Supporting Information

Effect of ligand denticity on the nitric oxide reactivity of its cobalt(II) complexes

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Figure S1. FT-IR spectrum of ligand L_1 in KBr pellet.



Figure S2. ¹H NMR spectrum of L_1 in CDCl₃.



Figure S3. ¹³C NMR spectrum of L_1 in CDCl₃.



Figure S4. ESI-mass spectrum of L_1 in methanol.



Figure S5. FT-IR spectrum of ligand L_2 in KBr pellet.



Figure S6. ¹H NMR spectrum of L_2 in CDCl₃.



Figure S7. ¹³C NMR spectrum of L_2 in CDCl₃.



Figure S8. ESI-mass spectrum of L_2 in methanol.



Figure S9. FT-IR spectrum of ligand L_3 in KBr pellet.



Figure S10. ¹H NMR spectrum of L₃ in CDCl₃.



Figure S11. ¹³C NMR spectrum of L₃ in CDCl₃.



Figure S12. ESI-mass spectrum of L_3 in methanol.



Figure S13. FT-IR spectrum of complex 1 in KBr pellet.



Figure S14. UV-visible spectrum of complex 1 in methanol.



Figure S15. ESI-mass spectrum of complex 1 in methanol.



Figure S16. FT-IR spectrum of complex 2 in KBr pellet.



Figure S17. UV-visible spectrum of complex 2 in methanol.



Figure S18. ESI-mass spectrum of complex 2 in acetonitrile.



Figure S19. FT-IR spectrum of complex 3 in KBr pallet.



Figure S20. UV-visible spectrum of complex 3 in methanol.



Figure S21. ESI-mass spectrum of Complex 3 in methanol.



Figure S22. Cyclic Voltammogram of Complex 1, positive scan.



Figure S23. Cyclic Voltammogram of Complex 1, negative scan.



Figure S24. Cyclic Voltammogram of Complex 2, positive scan.



Figure S25. Cyclic Voltammogram of Complex 2, negative scan.



Figure S26. Cyclic Voltammogram of Complex 3, positive scan.



Figure S27. Cyclic Voltammogram of Complex 3, negative scan.



Figure S28. UV-visible spectra of complex **3** (black line) and upon addition of excess NO (red line) in methanol under argon atmosphere.



Figure S29. X-band EPR spectra of complex **1** (black line) and upon addition of excess NO (red line) in methanol under argon atmosphere.



Figure S30. X-band EPR spectra of complex **2** (black line) and upon addition of excess NO (red line) in methanol under argon atmosphere.



Figure S31. X-band EPR spectra of complex **3** (black line) and upon addition of excess NO (red line) in methanol under argon atmosphere.



Figure S32. ¹H NMR spectrum of complex 4a in CD₃OD.



Figure S33. UV-visible spectrum of complex 4a in methanol.



Figure S34. FT-IR spectrum of complex 4b in KBr pellet.



Figure S35. UV-visible spectrum of complex **4b** in methanol. Inset shows the d-d transition region.



Figure S36. ESI-mass spectrum of complex 4a in acetonitrile. Inset shows isotopic distribution pattern. Black line corresponds experimental and red line corresponds simulated mass spectra.



Figure S37. ESI-mass spectrum of complex 4b in acetonitrile.



Figure S38. ¹H NMR spectrum of modified ligand L_1 [/] in CDCl₃.



Figure S39. ¹³C NMR spectrum of modified ligand L_1 [/] in CDCl₃.



Figure S40. ESI-mass spectrum of modified ligand L_1 [/] in methanol.



Figure S41. FT-IR spectrum of complex 5 in KBr pellet.



Figure S42. ¹H NMR spectrum of complex 5 in CD₃CN.



Figure S43. UV-visible spectrum of complex 5 in methanol.



Figure S44. ESI-mass spectrum of complex **5** in acetonitrile. Inset shows isotopic distribution pattern. Black line corresponds experimental and red line corresponds simulated mass spectra.



Figure S45. Cyclic Voltammogram of Complex 4a, positive scan.



Figure S46. Cyclic Voltammogram of Complex 4a, negative scan.



Figure S47. Cyclic Voltammogram of Complex 5, positive scan.



Figure S48. Cyclic Voltammogram of Complex 5, negative scan.