

Supporting Information

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Methoxyphenanthrenes: structure and analysis

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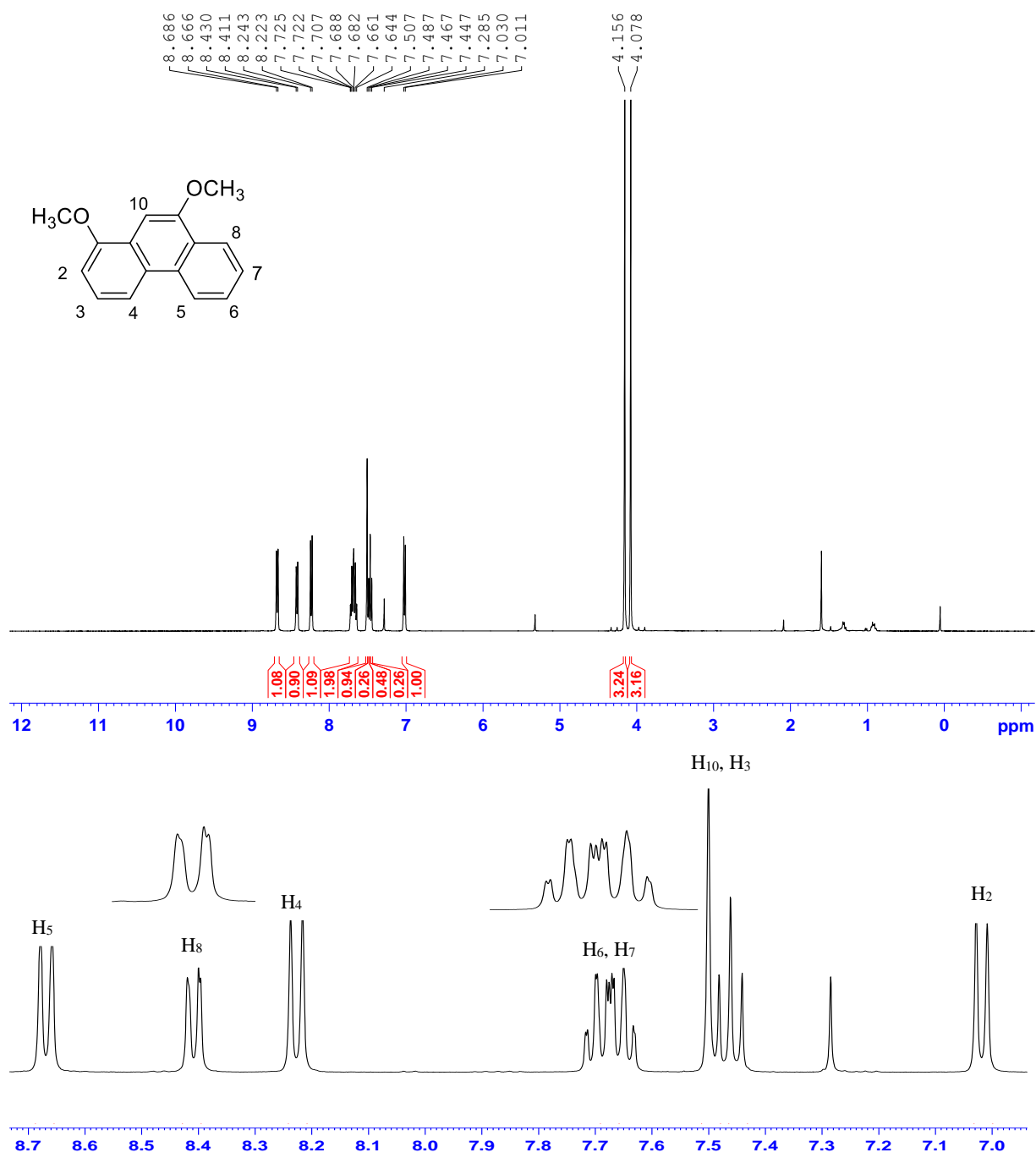


Figure S1: ^1H NMR spectra of **3a** (400 MHz, CDCl_3)

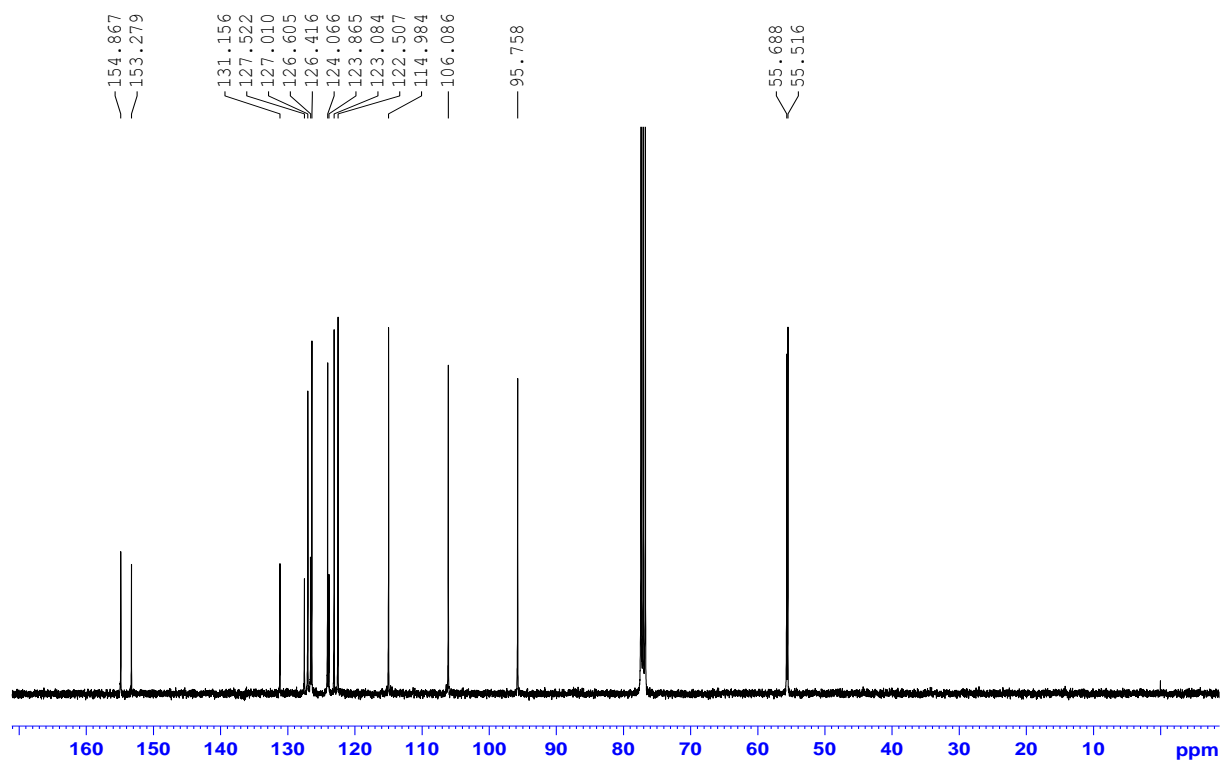


Figure S2: ^{13}C NMR spectra of **3a** (100 MHz, CDCl_3)

