

# **Oxidative Addition Reactions of Binuclear Organoplatinum Complexes with Ditopic Ligands**

M.S. McCready and R.J. Puddephatt\*

*Department of Chemistry, University of Western Ontario, London, Canada N6A 5B7*

## **Supporting Information**

Figures S1-S13. NMR spectra of selected compounds.

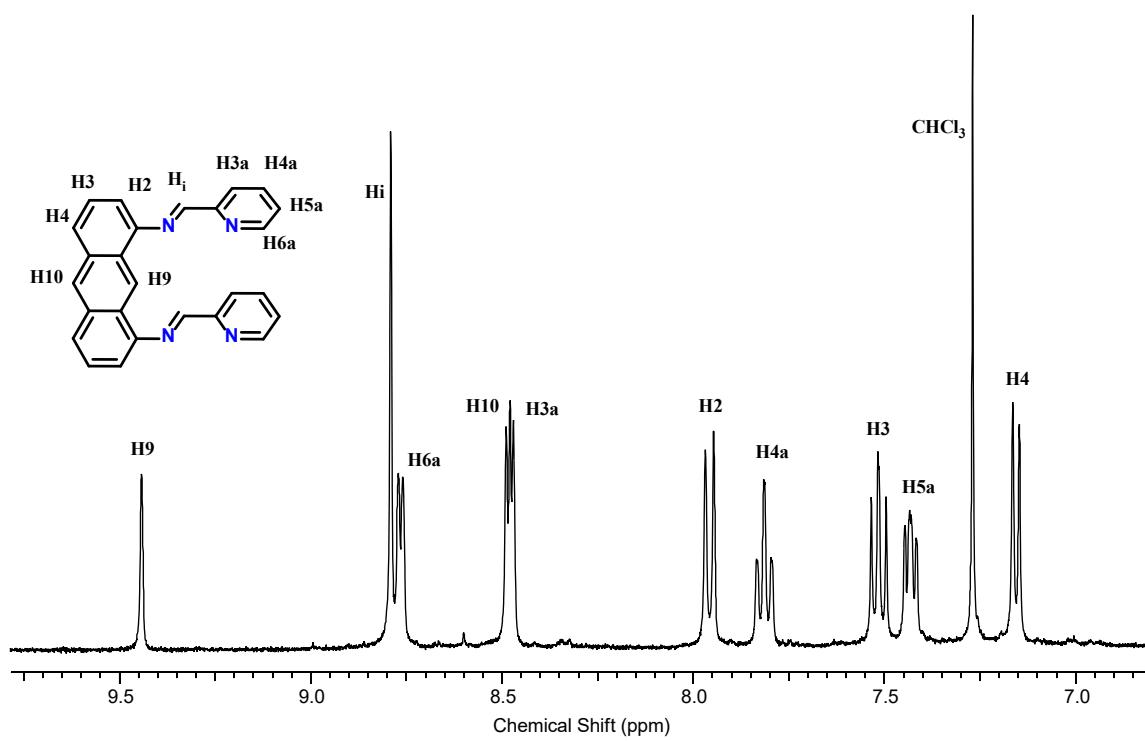


Figure S1.  $^1\text{H}$  NMR spectrum of the ligand **L1** in  $\text{CDCl}_3$ .

