

SUPPORTING INFORMATION

SYNTHESIS OF 4,7-DIBROMOBENZO[*b*]THIOPHENE DERIVATIVES VIA 2-(1-ADAMANTYLSULFANYL)-1,4-DIBROMO-3-(ETHYNYL)BENZENES AND THEIR REACTIONS

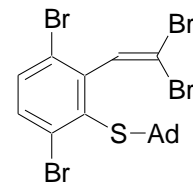
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NMR spectra



2

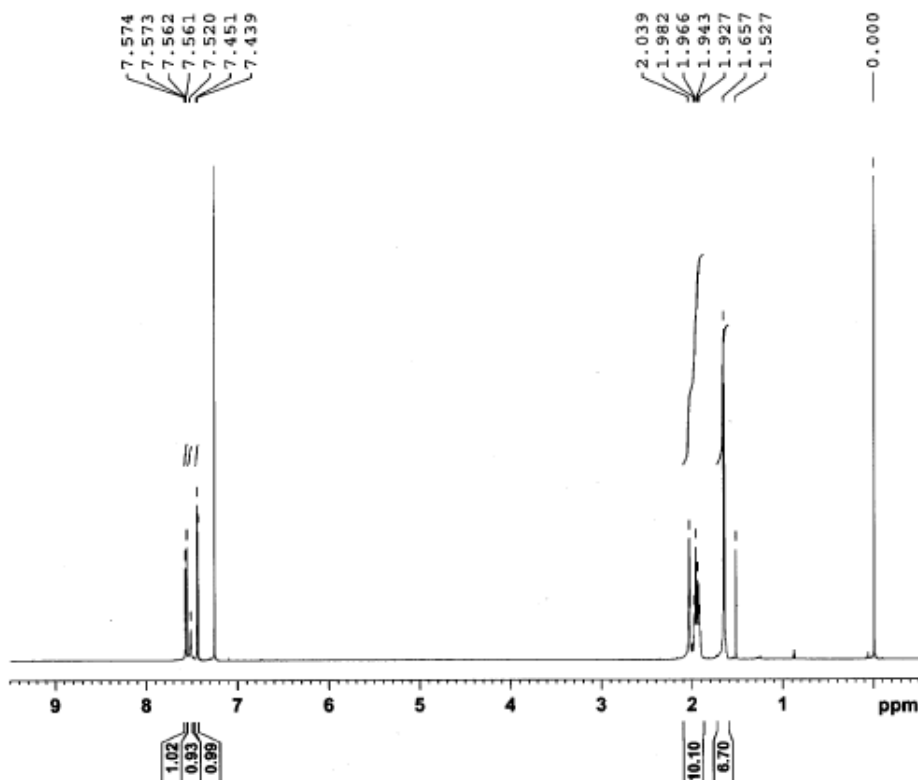


FIGURE S1 ^1H NMR (700 MHz, CDCl_3) spectrum of **2**

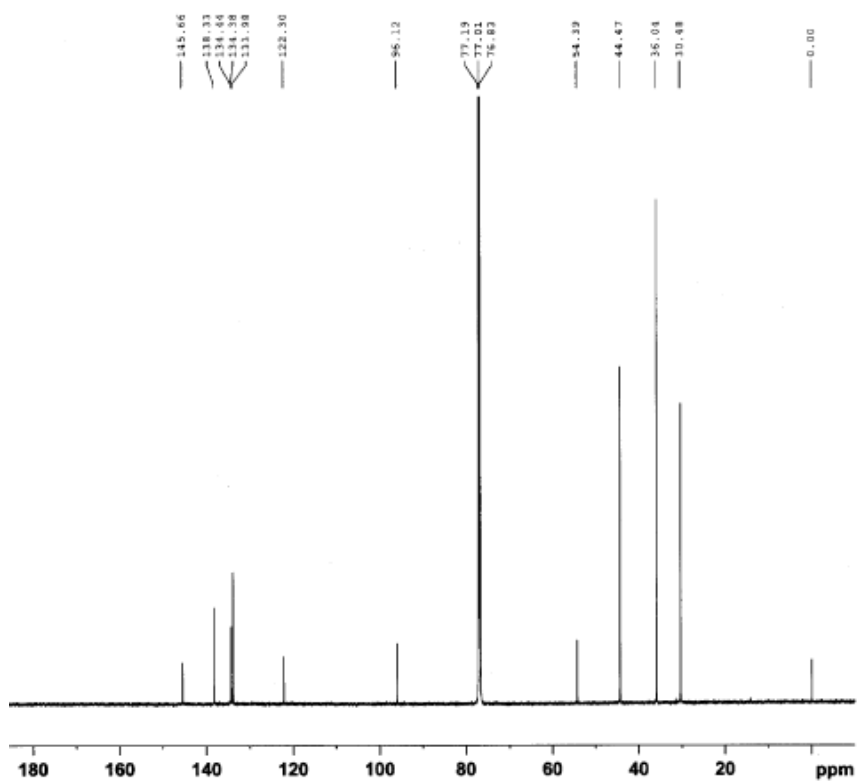
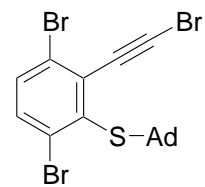


FIGURE S2 $^{13}\text{C}\{^1\text{H}\}$ NMR (176 MHz, CDCl_3) spectrum of **2**



3b

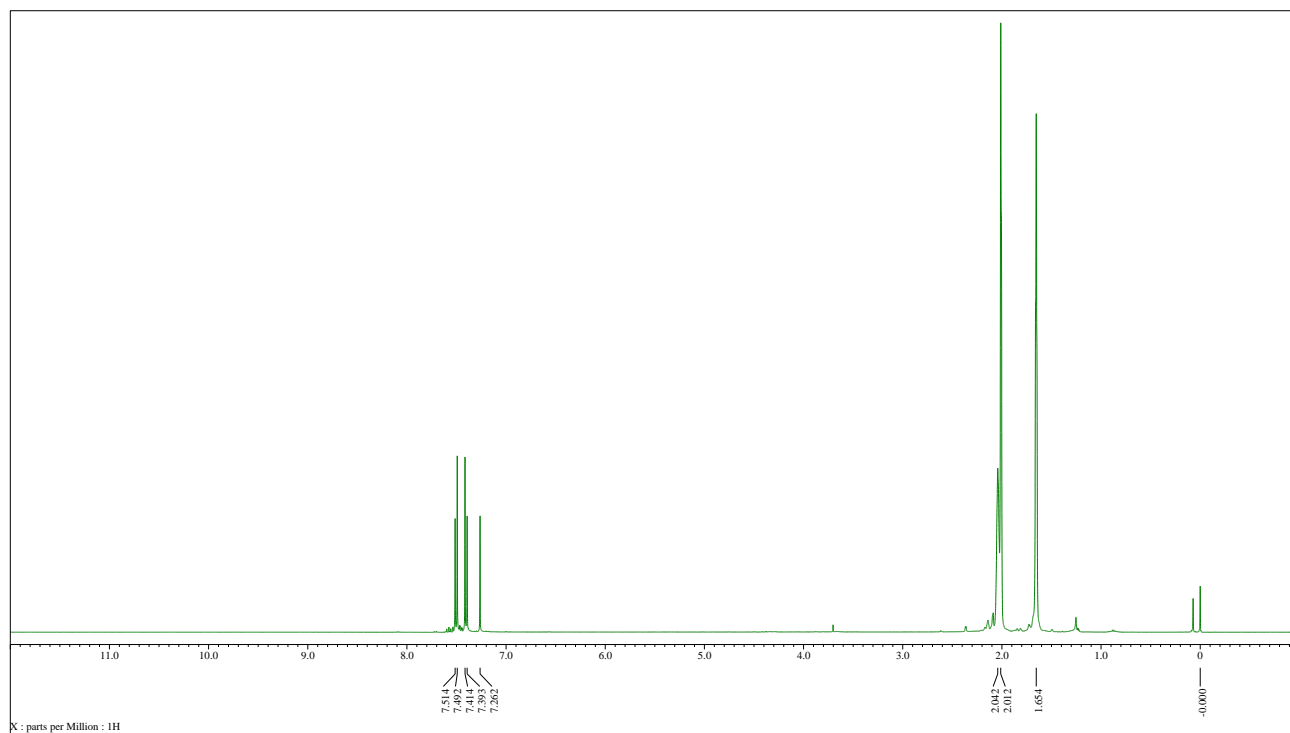


FIGURE S3 ^1H NMR (400 MHz, CDCl_3) spectrum of **3b**

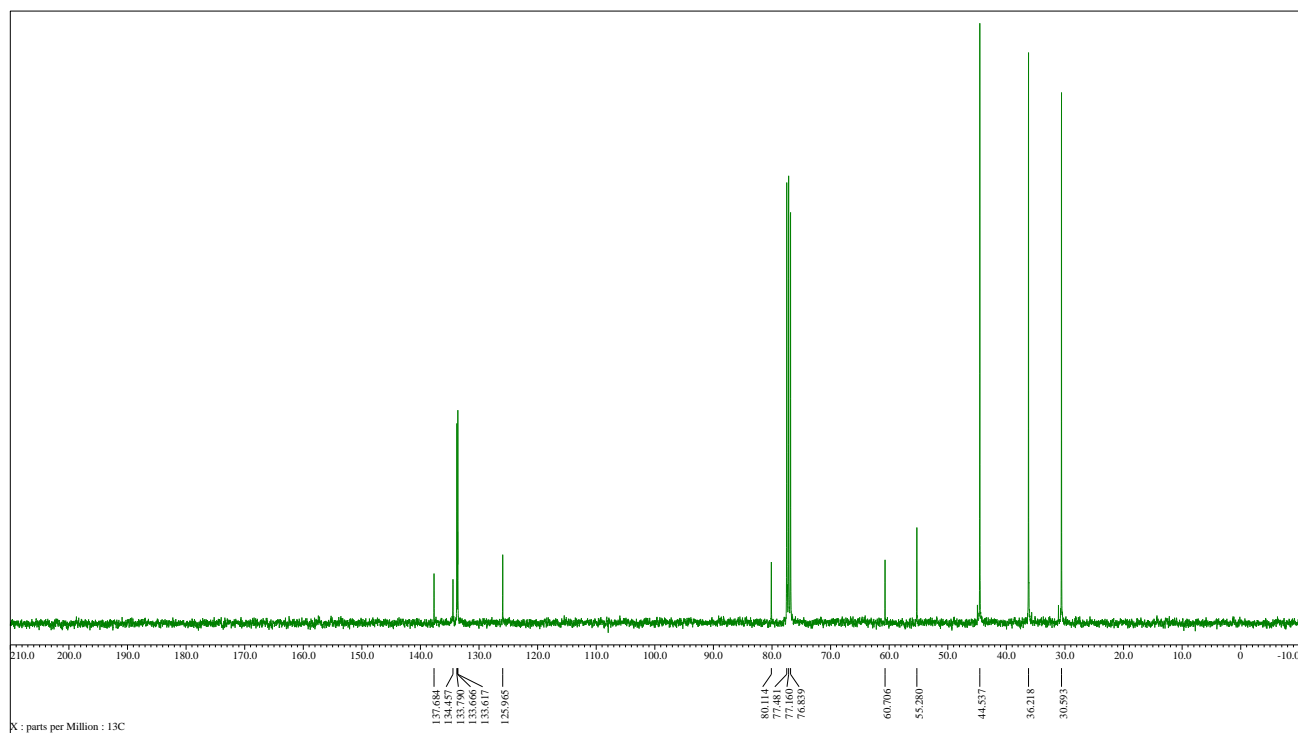


FIGURE S4 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **3b**

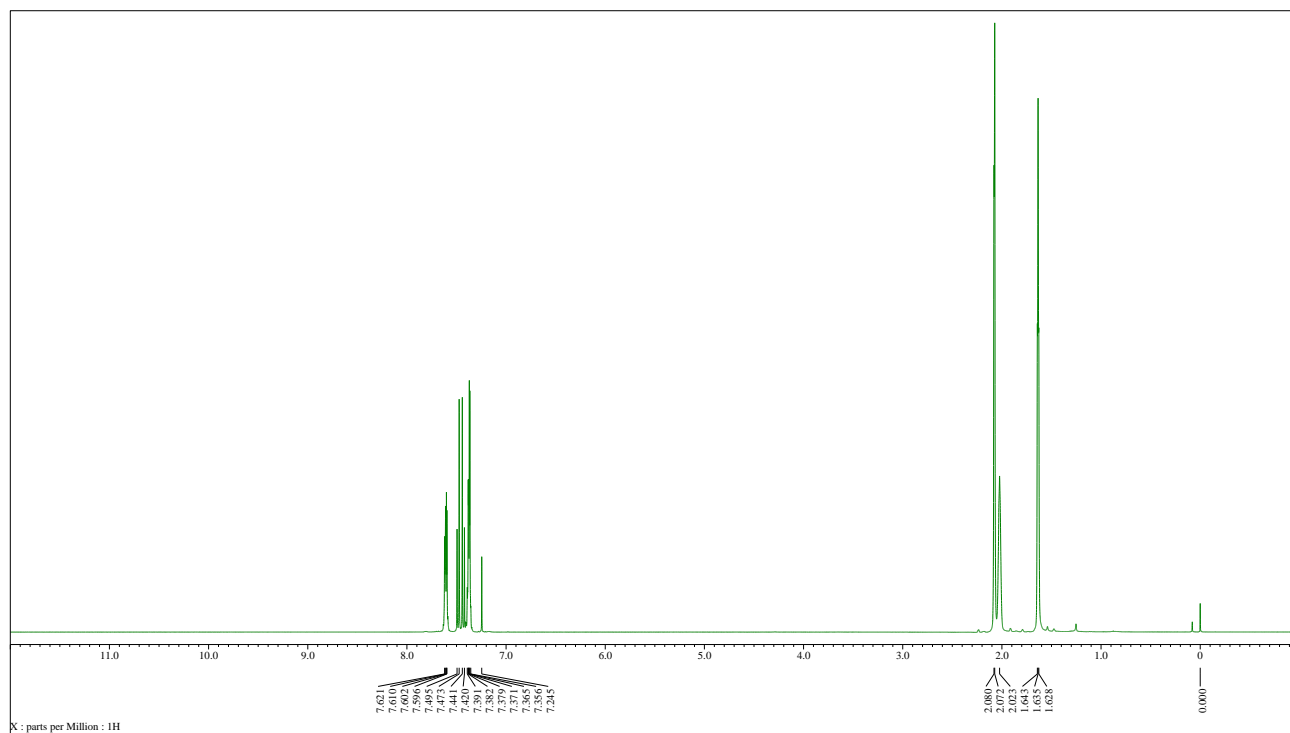
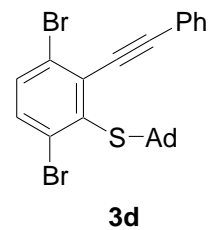


