

Supplementary Information

Synthesis of Conjugated Polymers via Cyclopentannulation

Reaction: Promising Materials for Iodine Adsorption

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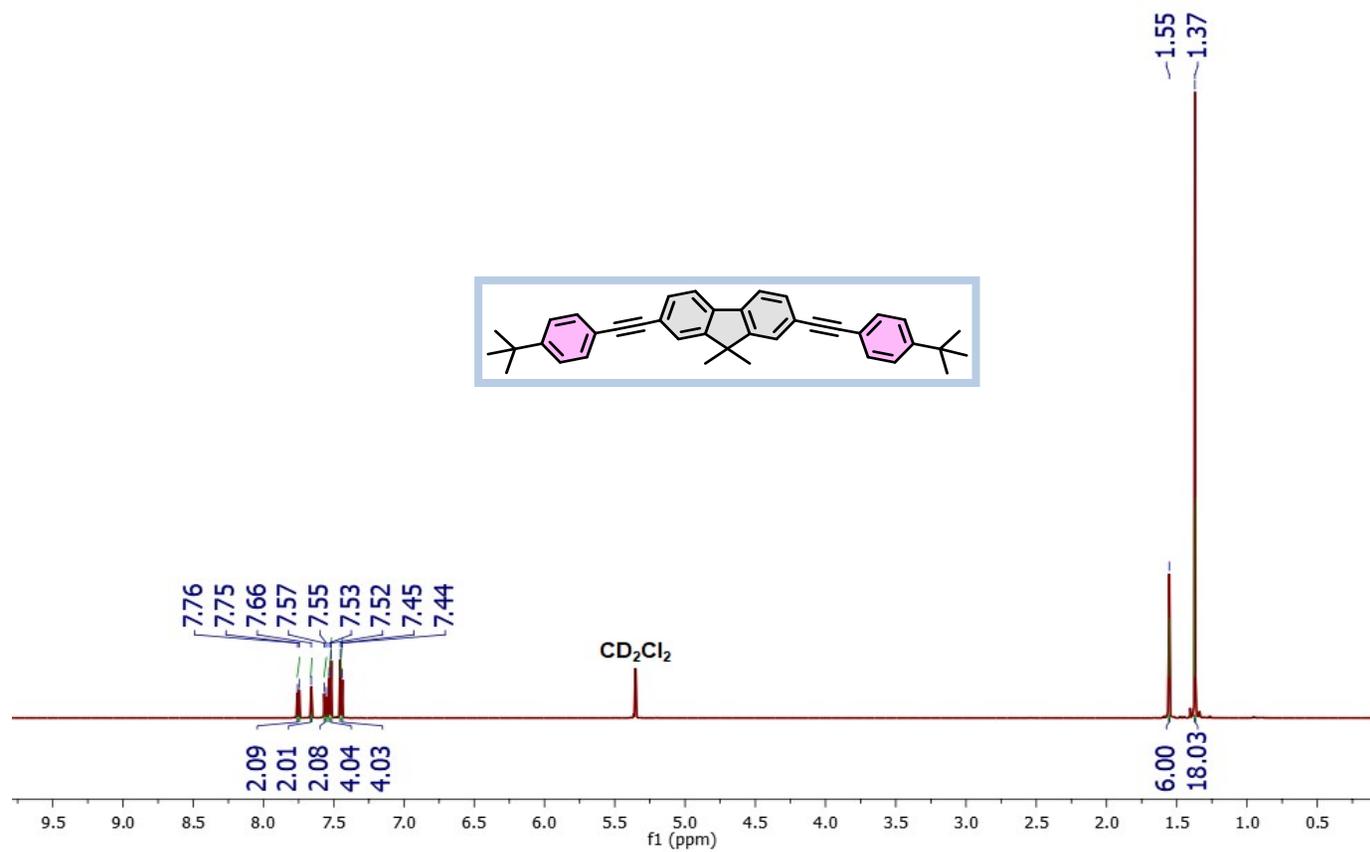


Figure S1: ^1H NMR spectrum of **3a** (CD_2Cl_2 , 600 MHz)

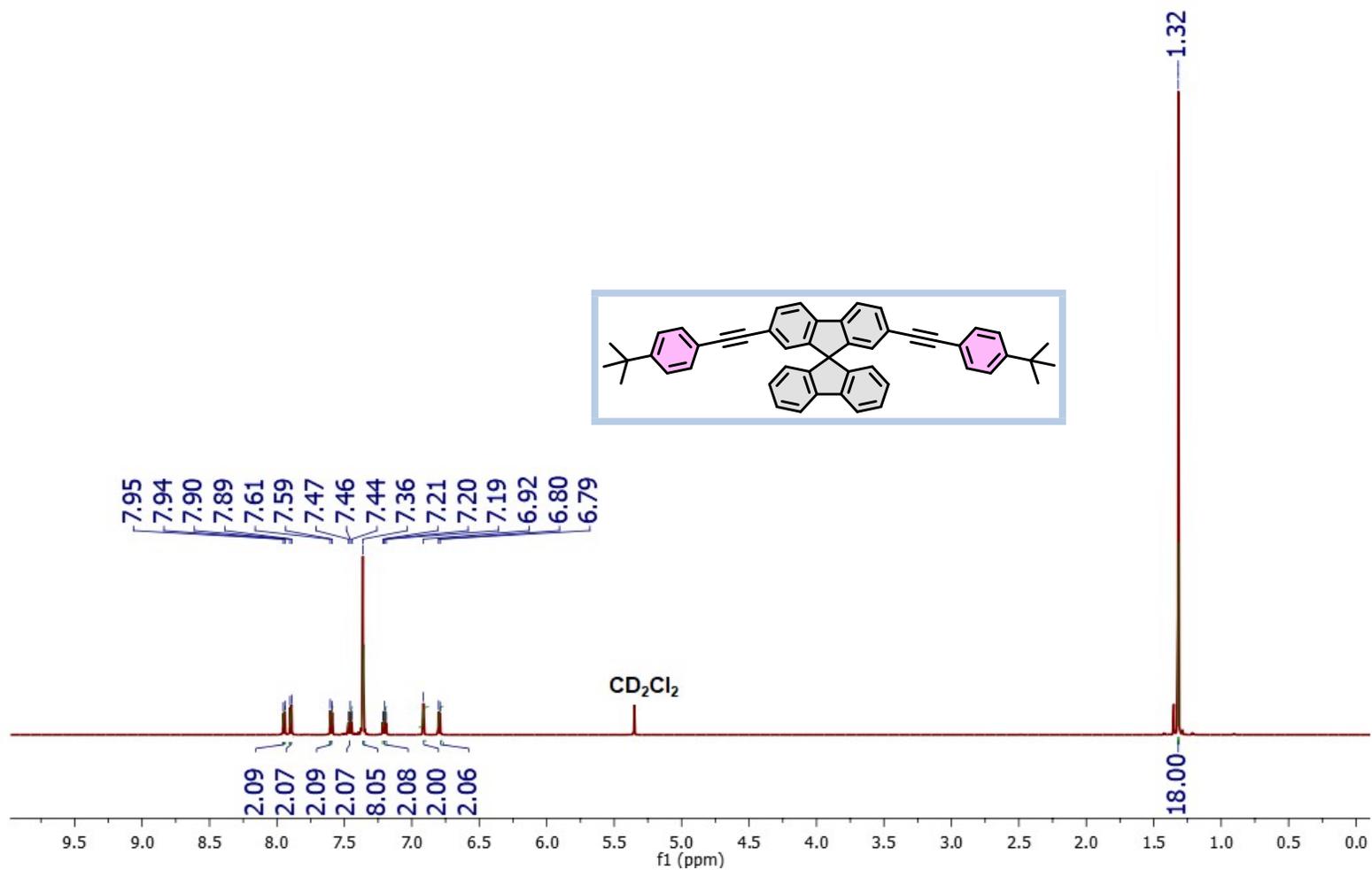


Figure S2: ^1H NMR spectrum of **3b** (CD_2Cl_2 , 600 MHz)

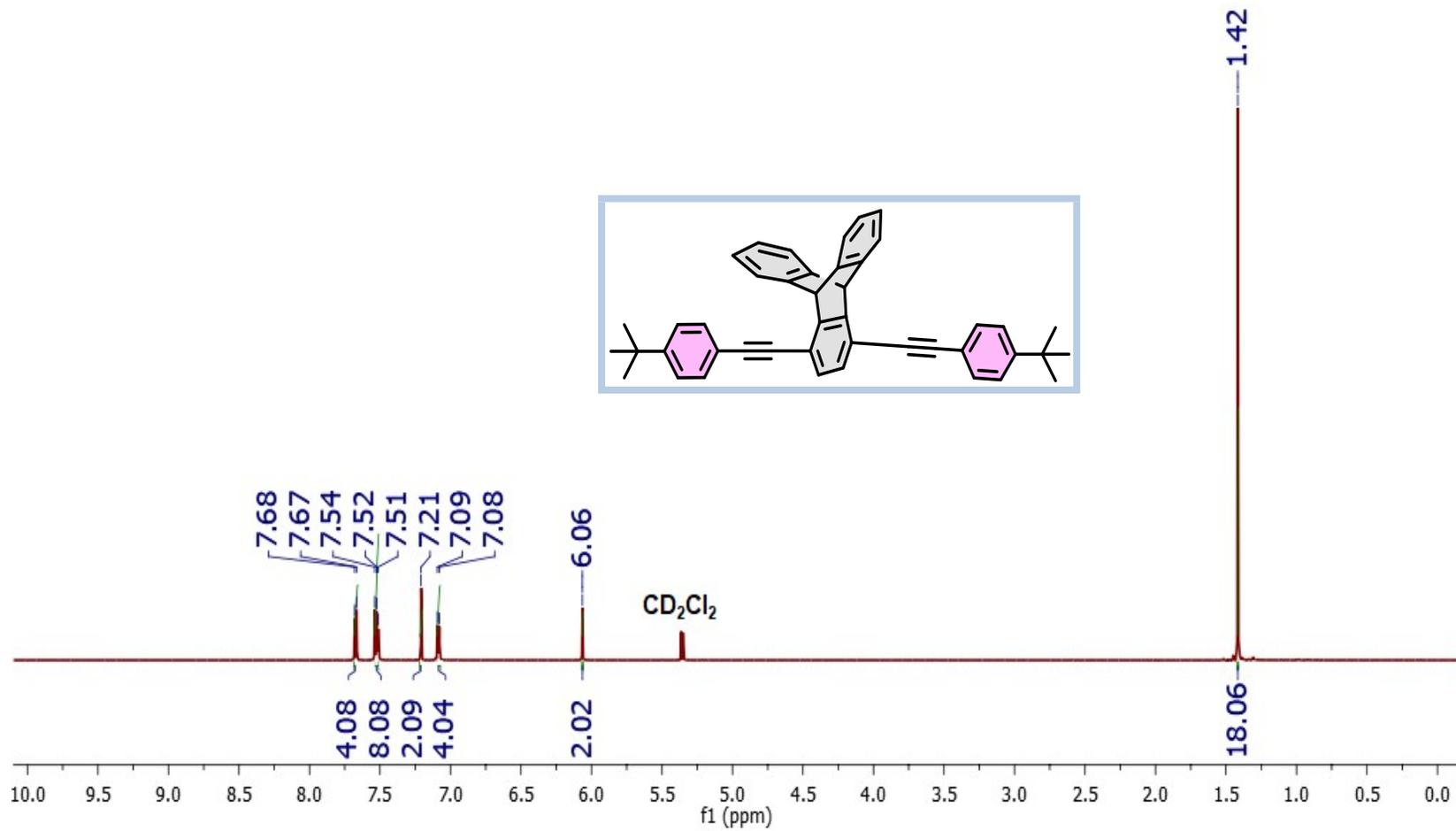


Figure S3: ^1H NMR spectrum of **3c** (CD_2Cl_2 , 600 MHz)

