

## Electronic Supporting Information

for

# Iron-based Metal Organic Frameworks, MIL-88A, as a Heterogeneous Persulfate Catalyst for Degradation of Rhodamine B in Water

*Kun-Yi Andrew Lin\**, *Hsuan-Ang Chen* and *Chung-Jun Hsu*

<sup>a</sup>Department of Environmental Engineering, National Chung Hsing University, 250 Kuo-Kuang Road, Taichung, Taiwan, R.O.C.

\*Corresponding Author. Tel: +886-4-22854709, E-mail address: [linky@nchu.edu.tw](mailto:linky@nchu.edu.tw)

(Kun-Yi Andrew Lin)

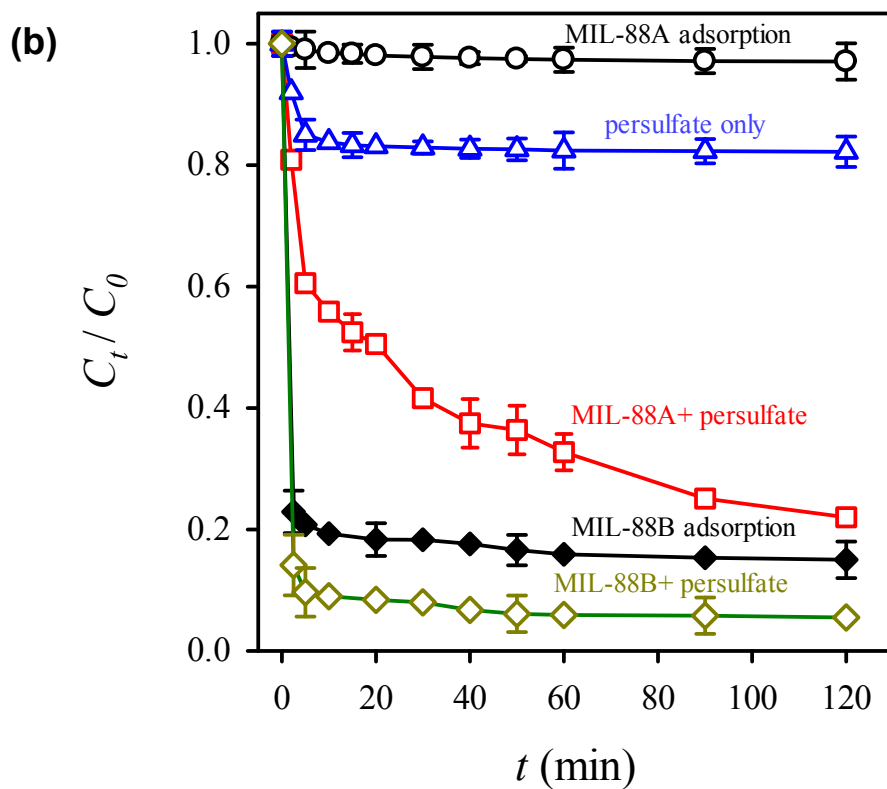
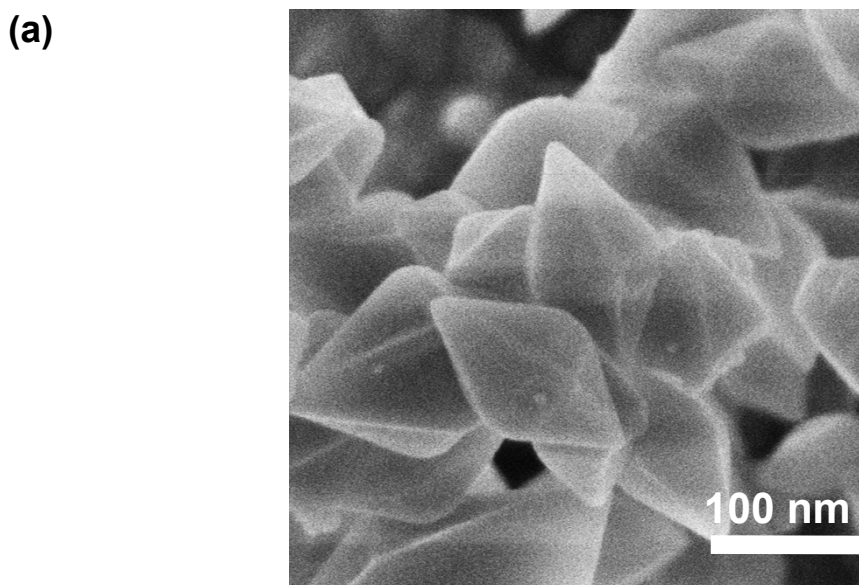