FIGURE S5 ^1H NMR (400 MHz, CDCl_3) spectrum of **3d**

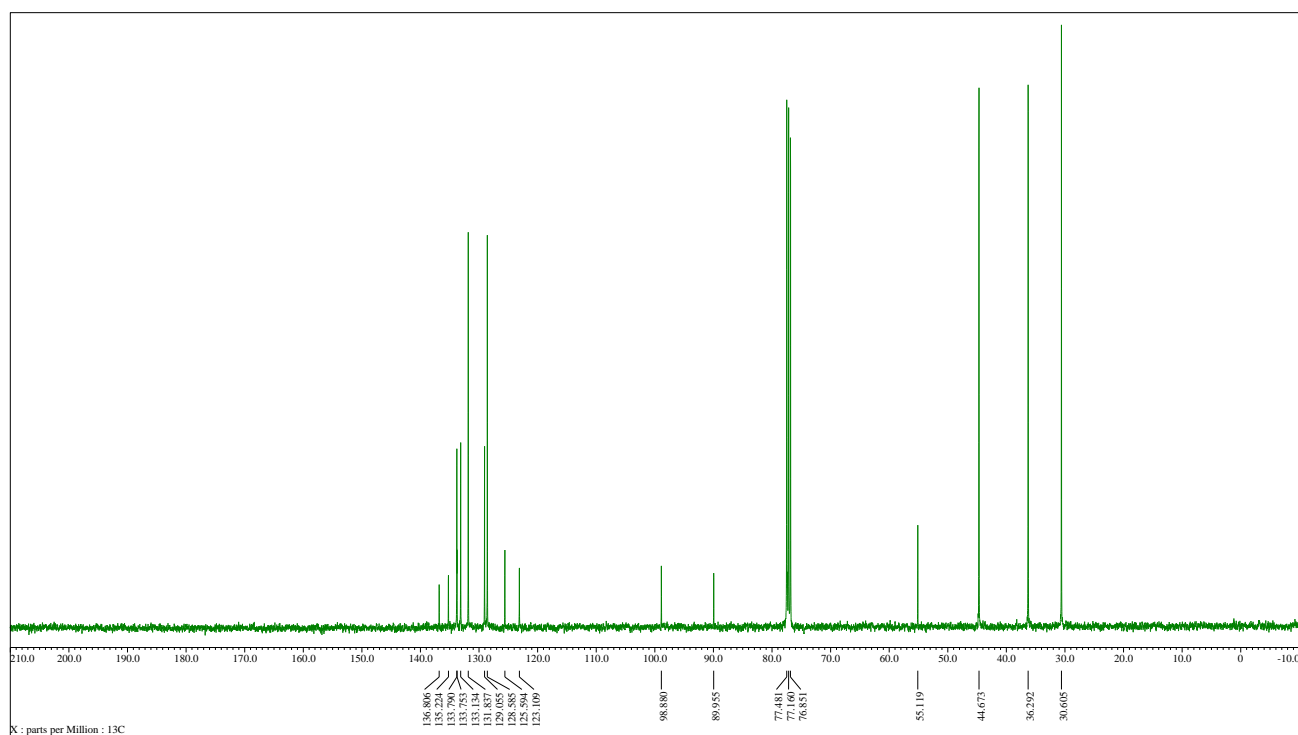


FIGURE S6 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **3d**

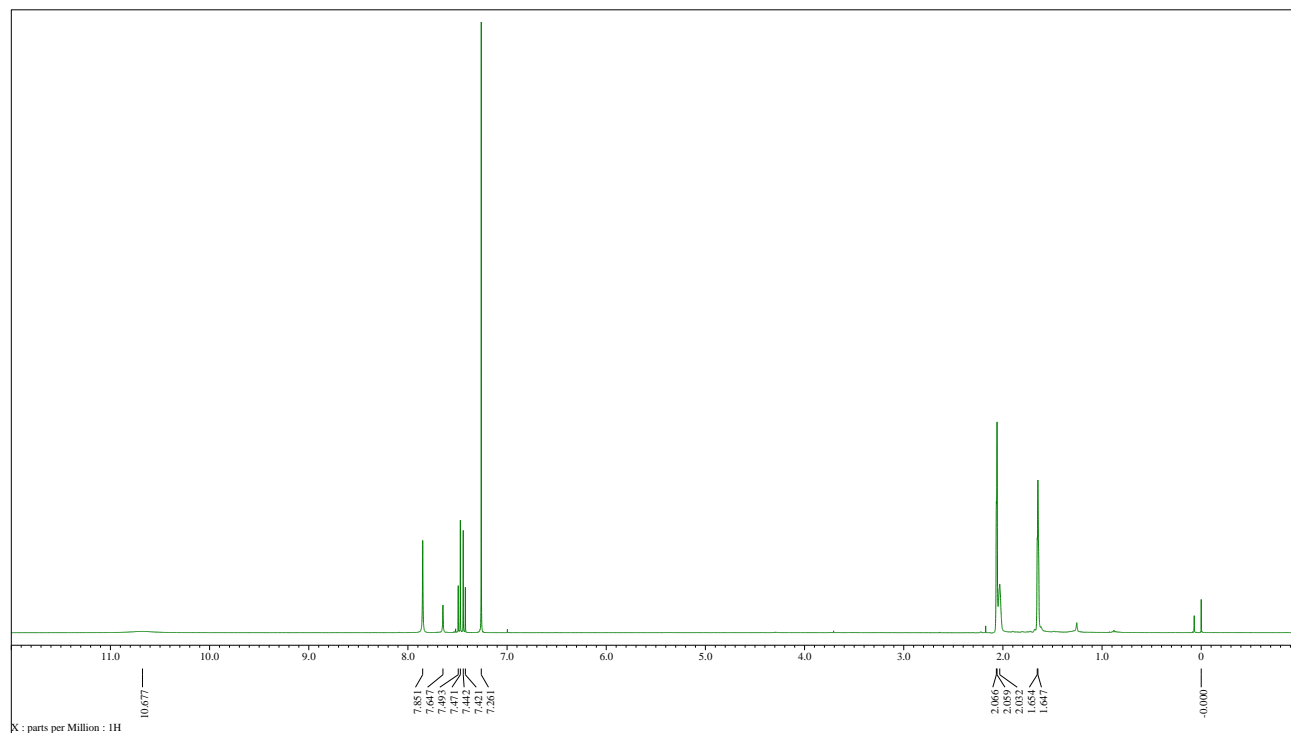
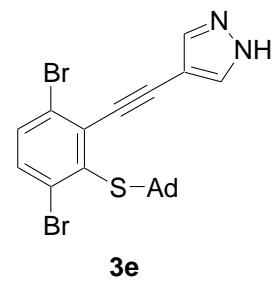


FIGURE S7 ^1H NMR (400 MHz, CDCl_3) spectrum of **3e**

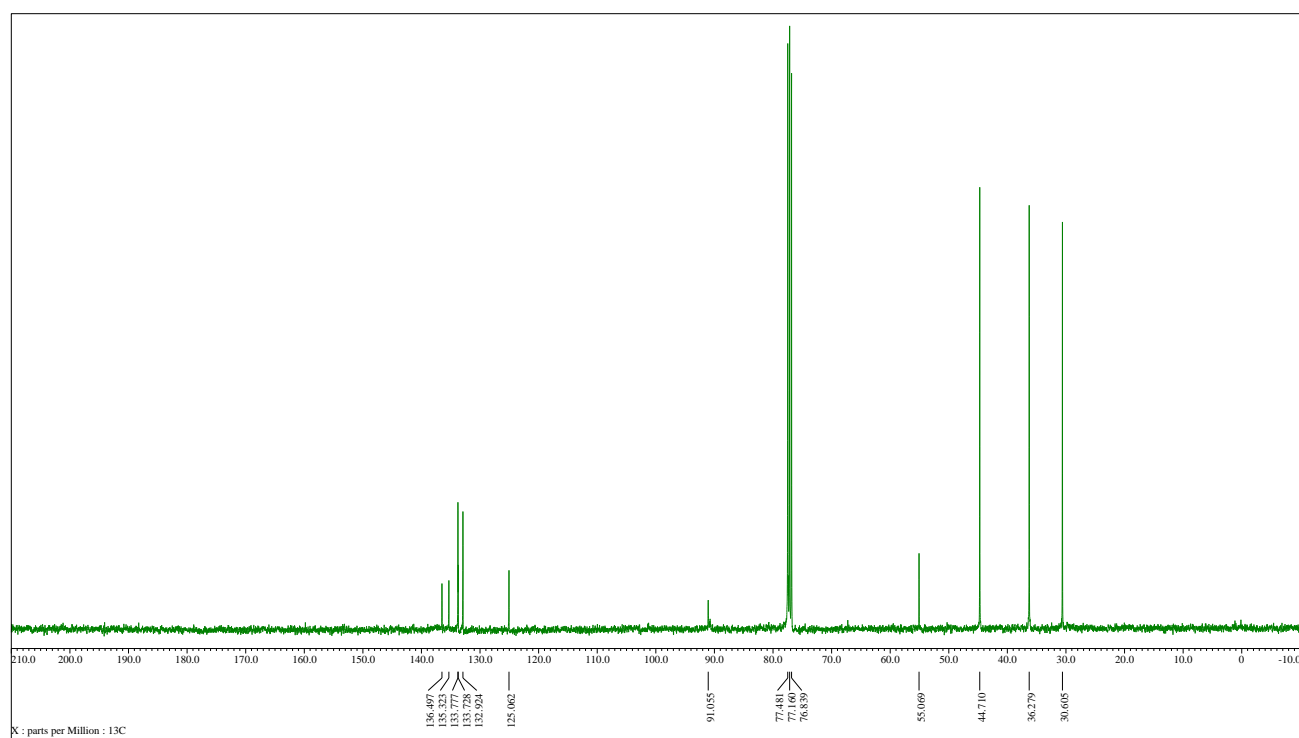


FIGURE S8 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **3e**

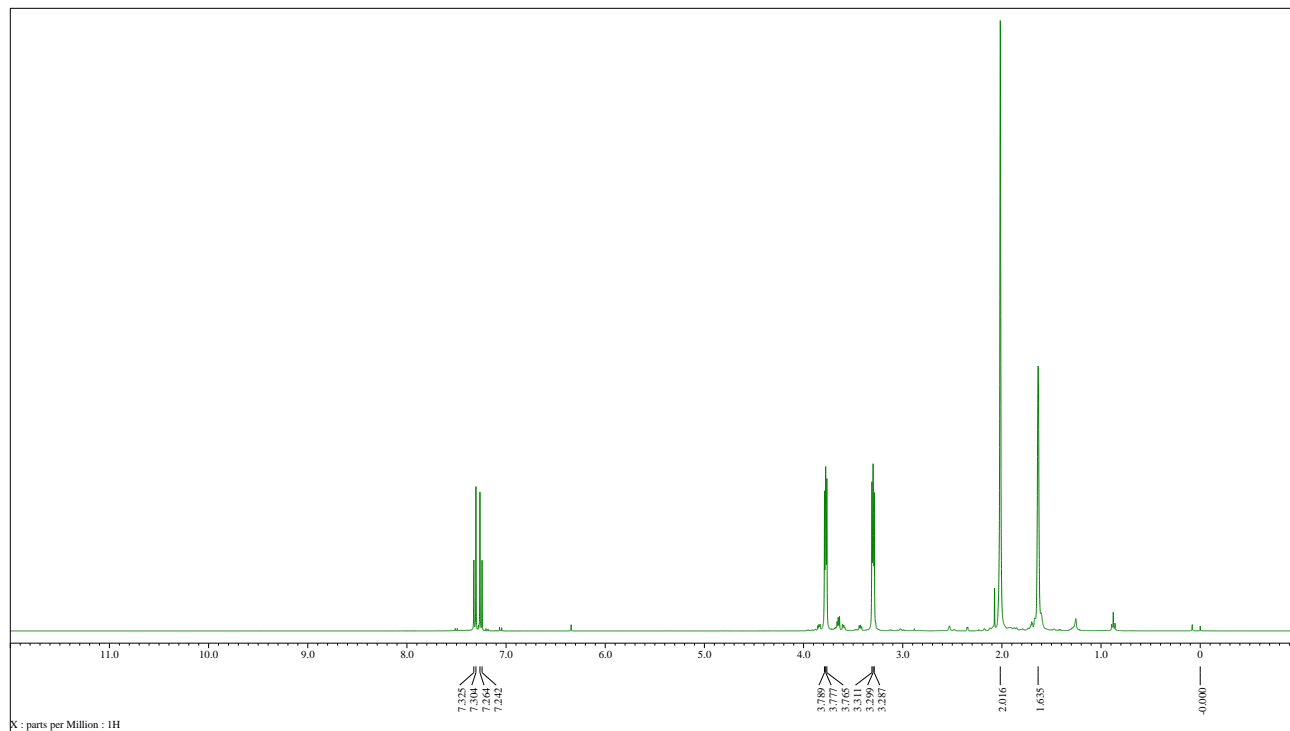
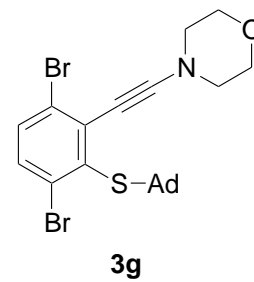


