Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Data

Preparation of Mn_2O_3/MIL-100(Fe) composite and its mechanism for enhancing the photocatalytic removal of Rhodamine B in water under visible light and persulfate activation

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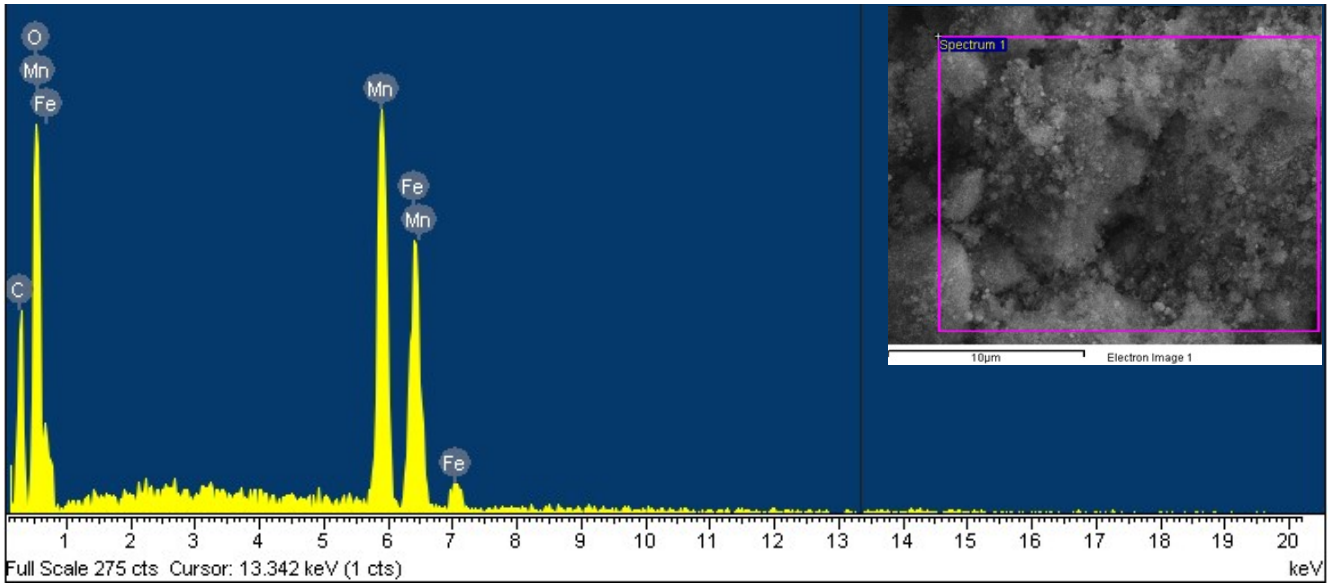

Figure S1. EDX spectrum of M100Mn(60:40)

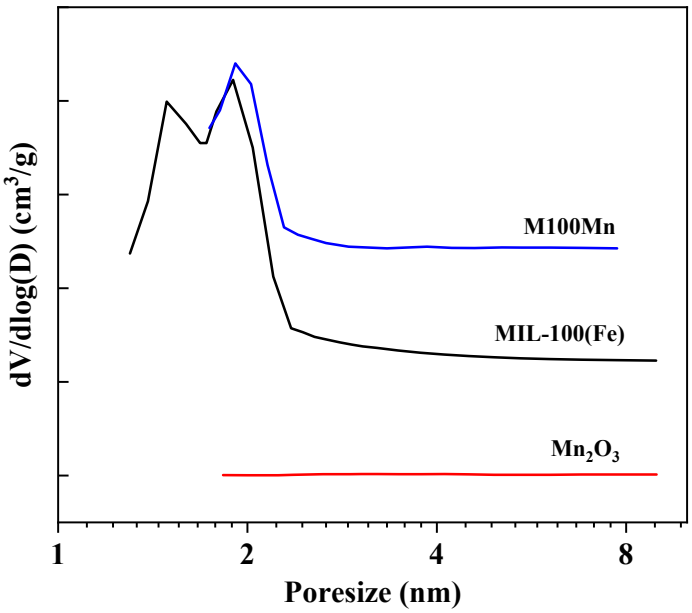

Figure S2. Pore size distribution of Mn_2O_3, MIL-100(Fe), and M100Mn(60:40) materials