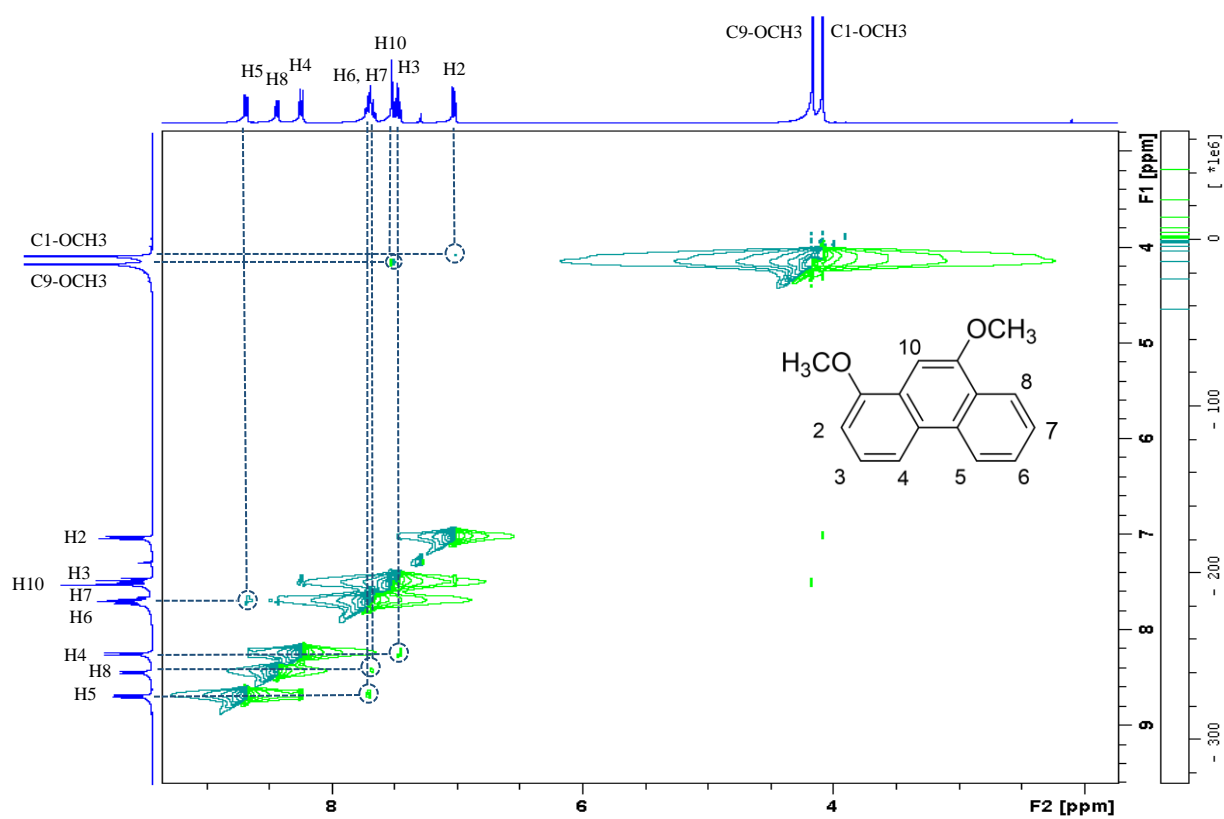


Figure S3: NOESY spectra of **3a** (400 MHz, CDCl_3)

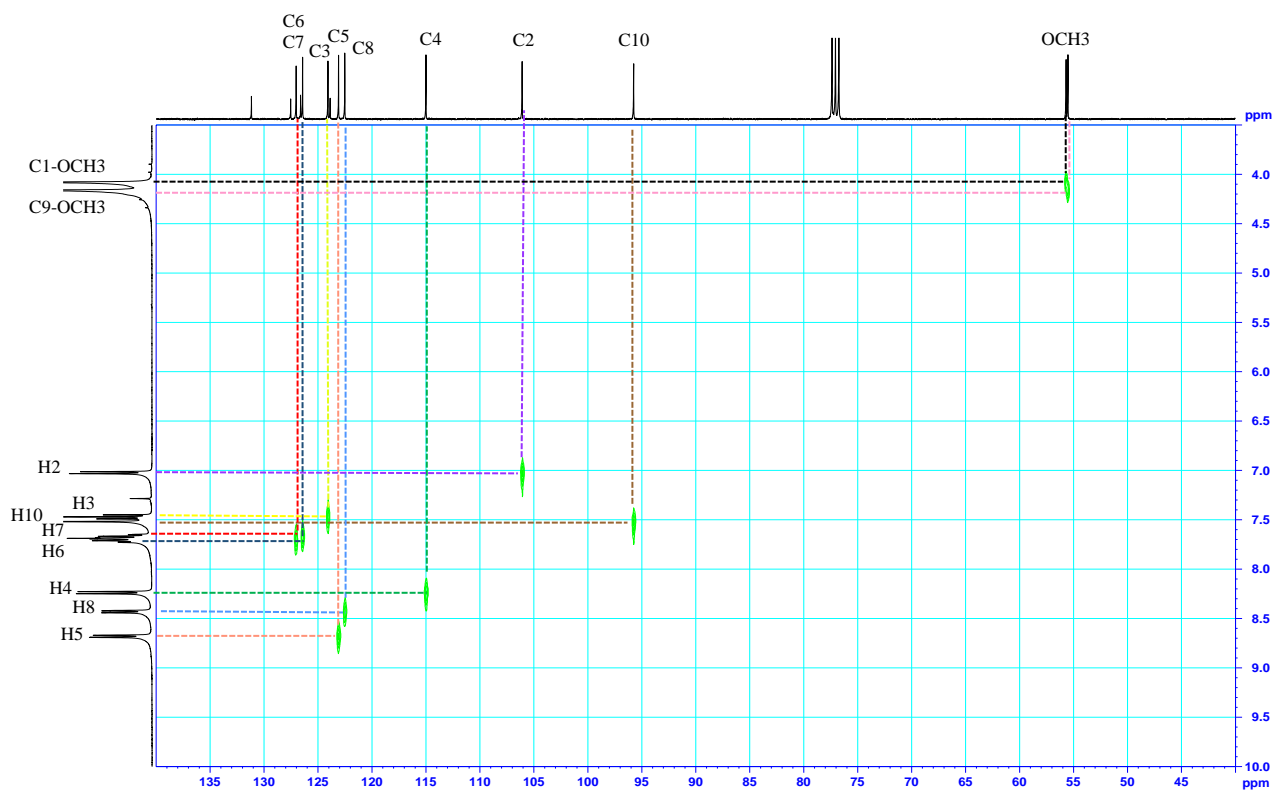


Figure S4: HETCOR spectra of **3a** ($^1\text{H}/^{13}\text{C}$ NMR 400 MHz/100 MHz, CDCl_3)

