Supplementary material

Reutilization of Fe-containing tailings ore enriched by iron (III) chloride as heterogeneous Fenton catalyst for decolorization of organic dyes

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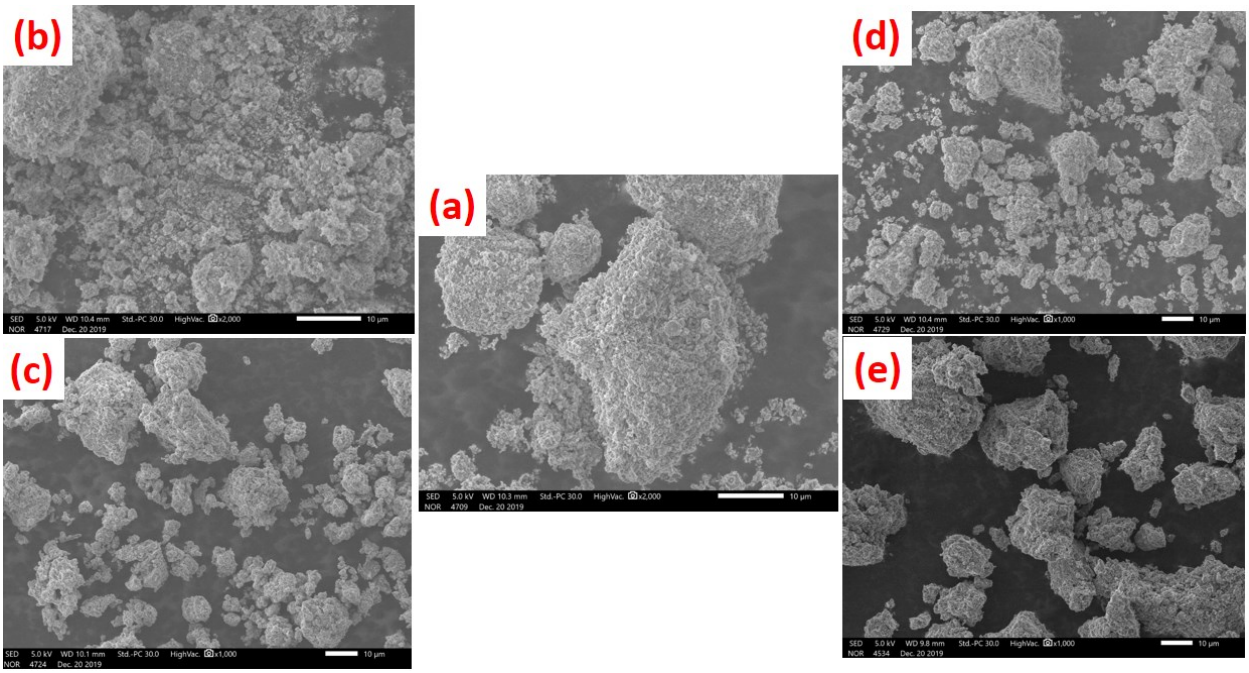

Figure S1. SEM images of (a) Fe-TO; (b) MFe-TO5; (c) MFe-TO10; (d) MFe-TO15; (e) MFe-TO20

