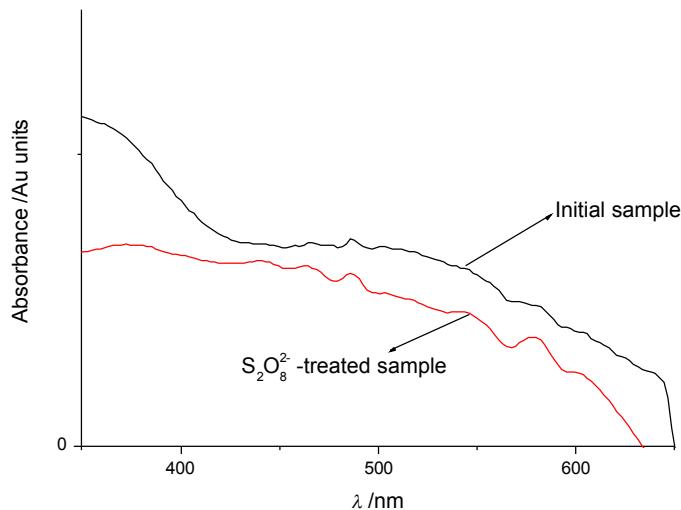


# SOL-GEL MATERIALS WITH TRAPPED TRINUCLEAR CLASS-II MIXED-VALENCE MACROCYCLIC COMPLEXES THAT MIMIC THEIR SOLUTION REDOX BEHAVIOUR

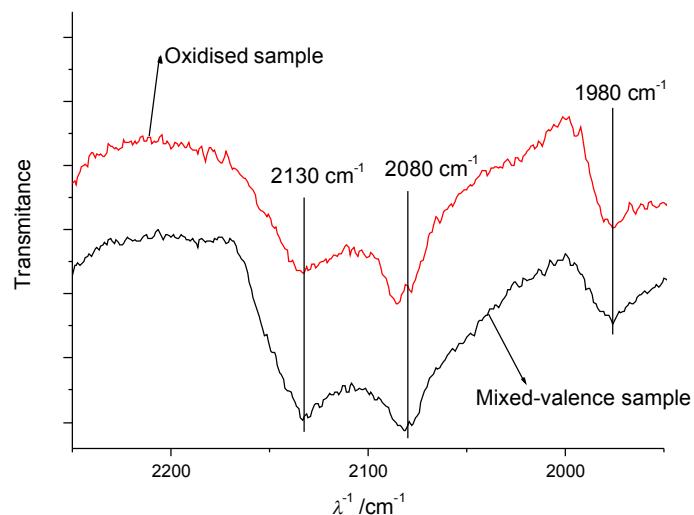
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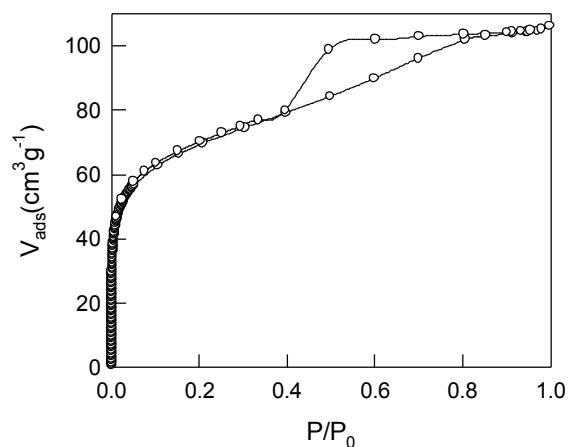
**FIGURE S1.**-Changes of the UV-Vis spectrum of a sample of the immobilized  $[\{L_{15Si}Co^{III}(\mu\text{-NC})\}Fe^{II}(CN)_5]^-$  complex upon oxidation with a 0.1 M solution of  $S_2O_8^{2-}$  at pH 3.



**FIGURE S2.-IR spectra of the CN bond stretching region for the immobilized  $[\{L_{15Si}Co^{III}(\mu\text{-NC})\}Fe^{II}(CN)_5]^-$  complex (bottom) and that obtained upon oxidation,  $[\{L_{15Si}Co^{III}(\mu\text{-NC})\}Fe^{III}(CN)_5]^0$  (top).**



**FIGURE S3.**-Nitrogen adsorption-desorption isotherm for the sample containing trapped *trans*-[ $\{L_{15}Co^{III}(\mu-NC)\}_2Fe^{II}(CN)_4\right]^{2+}$  complex.



**FIGURE S4.-** **a)** BJH pore size distribution for a sample containing trapped *trans*-  
 $[\{L_{15}Co^{III}(\mu-NC)\}_2Fe^{II}(CN)_4]^{2+}$ . **b)** MP pore size distribution for the same sample.

