Supporting Information

N-Heterocyclic Carbene Copper (I) Complexes Incorporating Pyrene Chromophore: Synthesis, Crystal Structure, and Luminescent Properties

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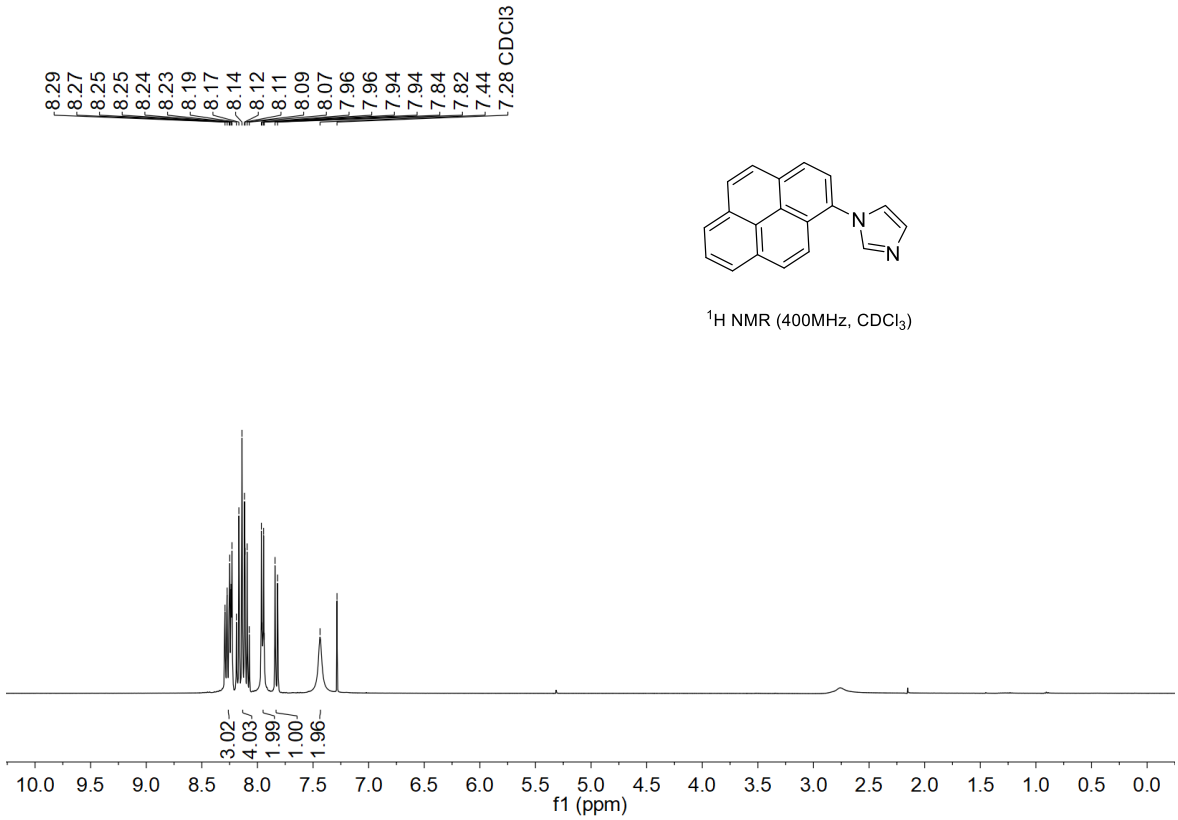

