

Exploration of 9-bromo[7]helicene reactivity

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Supplementary Information

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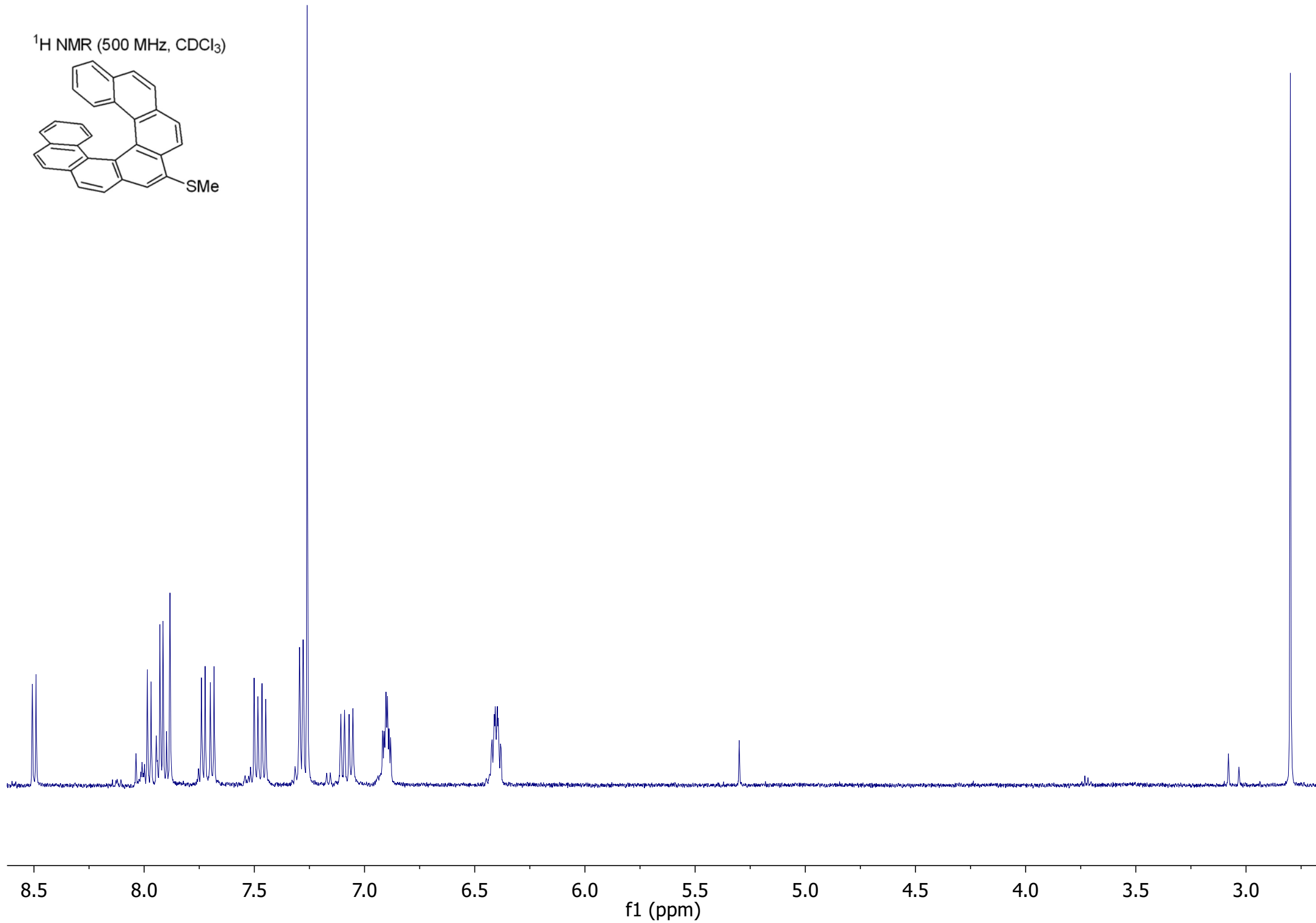
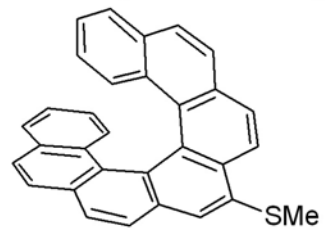
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General Considerations

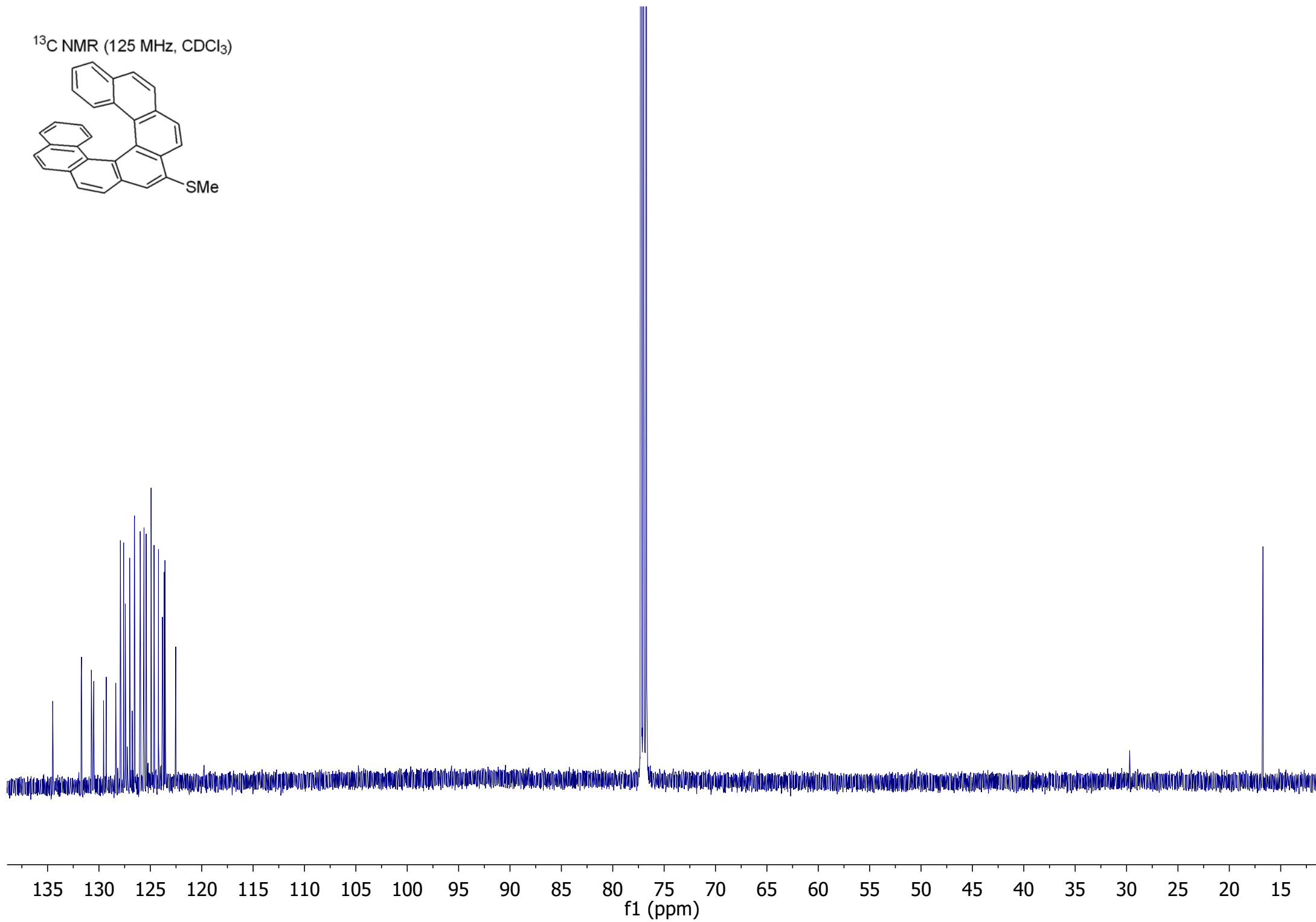
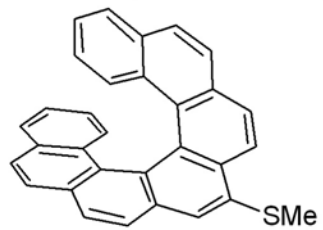
^1H and $^{13}\text{C}\{^1\text{H}\}$ spectra were recorded using a 500 MHz instrument. Chemical shifts are reported in ppm (δ) relative to TMS, referenced to signal CDCl_3 ($\delta = 7.26$ ppm and $\delta = 77.00$ ppm respectively); CD_2Cl_2 ($\delta = 5.32$ ppm and $\delta = 54.00$ ppm respectively); CD_3OD ($\delta = 3.31$ ppm and $\delta = 49.00$ ppm respectively); DMSO-d_6 ($\delta = 2.50, 3.33$ ppm and $\delta = 39.52$ ppm respectively). Electron impact (EI) mass spectra were determined at an ionising voltage of 70 eV. TLC was performed on Silica gel 60 F254-coated aluminium sheets and compounds were visualized by UV light (254 nm). Column chromatography was performed on HPFC Biotage system with pre-packed flash silica gel columns. Microwave experiments were performed on Anton Paar Monowave 300 equipped with simultaneous temperature measurement with IR and fiberoptic sensor and Biotage Initiator Microwave Synthesizer. Commercially available reagent grade materials were used as received. THF and Et_2O were freshly distilled from sodium/benzophenone under an atmosphere of nitrogen. 9-Bromo[7]helicene was purchased from Lach-ner s.r.o., Czech Republic.

