

Electronic Supplementary Information

Ni(II) and Pd(II) pyridinyloxazolidine-compounds: synthesis, X-ray characterisation and catalytic activities in the aza-Michael reaction

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Fig. S1. ^1H NMR (CDCl_3 , 298 K) of ligand **ppo**

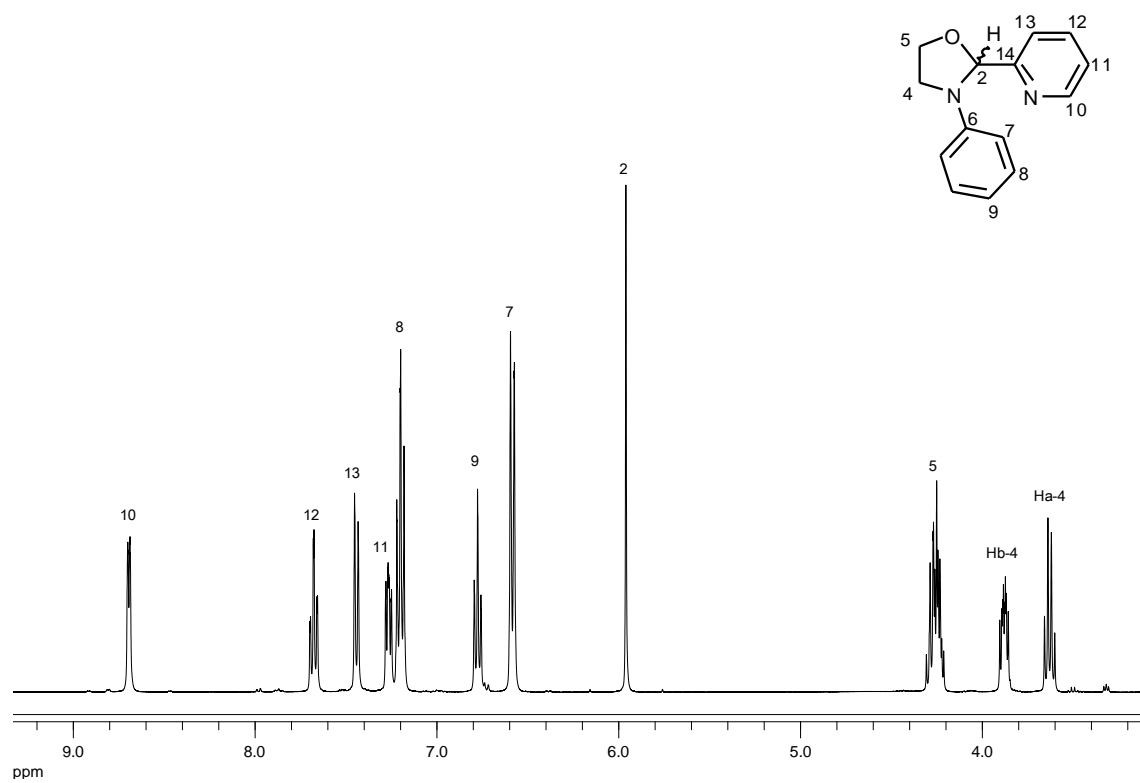


