RADIOACTIVE POLLUTION OF THE CHERNOBYL COOLING POND BOTTOM SEDIMENTS. I. WATER-PHYSICAL PROPERTIES, CHEMICAL COMPOUND AND RADIOACTIVE POLLUTION OF PORE WATER

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First results of complex research of the Chernobyl cooling pond bottom sediments are presented. The general problematic is considered. Information about vertical distribution of bottom sediments water-physical properties, and also ionic compound and radioactive pollution $^{137}\mathrm{Cs}$ and $^{90}\mathrm{Sr}$ of pore water is received. The inventory of bottom sediments pore water activity is calculated. Strong correlations between concentration in pore water $^{137}\mathrm{Cs}$, K $^+$, NH₄ $^+$ within the selected sediments columns are found out. Results of researches are intended for the forecast of radioecological situation change in the cooling pond water-soil complex during drying-up.

Keywords: the Chernobyl Cooling Pond, bottom sediments, radioactive pollution.