Spectroscopic Data

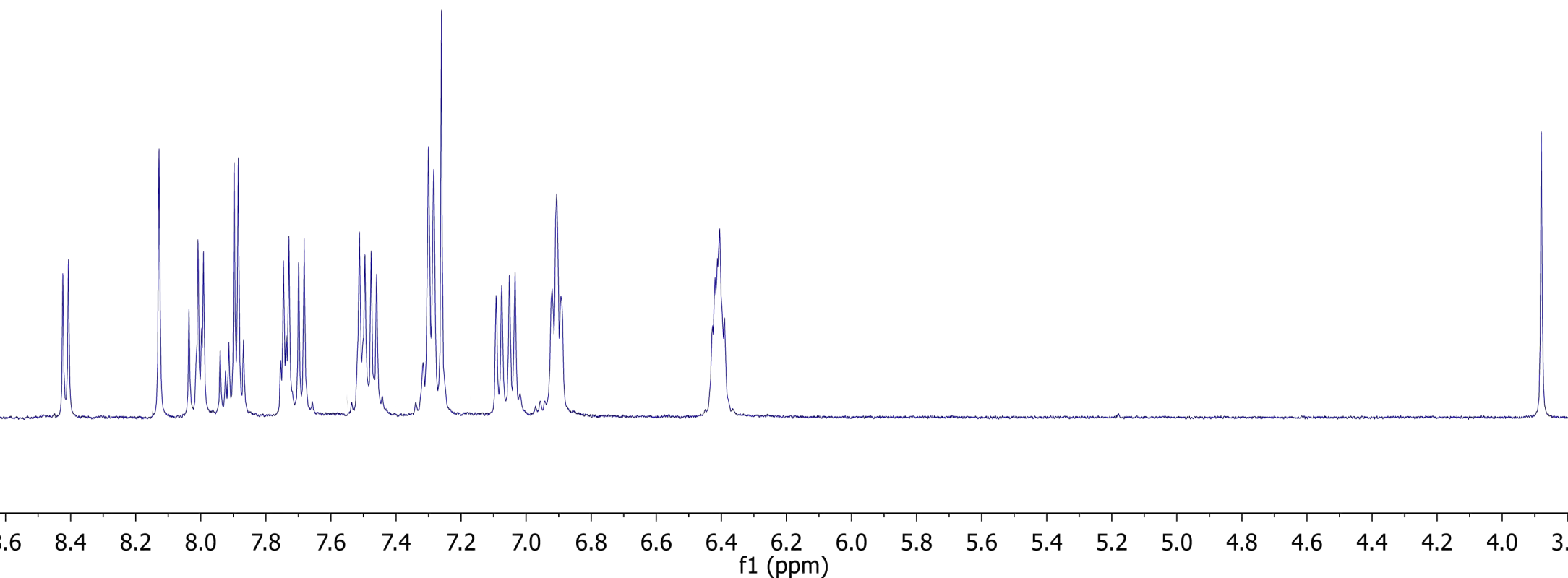
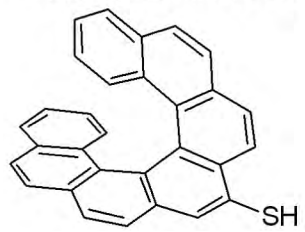
^1H NMR (500 MHz, CDCl_3)



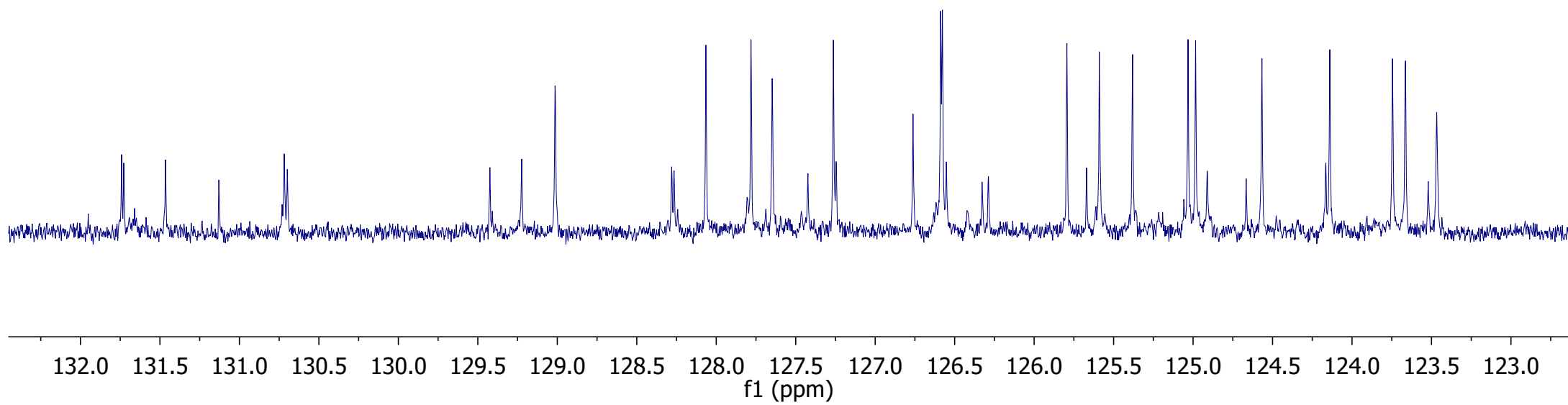
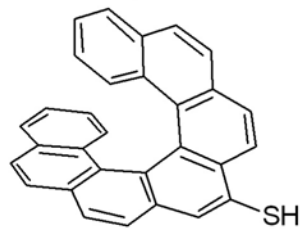
^{13}C NMR (125 MHz, CDCl_3)