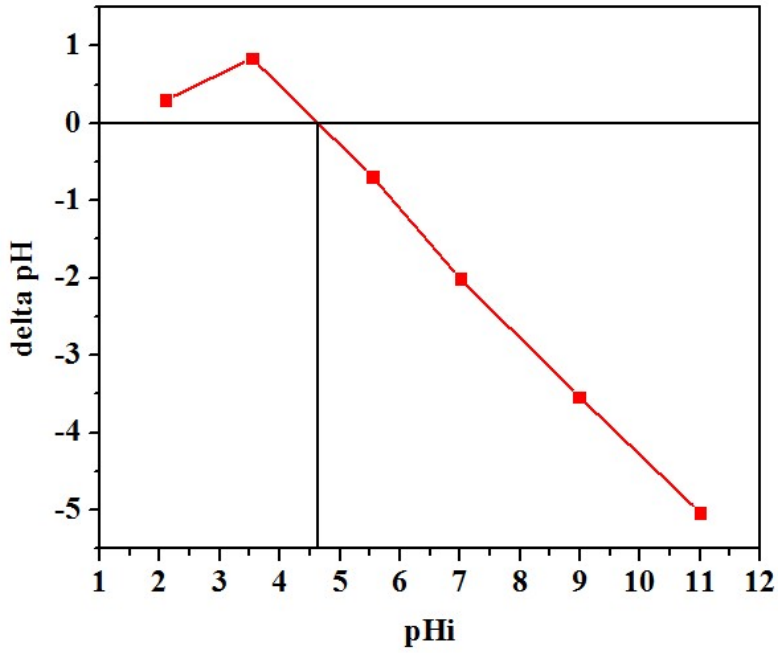

Figure S3. Plot for determining the pH_{pzc} of the M100Mn(60:40) material

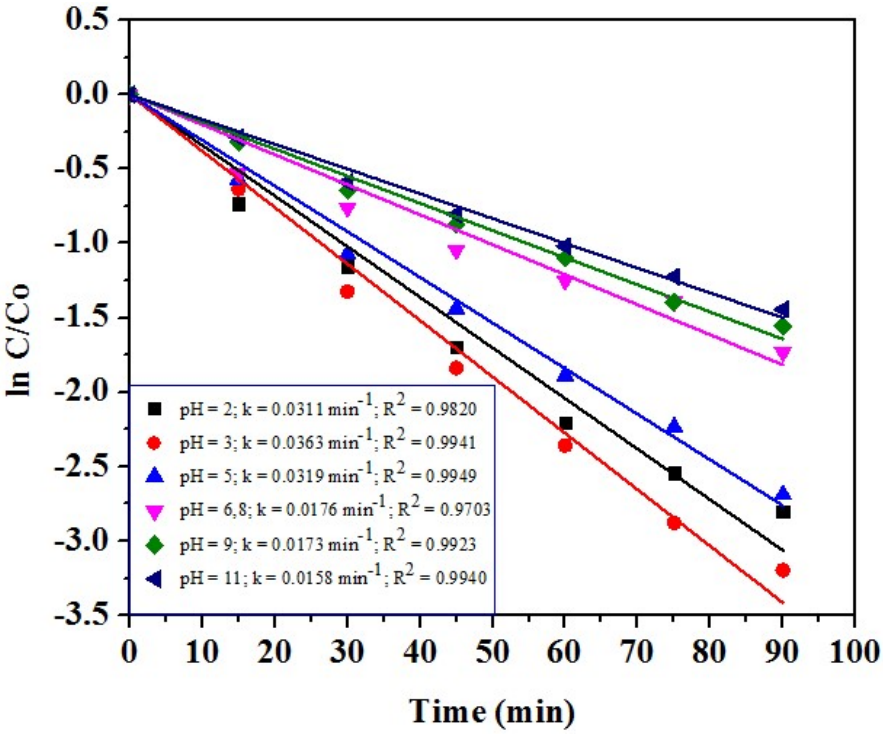

Figure S4. Degradation rate constant of RhB by the M100Mn/$Na_2S_2O_8$/Vis system with different solution pH

