

Constructing Small Molecular AIE Luminophores through 2,2-(2,2-diphenylethene-1,1-diyl)dithiophene Core and Peripheral Triphenylamine with Applications in Piezofluorochromism, Optical Waveguide, and Explosive Detection

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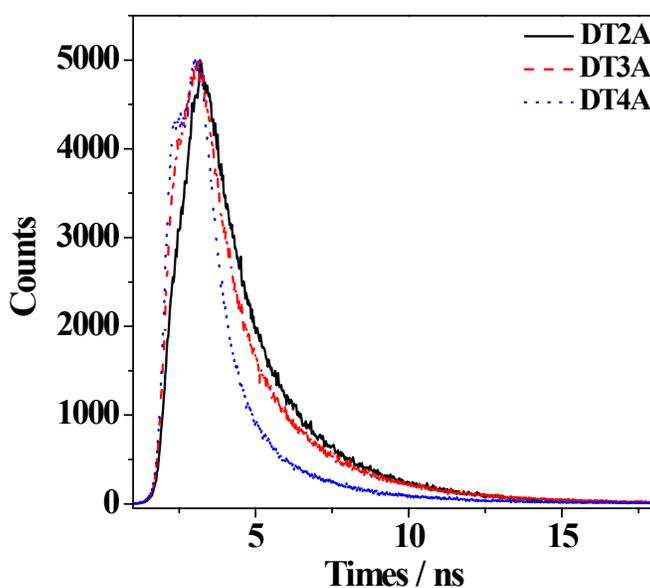


Figure S1. Comparison of the fluorescence-decay profiles for **DT2A**, **DT3A** and **DT4A** in thin films

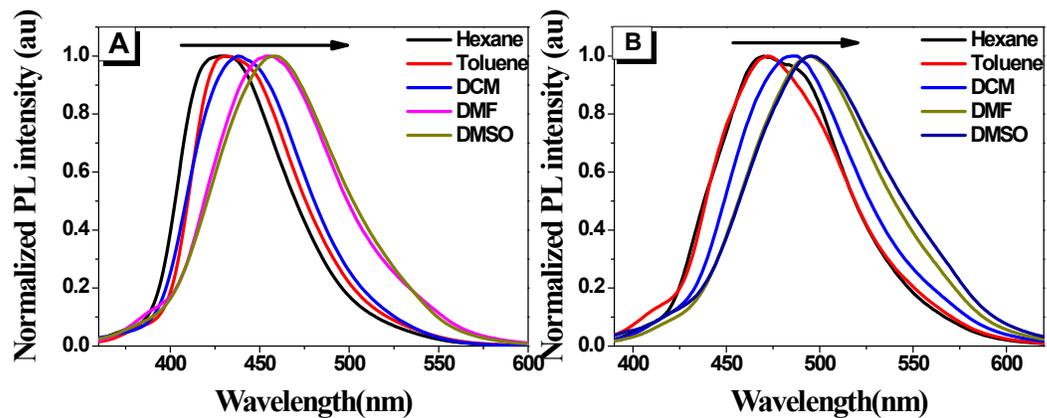


Figure S2. The excited fluorescence spectra of A) DT2A B) DT3A in different solvents.

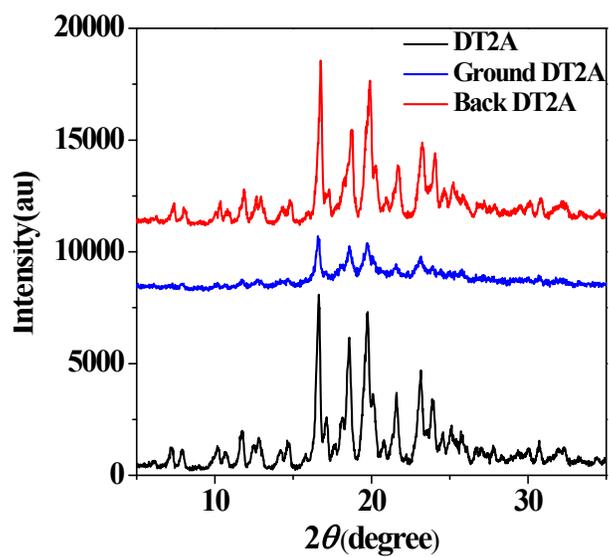


Figure S3. XRD as-synthesized, ground, and fumed DT2A.

