## **Electronic Supporting Information**

## for

Magnetic Iron/Carbon Nanorod Derived from Metal Organic Framework as an Efficient Heterogeneous Catalyst for Chemical Oxidation Process in Water

Kun-Yi Andrew Lin\* and Fu-Kong Hsu

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: <u>linky@nchu.edu.tw</u> (Kun-Yi Andrew Lin)



Fig. S1. The size distribution of MIL-88A nanorod. The red line shows the fitting curve for the distribution by Log Normal distribution model.



Fig. S2. Sequential pictures showing the quick separation of MICN from water by a permanent magnet: (a) t = 0 s, (b) t = 2 s, (c) t = 3 s, (d) t = 5 s, and (e) t = 10 s.



Fig. S3. The Arrhenius plots of Rhodamine B decolorization using MICN-activated oxidative processes: (a) peroxide and (b) persulfate.



Fig. S4. Photolysis of RB (50 mg  $L^{-1}$ ) in water by the UV irradiation at 25 °C.