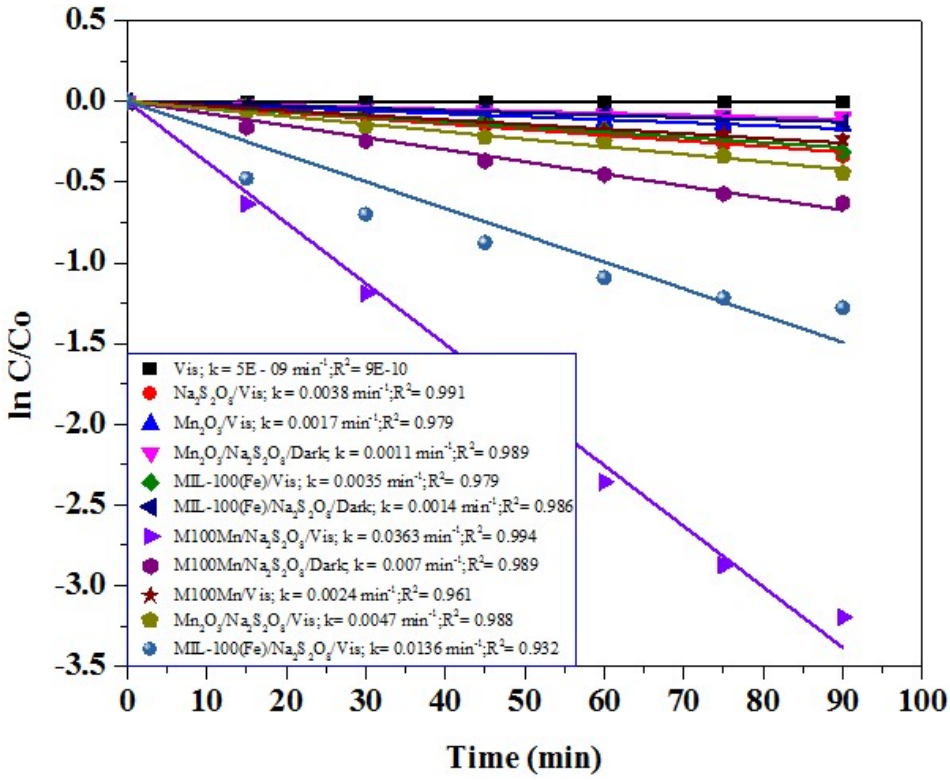

Figure S5. Degradation rate constant of RhB in different reaction systems

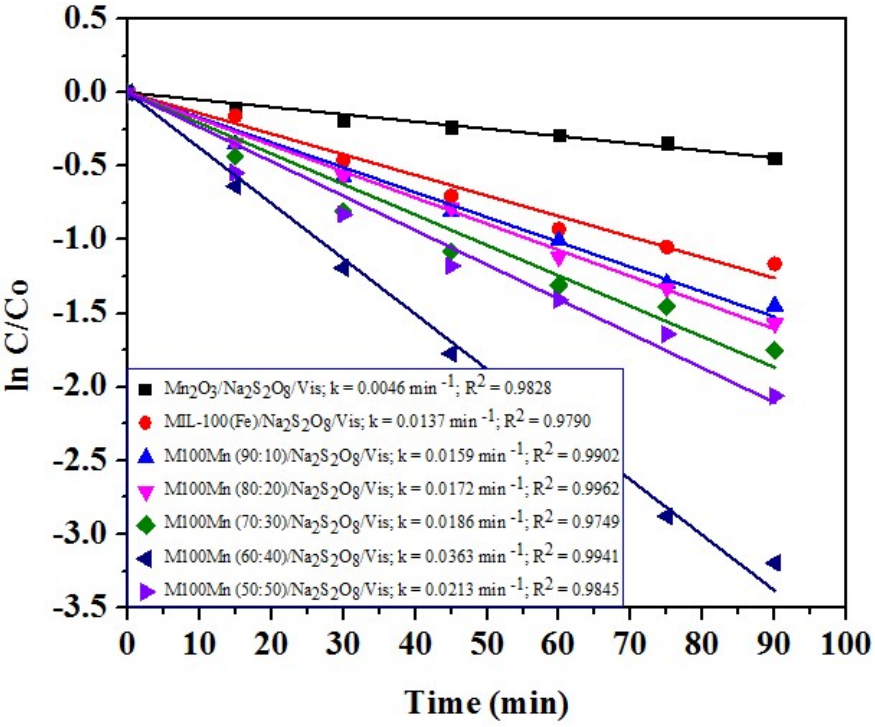

Figure S6. Degradation rate constant of RhB by M100Mn composites with different MIL-100(Fe):Mn_2O_3 ratios