Fig. S2. ^{13}C NMR (CDCl_3 , 298 K) of ligand **ppo**

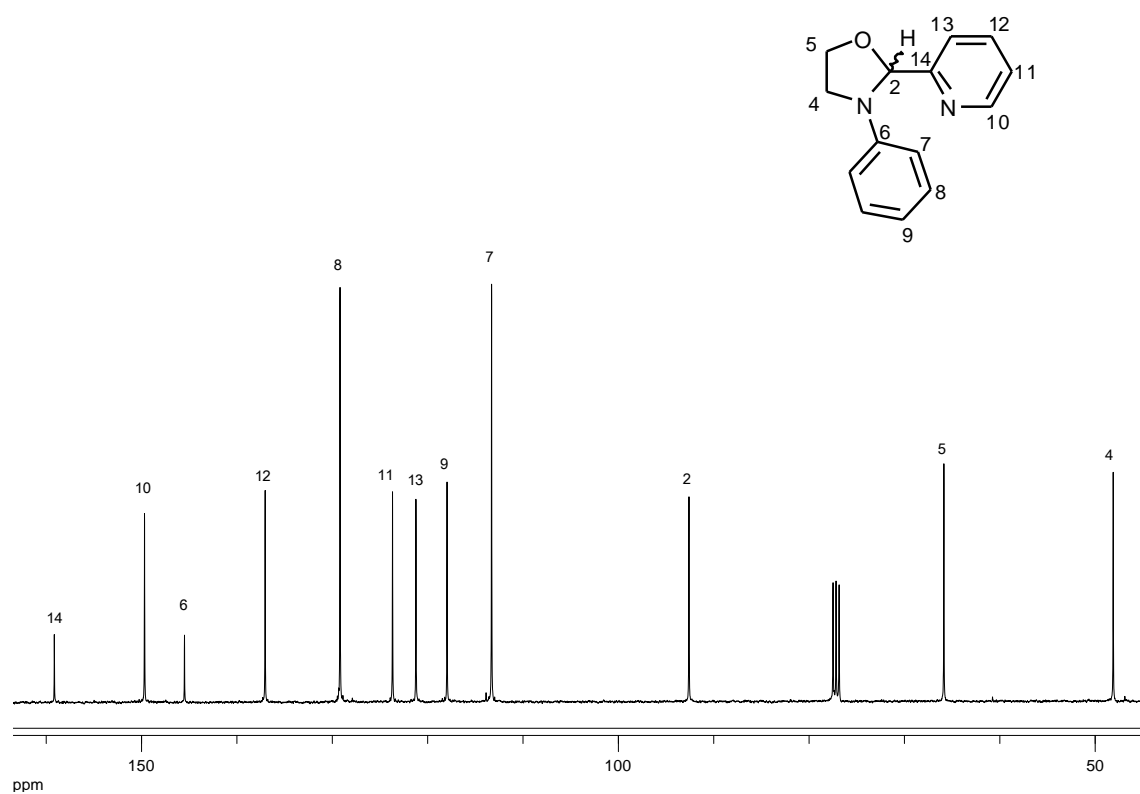


Fig. S3. ^1H - ^{13}C HETCOR (CDCl_3 , 298 K) of ligand **ppo**

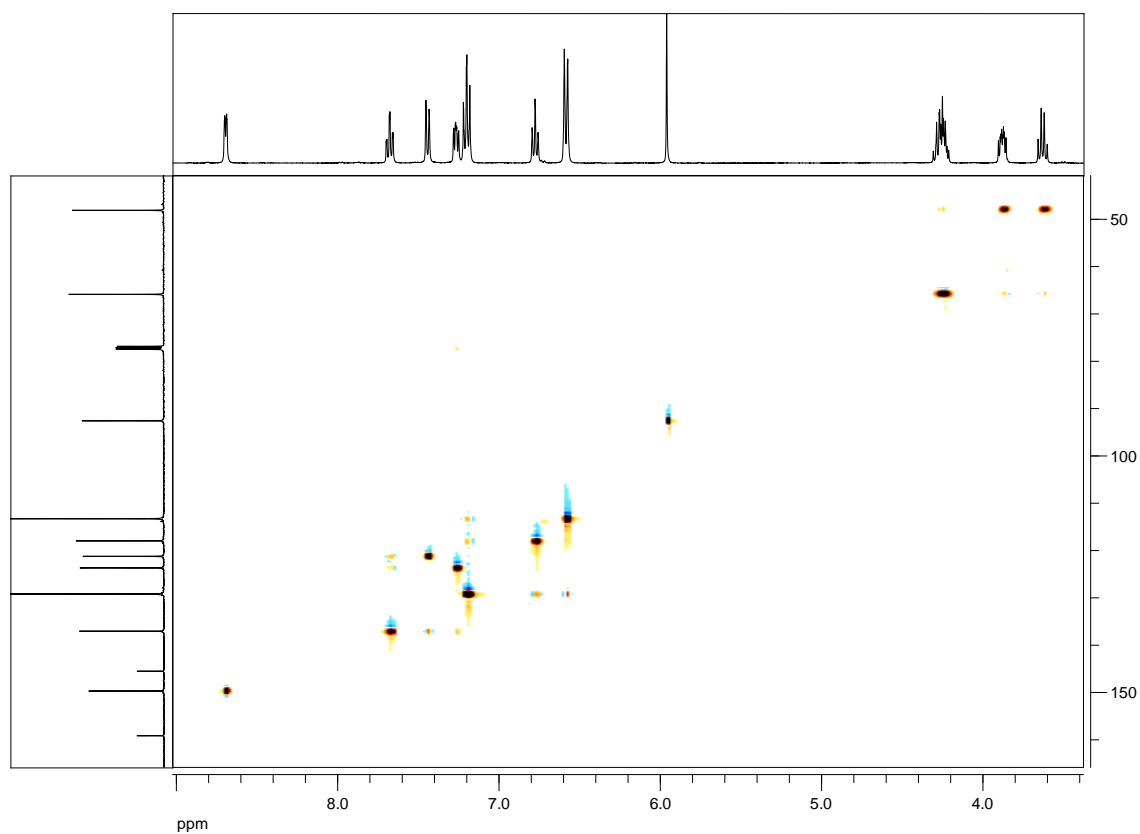


Fig. S4. ^1H NMR (CD_3CN , 298 K) of complex $[\text{Pd}(\text{N,N}'\text{-ppo})\text{Cl}_2]$ (**1**)

