STUDY OF ELECTRON SCANNING MICROSCOPE INDICATORS OF A NITROGEN-CONTAINING AURIN COMPOUND

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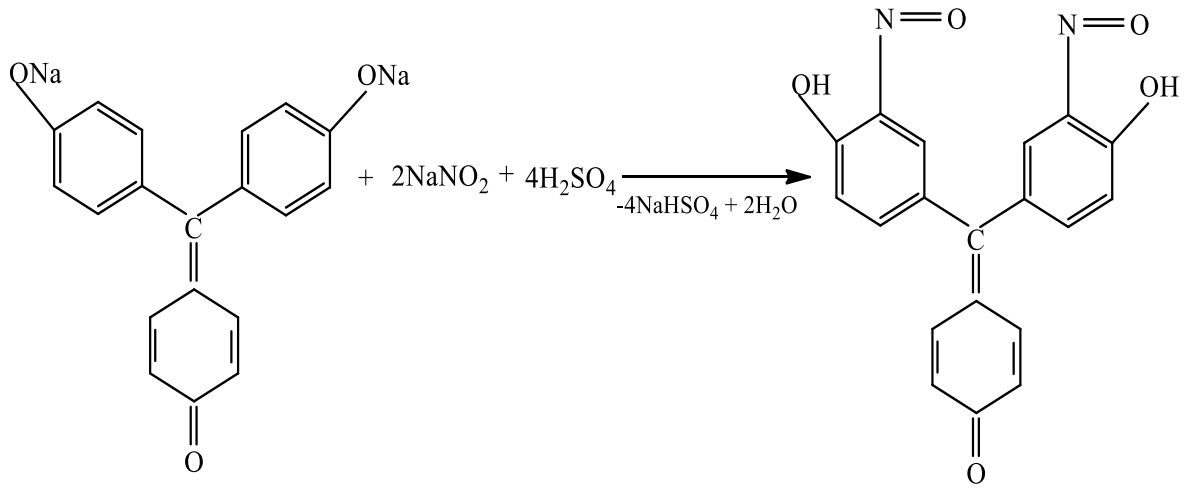
Annotation. It is known, that during the production of polyvinyl chloride in industry, chlororganics are release as a by-product. These additional decoupling chlororganics were isolated and sorbent agents were created from the amines produced by the processing. The sorbents obtained during the practical experiments of the study were establish to be use to treat industrial wastewater Cu (II) and Zn (II) ions.

In order to study the indicators of the location and uniform distribution of the elements contained in the sorbent obtained during practical experiments, the scanner was analyze using an electron microscope.

Keywords: scan electron microscope, sorbent, chlororganic compound, auren is a nitro compound.

On a global scale, complex compounds of intermediate metals are the main subject of applied research. Compounds formed by intermediate metals with a large number of reactively active organic ligands open up promising combinations of important production processes based on modern waste-free technologies in various industries. It is important to obtain sorbents based on covalent and non-covalent bonds of complexing organic ligands containing nitrogen, phosphorus, sulfur, which themselves are reactive.

For practical experiments, a test tube equipped with a dropper, a mechanical mixer and a thermometer obtained. The test tube was heat to a temperature of 20°C and a solution of 3 g of aurene, 0.8 g of NaOH in 7.2 ml of water was added dropwise. In addition, during the reaction, 30 ml of $NaNO_2$ solution in water was add dropwise, as well as a 20% H_2SO_4 solution with a volume of 20 ml. All solutions cooled, stirring, for an hour after addition. The precipitate formed as part of the resulting solution washed and dried in the open air. The resulting product was 3.5 g.



A scanning electron microscope (Jeol Interactive Corporation, Japan JSM-6460la) was use to study the composition and structure of the nitrogen-containing aurin substance obtained during a practical experiment. In this scanning electron microscope, the object analyzed with an increase of 250-300 000 times and a volume of 100x100-100m (10x6m) (Fig. 1).