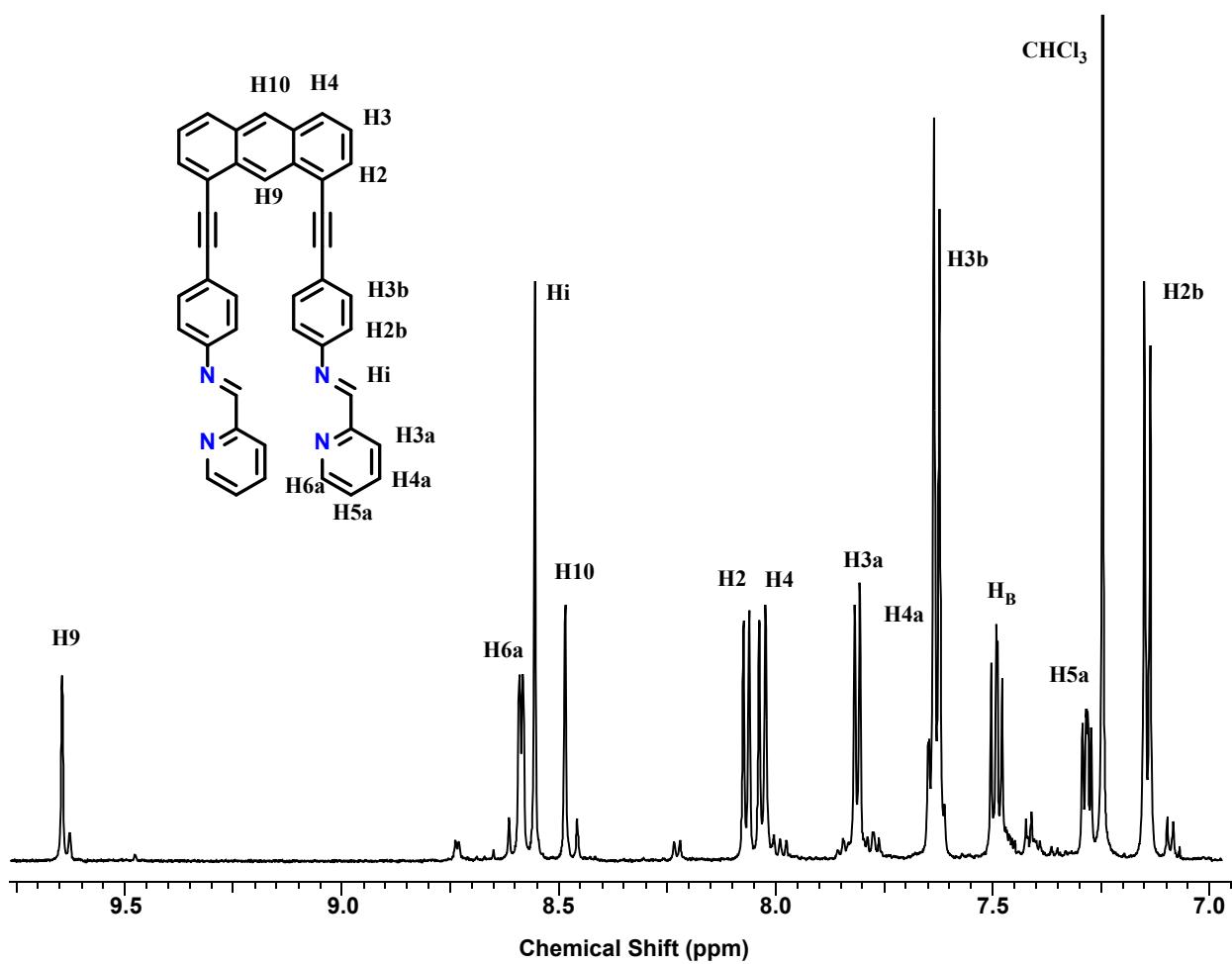


Figure S2.  $^1\text{H}$  NMR spectrum of the ligand **L2** in  $\text{CDCl}_3$ .

