

## Electronic Supplementary Information

### **Uniform copper oxide–poly(m-phenylenediamine) microflowers: synthesis and application for the adsorption of methyl orange**

Tingting Guo, Xinyuan Kang, Tingting Zhang, Fang Liao\*

College of Chemistry and Chemical Engineering, China West Normal University.

Nanchong 637002, China

\*To whom correspondence should be addressed. Tel/Fax: (+86) 817-2568067;

E-mail: [liao Zhang2003@163.com](mailto:liao Zhang2003@163.com).

## 1 Experimental Section

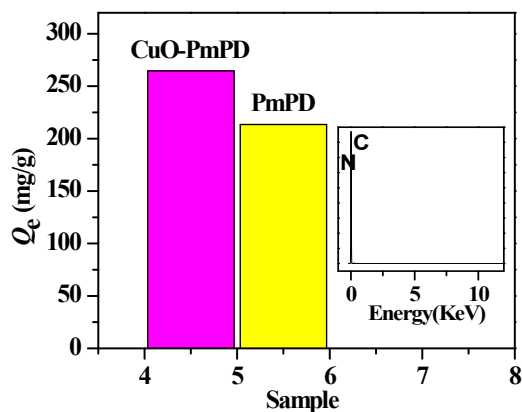
### (1) Preparation of PmPD

The PmPD were prepared as follows: 2 mL of mPD aqueous solution (20mM) was directly introduced into 8 mL of  $(\text{NH}_4)_2\text{S}_2\text{O}_8$  aqueous solution (20mM) at 20 °C for 12 h, a large quantity of brown precipitates were observed. The formed precipitates were washed with distilled water for three times, and then dried at 50 °C in vacuum for further characterization<sup>1</sup>.

### (2) The adsorption of MO on PmPD

5mg PmPD was equilibrated with 20 mL of 65 mg/L aqueous MO solution in a 100 mL Erlenmeyer flask at 30 °C using a shaking bath. The initial pH was 6.5. After shaking for 1 h to ensure full equilibration, the suspension was separated by centrifugation and the obtained supernatant was estimated by UV-Vis absorption spectroscopy.

## 2 Figure



**Figure S1** Comparison of MO adsorption capacity between the CuO-PmPD and PmPD. [MO] = 65 mg/L; pH=6.5; T=30°C; t=1.0h; the dose of each adsorbent is 5mg. The inset is the EDS image of PmPD

## Notes and references

- 1 T. Guo, F. Liao, Z. Wang and S. Yang, *Journal of Materials Science Research*, 2012, **1**.