

## Supplementary Materials

### Properties and antioxidant activity of water soluble iron catalysts with Schiff base ligands. Comparison with their manganese counterparts.

Verónica Daier,<sup>a</sup> Claudia Palopoli,<sup>a</sup> Christelle Hureau,<sup>b</sup> Ariel De Candia,<sup>c</sup> Sandra R. Signorella<sup>a\*</sup>

<sup>a</sup>Facultad de Ciencias Bioquímicas y Farmacéuticas - Universidad Nacional de Rosario, IQUIR (Instituto de Química Rosario) - CONICET, Suipacha 531, S2002LRK Rosario, Argentina.

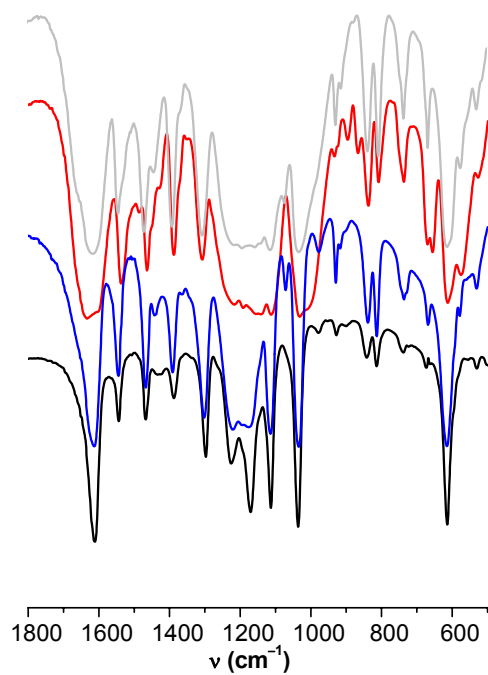
<sup>b</sup>CNRS; LCC (Laboratoire de Chimie de Coordination); 205, route de Narbonne, F-31077 Toulouse, France and Université de Toulouse; UPS, INPT; LCC; F-31077 Toulouse, France

<sup>c</sup>Departamento de Química Inorgánica, Analítica y Química Física / INQUIMAE-CONICET, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria, Pabellón 2, Buenos Aires, C1428EHA, Argentina.

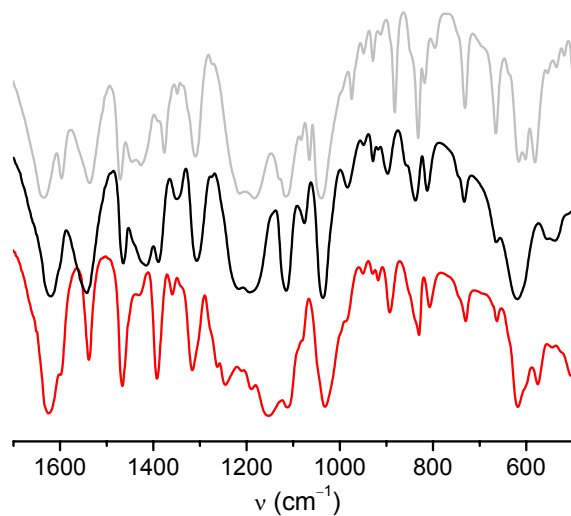
E-mail: [signorella@iquir-conicet.gov.ar](mailto:signorella@iquir-conicet.gov.ar)

#### Table of Contents

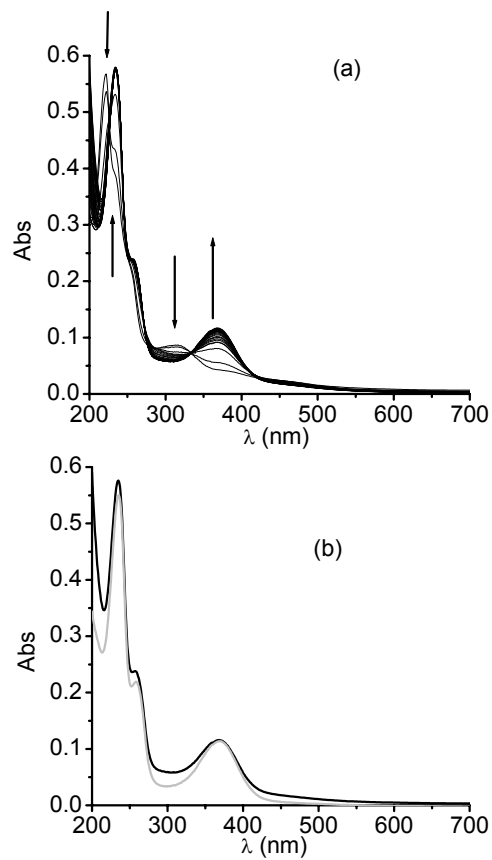
1. Figure S1. IR spectra of <b>1</b> , <b>2</b> , Mn-salpn and Mn-salpnOH	S2
2. Figure S2. IR spectra of <b>3</b> , Na[Mn <sub>2</sub> (5-SO <sub>3</sub> -salpentO)(μ-OAc)(μ-OMe)(H <sub>2</sub> O)] and Na <sub>2</sub> [Fe <sub>2</sub> (5-SO <sub>3</sub> -salpentO)(μ-O)Cl(H <sub>2</sub> O)]	S2
3. Figure S3. (a) Effect of addition of increasing amounts of Et <sub>3</sub> N (0 to 29 eqs) on a 1.15 x 10 <sup>-5</sup> M solution of <b>3</b> . (b) Spectra of a mixture of <b>3</b> and 29 eq ET <sub>3</sub> N a few minutes (—) and one day (—) after mixing	S3



**Figure S1.** IR spectra of **1** (—), **2** (—), Mn-salpn (—) and Mn-salpnOH (—)



**Figure S2.** IR spectra of **3** (—), Na[Mn<sub>2</sub>(5-SO<sub>3</sub>-salpentO)(μ-OAc)(μ-OMe)(H<sub>2</sub>O)] (—) and Na<sub>2</sub>[Fe<sub>2</sub>(5-SO<sub>3</sub>-salpentO)(μ-O)Cl(H<sub>2</sub>O)] (—).



**Figure S3.** (a) Effect of addition of increasing amounts of  $\text{Et}_3\text{N}$  (0 to 29 eqs) on a  $1.15 \times 10^{-5}$  M solution of **3**. (b) Spectra of a mixture of **3** and 29 eq  $\text{Et}_3\text{N}$  a few minutes (—) and one day (—) after mixing.