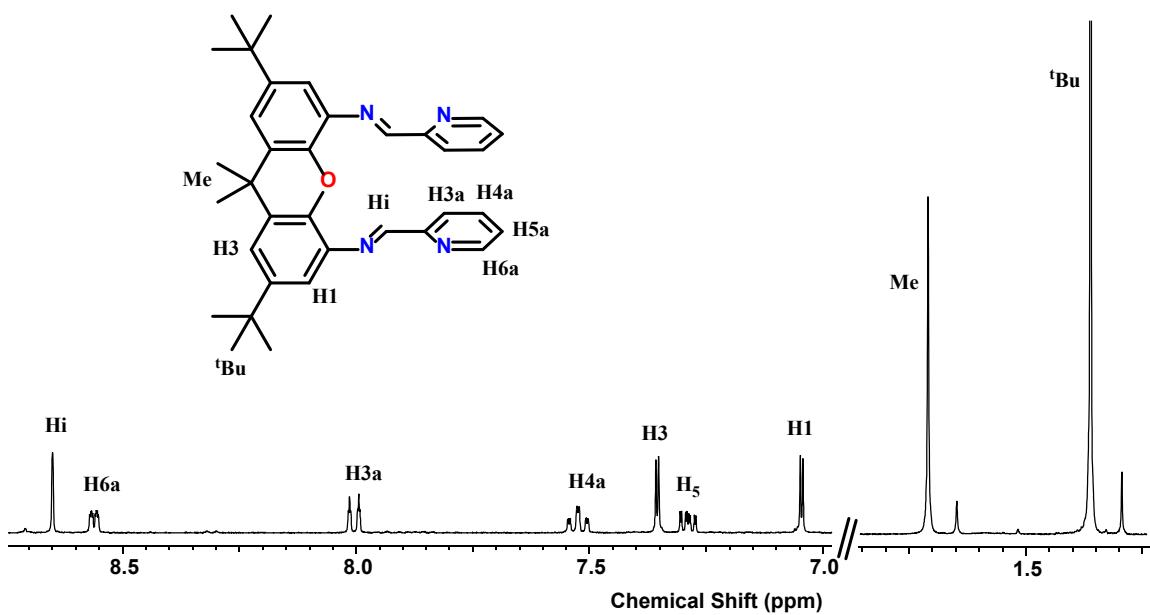


Figure S3. <sup>1</sup>H NMR spectrum of the ligand L3 in CD<sub>2</sub>Cl<sub>2</sub>.

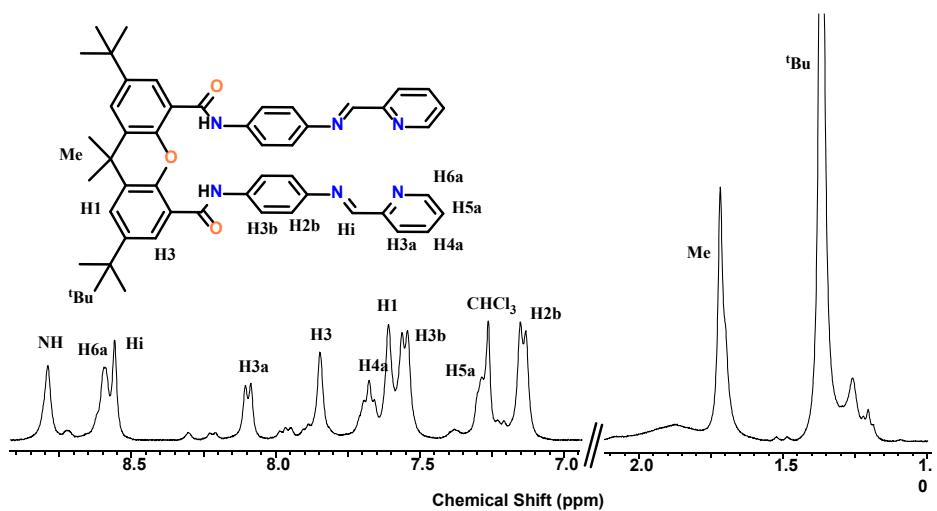


Figure S4.  $^1\text{H}$  NMR spectrum of the ligand **L4** in  $\text{CDCl}_3$ .

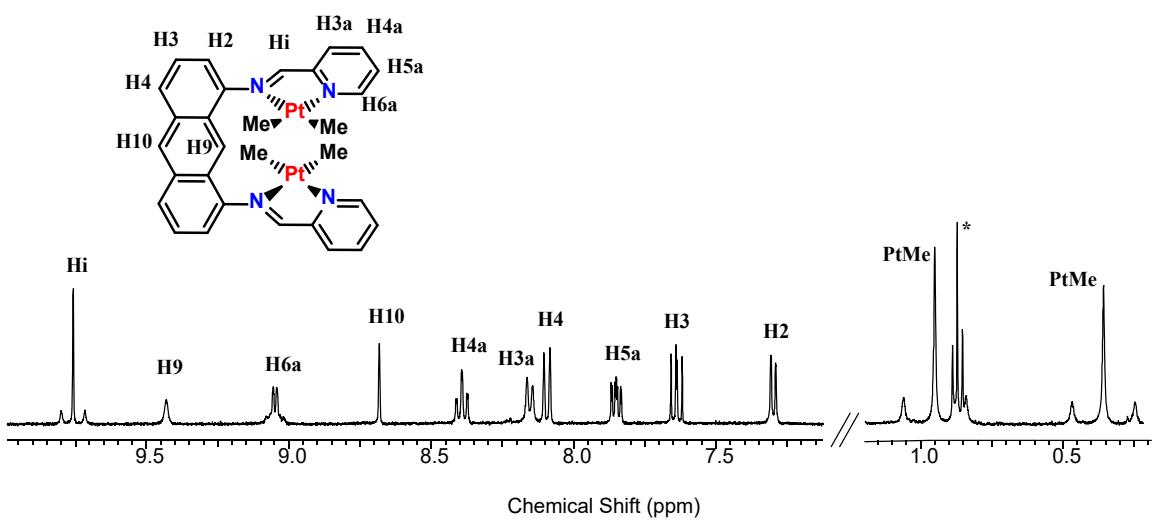


Figure S5.  $^1\text{H}$  NMR spectrum of complex **1** in acetone- $d_6$ . \* indicates the presence of residual pentane.