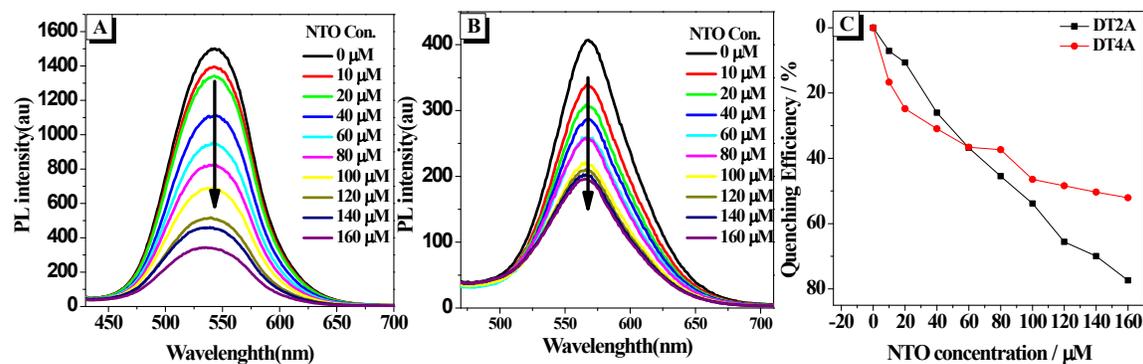


Figure S4. Emission spectra of (A) DT2A and (B) DT4A in THF/water mixtures with f_w at 99 vol% containing different amounts of NTO. (C) Quenching efficiency of TNT to FL intensities of DT2A and (B) DT4A containing different amounts of NTO.

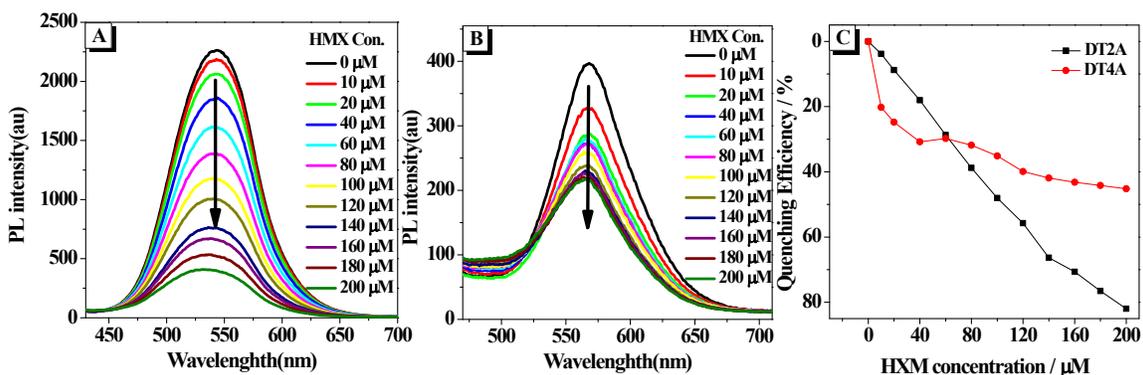


Figure S5. Emission spectra of (A) DT2A and (B) DT4A in THF/water mixtures with f_w at 99 vol% containing different amounts of HMX. (C) Quenching efficiency of TNT to FL intensities of DT2A and (B) DT4A containing different amounts of HMX.

