

## **CHARACTERISATION OF METAL RETENTION AGENTS AND STUDY OF THEIR APPLICATION IN LIQUID WASTES**

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### **ABSTRACT**

A procedure that should be implemented for the evaluation of materials suitability, in terms of their use as metal retention agents, is presented. It derives from a review of materials and waste treatment mechanisms, which has been studied and is also presented. Lignite fly ash, agricultural ashes, lime and sawdust were chosen for the experimental study of their metal uptake capacity, according to the proposed stages, during the treatment of an acidic liquid waste loaded with metals (Cu, Zn, Fe, Ni, Cd, Cr). Fly ash, agricultural ashes and lime exhibited increased metal retention percentages through adsorption and precipitation, as it was expected due to their structure, while sawdust acted as sorbent.