FIGURE S9 ^1H NMR (400 MHz, CDCl_3) spectrum of **3g**

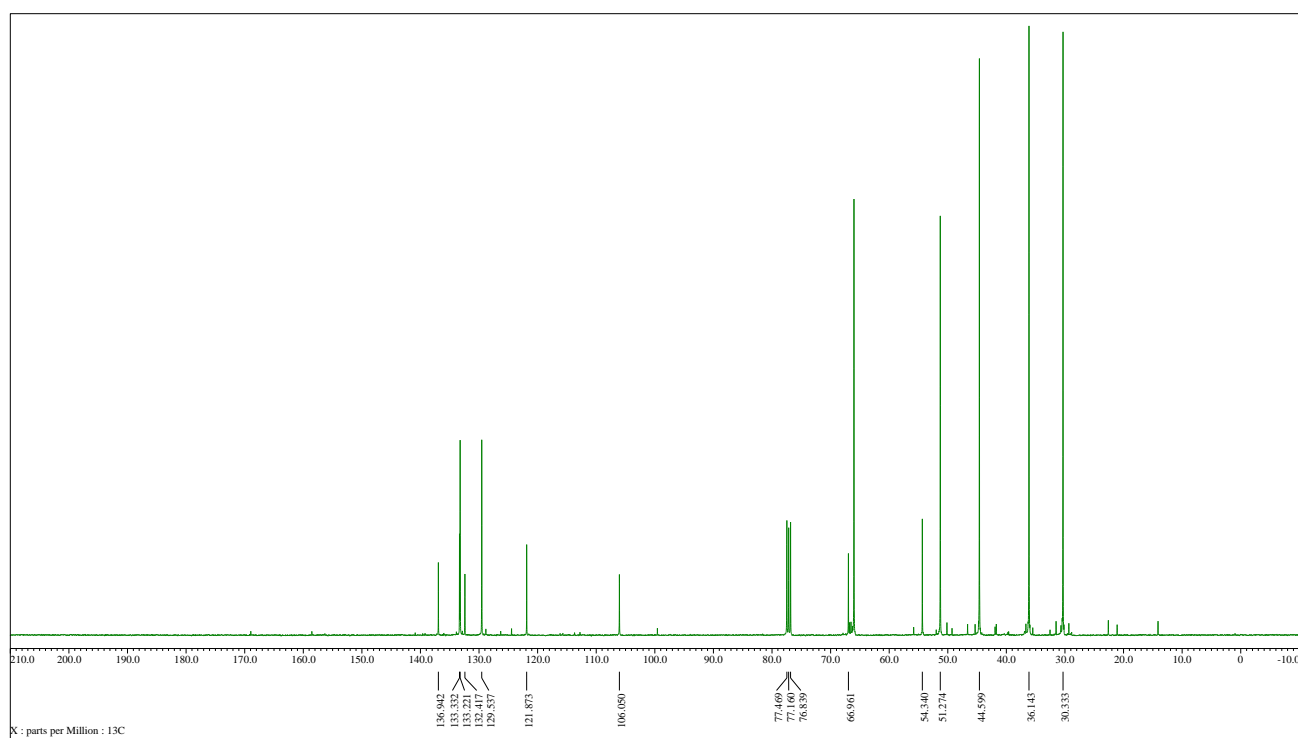
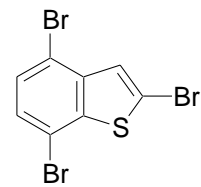


FIGURE S10 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **3g**



4b

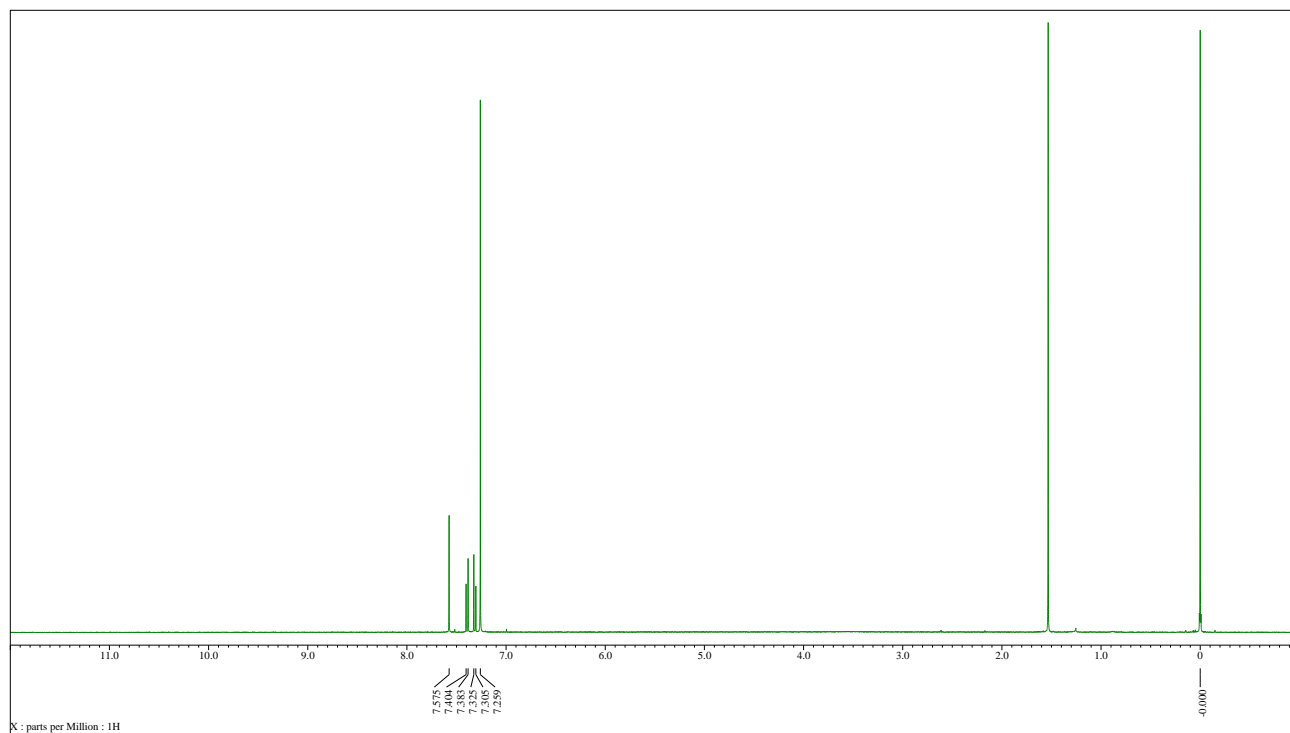


FIGURE S11 ^1H NMR (400 MHz, CDCl_3) spectrum of **4b**

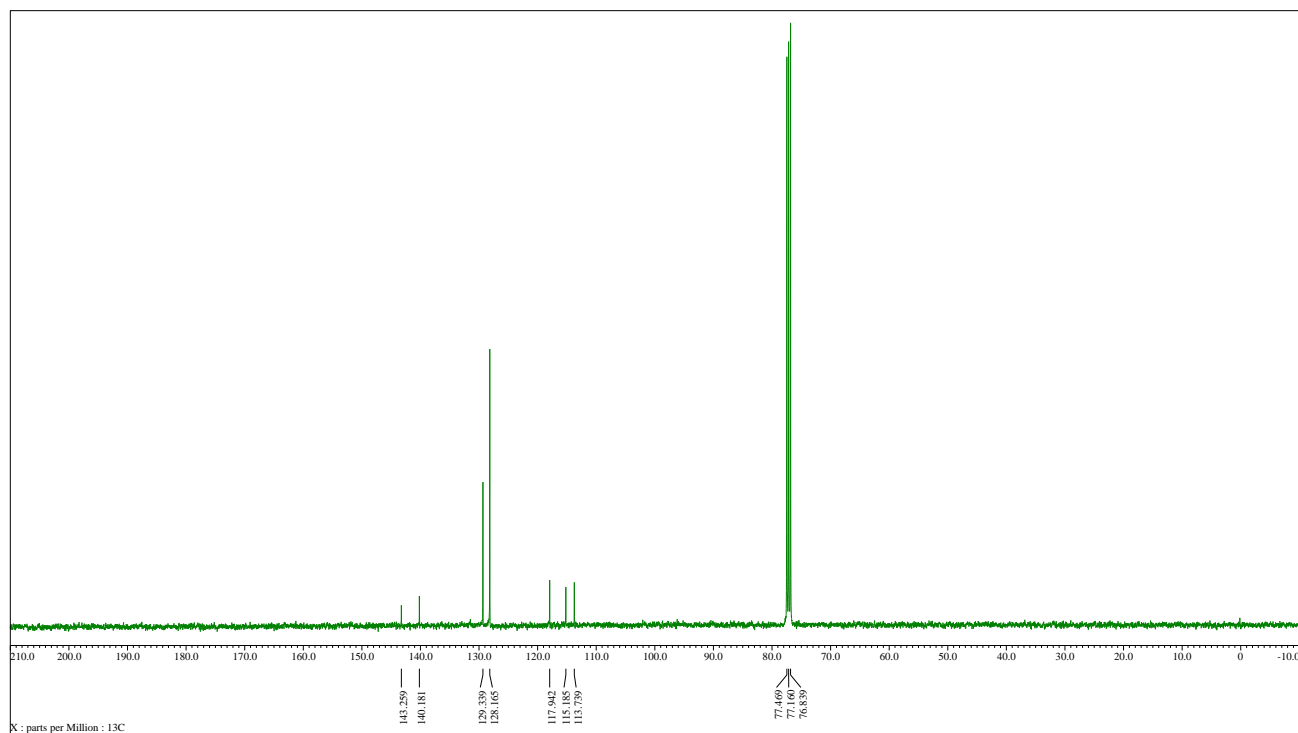


FIGURE S12 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **4b**

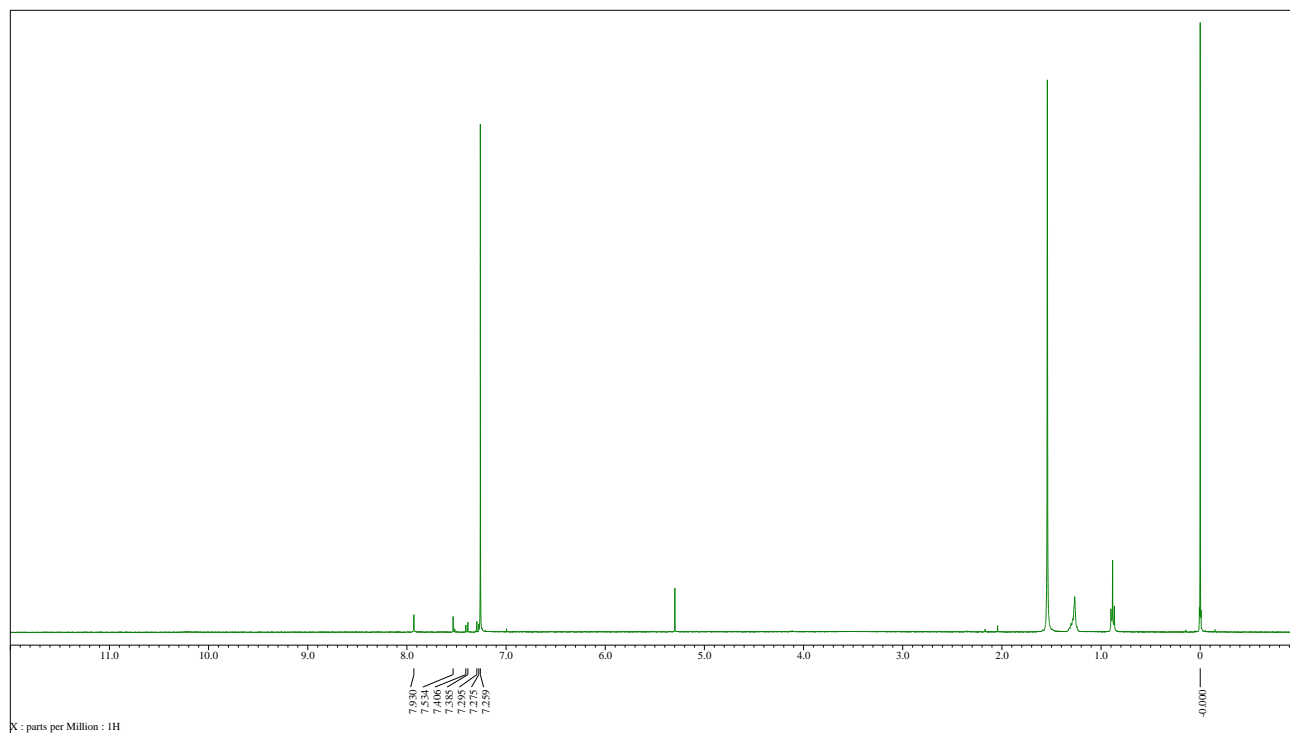
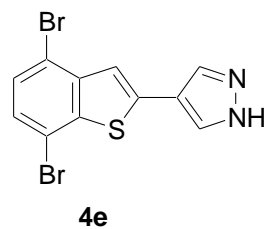


