

FORMATION OF SURFACE AND PROPERTIES OF THE MINERAL INDIVIDUAL BORDERS IN AGGREGATE DESTRUCTION

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Typomorphic features of mineral aggregate constitution are the result of its ontogenesis and determine a lot of its technological features. These aggregate capacities are determined by quantity of the energy, accumulated on its inner borders. Generally, if thermodynamic process kinetics is high, the mineral individual borders are especially power-saturated. In process of slowing down of mineral-forming and grain growth speed their borders become more power-intensive. A ratio of power-saturated and power-intensive boundaries in the mineral aggregate is relevant factor in a quantitative assessment of rocks and ores technological features. A kinetics of process and its duration determine as well such concept as structural equilibrium of borders in the mineral aggregate. It is energetically balanced (equal) and unbalanced growths of the mineral individuals. Power-saturated borders are uncovered first of all in the process of mineral aggregate disintegration, the second are power-intensive borders. Energetically balanced borders are the first to uncovered among power-intensive borders. Power-intensive structurally non-equilibrium borders at a mechanical disintegration can be not opened at all. The research of the quantitative characteristics of the mineral aggregate constitution typomorphic features, compiling of its instruction technological card will allow to operate processes of ore aggregate selective destruction, to forecast rock suitability for a lining of buildings, quays, underground.