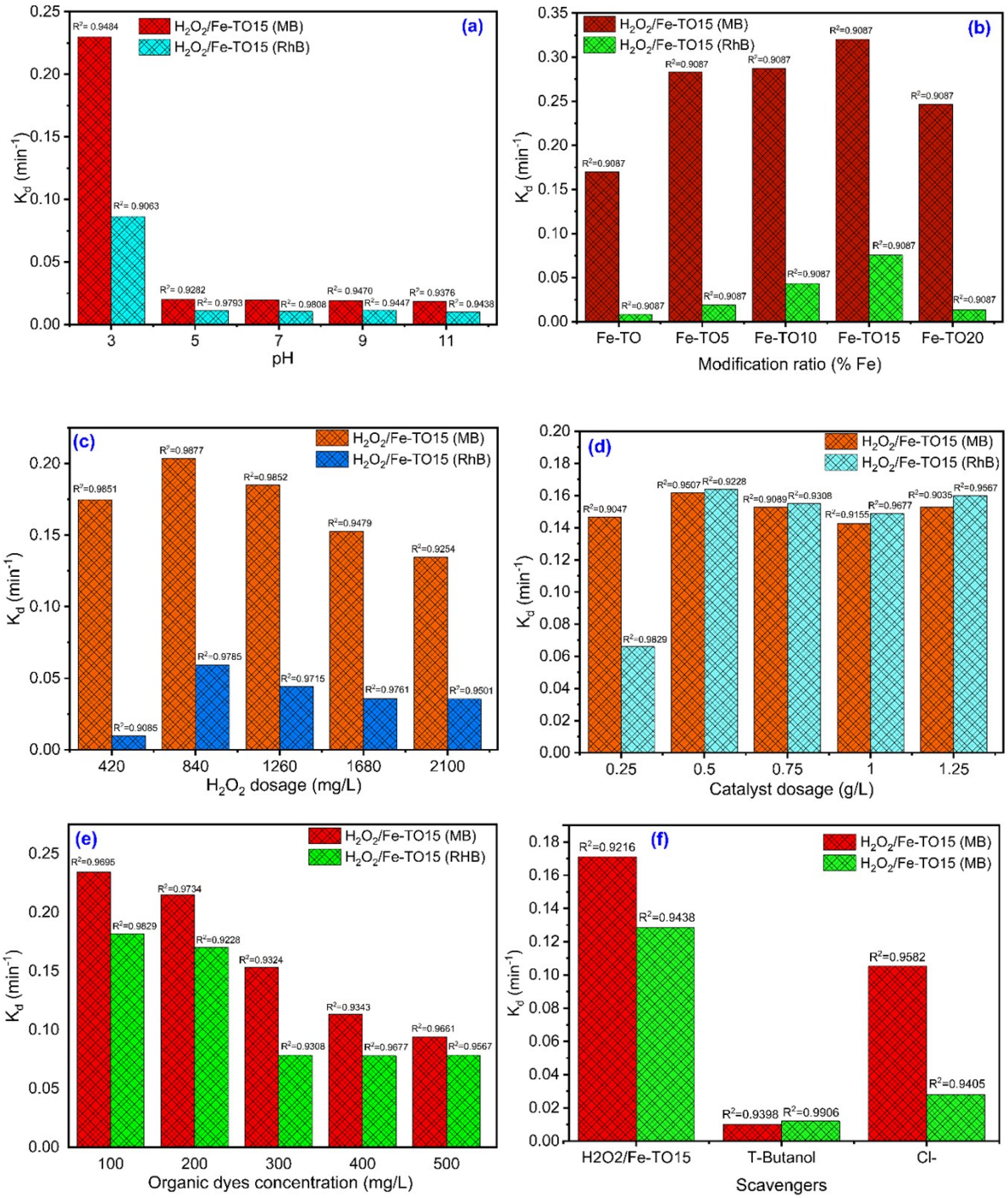

Figure S2. K_d values and R^2 of MB and RhB decolorization by H_2O_2/MFe-TO15 with varying of (a) solution pH; (b) modification ratios; (c) H_2O_2 dosages; (d) catalysts dosages; (e) initial organic dyes concentrations and (f) scavengers concentrations.

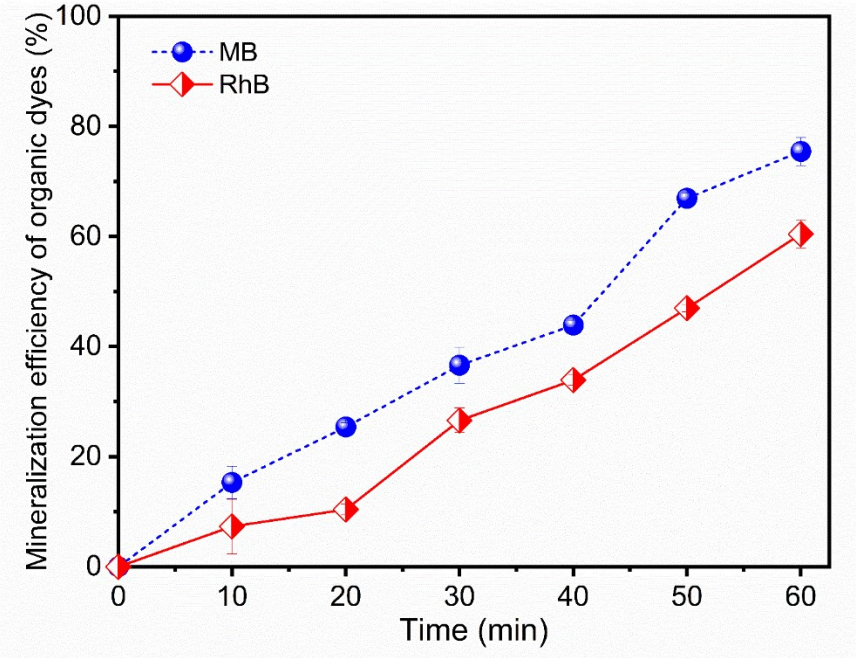

Figure S3. Mineralization of MB and RhB (in term of COD removal) by H_2O_2/MFe-TO15 system at pH of 3, catalyst dosage of 0.5 g/L, H_2O_2 dosage of 840 mg/L, initial organic dyes concentration of 200 mg/L.