Figure S1. ^{1}H NMR of compound **1** in $CDCl_3$

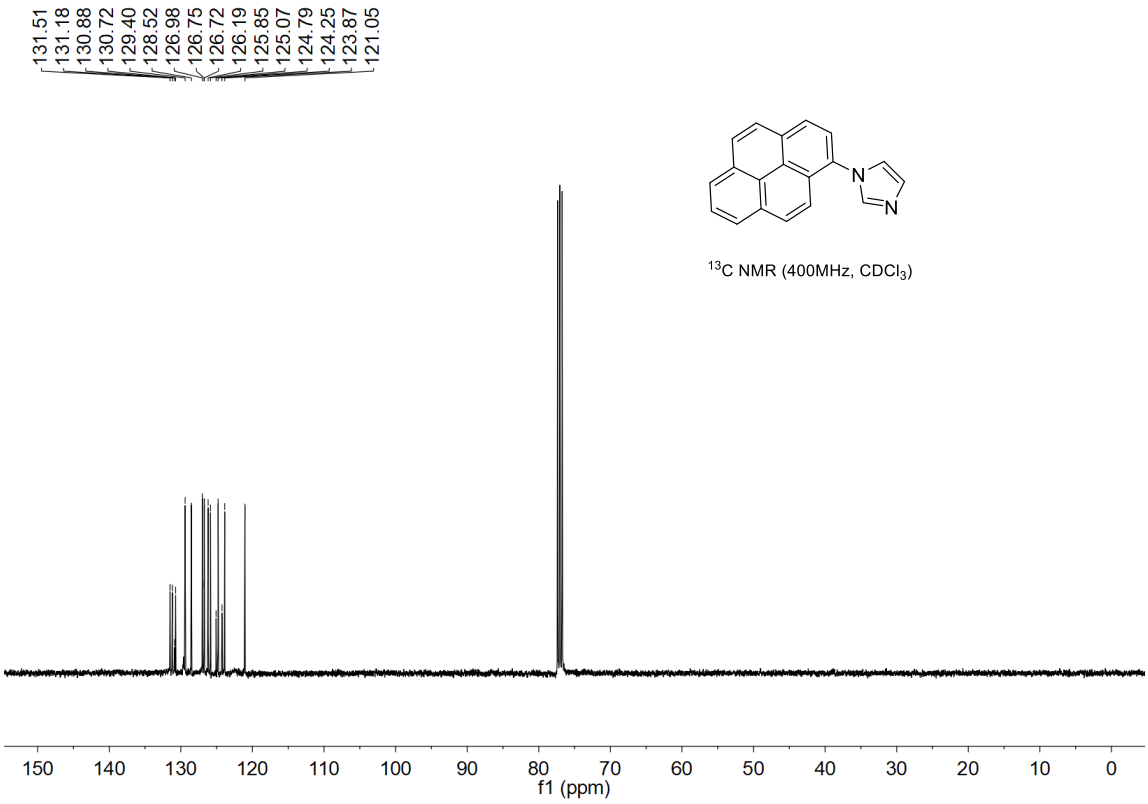

Figure S2. ^{13}C NMR of compound **1** in $CDCl_3$

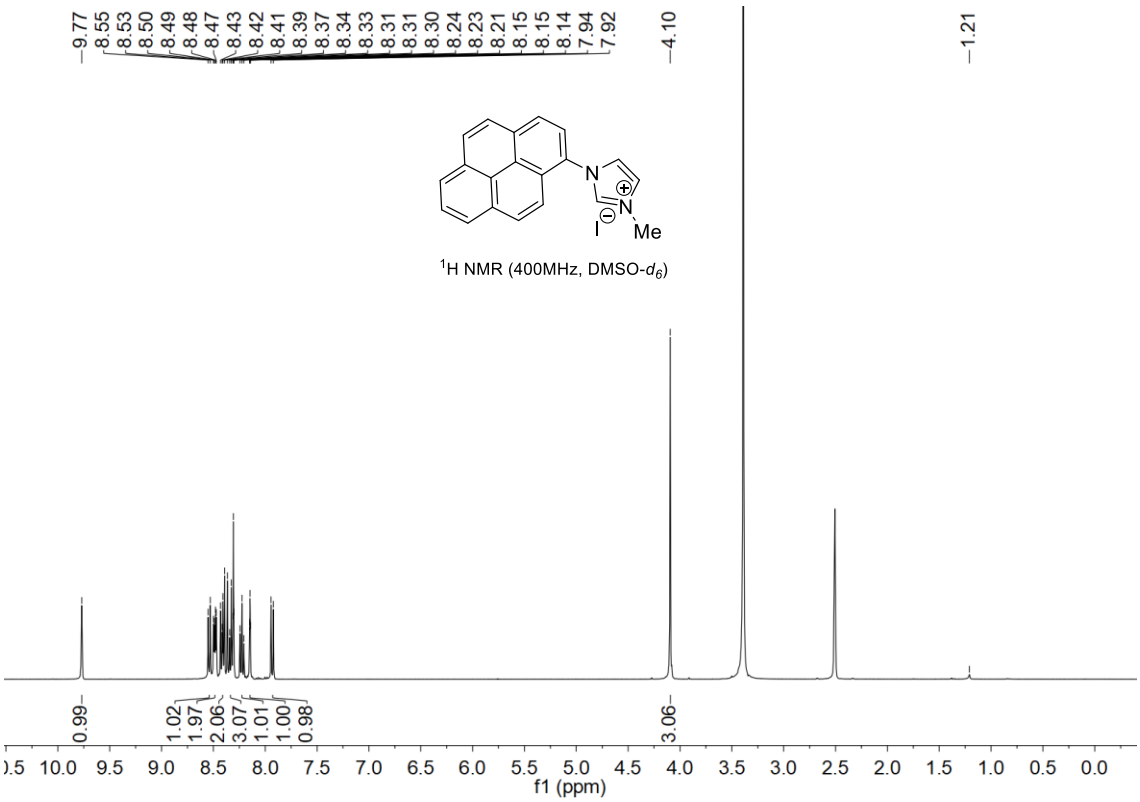