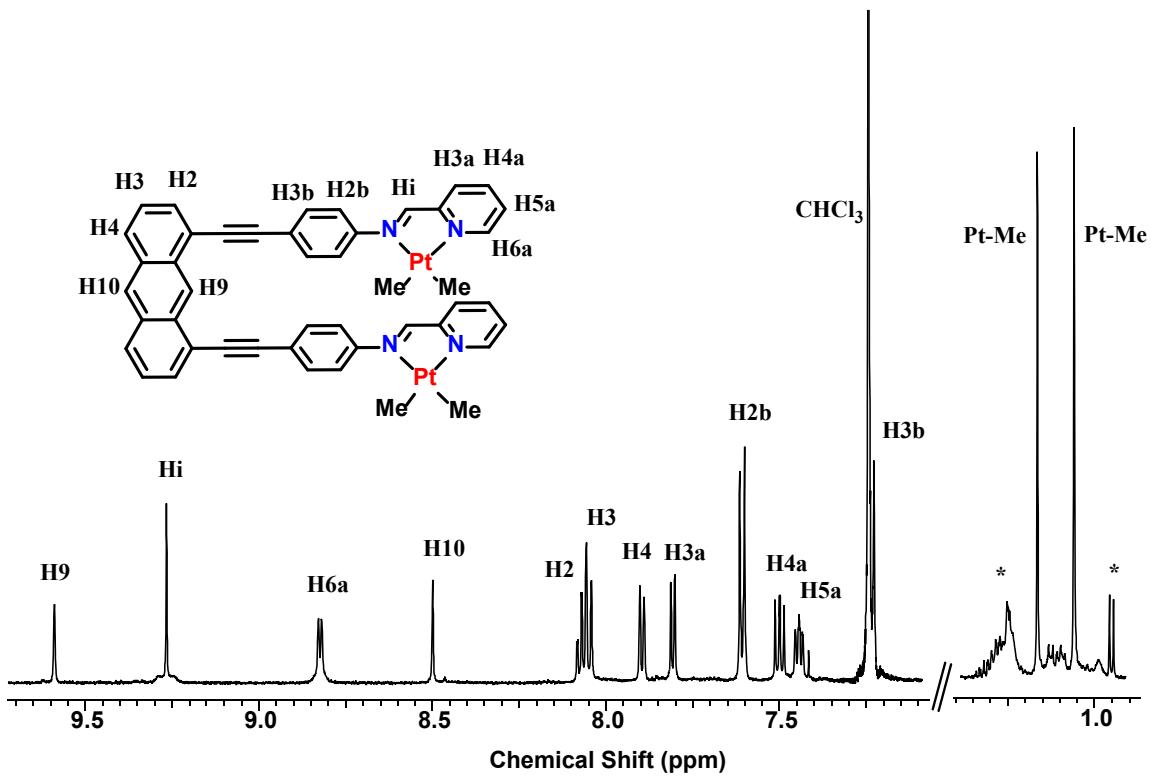


Figure S6. <sup>1</sup>H NMR spectrum of complex **2** in CDCl<sub>3</sub> (\* hexane impurity).

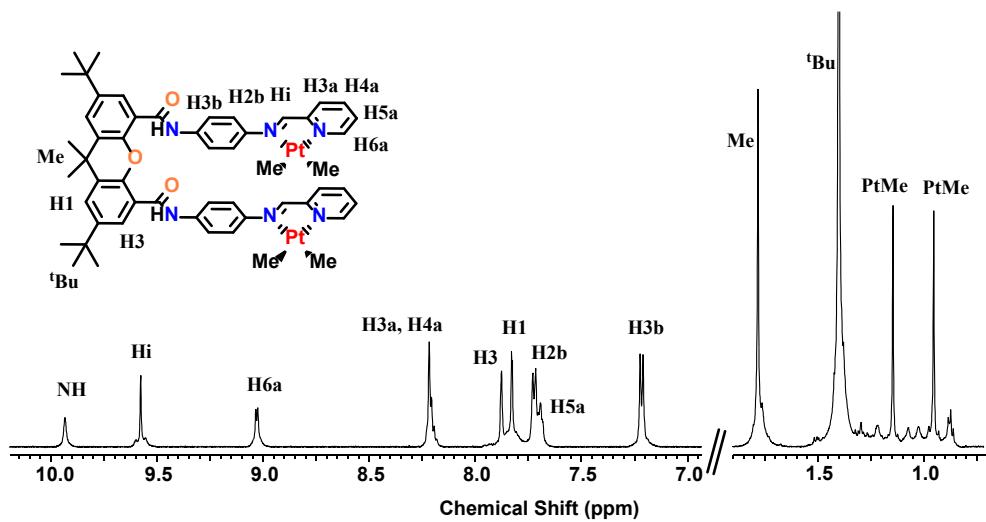


Figure S7. <sup>1</sup>H NMR spectrum of complex 4 in acetone-*d*<sub>6</sub>.

