

STUDY OF HYDROGEN SULFIDE REMOVAL FROM GRUNDWATER

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Abstract: The process of the hydrogen sulfide removal from the underground water of the Hancesti town has been investigated. By oxygen bubbling through the water containing hydrogen sulfide, from the Hancesti well tube, sulfur is deposited in the porous structure of studied catalysts, which decreases their catalytic activity. Concomitantly, the process of adsorption / oxidation of hydrogen sulfide to sulfate take place. The kinetic research of the hydrogen sulfide removal from the Hancesti underground water, after its treatment by hydrogen peroxide, proves greater efficiency than in the case of modified carbonic adsorbents. As a result of used treatment, hydrogen sulfide is completely oxidized to sulfates.

Keywords: catalysts, hydrogen sulfide, adsorption/oxidation, hydrogen peroxide, sulfur, sulfate.