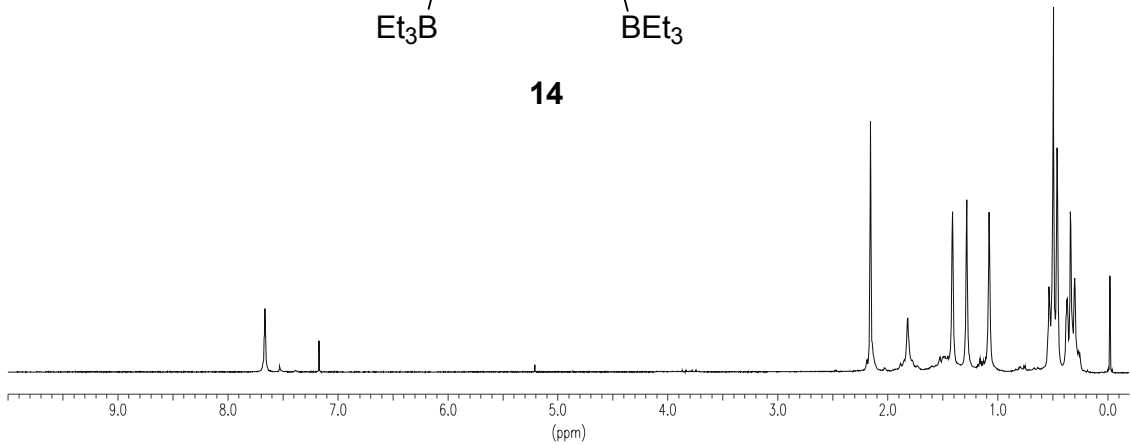
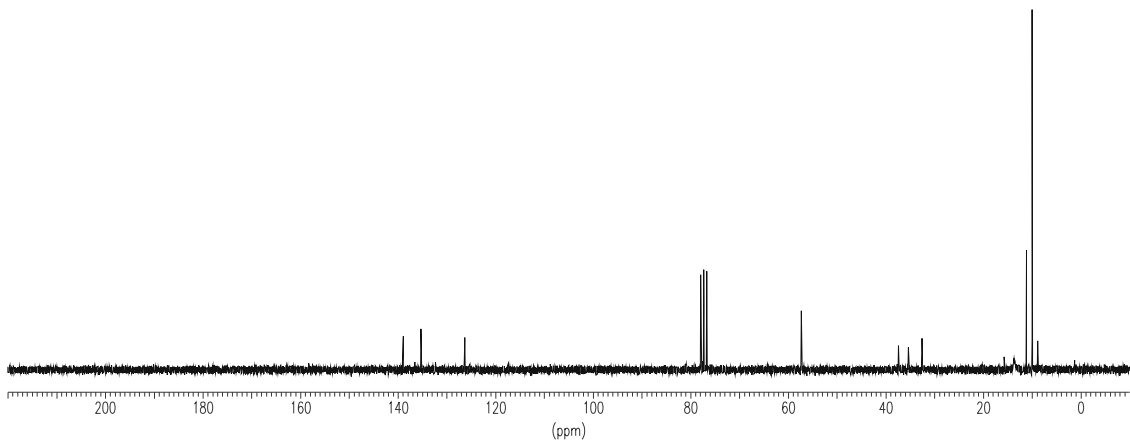
$^1\text{H}$ - und  $^{13}\text{C}$ -NMR-Spektrum von **10** (50.3 MHz,  $\text{D}_8\text{-THF}$ )

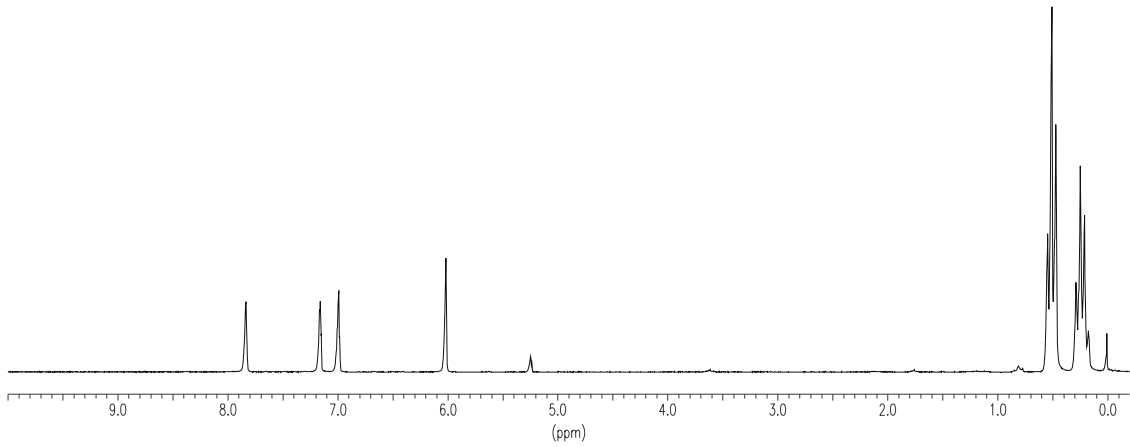
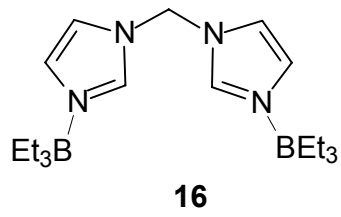