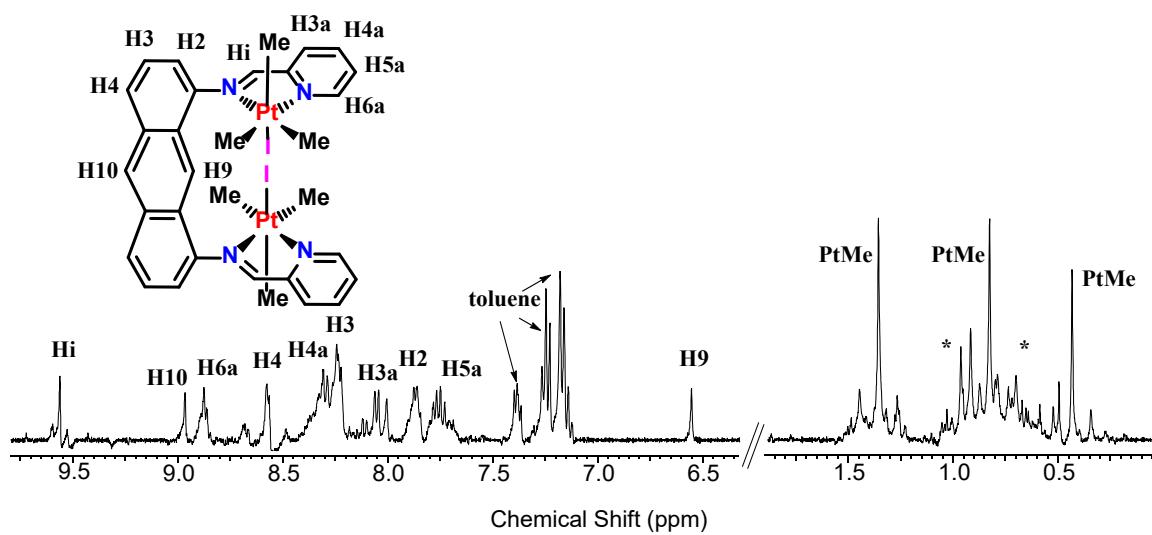


Figure S8. <sup>1</sup>H NMR spectrum of complex **5** in *d*<sub>6</sub>-DMSO. \* indicates trace hexanes and pentane solvent.

