Supporting information

A novel triazidoruthenium(III) building block for the construction of polynuclear compounds

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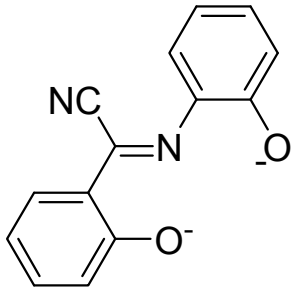

Fig. S1 Structure of CN-sap.

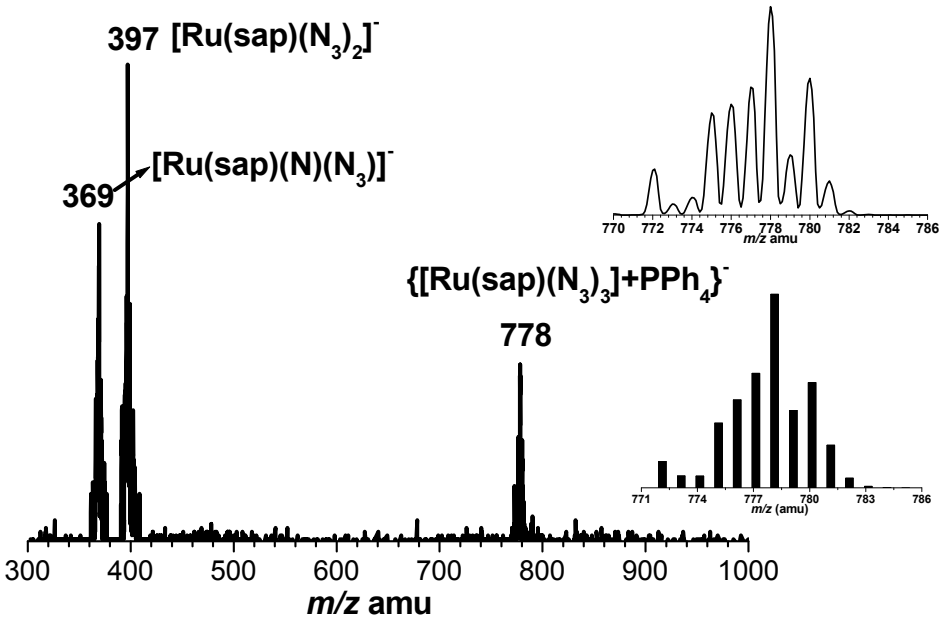

Fig. S2 ESI/MS of **1** in MeOH. Insets show the expanded (top) and simulated (bottom) isotopic distribution patterns of *m/z* 778.