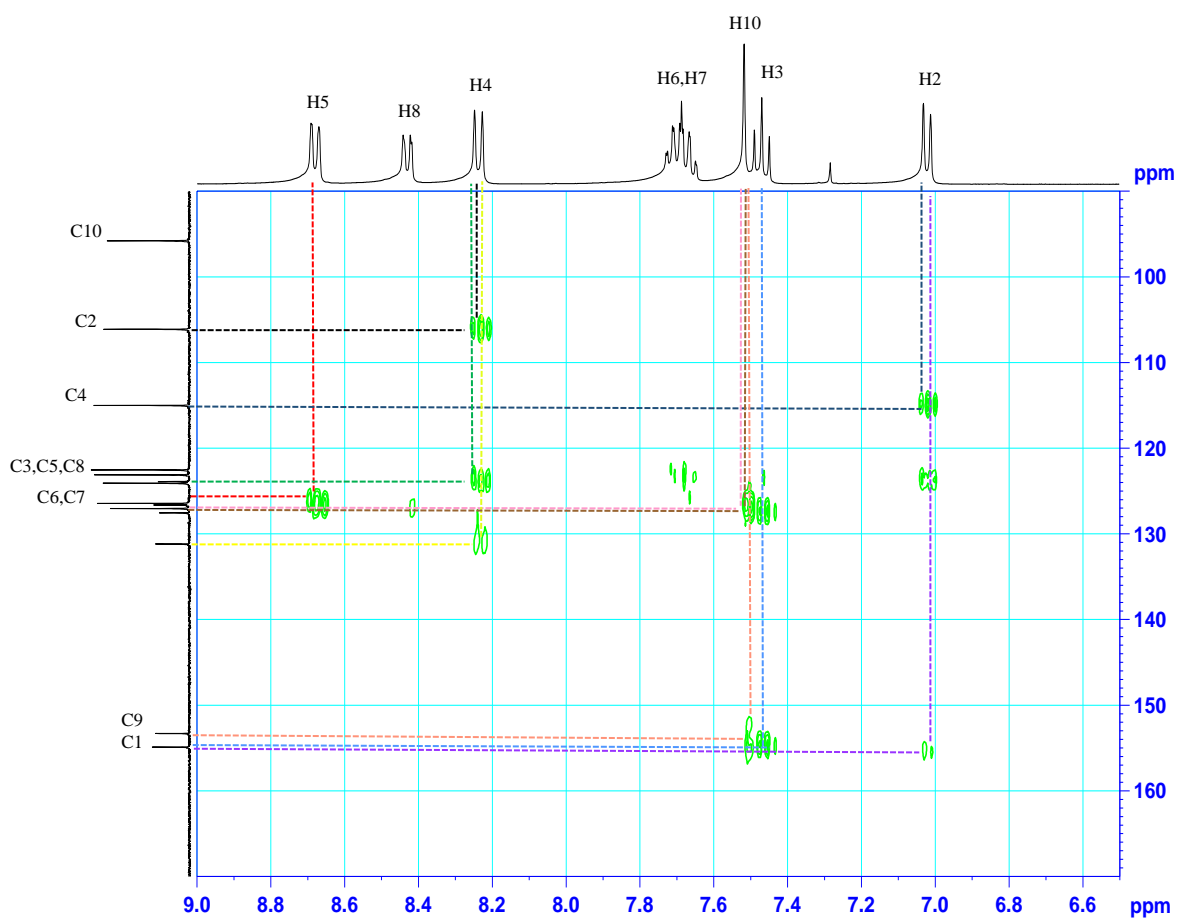


Figure S5: HMBC spectra of **3a** ($^1\text{H}/^{13}\text{C}$ NMR 400 MHz/100 MHz, CDCl_3)

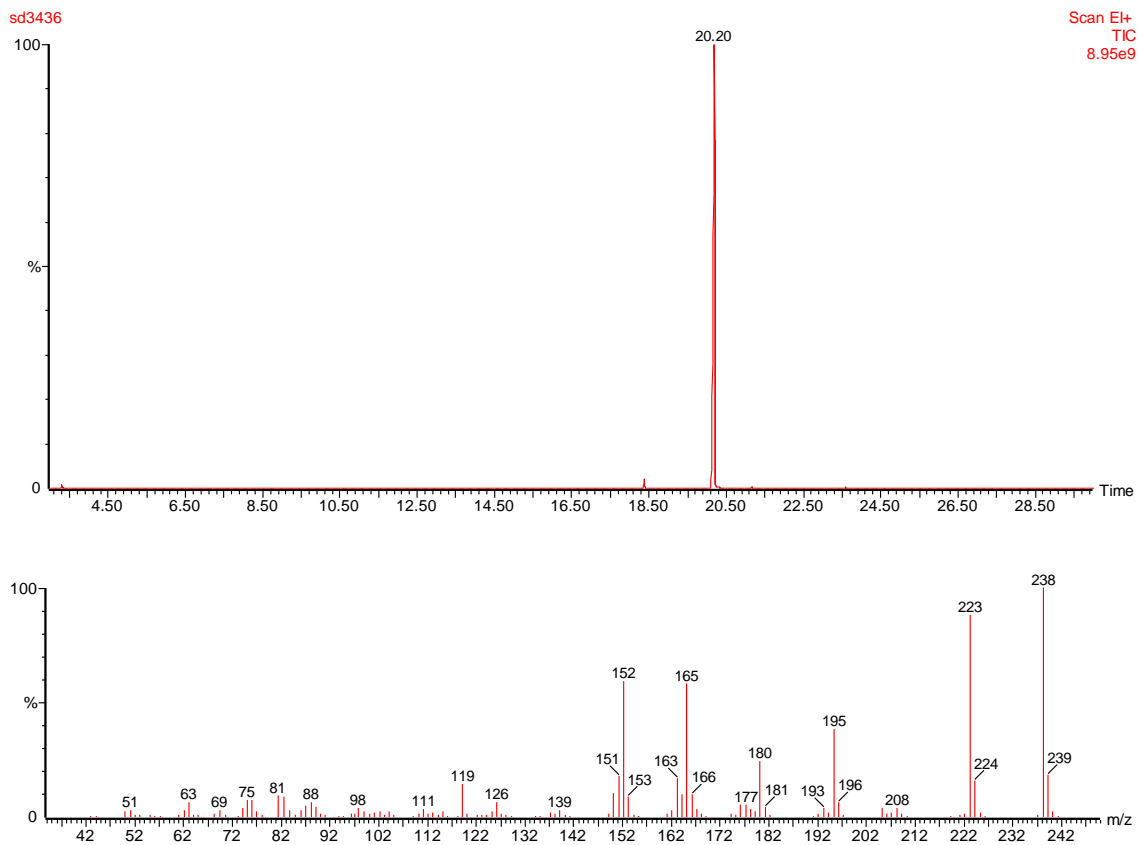


Figure S6 : GC/MS spectra and fragmentation patterns of **3a** (Perkin Elmar Clarus 500 GC-MS)

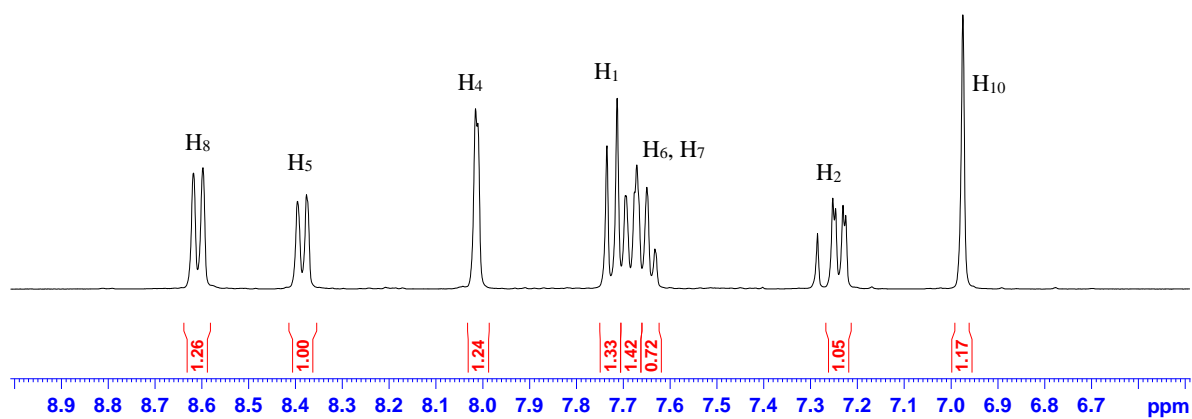
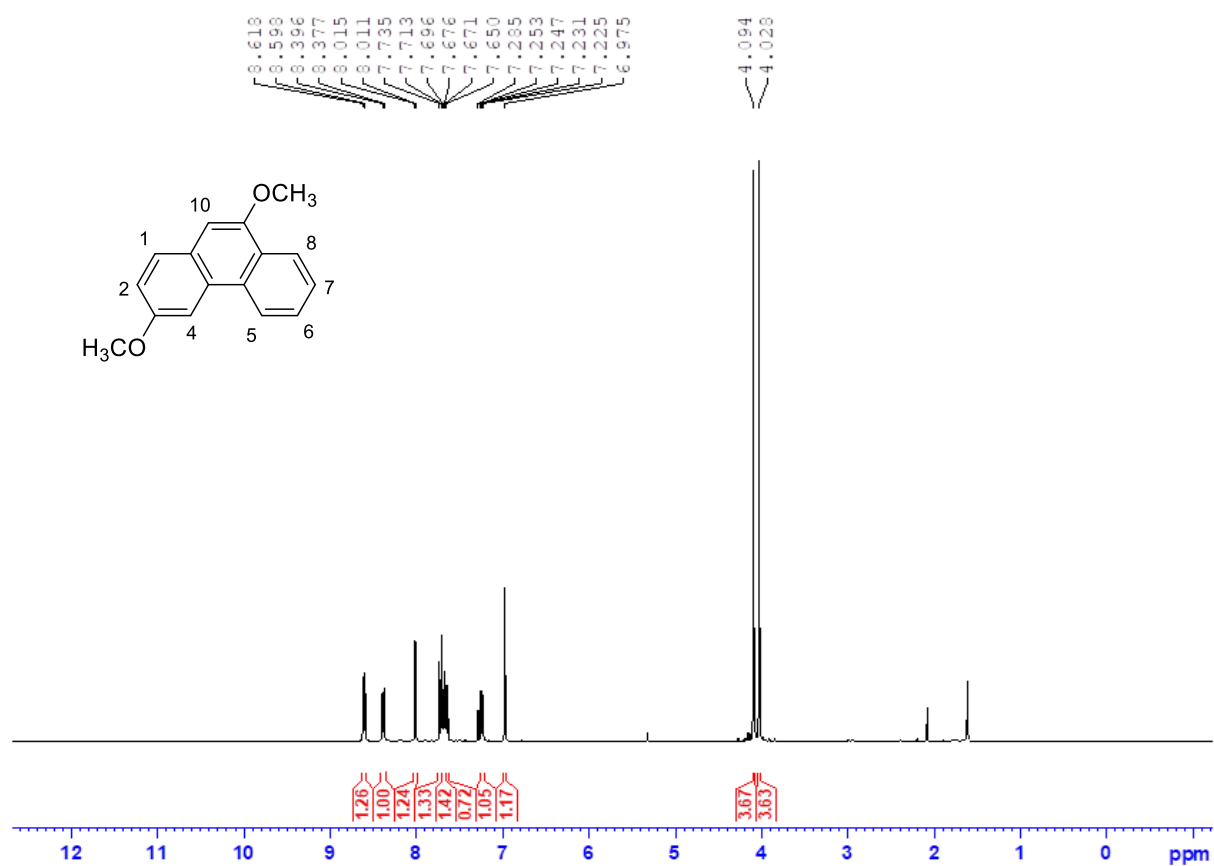


