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## **NON-FERROUS HEAVY METAL METALLURGY WASTEWATER TREATMENT BY THE ELECTRO-FLOTO-COAGULATION METHOD**

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### **Abstract**

Electroflotocoagulation is used for the treatment of liquid wastes of various origins, containing suspended matter. The metal hydroxide formed by electrochemical metallic ions generation acts to aggregate the colloidal impurities, and the hydrogen bubbles evolved at the cathode allow flotation of foam containing the impurities. The aggregates formed (containing the impurities) and lifted above the solution can then be removed. Electroflotocoagulation (simultaneous electrocoagulation and electroflotation) is studied as partially treatment method for non-ferrous heavy metals metallurgy wastewater (levigates). A pilot scale reactor for electroflotocoagulation is proposed. Different parameters are studied: pH variation during the process, anodic and cathodic current densities, cell voltage, energy consumption, hydrogen evolution etc.

*Key words:* electroflotocoagulation, environment protection, levigate, metallurgy wastewater

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