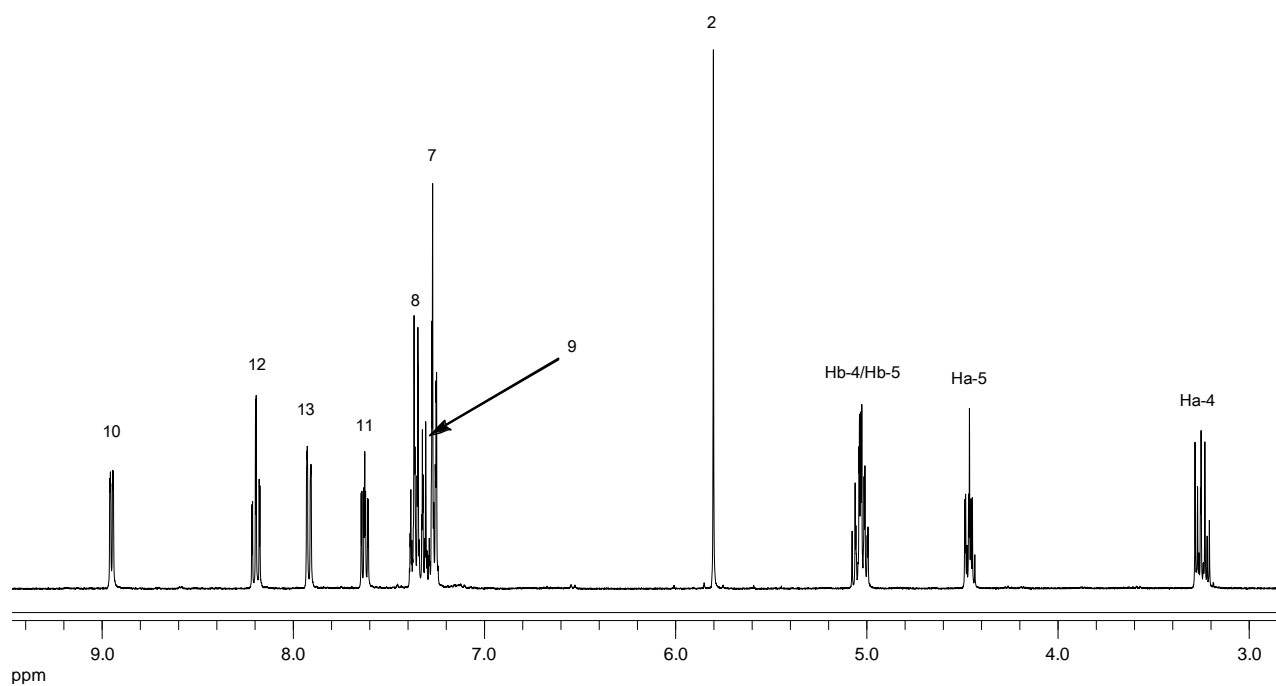


Fig. S5. ^{13}C NMR (CD_3CN , 298 K) of complex $[\text{Pd}(\text{N},\text{N}'\text{-ppo})\text{Cl}_2]$ (**1**)

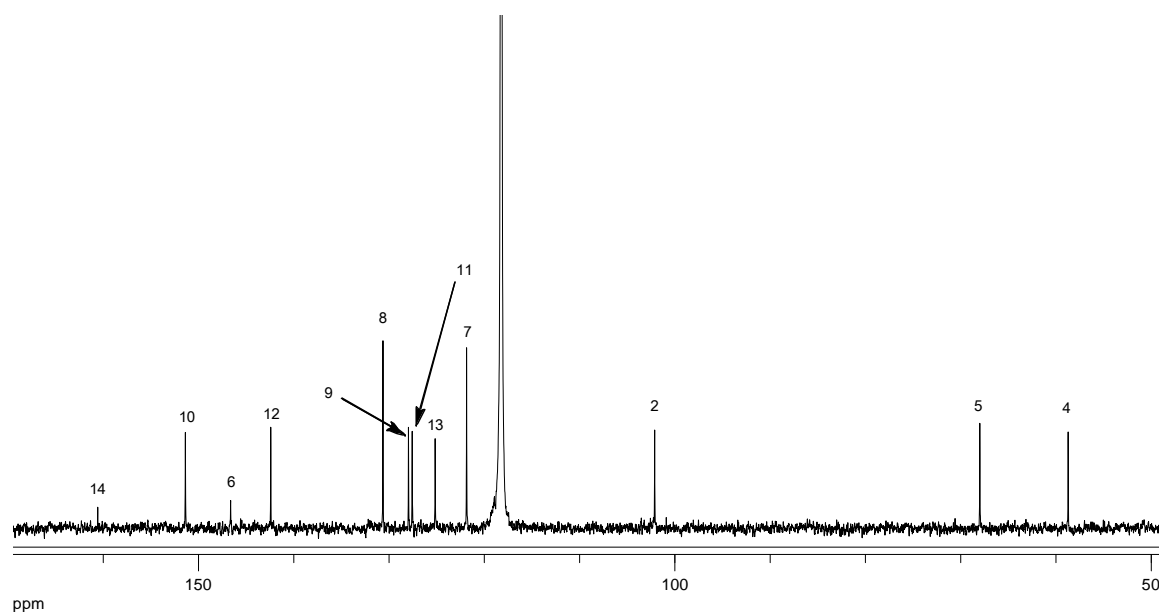


Fig. S6. ^1H - ^{13}C HETCOR (CD_3CN , 298 K) of complex $[\text{Pd}(\text{N},\text{N}'\text{-ppo})\text{Cl}_2]$ (**1**)