Figure S3. [1]H NMR of compound **2a** in DMSO

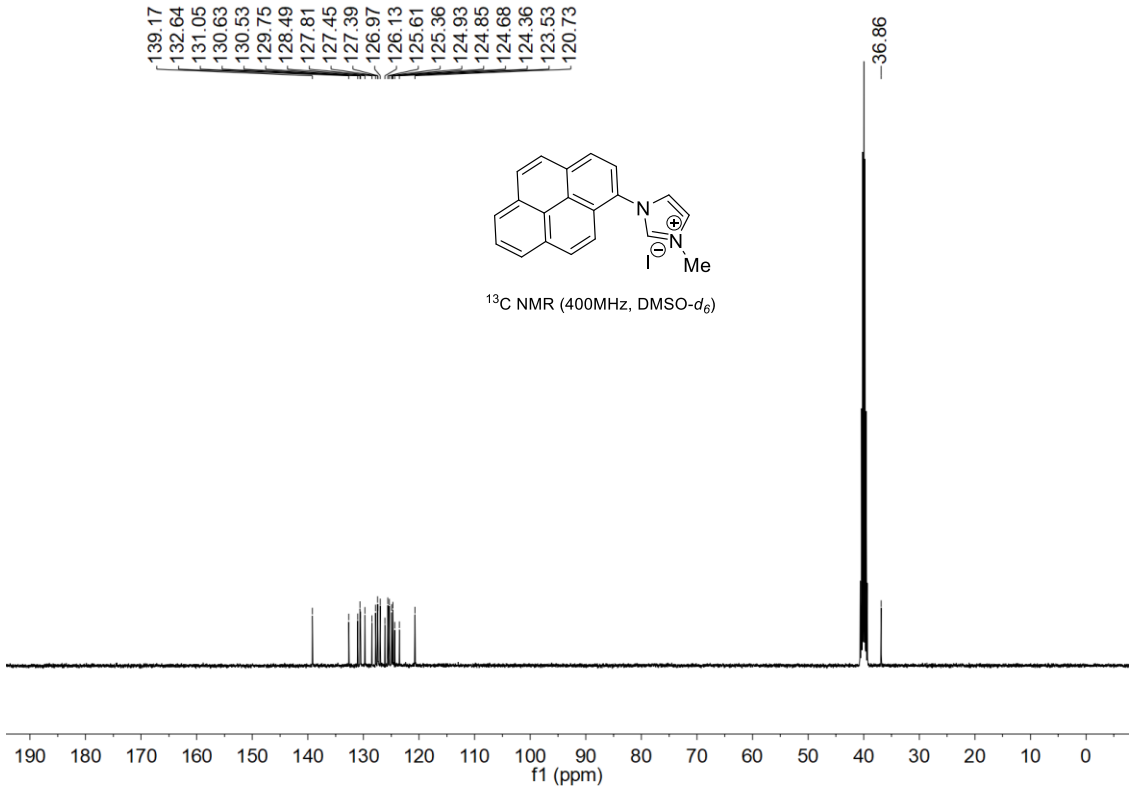

Figure S4. [13]C NMR of compound **2a** in DMSO

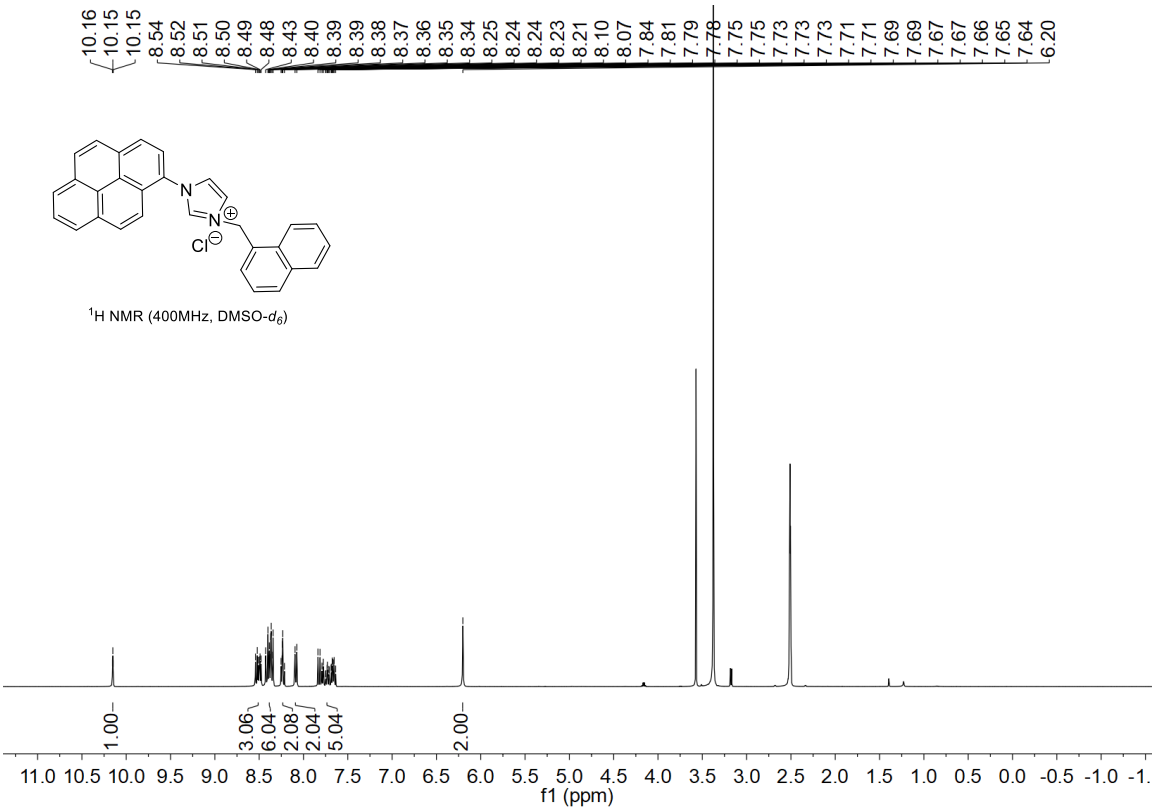

Figure S5. [1]H NMR of compound **2b** in DMSO

