



## **Research of Adsorptive Characteristics of Natural and Activated Bentonites of Kosovo against Adsorption of Blue-Methylene**

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**Abstract:** In this case study was studied the complex issue of valorization of bentonite resources of Kosovo, which are estimated to be large in Balkans, and was conducted the modeling of their structure and their physical-chemical characteristics. The experimental research was conducted in the samples of three important deposits of bentonite in Kosovo: Gushica, Kabash and Karaçeva. The study of adsorptive abilities of natural and activated bentonites made in this case study consists in determining the character of adsorption, respective isotherms of adsorption, or in determining the adsorbing surface of natural and activated bentonites in Kosovo, 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 bentonites, which is widely used for the characterization of adsorptive activity. Besides natural samples of deposits in Gushica, Kabash and Karaçeva their activated samples were also explored. Natural samples were explored in Gushica and its respective samples activated with HCl, (10%, 20% and 30%) and with natrium carbonate (3%). In the same manner were explored the samples in the deposit of Kabash, whereas both natural and activated sample of the deposit in Karaçeva was explored with natrium carbonate (3%).

**Keywords:** *bentonit, adsorption, blue-methylene, extinction, acidic activation*

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