



Experimental Study of Catalytic Activities of Natural and Activated Bentonites of Kosova on H₂O₂ Dissociation

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Abstract: The result of an experimental study of catalytic activities of Kosova bentonites on H₂O₂ dissociation is presented. Despite the fact that the specific surface of bentonite researched grow up to a certain degree of activated acid with case catalytic ability should be increased, the results from table 1 show that activation with hydrochloric acid 10% and 20% causes decrease in catalytic activity of Gushica bentonite. Among natural bentonites, the best results have shown bentonites of Kabash and Gushicë localities, while despite the fact that bentonite of Karaçevë locality contains more montmorillonite than bentonites of the other two localities its catalytic activity was less intensive. Additional studies with bentonites activated with HCl as well as complementary studies with X-ray diffraction and ESR spectroscopy have shown that catalytic activity of natural bentonites of Gushicë and Kabash is linked not only with montmorillonite but also with Mn²⁺ present in calcite and dolomite minerals contained in these bentonites. The bentonite of Gushicë locality activated with 3% Na₂CO₃ have shown the best catalytic activity, partially due to the alkalinity of the solution formed by dissolution of this bentonite in water.

Keywords: *bentonit, montmorillonite, H₂O₂, catalyst, complementary research.*

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