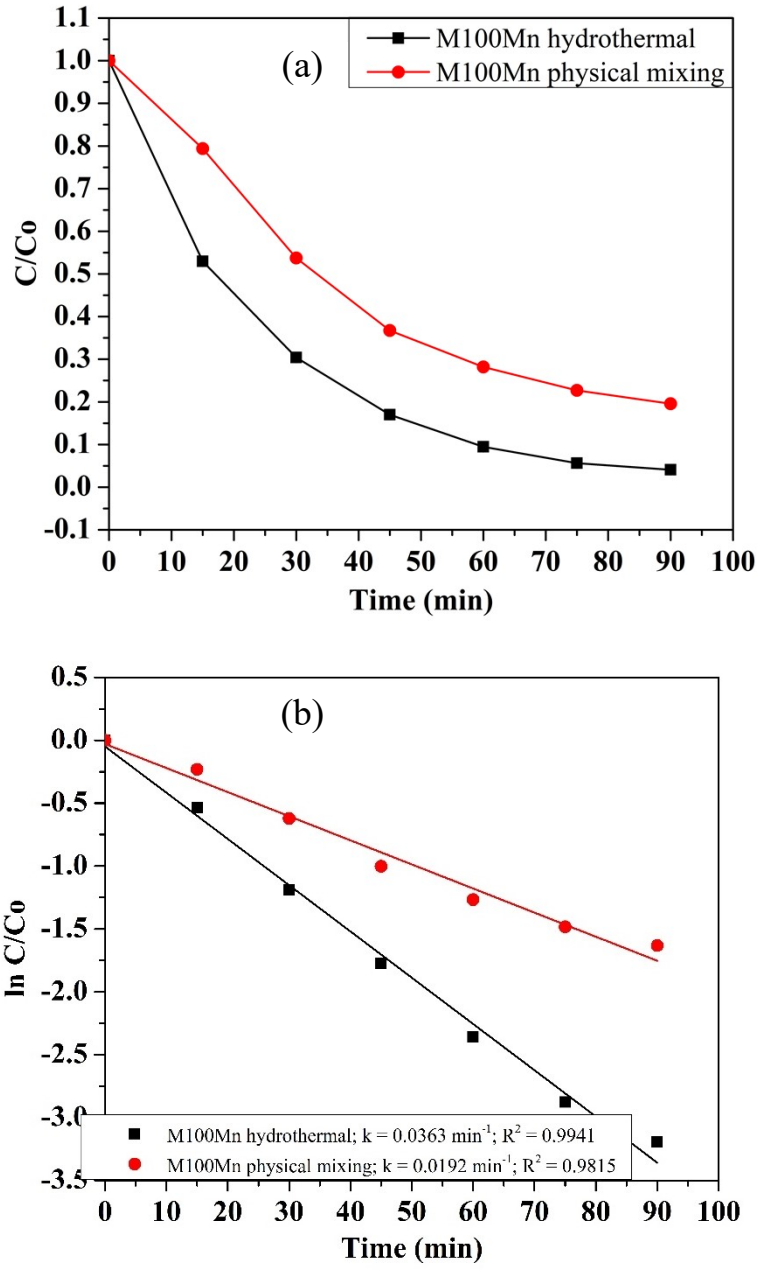

Figure S7. RhB degradation efficiency (a) and rate constant (b) using M100Mn(60:40) with hydrothermal synthesis and physical mixing methods.

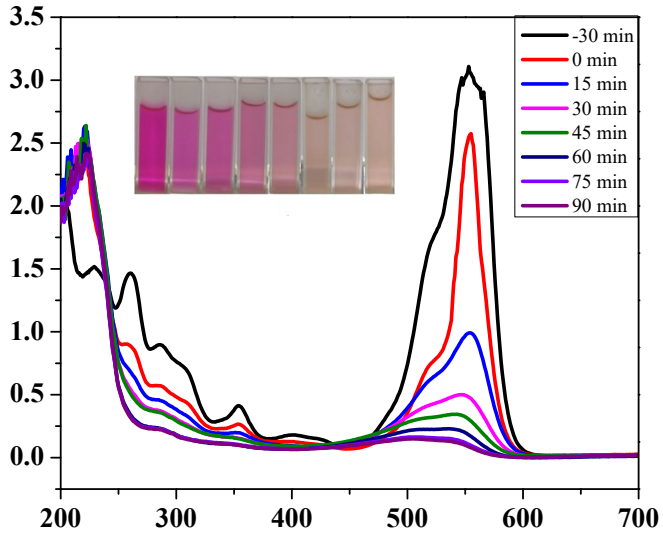

Figure S8. UV-Vis spectra of RhB solution during 30 min of adsorption and 90 min of photocatalytic reaction using M100Mn(60:40)