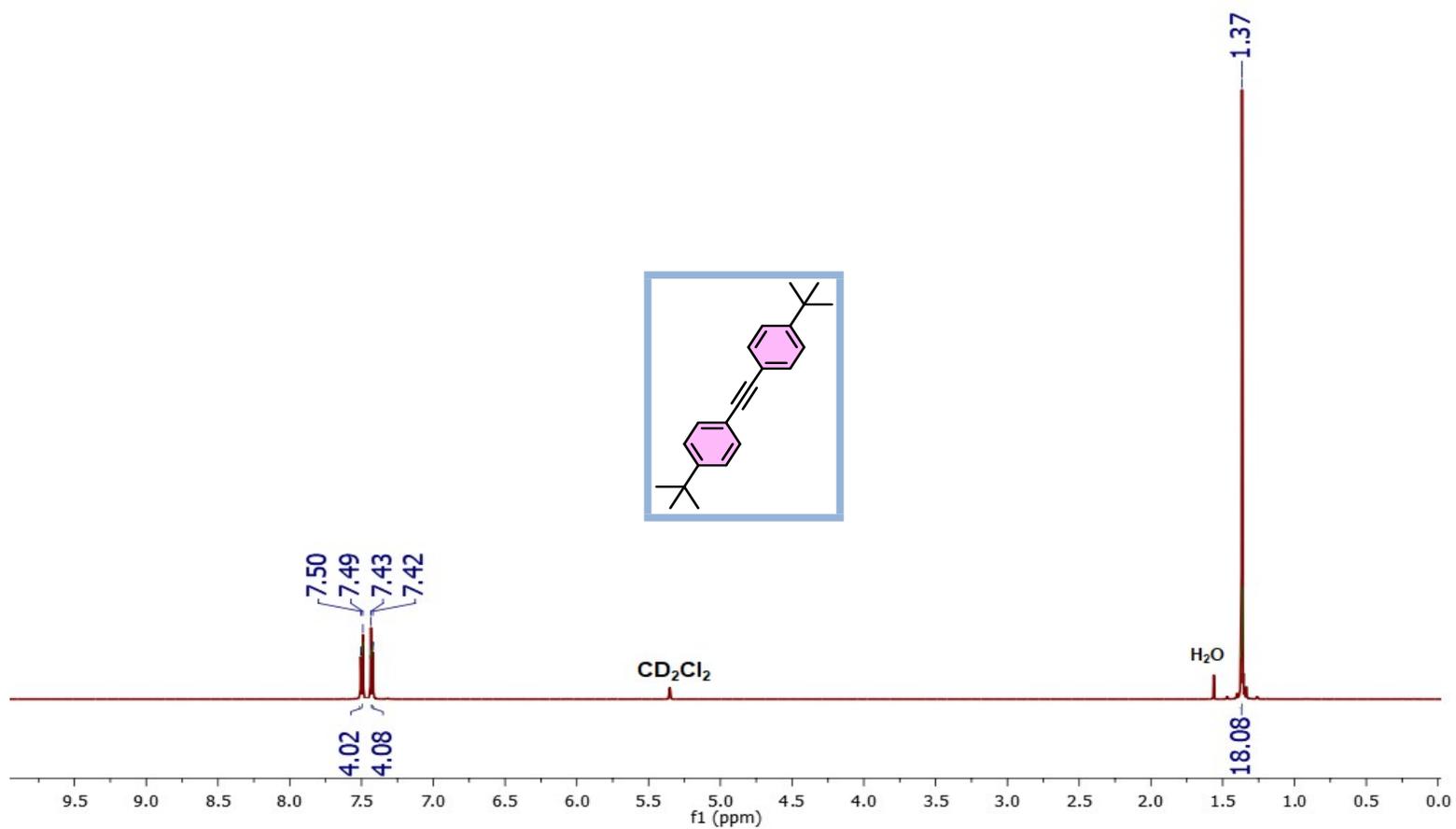


Figure S4: ^1H NMR spectrum of TBPE (CD_2Cl_2 , 600 MHz)

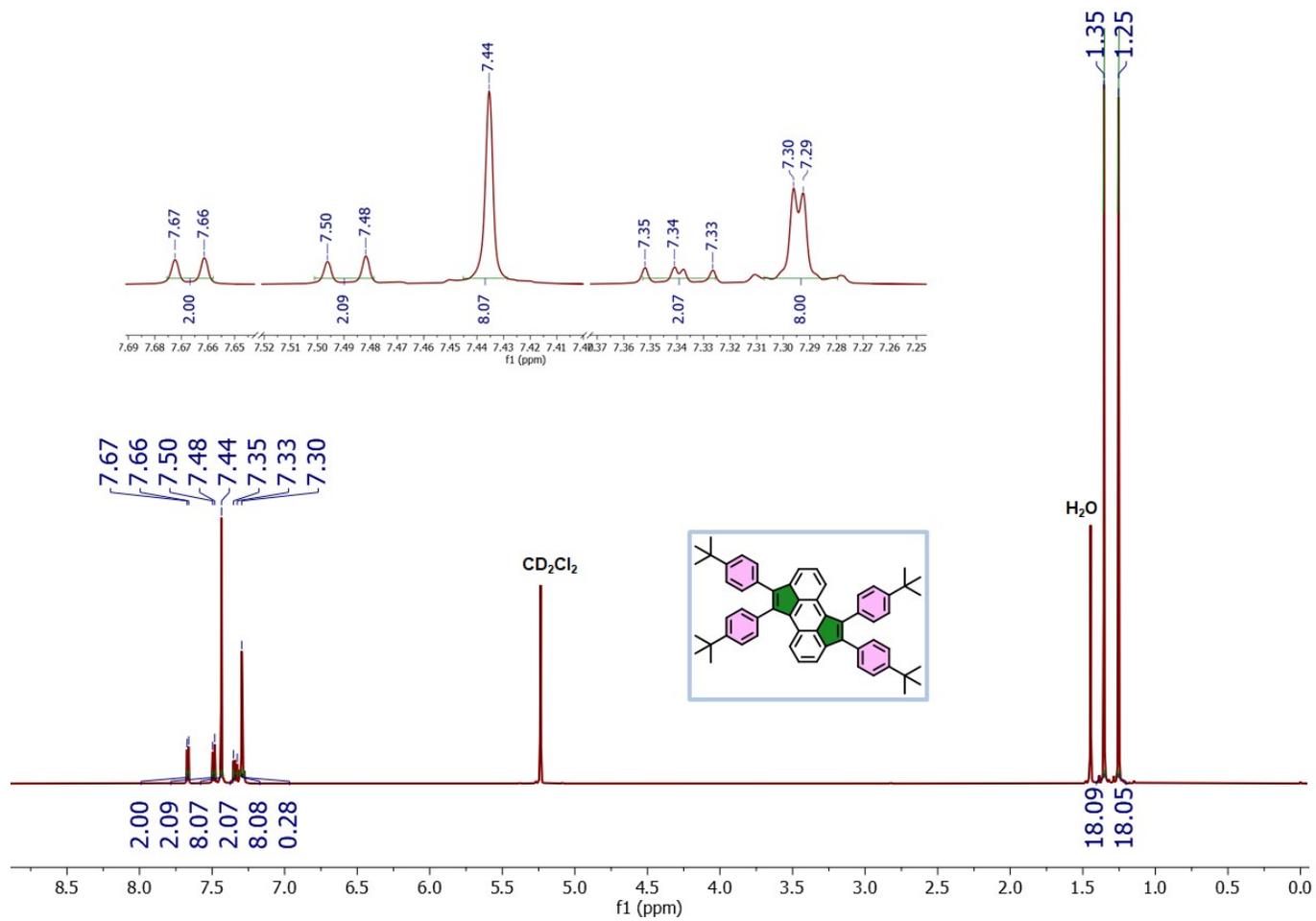


Figure S5: ^1H NMR spectrum of CPM (CD_2Cl_2 , 600 MHz)

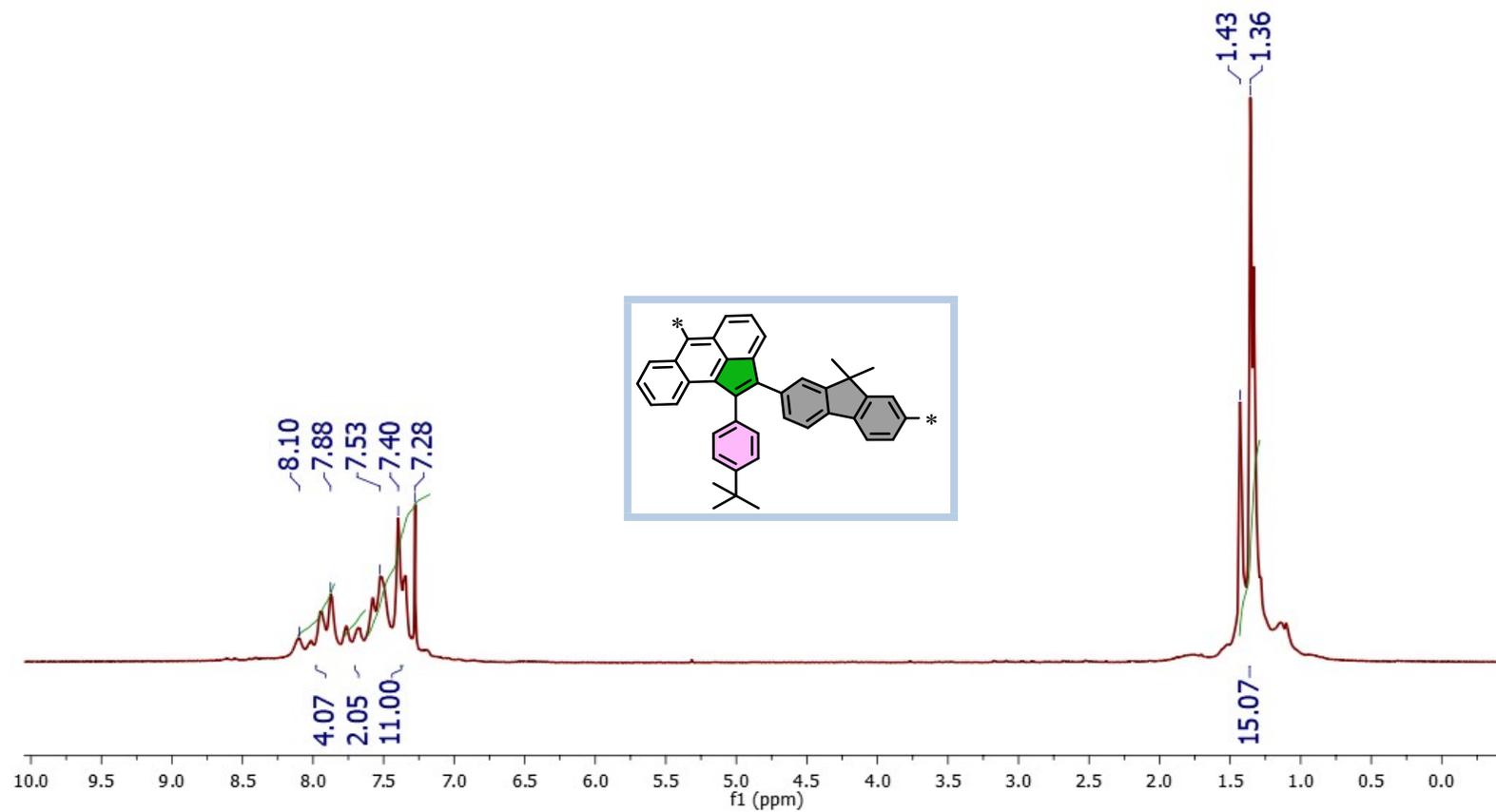


Figure S6: ^1H NMR spectrum of **CPP1** (CDCl_3 , 600 MHz)

