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Characteristics and toxic dye adsorption of magnetic activated carbon prepared from biomass waste by modified one-step synthesis

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Graphical Abstract



ABSTRACT

Magnetic activated carbons (MACs) were synthesized by modified one-step method under CO_2 atmosphere for the purification of toxic dye, using the mixture of $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ and peanut shells as precursor. Textural characterization showed that the CO_2 -MACs synthesized were high surface area carbons and micro-mesoporous structure accounted for a large proportion in the MAC samples as a result of the etching effect of iron oxides and

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