



Removal of various pollutants from wastewater by electrocoagulation using iron and aluminium electrode

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Received 12 December 2011; Accepted 7 February 2012

ABSTRACT

The present study deals with removal of various pollutants from a real wastewater by electrocoagulation treatment. Combined wastewater from one of the Delhi industrial areas was collected and treated by electrocoagulation process using iron and aluminium electrodes. Removal of Cr, Zn, Ni and Cu were achieved up to 100, 98.71, 69.22 and 48.08% respectively using aluminium electrode while Cr, Cu, Zn and Ni were removed up to 100, 78.57, 75.48 and 58.68% respectively using iron electrode electrocoagulation. Chemical oxygen demand, total organic carbon, total dissolved solids and sulphate were removed up to 83.94, 46.92, 74.16 and 83.66%, respectively in aluminium electrode electrocoagulation while the same were removed up to 54.83, 77.39, 52.85 and 60.74% respectively in iron electrode electrocoagulation.

Keywords: Electrocoagulation; Iron electrode; Aluminium electrode; Combined wastewater

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