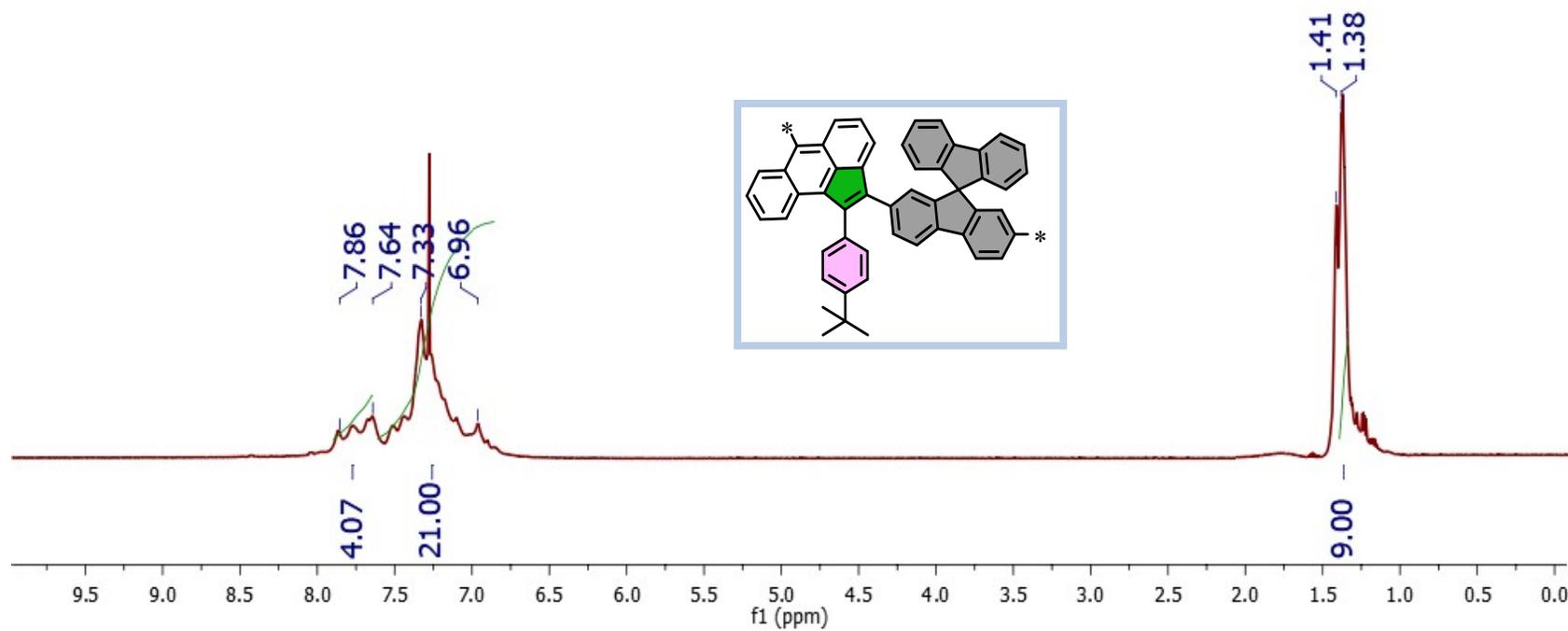


Figure S7: ^1H NMR spectrum of **CPP2** (CDCl_3 , 600 MHz)

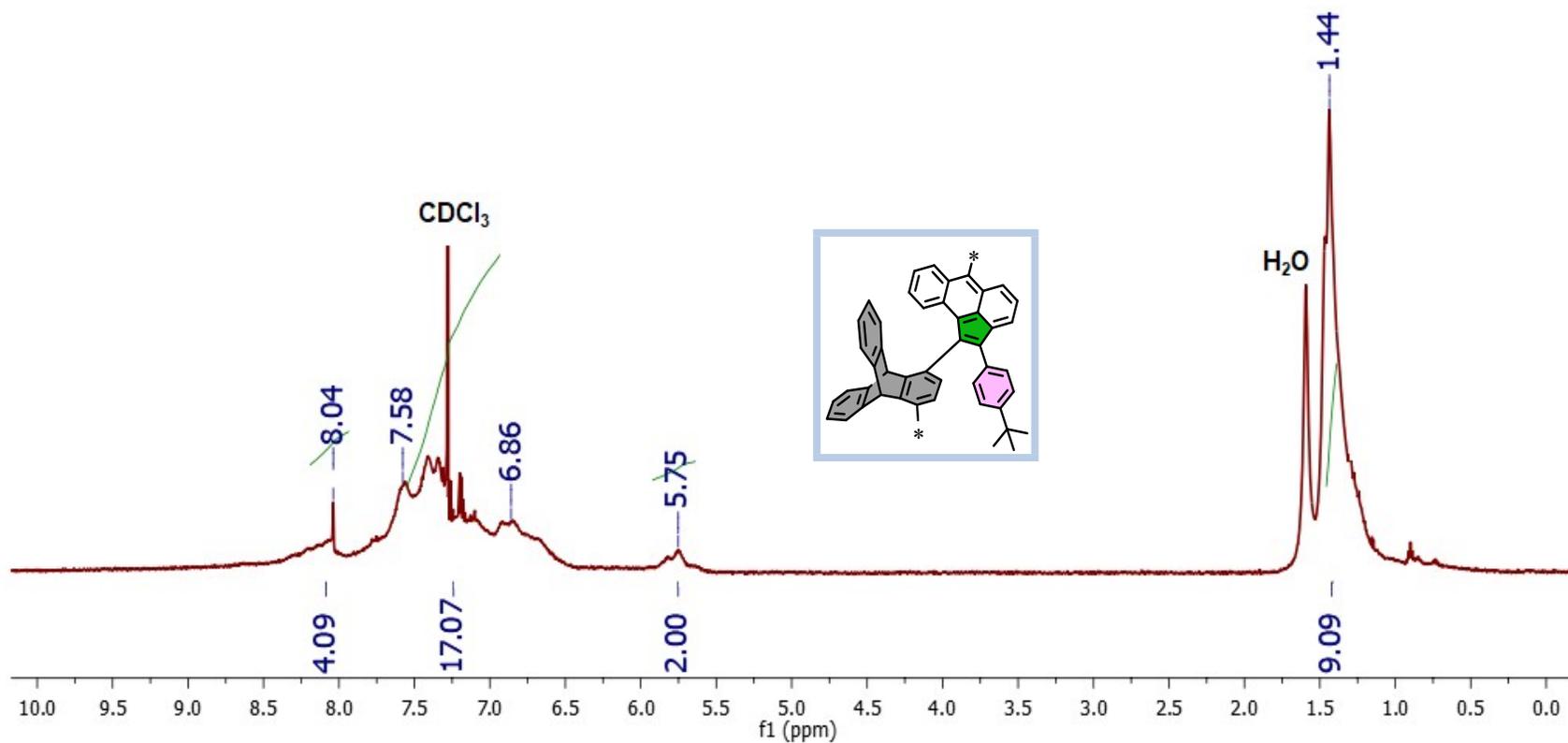


Figure S8: ^1H NMR spectrum of CPP3 (CDCl_3 , 600 MHz)

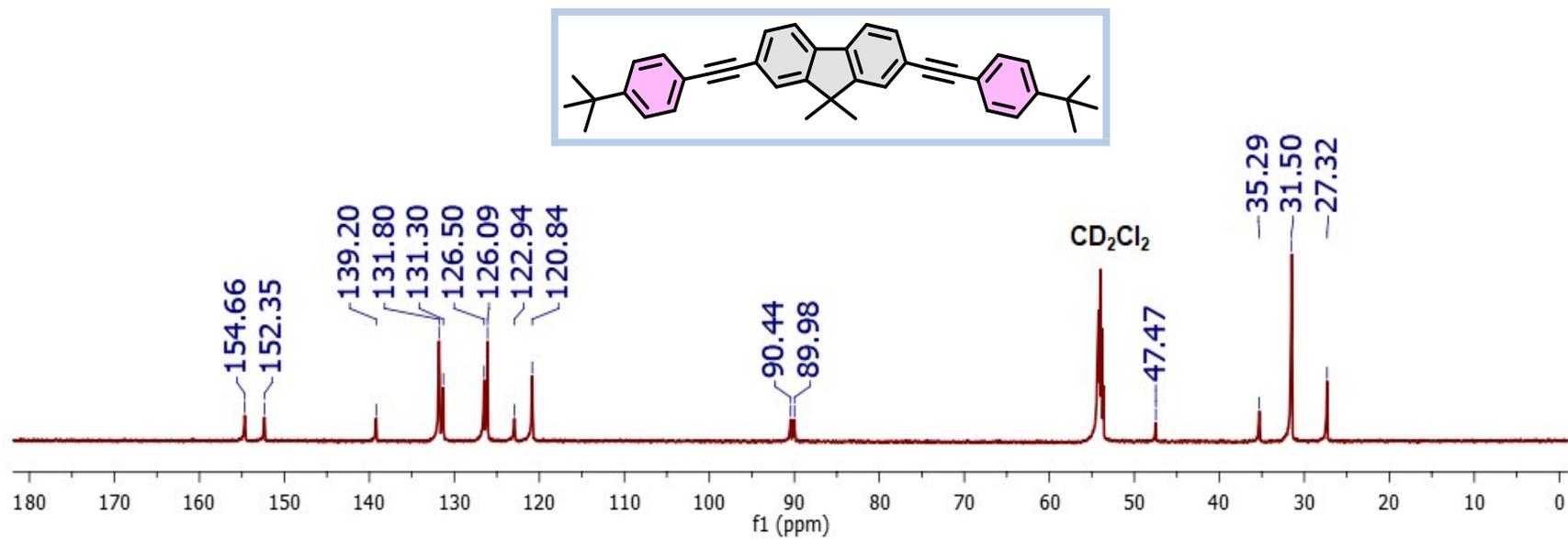


Figure S9: ^{13}C NMR spectrum of **3a** (CD_2Cl_2 , 150 MHz)

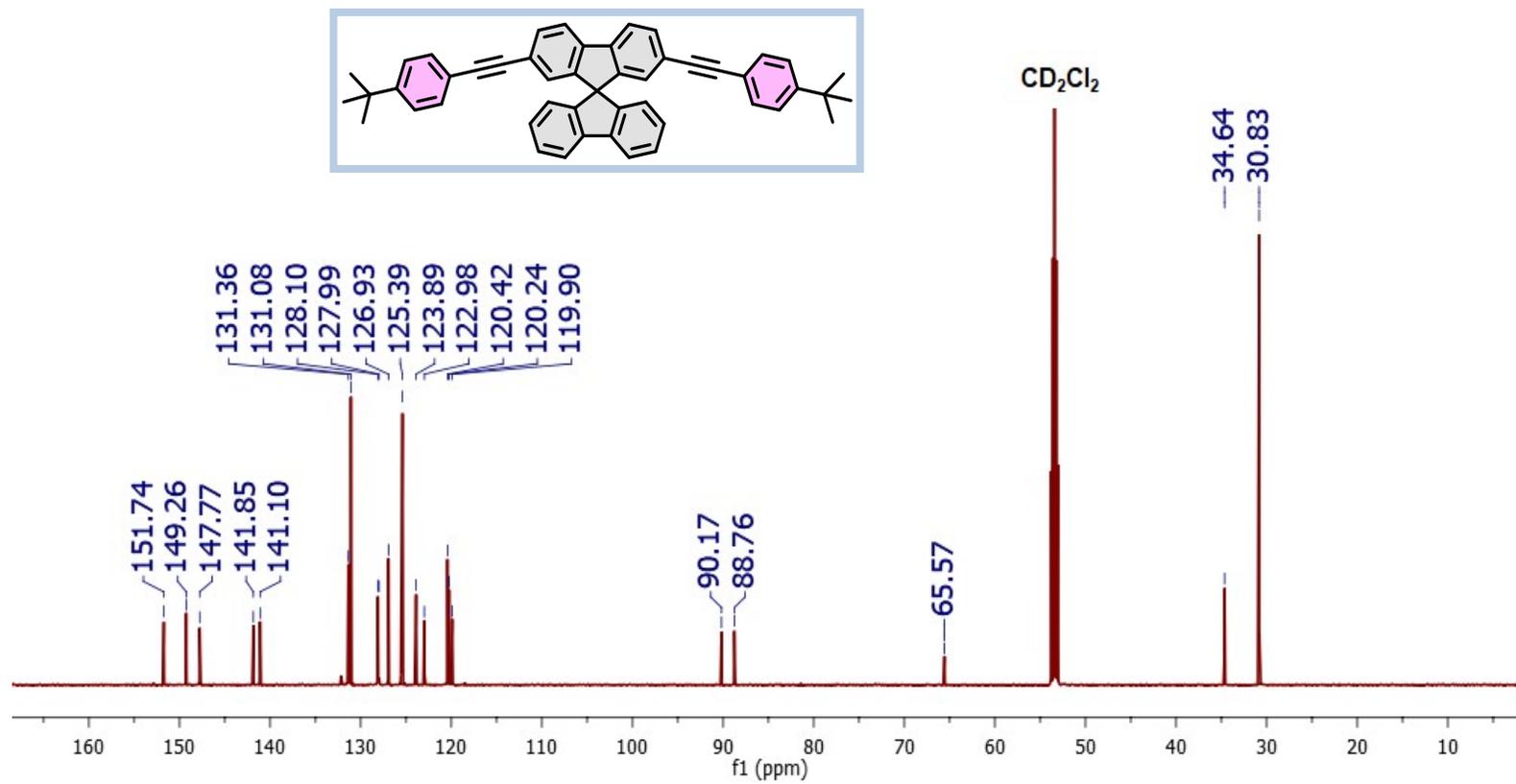


Figure S10: ^{13}C NMR spectrum of **3b** (CD₂Cl₂, 150 MHz)