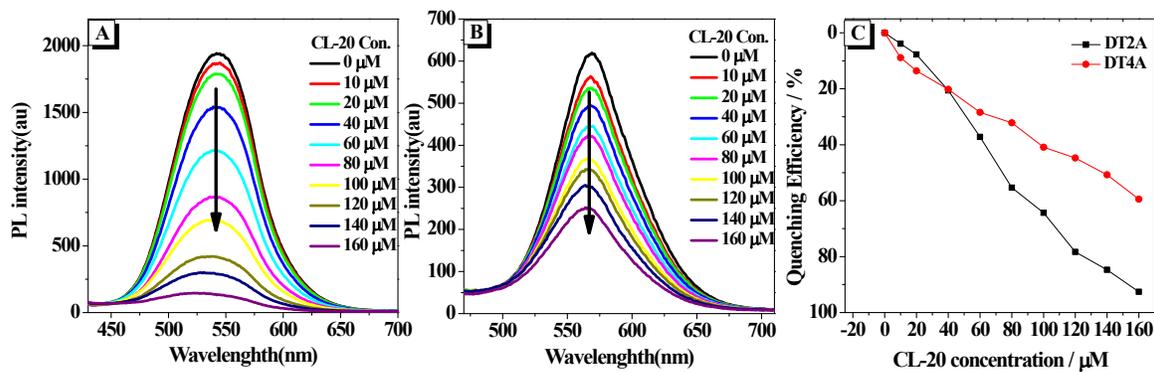
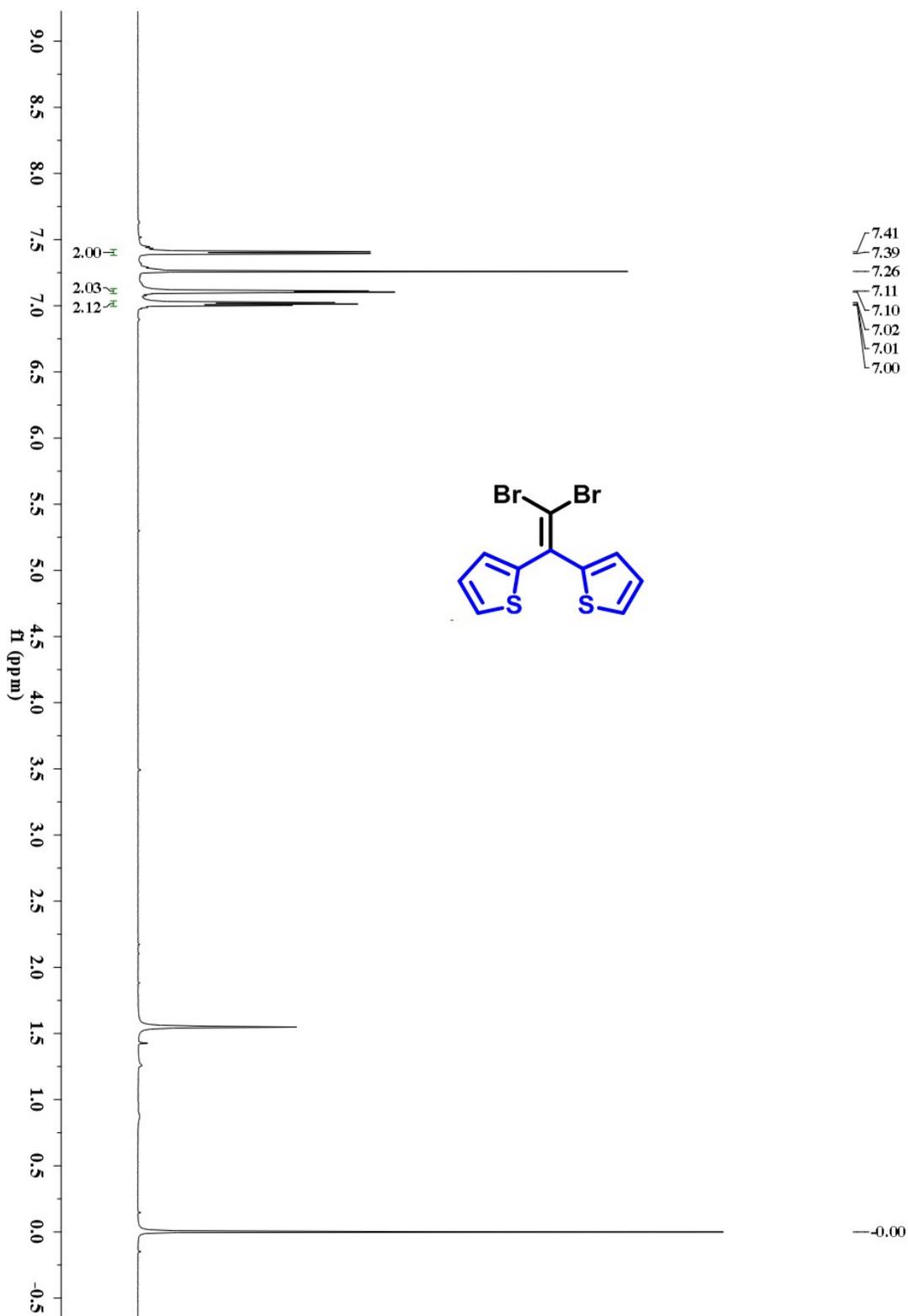