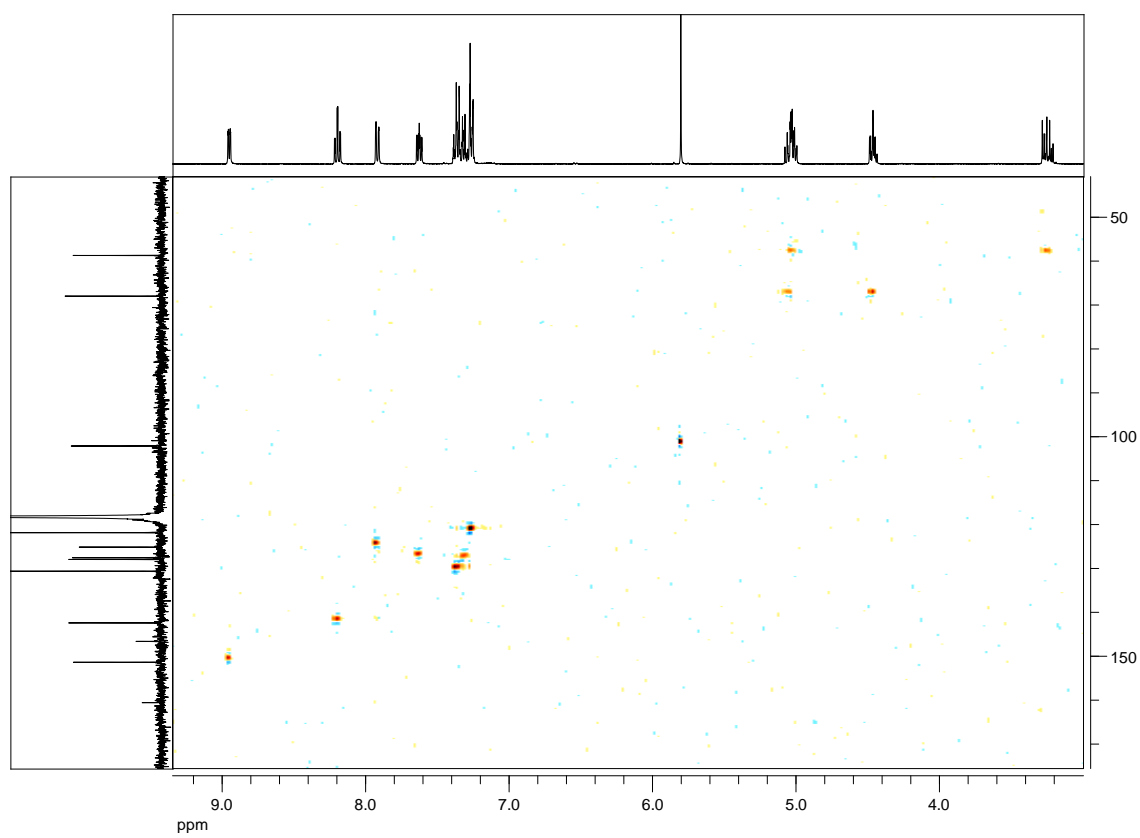


Fig. S7. ^1H NMR (CD_2Cl_2 , RT) of complex $[\text{Ni}(\text{N},\text{O}\text{-ppo})_2\text{Cl}_2]$ (**2**)

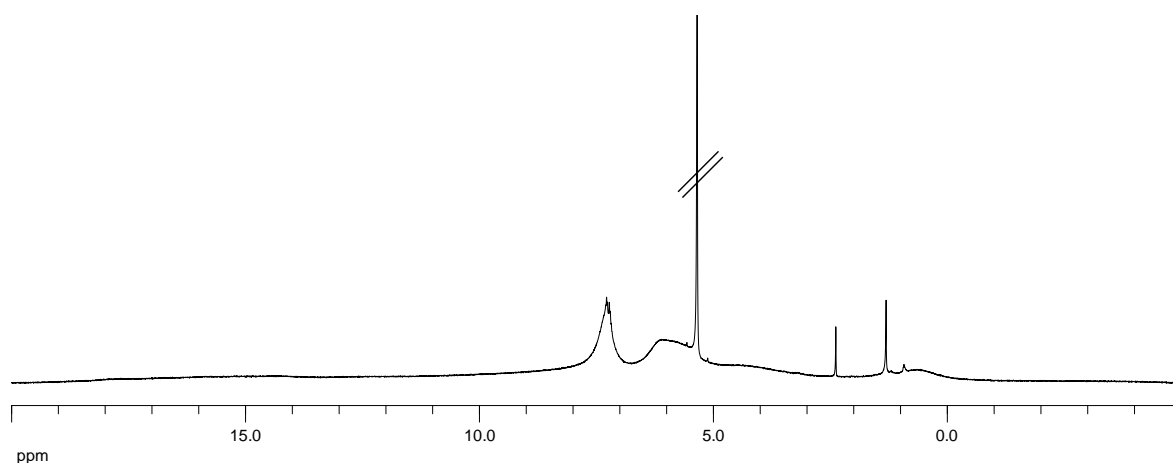


Fig. S8. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in $\text{CD}_2\text{Cl}_2/\text{toluene}$, at 298 K.

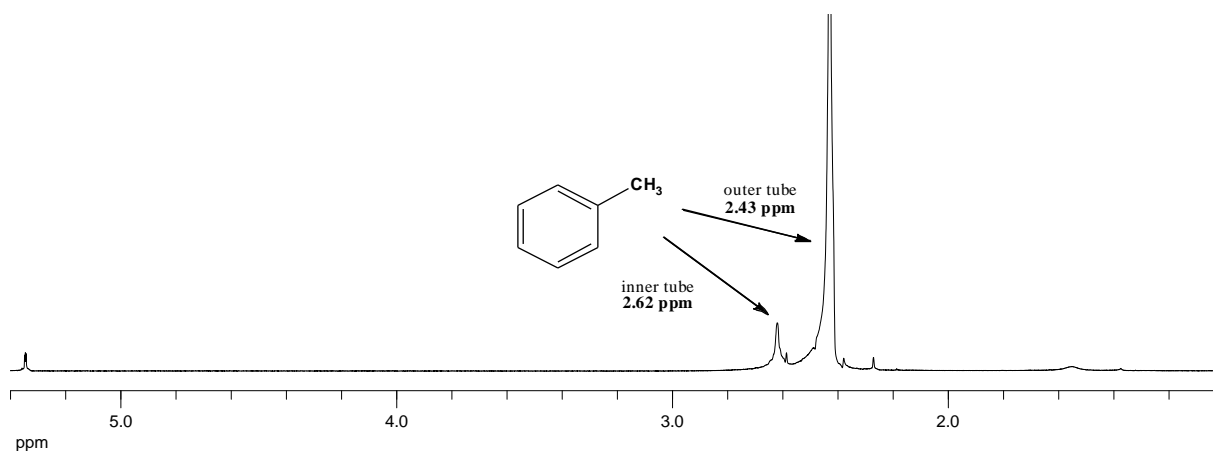


Fig. S9. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in $\text{CD}_2\text{Cl}_2/\text{toluene}$, at 273 K.