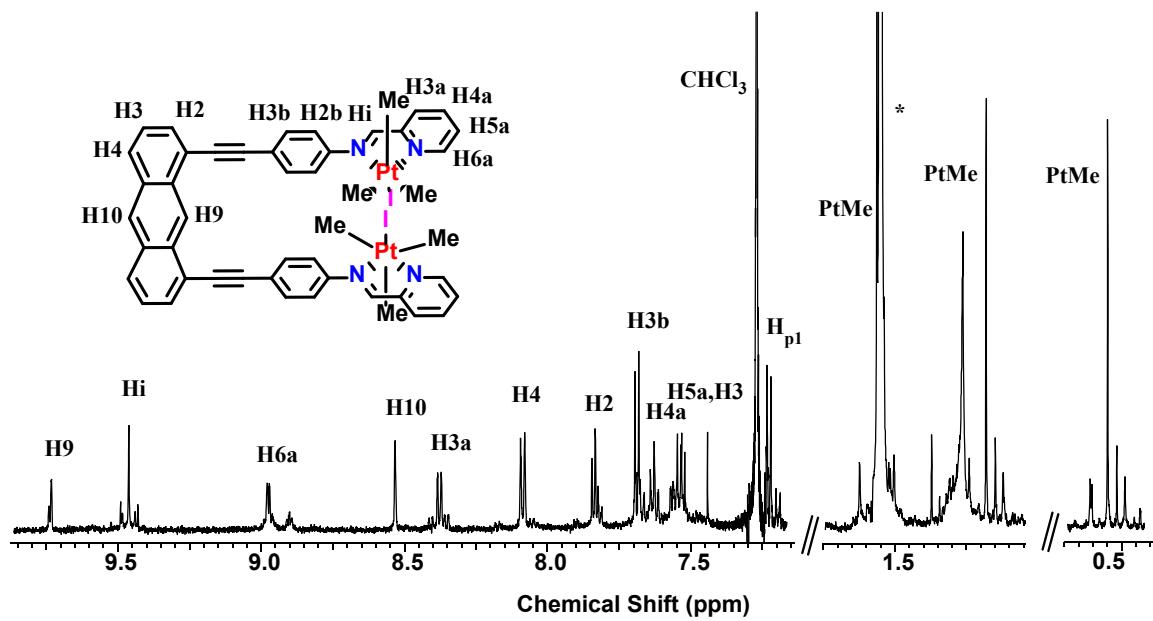


Figure S9. <sup>1</sup>H NMR spectrum, in CDCl<sub>3</sub>, of complex 6. \* indicates the presence of water.

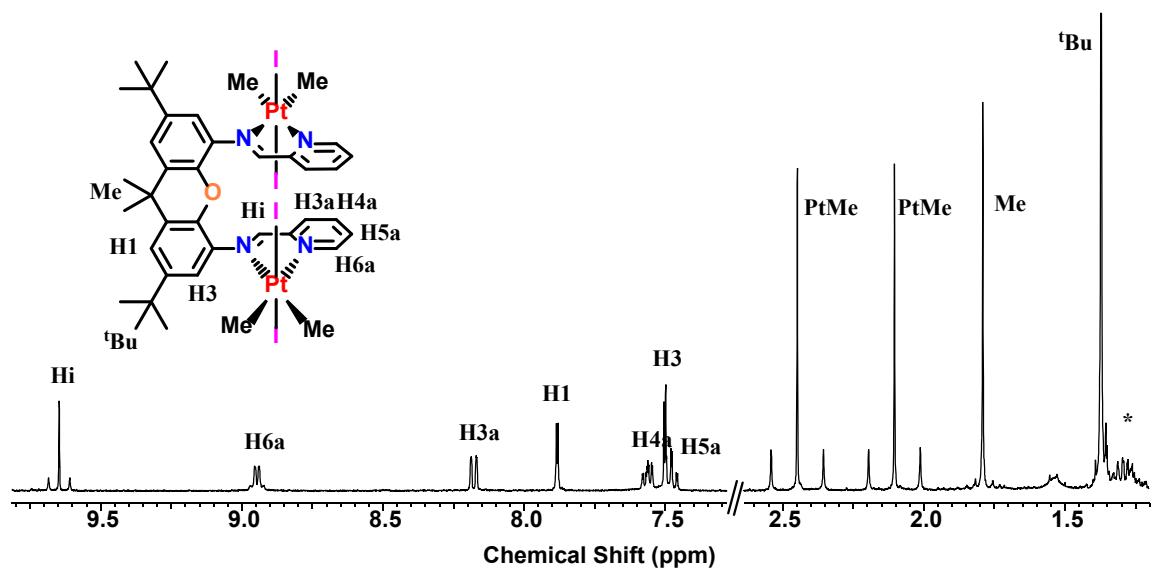


Figure S10.  $^1\text{H}$  NMR spectrum of complex 9 in  $\text{CD}_2\text{Cl}_2$ . \* indicates trace amounts of pentane.