Fig. S1. MIL-88B: (a) SEM image of the as-synthesized MIL-88B and (b) RB decolorization using MIL-88B with and without persulfate in comparison with MIL-88A. (Persulfate = 200 mg L<sup>-1</sup>, MIL-88A and MIL-88B = 500 mg L<sup>-1</sup>, RB = 10 mg L<sup>-1</sup>, 40 °C).

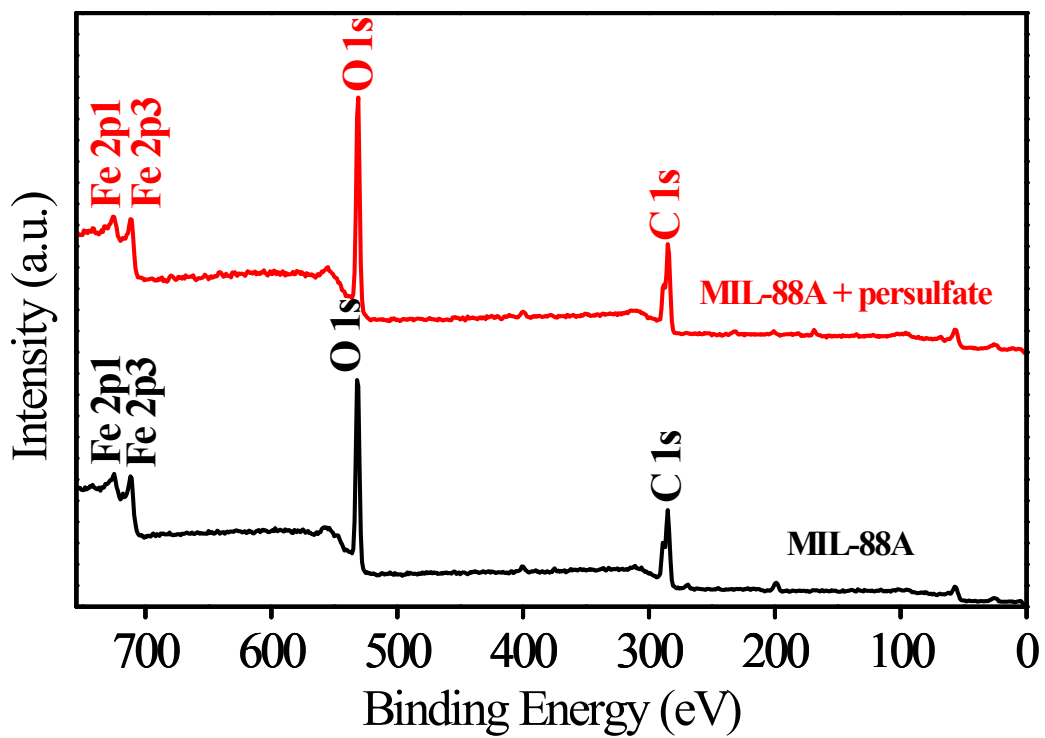


Fig. S2. XPS spectra of full survey of the pristine MIL-88A and MIL-88A recovered from the reaction of persulfate activation.

