

Supplementary Information

Heterometallic platinum(II) compounds with β -aminoethylferrocenes: synthesis, electrochemical behaviour and anticancer activity

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1.- Structural Characterization of Compounds 1 and 2

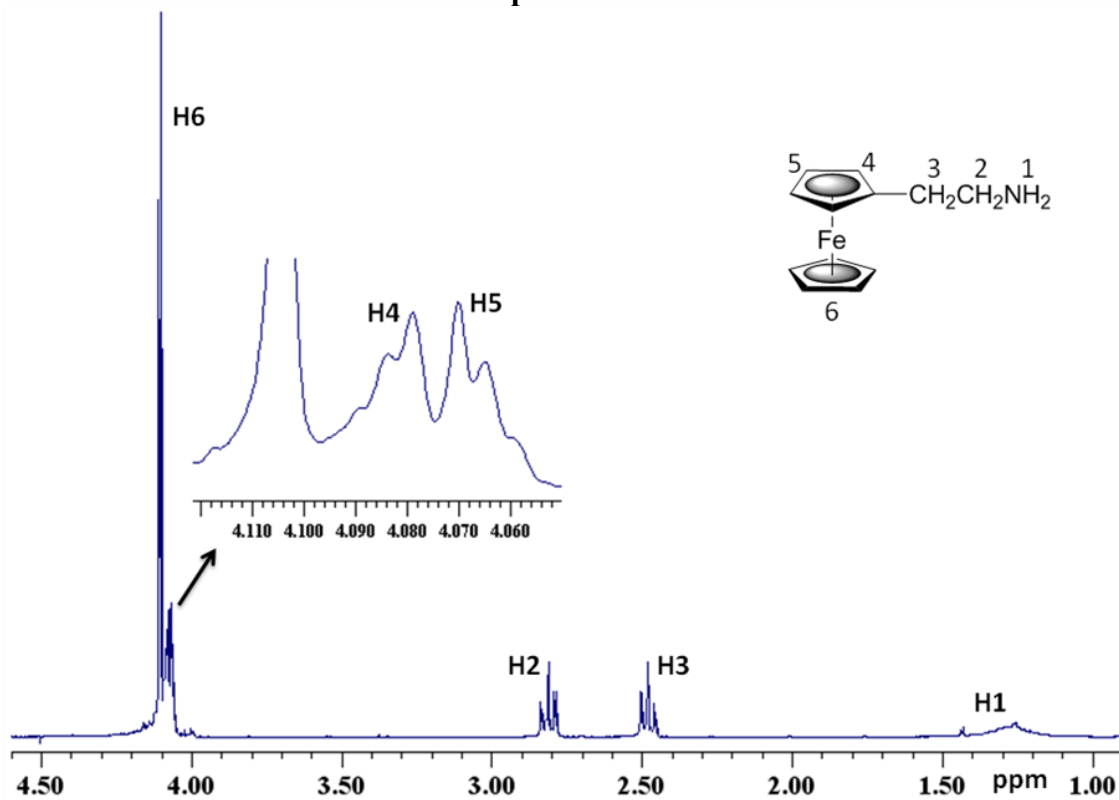


Figure S1. ^1H NMR spectrum (in CDCl_3 , 300 MHz) of compound 1 (inset: expanded view of cyclopentadienyl regions).

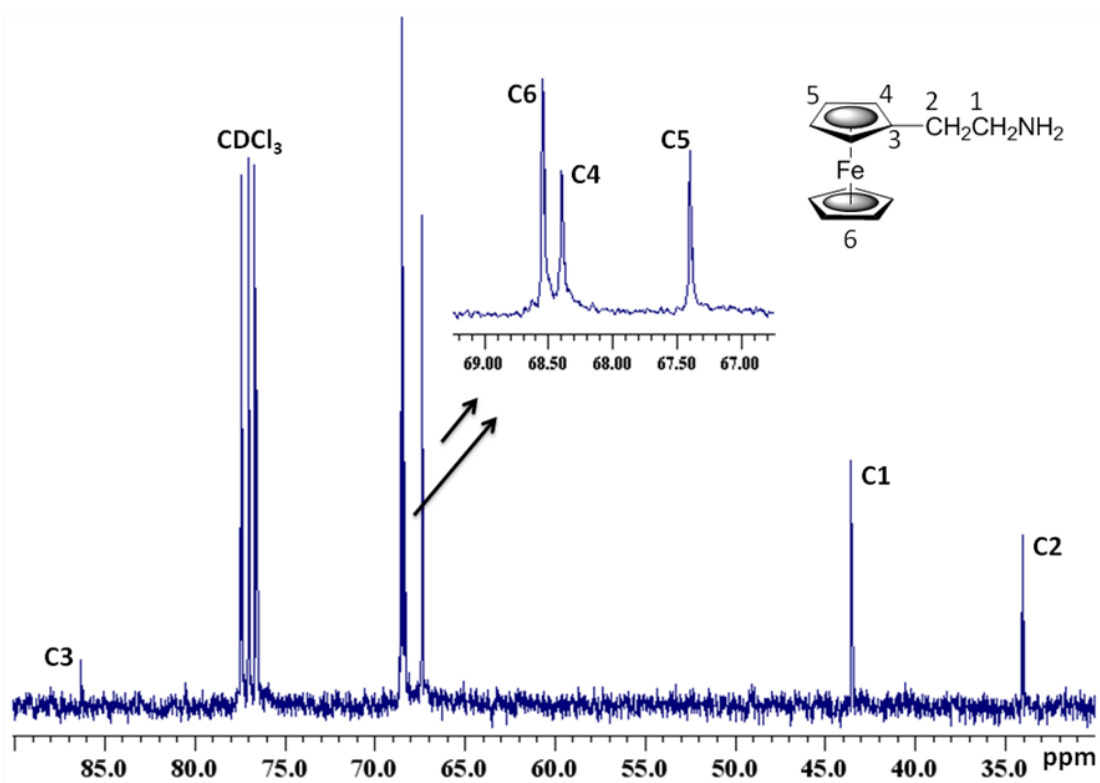


Figure S2. ^{13}C NMR spectrum (in CDCl_3 , 75 MHz) of compound 1 (inset: expanded view of cyclopentadienyl regions).