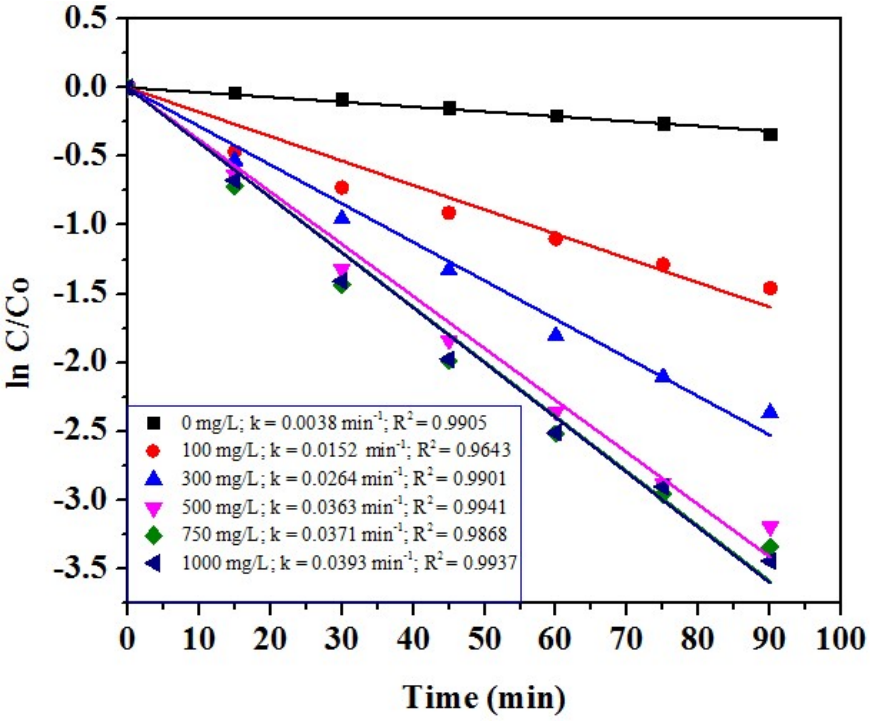

Figure S9. Degradation rate constant of RhB at different M100Mn(60:40) dosages

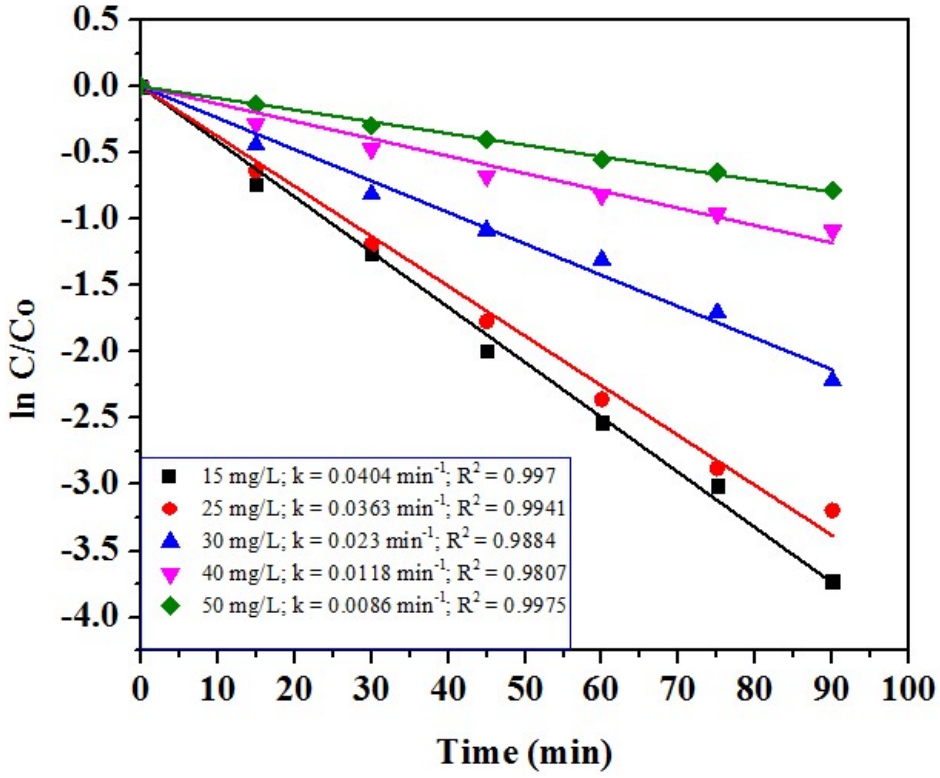

Figure S10. Degradation rate constant of RhB at different initial RhB concentrations