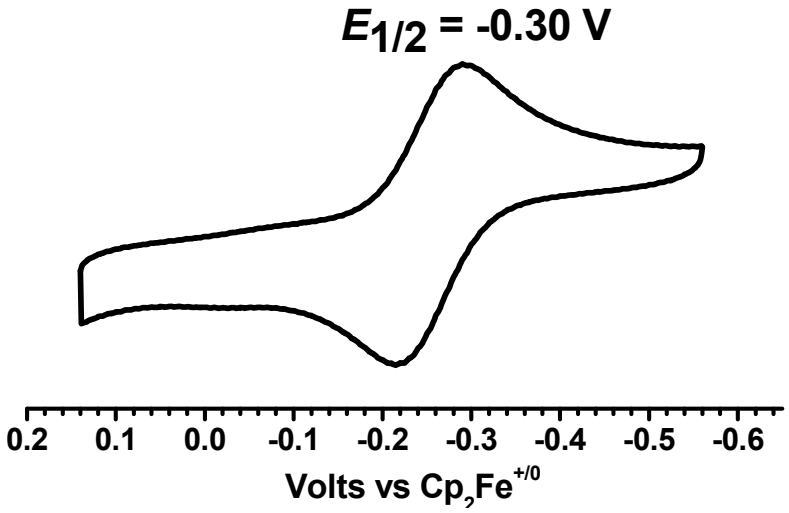

Fig. S3 Cyclic voltammogram of **1** in 0.1 M $[^{n}Bu_4N]PF_6$ in CH_3CN

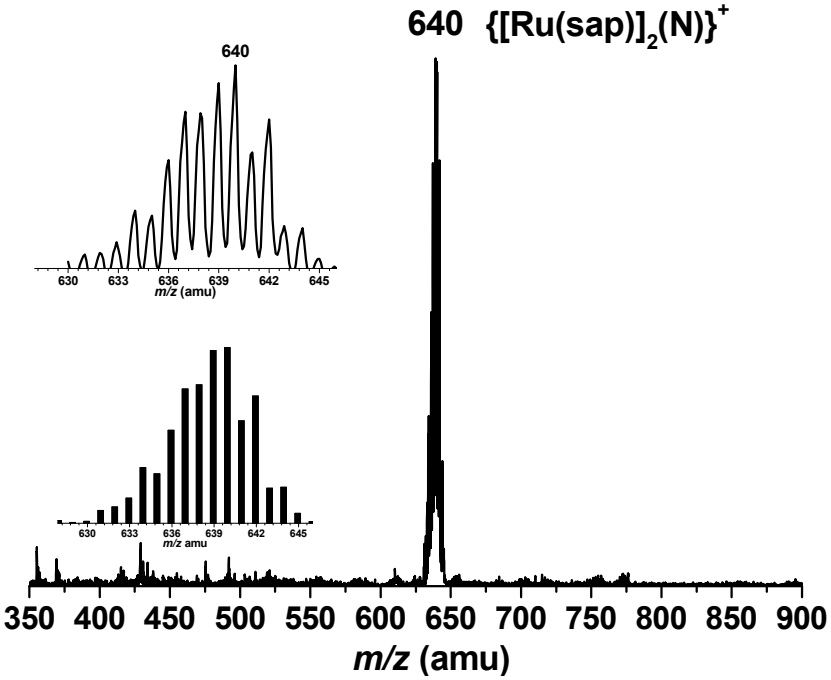

Fig. S4 ESI-MS of **2** in 0.1 M CF_3COOH in acetone. Insets show the expanded (top) and simulated (bottom) isotopic distribution patterns of *m/z* 640.

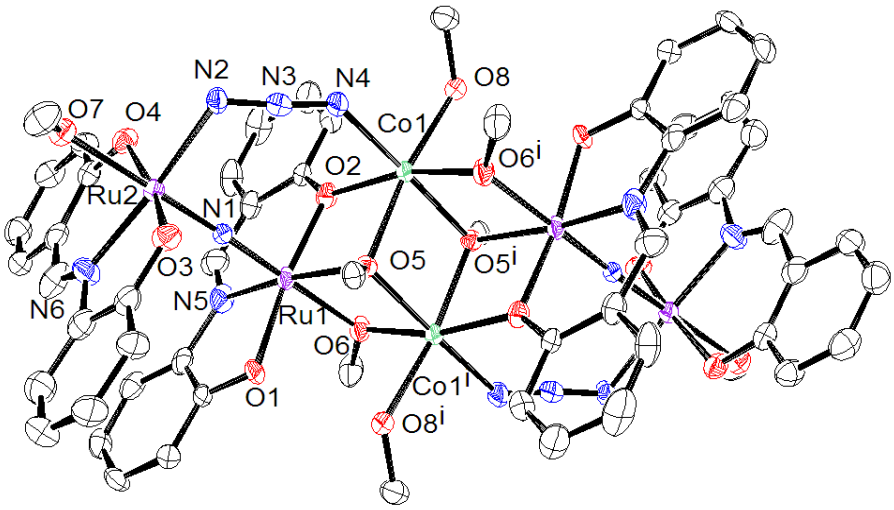

Fig. S5 ORTEP diagram of **3** and thermal ellipsoids are drawn at 30% probability (Symmetry codes: (i) –*x*+2, –*y*+2, –*z*+2).

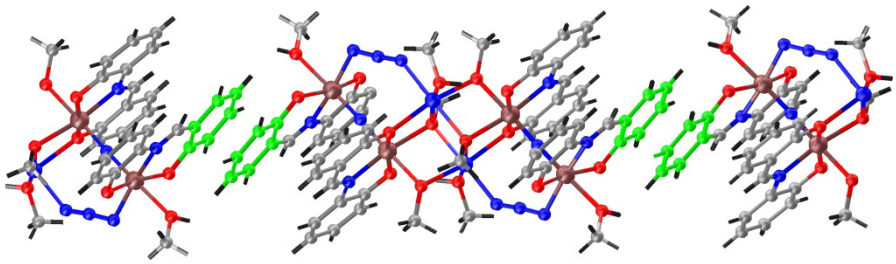

Fig. S6 The packing diagram of **3** showing the π-π interactions among the phenol rings of sap ligands.