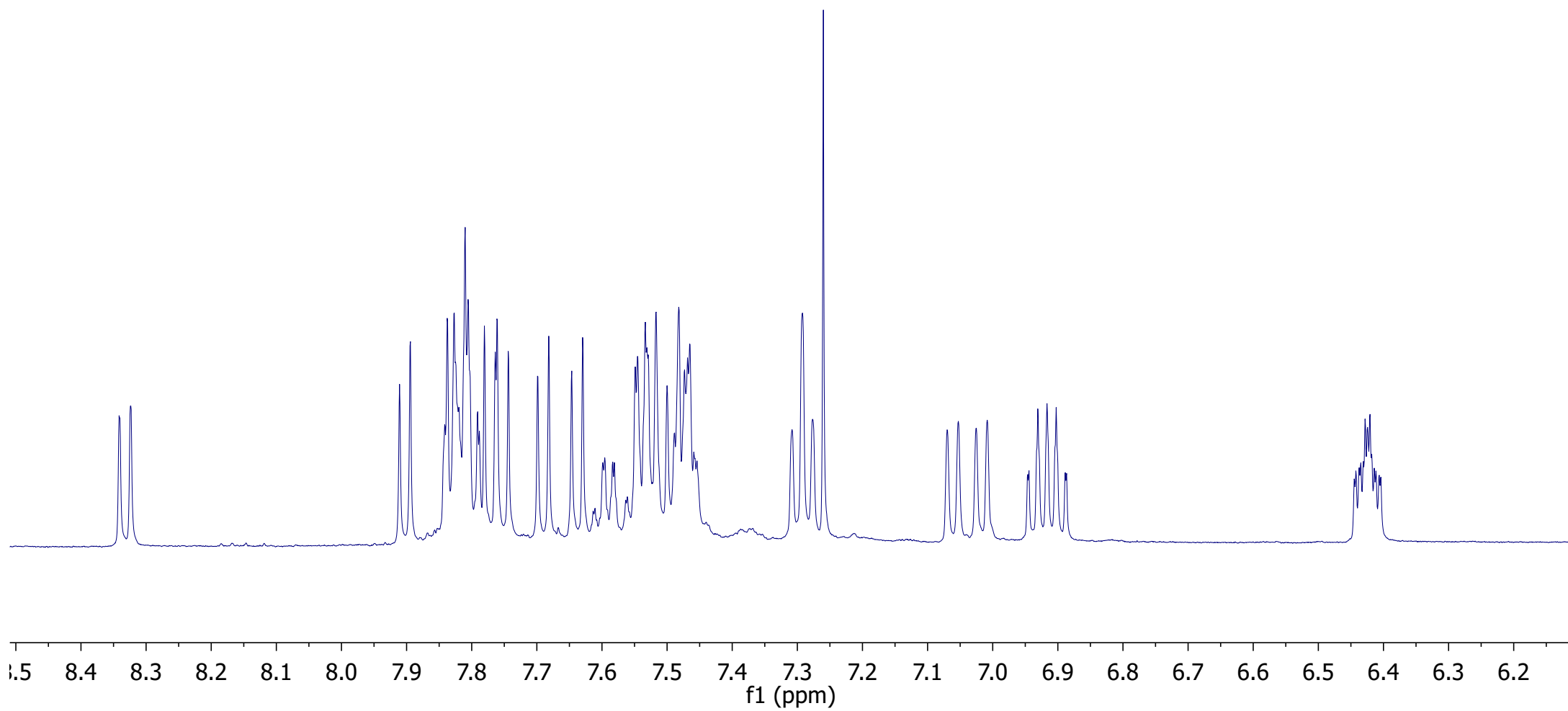
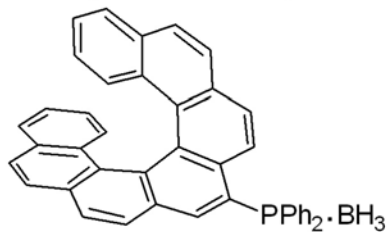
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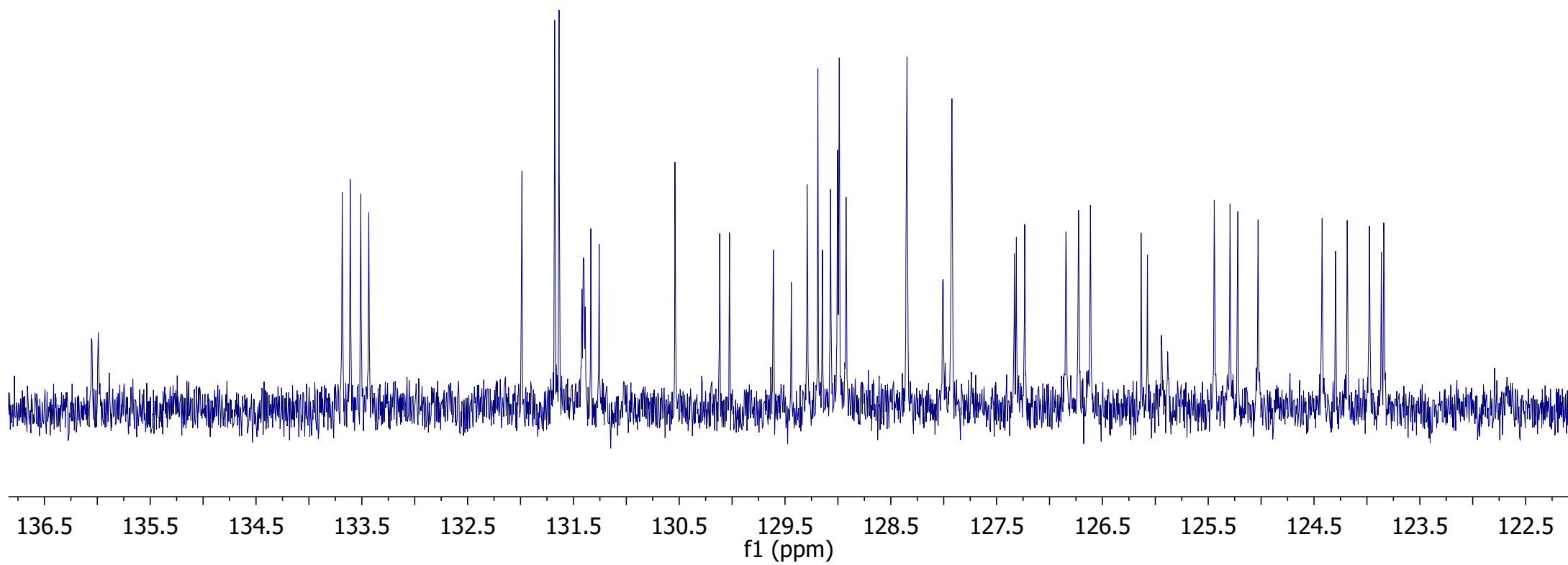
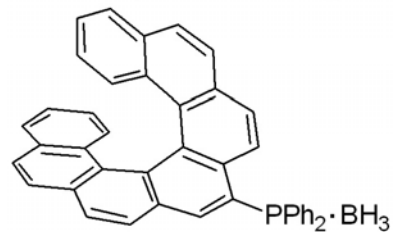
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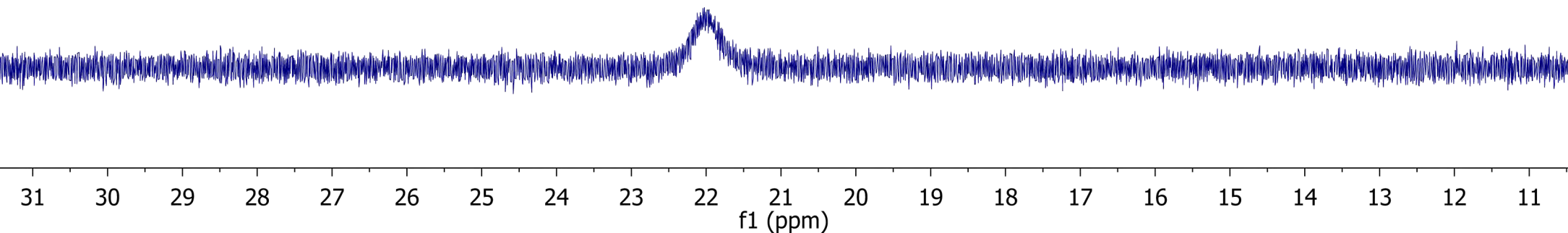
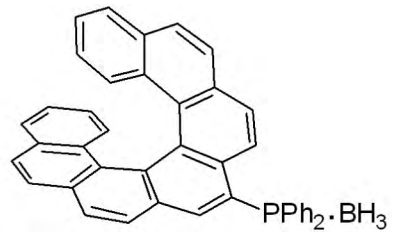
^1H NMR (500 MHz, CDCl_3)



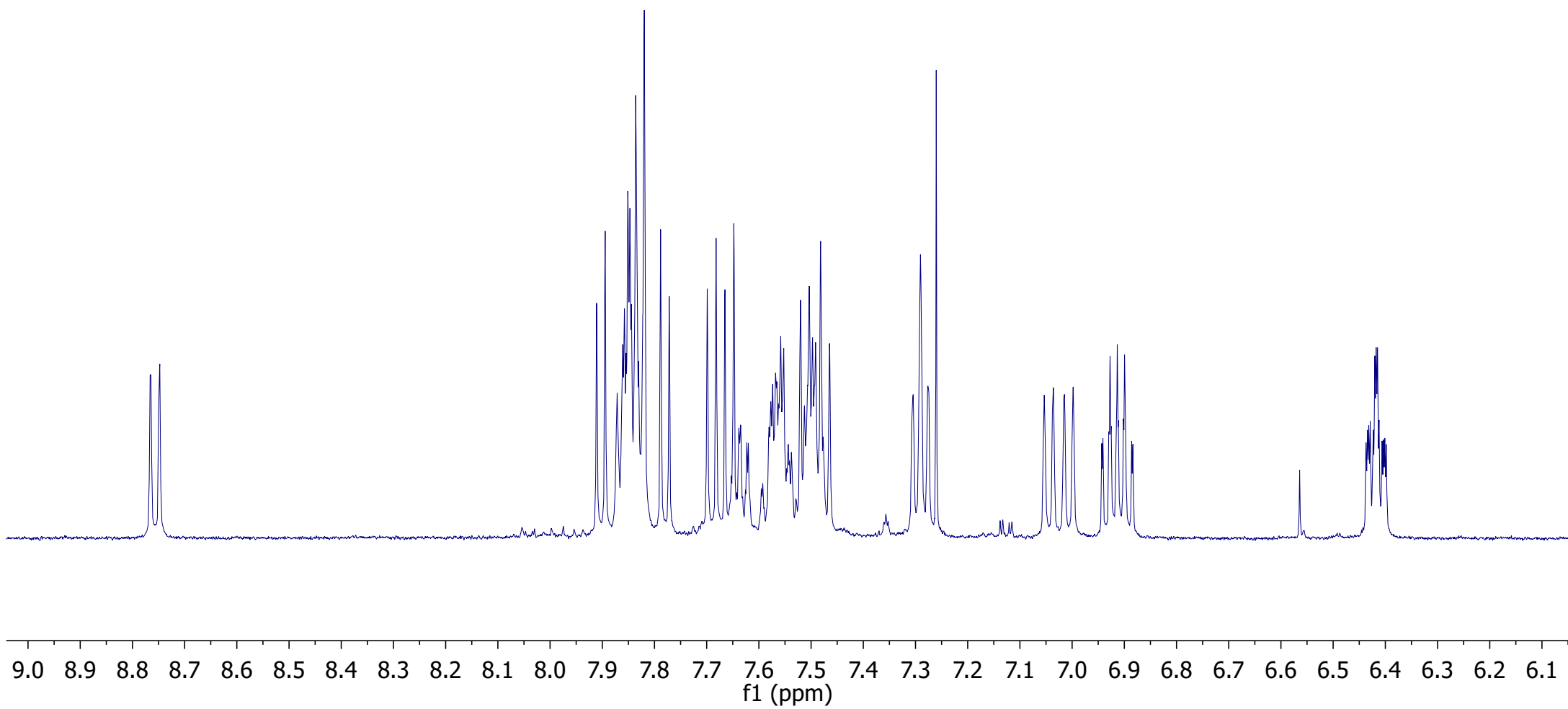
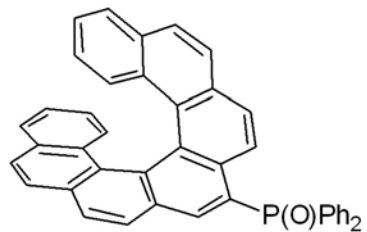
^{13}C NMR (125 MHz, CDCl_3)



