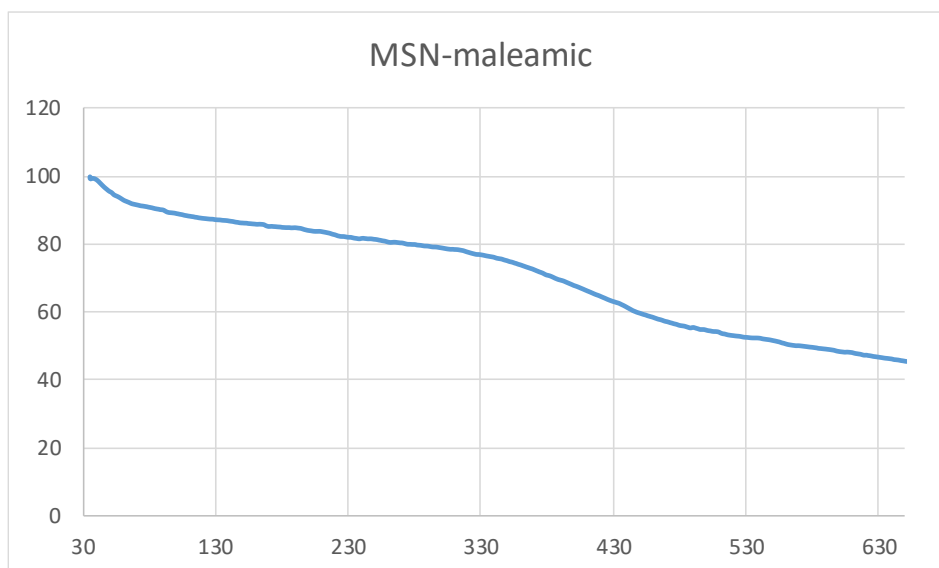
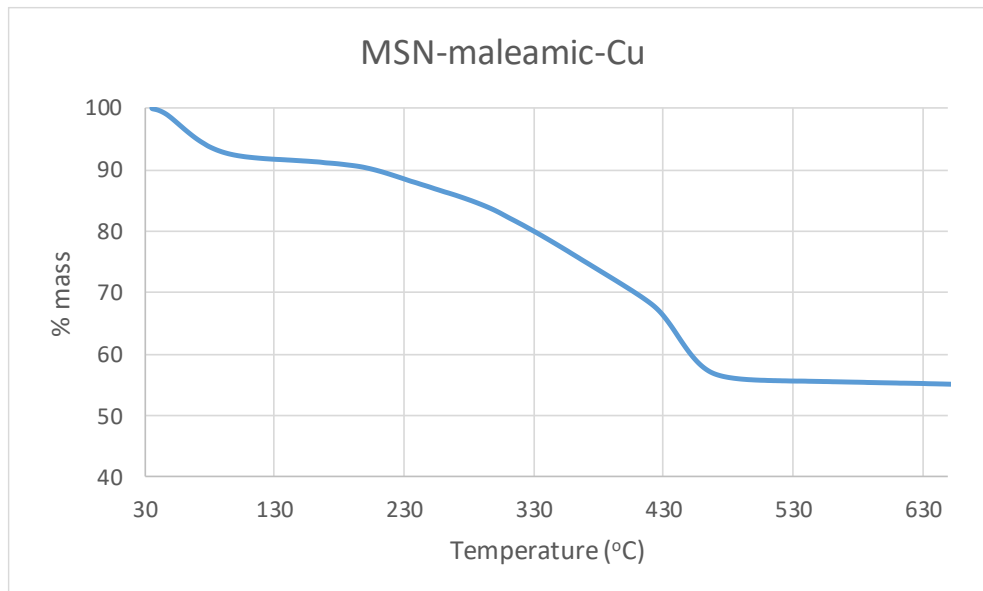