$^1\text{H-NMR}$ -Spektrum von **11** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )

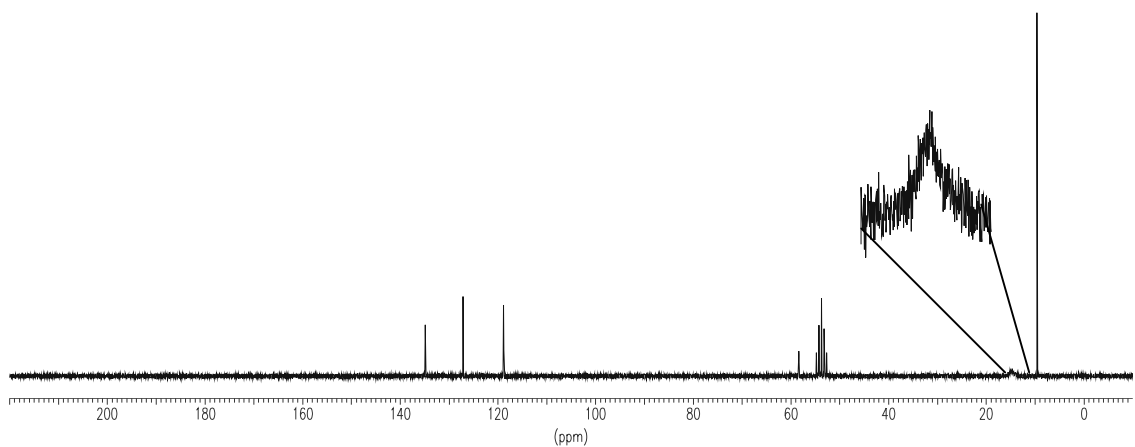


$^{13}\text{C-NMR}$ -Spektrum von **11** (50.3 MHz,  $\text{CD}_2\text{Cl}_2$ )

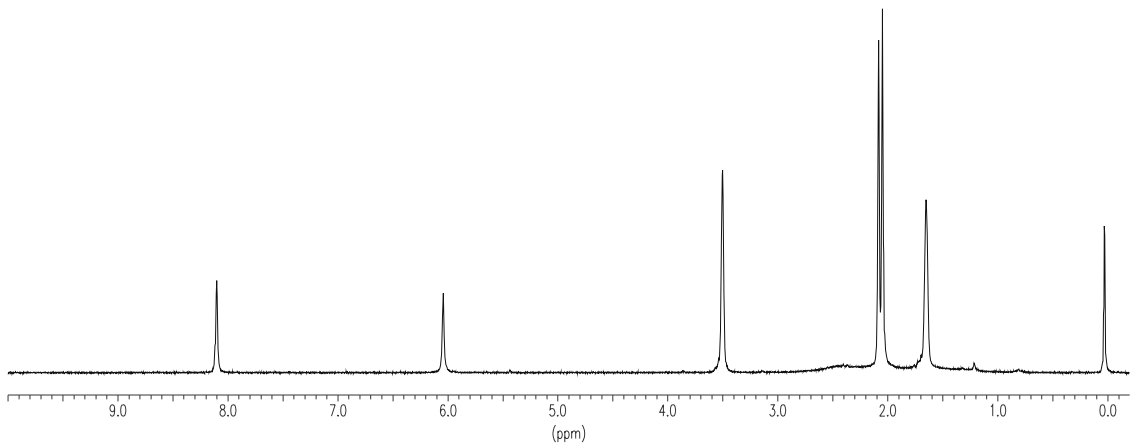
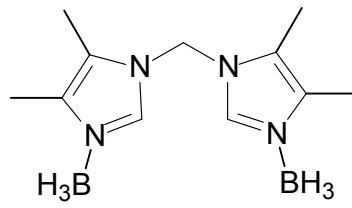
**14**<sup>1</sup>H-NMR-Spektrum von **14** (200.1 MHz, CDCl<sub>3</sub>)<sup>13</sup>C-NMR-Spektrum von **14** (50.3 MHz, CDCl<sub>3</sub>)



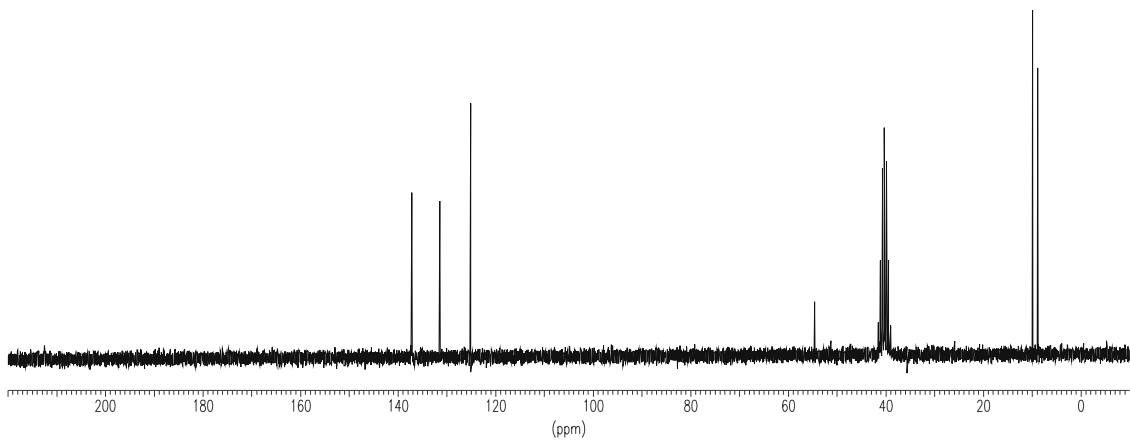
$^1\text{H}$ -NMR-Spektrum von **16** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )