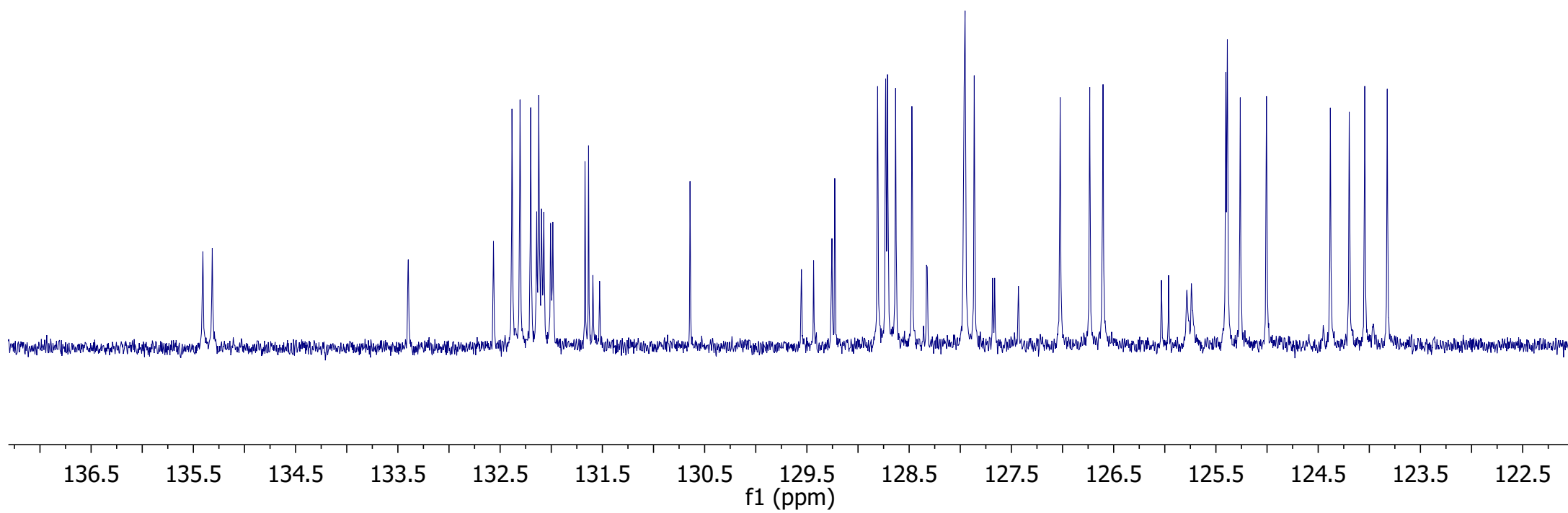
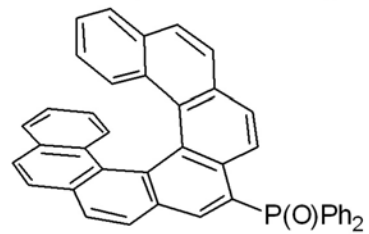
^{31}P NMR (202 MHz, CDCl_3)



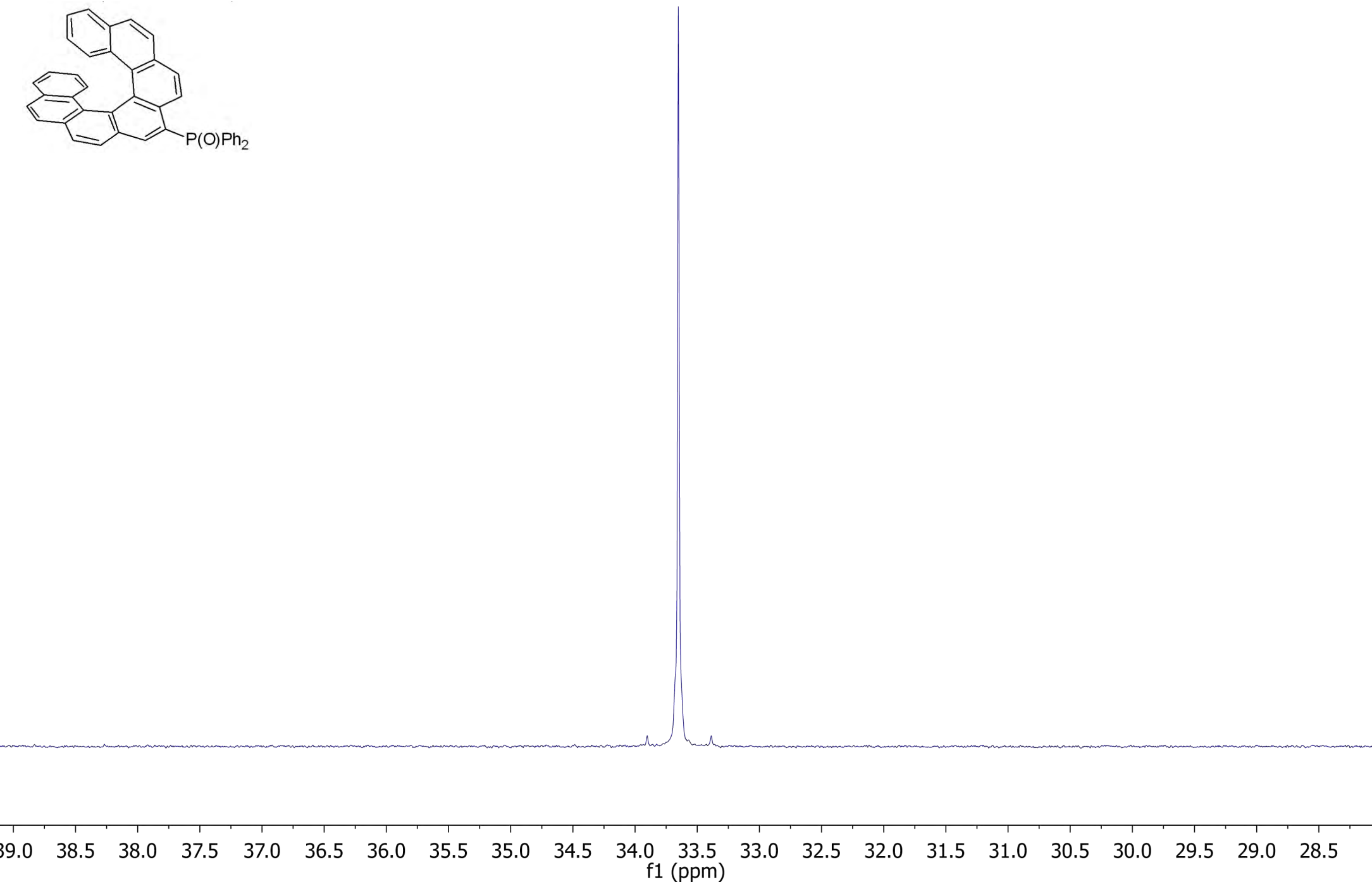
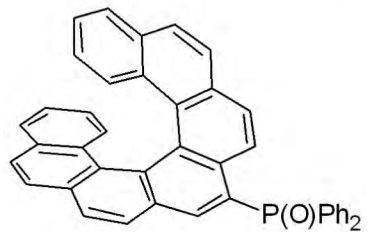
^1H NMR (500 MHz, CDCl_3)



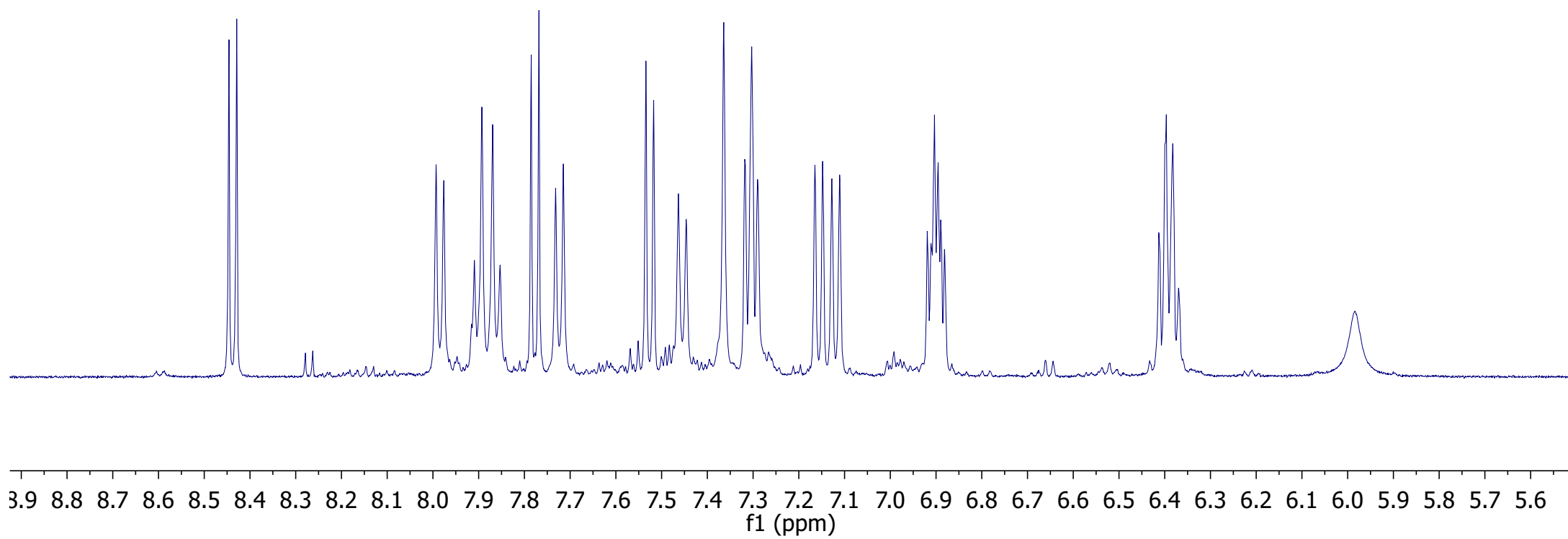
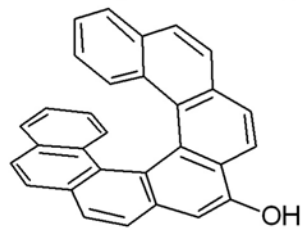
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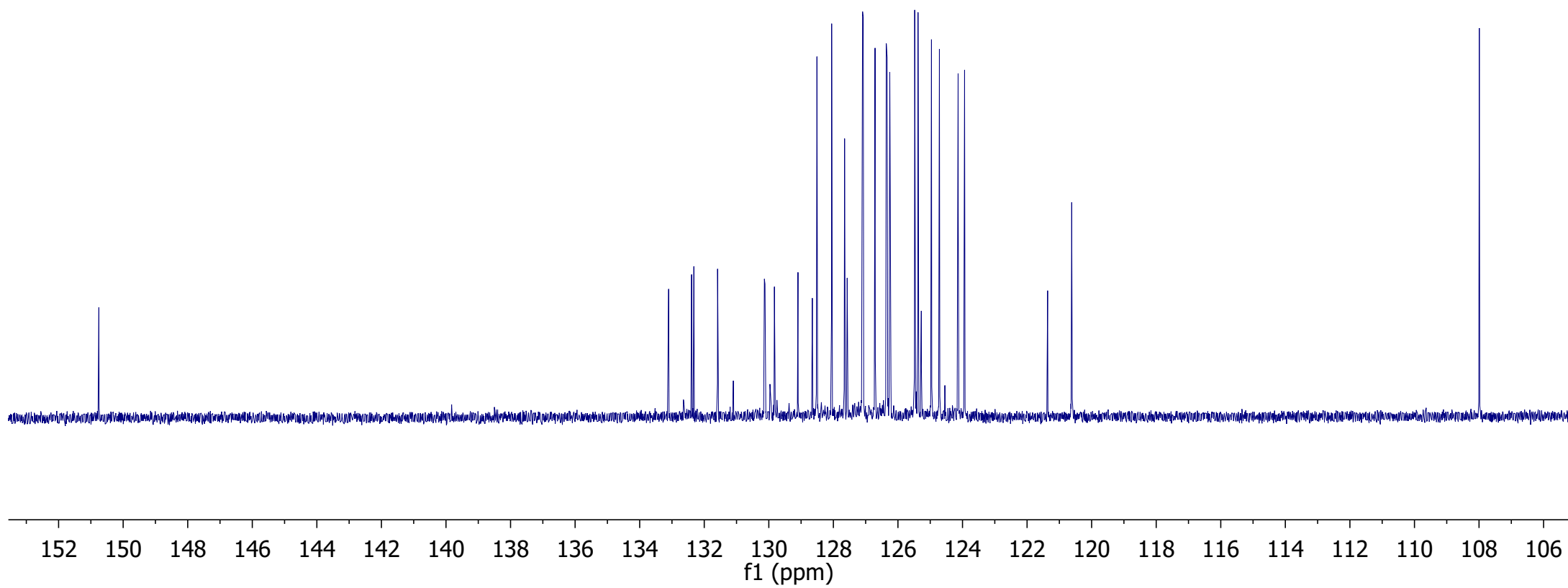
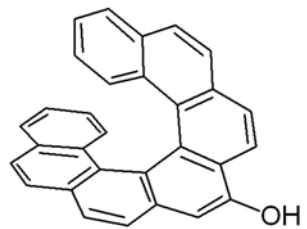
^{31}P NMR (202 MHz, CDCl_3)