FIGURE S13 ^1H NMR (400 MHz, CDCl_3) spectrum of **4e** (hardly soluble), containing hexane and dichloromethane

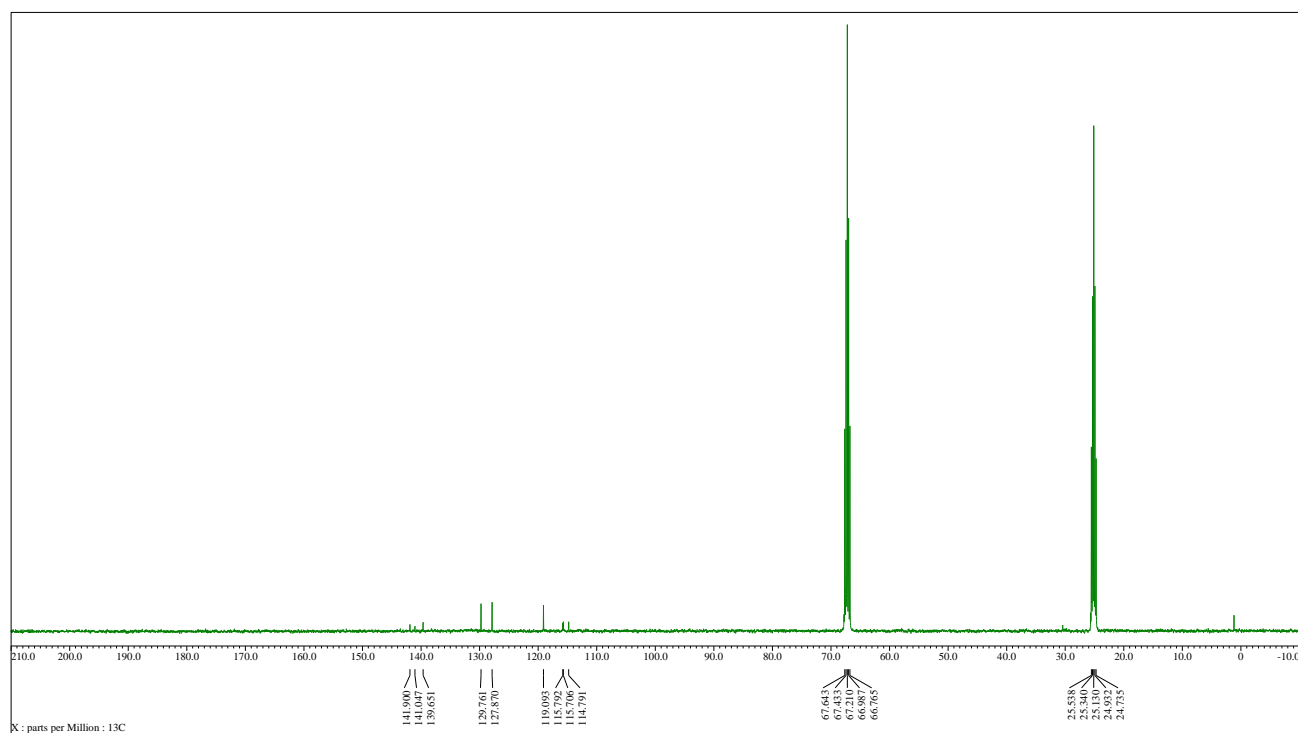


FIGURE S14 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, $\text{THF-}d_8$) spectrum of **4e**

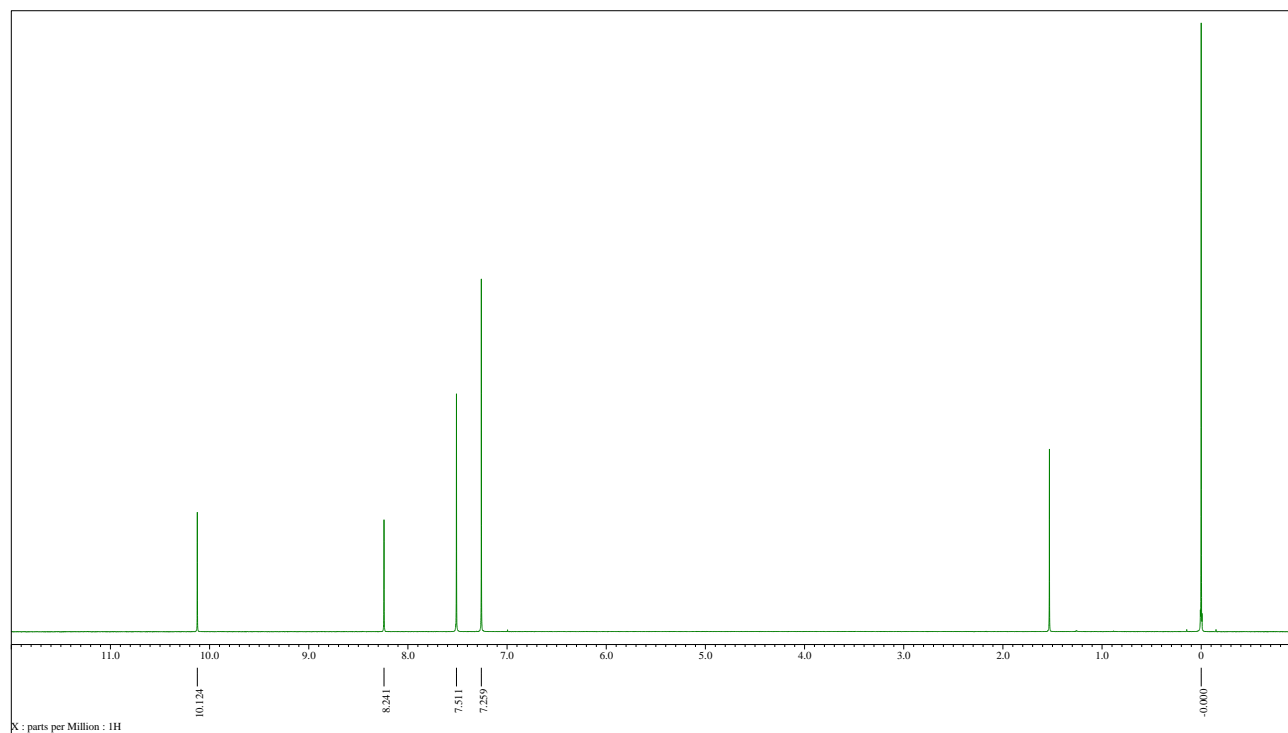
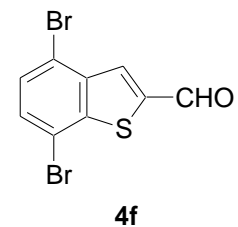


FIGURE S15 ^1H NMR (400 MHz, CDCl_3) spectrum of **4f**

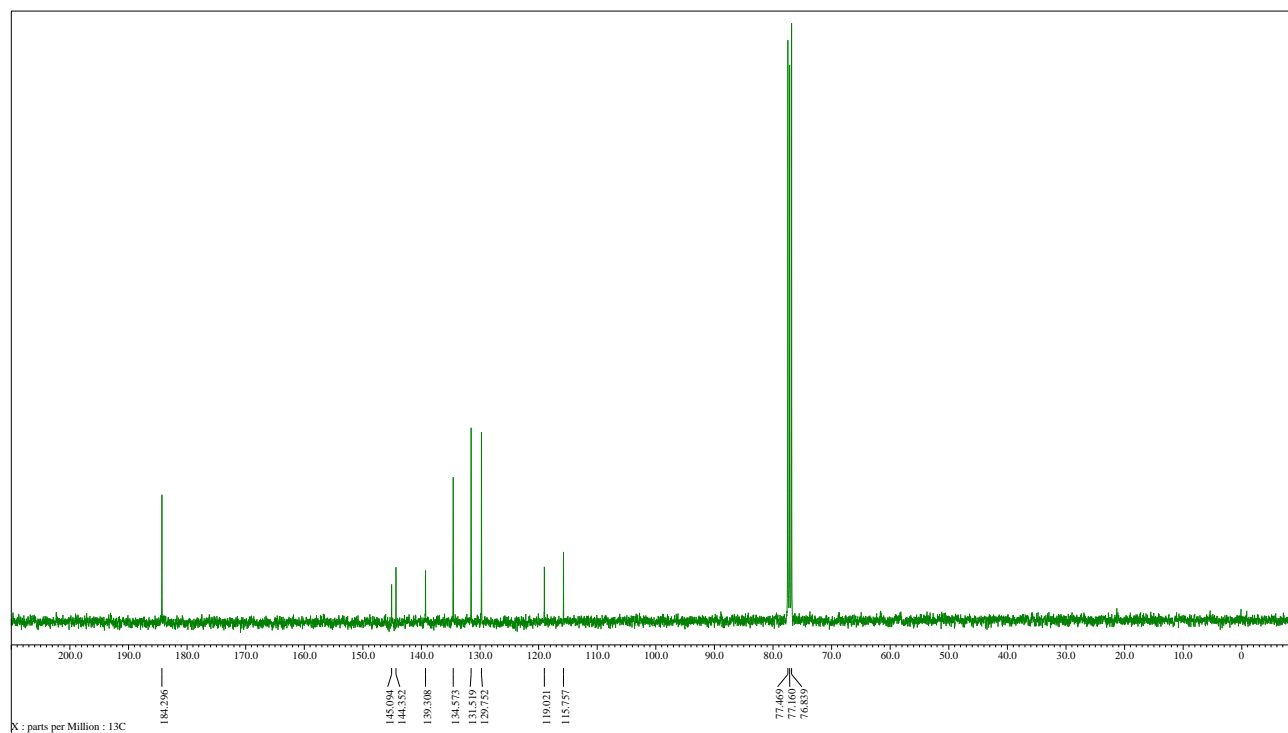


FIGURE S16 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **4f**

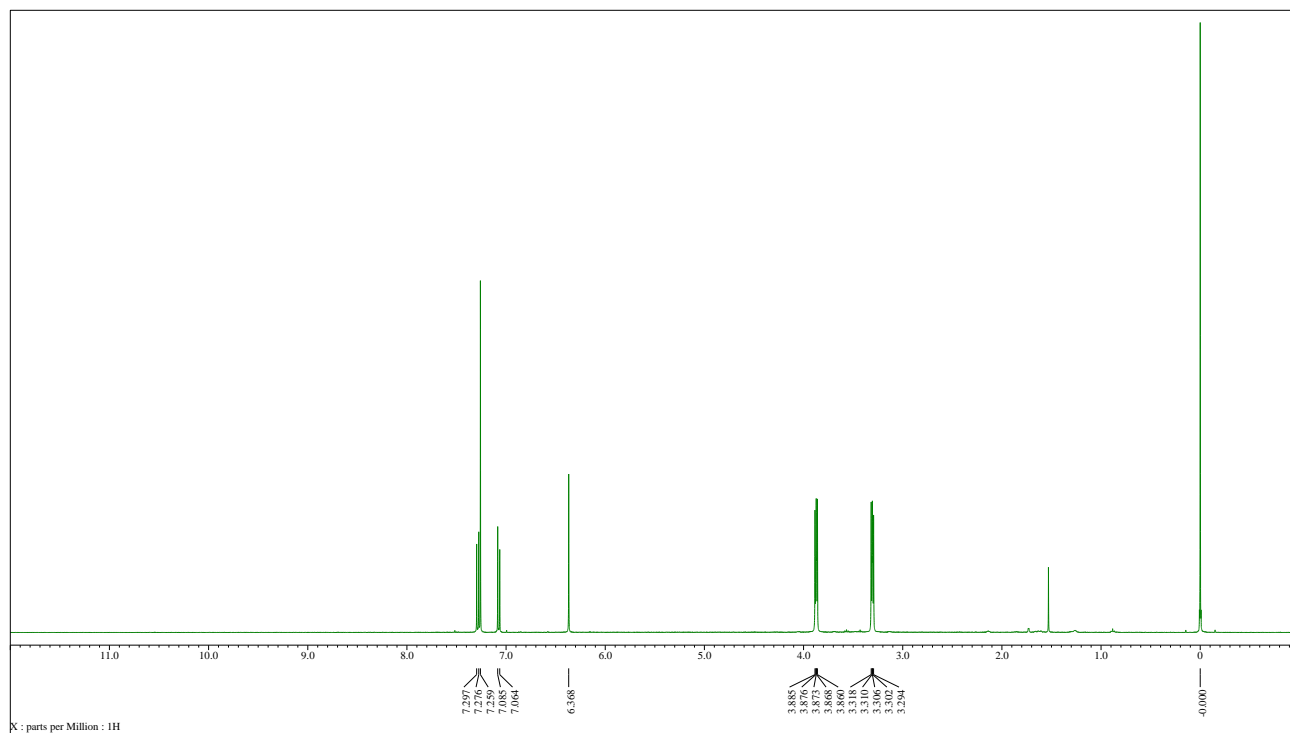
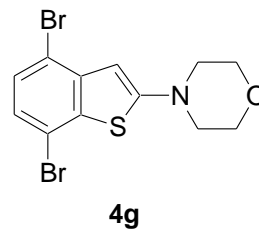


