## About the possibility of sorption concentration of heavy metals using magnetite

Kharlyamov D., Mavrin G., Sippel I. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

## **Abstract**

This paper addresses the possibility of using magnetite nanoparticles for sorption concentration of heavy metals ions in the analysis of their trace amounts. On the example of copper, lead and nickel ions, optimum conditions for concentrating have been determined, pH, temperature and contact time effect on the adsorption process have been studied in the static mode, and magnetite sorption capacity has been calculated on the basis of experimental data.

## **Keywords**

Concentrating, Heavy metals, Magnetite, Sorption