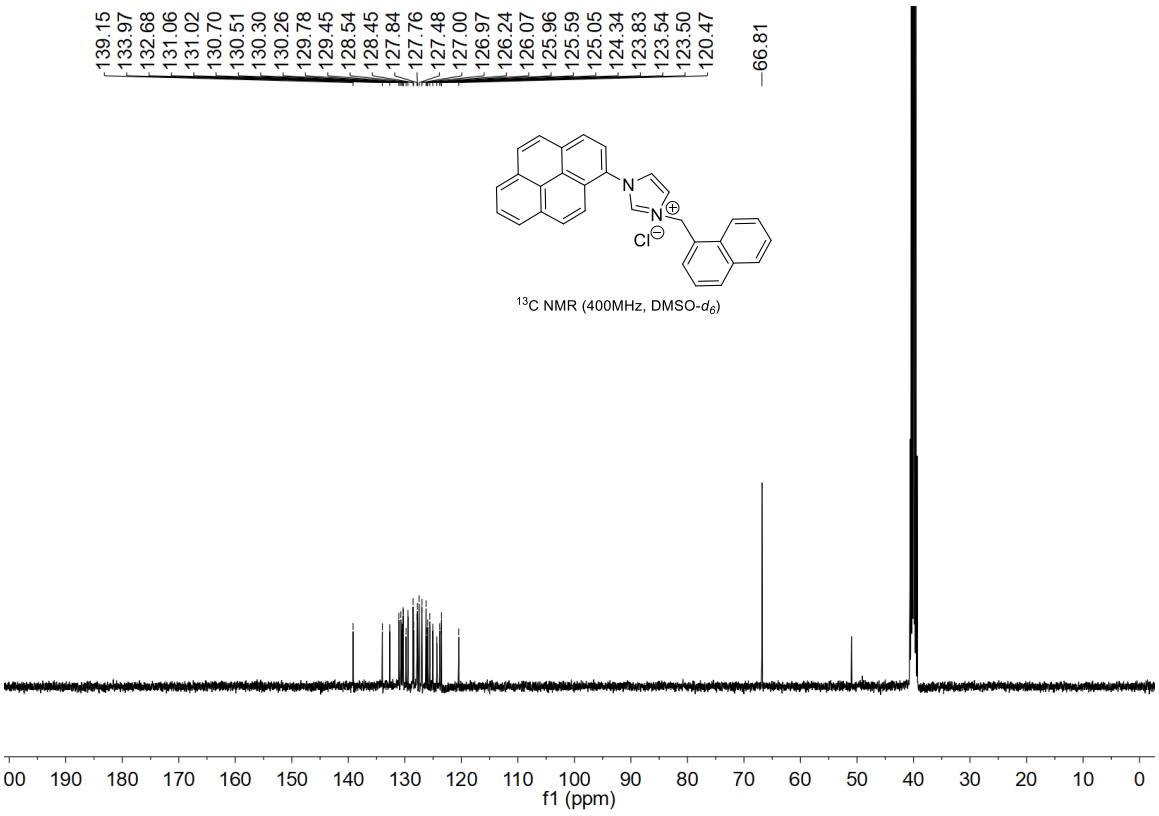

Figure S6. [13]C NMR of compound **2b** in DMSO

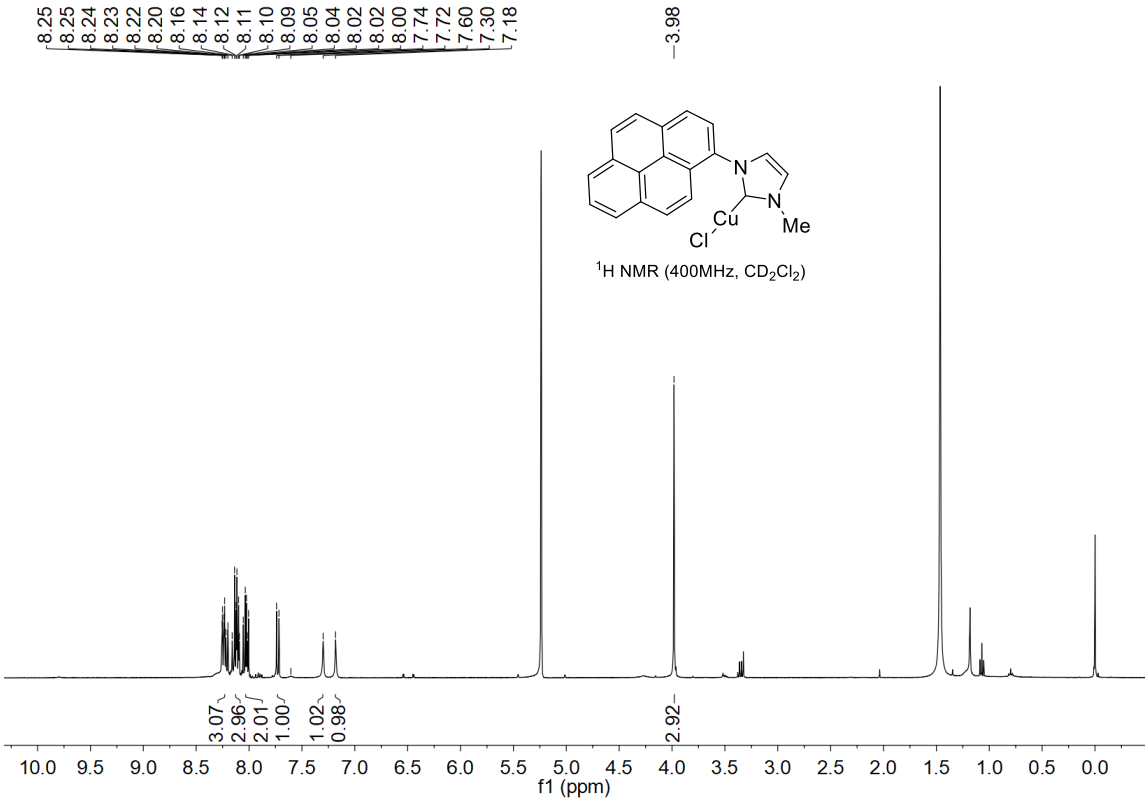

Figure S7. ^{1}H NMR of complex **3** in CD_2Cl_2

