

START UP AND ENHANCEMENT GRANULATION IN AN ANAEROBIC BAFFLED REACTOR FOR THE TREATMENT OF TEXTILE WASTEWATER

BHUVANESWARI A¹, ASHA B² & SARANYA T³

^{1,2}Assistant Professor in Civil Engineering, Annamalai University, Annamalai Nagar, Tamil Nadu, India

³P.G. Student, Department, of Civil Engineering, Annamalai University, Annamalai Nagar, Tamil Nadu, India

ABSTRACT

A laboratory scale anaerobic baffled reactor with working volume of 36 litres for treating textile wastewater at 26°C was started-up and loaded to an organic loading rate of 0.252kg COD/m³.d. Operational parameters such as influent COD concentration and pH were identified that was modified to improve the reactor's performance without the need for external pH control. Moreover, this experiment was found that the reactor could reach a steady state from 75 to 78 days, respectively. This paper envisaged that the startup performance of ABR in treating textile wastewater at continuous phase was investigated.

KEYWORDS: Anaerobic Baffled Reactor, Chemical Oxidation Demand, Flow rate, Organic Loading Rate, pH, Startup performance