Figure S7: ^1H NMR spectra of **3b** (400 MHz, CDCl_3)

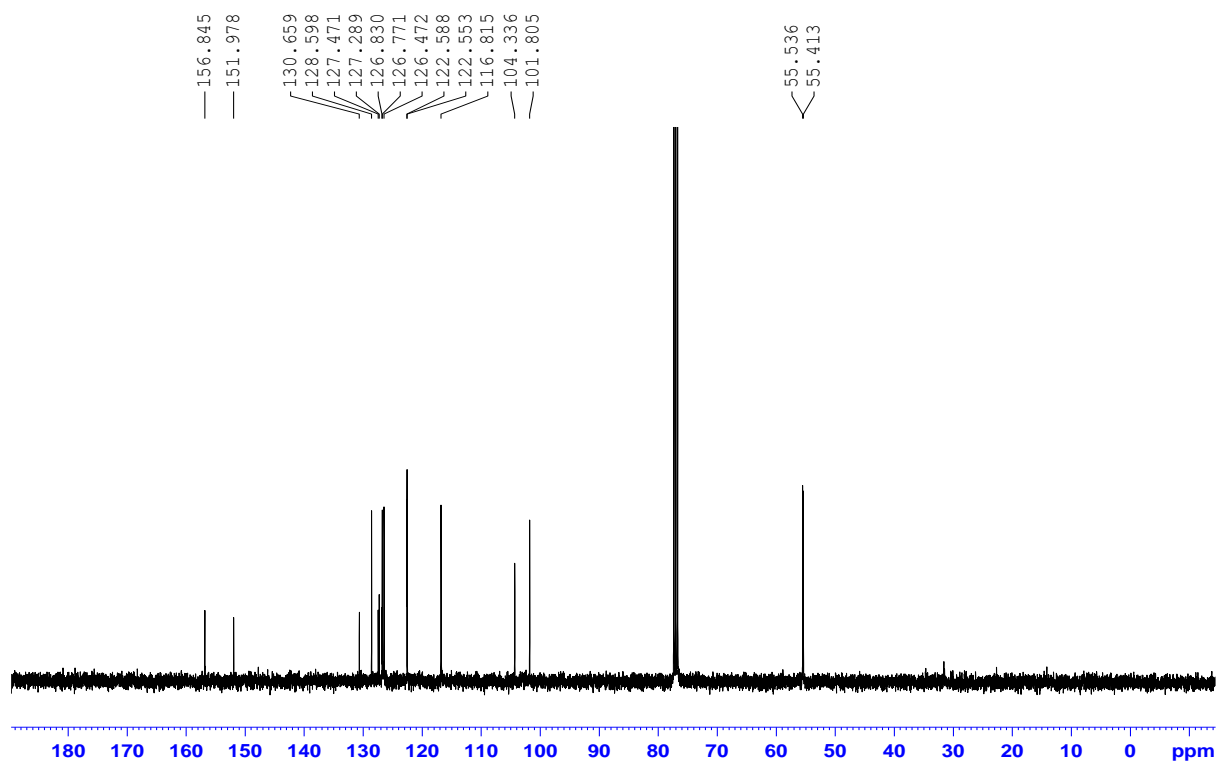


Figure S8: ^{13}C NMR spectra of **3b** (100 MHz, CDCl_3)

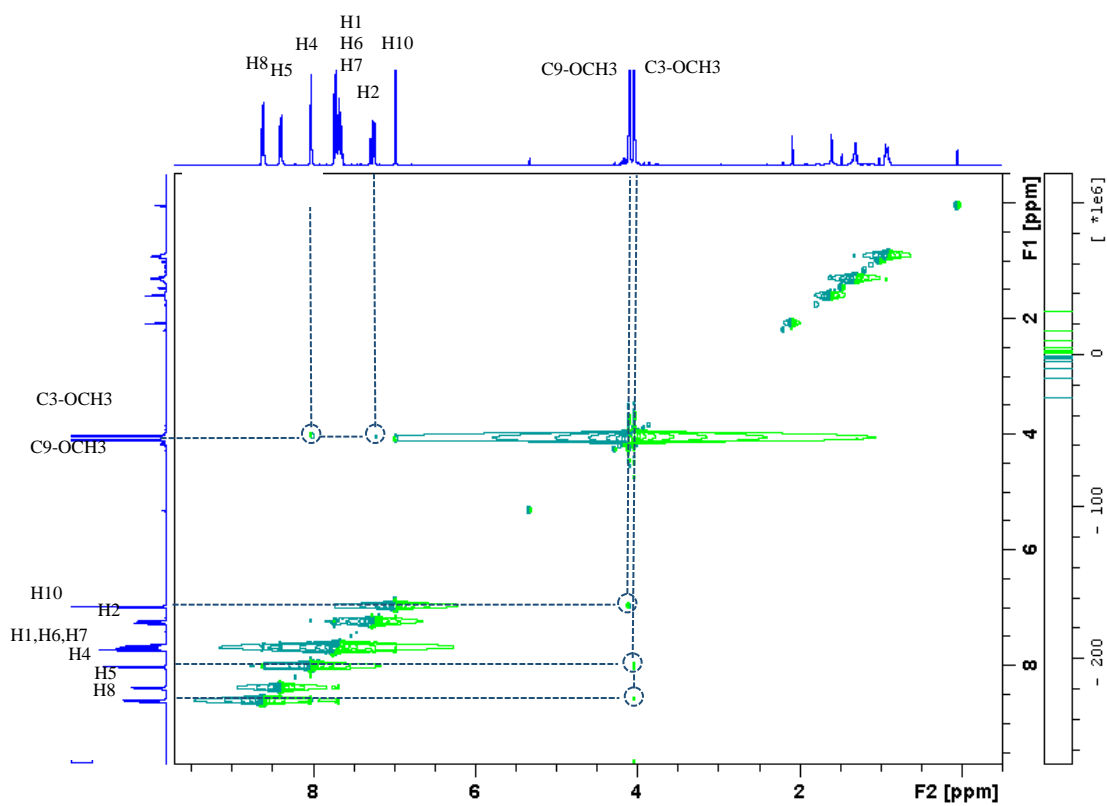


Figure S9: NOESY spectra of **3b** (400 MHz, CDCl_3)

