

## **Mutual influence of hydrogen peroxide and guanibifos on sewage water treatment process under aerobic conditions**

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### **Abstract**

The article presents a study of currently existing systems and wastewater treatment principles. Study of the process of biological treatment of polluted sewage water using stimulant of biocenosis of activated sludge together with an oxidizing agent. Choose a path to stimulate the functioning of biocenosis of activated sludge with biologically active substances. The investigations were carried out on real sewage water produced by JSC "Kazanorgsintez". The hydrogen peroxide was taken as the oxidant purification process. During the experiment, we observed intensification of the wastewater treatment process of organic compounds with the participation in the process of hydrogen peroxide as intensifying the work of activated sludge and protects against the harmful effects generated radical species. The paper showed that the hydrogen peroxide does not decompose under the experimental conditions for radical species. This opens the possibility of penetration in her cell while preserving the molecular structure followed by decomposition, causing the death of the living matter. We present the results of the possibility of sewage water treatment by a combination of several factors at the same time.

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### **Keywords**

Activated sludge, Aerobic biological sewage treatment, Biological active substances, Chemical consumption of oxygen, Low and extremely low concentrations, Oxidation of hydrogen peroxide