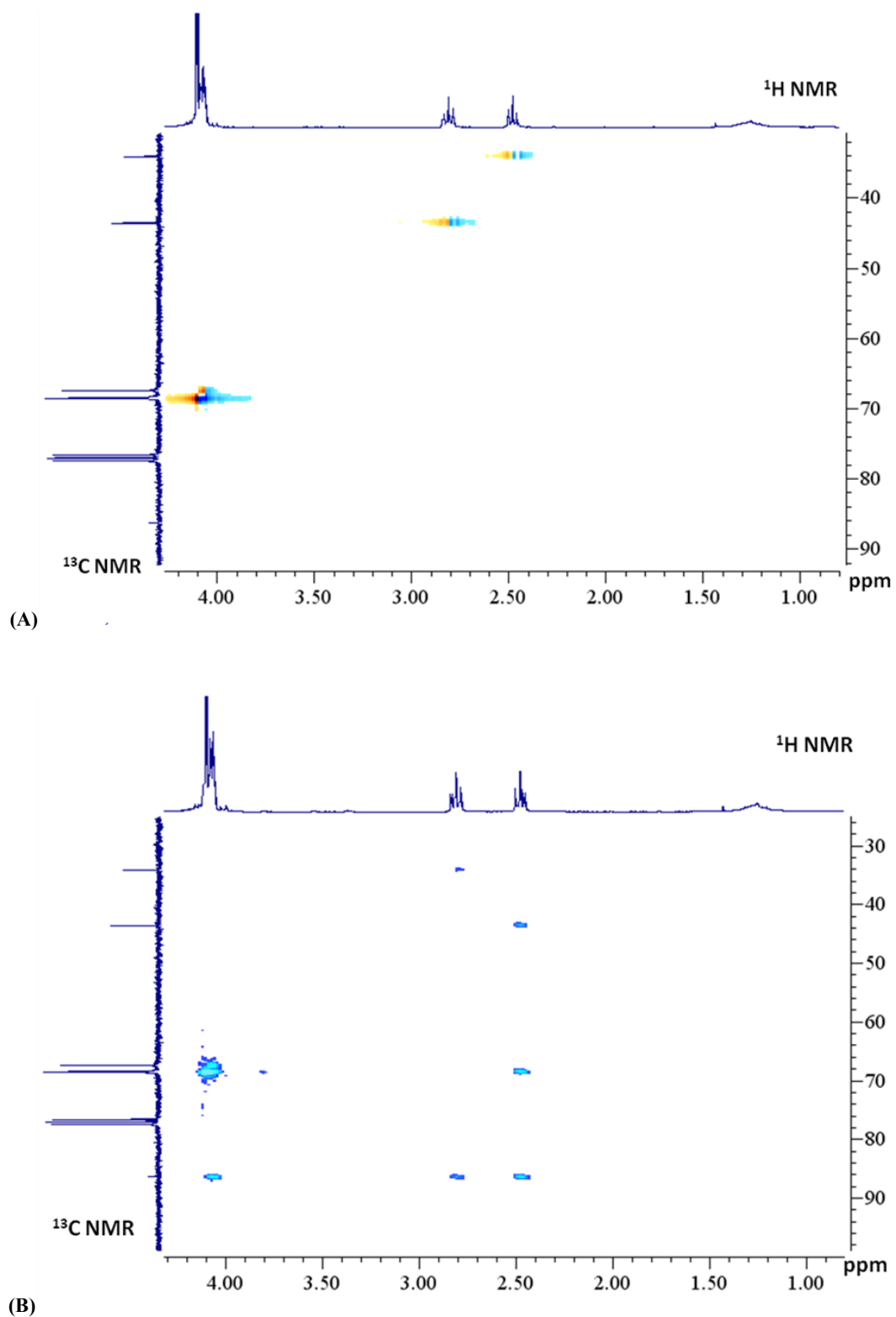


Figure S3. HMQC NMR spectrum (A) and HMBC NMR spectrum (B) (in CDCl_3 , 300 MHz) of **1**.

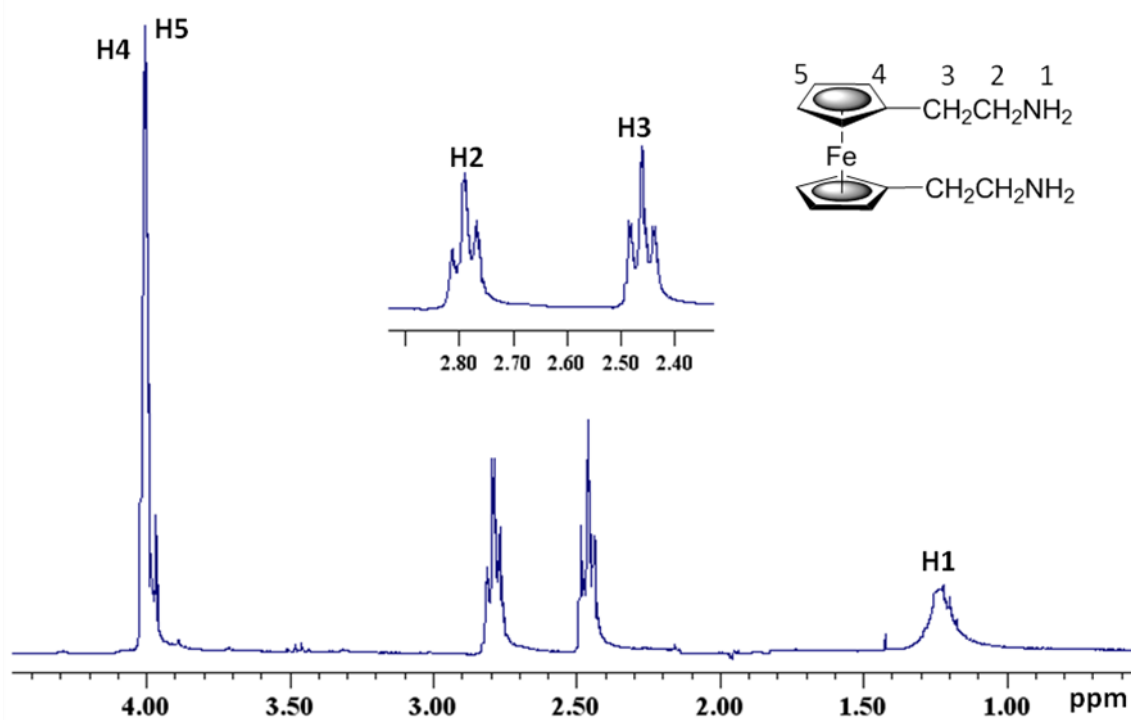


Figure S4. ¹H NMR spectrum (in CDCl₃, 300 MHz) of compound **2** (inset: expanded view of CH₂ regions).

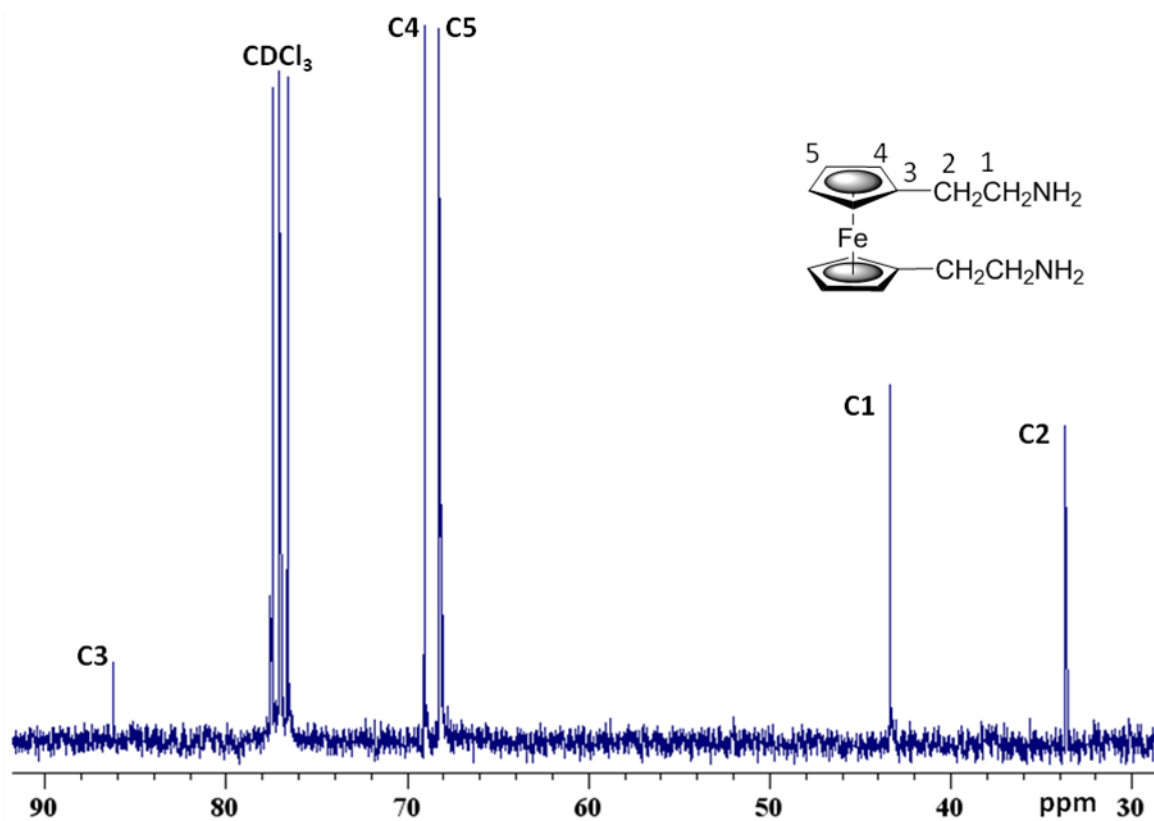


Figure S5. ¹³C NMR spectrum (in CDCl₃, 75 MHz) of compound **2**.

