Supporting Information

The first example of centro-symmetrical bis(imido)-bridged dinuclear cobalt(III) complex: synthesis via oxidative dehydrogenation and phenoxazinone synthase activity

Anangamohan Panja*,a,b,c and Philippe Guionneau a,b

^aCNRS, ICMCB, Groupe des Sciences Moléculaires, UPR 9048, F-33608 Pessac, France

^bUniversité de Bordeaux, ICMCB, UPR 9048, Pessac, F-33600, France

^cPostgraduate Department of Chemistry, Panskura Banamali College, Panskura RS, Purba

Medinipur, West Bengal 721152, India

Corresponding Author

E-mail: ampanja@yahoo.co.in (A. P.)

Contents

Figure S1: Absoption spectra of cobalt(II)-bound 2-aminomethylpyridine in alkaline media; before and after the addition of hydrogen peroxide.

Figure S2: The molecular packing of the complex.

Figure S3. Mass spectrum of complex 1 in methanol

Figure S4. IR spectra

Figure S5. Cyclic voltammogram of 2-aminophenol

Figure S6. Rate dependency on catalyst concentrations

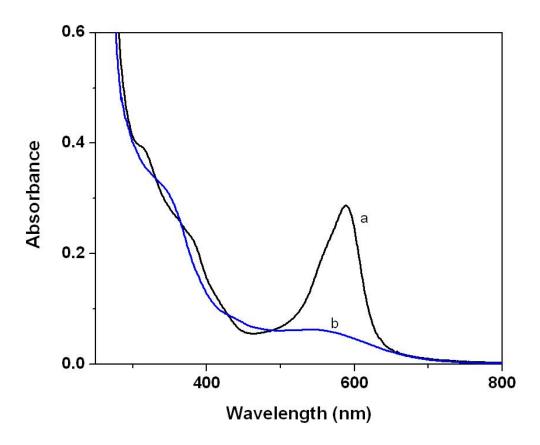


Figure S1. Absorbion spectra of cobalt(II)-bound 2-aminomethylpyridine in alkaline media; before (a) and after (b) the addition of hydrogen peroxide.

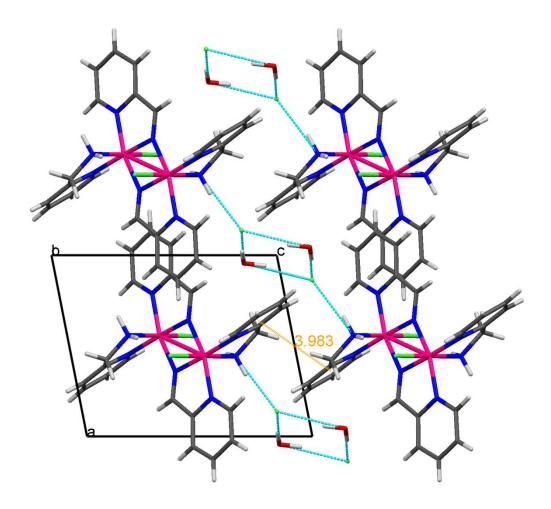


Figure S2: The molecular packing of the complex showing $\pi^{\dots}\pi$ stacking and hydrogen bonding interactions.

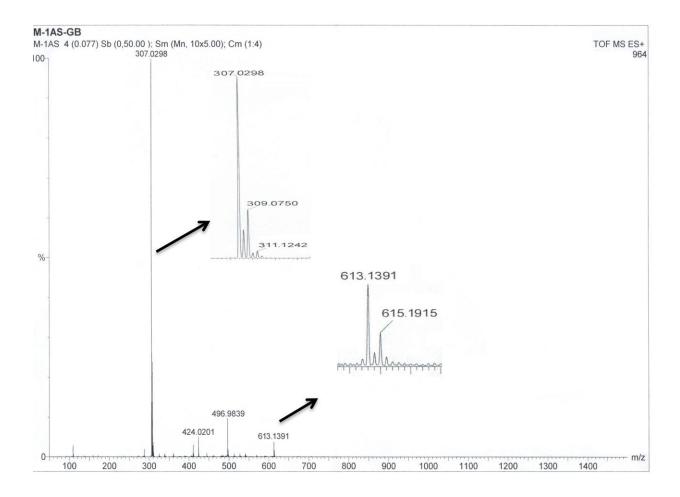


Figure S3. Mass spectrum of complex 1 in methanol

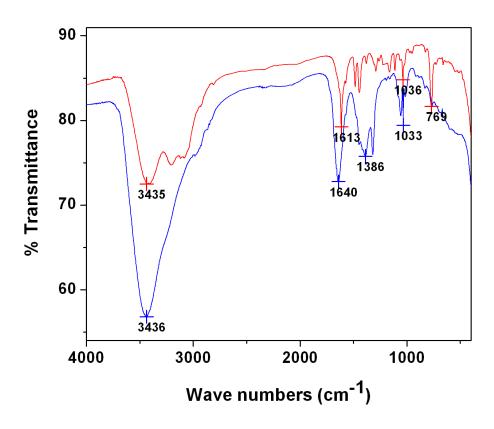


Figure S4. IR spectra of a mixture of cobalt(II) chloride and 2-aminomethylpyridine in 1: 2 molar ratio in methanol (red), and upon addition of alkaline hydrogen peroxide (blue).

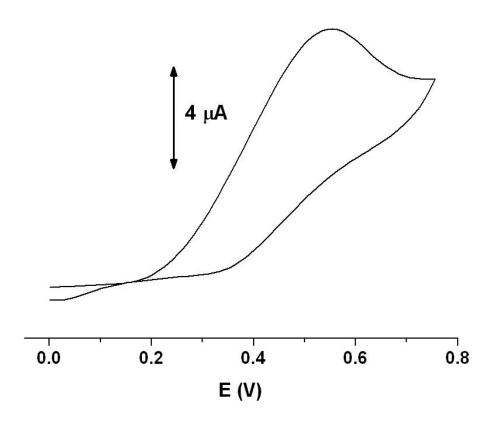


Figure S5. Cyclic voltammogram of 2-aminophenol in methanol containing TBAP as supporting electrolyte at a scan rate of 100 mV/s.

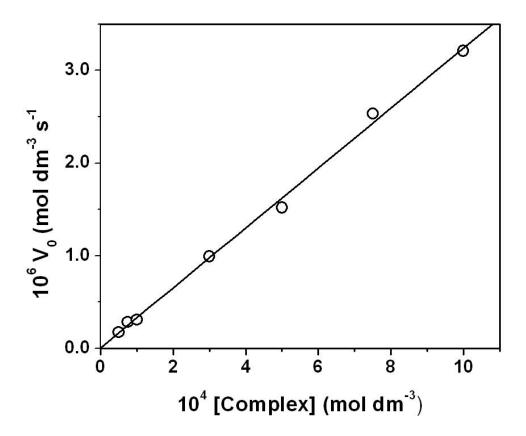


Figure S6. Plot of the reaction rates on the complex concentrations for the oxidation of 2-aminophenol catalyzed by the complex in dioxygen-saturated methanol at 25 °C