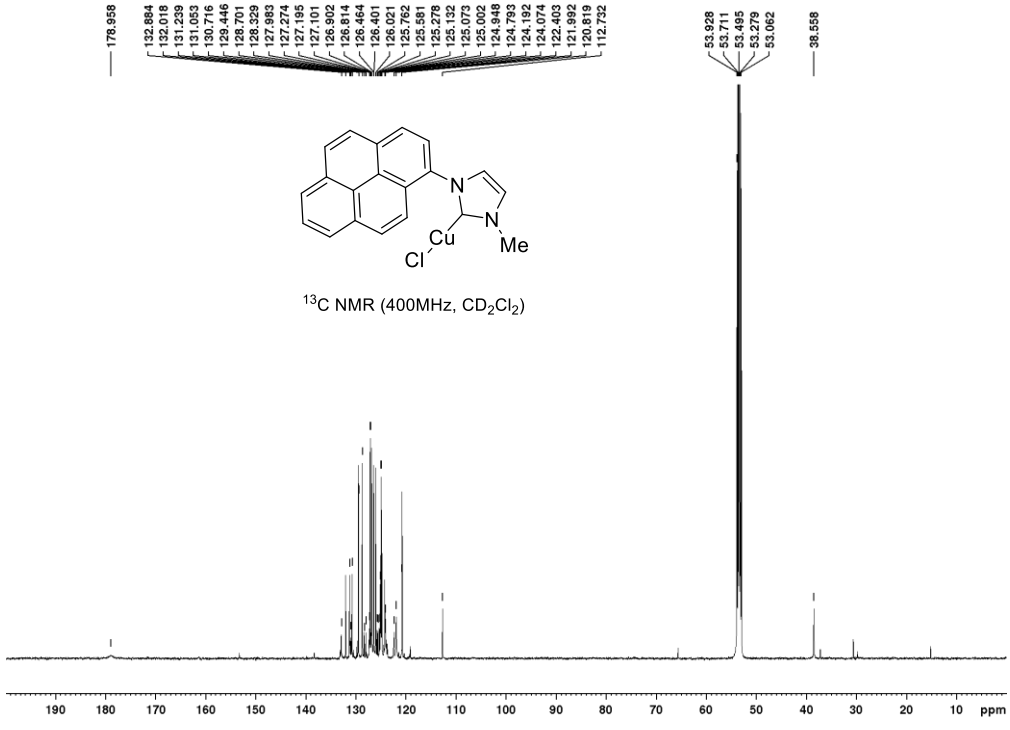

Figure S8. ^{13}C NMR of complex **3** in CD_2Cl_2

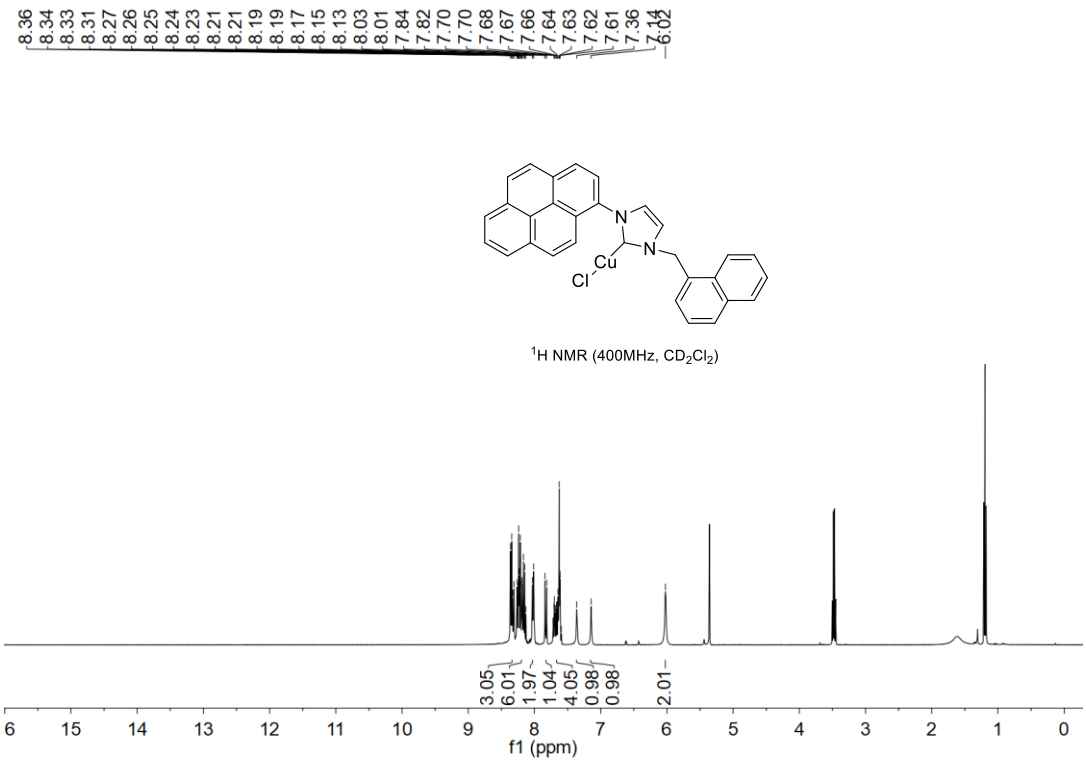

Figure S9. ^{1}H NMR of complex **4** in CD_2Cl_2

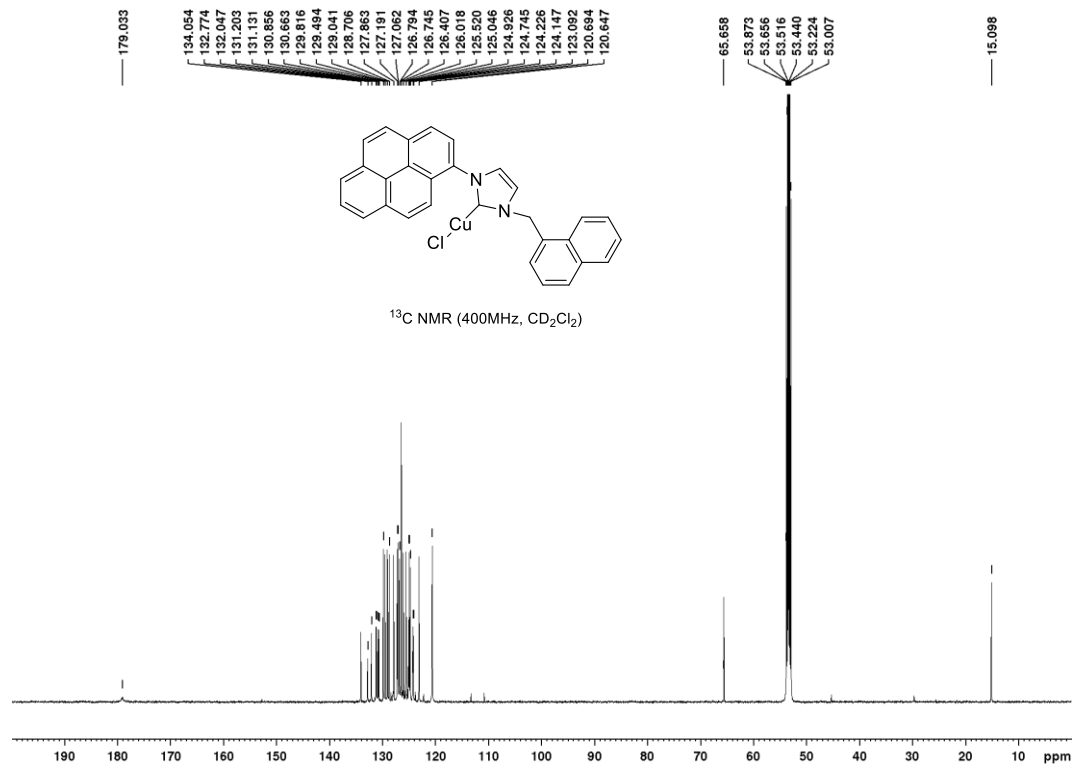