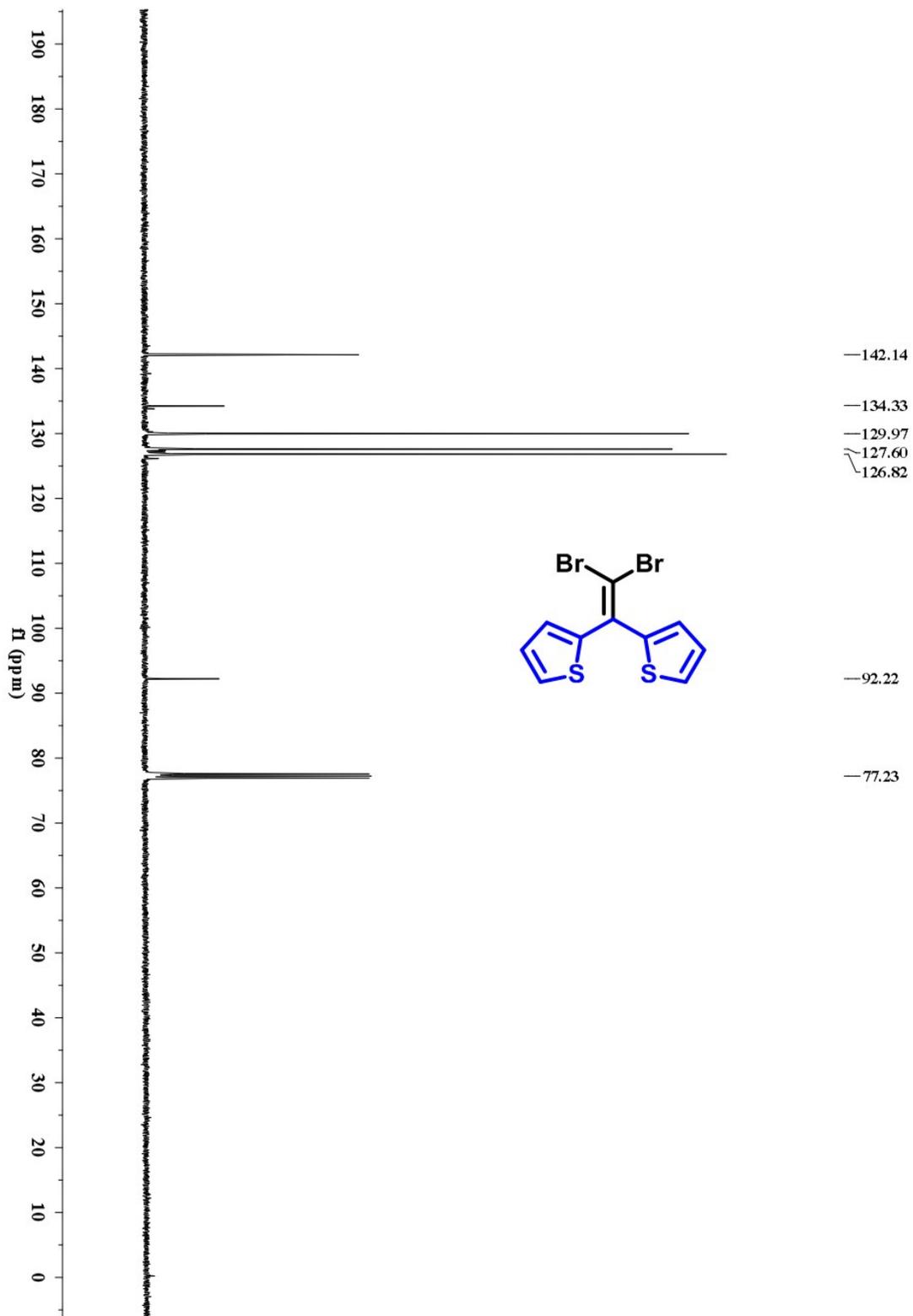