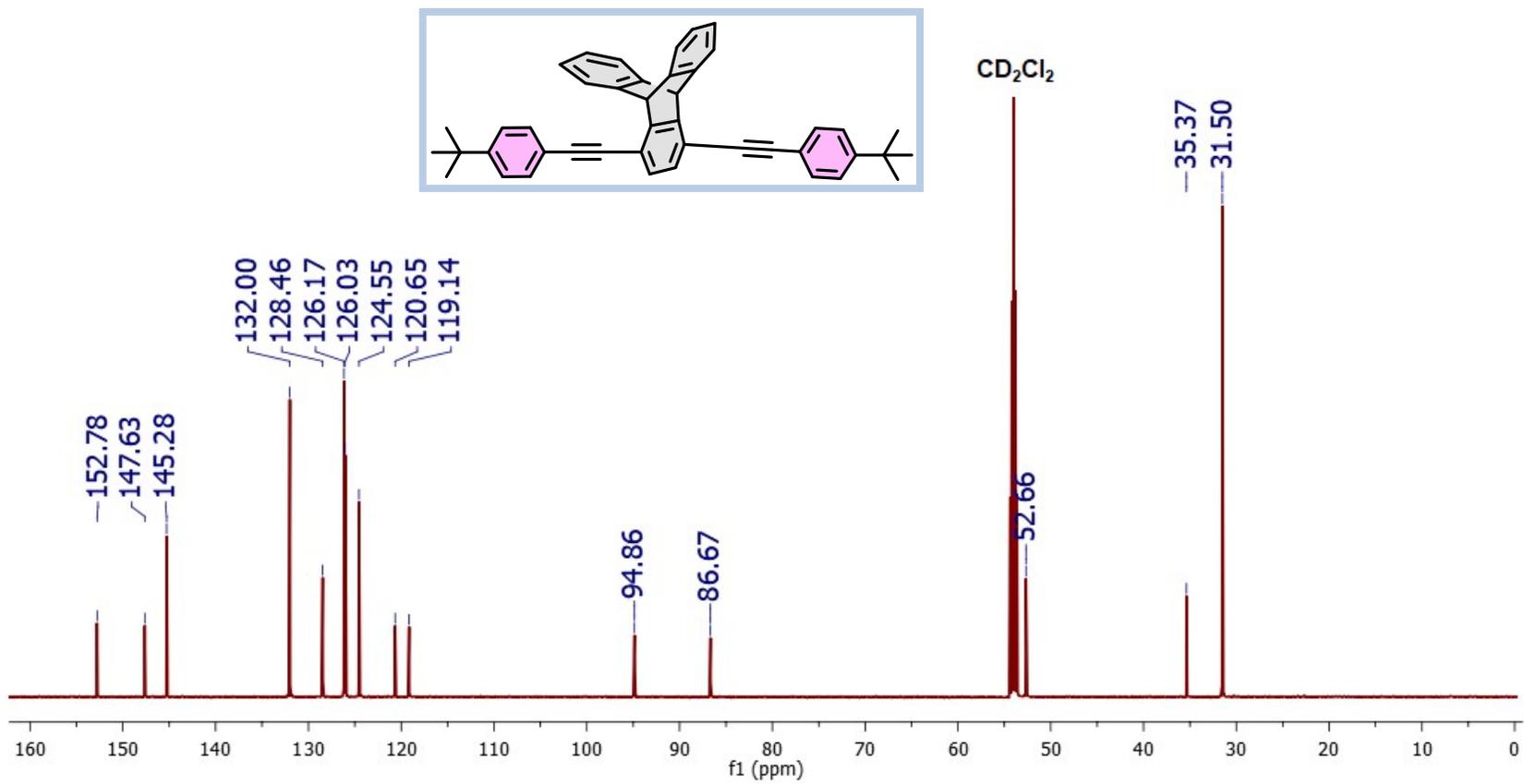


Figure S11: ^{13}C NMR spectrum of **3c** (CD $_2$ Cl $_2$, 150 MHz)

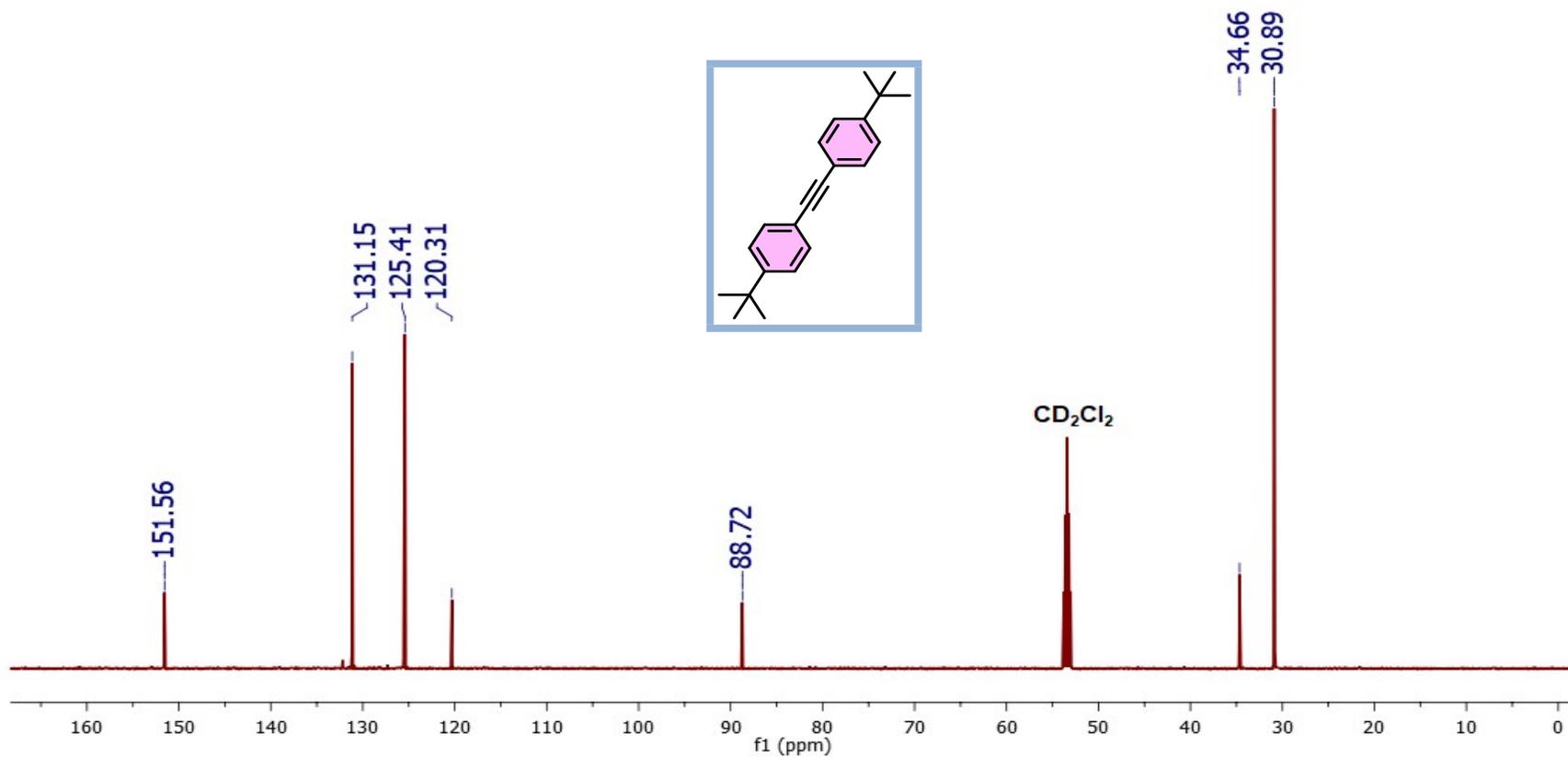


Figure S12: ^{13}C NMR spectrum of TBPE (CD_2Cl_2 , 150 MHz)

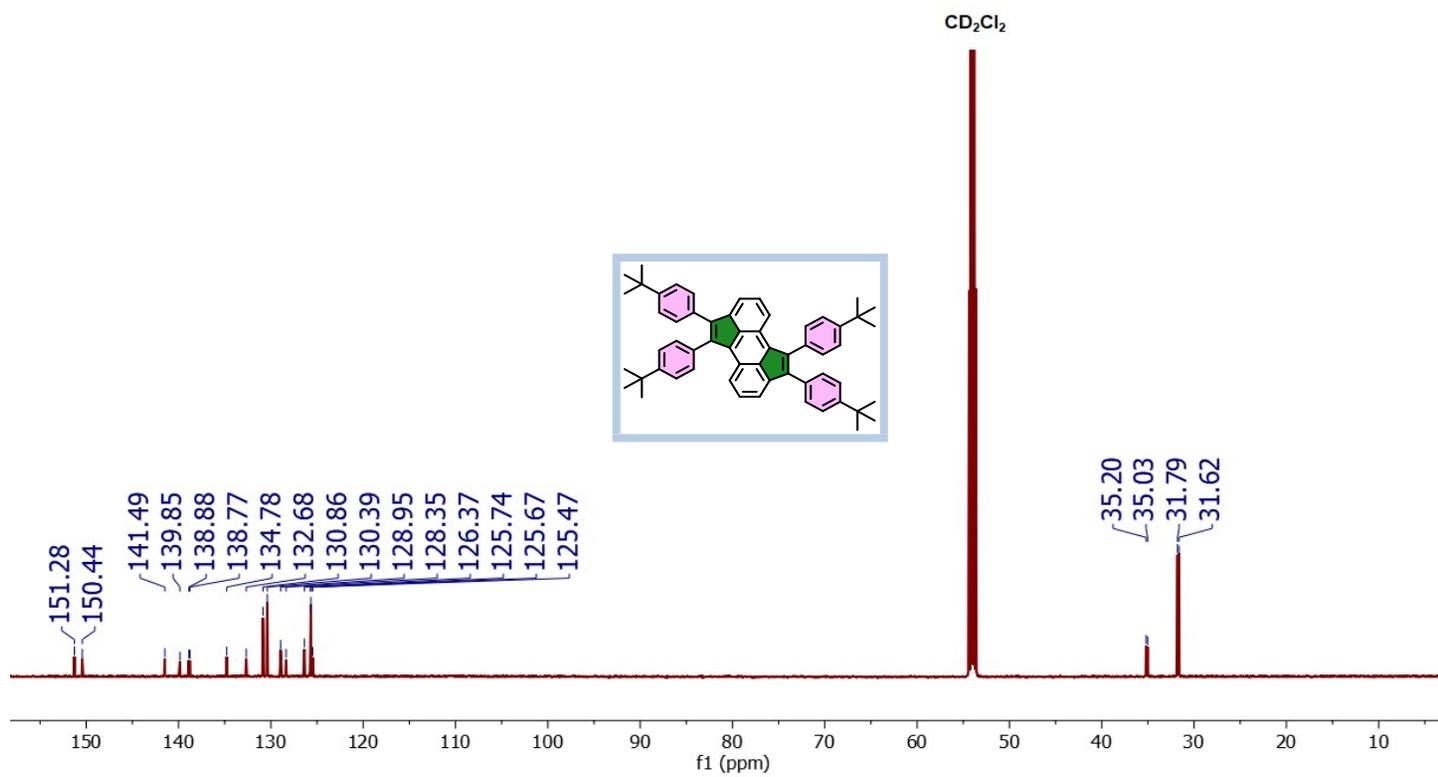


Figure S13: ^{13}C NMR spectrum of **CPM** (CD_2Cl_2 , 150 MHz)

