

Support information

Importance of reagents addition order in contaminant degradation in Fe(II)/PMS system

Ying Huang, Zhaohui Wang* , Changling Fang, Wenqian Liu, Xiaoyi Lou and Jianshe Liu

State Environmental Protection Engineering Centre for Pollution Treatment and Control in Textile Industry, College of Environmental Science and Engineering, Donghua University, Shanghai, 201620, China.

*Corresponding author: Email: zhaohuiwang@dhu.edu.cn (Z. Wang).

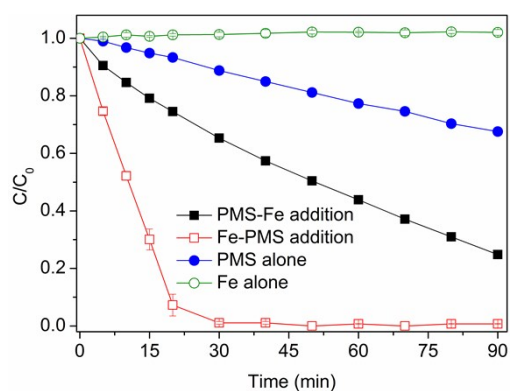


Fig. S1 The degradation of MB as a function of reaction time in Fe(II)/PMS system.

Conditions: $[MB]_0=0.05$ mM; $[PMS]_0=0.3$ mM.

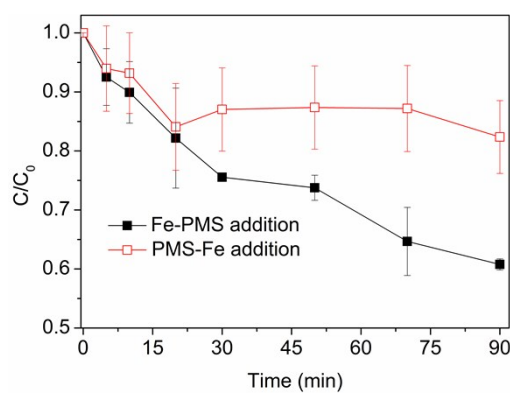


Fig. S2 The degradation of 4-Chloro-2-Nitrophenol (4C2NP) in Fe(II)/PMS system.

Conditions: $[4C2NP]_0=0.05$ mM; $[Fe(II)]_0=0.3$ mM; $[PMS]_0=0.3$ mM

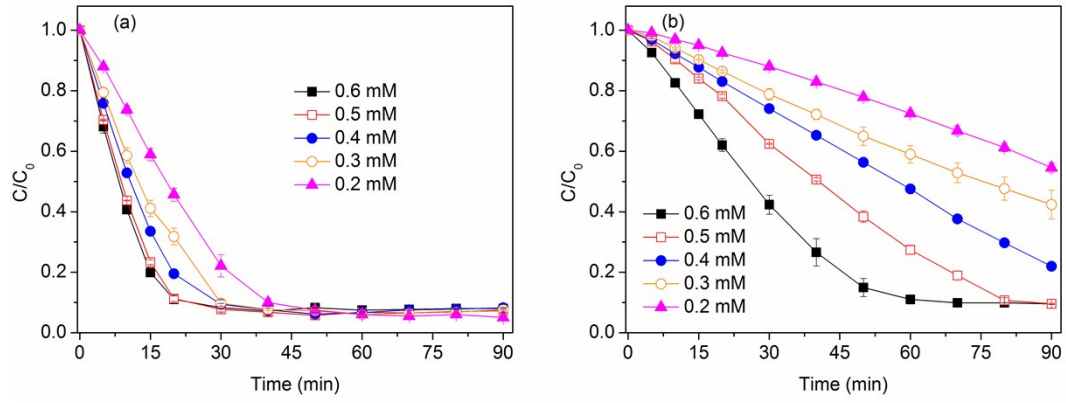


Fig. S3 The degradation of AO7 in Fe(II)/PMS system. (a) Fe(II)-PMS addition; (b) PMS-Fe(II) addition. Conditions: $[AO7]_0=0.05$ mM; $[PMS]_0=0.3$ mM; pH=3.0.

