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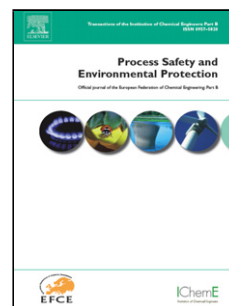
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Treatability Study using Novel Activated Carbon prepared from Rice Husk: Column study, Optimization using Response Surface Methodology and Mathematical Modeling

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Research Highlights

- Activated carbon was synthesized from rice husk and was used for the removal of fluoride present in water
- A two-level three factor (2^3) full factorial central composite design was used for optimization of the fluoride removal process
- The optimum conditions were found to be initial fluoride concentration of 50 mg L^{-1} , flow rate of 10 ml min^{-1} and bed height of 3 cm
- The Thomas model showed excellent fit to the dynamic fluoride adsorption data

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