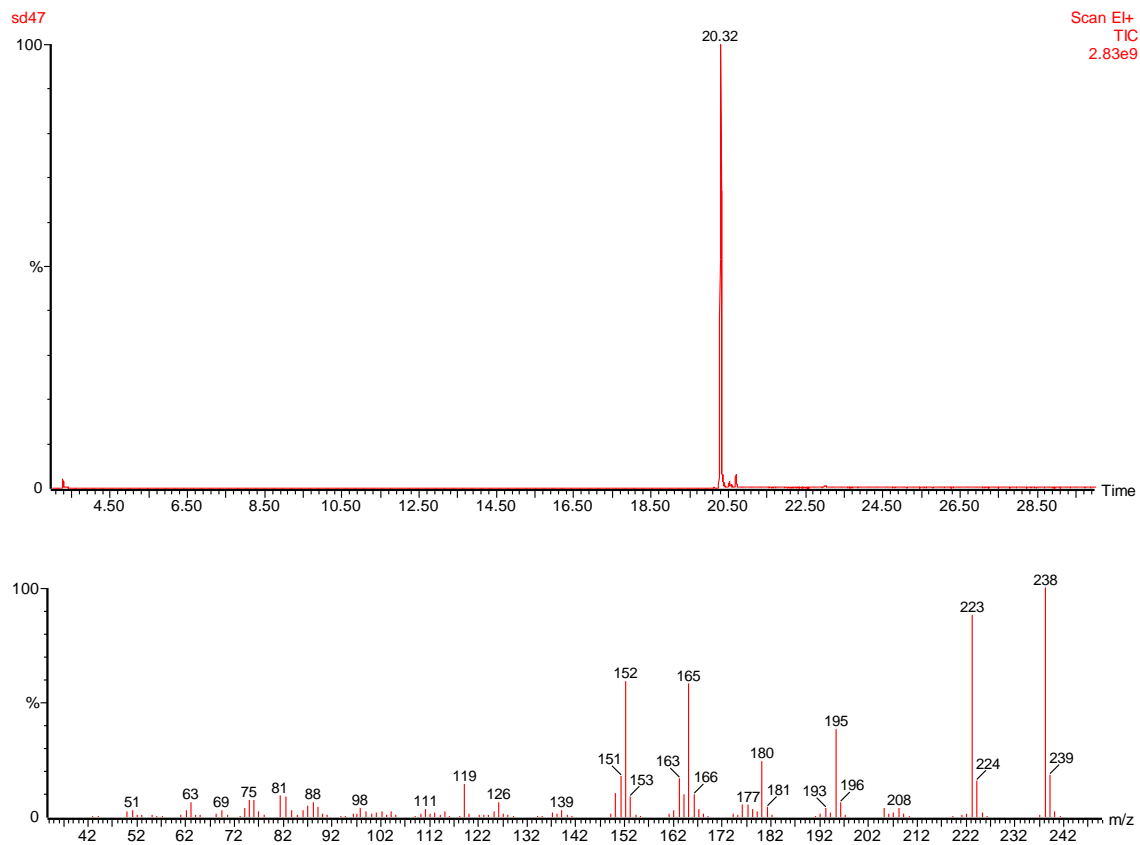


Figure S10: GC/MS spectra and fragmentation patterns of **3b** (Perkin Elmar Clarus 500 GC-MS)

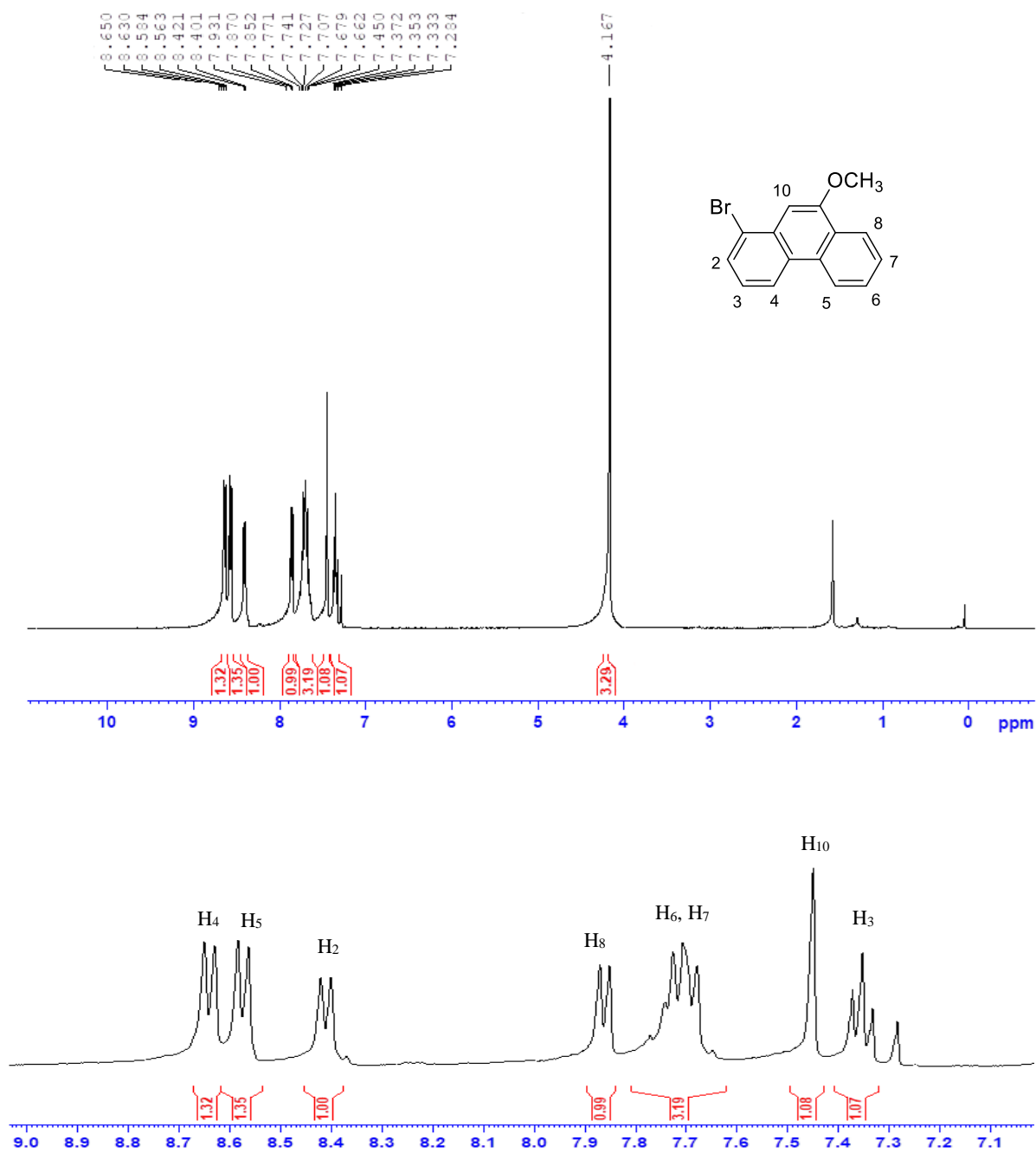


Figure S11: ¹H NMR spectra of **3c** (400 MHz, CDCl₃)