FIGURE S17 ^1H NMR (400 MHz, CDCl_3) spectrum of **4g**

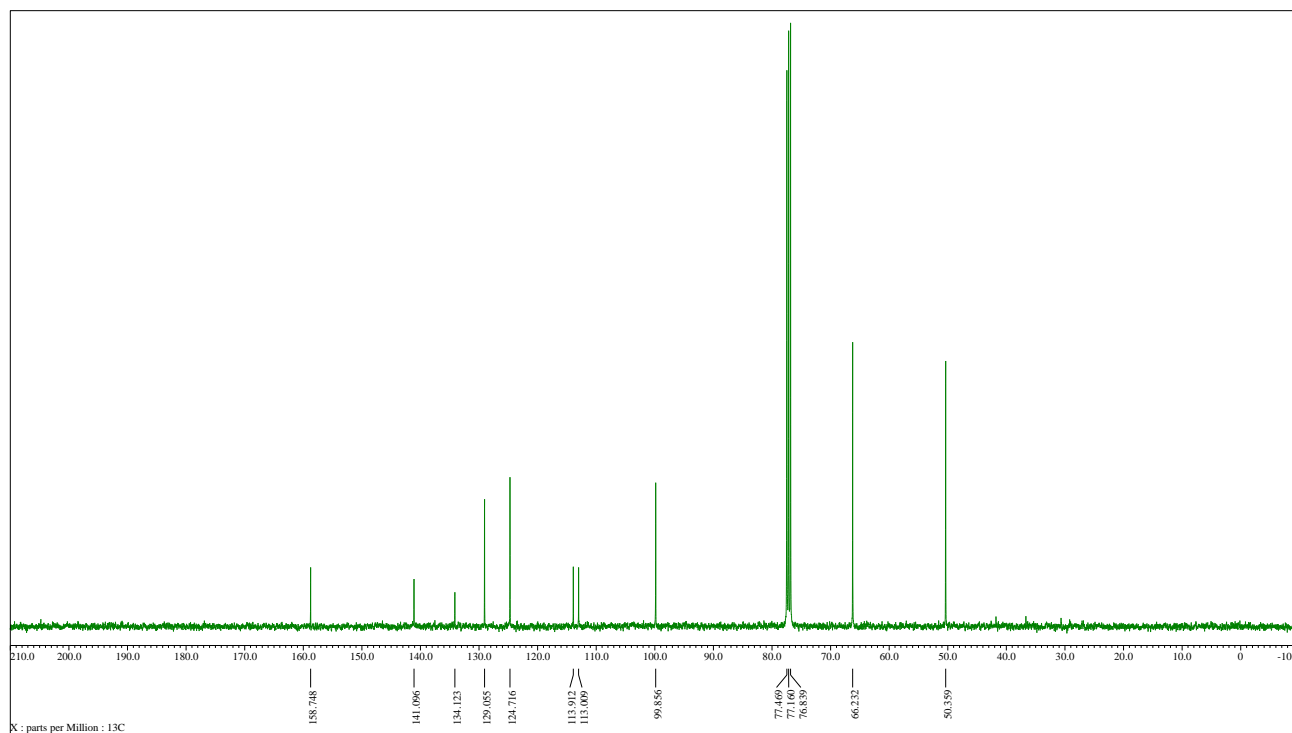
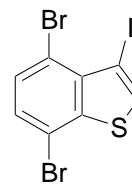


FIGURE S18 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **4g**



4h

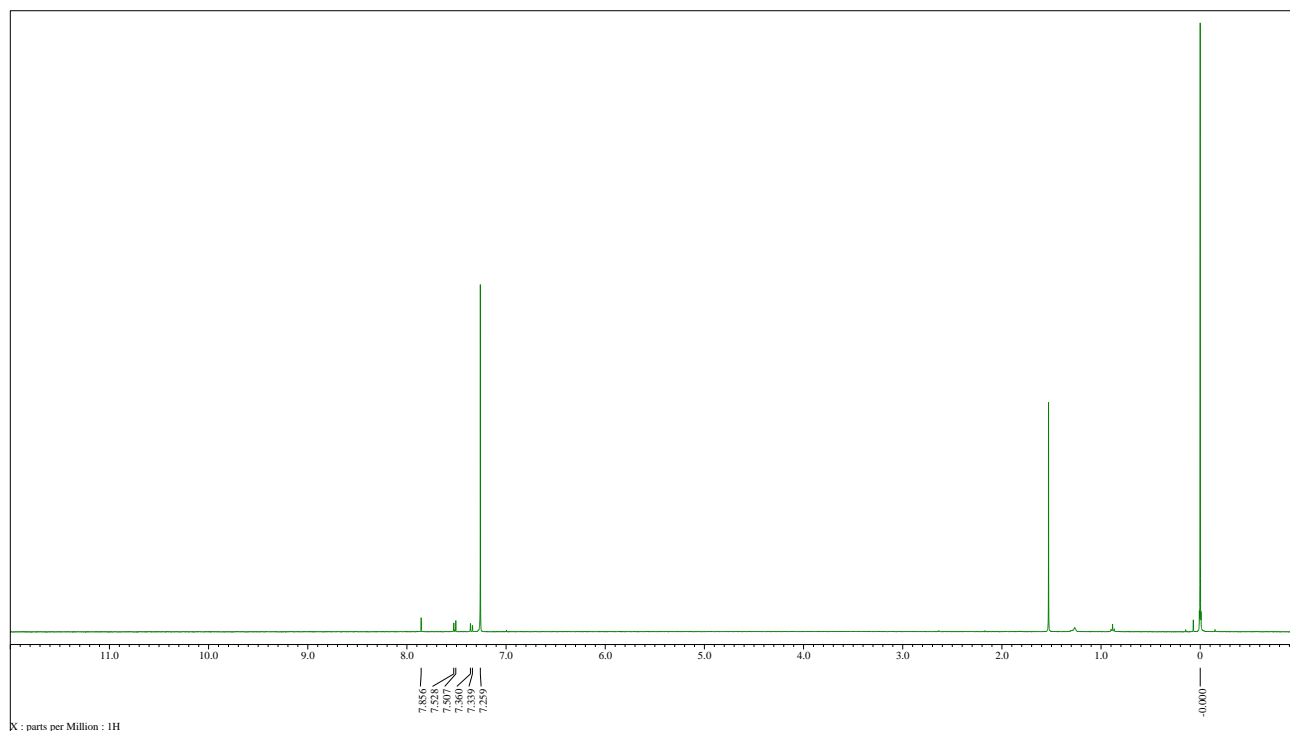


FIGURE S19 ^1H NMR (400 MHz, CDCl_3) spectrum of 4h

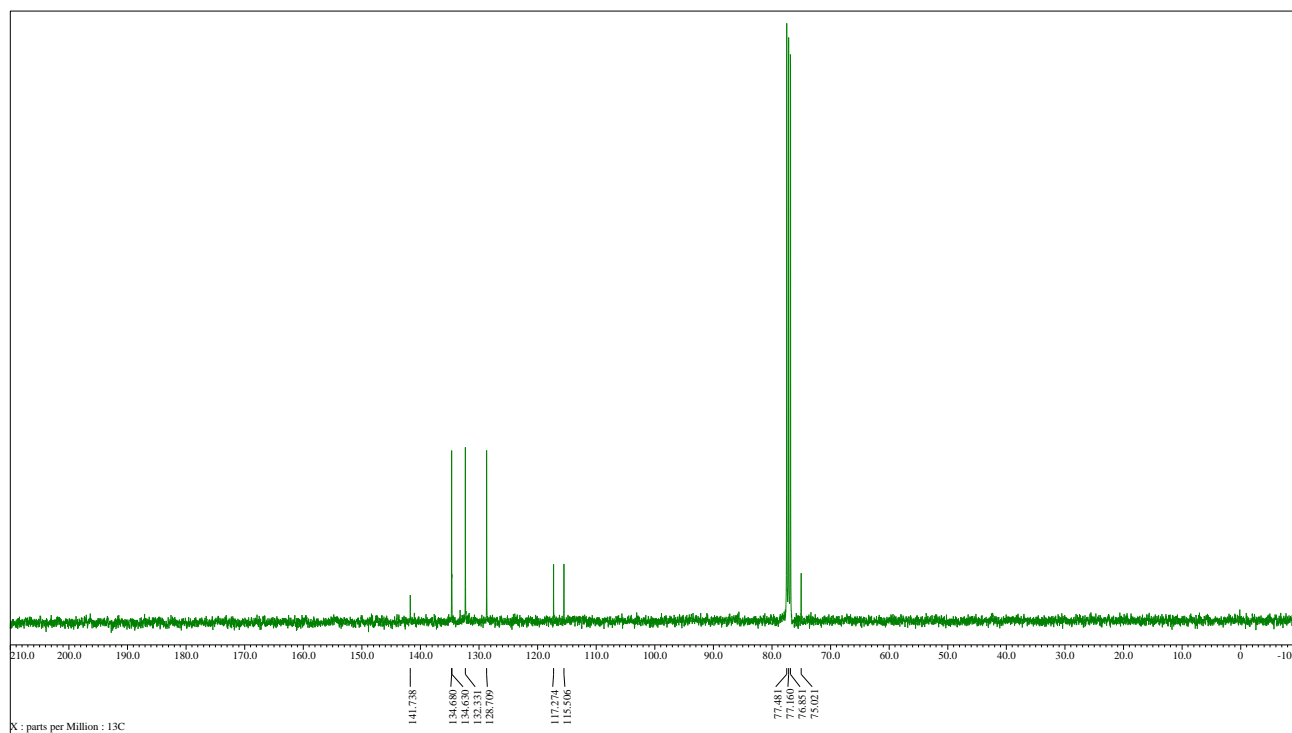


FIGURE S20 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of 4h

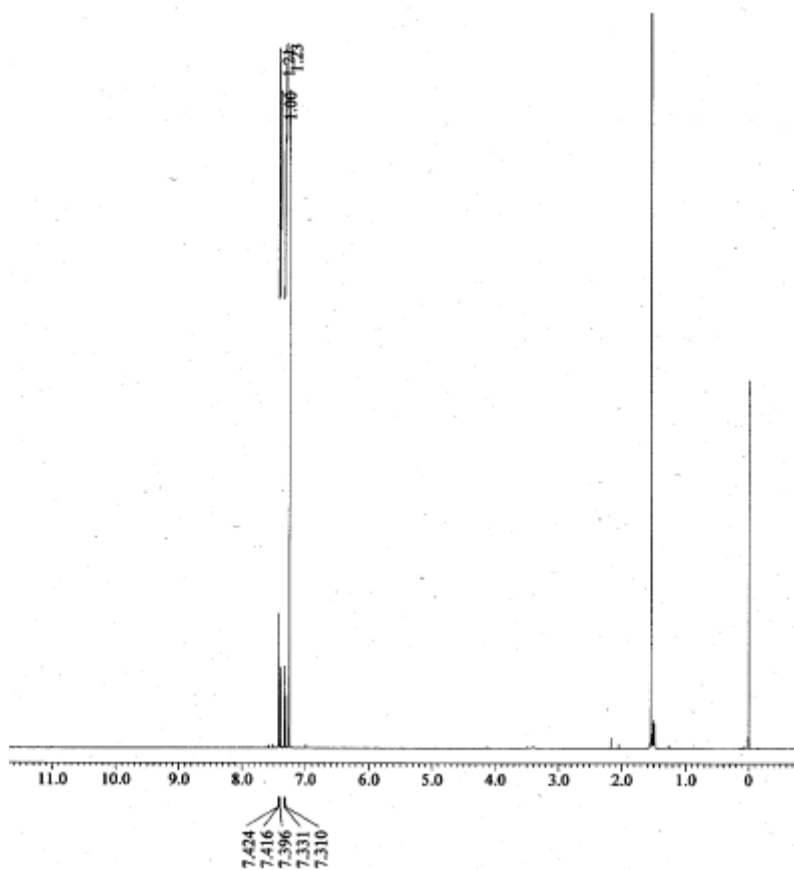
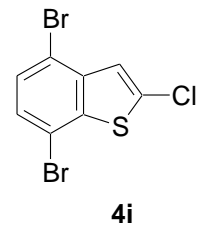


