

Removal of Chloro-Compounds from Pulp and Paper Industry Wastewater Using Electrocoagulation

Authors : Chhaya Sharma, Dushyant Kumar

Abstract : The present work deals with the treatment of wastewater generated by paper industry by using aluminium as anode material. The quantitative and qualitative analyses of chlorophenolics have been carried out by using primary clarifier effluent with the help of gas chromatography mass spectrometry. Sixteen chlorophenolics compounds have been identified and estimated. Results indicated that among 16 identified compounds, 7 are 100% removed and overall 66% reduction in chlorophenolics compounds have been detected. Moreover, during the treatment, the biodegradability index of wastewater significantly increases, along with 70 % reduction in chemical oxygen demand and 99 % in color.

Keywords : aluminium anode, chlorophenolics, electrocoagulation, pollution load, wastewater

Conference Title : ICWPCST 2017 : International Conference on Water Pollution, Control Strategies and Technology

Conference Location : Barcelona, Spain

Conference Dates : May 26-27, 2017