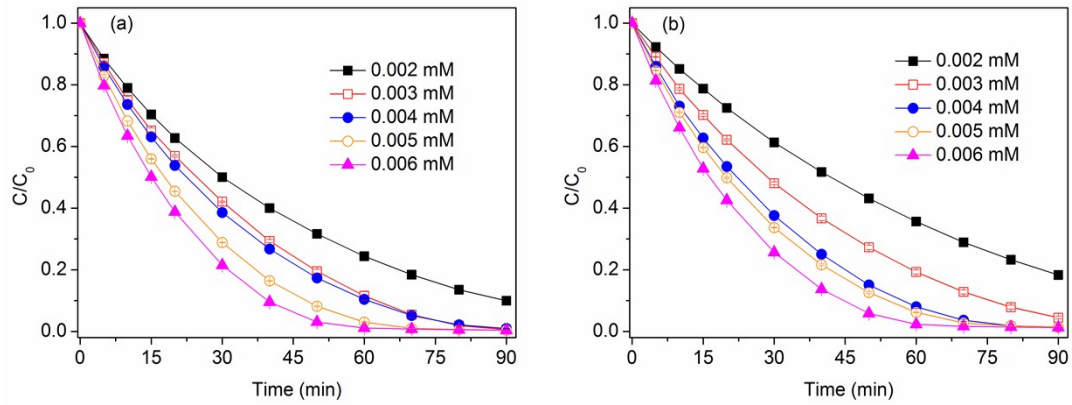


Fig. S4 The degradation of AO7 as a function of reaction time in Co(II)/PMS system. (a) Co(II)-PMS addition; (b) PMS-Co(II) addition. Conditions: $[AO7]_0=0.05$ mM; $[PMS]_0=0.3$ mM; pH=3.0.

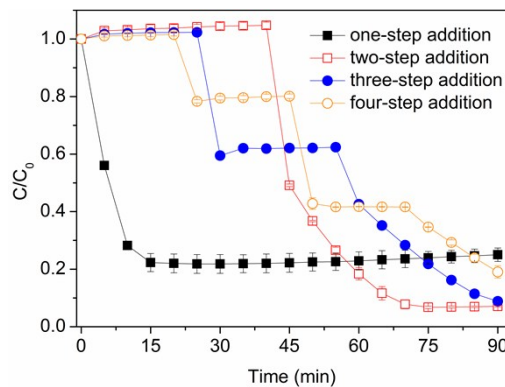


Fig. S5 Stepwise addition of PMS on AO7 degradation process as a function of reaction time in Fe(II)/PMS system. Conditions: $[AO7]_0=0.1$ mM; $[Fe(II)]_0=0.6$ mM; $[PMS]_{total}=0.3$ mM.

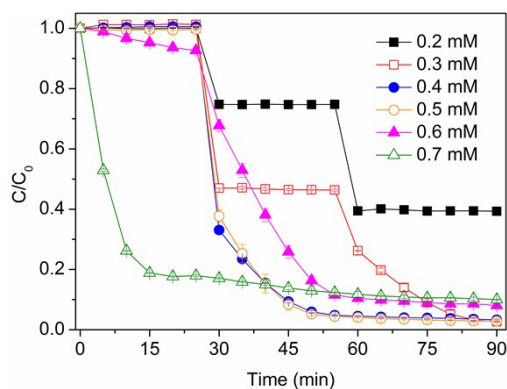


Fig. S6 Effect of PMS concentration on the degradation of AO7 for three-step addition in Fe(II)/PMS system. Conditions: $[AO7]_0=0.05$ mM; $[Fe(II)]_0=0.3$ mM.