

عنوان مقاله:

An airlift reactor with net draft tube for phenol biodegradation using *Ralstonia eutropha*

محل انتشار:

پانزدهمین کنگره ملی مهندسی شیمی ایران (سال: 1393)

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خلاصه مقاله:

Biodegradation of phenol has been investigated in an airlift reactor with net draft tube (ALR-nd) at different phenol concentrations (50, 100 and 190 mg/l) and air flow rates (100, 300, and 600 mL/min) using phenol-adapted *Ralstonia eutropha*. The results showed that the biodegradation rate of phenol decreased at high concentration of phenol (190 mg/l) due to inhibition. On the basis of biodegradation experiments, it was observed that the optimum amount of air flow rate was 300 ml/min. The maximum biodegradation rate was 11.5 mg/l.hr which was obtained at 100 mg/l of .initial concentration of phenol and 300 mL/min of air flow rate

کلمات کلیدی:

Airlift reactor, net draft tube, *Ralstonia eutropha*, Biodegradation, Phenol

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