$^{13}\text{C}$ -NMR-Spektrum von **16** (50.3 MHz,  $\text{CD}_2\text{Cl}_2$ )

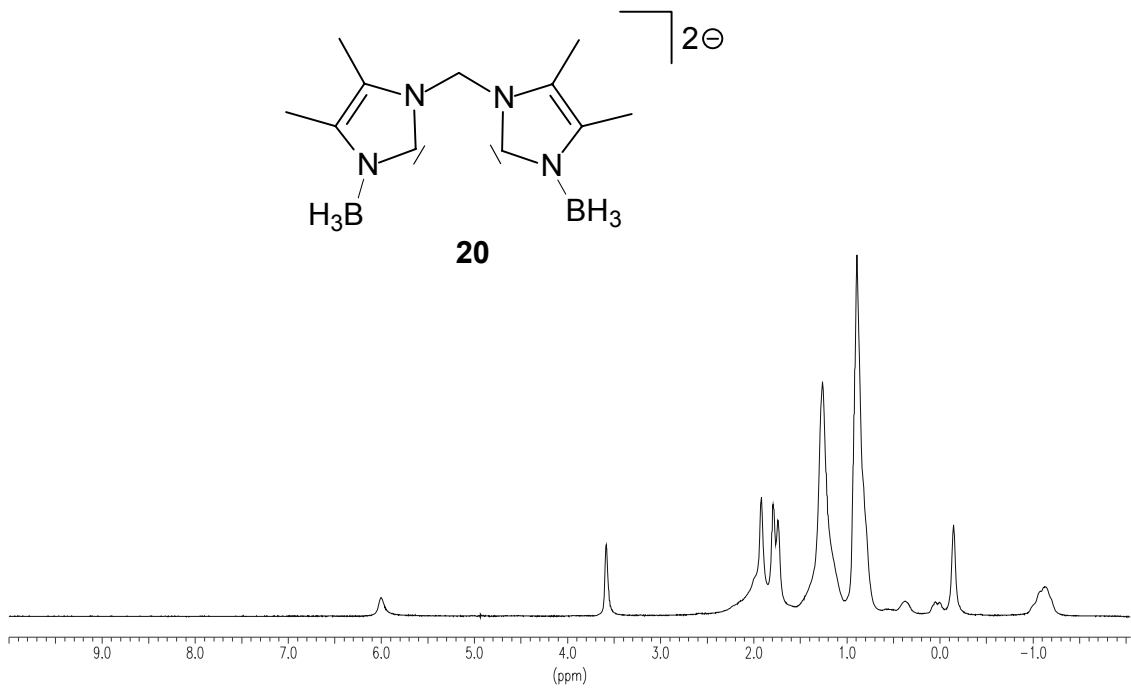


$^1\text{H}$ - und  $^{13}\text{C}$ -NMR-Spektrum von **18** (200.1 MHz,  $\text{D}_8\text{-THF}$ )

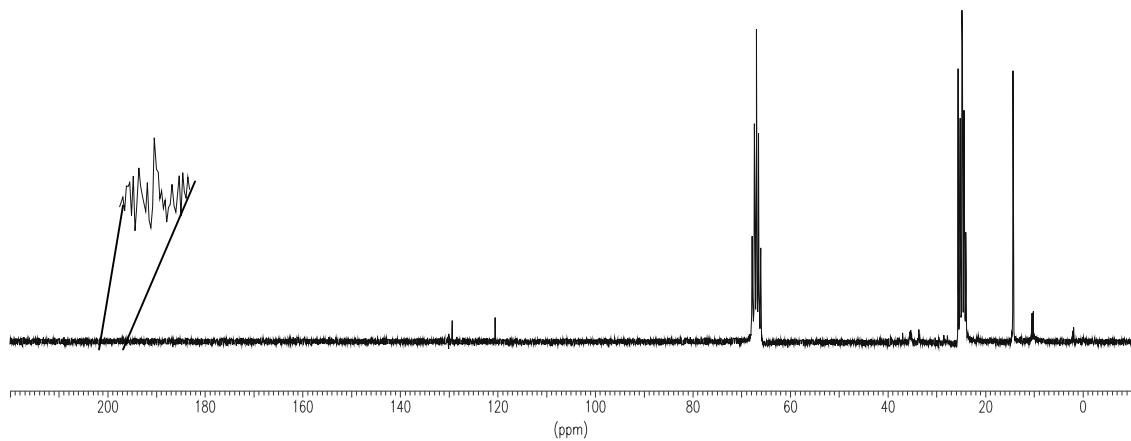


$^1\text{H}$ - und  $^{13}\text{C}$ -NMR-Spektrum von **18** (50.3 MHz,  $\text{D}_6\text{-DMSO}$ )

