

Krirk Wongsontam 2006: Biofiltration of Benzene Contaminated Air with Agricultural By-Product Filter Media. Master of Engineering (Environmental Engineering),
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Air pollution treatment technique with biofiltration interested and a good new alternative for VOCs vapor treatment because biofiltration unnecessary high technology for operate, low cost, high efficiency and no waste from treatment.

This research is treatment efficiency study of biofiltration of benzene contaminated air with agricultural by-product filter media: peanut shell and rice husk at air flow rate 0.42 l/min, 0.85 l/min and 1.27 l/min. The result, removal efficiency of biofiltration were 100%, 100% and 69.22% respectively at 50 ppm benzene concentration and removal efficiency were 95.45%, 60.63% and 49.66% respectively at 100 ppm benzene concentration with peanut shell filter media. For rice husk filter media could experiment only at air flow rate 0.42 l/min and 0.85 l/min because low efficiency initial experiment ,so the removal efficiency were 61.38% and 35.10% respectively at 50 ppm benzene concentration and removal efficiency were 61.38% and 35.10% respectively.

Student's signature

Thesis Advisor's signature

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