FIGURE S21 ¹H NMR (400 MHz, CDCl₃) spectrum of **4i**

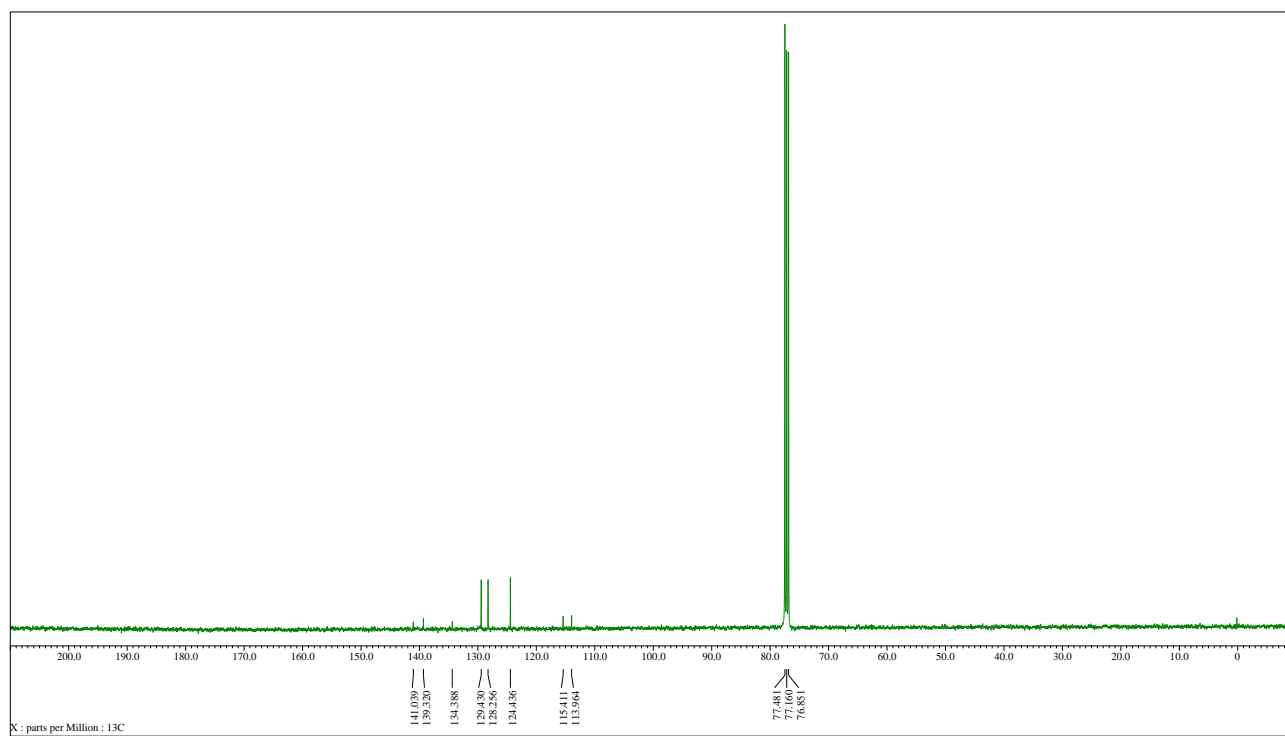
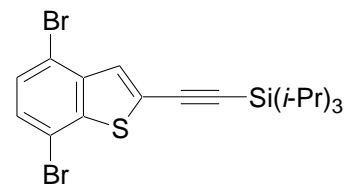


FIGURE S22 ¹³C{¹H} NMR (100 MHz, CDCl₃) spectrum of **4i**



4j

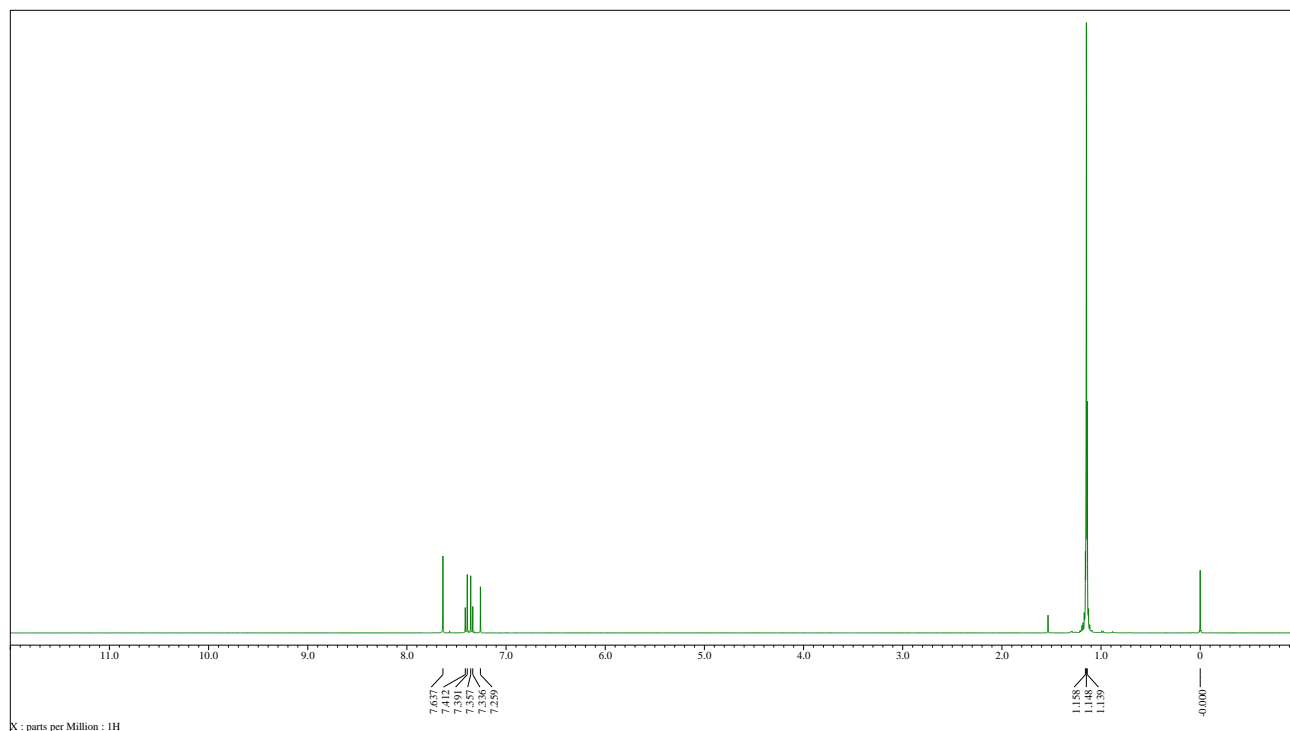


FIGURE S23 ^1H NMR (400 MHz, CDCl_3) spectrum of **4j**

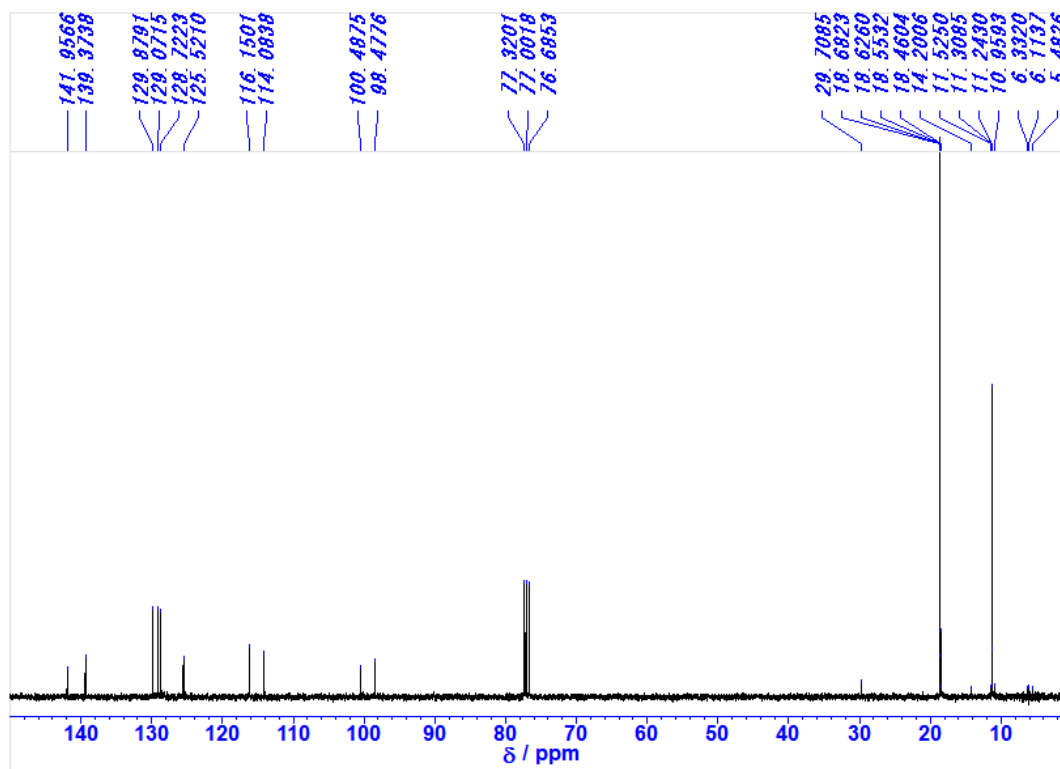
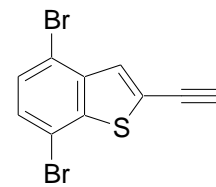
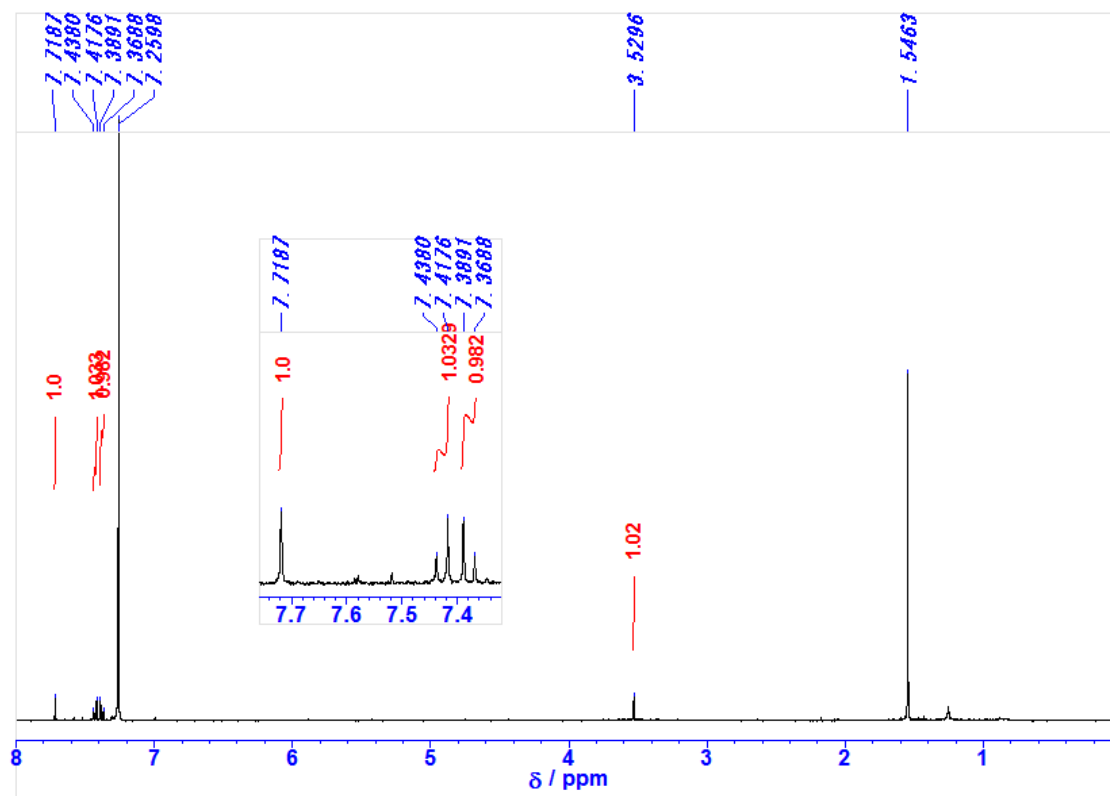
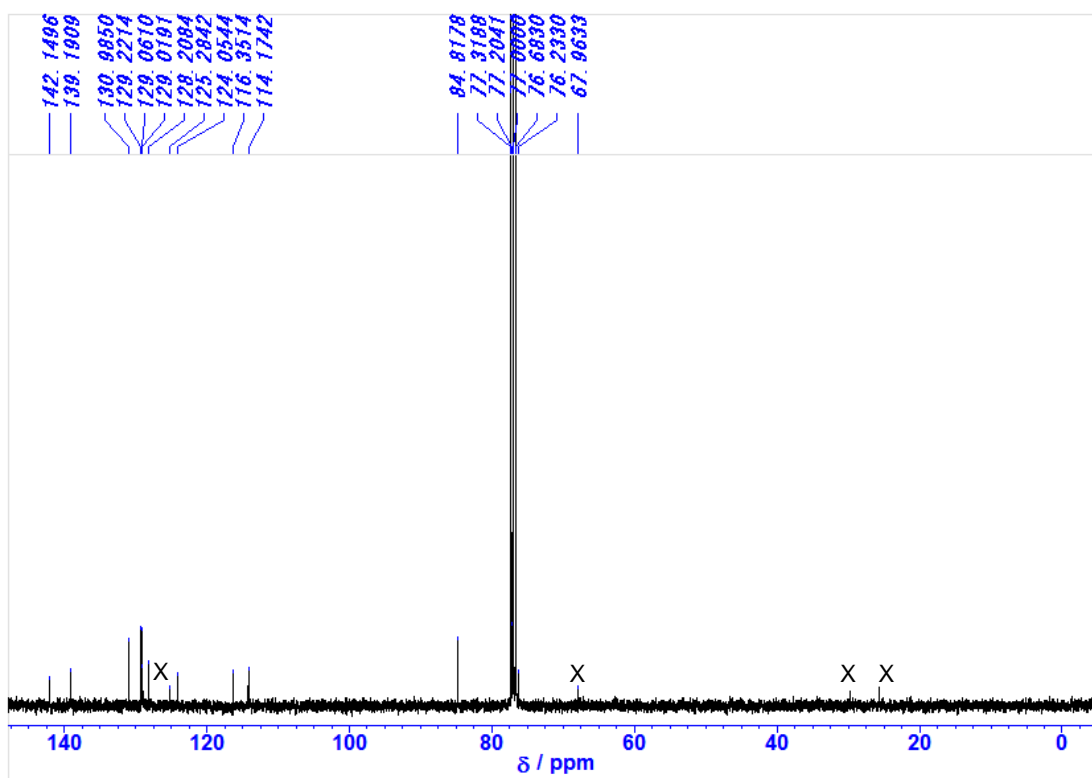


