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# **Degradation of a synthetic binary dye mixture using reactive adsorption: Experimental and modeling studies**

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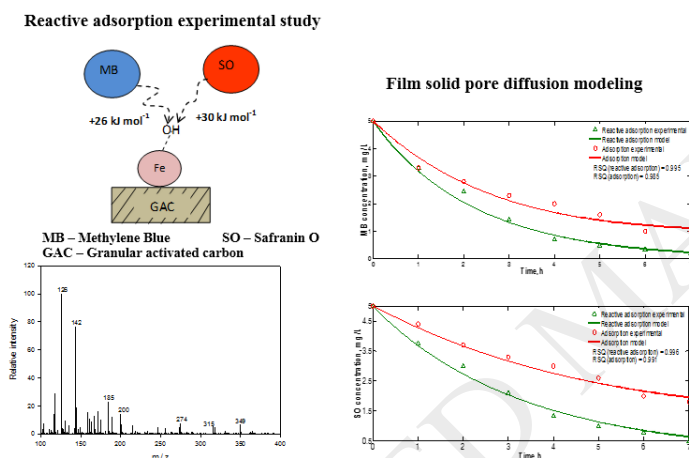
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## **Graphical abstract**



## **Highlights**

- Simultaneous removal of MB and SO mixture via reactive adsorption is presented.
- Kinetic and thermodynamic parameters were estimated using reactive adsorption.
- Simultaneous degradation pathways of Methylene Blue and Safranin O are proposed.
- $k_L$ ,  $D$ , and  $k_R$  were estimated using film solid pore diffusion model for MB and SO dyes.

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