

Mild acid ($\text{CF}_3\text{CO}_2\text{H}$) added to the second hexol in $\text{Me}_2\text{SO}-d_6$ shifts the signals and gives rise to an additional OH resonance, integrating for 4H (Fig. S6). The symmetry for the complex appears to remain intact. It is suggested that the oxo bridges are protonated and Co-O bonds cleaved as shown in Fig. S7, with resultant inversion symmetry to retain the equivalence of the various NH_3 and OH groups. Coordinated solvent would occupy the sites where Co-O cleavage occurred. There are 4 OH proton signals that are still 'missing', as in the parent ion.

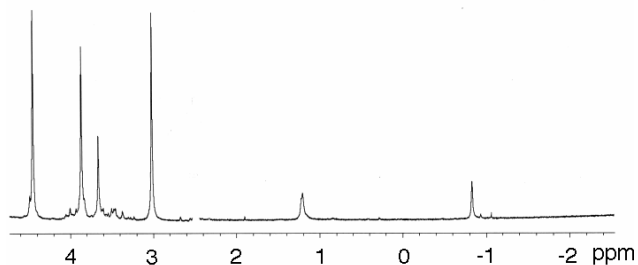


Fig. S6

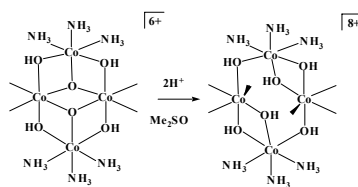


Fig. S7