Figure S10. ^{13}C NMR of complex **4** in CD_2Cl_2

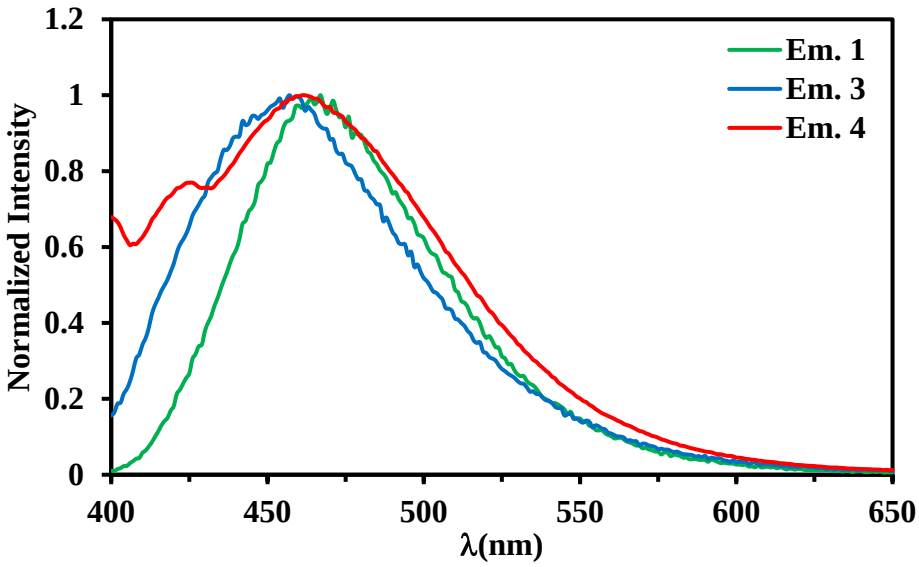

Figure S11. Normalized emission spectra of ligand **1** and complexes **3-4** in solid-state at rt.

