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Wastewater Treatment using Electrocoagulation Oxidation Processes

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Abstract: The control of environmental pollution and also the treatment of polluted water are of great concern. Within the past decade, electrochemical coagulation process has emerged as most effective wastewater treatment process as compared to conventional techniques of treating wastewater. Electrocoagulation is robust, cost effective, reliable, low sludge generating process, it has automation amenability and it has high pollutant removal efficiency. It has been proved effective in treating various types of wastewater but is seldom accepted. The aim of the review is to explain the basics and up to date advancement of electrocoagulation method for the improvements in the pollutant removal efficiency. In this review paper, an overview of electrocoagulation method with effect of key operational parameters on it is provided. Limitations of the method are also represented for the better understanding of the mechanism of pollutant removal and its optimization. The recent advancements and future scope of the electrocoagulation process are also reviewed.

Keywords: Electrocoagulation; wastewater; poly hydroxides; sacrificial electrode