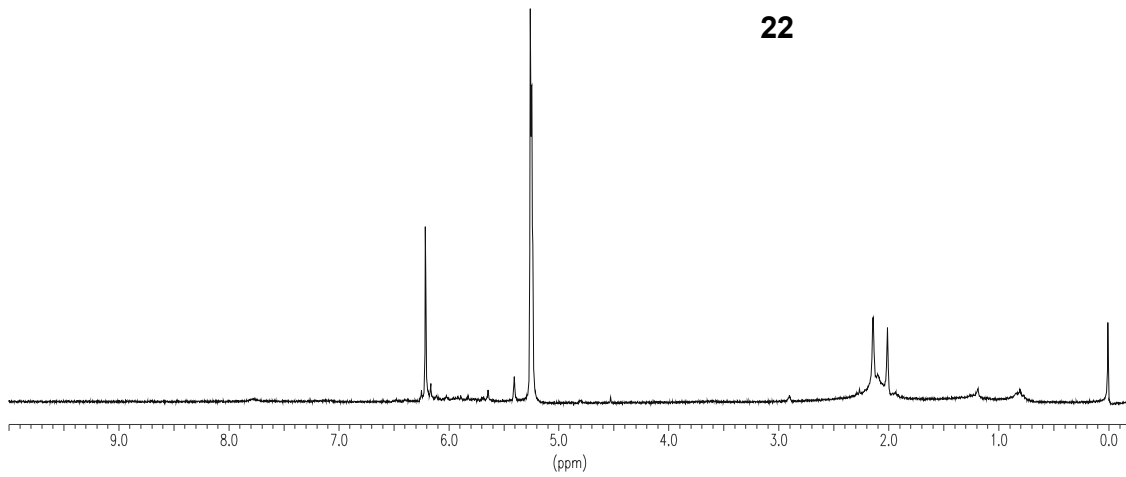
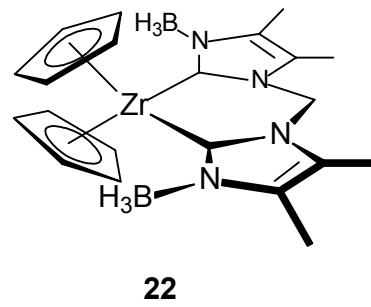




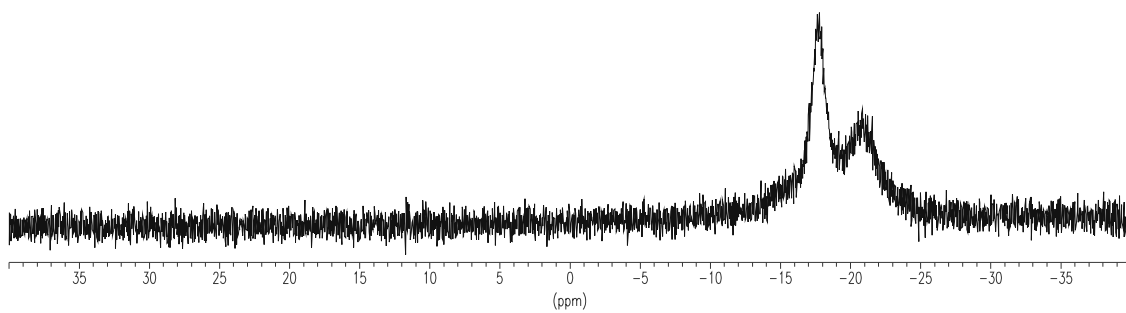
<sup>1</sup>H- und <sup>13</sup>C-NMR-Spektrum von **20** (200.1 MHz, D<sub>8</sub>-THF)



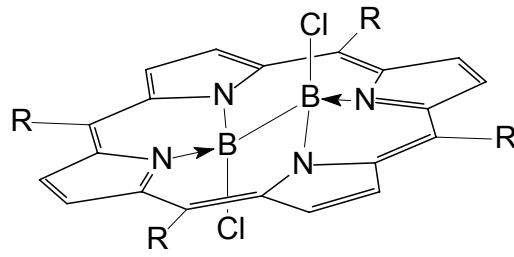
<sup>1</sup>H- und <sup>13</sup>C-NMR-Spektrum von **20** (50.3 MHz, D<sub>8</sub>-THF)



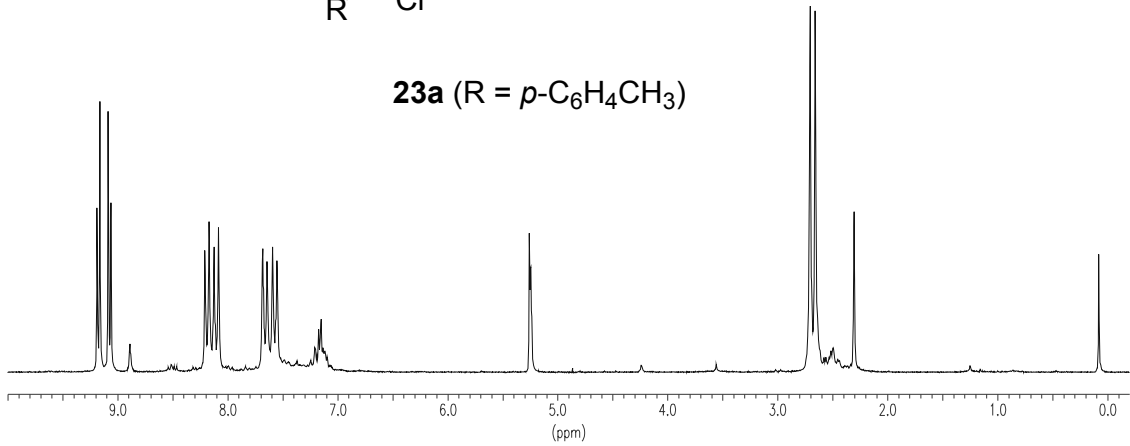
$^1\text{H}$ -NMR-Spektrum von **22** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )