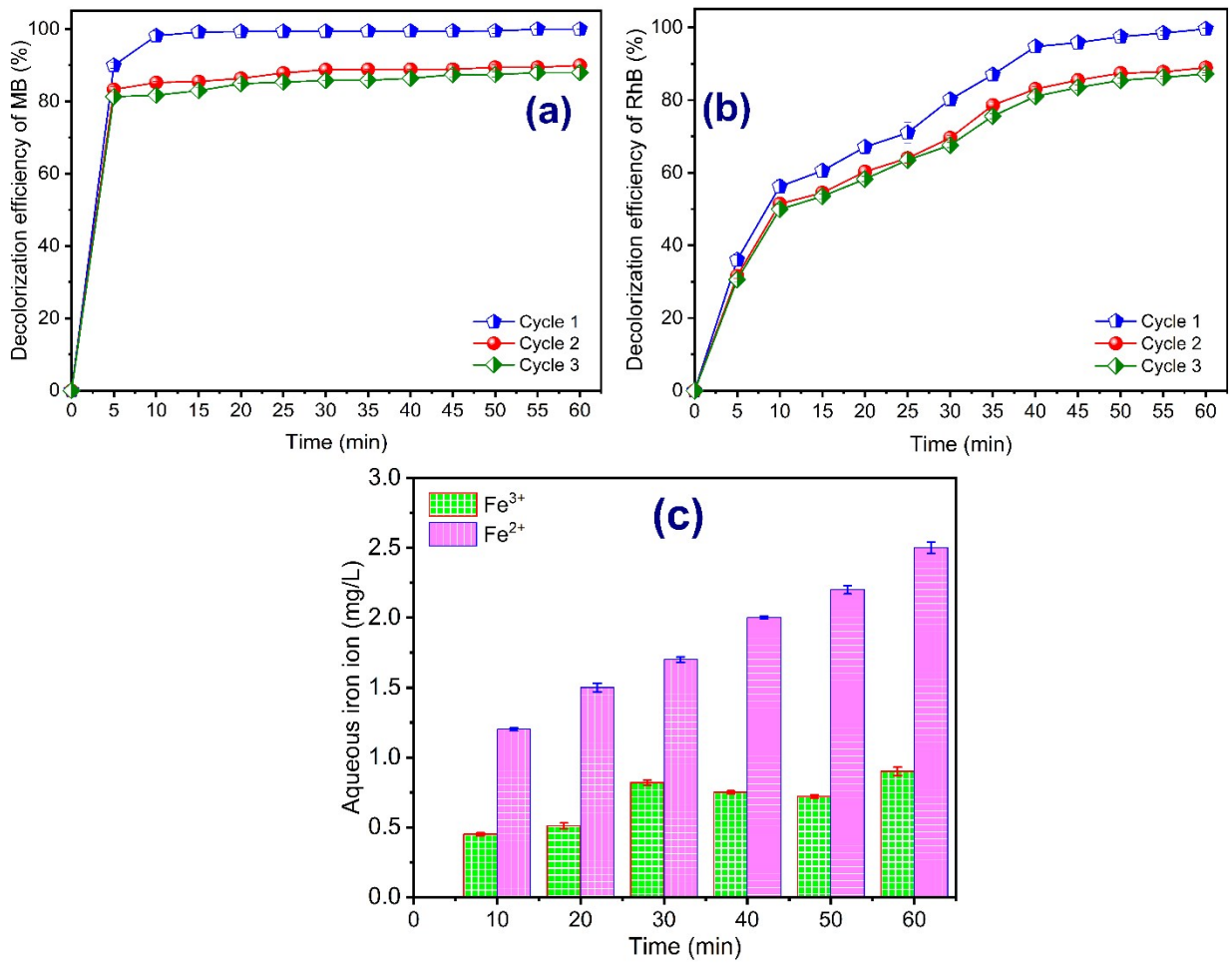

Figure S4. Reusability of catalyst (MFe-TO15) for decolorization of (a) MB; (b) RhB and stability of catalyst evaluated through leaching iron (c) at pH of 3, catalyst dosage of 0.5 g/L, H_2O_2 dosage of 840 mg/L, initial organic dyes concentration of 200 mg/L by H_2O_2/MFe-TO15 system.