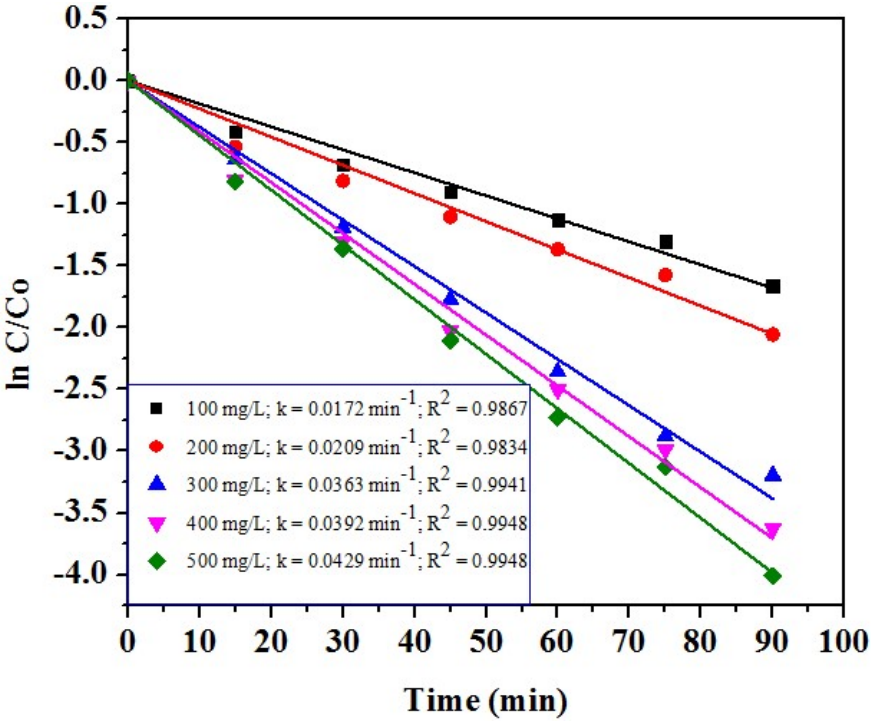

Figure S11. Degradation rate constant of RhB at different $Na_2S_2O_8$ concentrations