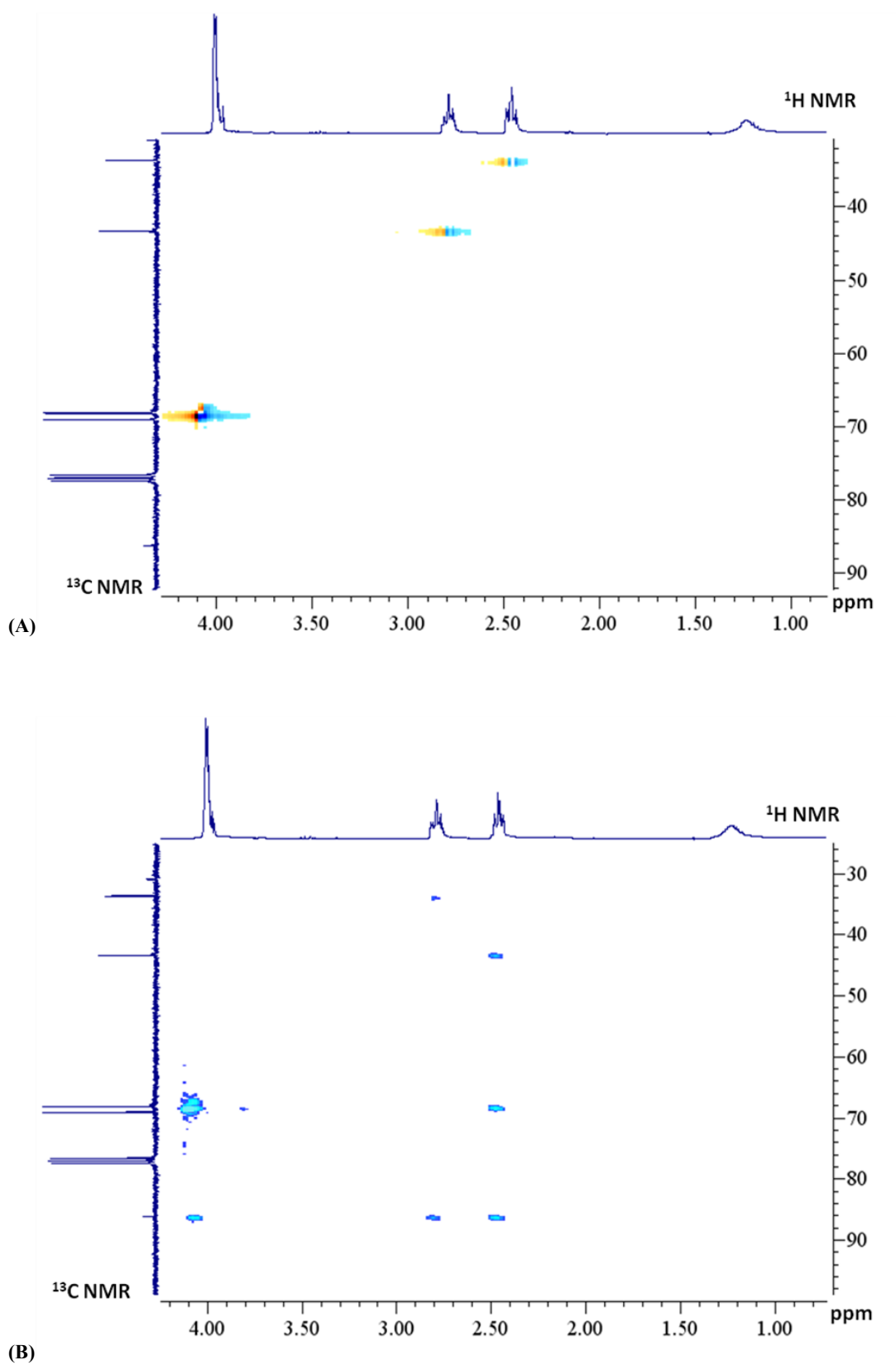


Figure S6. HMQC NMR spectrum (A) and HMBC NMR spectrum (B) (in CDCl₃, 300 MHz) of 2.

2.- Structural Characterization of Compounds 3 – 6

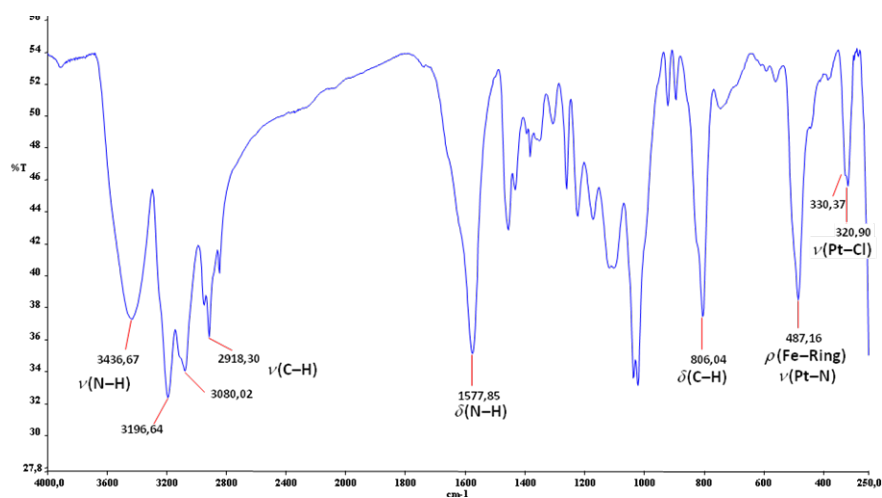


Figure S7. IR spectrum (in KBr) of compound 3.

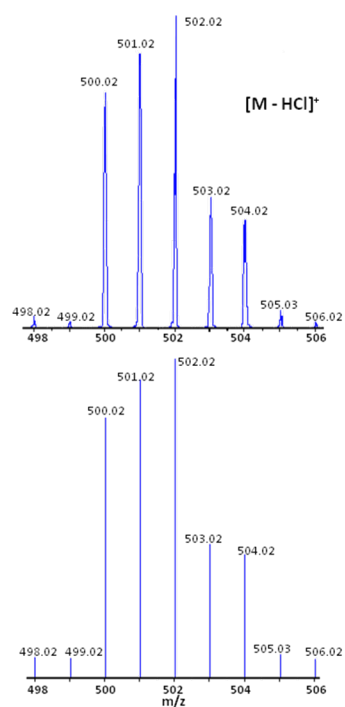


Figure S8. Mass spectrometry characterization by ESI for compound 3. Isotopic distribution of molecular ion pick of 3, experimental (top) and calculated (bottom).

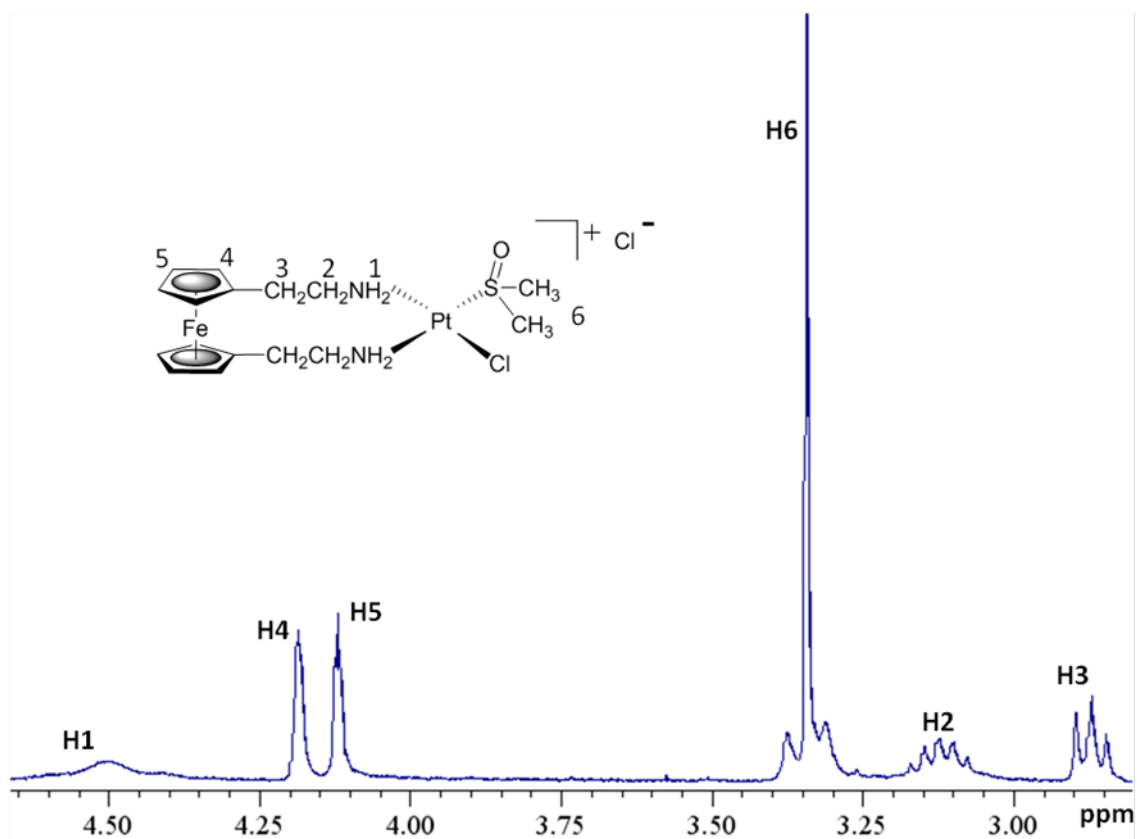


Figure S9. ¹H NMR spectrum (in (CD₃)₂CO, 300 MHz) of bimetallic compound 4.