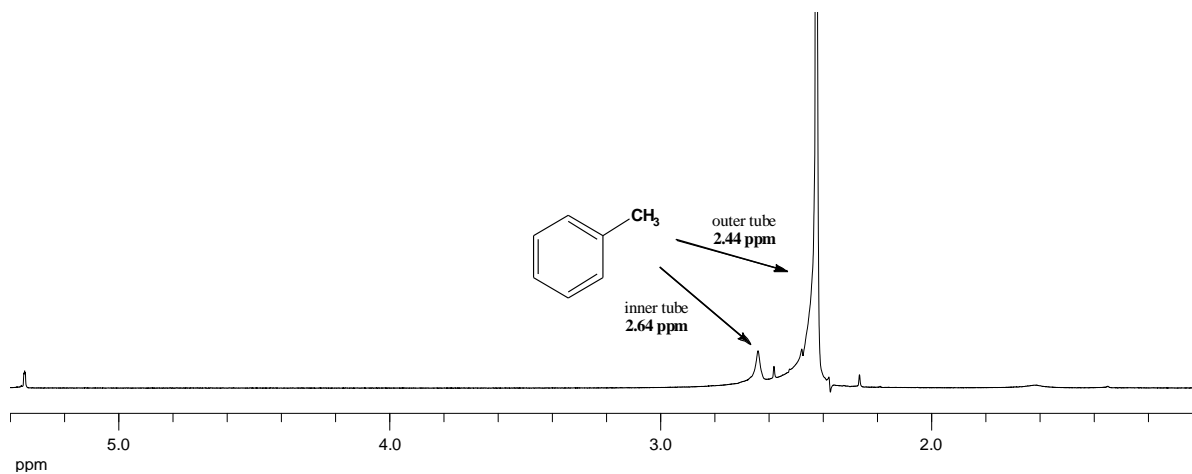


Fig. S10. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in $\text{CD}_2\text{Cl}_2/\text{toluene}$, at 228 K.

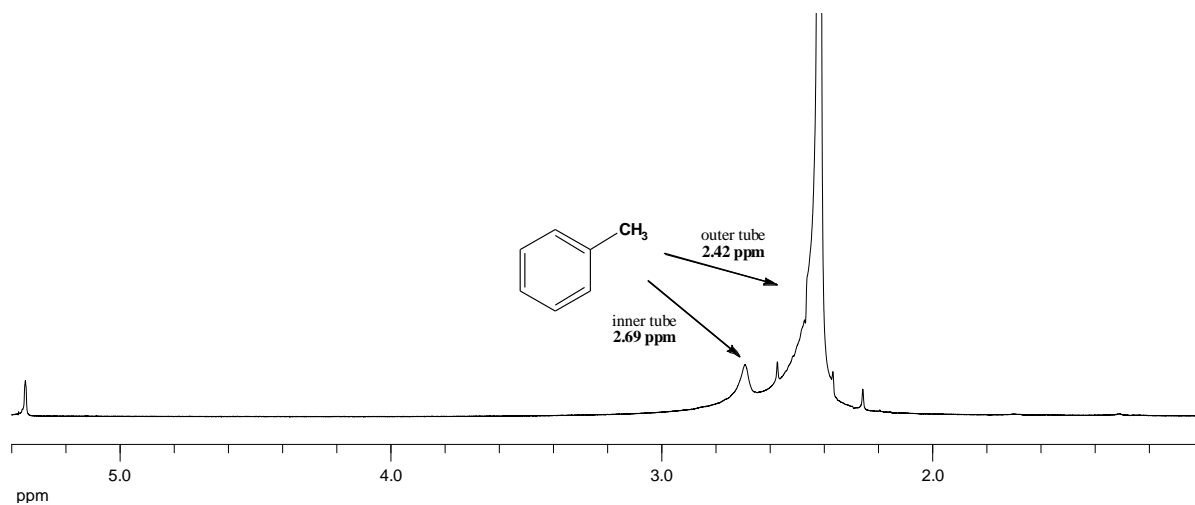


Fig. S11. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in $\text{CD}_2\text{Cl}_2/\text{toluene}$, at 308 K.

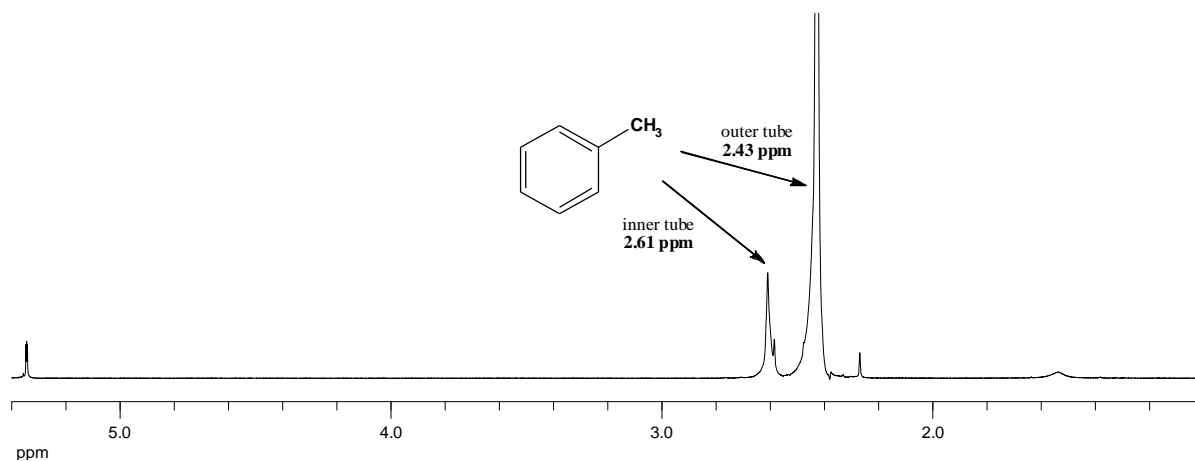


Fig. S12. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in CD_3OD /toluene, at 298 K.