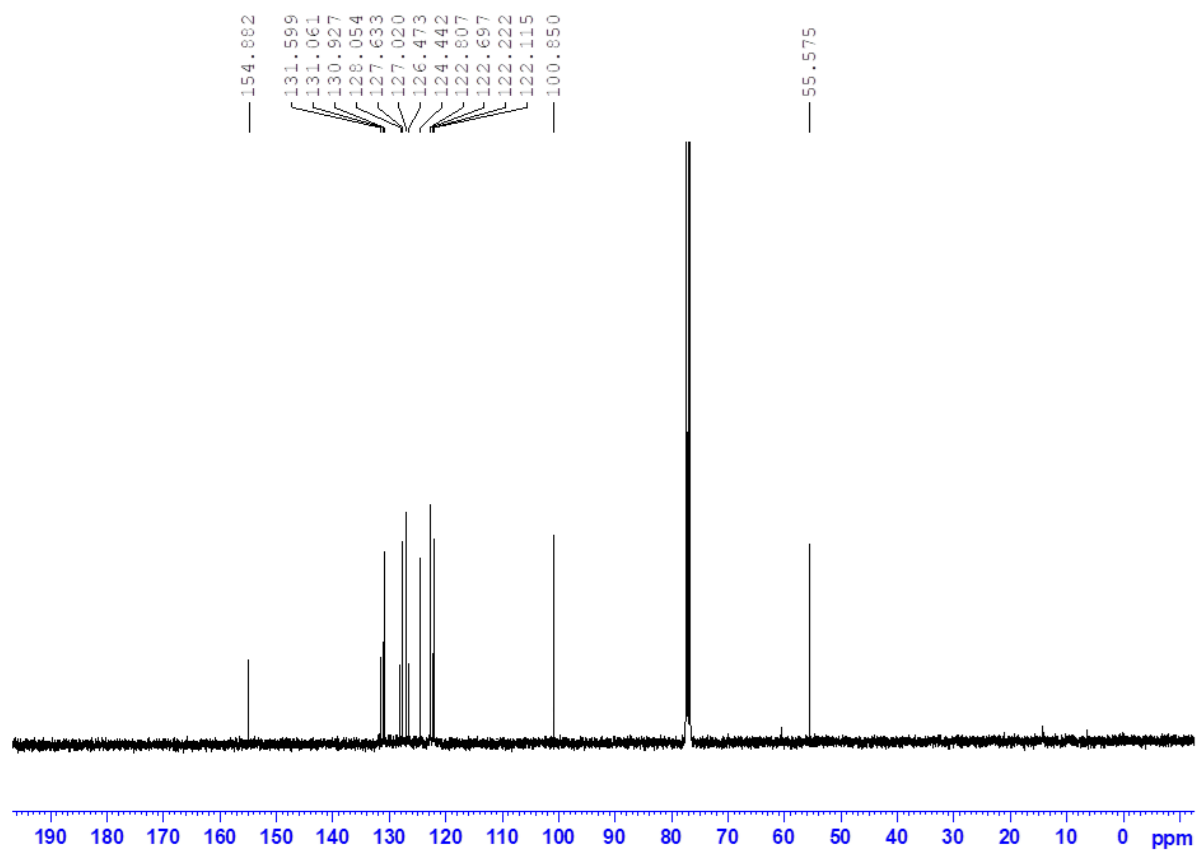


Figure S12: ^{13}C NMR spectra of **3c** (100 MHz, CDCl_3)

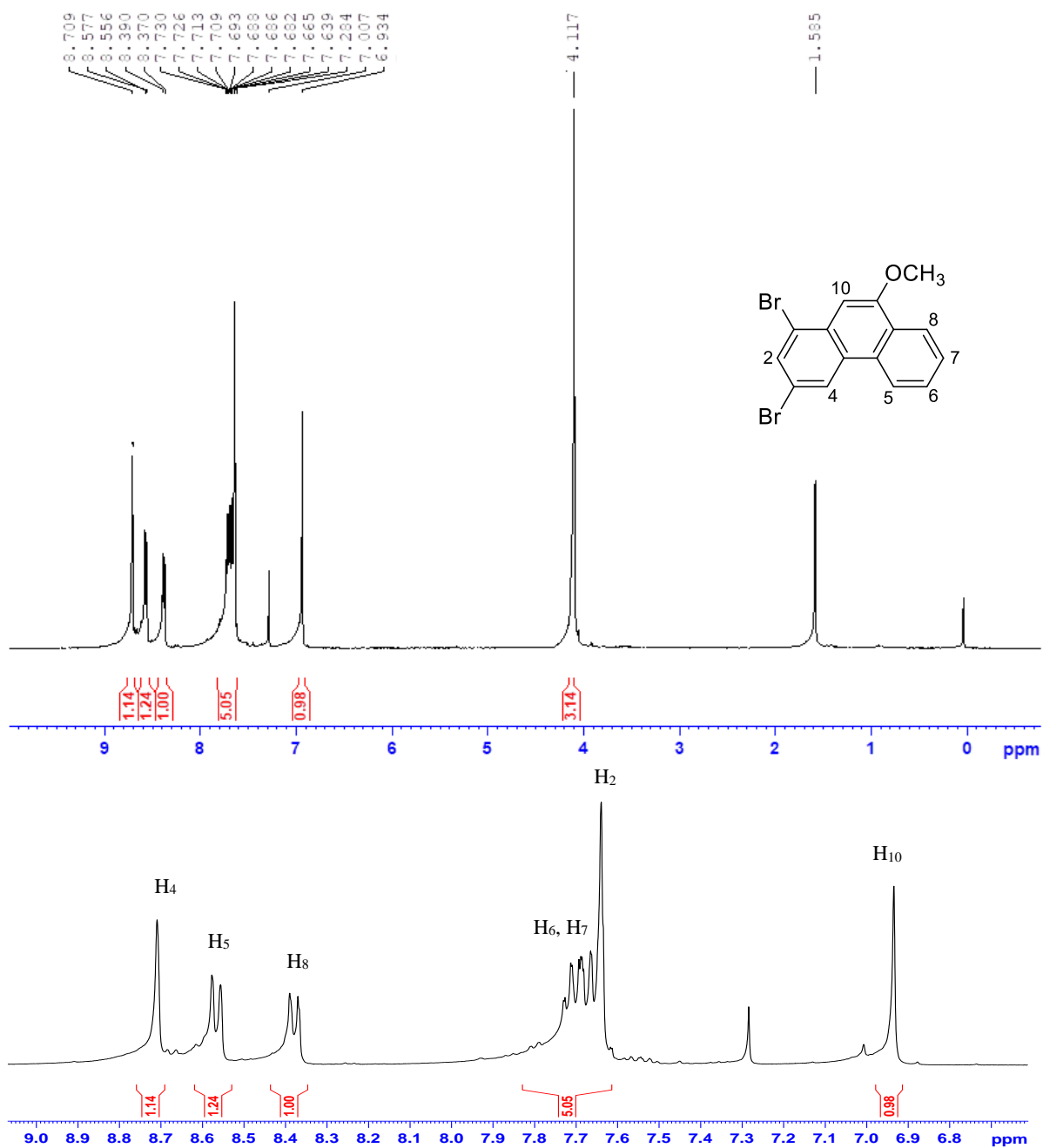


Figure S13: ^1H NMR spectra of **3d** (400 MHz, CDCl_3)

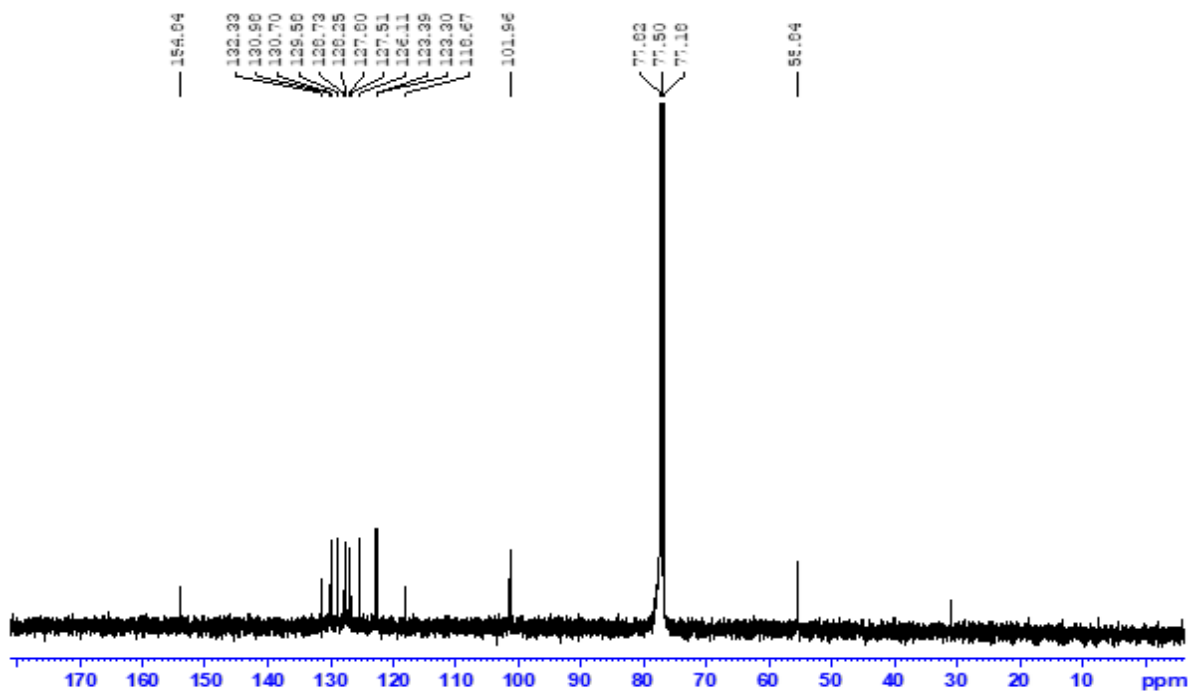


Figure S14: ^{13}C NMR spectra of **3d** (100 MHz, CDCl_3)