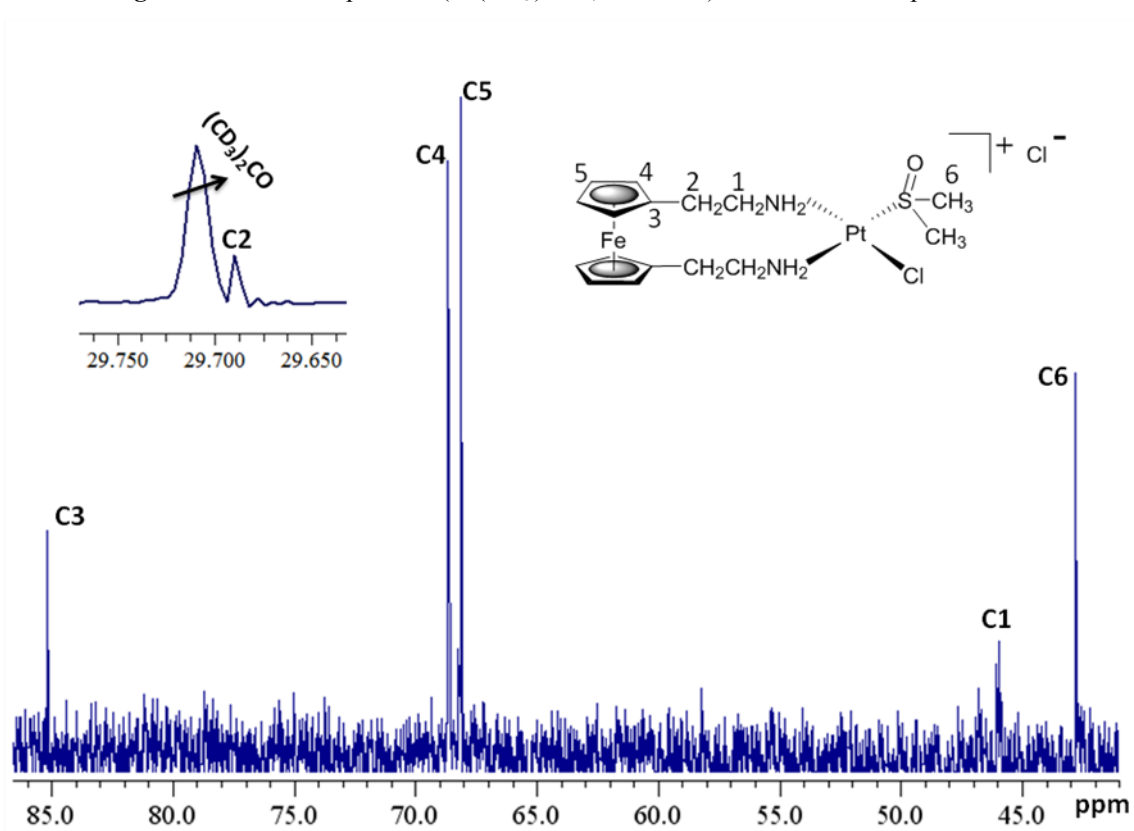


Figure S10. ¹³C NMR spectrum (in (CD₃)₂CO, 75 MHz) of bimetallic compound 4. (inset: expanded view of C2 signal).

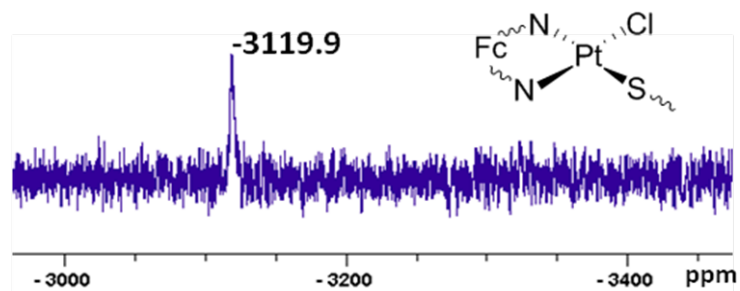


Figure S11. ^{195}Pt NMR spectrum (in $(\text{CD}_3)_2\text{CO}$, 64 MHz) of compound 4.

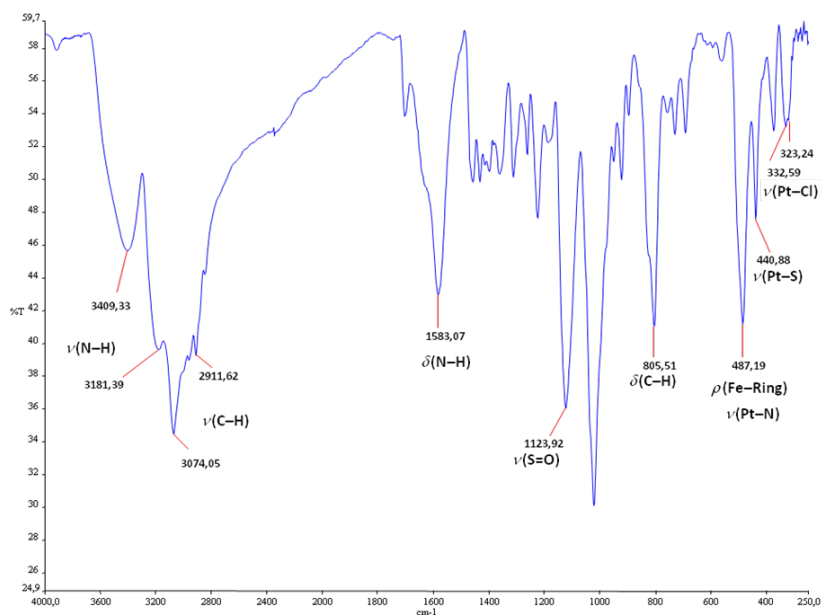


Figure S12. IR spectrum (in KBr) of compound 4.

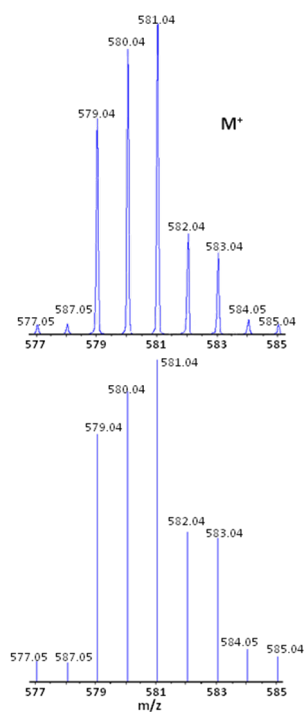


Figure S13. Mass spectrometry characterization by ESI for compound 4. Isotopic distribution of molecular ion pick of 4, experimental (top) and calculated (bottom).

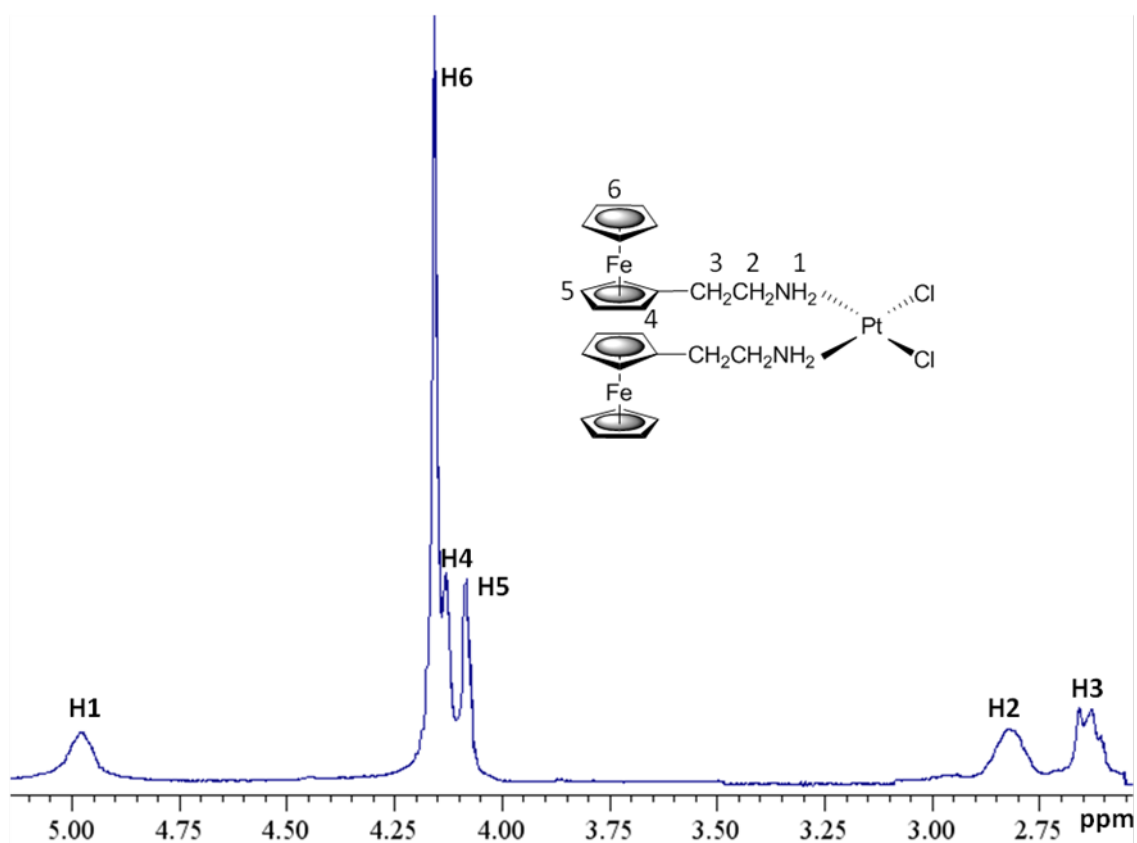


Figure S14. ^1H NMR spectrum (in dms0-d_6 , 300 MHz) of trimetallic compound **5**.

