Cellulose Based Filtration of Heavy Metals from Wastewater

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Removal of heavy metal ions and dissolved organic compounds present in wastewater is a challenge for many countries owing to high cost of existing technologies and continued increase in water consumption. In this study, outer orange peels and inner, white orange peels were selected and used to remove copper from water. The extraction capacity of peels increased with extraction time and a plateau was reached at equilibrium 2 hours. Outer orange peels showed the highest extraction efficiency toward copper. In the future, you can use the Langmuir isotherm model to understand the mathematical behavior of the orange peels absorbing metal.

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