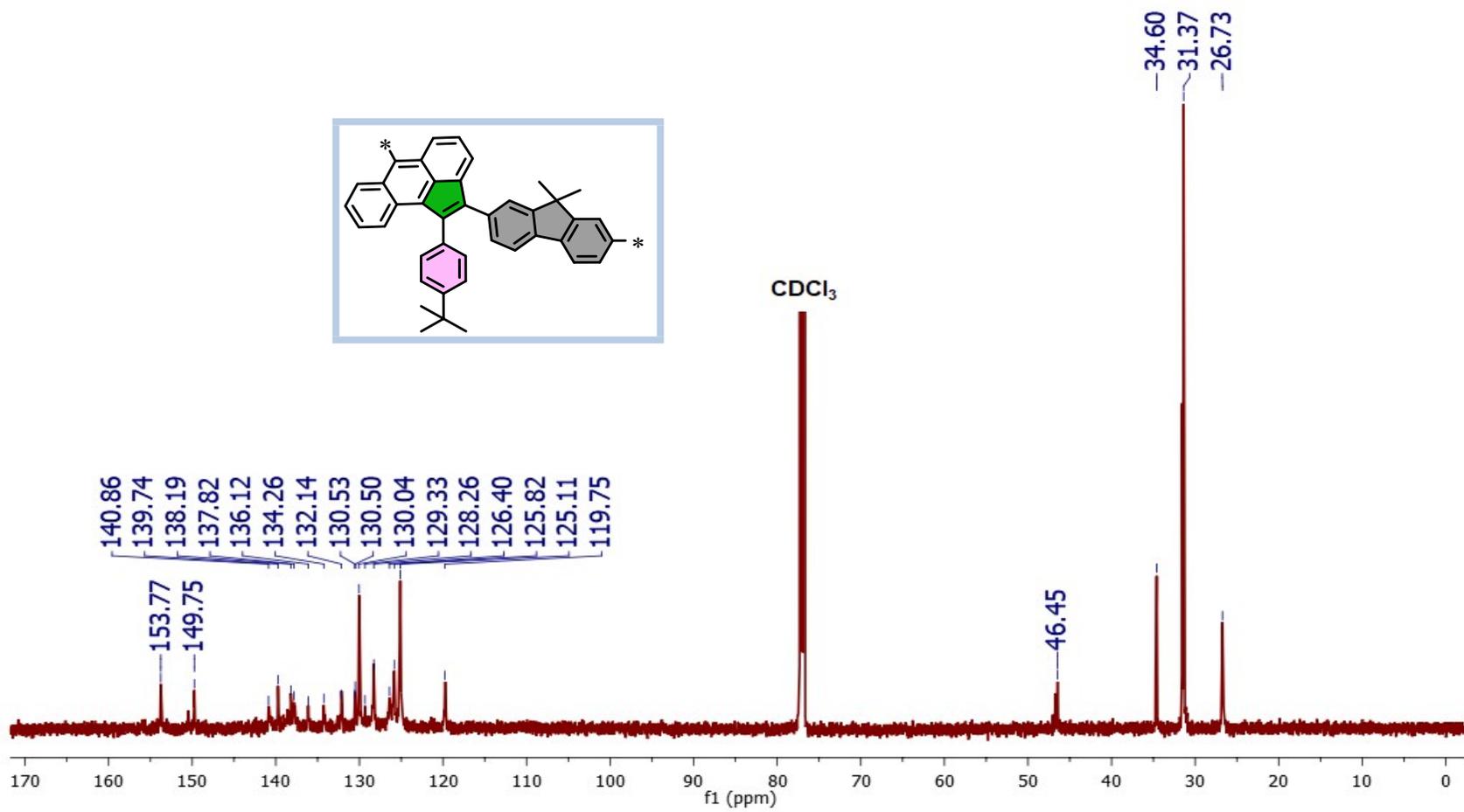


Figure S14: ^{13}C NMR spectrum of **CPP1** (CDCl_3 , 150 MHz)

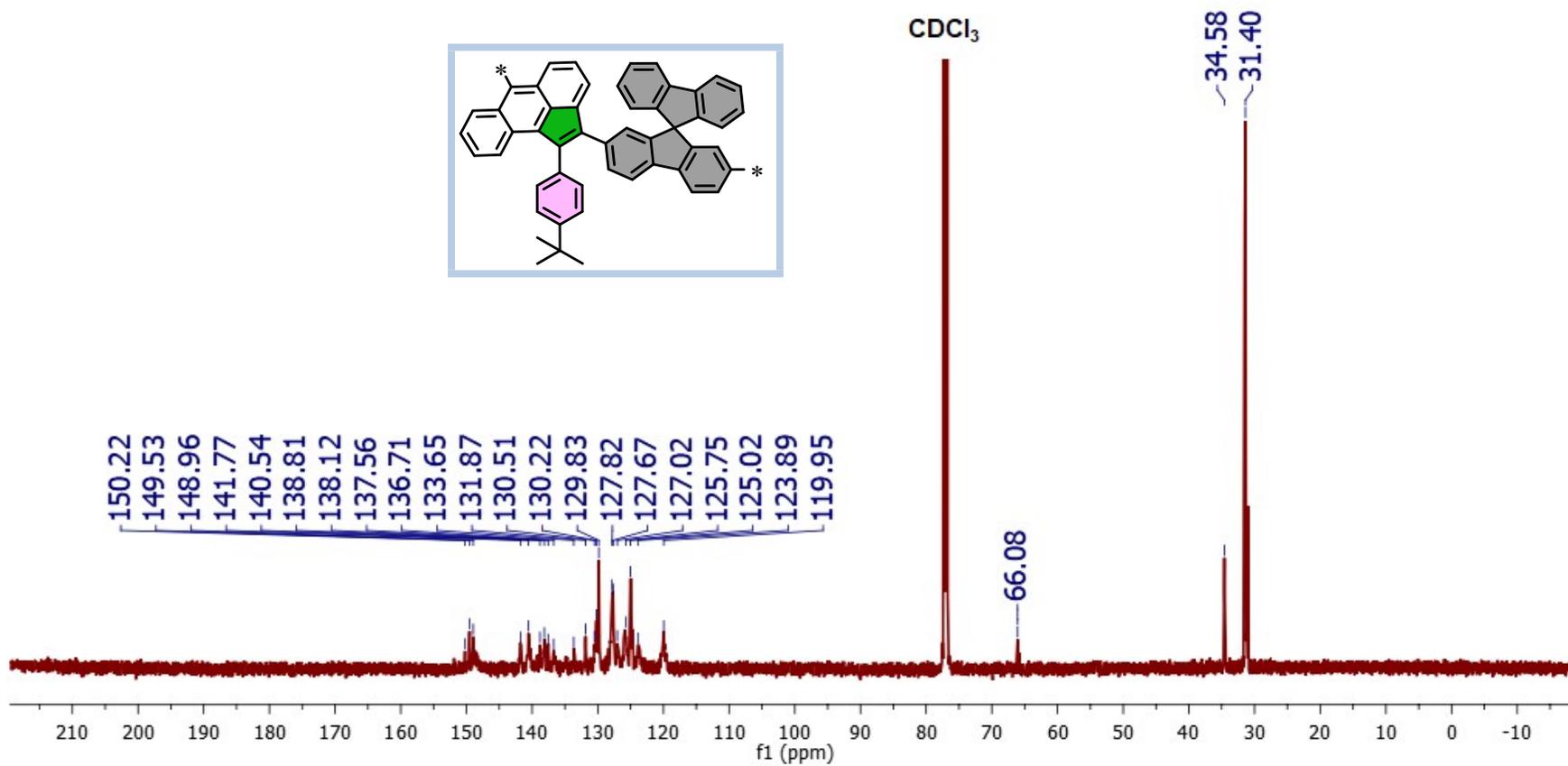


Figure S15: ^{13}C NMR spectrum of CPP2 (CDCl_3 , 150 MHz)

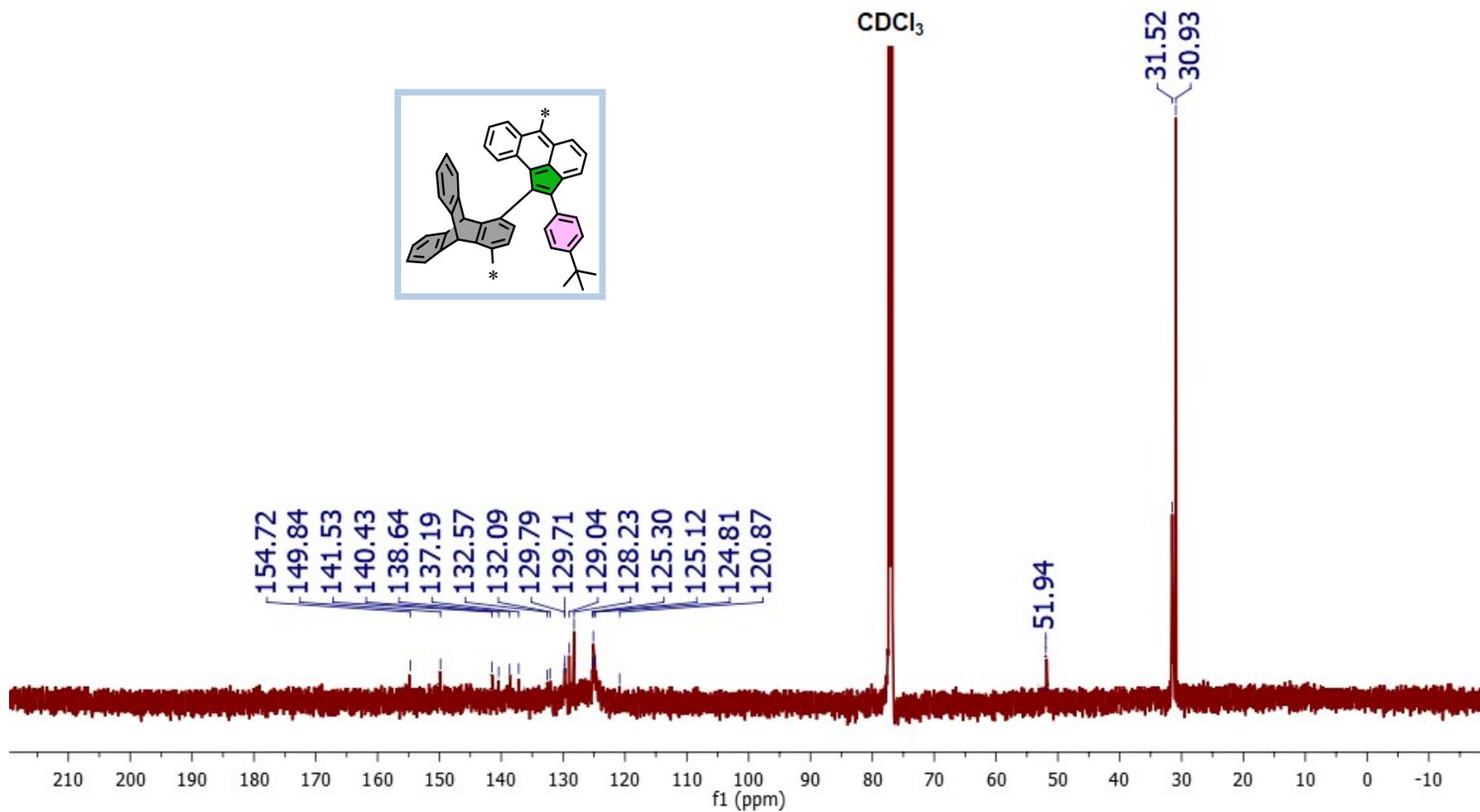


Figure S16: ^{13}C NMR spectrum of **CPP3** (CDCl_3 , 150 MHz)