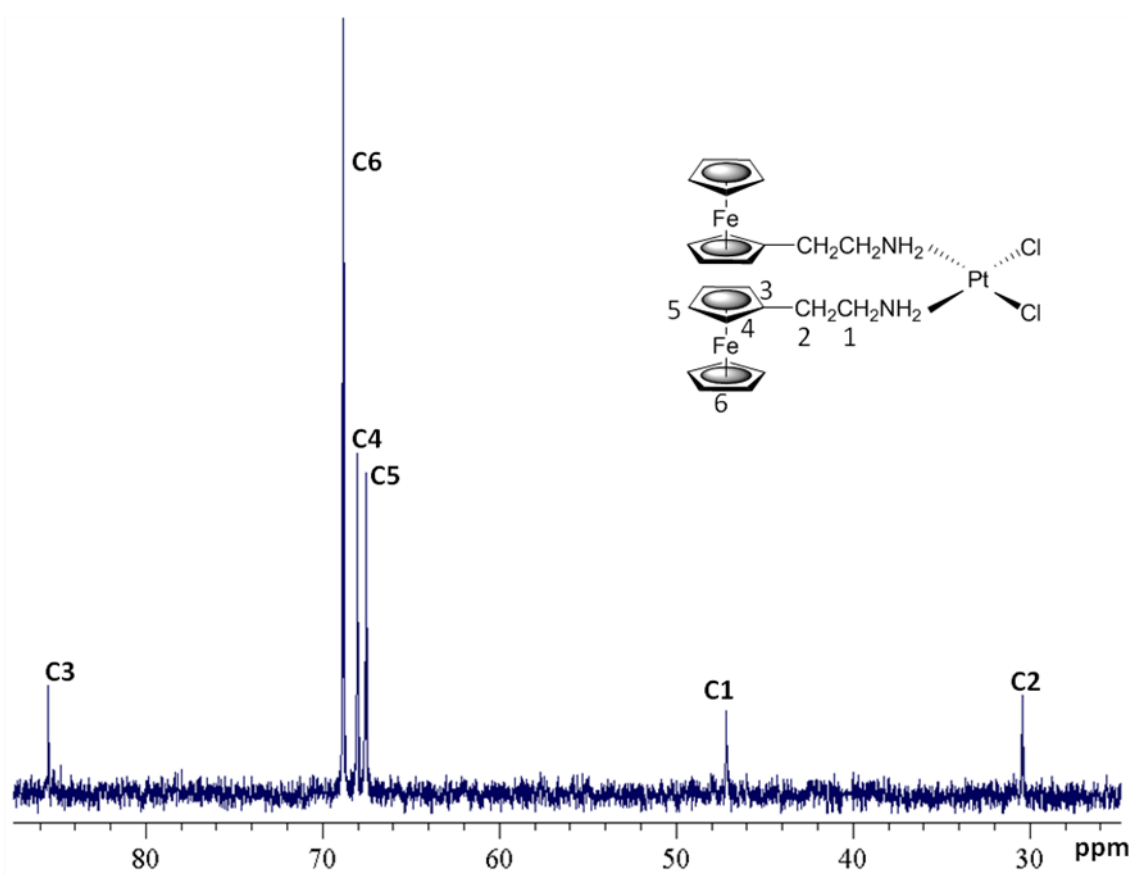


Figure S15. ^{13}C NMR spectrum (in dms0-d_6 , 75 MHz) of trimetallic compound **5**.

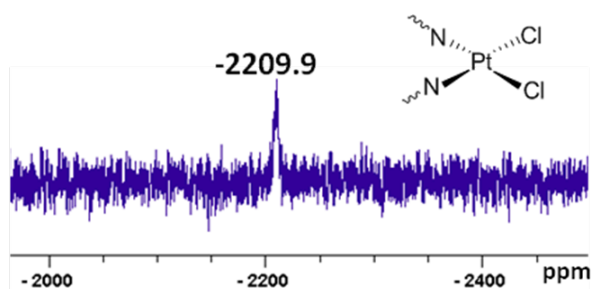


Figure S16. ^{195}Pt NMR spectrum (in $\text{dms}\text{-d}_6$, 64 MHz) of compound 5.

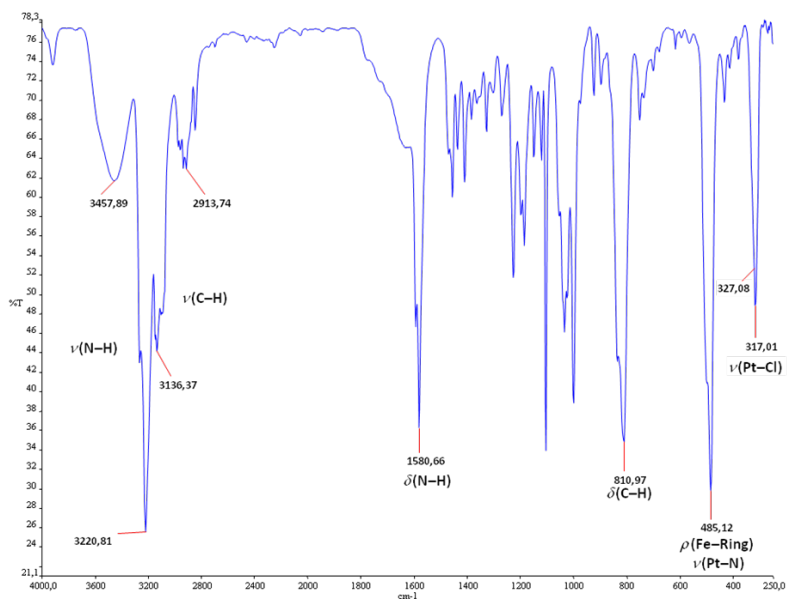


Figure S17. IR spectrum (in KBr) of compound 5.

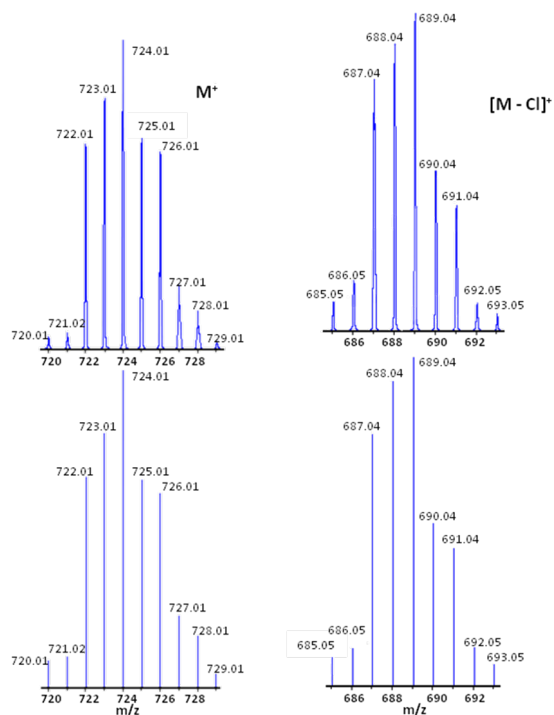


Figure S18. Mass spectrometry characterization by ESI for compound 5. Isotopic distribution of selected picks of 5, experimental (top) and calculated (bottom).

