



COD Removal from Landfill Leachate by Electrochemical Method Using Charcoal-PVC Electrode

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Abstract: This study investigated the efficiency of electrochemical oxidation in removing chemical oxygen demand (COD) from leachate. The paper studies the factors affecting the efficiency of removing COD of leachate, such as applied voltage, electrolysis time and Cl^- concentration. Charcoal composite electrode was used as anode, the results show that the electrochemical oxidation can be applied to leachate treatment. The operating conditions were applied voltage of 15 V, the raw pH, Cl^- concentration of 1.5 % (w/v), operating time of 90 min. with charcoal-poly vinyl chloride (C-PVC) electrode, the highest COD removal efficiencies was 82%.

Keywords: electrochemical oxidation; Landfill leachate; C-PVC electrode, treatment.

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