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| Thesis Title | Waste – Water Treatment Machine with Electrical System |
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ABSTRACT

The purpose of this research is to present “ Waste-Water Treatment Machine ” with Electrical System based on Faraday’s Electrolysis by putting direct current voltage in plate electrode in “Waste-Water Treatment. The most important purposes of the treatments are: saving energy used in this and the waste-water quality that was treated will have the standard according to the rule of Ministry of Industries. The first experiment are designing plate electrode and switching power supply which effects to the efficiency of the treatment. The heavy metals with catalyst will be put in the waste-water to increase the ability of the treatment. Then these data are simulated as a better Waste-Water Treatment Machine and used in treating waste-water from community sources. The experiments results and data of treating waste-water can be used in developing a better Waste-Water Treatment Machine with Electrical System in the future. This waste-water treatment machine with Electrical System is the original machine and it can treat 60 litres of waste-water in 2 hours by using electrical energy only 0.26 kWh And after treating the waste – water with 3 kinds of heavy metals , cromium 65.4 mg/4L , lead 342 mg/4L and copper 205 mg/4L from the industrial factory in 2 hours ; the experimental result shows that all of the 3 heavy metals are decreased in quanlity. There is only 0.54 mg/4L of cromium and 0.75 mg/4L of lead but there is no copper in the waste – water at all.