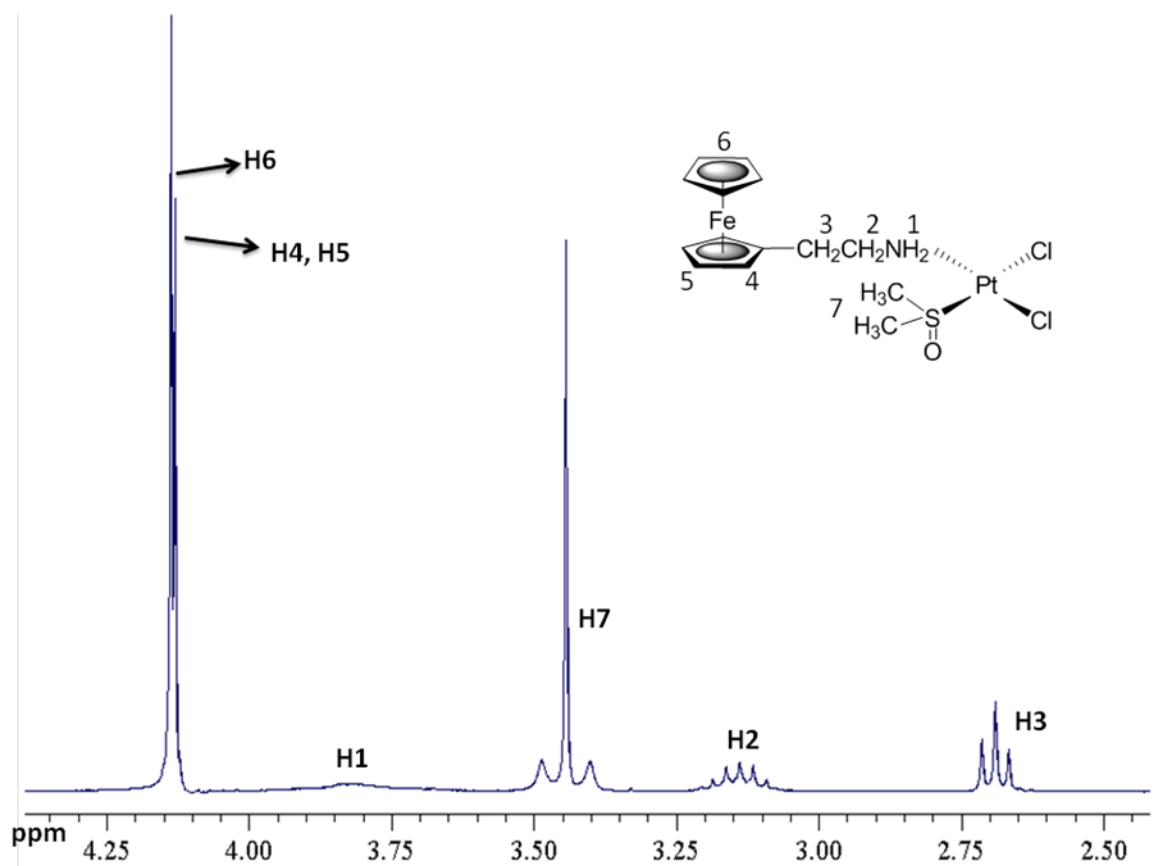


Figure S19. ¹H NMR spectrum (in CD₂Cl₂, 300 MHz) of bimetallic compound 6.

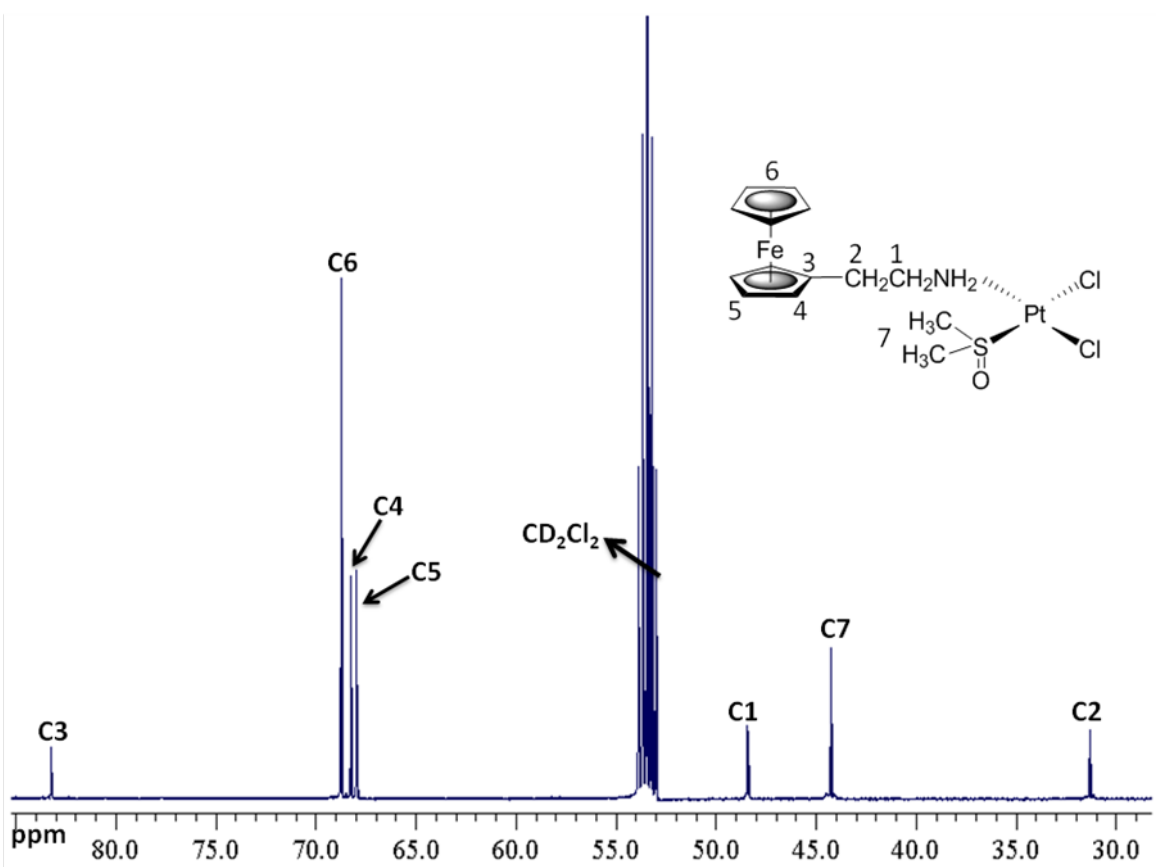


Figure S20. ¹³C NMR spectrum (in CD₂Cl₂, 125 MHz) of bimetallic compound 6.

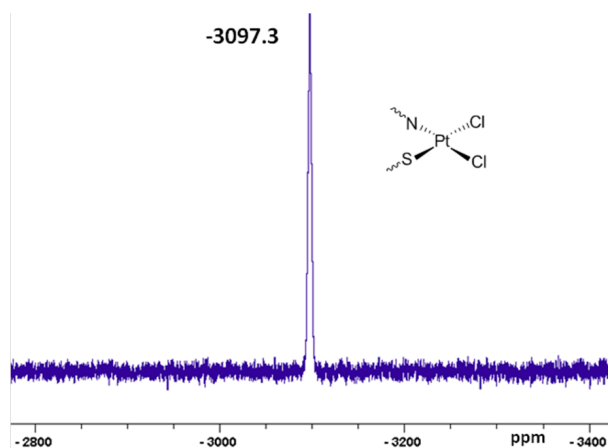


Figure S21. ^{195}Pt NMR spectrum (in CD_2Cl_2 , 107 MHz) of compound **6**.

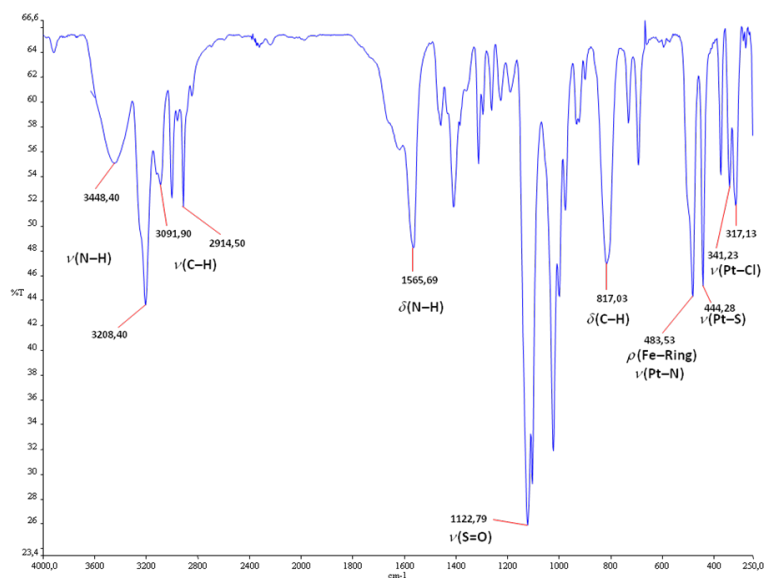


Figure S22. IR spectrum (in KBr) of compound **6**.