Figure S6. Emission spectra of (A) DT2A and (B) DT4A in THF/water mixtures with f_w at 99 vol% containing different amounts of CL-20. (C) Quenching efficiency of TNT to FL intensities of DT2A and (B) DT4A containing different amounts of CL-20.

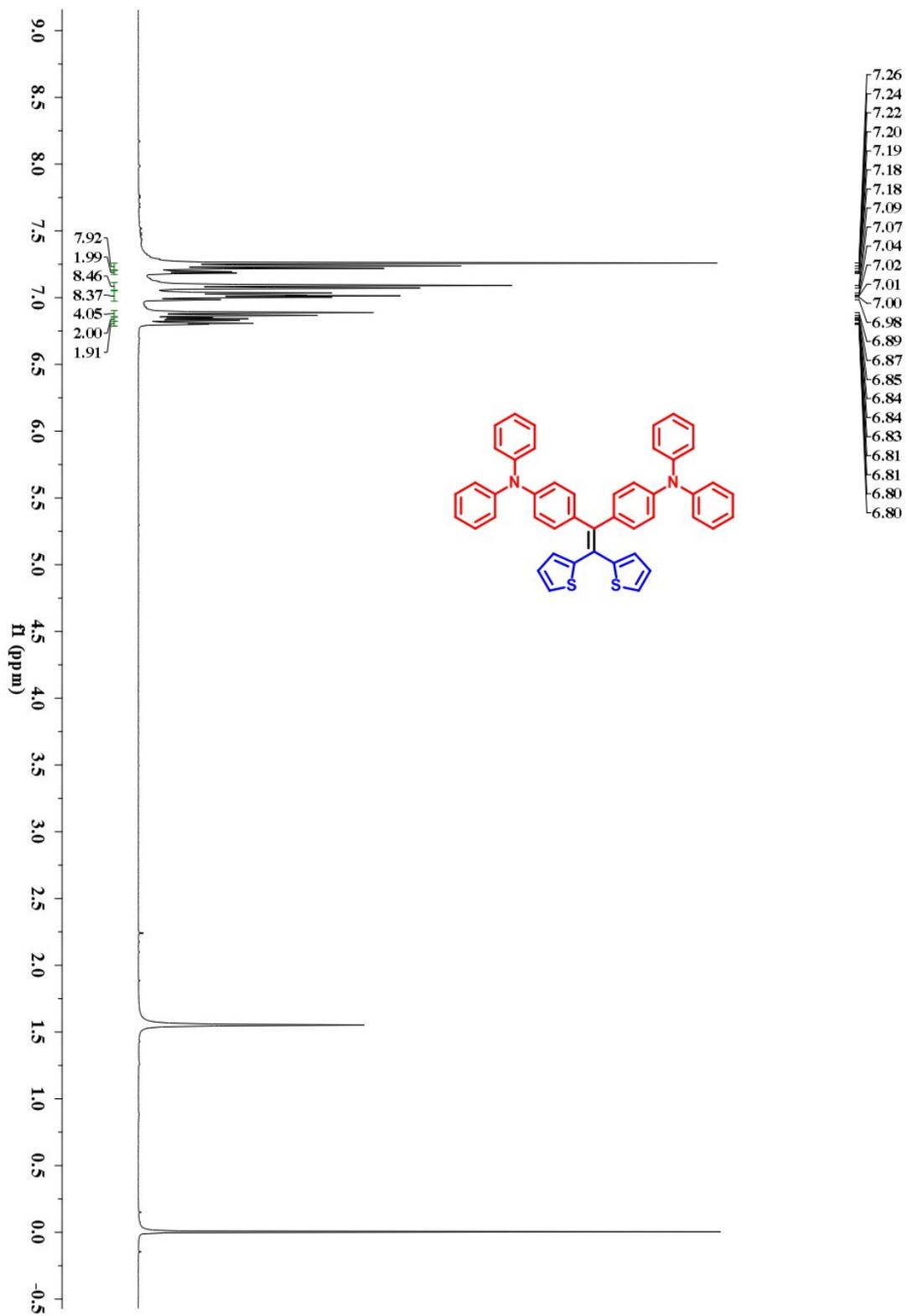
Copies of ^1H and ^{13}C NMR Spectra



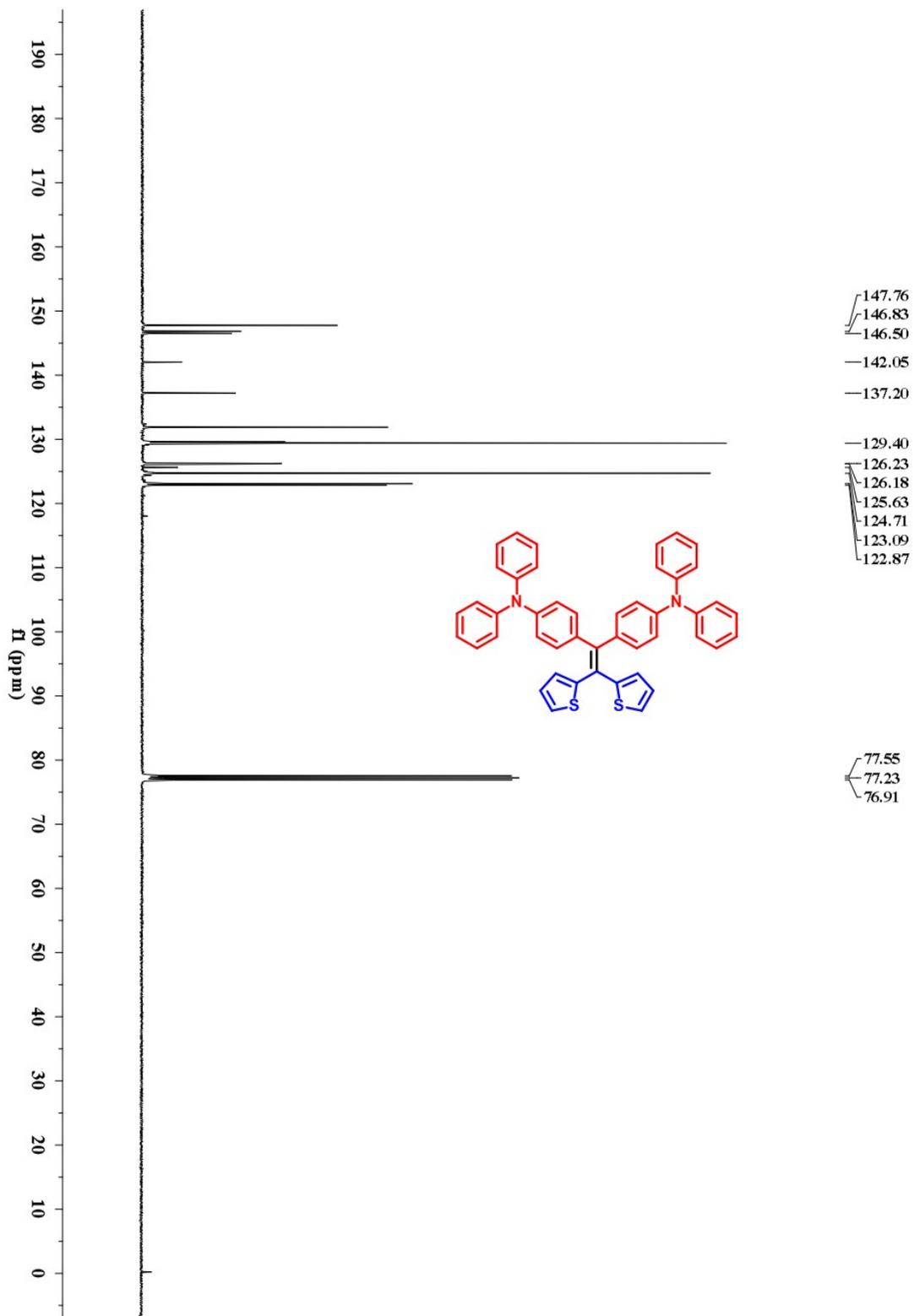