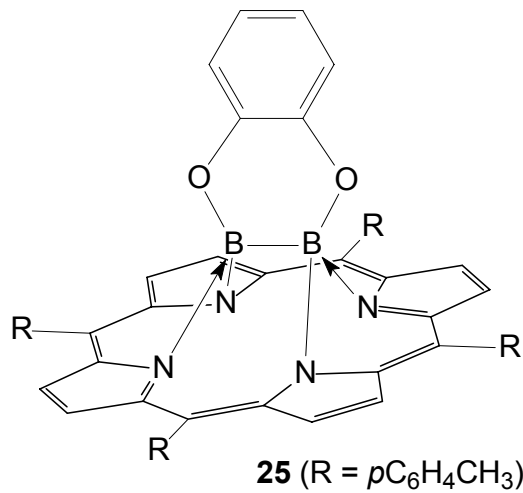
$^{11}\text{B}$ -NMR-Spektrum von **22** (64.2 MHz,  $\text{CD}_2\text{Cl}_2$ )



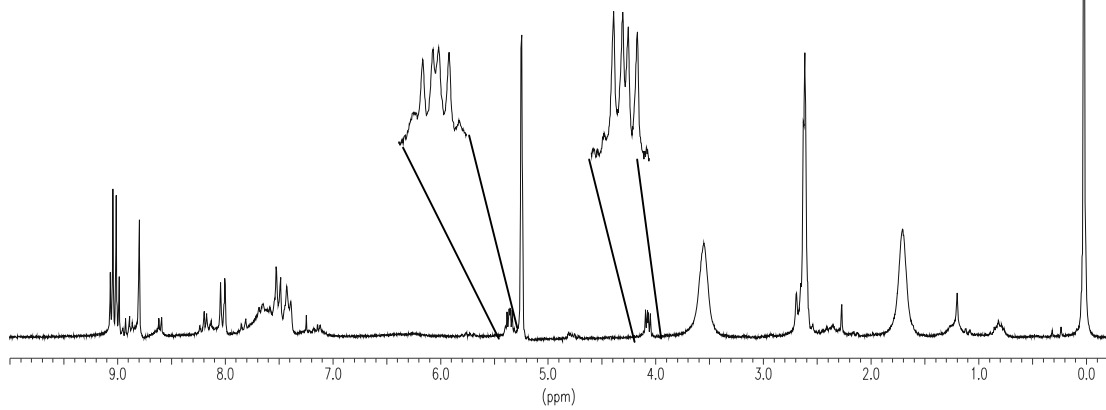
**23a** ( $R = p\text{-C}_6\text{H}_4\text{CH}_3$ )