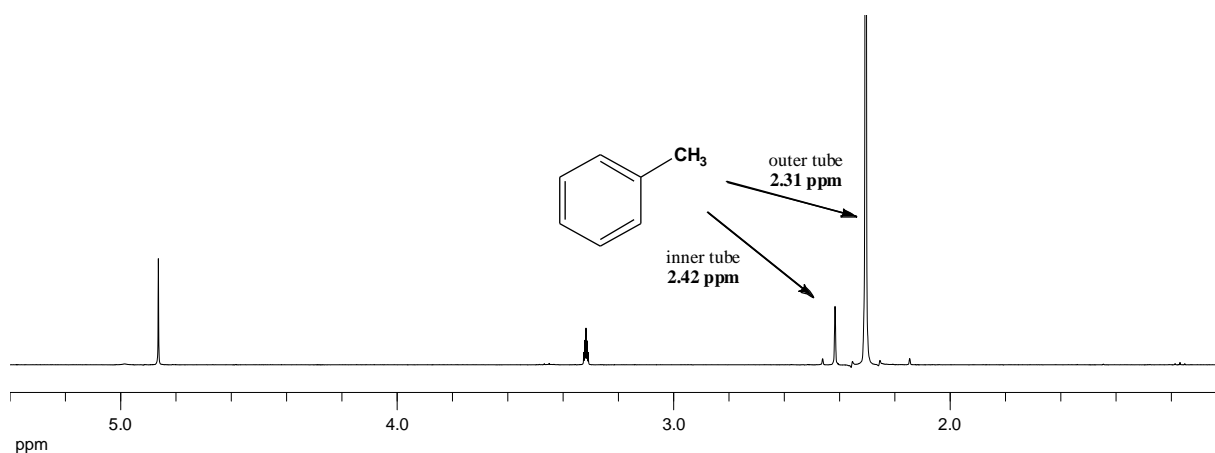


Fig. S13. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in CD_3OD /toluene, at 273 K.

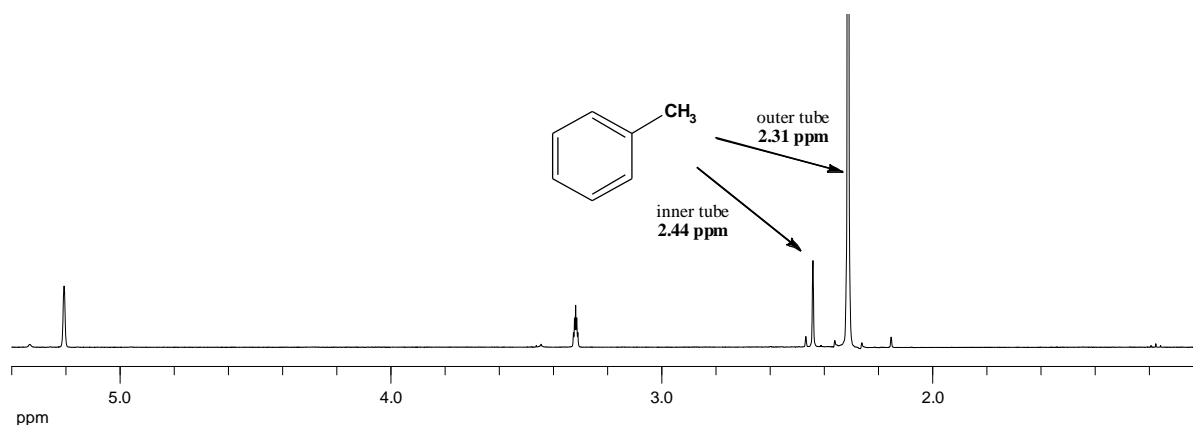


Fig. S14. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in CD_3OD /toluene, at 228 K.

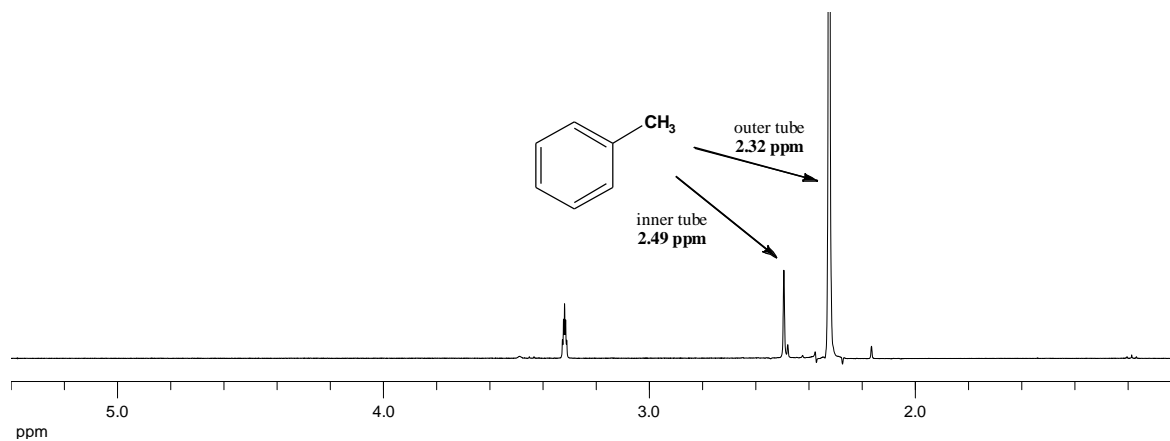


Fig. S15. Magnetic moment of compound **2** via ^1H NMR (Evans' method), in $\text{CD}_3\text{OD}/\text{toluene}$, at 308 K.

