**TOWARDS THE PURIFICATION OF GROUNDWATERS IN THE REPUBLIC OF MOLDOVA**

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Groundwater is the most important source of drinking water in the Republic of Moldova, especially in rural regions. Because of pollution, groundwaters do not meet the requirements of standards for drinking water, being detected high concentrations of hydrogen sulphide, fluoride ions, ammonium and nitrite ions, iron, manganese, strontium etc.

This study represents a combined research for removal of a large spectrum of pollutants (iron(ii), manganese(ii) and strontium ions; humic substances and hydrogen sulphide) from water. A lot of carbonaceous adsorbents of local origin were tested as catalysts for oxidation of hydrogen sulphide from water. Comparative analysis highlights the performance of carbonaceous adsorbents obtained by impregnation with copper(ii) ions, being recommended for practical purposes to remove hydrogen sulphide from natural waters.

The extensive experiments involving the combination of coagulation-floculation, chemical adsorption and oxidation processes were conducted on natural water in order to find the best technological parameters.

Developed technologies have been evaluated/tested by using semi-plant in field conditions in some localities from Republic of Moldova (Sculeni, district Ungheni; Sarata Noua, district Leova; Costesti, district Ialoveni; Bulboaca, district Anenii Noi, town Hincesti). Studies proved that the implementation of the recommended processes ensures removal of the studied pollutants below the maximum allowable concentration.