

Experimental studies on wastewater sorption treatment with subsequent disposal of used sorbents(Article)

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#### Краткое описание

The research proposes the method for cleaning of the chromium-containing wastewater by the modified sorbents based on the natural aluminosilicates of East Kazakhstan deposits, local wood waste and fibrous materials that differ by cheap, good sorption properties, availability and security in the environmental terms. The research of the waste complex sorbents for utilization in one of the most resource-intensive industries - the construction industry - is highly relevant and promising to create the necessary preconditions for the industrial development of the construction binders for various technology areas. The application of the research results will make sound recommendations how to expand the resource base, to use industrial raw materials in the production process, and to reduce the cost of widely used materials and products in the construction practice. The important factor in the technical and economic term is that the residue from the treated waste water is environmentally friendly since the chromium ions and other heavy metals have the form of the complex compounds. The complex compounds are environmentally safe and can be recycled in various building materials. The optimal construction materials for the utilization of the waste sorbents are mortar and concrete. Copyright © 2018, AIDIC Servizi S.r.l.