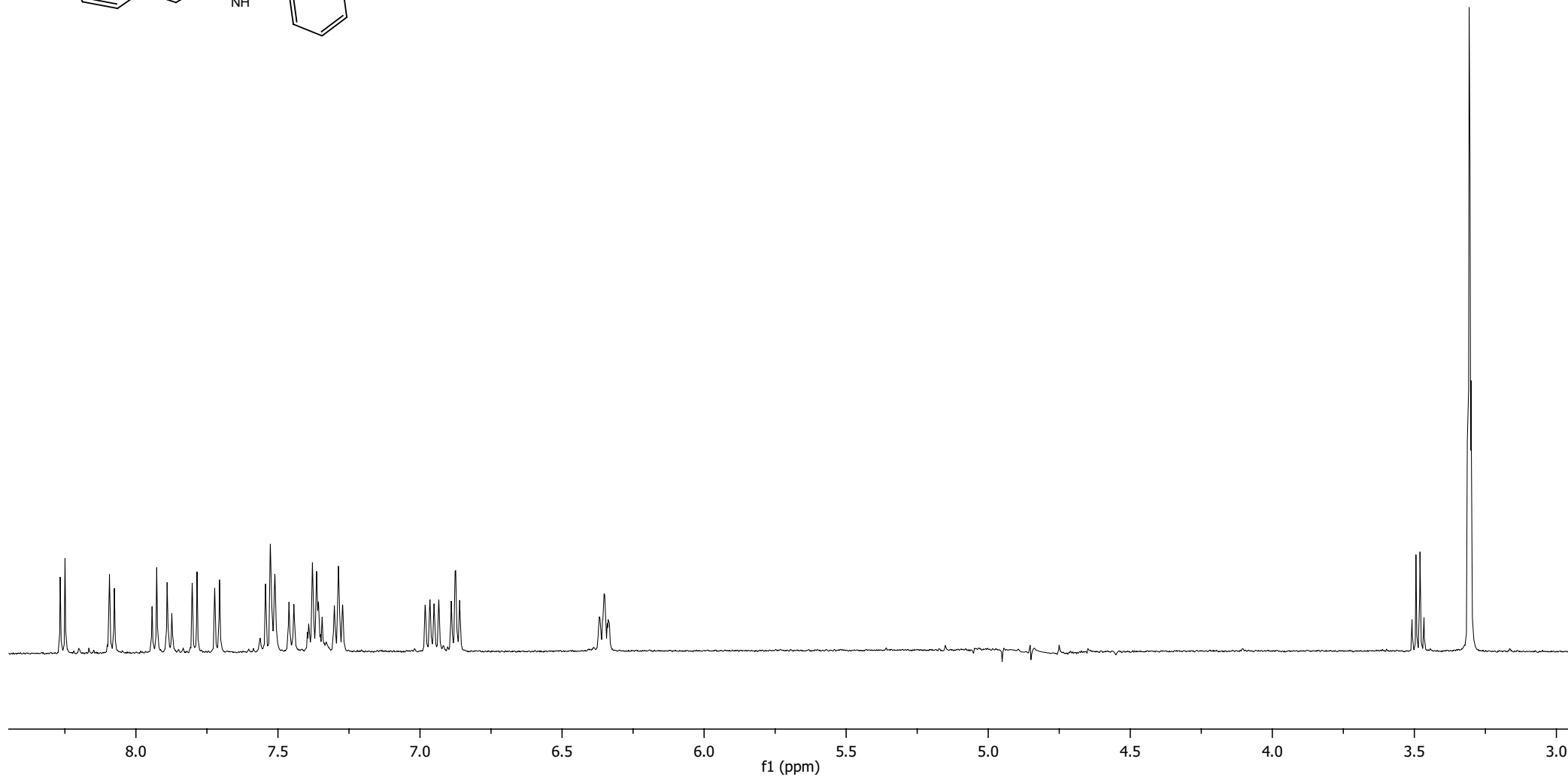
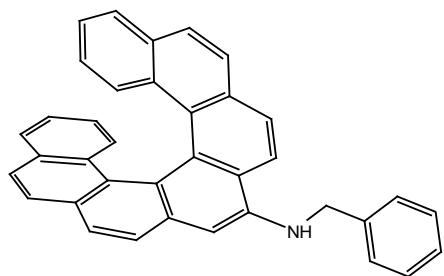
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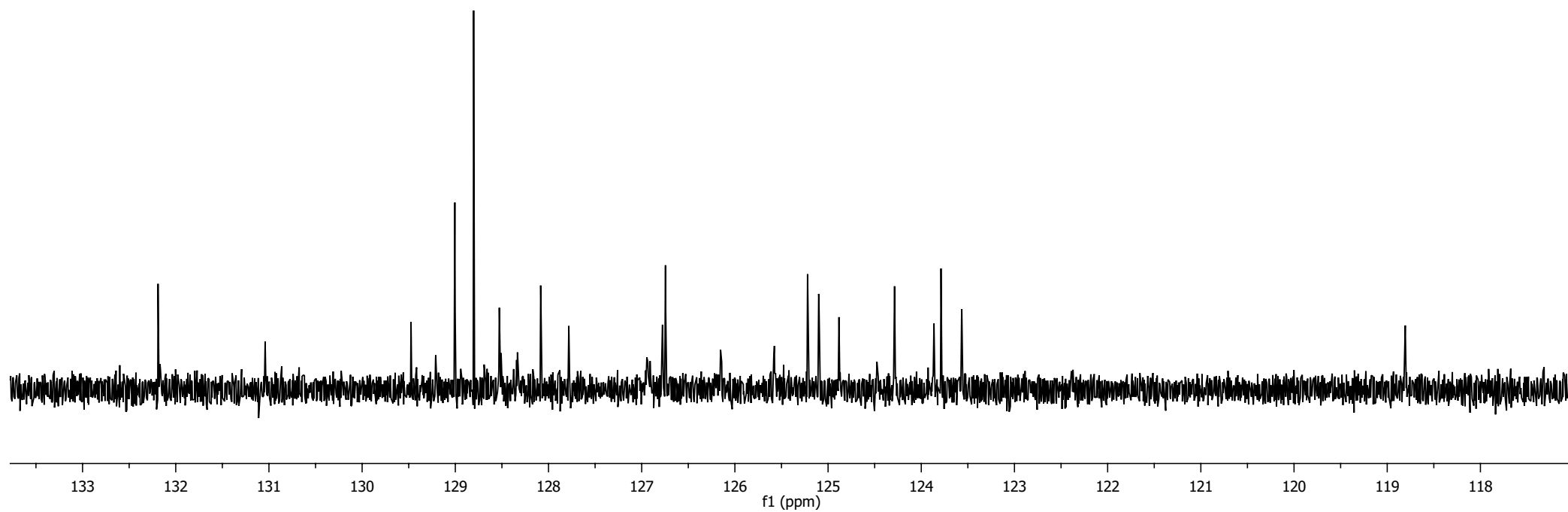
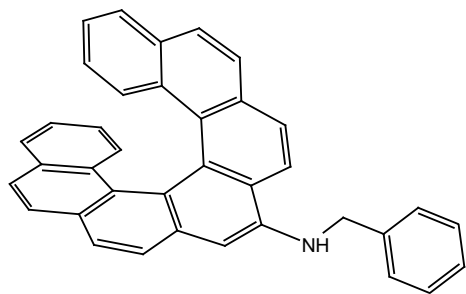
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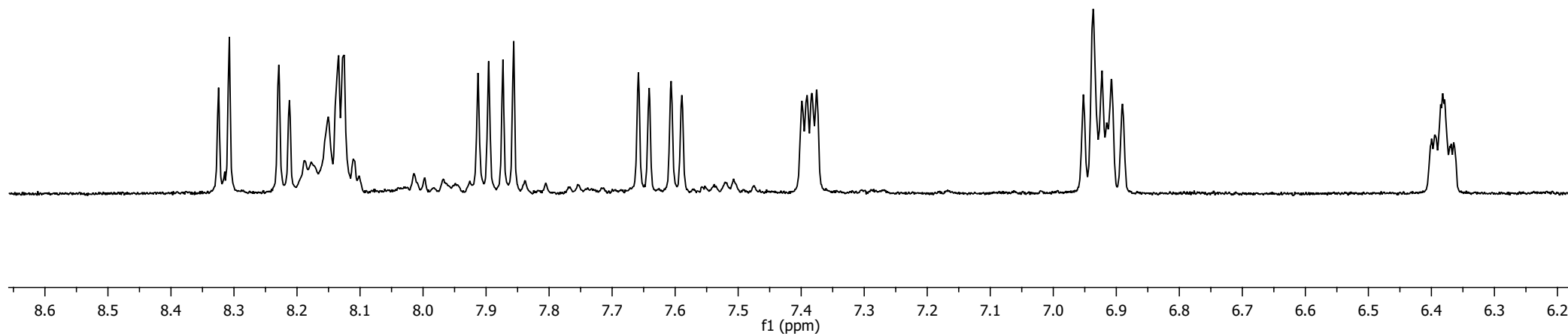
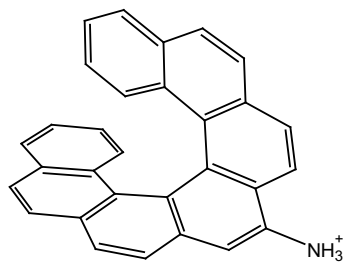
¹H NMR (500 MHz, CD₃OD)



