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Reduction of Chemical Oxygen Demand (Cod) Using Electrocoagulation in Treating Oleochemical Wastewater

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EXTENDED ABSTRACT

Development in the Oleochemical Industry are focused in Asia, in particular China, India, Indonesia and Malaysia where the demand of products and the availability of raw materials. Oleochemical industry have to major product which are fatty acid and glycerin and the other products include methyl esters and fatty alcohol (detergent alcohol) Generally, Oleochemical wastewater are biodegradable and low toxicity where it also considered being environmentally friendly but it contain high chemical oxygen demand (COD). Untreated wastewater from Oleochemical Industry where it has high concentration of chemical of oxygen demand (COD), fatty acid, sodium chloride, glycerin organic and inorganic residue are harmful to the environment which significantly can cause serious health risks to human being and other living organisms. Thus, it is important to manage the wastes especially for industrial effluents to undergo treatment process before discharge or reused of it. The objective of the study is to study of Optimum Condition (temperature, pH, voltage and time) to enhance degradation organic matters in wastewater from Oleochemical Industry using Electrocoagulation process. Electrocoagulation treatment is capable of having high removal of color, chemical oxygen demand (COD), Biological oxygen demand (BOD) and more efficient for the treatment

Keywords: Oleochemical industry, Chemical oxygen demand (COD), Electrocoagulation system

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