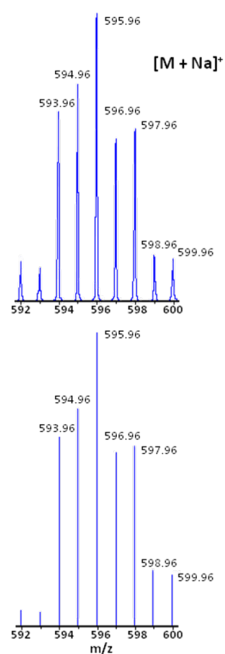


Figure S23. Mass spectrometry characterization by ESI for compound **6**. Isotopic distribution of molecular ion pick of **6**, experimental (top) and calculated (bottom).

3.- Electrochemistry of Compounds 3-6

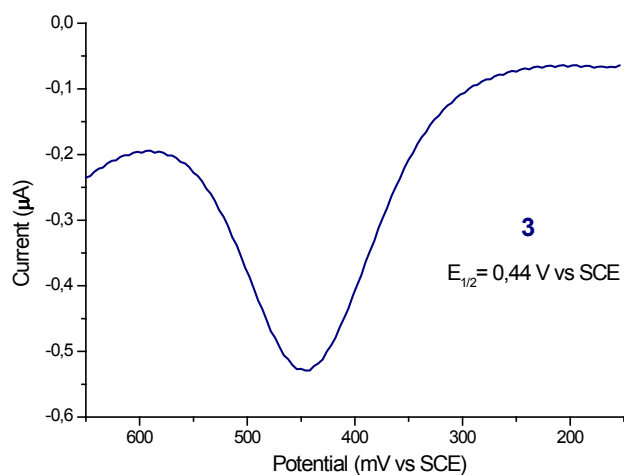


Figure S24. SWV response of compound 3 (5×10^{-4} M) recorded in dmso containing 0.1 M TBAPF₆.

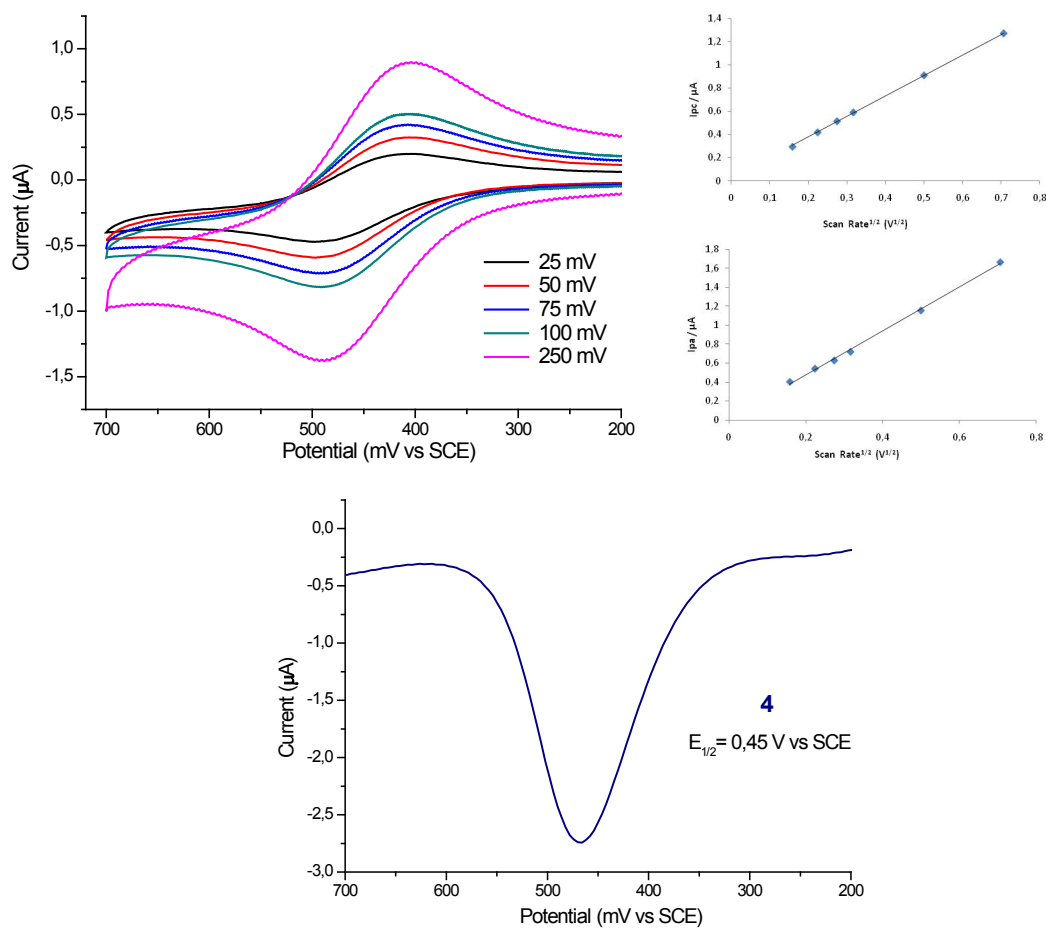


Figure S25. CV responses of compound 4 (5×10^{-4} M) recorded in dmso containing 0.1 M TBAPF₆, at different scan rates and plots of I_{pa} and I_{pc} against scan rate^{1/2} (top). SWV of compound 4 (bottom).

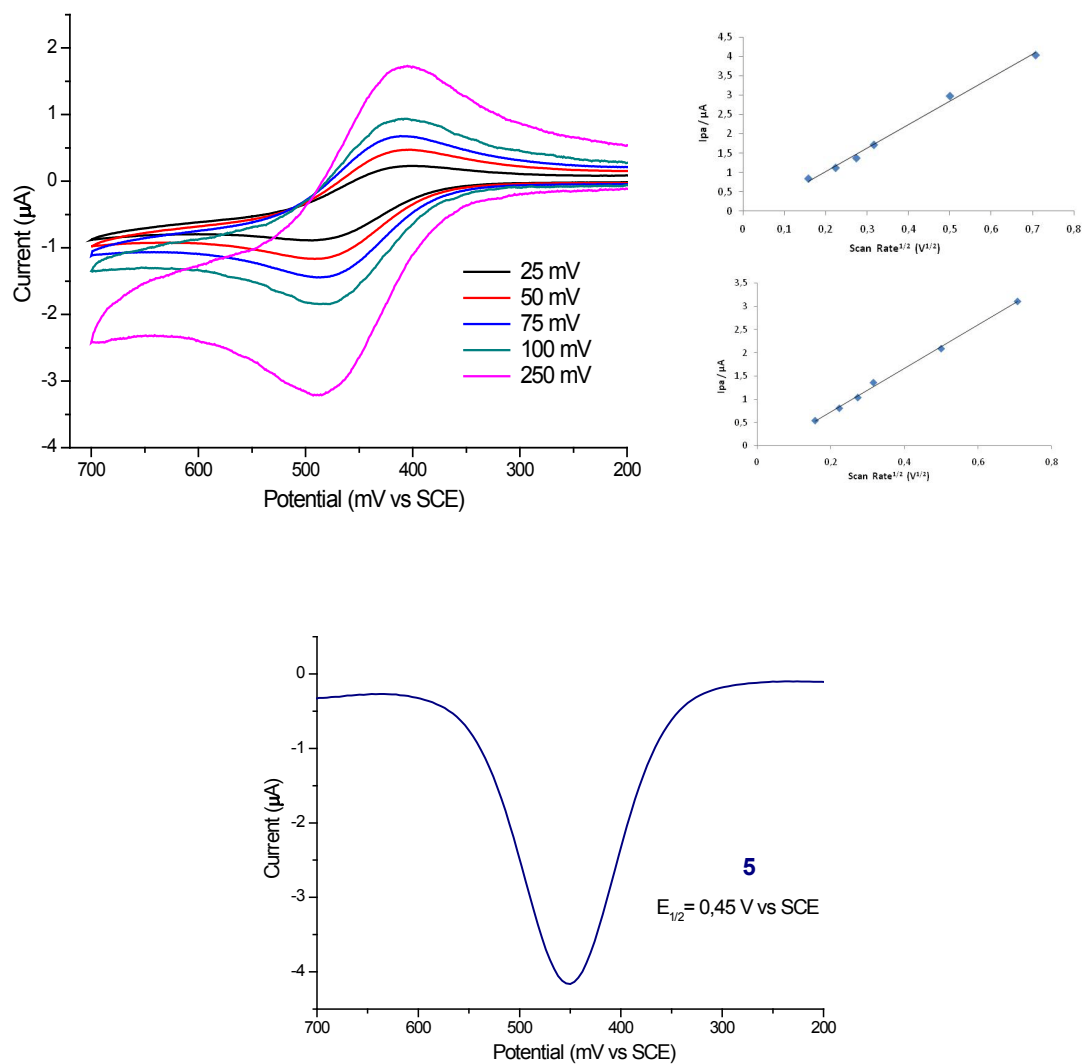


Figure S26. CV responses of trimetallic **5** ($5 \times 10^{-4} \text{ M}$) recorded in dmsO containing 0.1 M TBAPF₆, at different scan rates and plots of I_{pa} and I_{pc} against scan rate^{1/2} (top). SWV of compound **5** (bottom).