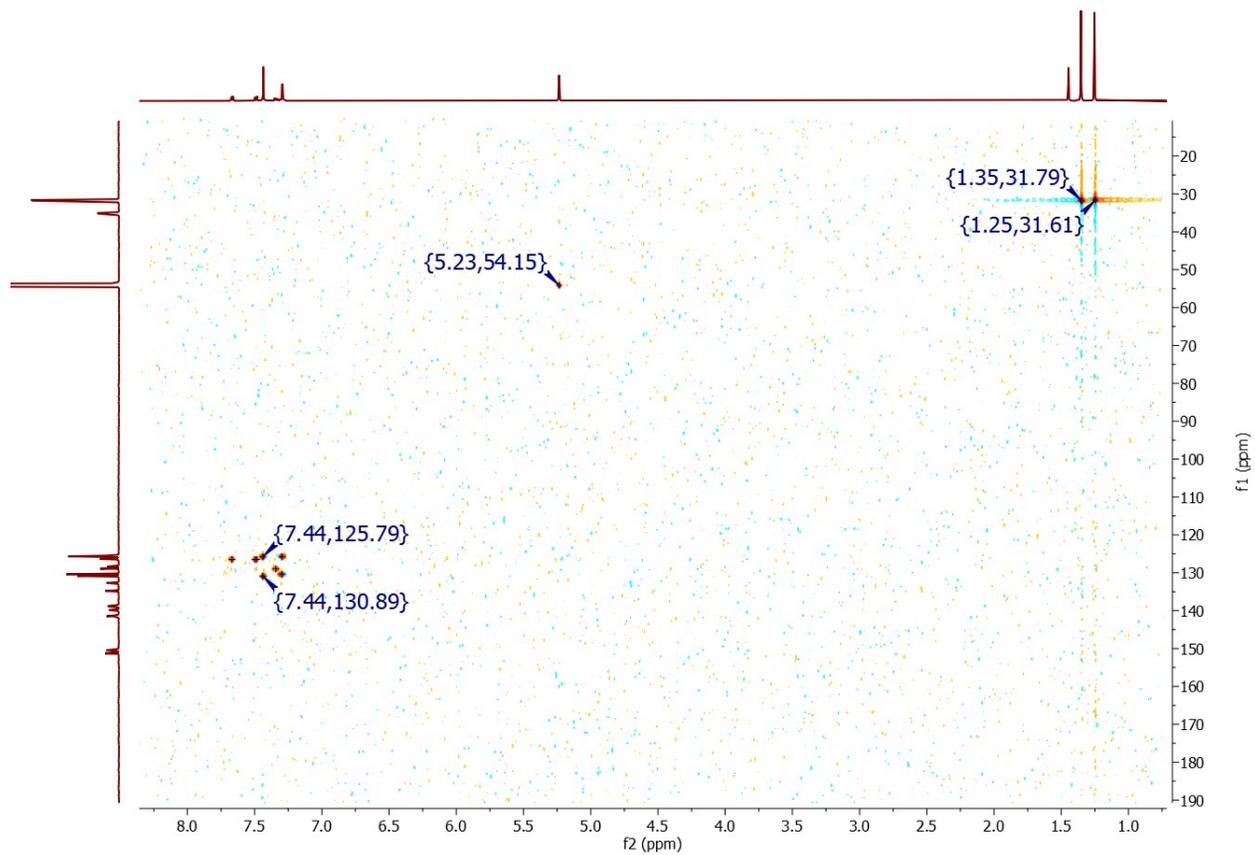


Figure S17: 2D-NMR HETCOR spectrum of **CPM** (CD₂Cl₂)

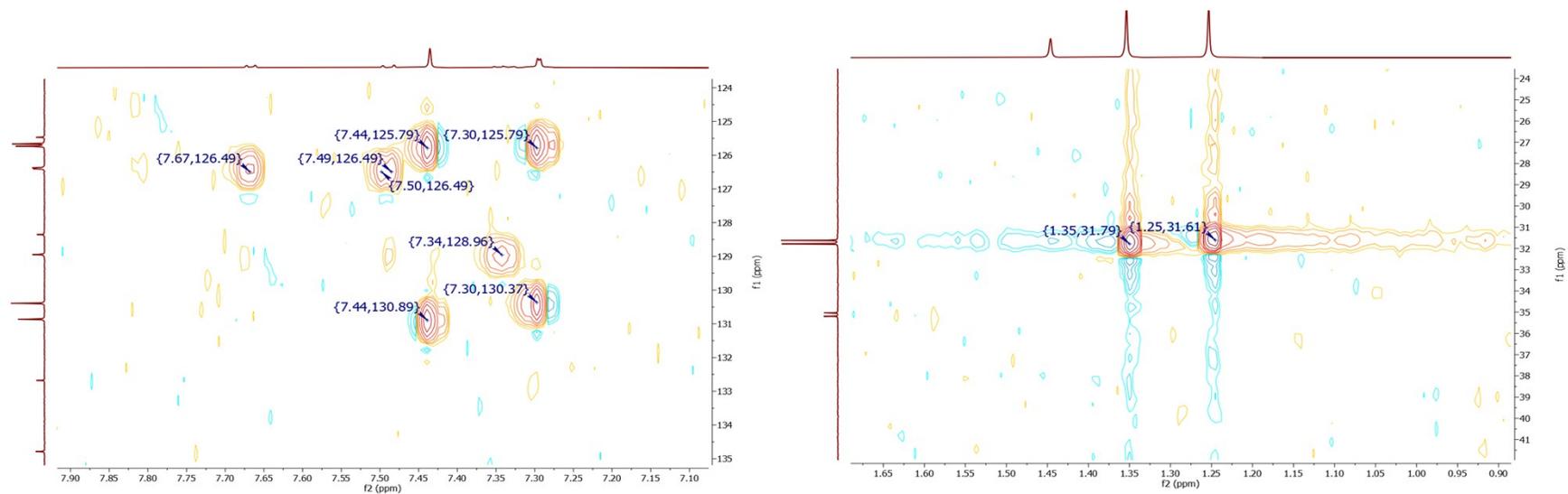


Figure S18: 2D-NMR HETCOR spectrum of **CPM** aromatic region (left) aliphatic region(right)