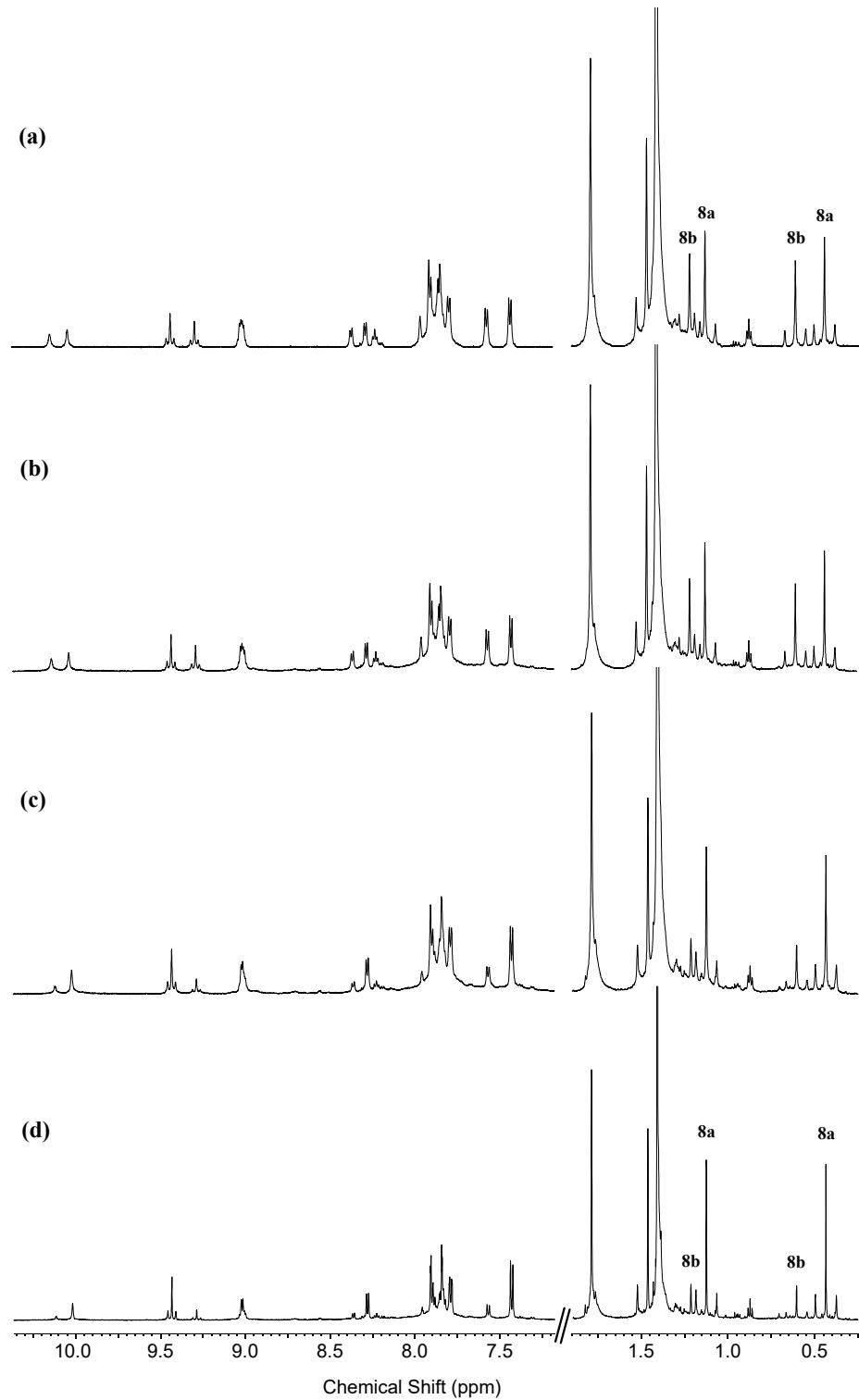


Figure S11. <sup>1</sup>H NMR spectra during isomerization between isomers **8a** and **8b**; after (a) 10 minutes, (b) 1 hour, (c) 24 hours and (d) 48 hours.

