



Study the Efficiency of Various Metal Powder Composition Electrodes Based on Landfill Leachate Treatment

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Abstract: In this research, new composite electrodes of platinum (Pt), silver (Ag), aluminium (Al), cobalt (Co), copper (Cu), nickel (Ni) and iron (Fe) with PVC were prepared. The ready composite electrodes were then used as a working electrode to treat a leachate samples using electrochemical method with stainless steel as the counter electrode. Electrochemical oxidation processes, is one of the environmental friendly technologies in landfill leachate treatment processes. The results showed a composition of Co₈₅-PVC₁₅ was the best electrode which gave the removal percentage of color, COD and NH₃-N are 82, 80 and 76% respectively.

Keywords: metals powder, landfill leachate, electrode, electrochemical.

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