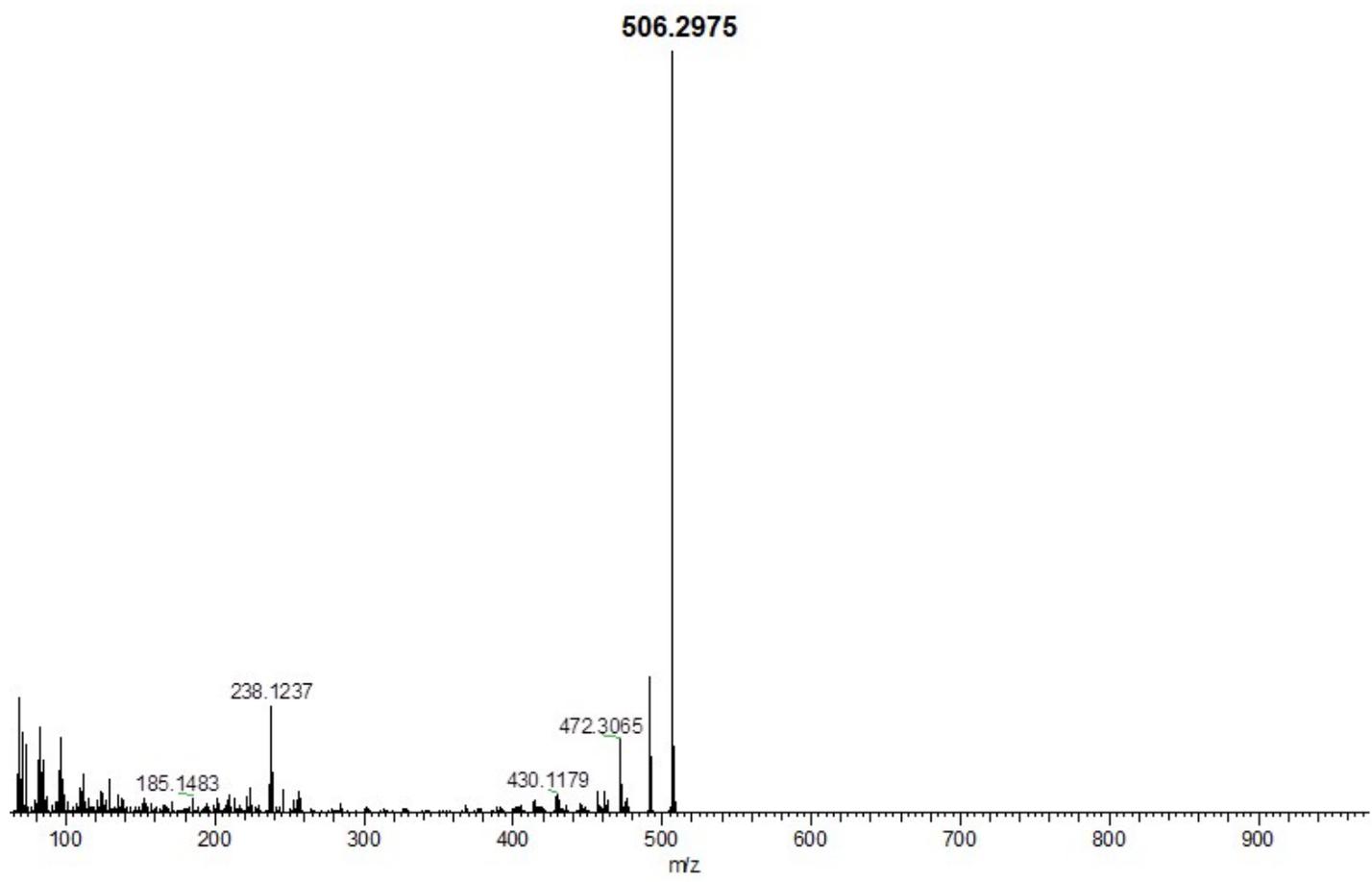


Figure S19: EI-HRMS spectrum of **3a**

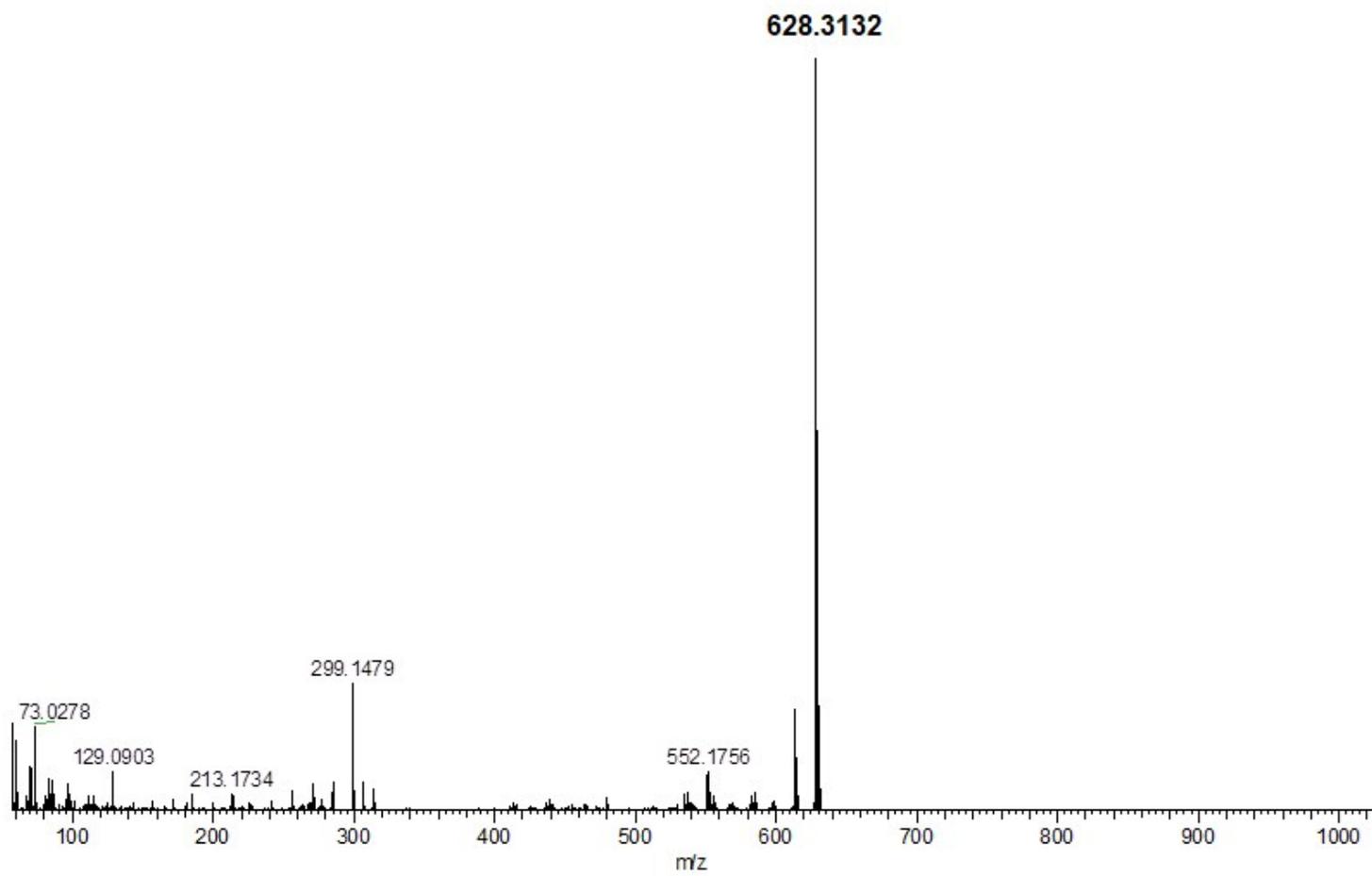


Figure S20: EI-HRMS spectrum of **3b**

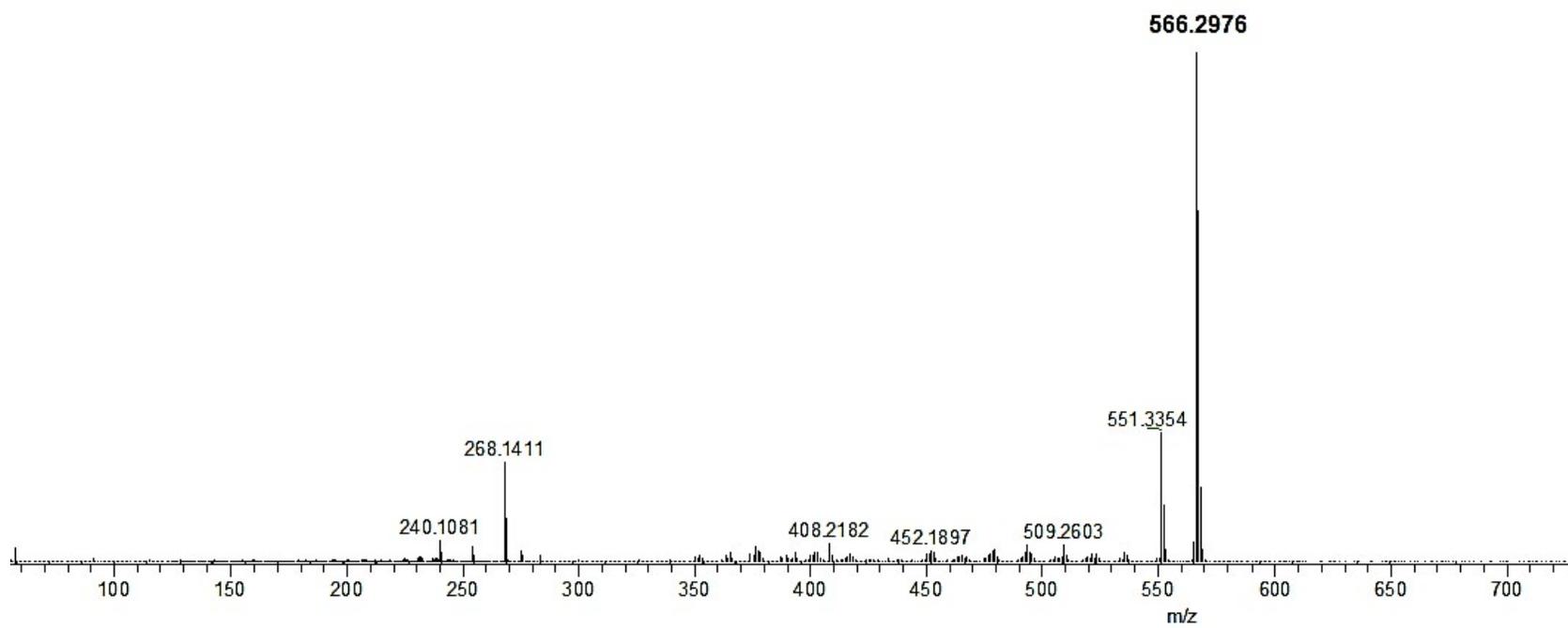


Figure S21: EI-HRMS spectrum of **3c**

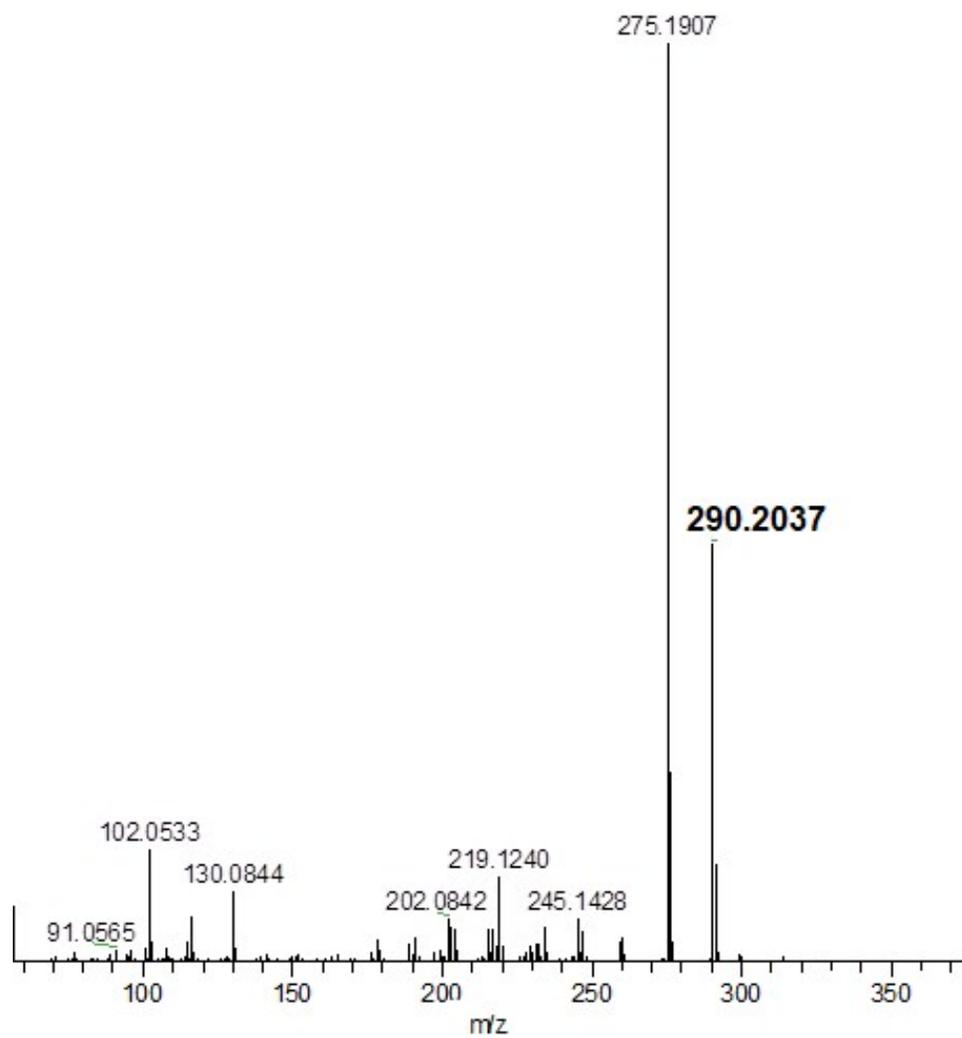


Figure S22: EI-HRMS of spectrum **TBPE**

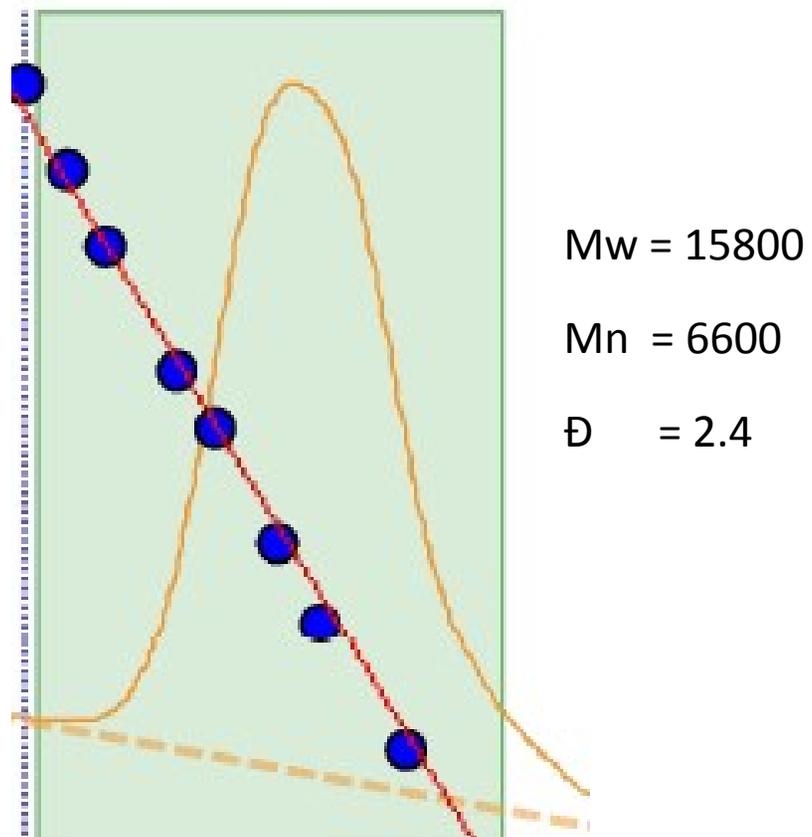


Figure S23: GPC chromatogram of **CPP1**

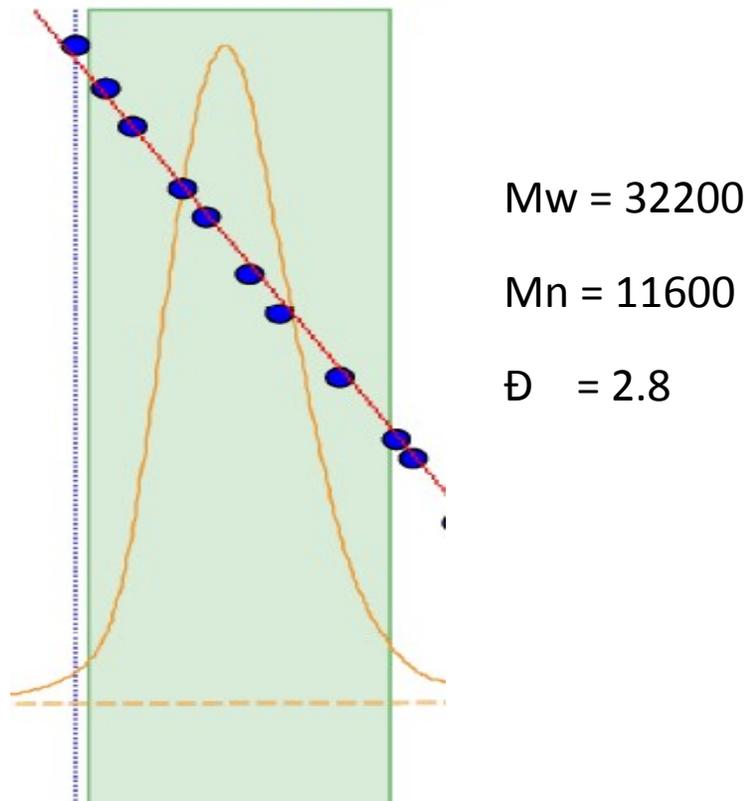


Figure S24: GPC chromatogram of **CPP3**

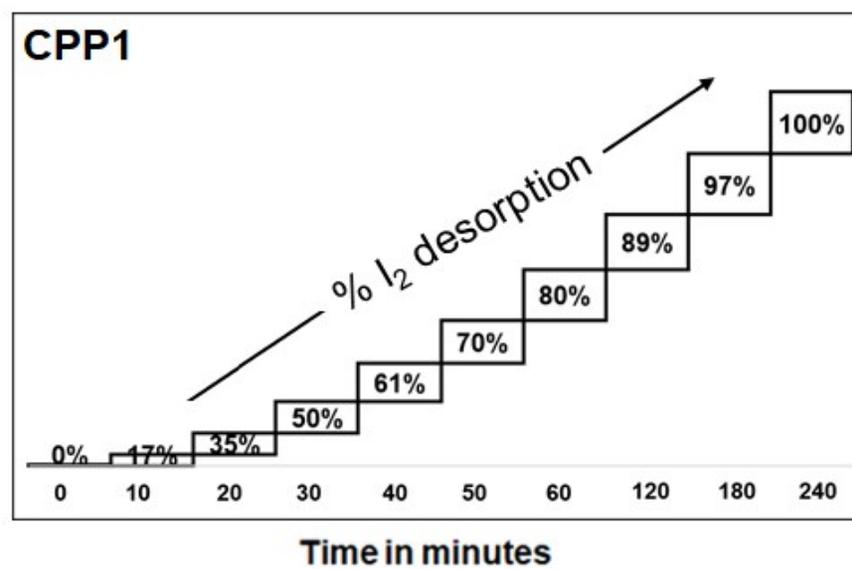
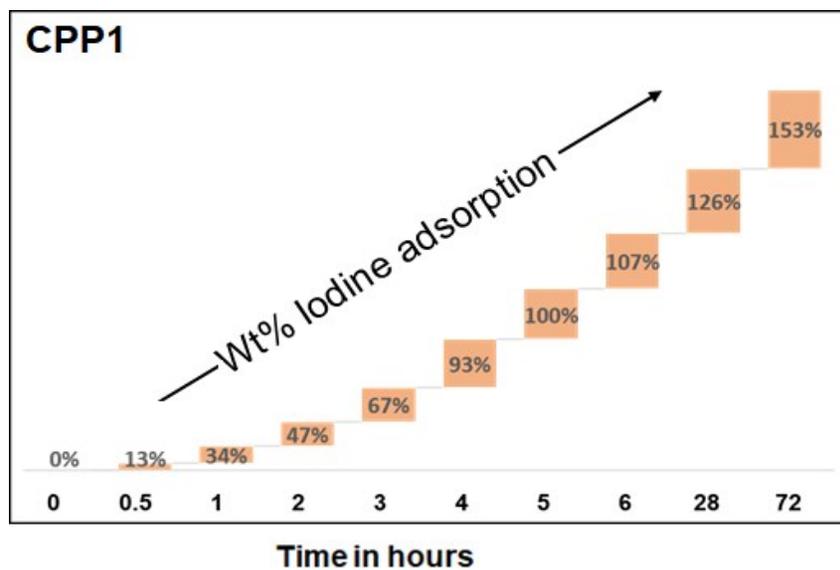