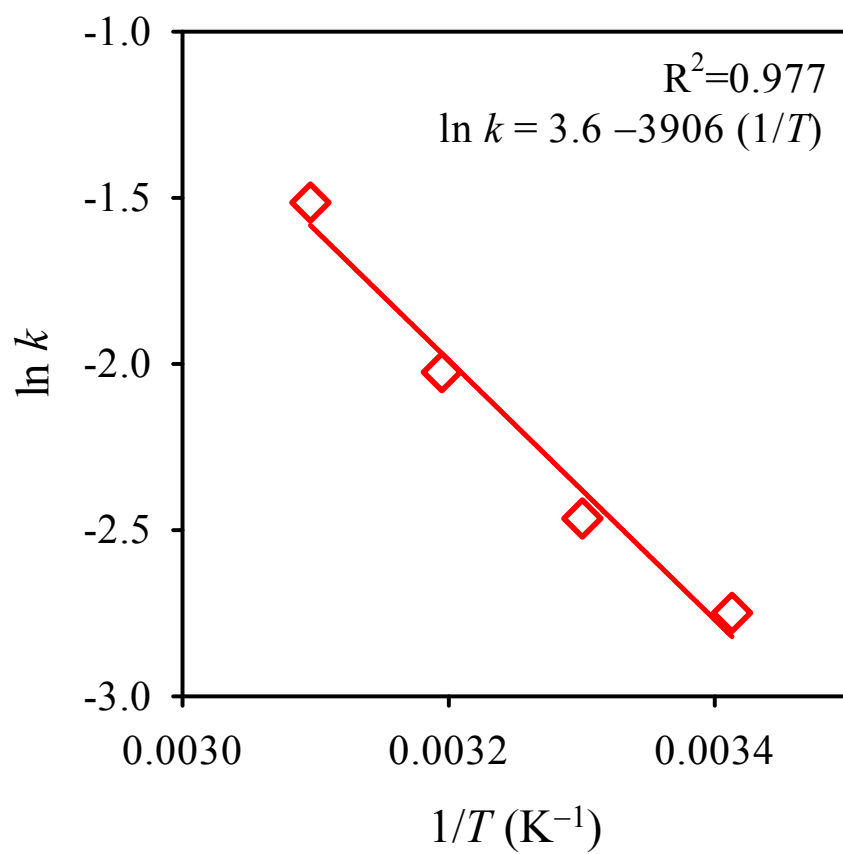


Fig. S3. Arrhenius plot of Rhodamine B decolorization using persulfate activated by MIL-88A.

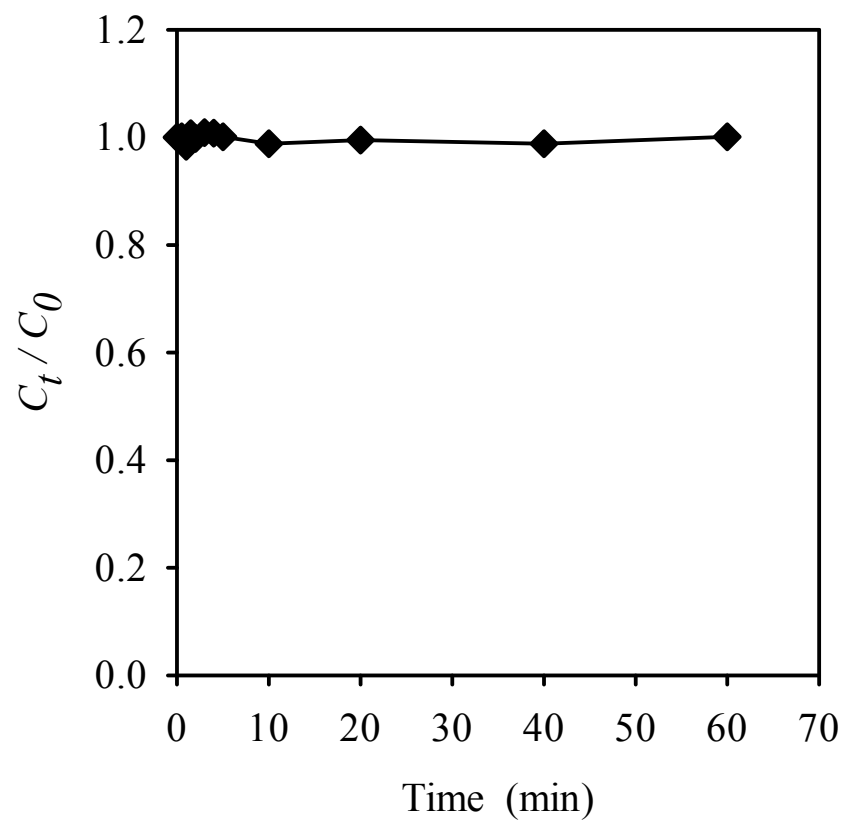


Fig. S4. Photolysis of Rhodamine B in water by the UV irradiation at 40 °C.