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**Treatment of Oued El Harrach river water by electrocoagulation noting the effect of the electric field on microorganisms**

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**ABSTRACT:**

The purpose of this study is to investigate the possible purification of Oued El Harrach river water, which introduces significant chemical and biological pollution into the Algiers Bay ecosystem and threatens public health. This study determines the feasibility of river water treatment by electrocoagulation (EC) with aluminum electrodes. In batch tests, chemical oxygen demand (COD) and turbidity were reduced of about 80% and 95%, respectively, within 30. min. Analysis of the water before and after EC also indicates a significant reduction of microbial load. Indeed, a 99% reduction in fecal coliforms and Escherichia coli was observed. Almost total destruction of fungi was obtained.