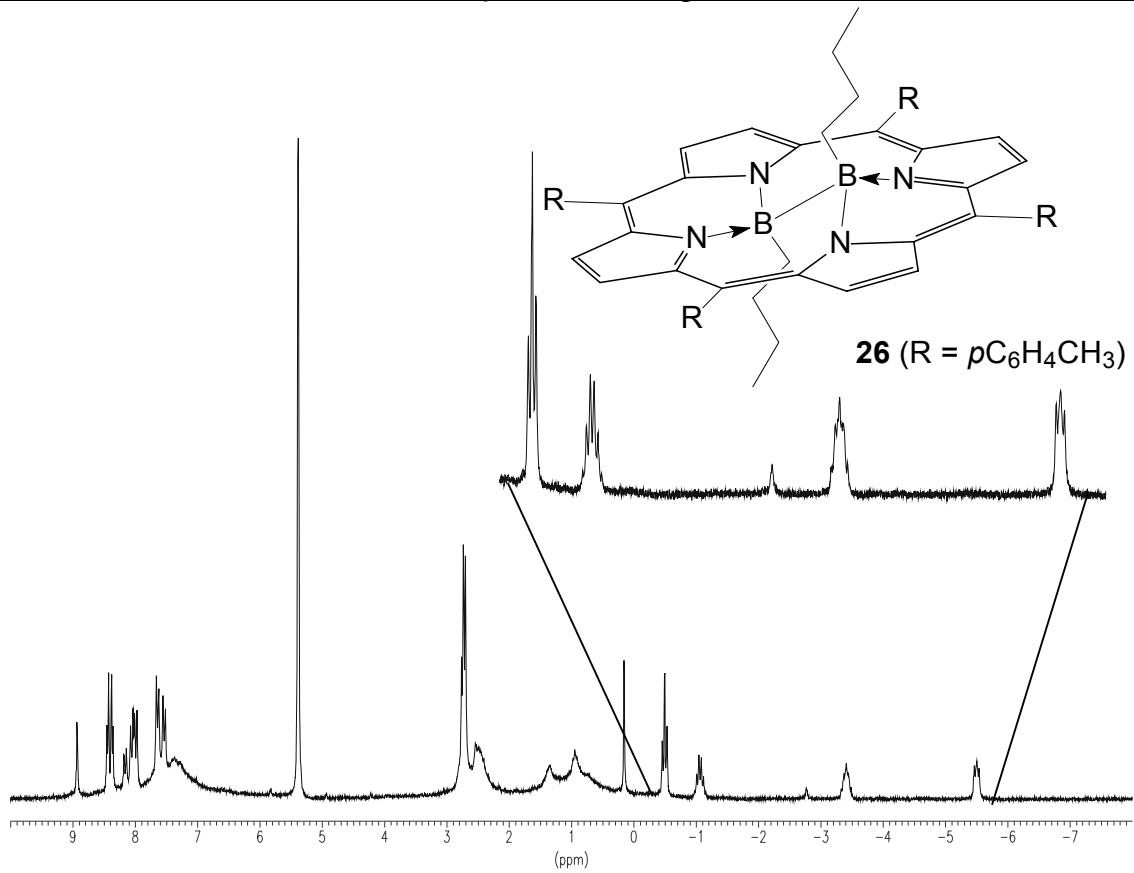
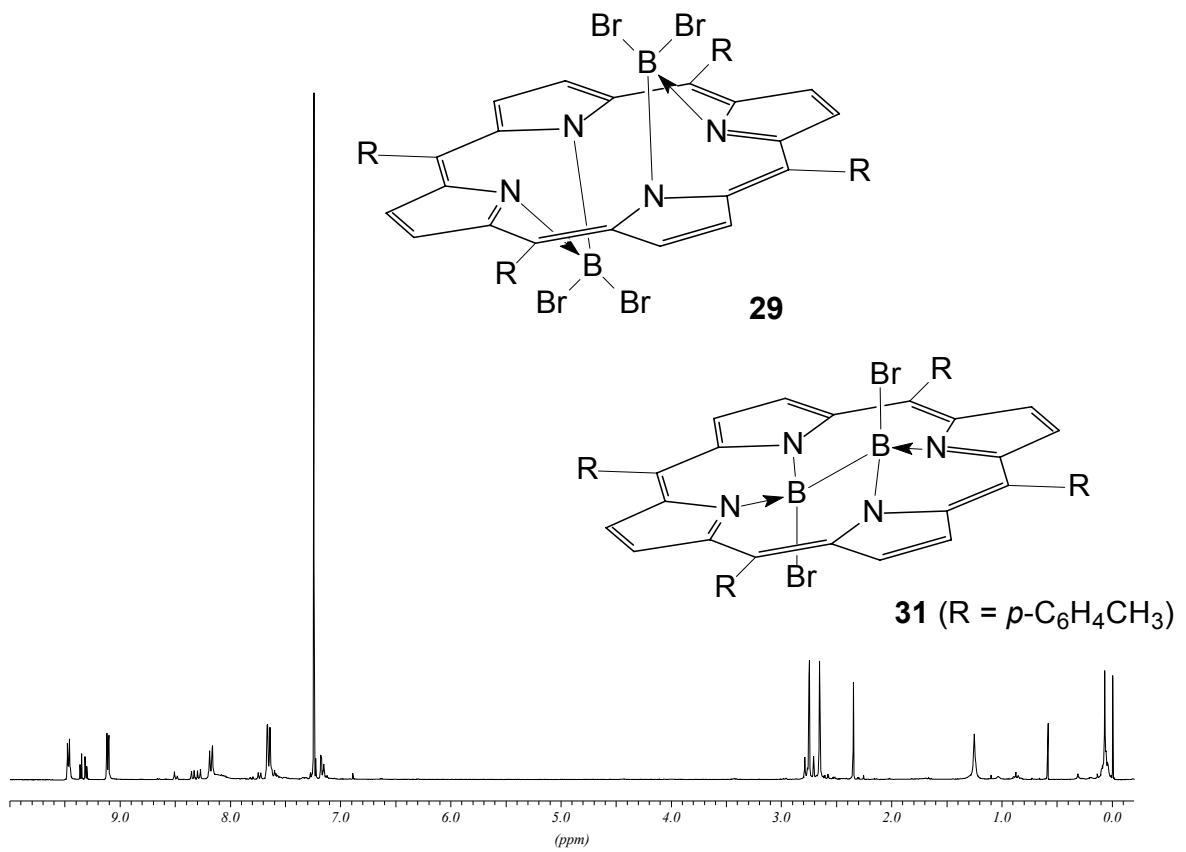
$^1\text{H-NMR}$ -Spektrum von **23a** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )

