The press service of NITU MISIS reported that university scientists, together with the center of forensic examination, have developed a new way to detect toxic chlorine compounds in the wastewater of oil and gas enterprises. The technique allows you to determine three forms of chlorine for one analysis with an accuracy of 95%.

The new approach combines Jonometry with chloride-sectrum electrode and special sampling. First, easily soluble inorganic compounds during boiling are measured, then the total chlorine content is determined after calcining with the alkaline. The difference between these indicators shows the concentration of dangerous organic compounds.

The advantage of development is the use of affordable reagents instead of expensive analogues. This will reduce the costs of enterprises for environmental monitoring. It is especially important that the method is adapted to the complex composition of oil and gas water, where chlorine is often associated with organic substances.

According to the rector of NITU, Misis Alevtina Chernikova, the method will provide an effective tool for identifying dangerous chlorological compounds without significant financial costs.