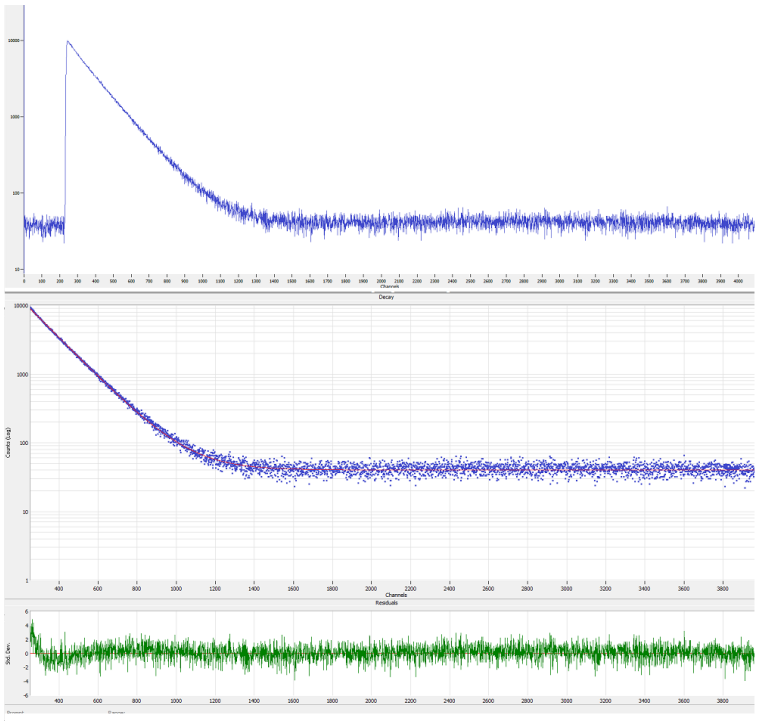

Figure S12. Emission decay (blue), best fit (red) and residuals (green) of **1** in CH_2Cl_2 at rt; $\chi^2 = 1.123$.

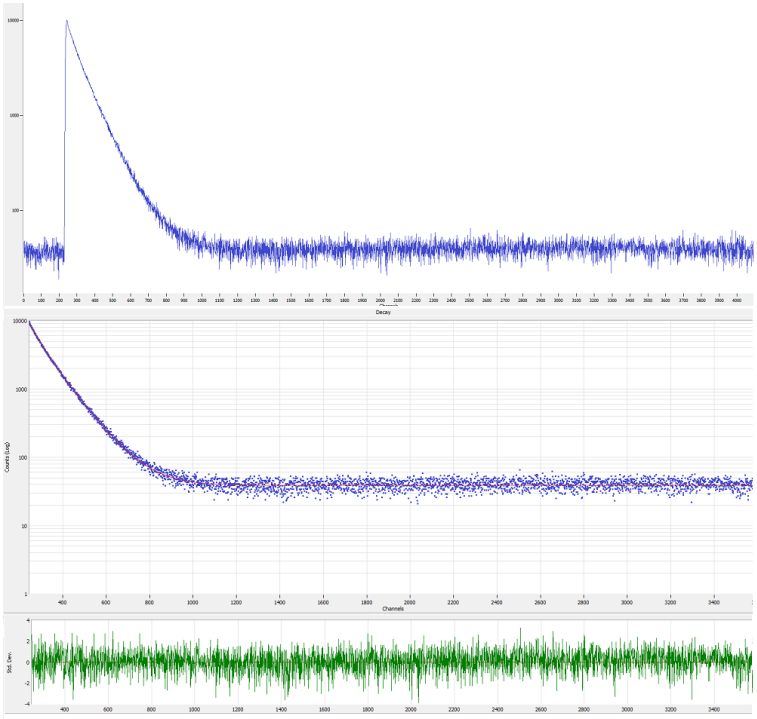

Figure S13. Emission decay (blue), best fit (red) and residuals (green) of **3** in CH_2Cl_2 at rt; $\chi^2 = 1.050$.

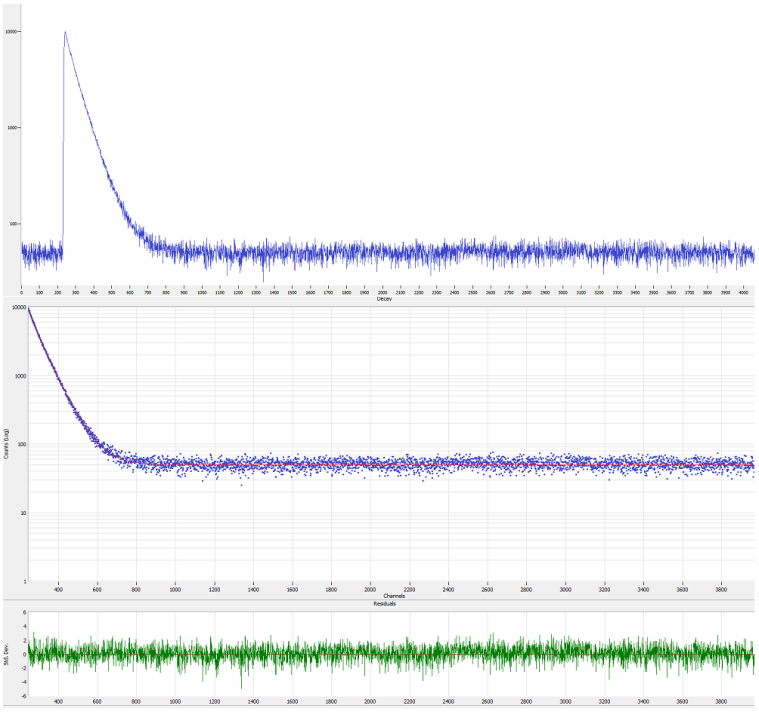

Figure S14. Emission decay (blue), best fit (red) and residuals (green) of **4** in CH_2Cl_2 at rt; $\chi^2 = 1.056$.