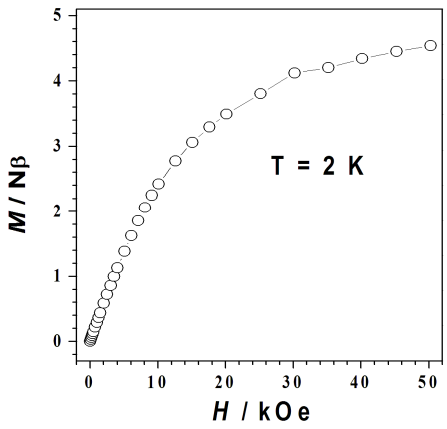

Fig. S7 Temperature dependence of χ_M and χ_M^{-1} for **2**

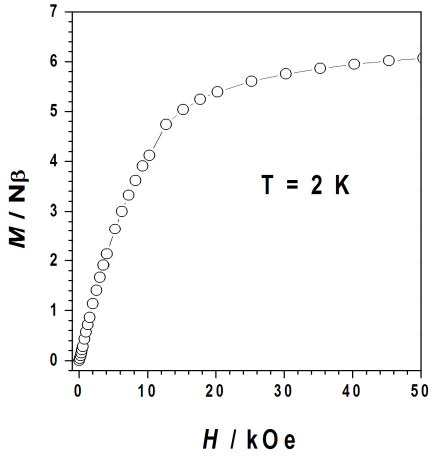

Fig. S8 Temperature dependence of χ_M and χ_M^{-1} for **3**

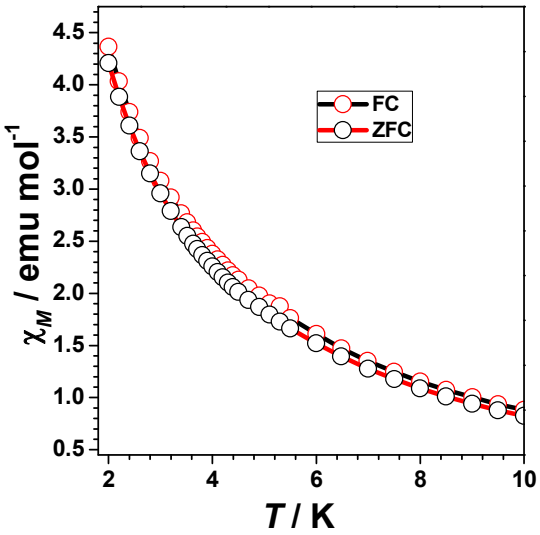

Fig. S9 ZFCM/FCM of **2** at 10 Oe

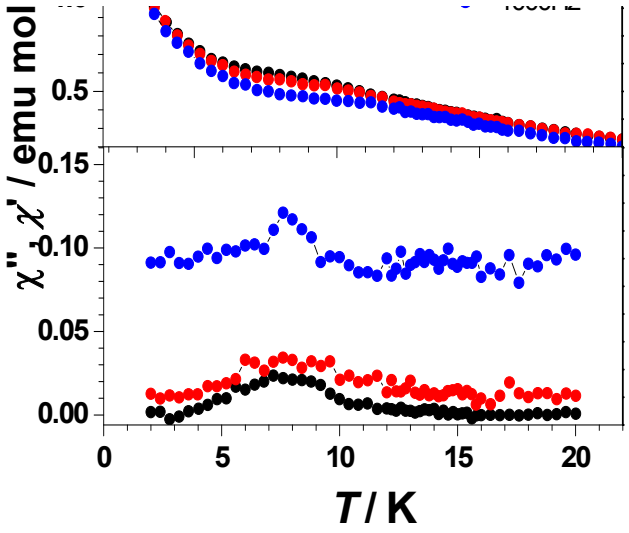

Fig. S10 Temperature dependence of real (χ') and imaginary (χ'') part of the *ac* susceptibility for **2** measured under various oscillating frequencies (10, 110, 1000Hz).

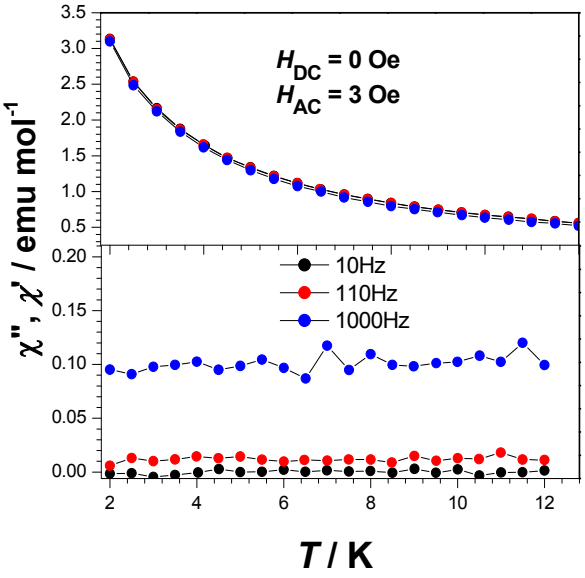

Fig S11 Temperature dependence of real (χ') and imaginary (χ'') part of the *ac* susceptibility for **3** measured under various oscillating frequencies (10, 110, 1000Hz).