

## **Determination of copper and cadmium by atomic absorption spectrometry with electrochemical and sorption preconcentration**

Abdullin I., Turova E., Budnikov G.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### **Abstract**

A method is proposed for the determination of copper and cadmium by atomic absorption spectrometry in a propane-butane-air flame with electrochemical and sorption preconcentration. Electrochemical preconcentration was performed on metal (tantalum, titanium, molybdenum, and platinum), glassy-carbon, and spectrographic graphite electrodes. Sorption preconcentration was performed on filter paper with immobilized dithizone, 8-hydroxyquinoline, and rubeanic acid. It is demonstrated that copper and cadmium can be determined in water within the concentration range 1-10  $\mu\text{g/L}$ .

---