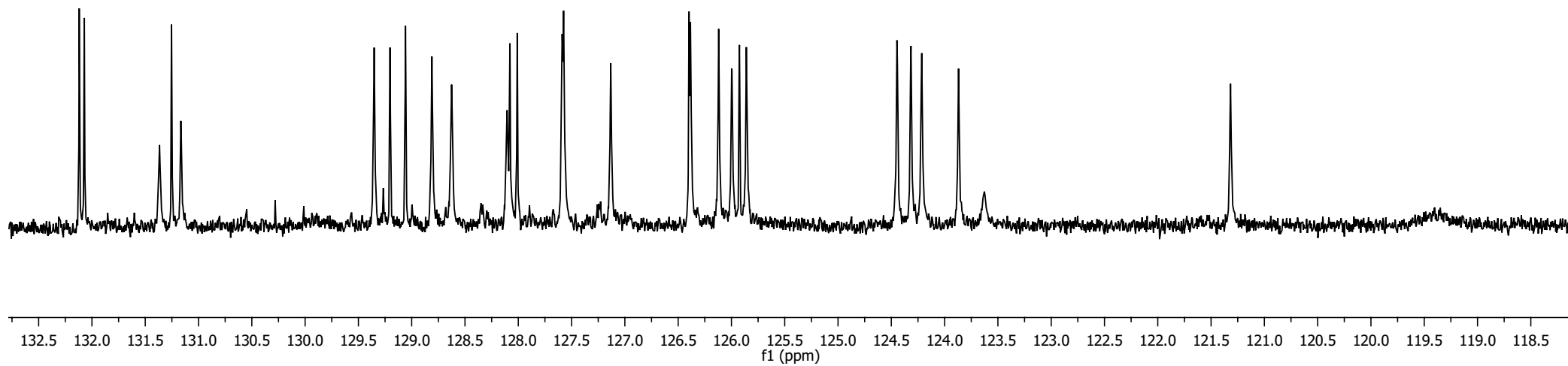
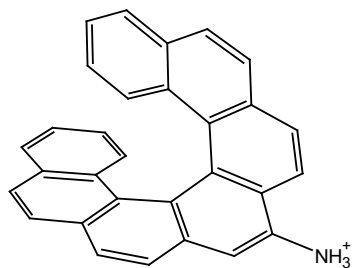
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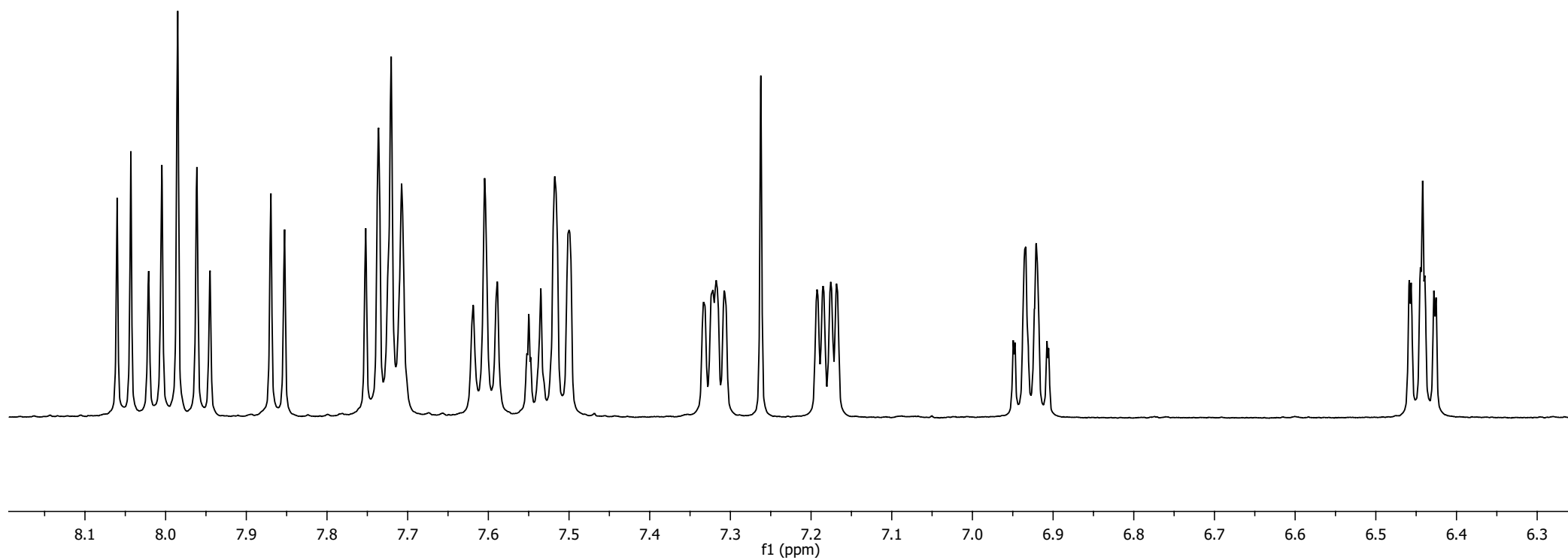
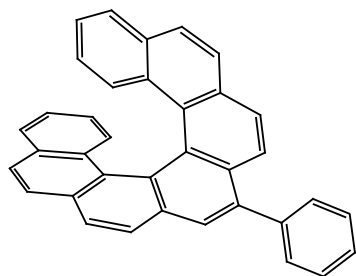
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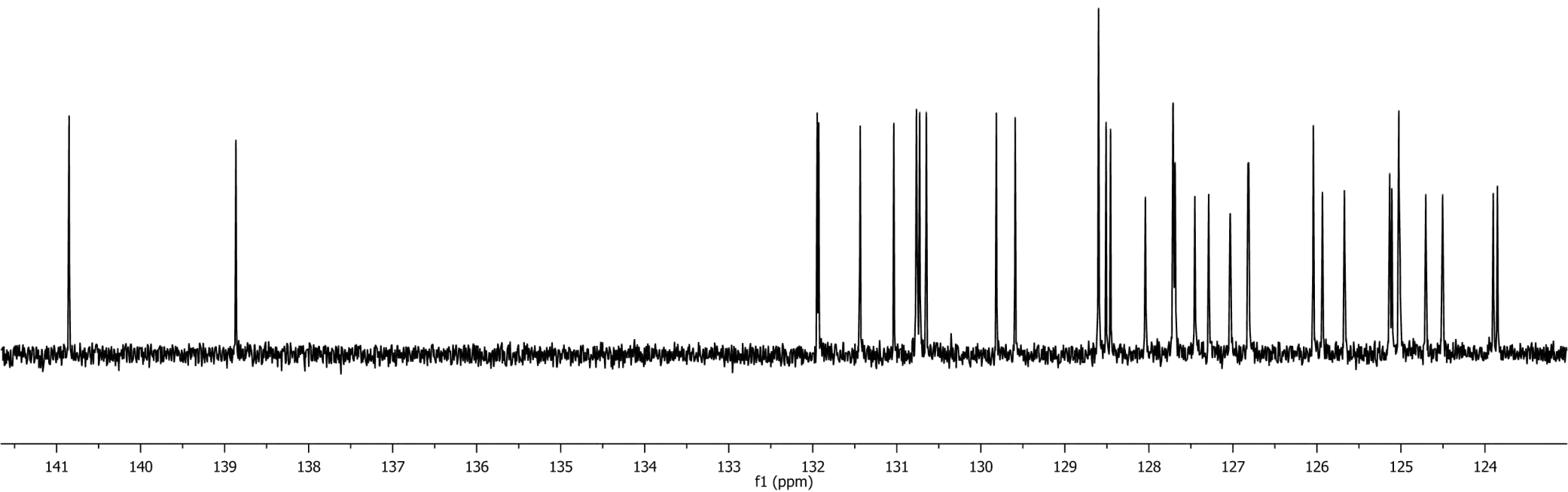
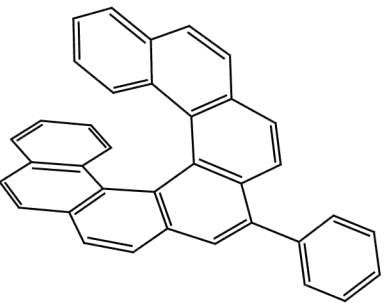
^{13}C NMR (125 MHz, DMSO- d_6)



