Supplementary Material

Selective decolorization of cationic dyes by peroxymonosulfate: non-radical mechanism and effect of chloride

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**Figure S1.** Influence of ZnFe₂O₄ dosage on the degradation of RhB in PMS/ZnFe₂O₄ system. Conditions: [PMS] = 2.5 mM, [RhB] = 10 mg/L, pH₀ = 4.5 ± 0.1.
Figure S2. Influence of Ar purging on the degradation of RhB. Conditions: [PMS] = 
2.5 mM, pH₀ = 4.5 ± 0.1. [Ar] = 3 L/min, [RhB] = 10 mg/L.
Table S1. The final pH of RhB solution at different initial solution pH. Conditions: [PMS] = 2.5 mM, [RhB] = 10 mg/L, Time = 120 min.

<table>
<thead>
<tr>
<th>Initial pH</th>
<th>2.0</th>
<th>4.5</th>
<th>7.0</th>
<th>10.0</th>
<th>12.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>After adding PMS</td>
<td>1.92</td>
<td>2.57</td>
<td>2.56</td>
<td>2.55</td>
<td>11.72</td>
</tr>
<tr>
<td>Final pH</td>
<td>0.97</td>
<td>2.53</td>
<td>2.5</td>
<td>2.46</td>
<td>11.56</td>
</tr>
</tbody>
</table>