

T3. Application of OES-AD Software Package for Developing Automated Techniques

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OES-AD SOFTWARE PACKAGE is a convenient and useful tool for creating auto-mated techniques of multielement atomic-emission analysis of solid samples if there is multichannel spectrometer in laboratory.

This software contains knowledge base and database, which are connected with one another by calculation modules. Registered spectra of calibration, CRM and unknown samples are collected in database for every analytical technique. Knowledge base and calculation modules do rapidly the primary methodological studies such as:

1. selection of analytical lines (determination of upper and low bounds of intensity measuring);
2. selection of analytical parameter for each spectral lines (calculation method of intensity);
3. type selection of n-dimensional calibration for every analyte or its group.

Optimization of spectral information process is realized with performance criteria of analytical results.

OES-AD SOFTWARE PACKAGE is applied to obtain and process for techniques of impurity determining in quartz and crystalline silicon and silanes; Au, Ag and noble metals in nonsoluble carbonaceous substance from black shales; lanthanum and yttrium in barium fluoride crystals; boron and tin in granitoids.