FIGURE S24 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **4j**

**4k****FIGURE S25** ^1H NMR (400 MHz, CDCl_3) spectrum of **4k****FIGURE S26** $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **4k**

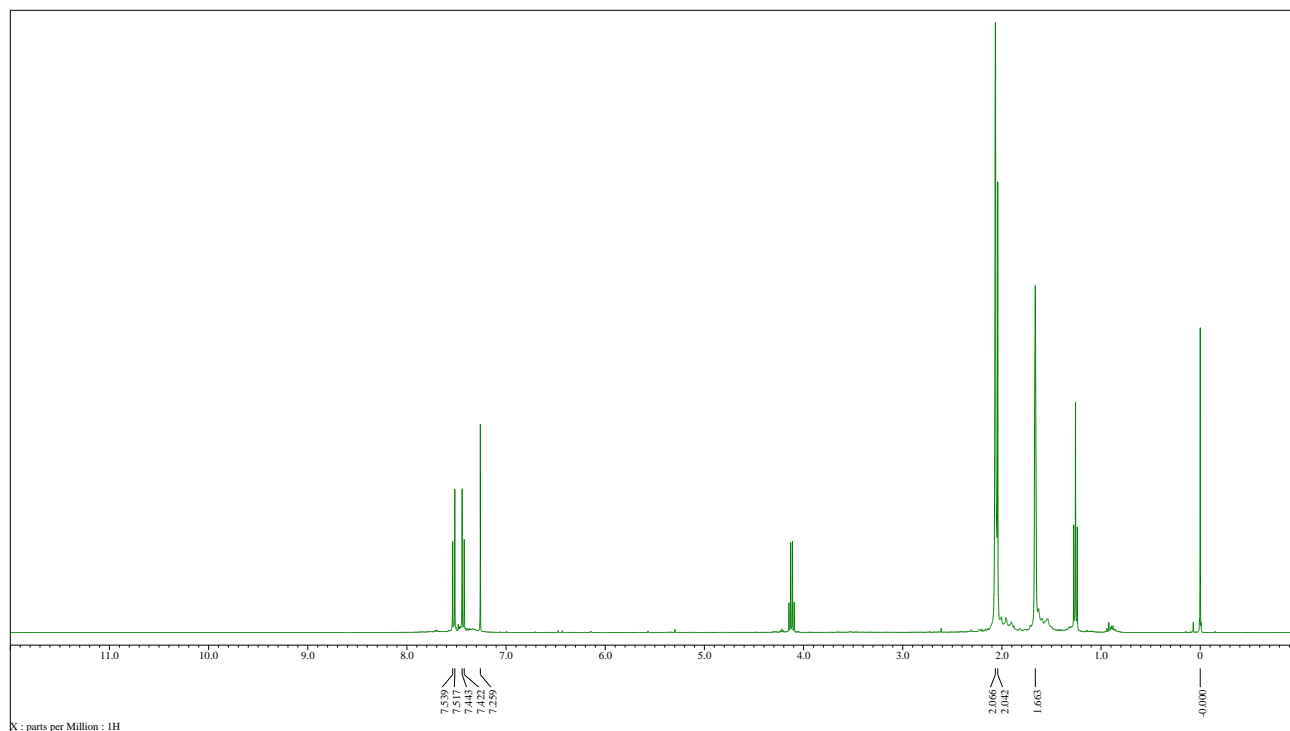
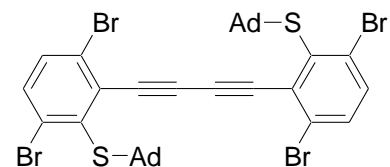


FIGURE S27 ^1H NMR (400 MHz, CDCl_3) spectrum of **5** containing ethyl acetate

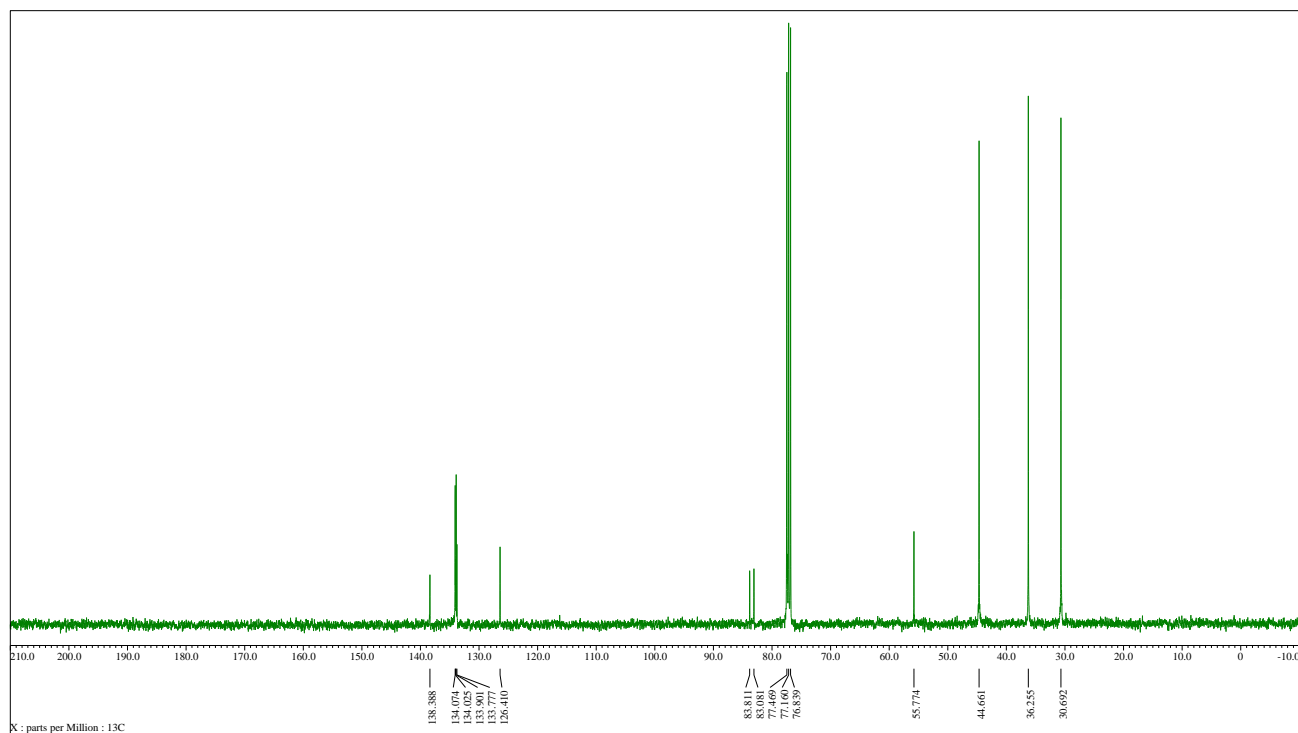


FIGURE S28 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **5**

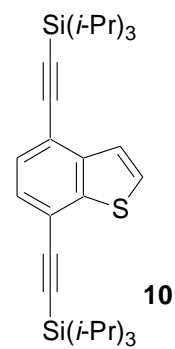
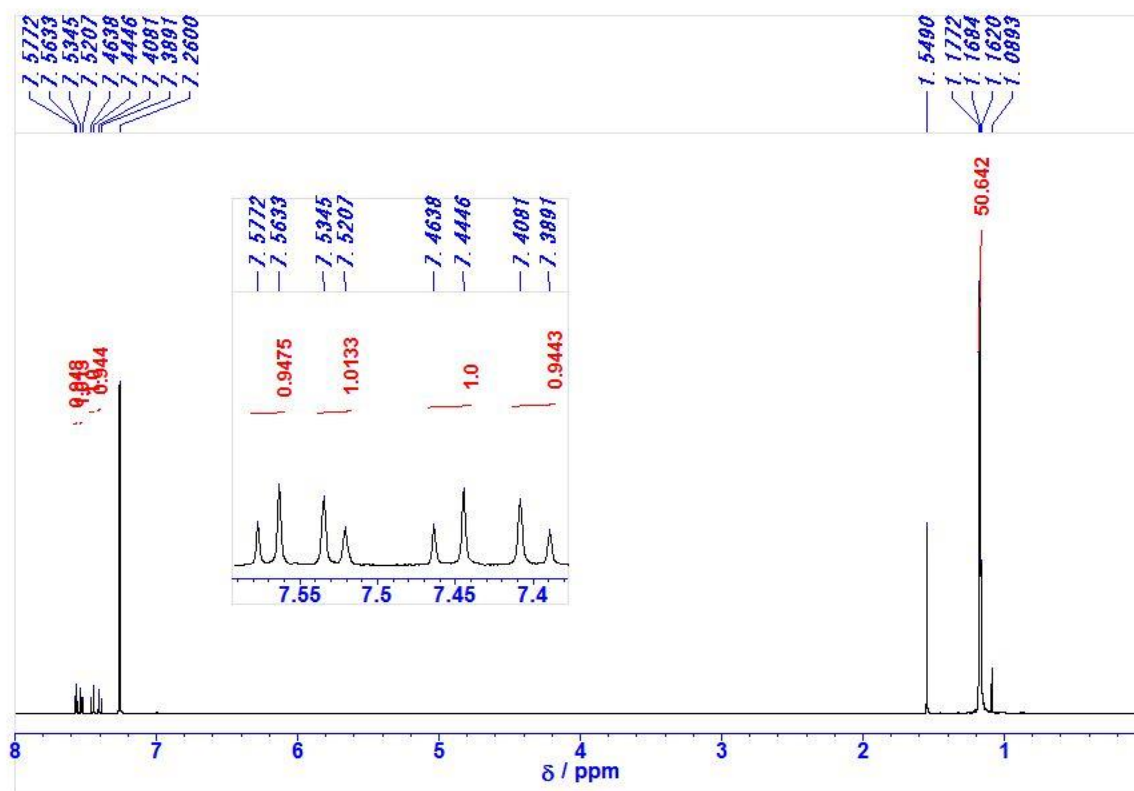


FIGURE S29 ^1H NMR (400 MHz, CDCl_3) spectrum of **10**

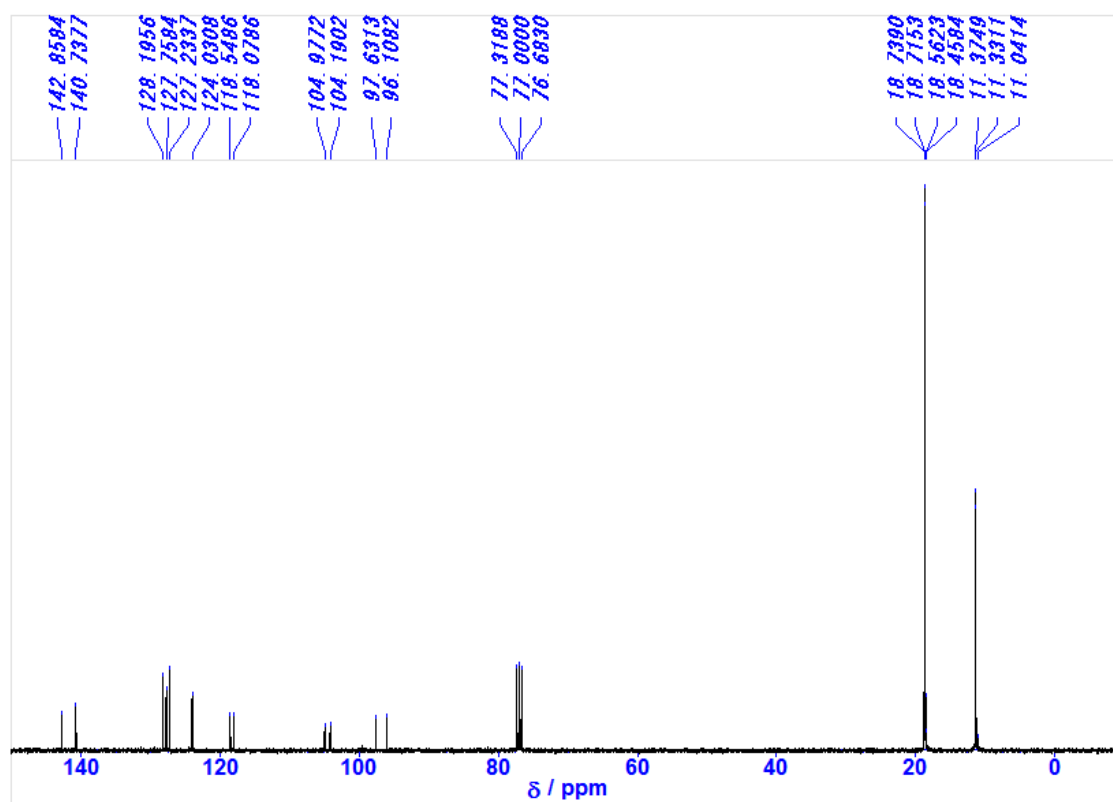
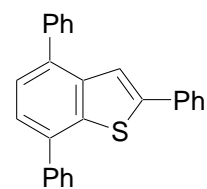