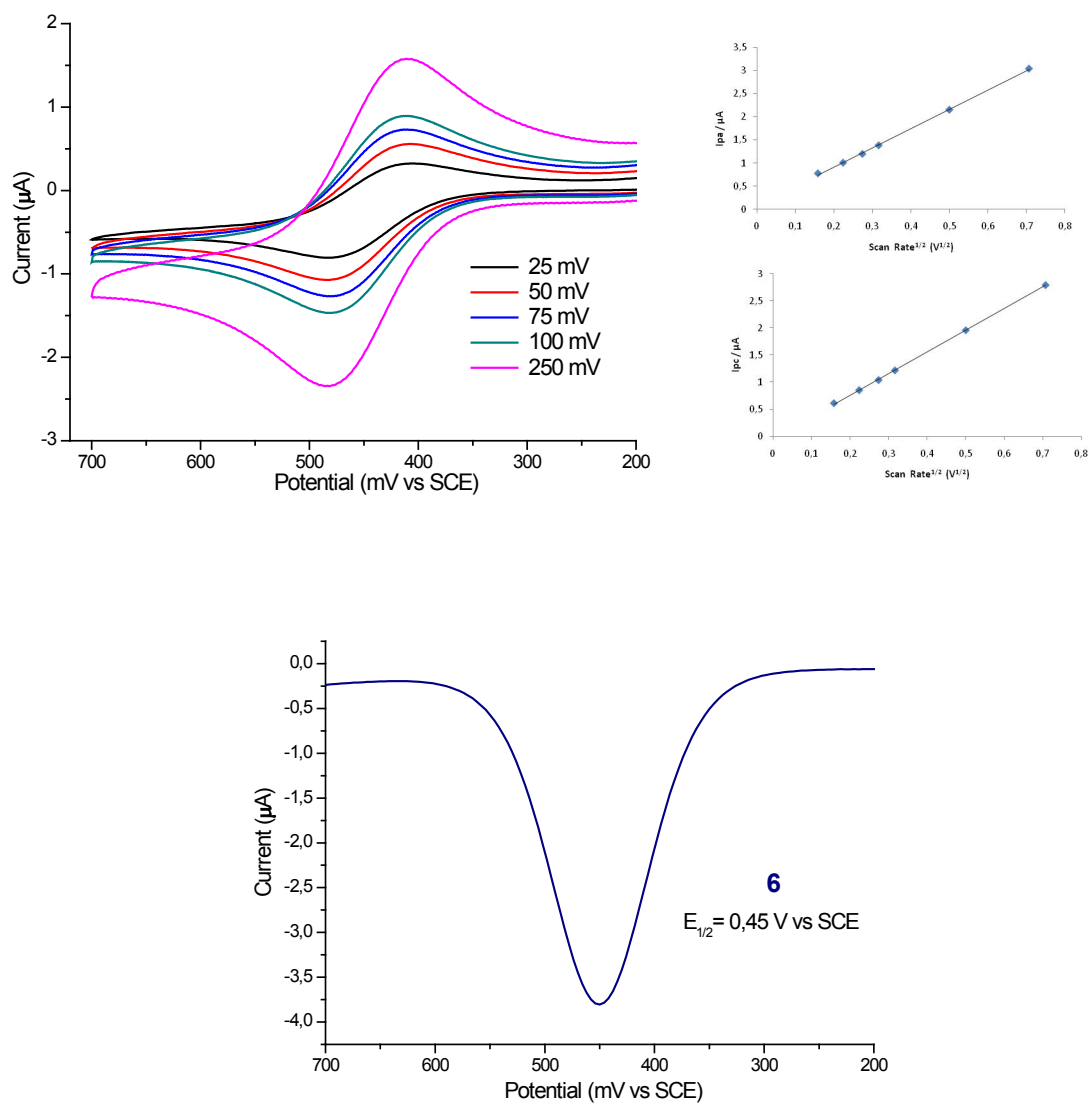


Figure S27. CV responses of compound **6** ($5 \times 10^{-4} \text{ M}$) recorded in dmsO containing 0.1 M TBAPF₆, at different scan rates and plots of I_{pa} and I_{pc} against scan rate^{1/2} (top). SWV of compound **6** (bottom).

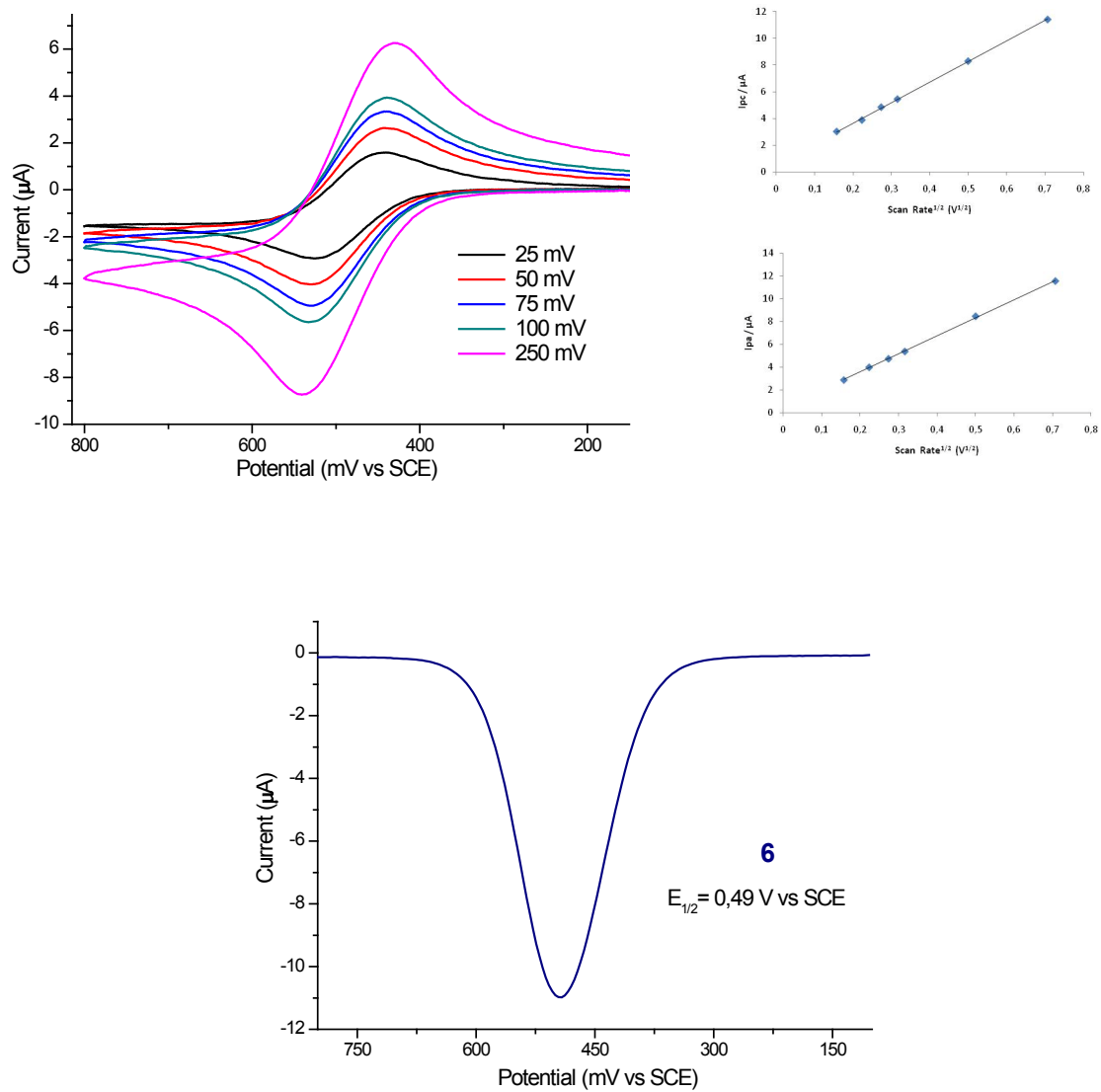


Figure S28. CV responses of compound **6** (10^{-3} M) recorded in CH_2Cl_2 containing 0.1 M TBAPF_6 , at different scan rates and plots of I_{pa} and I_{pc} against scan rate^{1/2} (top). SWV of compound **6** (bottom).