



## **Research of Kosova Bentonite Through Diffractometer Dust Analysis, ESR Spectroscopy and TDA and TGA Analysis**

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**Abstract:** Experimental realization of this work we have done in natural and activated bentonite of Kosova. Diffractogram analysis shows that the natural bentonite of Karaçeva contains mainly montmorillonit mineral, while the clay mineral contained in the bentonite of Gushica and Kabash presents the structure of the mixed layers of mika and montmorillonit, respectively of ilit ore. To create specific statement of phase transformations of special mineralogical components during heat treatment of bentonite of Kosova were used analysis methods of TDA and TGA. Research by ESR spectroscopy have been undertaken to identify the positions of  $\text{Fe}^{3+}$  and  $\text{Mn}^{2+}$  ions in the structures of minerals present in various deposits in Kosova.

**Keywords:** *bentonite, research, dust diffractometer, TDA, TGA, ESR, spectroscopy, analysis*

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