FIGURE S30 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **10**



11

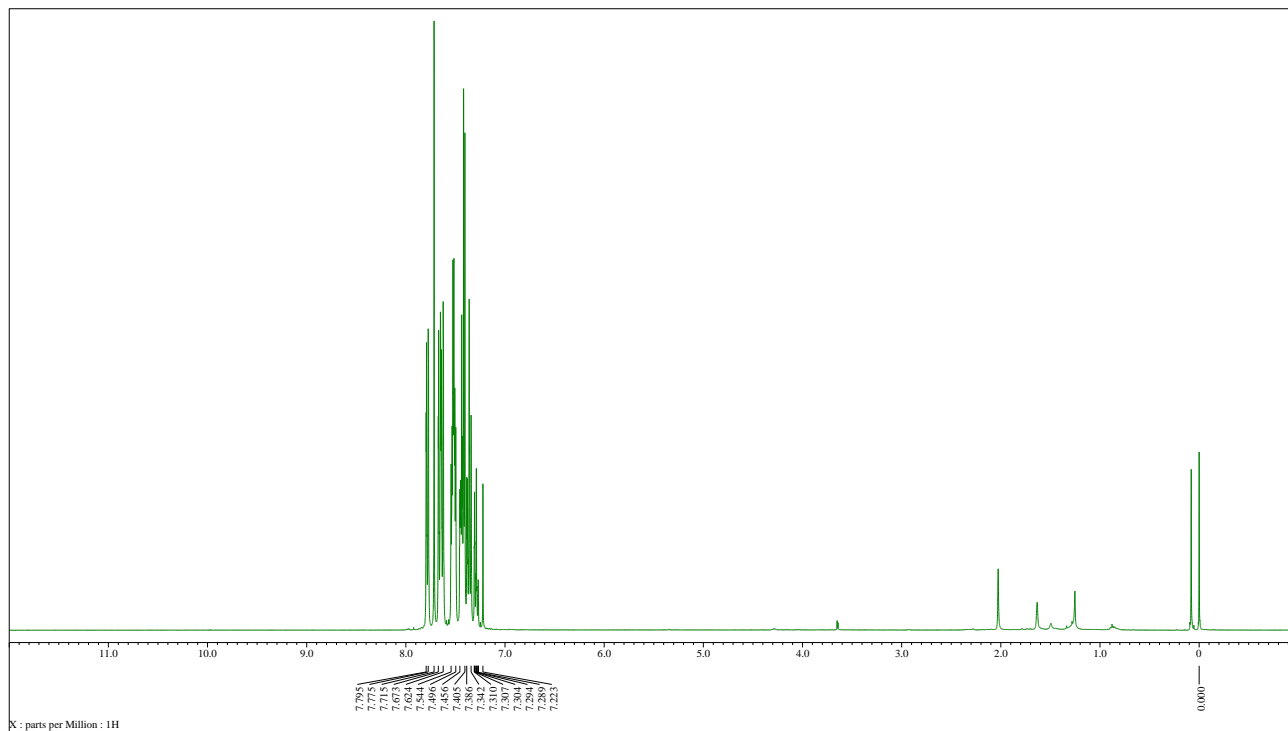


FIGURE S31 ^1H NMR (700 MHz, CDCl_3) spectrum of **11** containing ethyl acetate

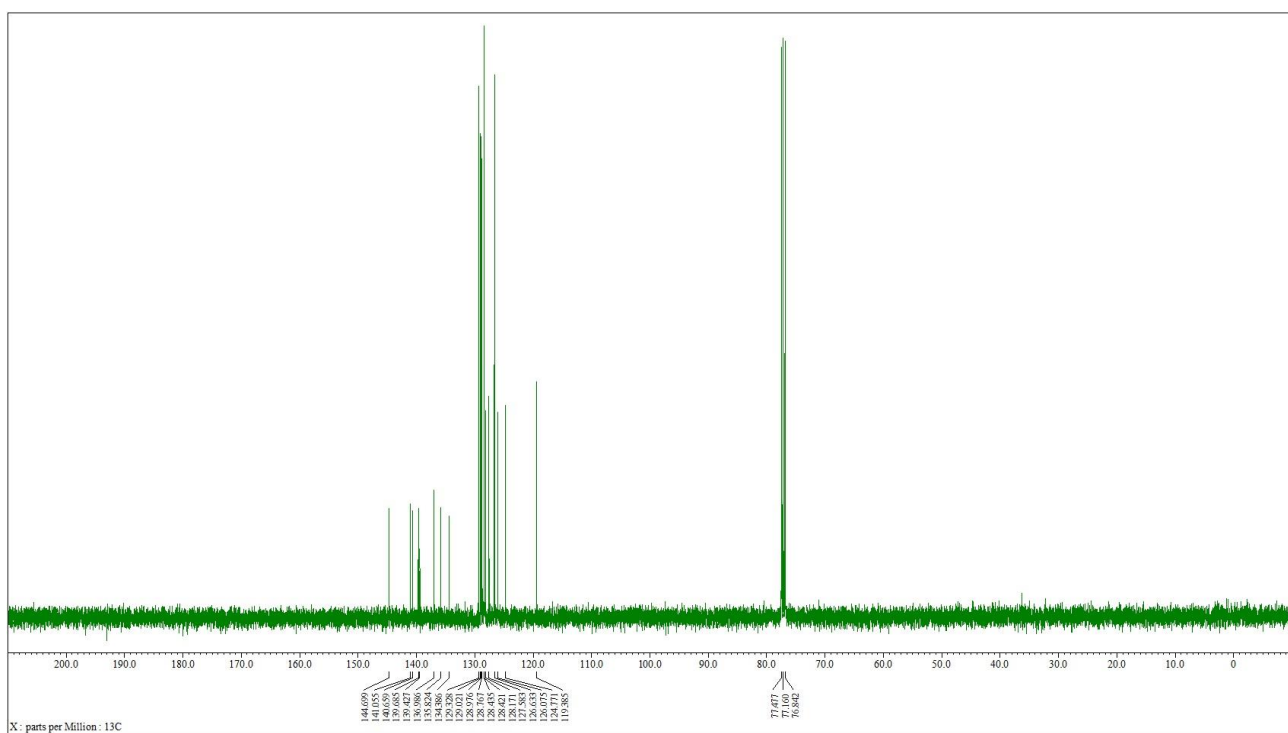


FIGURE S32 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **11**

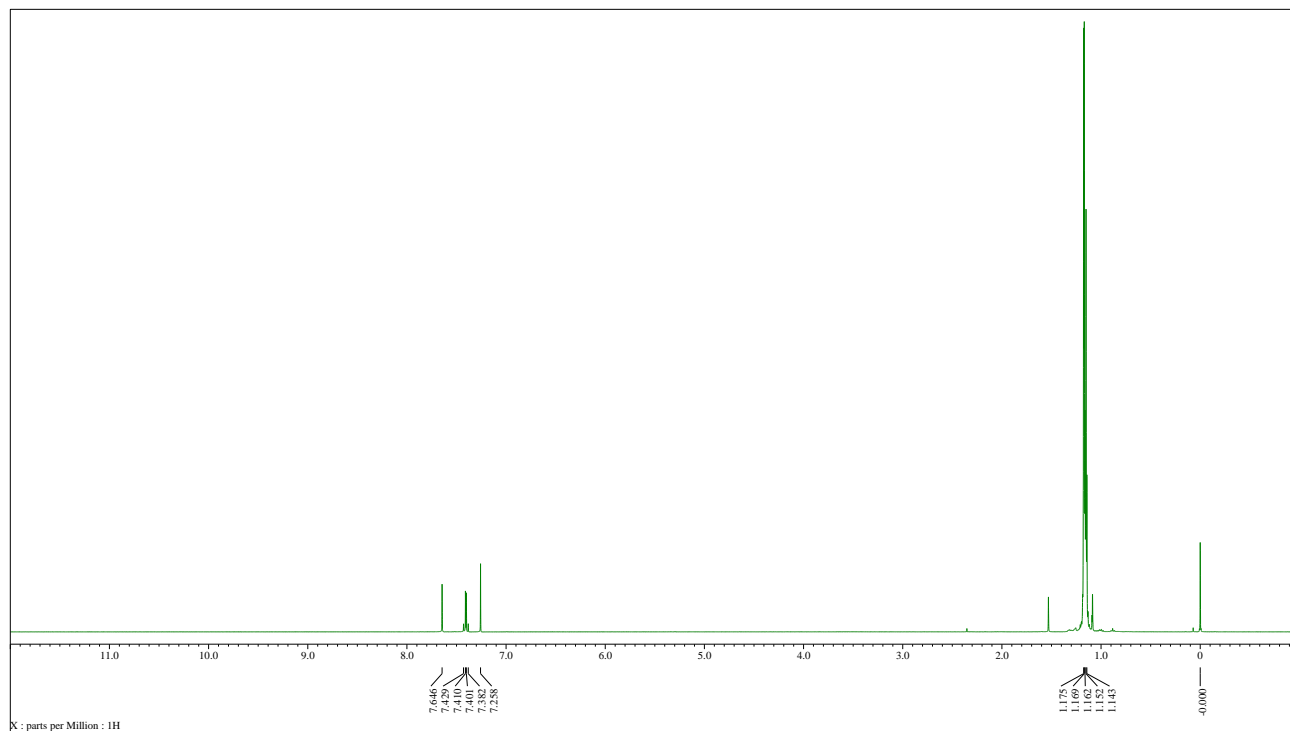
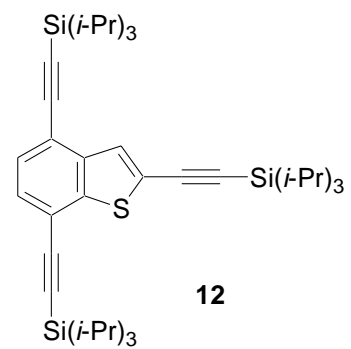


FIGURE S33 ^1H NMR (400 MHz, CDCl_3) spectrum of **12**

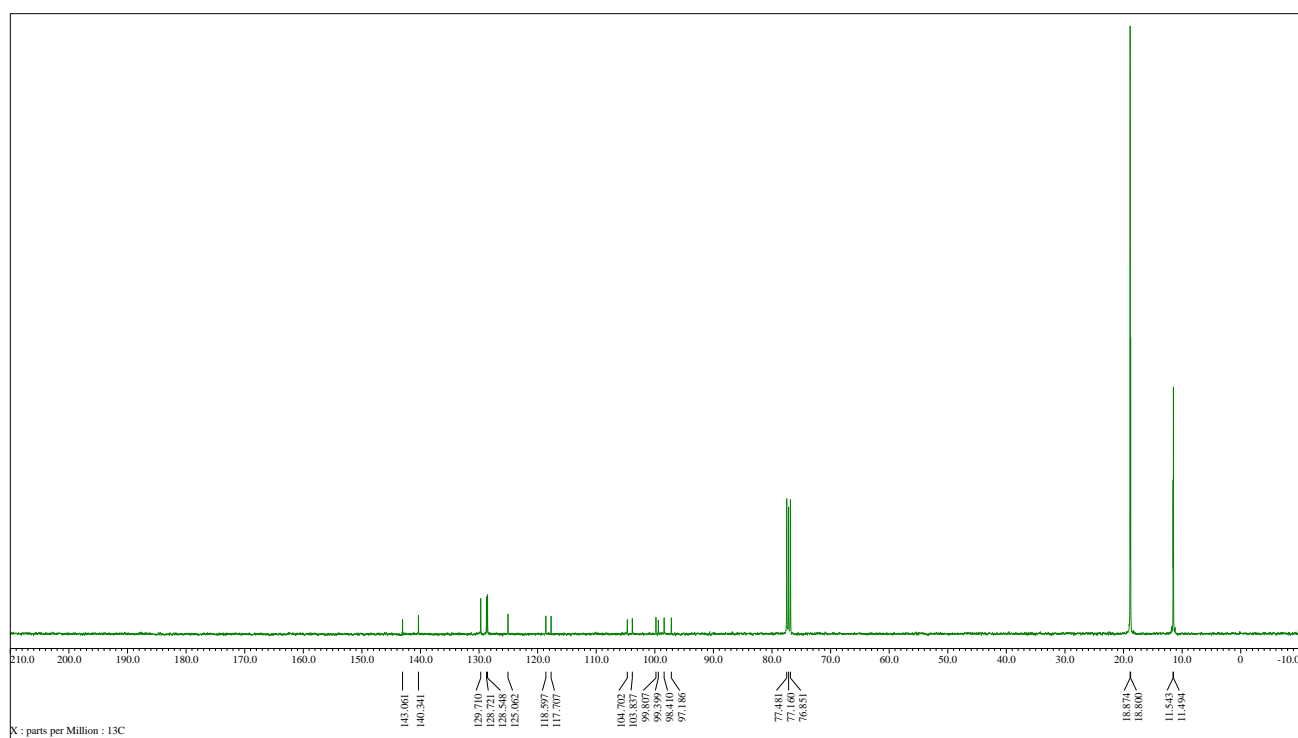


FIGURE S34 $^{13}\text{C}\{^1\text{H}\}$ NMR (100 MHz, CDCl_3) spectrum of **12**