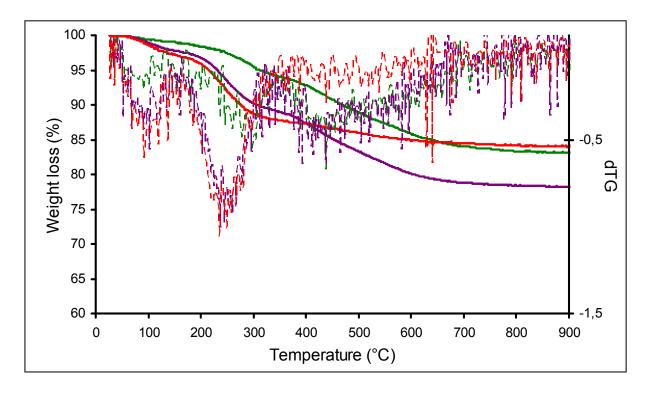
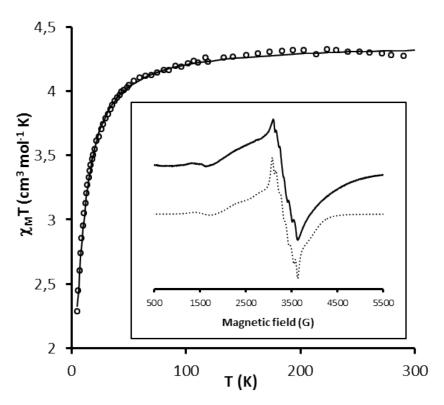
## **Electronic Supporting Information**

Bioinspired heterogeneous catalyst based on the model of the manganesedependent dioxygenase for selective oxidation using dioxygen

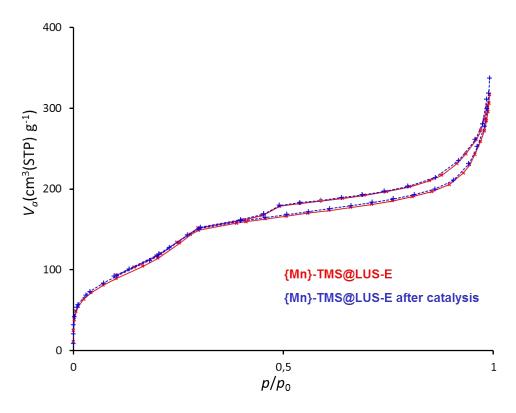
Jérémy Chaignon,<sup>a,b</sup> Marie Gourgues,<sup>a,c</sup> Lhoussain Khrouz,<sup>a</sup> Nicolás Moliner,<sup>b</sup> Laurent Bonneviot,<sup>a</sup> Fabienne Fache,<sup>c</sup> Isabel Castro\*<sup>b</sup> and Belén Albela\*<sup>a</sup>



**Figure S1**. TGA profiles of materials LUS-TMA-E15 (red), Py@LUS-TMA-E15 (purple) and  $N_3$ -Py@LUS-E15 (green) as well as their derivative curves (dotted lines). In the case of  $N_3$ -Py@LUS-E15, mass losses corresponding to the degradation of pyridine and azide functions were 9.5 and 4 % respectively.



**Figure S2**. Temperature dependence of  $\chi_M T$  for **S2**. The solid line represents the best fit discussed in the text. Insert: solid-state EPR spectra of **S1** at 120 K and its simulation (dotted line).



**Figure S3**. Nitrogen sorption isotherms at 77 K of {Mn}-TMS@LUS-E and {Mn}-TMS@LUS-E after catalysis.