

## Research of Concentratibility of Low Quality Bauxite Raw Materials

**Authors :** Nadezhda Nikolaeva, Tatyana Alexandrova, Alexandr Alexandrov

**Abstract :** Processing of high-silicon bauxite on the base of the traditional clinkering method is related to high power consumption and capital investments, which makes production of alumina from those ores non-competitive in terms of basic economic showings. For these reasons, development of technological solutions enabling to process bauxites with various chemical and mineralogical structures efficiently with low level of thermal power consumption is important. Flow sheet of the studies on washability of ores from the Timanskoe and the Severo-Onezhskoe deposits is on the base of the flotation method.

**Keywords :** low-quality bauxite, resource-saving technology, optimization, aluminum, conditioning of composition, separation characteristics

**Conference Title :** ICMMPME 2015 : International Conference on Mining, Mineral Processing and Metallurgical Engineering

**Conference Location :** Venice, Italy

**Conference Dates :** November 09-10, 2015