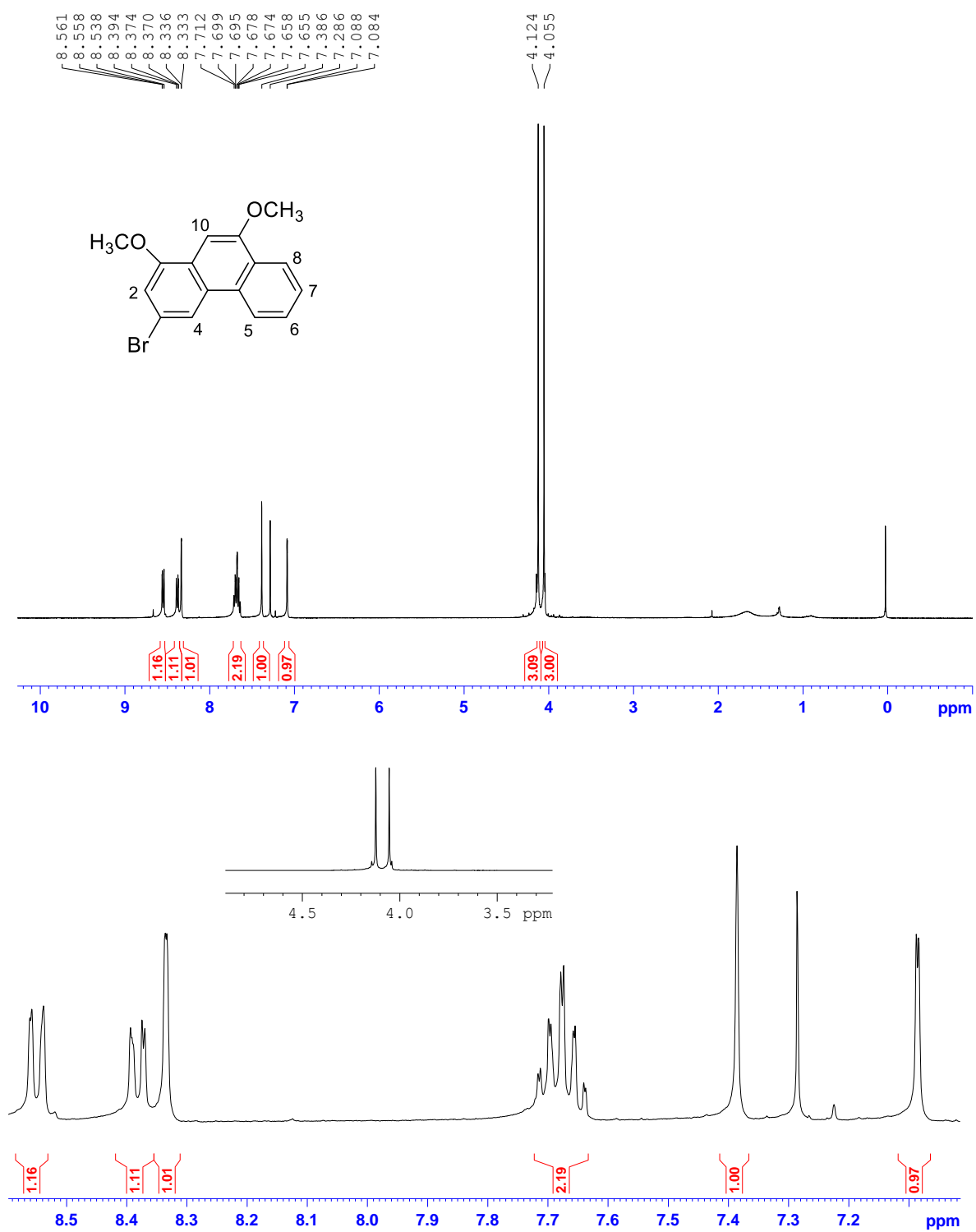


Figure S15: ¹H NMR spectra of **4** (400 MHz, CDCl₃)

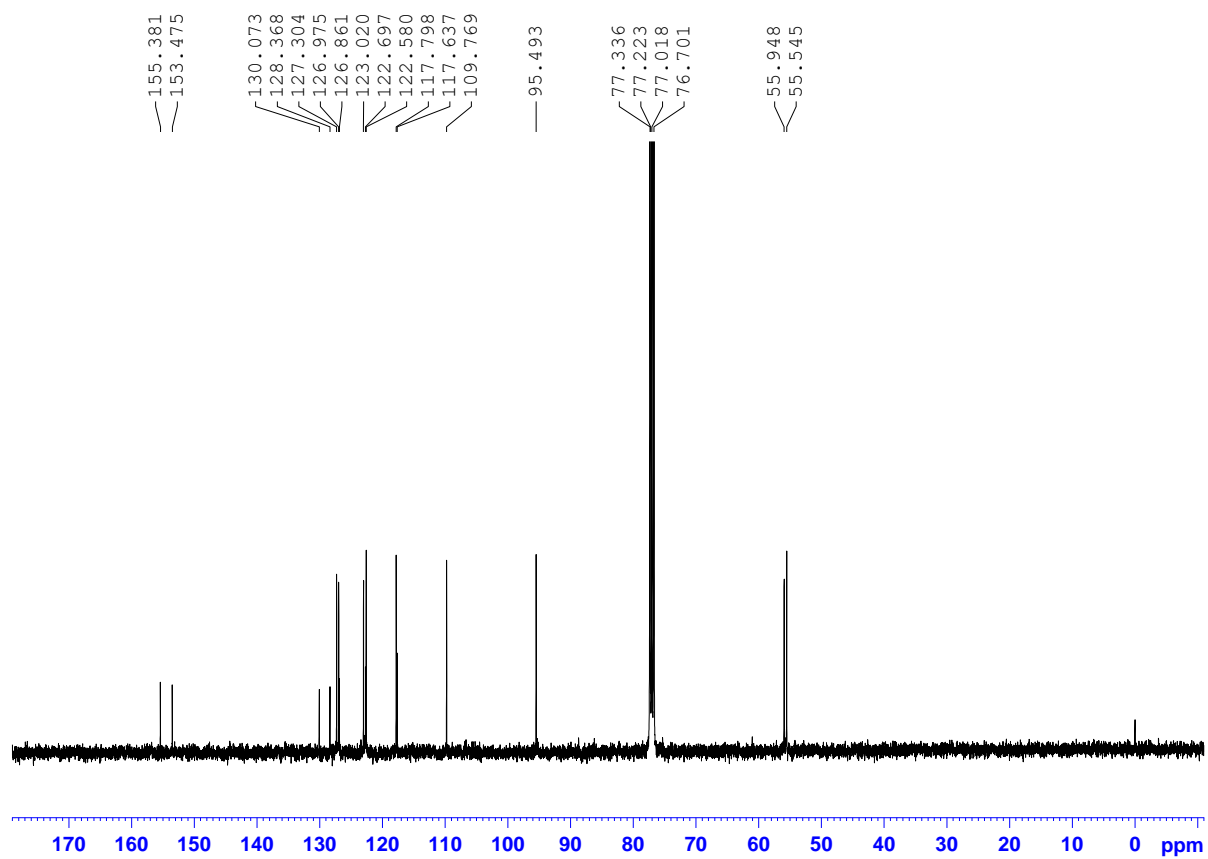


Figure S16: ^{13}C NMR spectra of **4** (100 MHz, CDCl_3)

