Searching of Adsorptive Properties of Karaçeva Bentonite in Its Natural State and After Treatment

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Abstract: In this paper was done the research of granule-metric composition, chemical composition, pH and adsorptive properties of bentonite in Karaçeva deposit. Granule metric composition is determined in natural samples of Karaçeva bentonite. It was determined the chemical composition of natural and activated bentonite with (10, 20 and 30) % $\text{H}_2\text{SO}_4$. It was determined the pH of bentonite in its natural state, after acidic activation with (10, 20 and 30) % $\text{H}_2\text{SO}_4$ and basic activation with (1, 2, 3, 4 and 5) % $\text{Na}_2\text{CO}_3$. The study of adsorptive abilities of natural and activated bentonites, consists in determining the character of adsorption, respectively the isotherms of adsorption, or in determining the adsorbing surface of natural and activated bentonite in Karaçeva, and study of their interaction with other physical-chemical and structural characteristics. For this purpose was used the method of adsorption of blue-methylene in bentonite, which is widely used for the characterization of adsorptive activity.

Keywords: bentonit, adsorption, chemical composition, extinction, granule-metric analysis

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