Figure S25: CPP1 gravimetric adsorption (left) and desorption (right, heated at 125°C in air) of iodine as a function of time

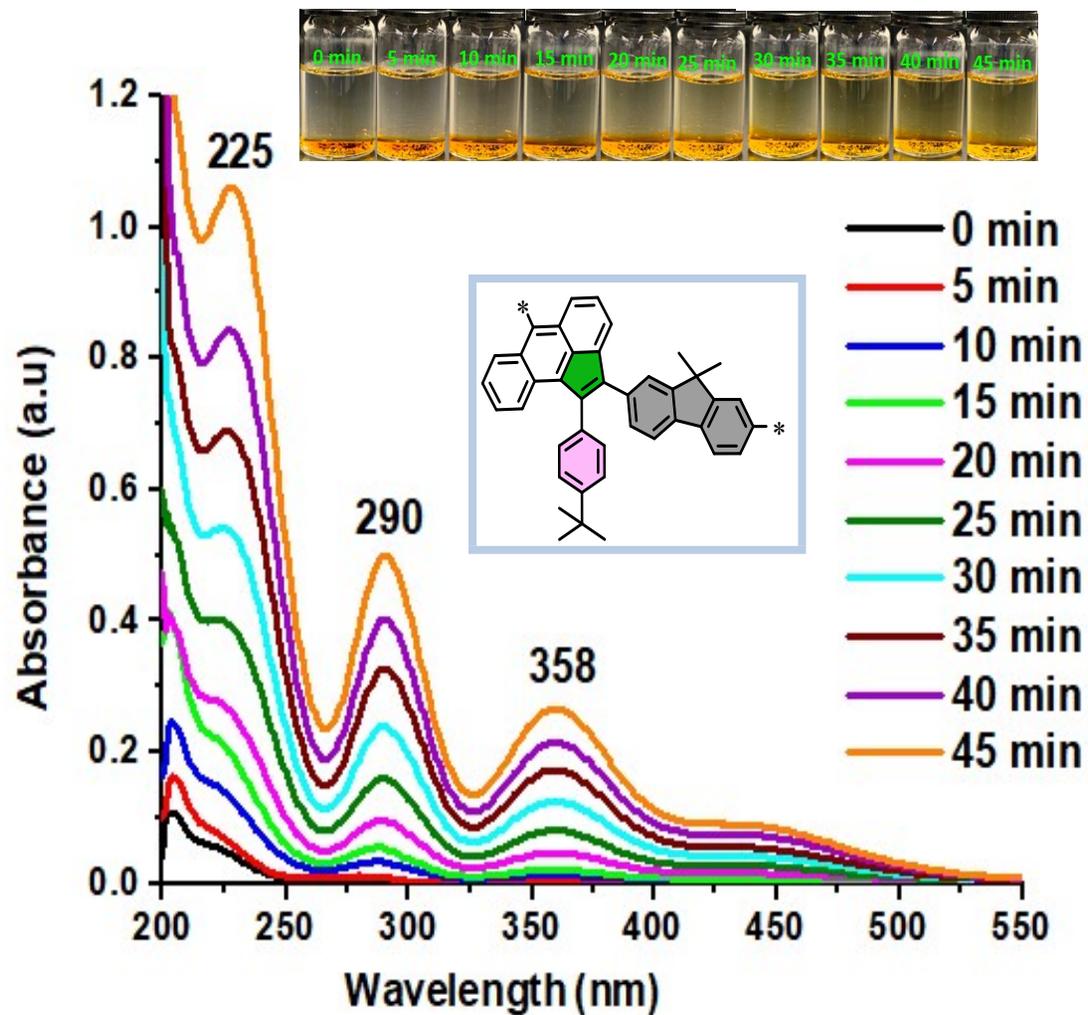


Figure S26: UV-Vis absorption spectra upon immersion of I₂@CPP1 in ethanol. Inset: photos of the solutions showing the color change upon immersion in ethanol.

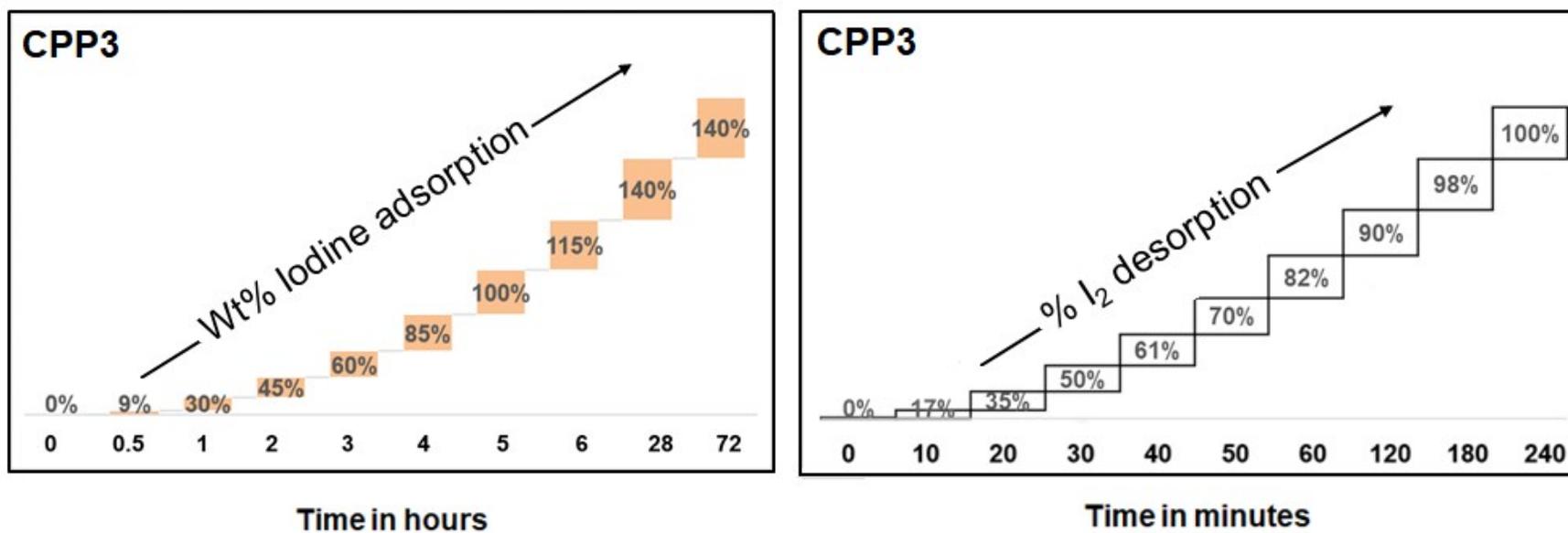


Figure S27: CPP3 gravimetric adsorption (left) and desorption (right, heated at 125°C in air) of iodine as a function of time

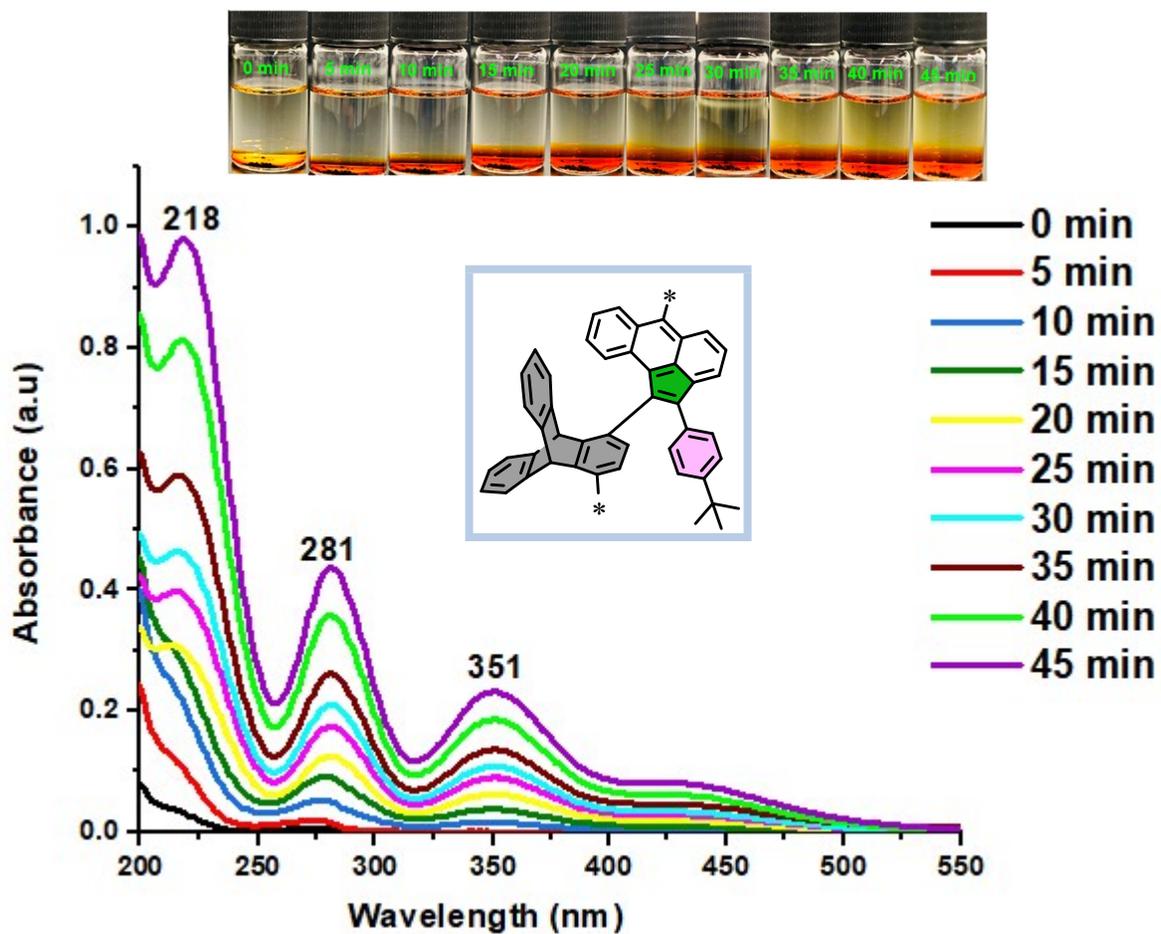


Figure S28: UV-Vis absorption spectra upon immersion of $I_2@CPP3$ in ethanol. Inset: photos of the solutions showing the color change upon immersion in ethanol.