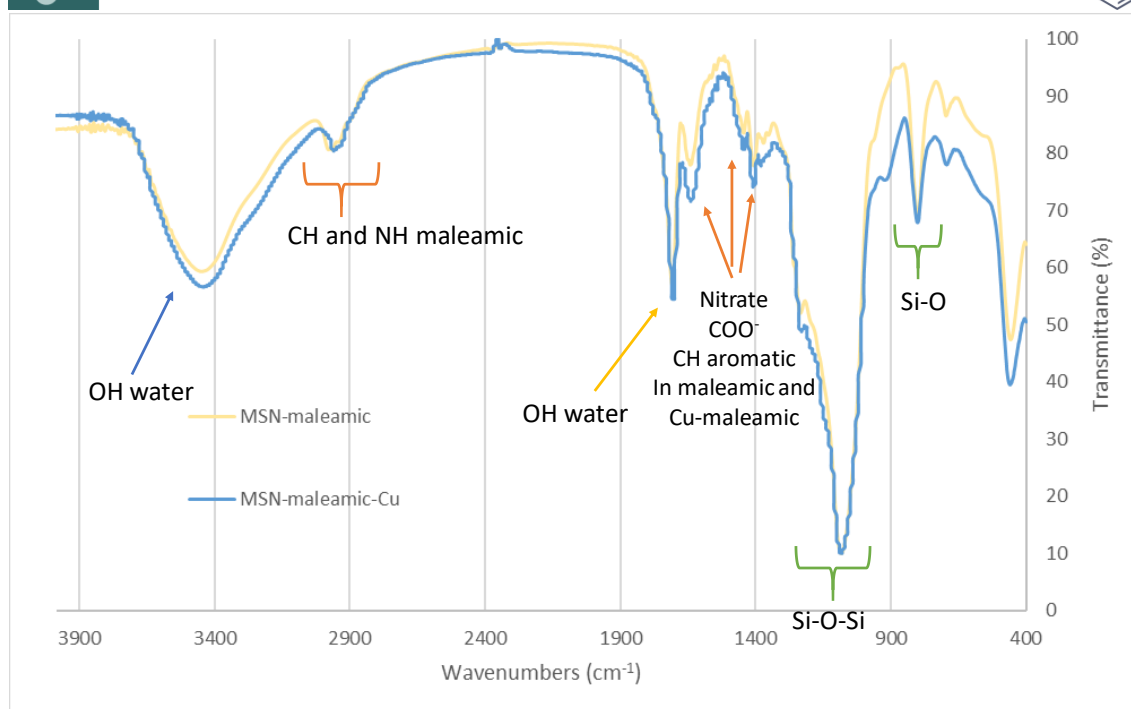
# Supplementary Materials: Preparation and Study of the Antibacterial Applications and Oxidative Stress Induction of Copper Maleamate-Functionalized Mesoporous Silica Nanoparticles



**Figure S1.** TG of MSN-maleamic.



**Figure S2.** TG of MSN-maleamic-Cu.



**Figure S3.** FT-IR spectra of MSN-maleamic and MSN-maleamic-Cu.

**Table S1.** TON, TOF, selectivity to benzaldehyde or benzyl benzoate in the oxidation of benzyl alcohol catalyzed by MSN-maleamic-Cu with different H<sub>2</sub>O<sub>2</sub> quantities.<sup>a</sup>

| Material                                 | Benzaldehyde |                        |                 | Benzyl benzoate |                        |                 | Time (h) |
|------------------------------------------|--------------|------------------------|-----------------|-----------------|------------------------|-----------------|----------|
|                                          | TON          | TOF (h <sup>-1</sup> ) | Selectivity (%) | TON             | TOF (h <sup>-1</sup> ) | Selectivity (%) |          |
| MSN-maleamic-Cu                          | 1.33         | 0.06                   | 67.19           | 0.65            | 0.03                   | 32.81           | 6        |
| (1.5 mL H <sub>2</sub> O <sub>2</sub> )  | 1.15         | 0.19                   | 70.34           | 0.49            | 0.08                   | 29.66           | 24       |
| MSN-maleamic-Cu                          | 1.25         | 0.21                   | 73.36           | 0.46            | 0.08                   | 26.64           | 6        |
| (1.0 mL H <sub>2</sub> O <sub>2</sub> )  | 1.14         | 0.05                   | 61.13           | 0.73            | 0.03                   | 38.87           | 24       |
| MSN-maleamic-Cu                          | 1.13±0.03    | 0.19±0                 | 91.73±0.27      | 0.10±0.007      | 0.02±0.001             | 8.27±0.27       | 6        |
| (0.25 mL H <sub>2</sub> O <sub>2</sub> ) | 1.03±0.20    | 0.04±0.01              | 90.85±1.64      | 0.10±0.007      | 0.02±0.001             | 9.15±1.64       | 24       |

<sup>a</sup> The results without SD correspond to the mean of a unique set of two experiments.