Supplementary Material (ESI) for Dalton Transactions

Electronic Supplementary Information (ESI)

Mechanistic studies on oxidation of nitrite by a $\{Mn_3O_4\}^{4+}$ core in aqueous acidic media

Suranjana Das and Subrata Mukhopadhyay*

Department of Chemistry, Jadavpur University, Calcutta 700 032, India.

E-mail: smukhopadhyay@chemistry.jdvu.ac.in

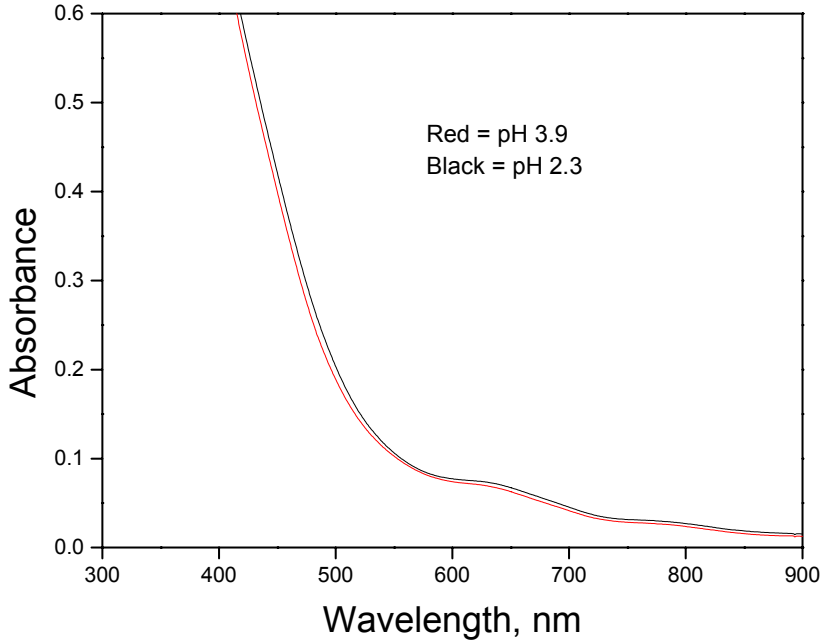

Figure S1. UV-Vis spectrum of $[Mn^{IV}_3(\mu\text{-}O)_4(phen)_4(H_2O)_2]^{4+}$ (**1**) in water at pH 2.3 and at pH 3.9 in presence no externally added phen. Both at I = 1.0 M ($NaNO_3$), T = 25.0 °C. phen = 1,10-phenanthroline.

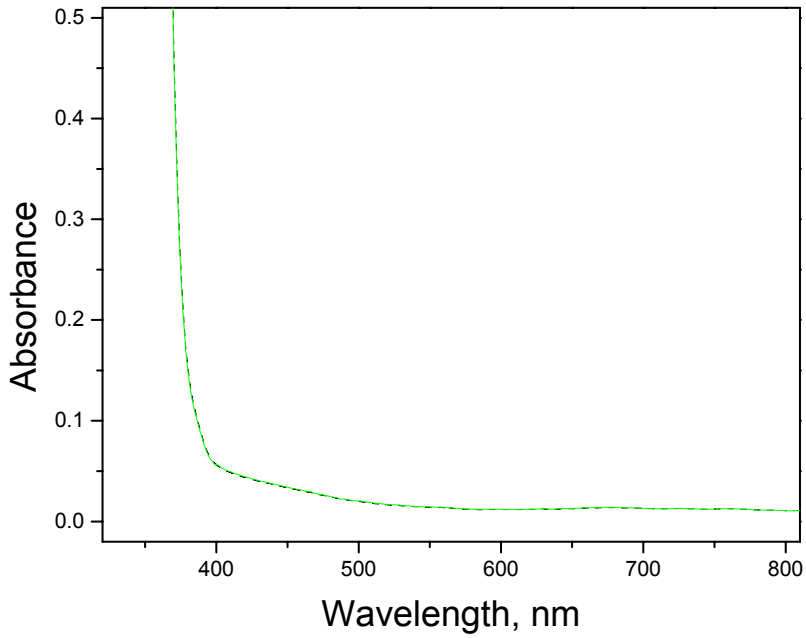

Figure S2. Optical spectrum (shown in black) of product solution when 0.10 mM of $[Mn^{IV}_3(\mu\text{-}O)_4(phen)_4(H_2O)_2]^{4+}$ (**1**) is reacted with 10.0 mM N(III) in aqueous media at pH 3.65 in presence 5.0 mM phen. The spectrum shown in green is that of a mixture of 0.30 mM $Mn(NO_3)_2$ and 5.0 mM phen at pH 3.65. Both at I = 1.0 M ($NaNO_3$), T = 25.0 °C. phen = 1,10-phenanthroline.