



International Mineral Processing & Recycling Conference



Proceedings

Editors:
Jovica Sokolović
Milan Trumić

17-19 May 2023 Belgrade SERBIA









Chamber of Commerce and Industry of Serbia





Proceedings

Editors: Jovica Sokolović Milan Trumić

17 – 19 May 2023, Belgrade, Serbia



XV International Mineral Processing and Recycling Conference 17-19 May 2023, Belgrade, Serbia

RECOVERY OF METALS FROM INDUSTRIAL EFFLUENTS USING AN IONIC LIQUID-BASED STRATEGY

A. Jocić*, S. Marić, A. Dimitrijević

University of Belgrade, VINČA Institute of Nuclear Sciences - National Institute of the Republic of Serbia, Belgrade, Serbia

ABSTRACT – This work addresses the treatment of industrial effluents containing a high concentration of various metals. The discharge of large amounts of metal-contaminated wastewater represents a huge problem from an environmental and economic perspective. The main goal of our work is to test an innovative ionic liquid-based strategy as an extraction platform for valuable metals from wastewater. Phosphonium-based ionic liquids were designed with appropriate anions intending to obtain the highest efficiency for the metals dominated in industrial effluents. Proposed integrated platform will pave the way for further investigation on a larger scale.

Keywords: Ionic Liquid, Wastewater, Extraction.

[#] corresponding author: ana.jocic@vin.bg.ac.rs

