

## GOLD IN LATERITIC BAUXITES. THE PRACTICAL ASPECT

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The largest in Europe plant in the production of alumina from lateritic bauxites of different deposits of the world works in the Ukraine. Zircon, rutile, native gold release themselves during the process of alumina production. The native gold has been studied both in bauxites and in waste of their processing (red mud). The average content of gold in bauxites of main countries-exporters (g/t) is the following: Australia -0,12; Brazil -0,05; Guinea -0,08; Guiana -0,08; India - 0,4; Sierra Leone -0,05; Jamaica -0,15. Gold is fine. On an average, about 80% of its particles have a dimension 0,01-0,1 mm, but particles with the dimension 0,6 mm and more also occur. Gold standard of fineness is 800-900. The shape of gold particles is isometric, flattened, more rare - dendritic. The latter is typical for growth with quartz.

During bauxites processing the overwhelming part of gold gets into accumulators of red muds, where its concentration, submitting the laws of hydrodynamics, takes place. Near places of muds unloading gold contents are correlative with natural placers. By a rather simple magnetic-gravitational flowsheet of dressing the concentrates with gold content 40 g/t, which are of a practical interest, are obtained from red muds.

The processes of laterization run with an intensive oxidation of all iron-bearing minerals of initial rocks. The release of gold and its partial growth takes place. The initial gold contents in lateritic bauxites depend on many geological factors, which study may increase the cost of this kind of the raw material.