



Application of electrocoagulation in the removal of pollutants in mineral processing wastewater

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Abstract

The presence of heavy metals and various chemical materials in the production of wastewater in mineral processing units, especially in flotation units, has led us to encounter a complex wastewater. A high percentage of the produced wastewater is recycled back to the system as process water. Paying attention to pollutant removal not only preserves the environment, but also increases the efficiency of the units that use processed water. This is due to the fact that the recovery and grade of concentrated materials in these units are related to the quality of the used water. Since there exists a variety of pollutants in these types of industries, in order to better assist the refining or purifying process qualitatively and economically, implementing hybrid methods is essential. In this paper we investigate the hybrid methods together with electrocoagulation that enables us to better purify wastewater.

Keywords: Electrocoagulation, Hybrid method, Process water, Mineral processing, wastewater, Flotation

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