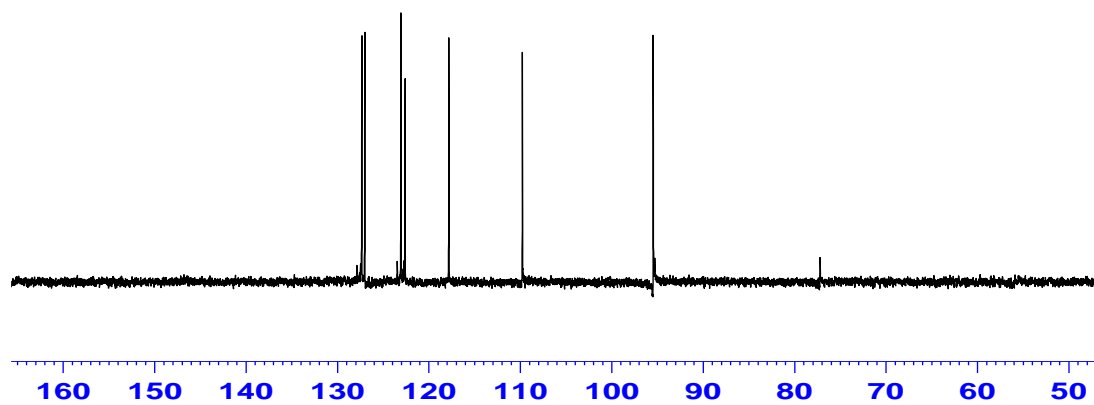


Figure S17: DEPT-90 spectra of **4** (100 MHz, CDCl_3)

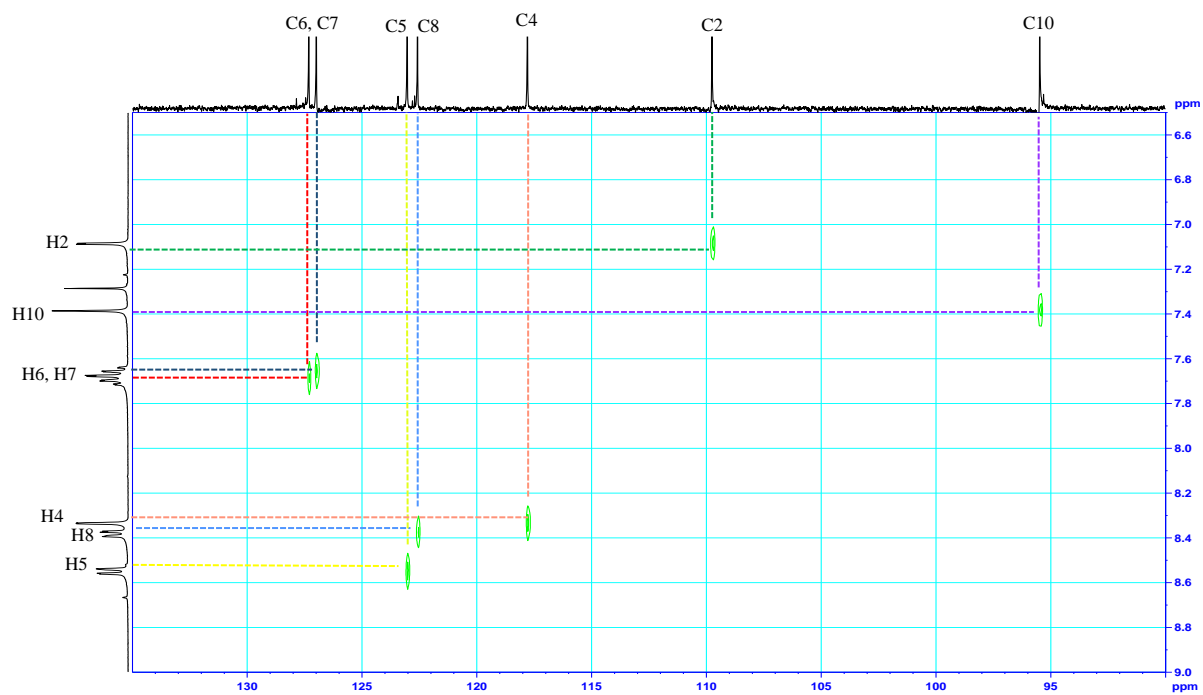


Figure S18: HETCOR spectra (^1H NMR/DEPT-90) of **4** ($^1\text{H}/^{13}\text{C}$ NMR 400 MHz/100 MHz, CDCl_3)

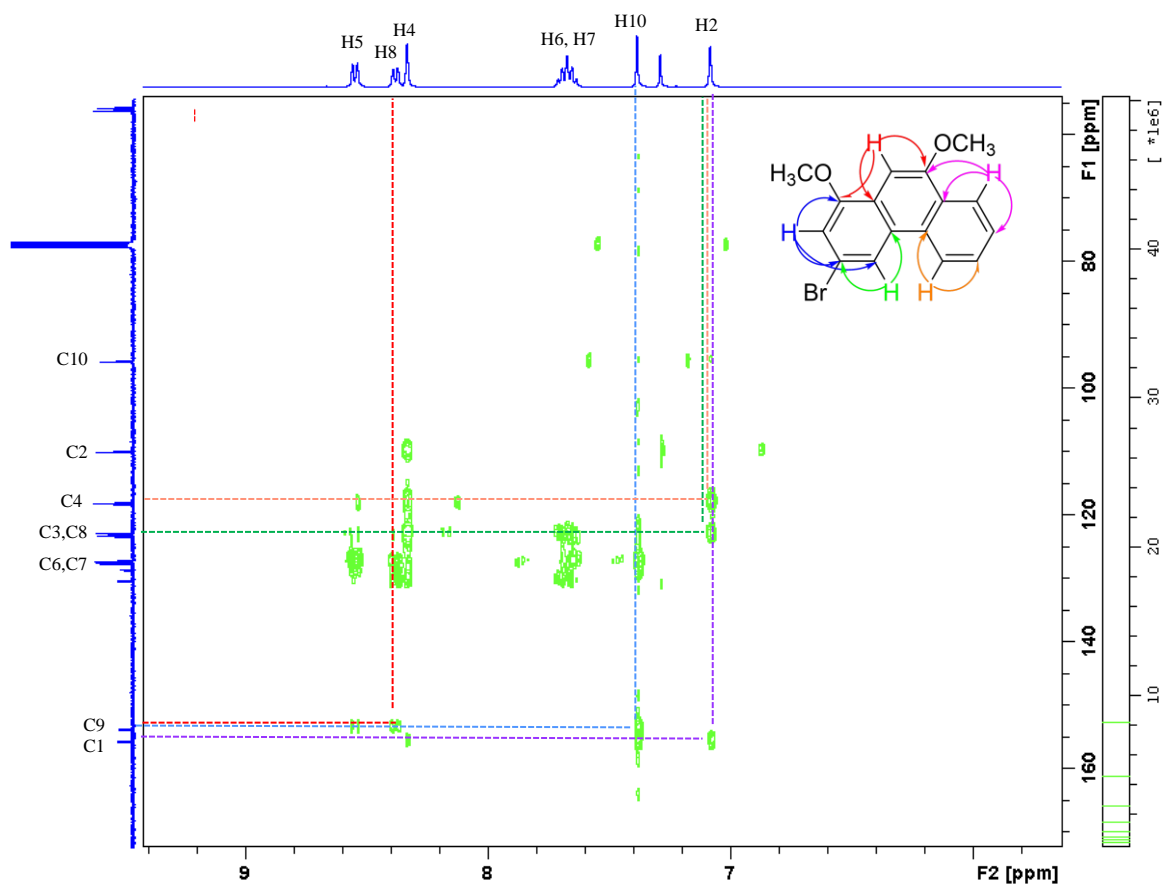


Figure S19: HMBC spectra of **4** ($^1\text{H}/^{13}\text{C}$ NMR 400 MHz/100 MHz, CDCl_3)