^1H NMR spectrum of 2



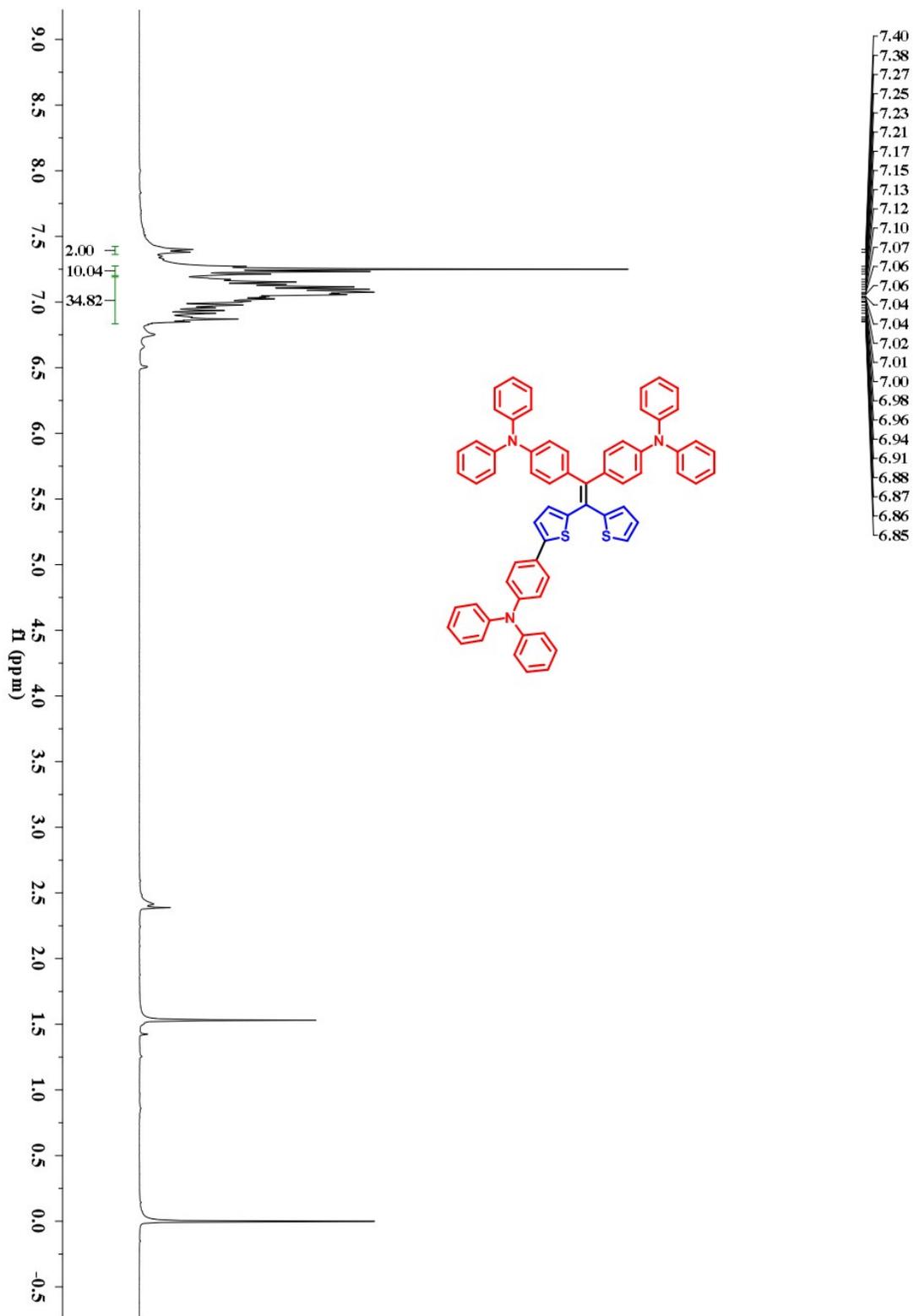
¹³C NMR spectrum of 2



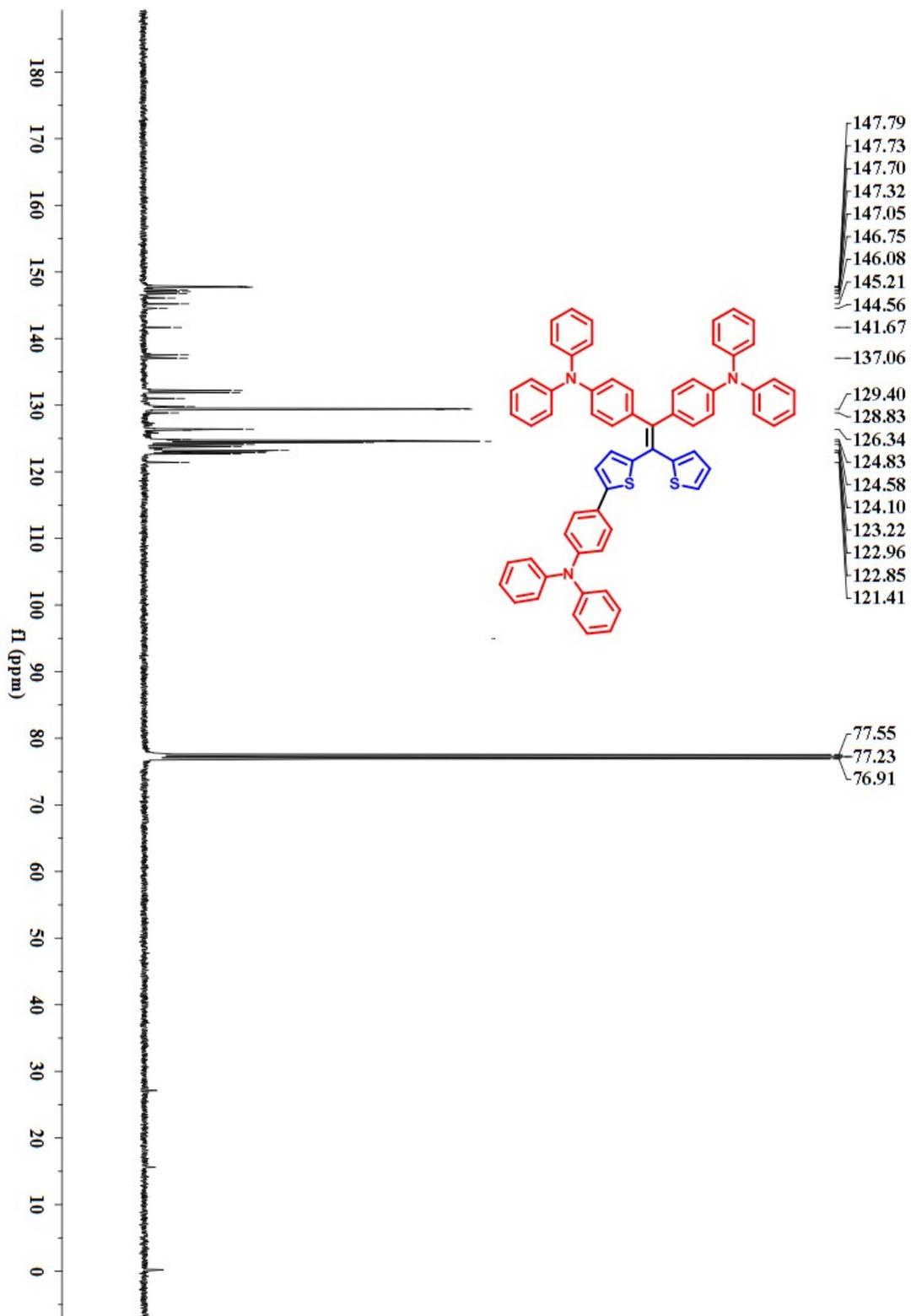
¹H NMR spectrum of DT2A



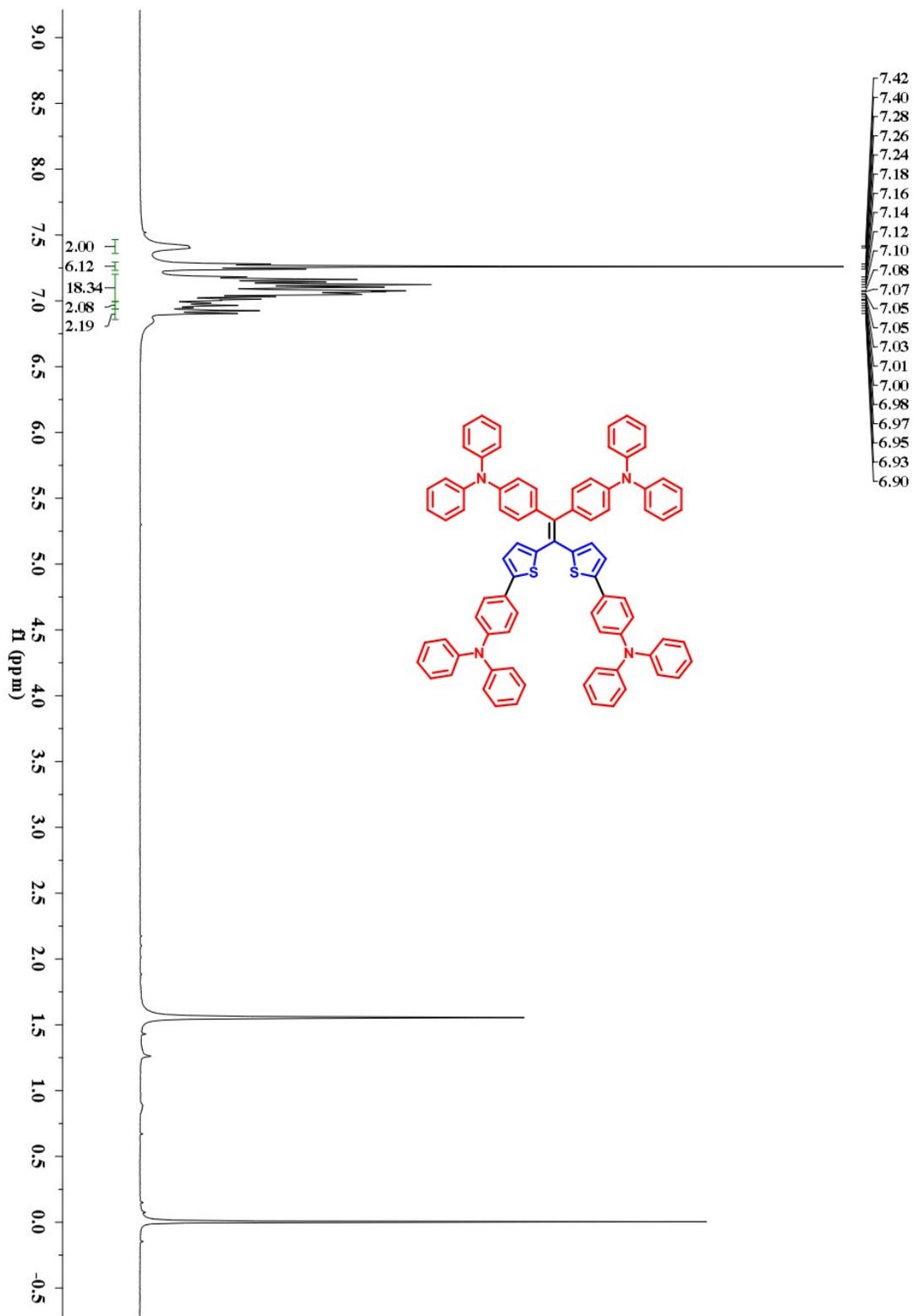
