

Microscopic investigations of the flotation tailings from Baia Mare Central Pond for highlighting the sulphides

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The strategy of the European Union regarding Raw Materials policy led to strategy called "Raw materials initiative" [1]. Thus, the use of waste dumps is encouraged in the sense of recovering the base metals through efficient eco-friendly technologies, according to the principles "fostering sustainable supply of raw materials from European sources, and boosting resource efficiency and promoting recycling" [2].

Microscopic investigations provide information on the minerals in which the elements of interest are present. In the case of the tailings from the Baia Mare Central Pond are followed the sulphides with base metal content Cu, Pb, Zn. These can be distributed individually or in mineral associations, along with the gangue minerals. By microscopic methods (scanning electron microscopy- energy dispersive X-ray spectroscopy and optical microscopy) sulphides and other minerals from the initial material were observed, as well as metallurgical slags from ore processing.

Keywords: *sulphides; tailings; metals; microscopy; minerals.*

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Not applicable.

Conflicts of Interest

The authors declare no conflict of interest.

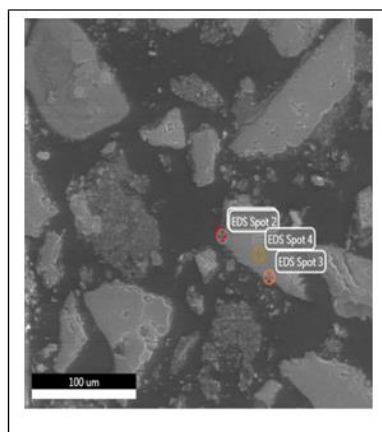


Figure 1. Scanning electron image, copper sulphide with slags and iron sulphide.

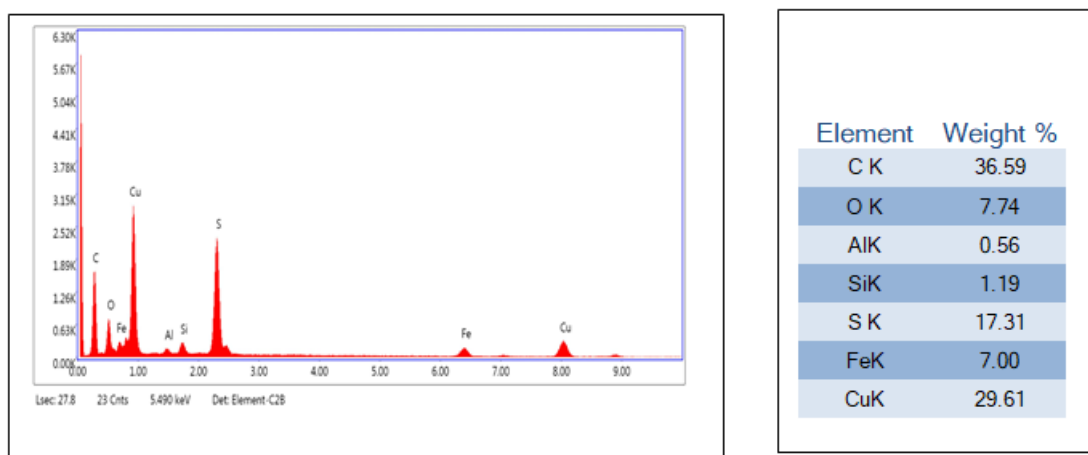


Figure 2. EDS analysis of Spot 3 marked in Figure 1.

Mineral of interest: copper sulphide.

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