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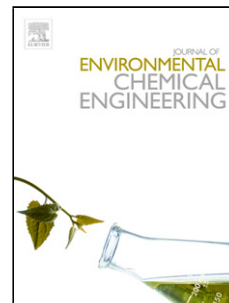
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Sequestering of Pollutants from Public Market Wastewater using *Moringa oleifera* and *Cicer arietinum* Flocculants

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Research highlight

- The use of *M. oleifera* resulted in the highest removal for BOD₅, COD and O&G from the public market wastewater
- Adsorption of COD by *M. oleifera* was fitted to both the Langmuir and Freundlich isotherms, while the Freundlich isotherm was the best model to study COD and O&G removal by *C. arietinum*.
- The natural coagulants are applicable for improving the quality of public market wastewater.

Abstract

The present study aimed to investigate potential of *Moringa oleifera* and *Cicer arietinum* seeds for the treatment of public market wastewater in comparison to Alum and FeSO₄. The flocculation process was assessed as a function of adsorbent dose (60-360 mg/L), pH (4 to 9) and mixing rate (50 to 300 rpm). The adsorption study was performed to find out the removal of biological oxygen demand (BOD₅), chemical oxygen demand (COD), total suspended solids

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