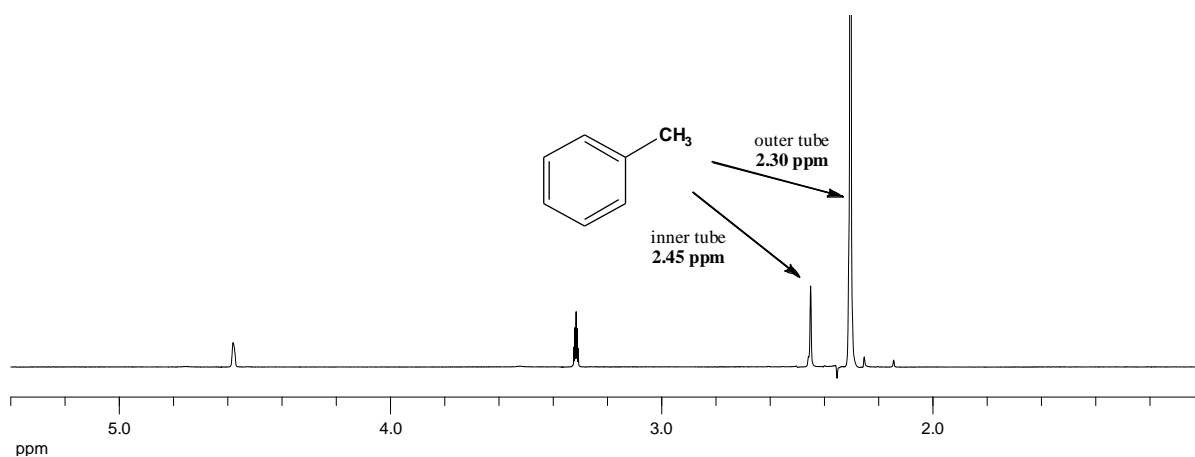


Fig. S16. Absolute energy of the five possible isomers of $[\text{Ni}(\text{ppo})_2\text{Cl}_2]$. ($\text{ttt}-[\text{Ni}(\text{ppo})_2\text{Cl}_2]$ opt: *complex 2* optimized in vacuum or acetonitrile)

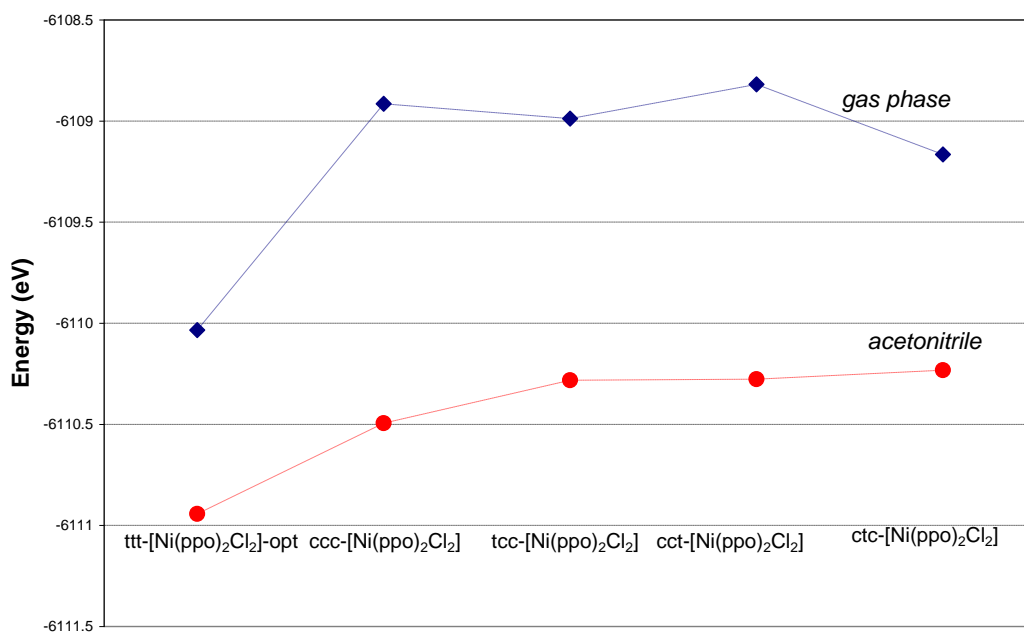


Fig. S17. Conjugate addition of piperidine to benzalacetone catalysed by complexes **1** and **2**: mass spectrum of the product (calc. for M^+ : $m/z = 231.16$).