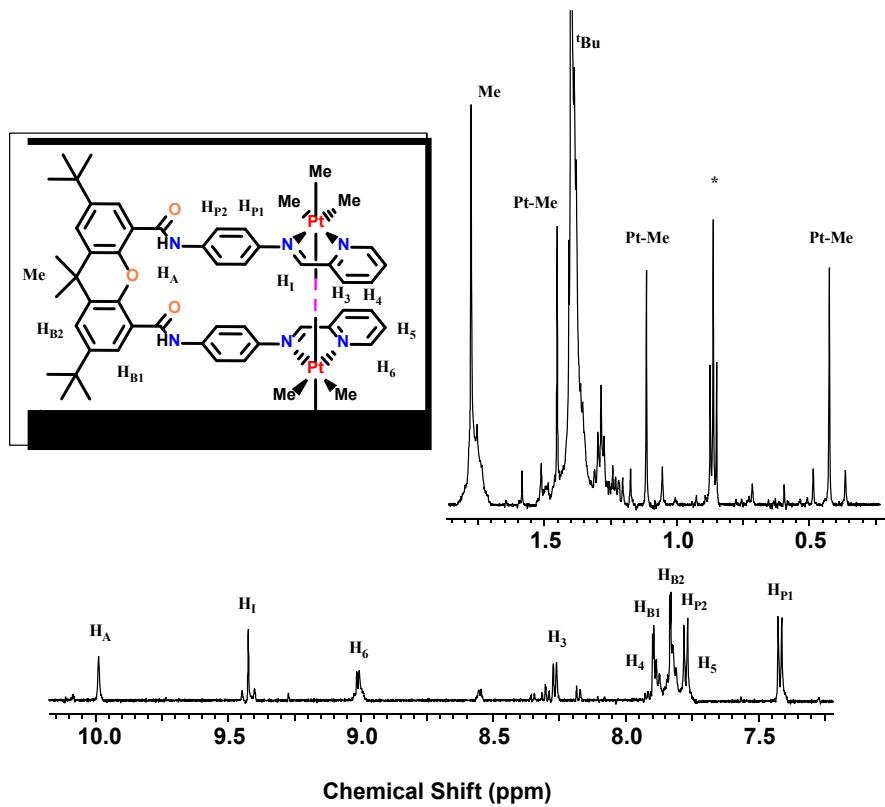


Figure S12.  $^1\text{H}$  NMR spectrum of complex **8a** in acetone- $d_6$  after recrystallization. \* indicates residual pentane.

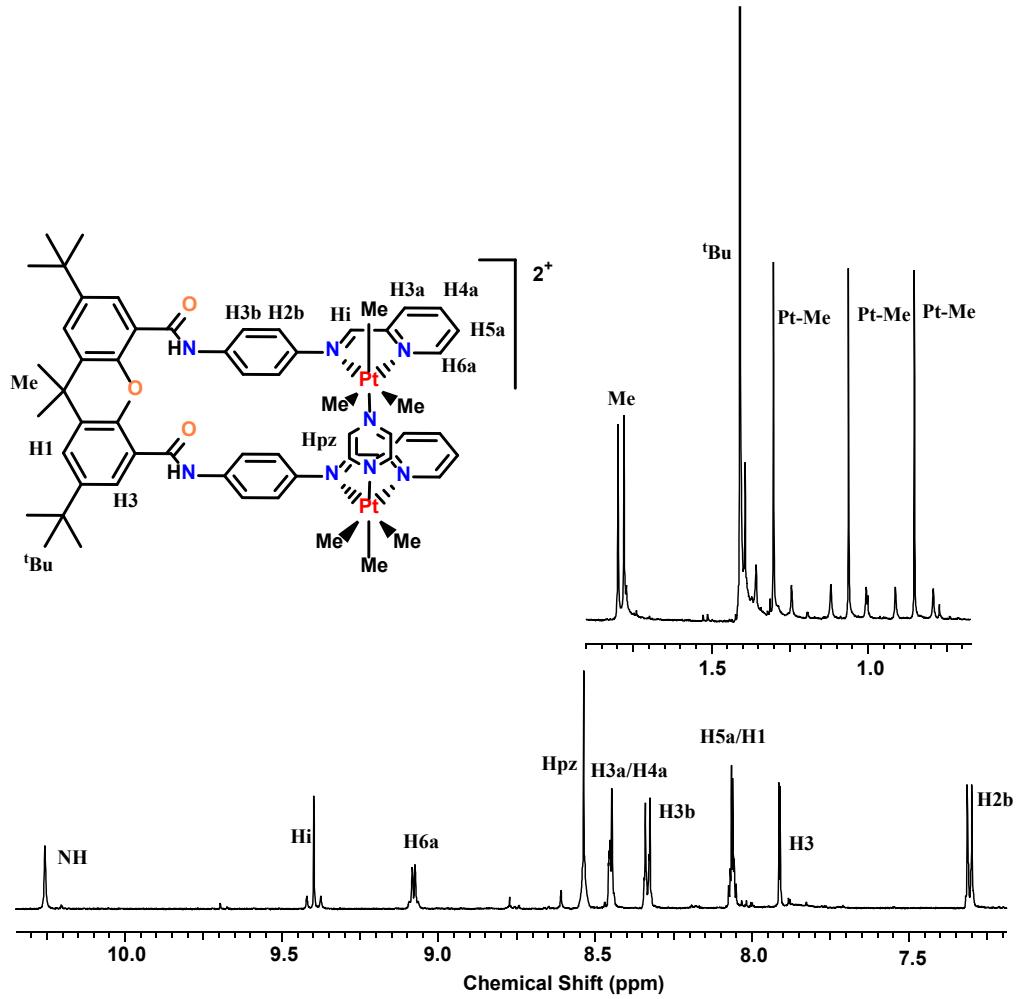


Figure S13. The  $^1\text{H}$  NMR spectrum (acetone- $d_6$ ) of complex **13**.