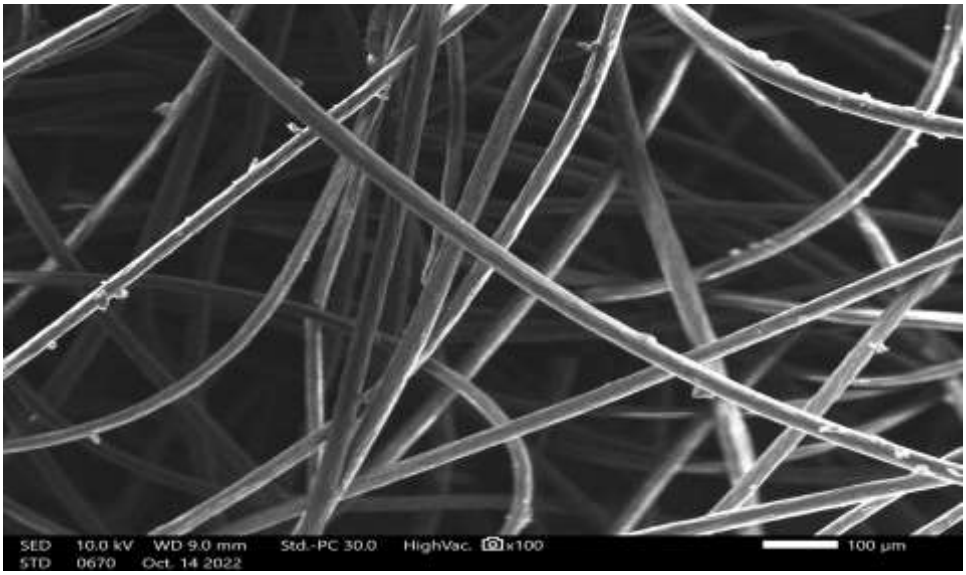


Figure 1. Indicators of a scanning electron microscope of nitrogen-containing aurin

In the sample obtained, nitrogen-containing aurin were use as sorbents. The fiber (PPA) is immobilize through the compound nitrogen-containing aurin. When copper (Cu) metal ingested into the resulting sample and studied through SEM analysis, it studied how substances spread on its surface. In the composition of the electron microscope indicators of this sample, it is manifested that the chemicals are evenly distributed. Indicates that there are no poor-quality cases of particle scattering on the surface of the compound (Fig. 2).

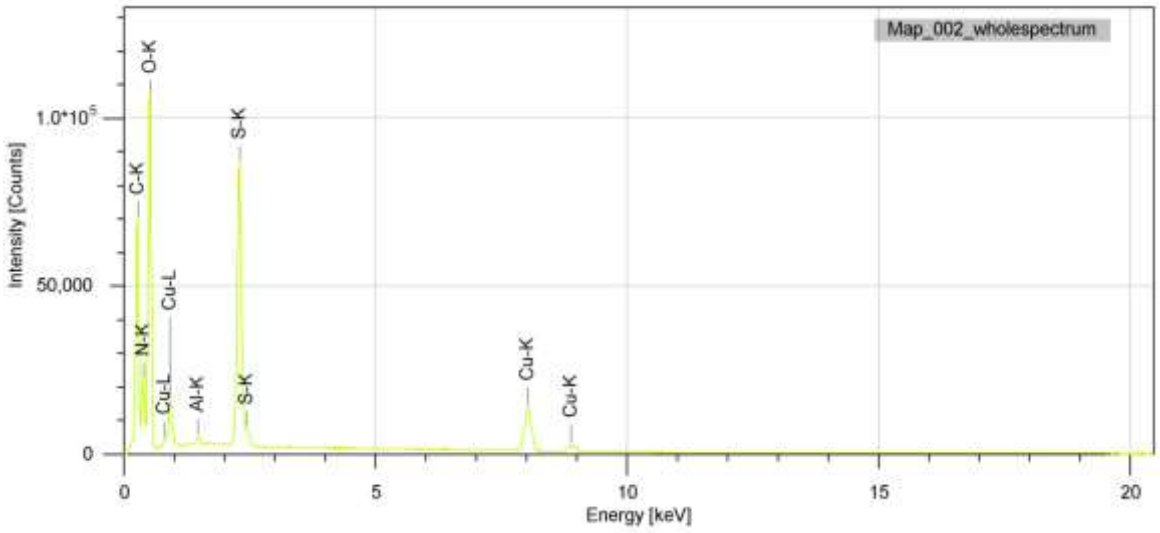


Figure 2. Elemental analysis of nitrogen-containing aurin

For the purpose of studying the composition of the sample obtained for the study, an element analysis was carried out. The results showed that the sample contained Cu, Al, Fe, N and other elements.

Thus, during the study, the immobilization of organic ligands to mineral matrices was studied. It has been scientifically proven that the scanning electron microscope indicators of the nitrogen-containing aurin compound obtained as a result of practical research experiments are evenly distributed elements and functional groups in the sorbent obtained by analysis.

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