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IONIC LIQUID-BASED TECHNOLOGY FOR METAL RECOVERY FROM ELECTRONIC WASTE

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ABSTRACT – Recycling metals from electronic waste is an important subject not only for environmental protection but also for the recovery of valuable materials. The main goal was to test an innovative technology that involves new solvents, ionic liquids, and an aqueous biphasic system as an extraction platform for metal valorization from PCB. Ionic liquids are considered green solvents due to their many unique features (non-volatility, non-flammability, etc.). Selected ionic liquids have salicylate-based anion known as a complexing agent that forms stable complexes with different metals. Various extraction parameters were assessed to test the feasibility of the proposed technology.

Keywords: Ionic Liquid, Electronic Waste, Extraction, Aqueous Biphasic System.

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