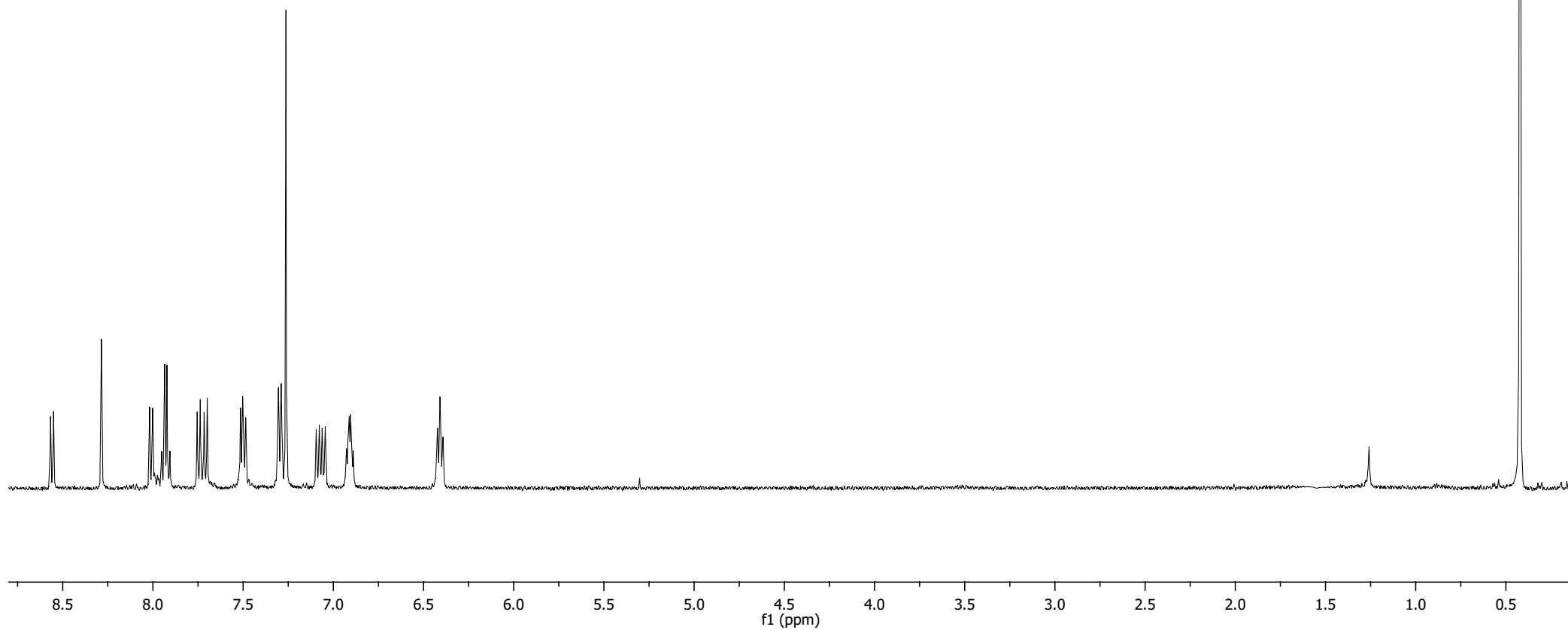
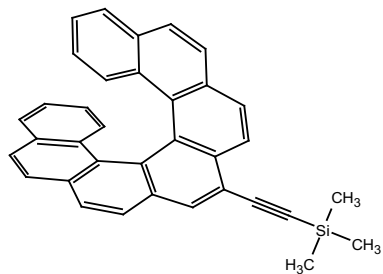
^1H NMR (500 MHz, CDCl_3)