^{13}C NMR spectrum of DT2A



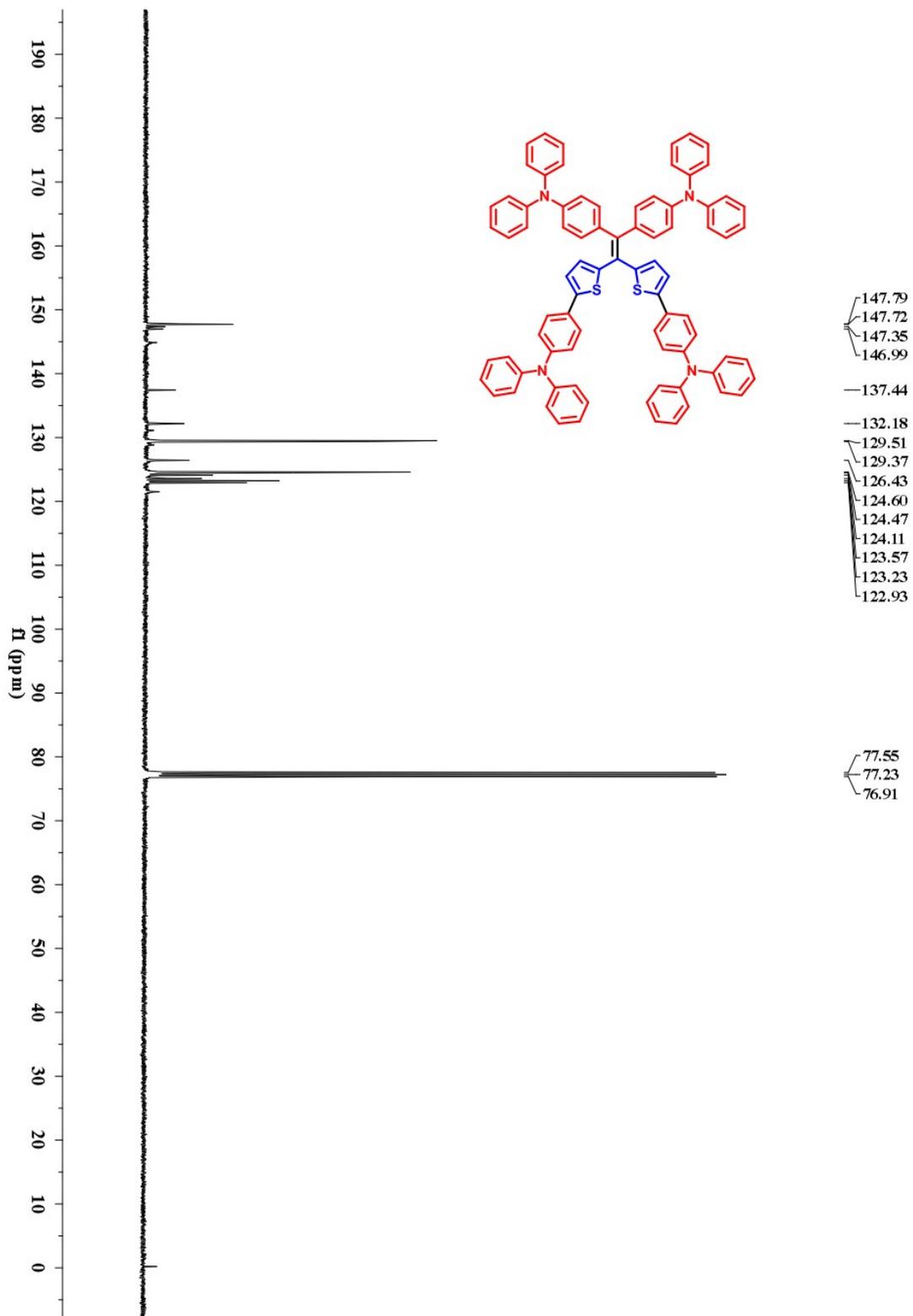
¹H NMR spectrum of DT3A



^{13}C NMR spectrum of DT3A



¹H NMR spectrum of DT4A



¹³C NMR spectrum of DT4A