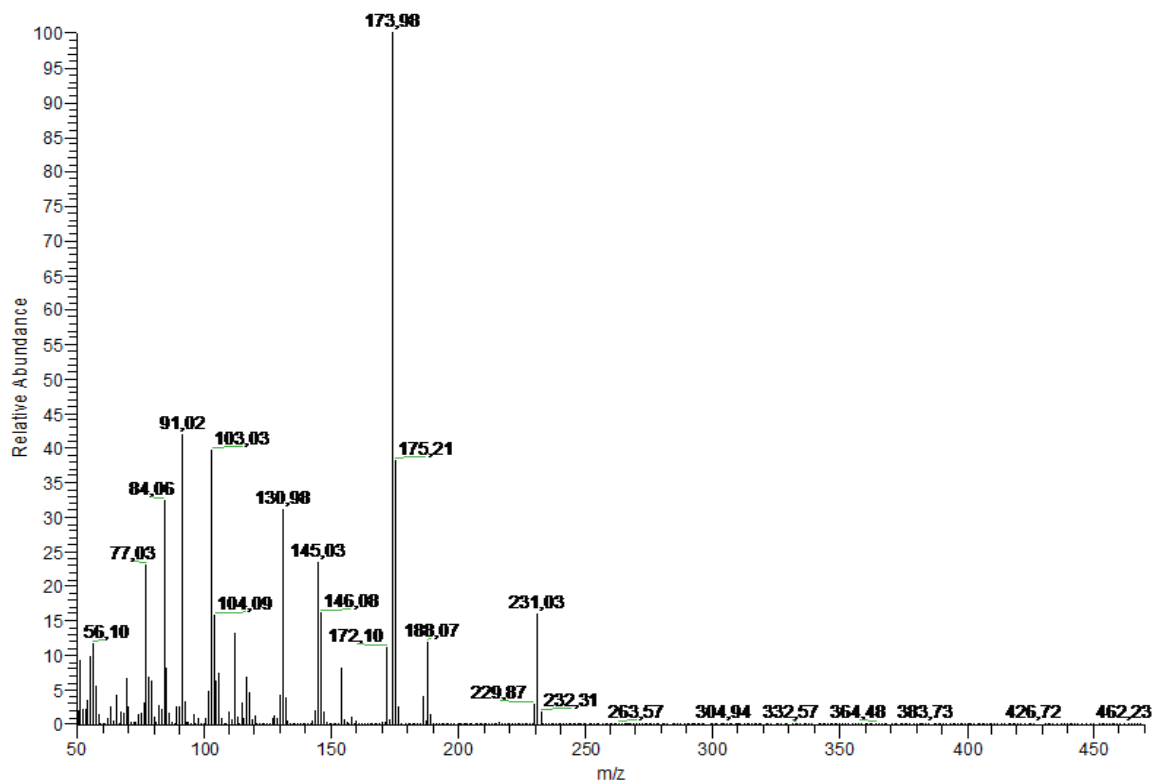


Fig. S18. Conjugate addition of morpholine to benzalacetone catalysed by complexes **1** and **2**: mass spectrum of the product (calc. for M^+ : $m/z = 233.14$).

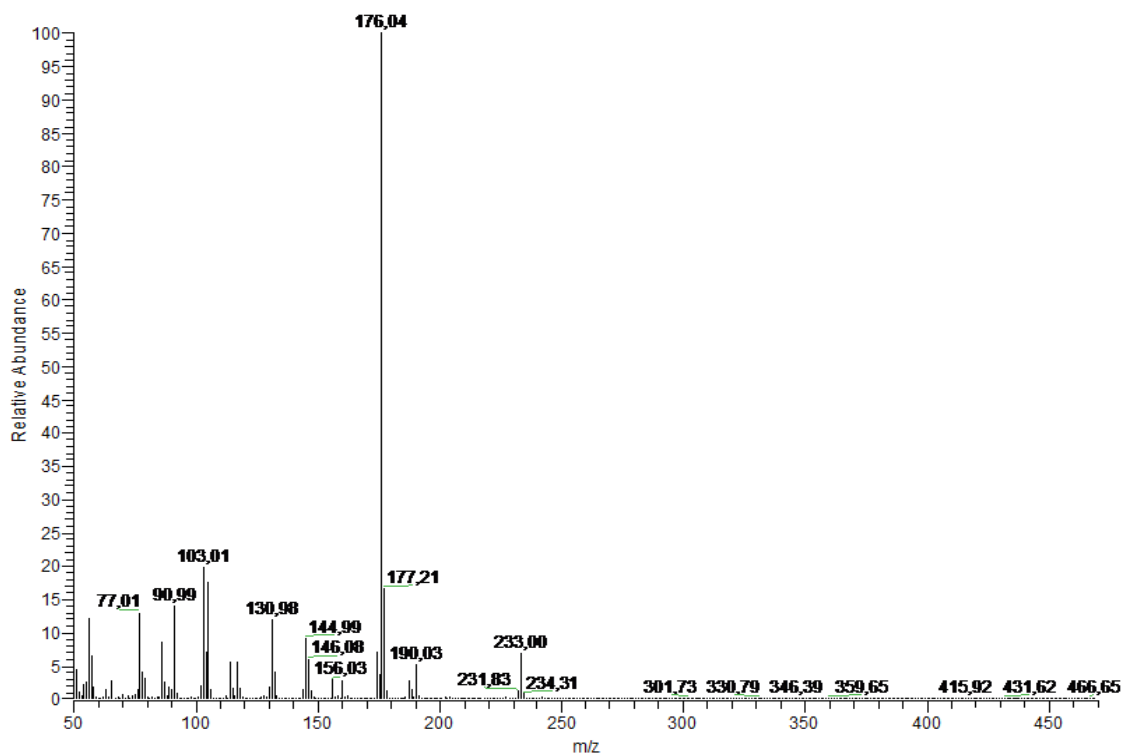


Fig. S19. Conjugate addition of dimethylamine to benzalacetone catalysed by complexes **1** and **2**: mass spectrum of the product (calc. for M^+ : $m/z = 191.13$).