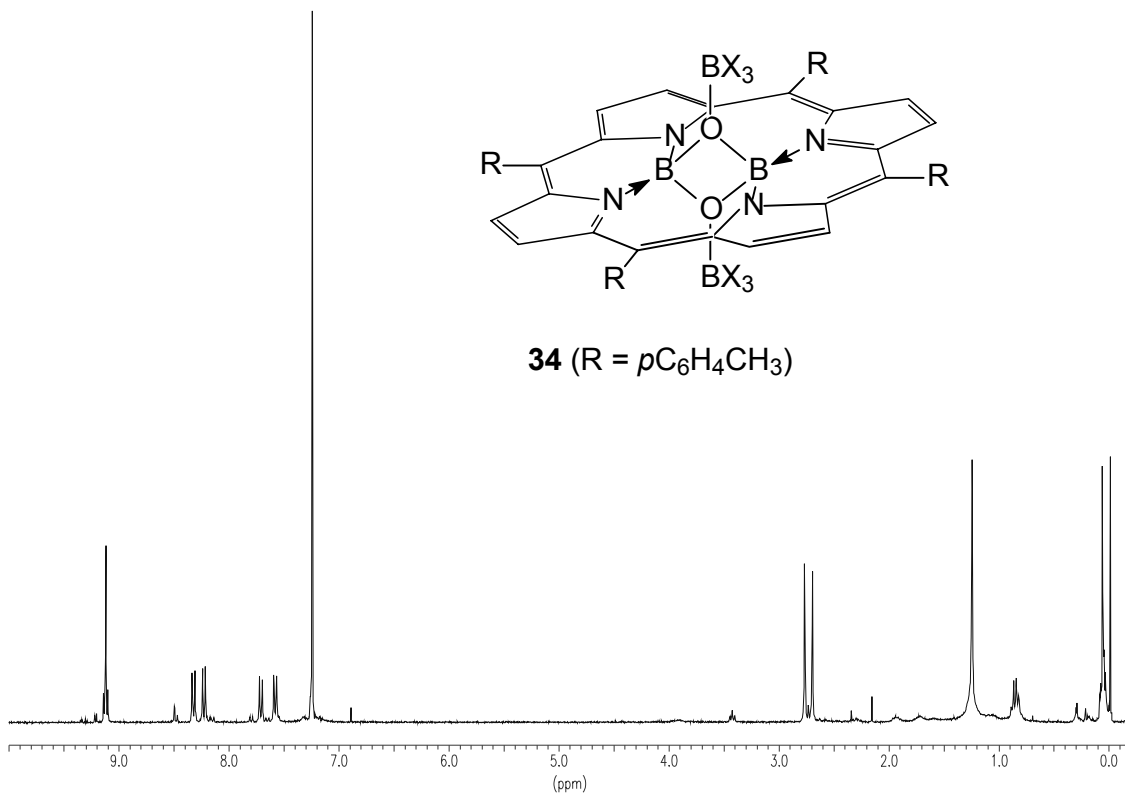


**25** ( $R = p\text{-C}_6\text{H}_4\text{CH}_3$ )

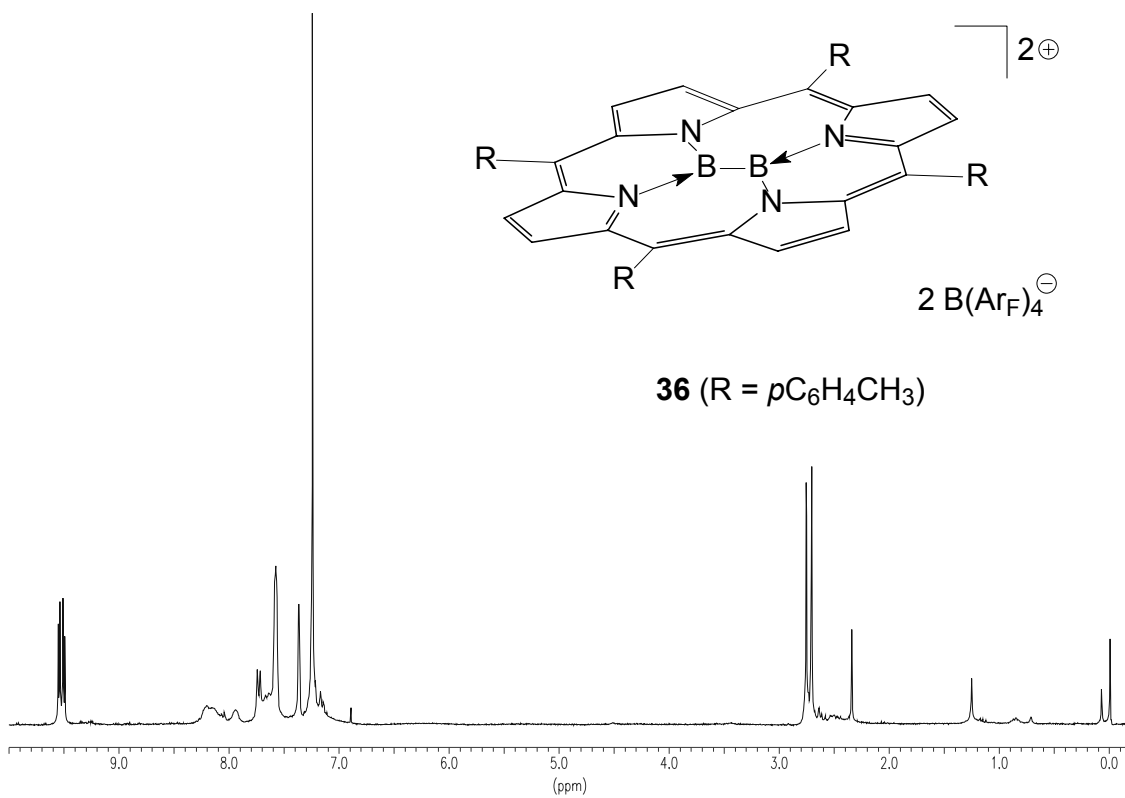


$^1\text{H-NMR}$ -Spektrum von **25** (200.1 MHz,  $\text{CD}_2\text{Cl}_2$ )