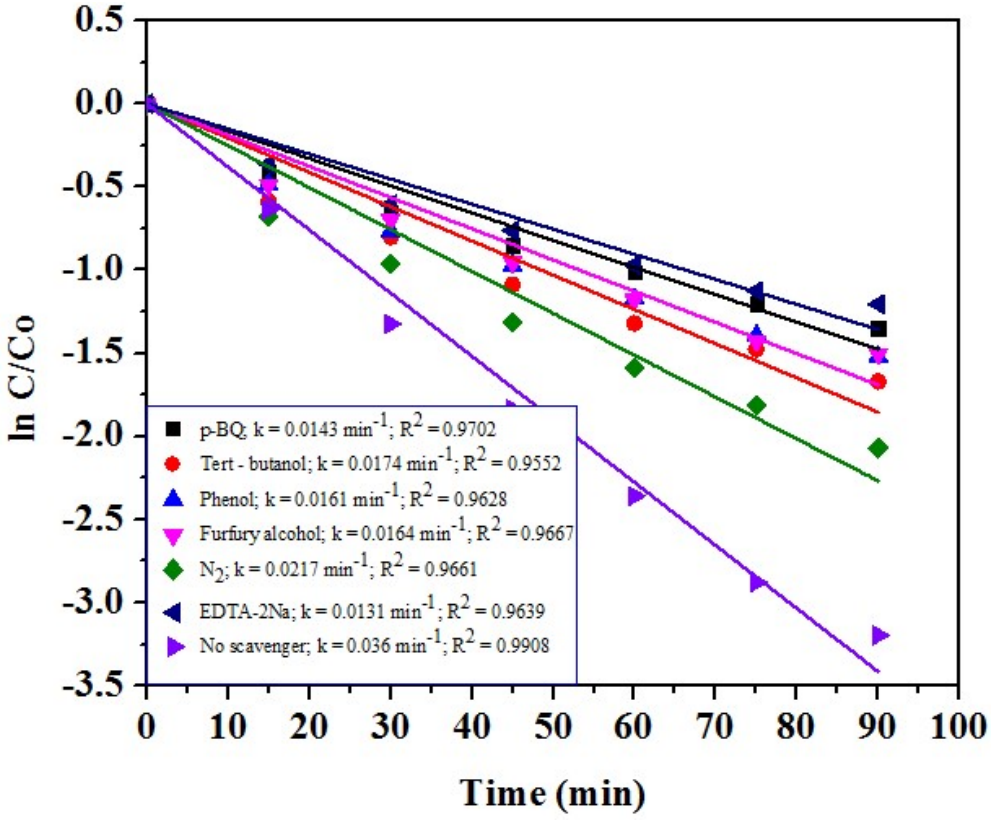

Figure S12. Degradation rate constant of RhB under the presence of different radical scavengers