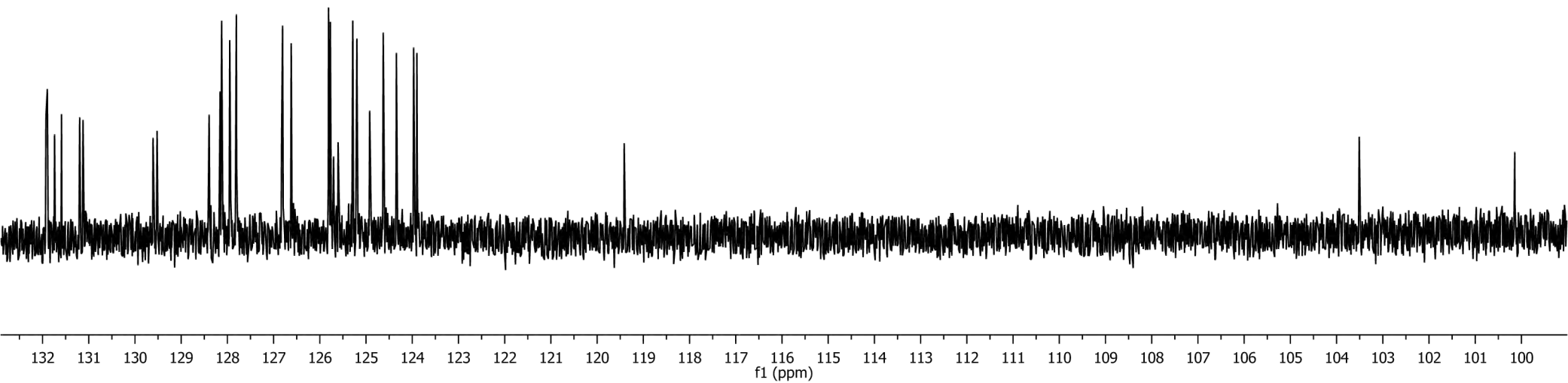
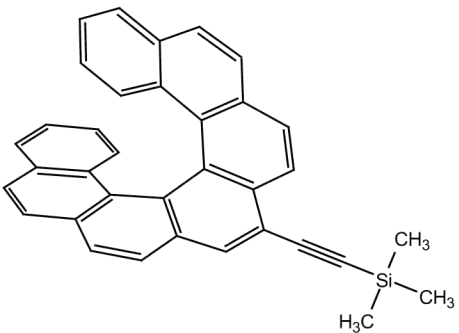
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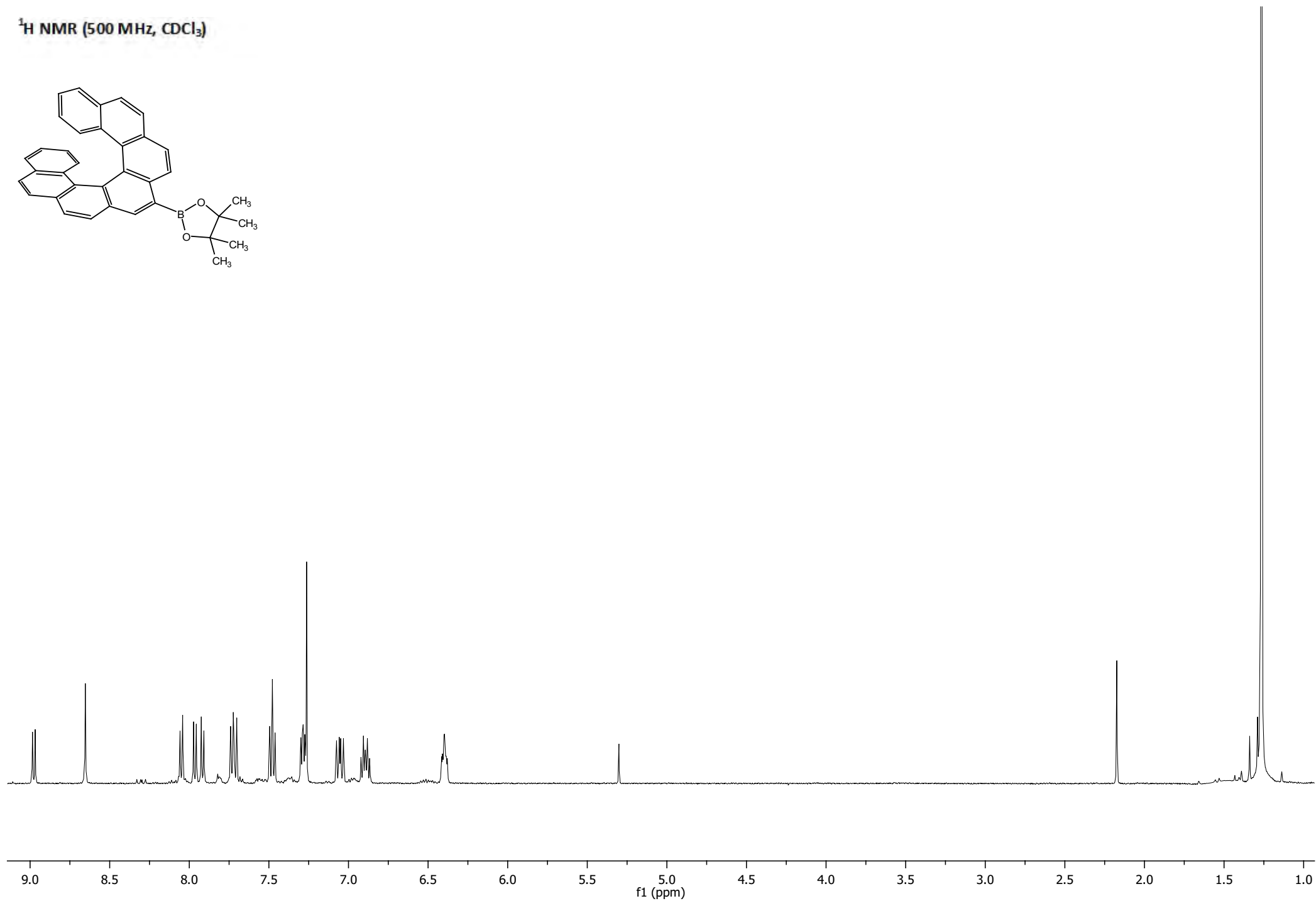
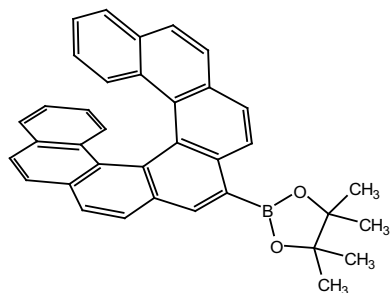
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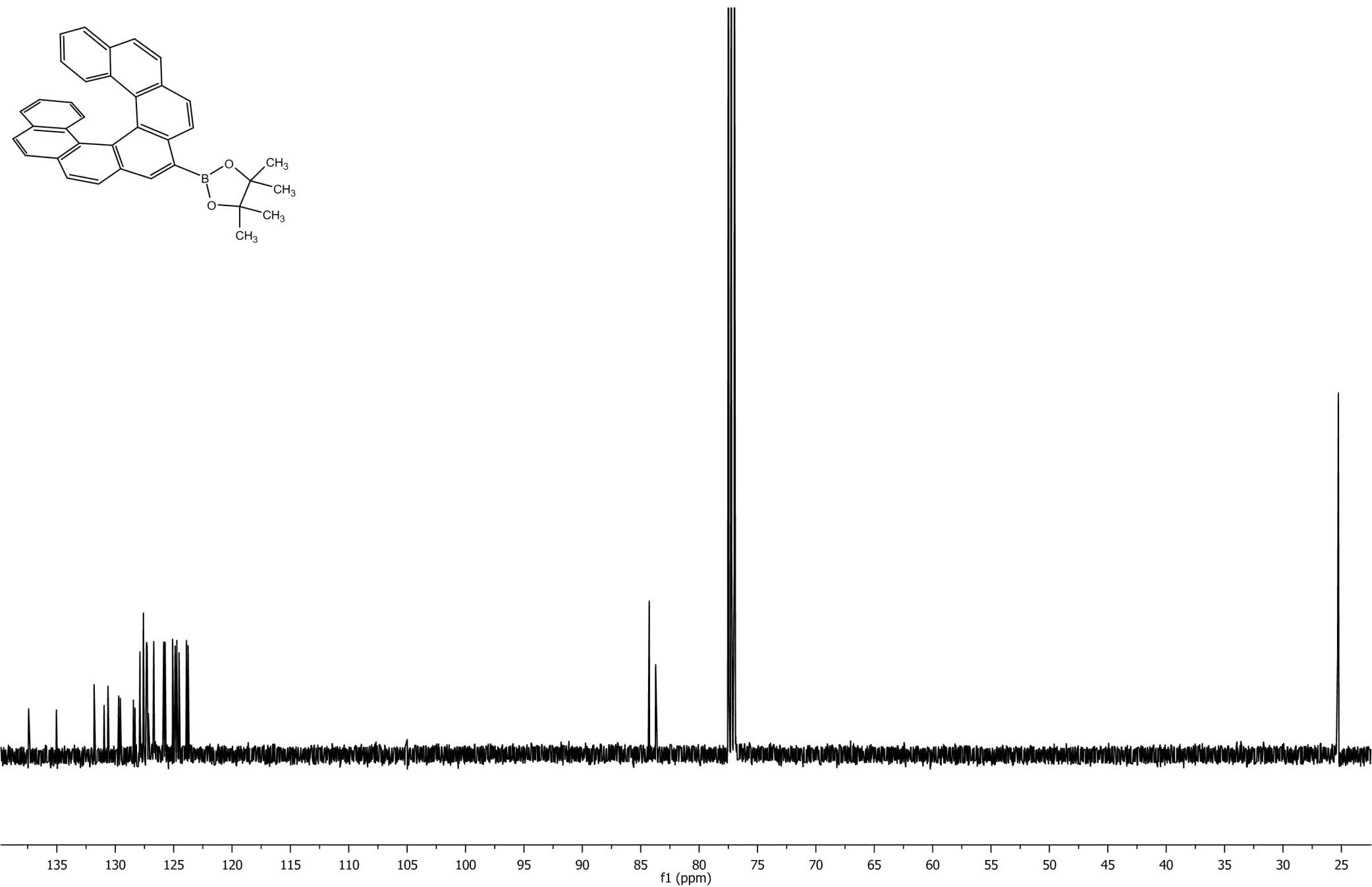
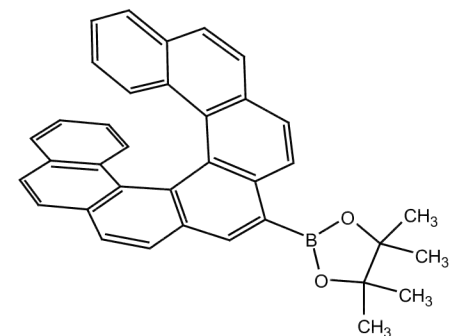
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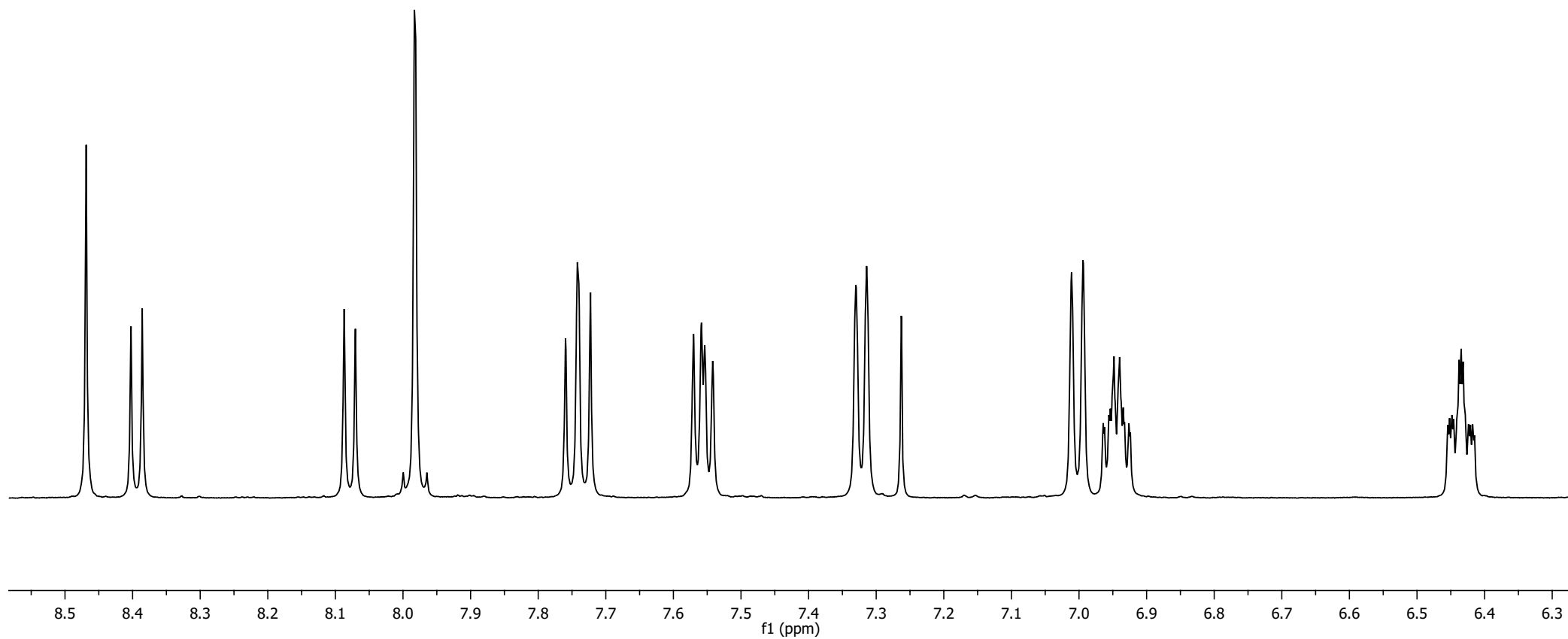
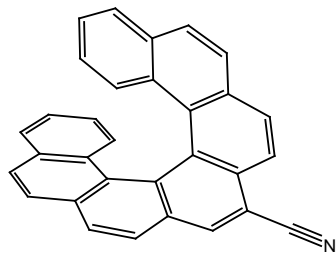
^1H NMR (500 MHz, CDCl_3)



¹³C NMR (125 MHz, CDCl₃)



^1H NMR (500 MHz, CDCl_3)



^{13}C NMR (125 MHz, CDCl_3)