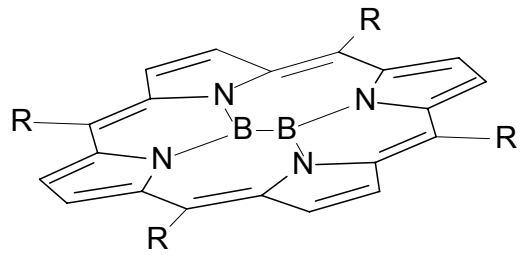
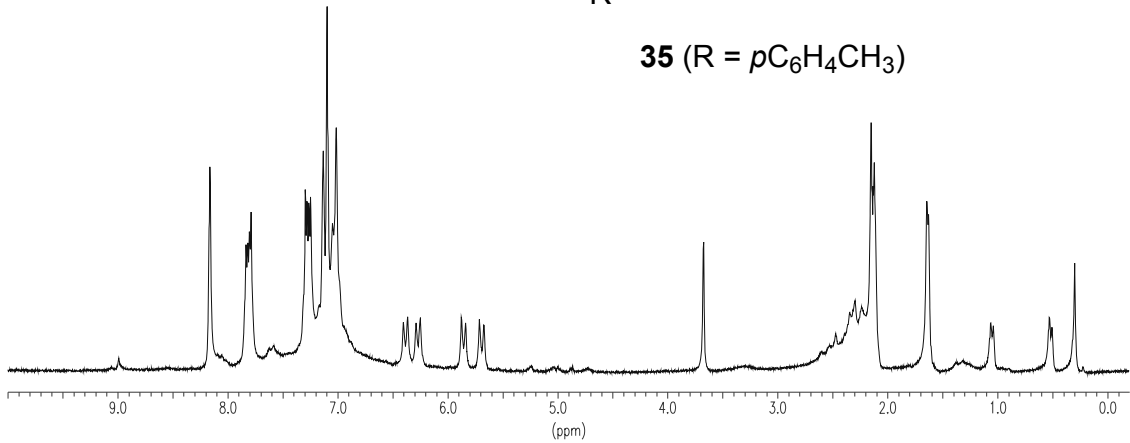
 $^1\text{H-NMR}$ -Spektrum von **26** (200.3 MHz,  $\text{CD}_2\text{Cl}_2$ ) $^1\text{H-NMR}$ -Spektrum von **29** und **31** (300.1 MHz,  $\text{CDCl}_3$ )



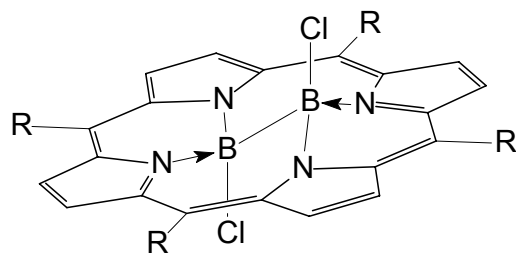
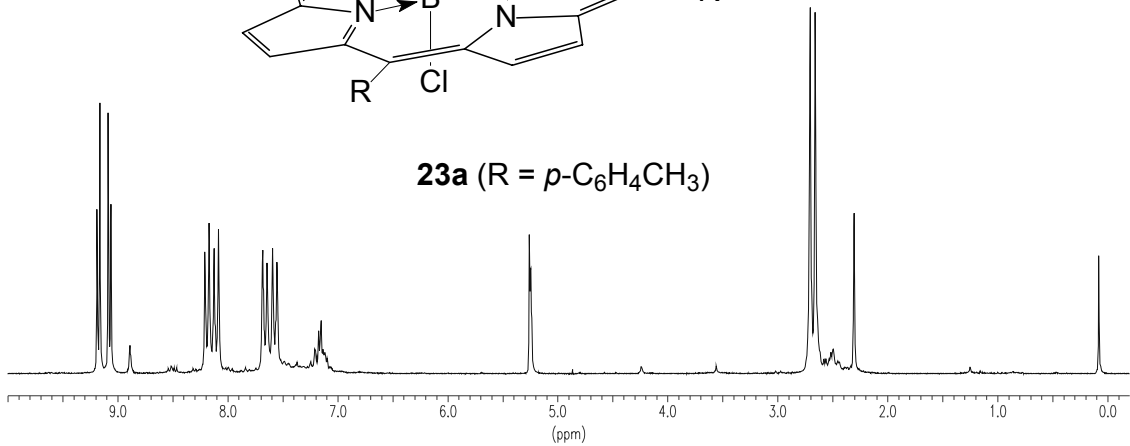
$^1\text{H-NMR}$ -Spektrum von **34** (300.1 MHz,  $\text{CDCl}_3$ )



$^1\text{H-NMR}$ -Spektrum von **36** (300.1 MHz,  $\text{CDCl}_3$ )

**35** (R = *p*C<sub>6</sub>H<sub>4</sub>CH<sub>3</sub>)<sup>1</sup>H-NMR-Spektrum von **35** (200 MHz, D<sub>8</sub>Toluol)

zum Vergleich:

**23a** (R = *p*-C<sub>6</sub>H<sub>4</sub>CH<sub>3</sub>)<sup>1</sup>H-NMR-Spektrum von **23a** (200.1 MHz, CD<sub>2</sub>Cl<sub>2</sub>)