

# **Spectral methods**

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## Spectrophotometer





Spectrophotometer - a device designed to measure the ratio of two optical radiation fluxes, one of which is the flow incident on the sample under study, the other is the flow that has experienced a particular interaction with the sample.

# X-ray fluorescence spectrometer





An X-ray fluorescence spectrometer is a device used to determine the elemental composition of a substance using X-ray fluorescence analysis (XFA).

#### Atomic absorption spectrometers





Atomic absorption spectrometers (AAS) are devices designed for quantitative elemental analysis (up to 70 elements) based on atomic absorption spectra, primarily for determining the content of metals in solutions of their salts: in natural and waste water, in solutions-mineralizates of consistency products, technological and other solutions.

# Infrared spectrometer





An infrared spectrometer is a device for recording the infrared absorption, transmission, or reflection spectra of substances.

## Atomic emission spectrometer





An atomic emission spectrometer is a highly sensitive device designed for the rapid determination of the elemental composition of a substance, recording radiation spectra in the range of 200-1000 nm.







# УНИВЕРСИТЕТ ЛОБАЧЕВСКОГО

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