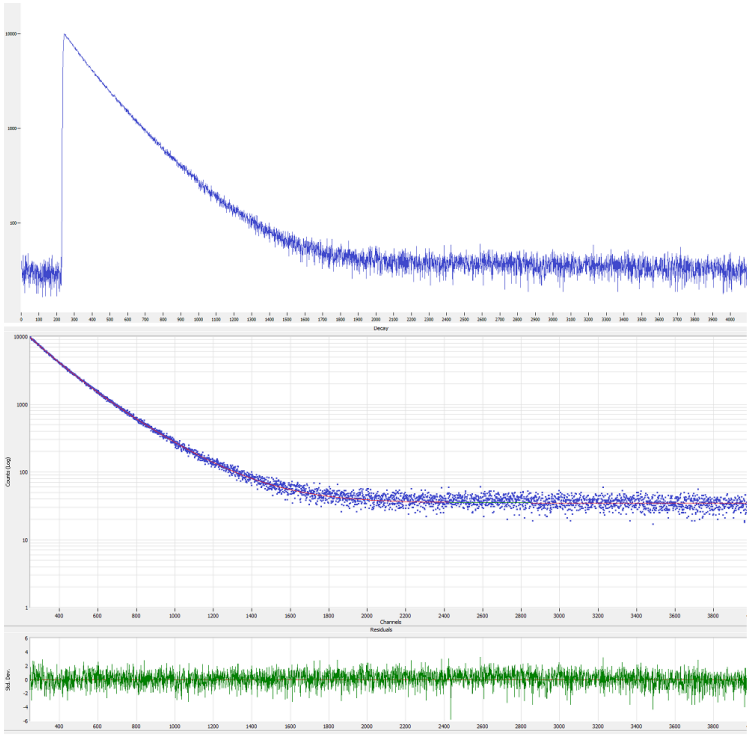

Figure S15. Emission decay (blue), best fit (red) and residuals (green) of **1** in solid-state at rt; $\chi^2 = 1.084$.

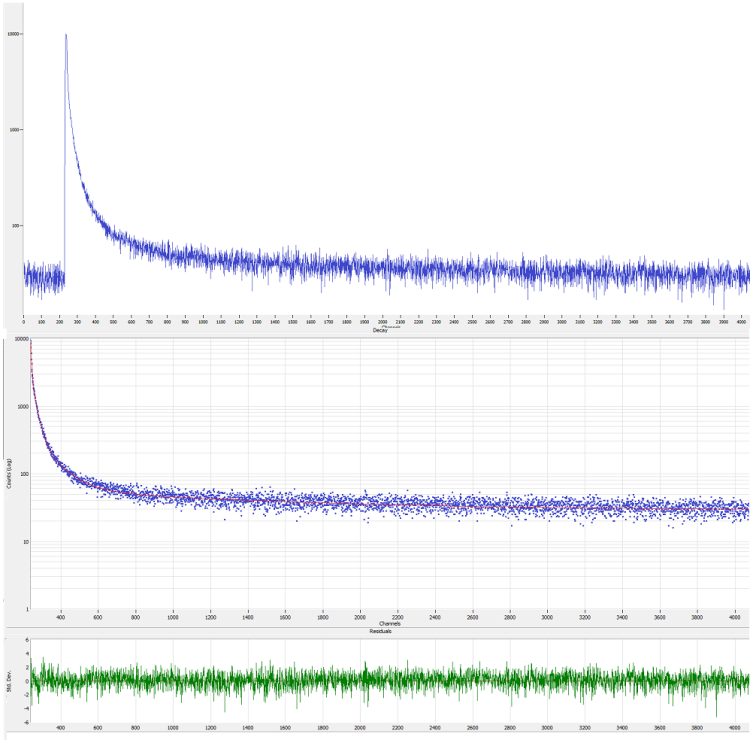

Figure S16. Emission decay (blue), best fit (red) and residuals (green) of **3** in solid-state at rt; $\chi^2 = 1.061$.

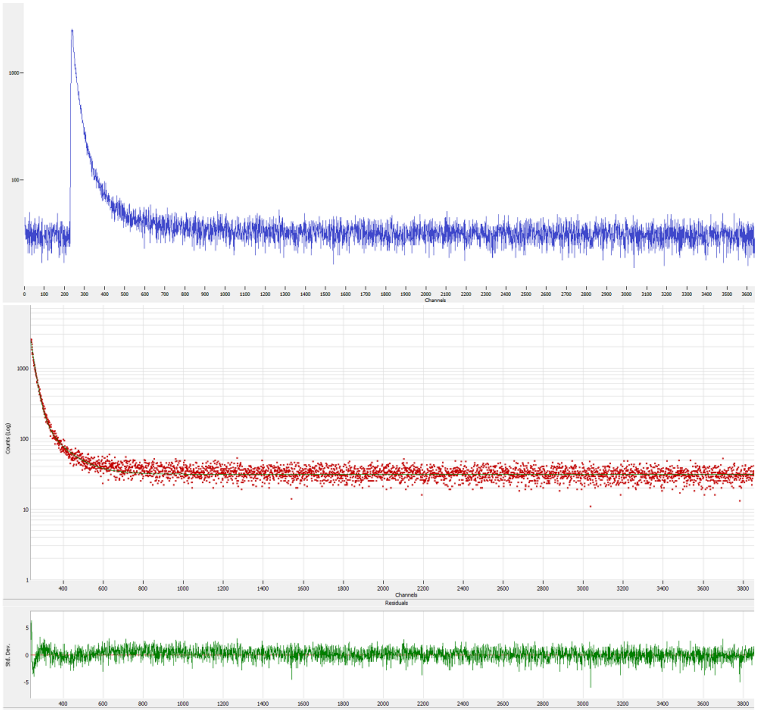

Figure S17. Emission decay (blue), best fit (red) and residuals (green) of **4** in solid-state at rt; $\chi^2 = 1.150$.