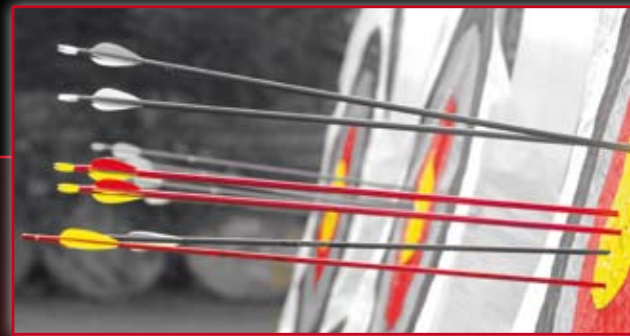


analytikjena

contrAA[®] – Hit the mark!



NEW

contrAA[®] 600

High-Resolution Continuum Source AAS for graphite furnace technique



contrAA® – Fast. Easy. Efficient.

The contrAA® 600 combines the high precision of the transverse heated graphite furnace with all advantages of the High-Resolution Continuum Source Atomic Absorption Spectrometry (HR-CS AAS).

Persuasive performance characteristics of the HR-CS AAS:

- Just one light source for all elements
- Unique simultaneous background correction
- Impressive analytical performance
- Fast and efficient analysis
- Precise measurement results
- Easy to operate and robust
- New information content

The HR-CS AAS guarantees high efficiency and an outstanding quality of the measurement results.

HR-CS AAS at a glance

The Xenon short-arc lamp is a continuum radiation source with optimal intensity over the entire wavelength range relevant for AAS. Thus, the contrAA® is immediately ready to measure all elements and at all available wavelengths! The evaluation of molecular absorption bands, allowing the analysis of additional elements, is a further innovation.

The high-resolution echelle spectrometer allows an optimum line separation. Aside from the intensity of the analysis line, the entire spectral vicinity is recorded on the CCD array detector simultaneously. Using a high number of reference pixels in combination with fully automated correction routines a unique simultaneous background correction is possible. Spectral interferences and direct line overlapping are corrected in real time.

Thanks to these features contrAA® users experience totally new dimensions in analysis.

*contrAA® 600 and SSA 600 ►
with liquid dosing unit
– fully automated solid
sampling system with
integrated micro balance*



New!

contrAA® 600 for graphite furnace technique

Interference-free graphite furnace analysis

contrAA® 600 in combination with different autosampler systems for the first time enables the fully automated measurement of solid and liquid samples in one system! Transverse heating of the graphite tube and the unique simultaneous background correction possibilities guarantee minimization of matrix interferences and allow a precise determination even of refractory elements.

The transverse heated graphite furnace ensures:

- Uniform temperature distribution
- Lower atomization temperatures
- Decreased gas phase interferences
- Linear, rapid heating rates
- Minimized memory effects

The Analytik Jena graphite furnace systems have been using the STPF (Stabilized Temperature Platform Furnace) technique successfully for a long time, ensuring highest accuracy, precision and best detection limits. The STPF concept requires the use of:

- Integrated platform
- Gas stop during the atomization
- Matrix modifier
- Evaluation of the signal area
- Real time data processing

The integrated color furnace camera enables a detailed observation of all processes in the graphite tube starting with the sample introduction up to the drying and pyrolysis, for simple and correct method development.

AspectCS® – software, that inspires

Method development and optimization of diverse applications in AAS is done incredibly easy using AspectCS®. Even newcomers in graphite furnace technique will get started immediately.

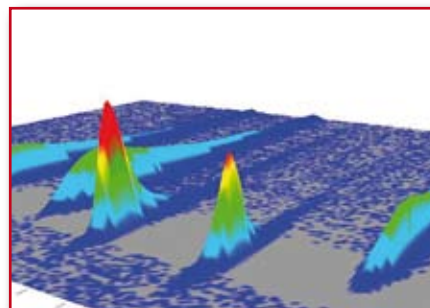
Comfortable method configuration, due to:

- Integrated method library
- Automatic optimization routines
- Unique, automatic, simultaneous background correction
- Colored visualization of structured background in real time display

By means of the 3D spectra – absorbance, time and wavelength – the entire environment of the analysis line becomes visible. The user can identify the cause of the spectral interference and eliminate it, as required. Complex or structured background provides information about the matrix composition of unknown samples. Thus, the user is able to evaluate the results already during the analysis process efficiently on the screen.

A QC function with comprehensive quality assurance options is already included in the standard software. All method and evaluation parameters are saved together with the raw data of the results. AspectCS® enables a comfortable and FDA conform calculation of the results.

Thanks to extremely flexible export functions sample results can be integrated fast and easily in existing Laboratory Information and Management Systems or in Excel.





▲ Fully automated autosampler for liquid samples



▲ Fully automated autosampler for solid samples



▲ Liquid dosing unit for SSA 600 – for automated calibration with liquid standards and addition of modifiers

Automated sample preparation

Intelligent accessories lay the foundation for versatile and efficient applications and ensure accurate measurement results. Automated functions as dilution and enrichment of the sample, addition of modifiers or depth adjustment guarantee straight forward and rapid analysis performance.

HydREA technique

The combination of hydride formation in the hydride system with the electrothermal atomization in the graphite tube opens up completely new perspectives in the detection of hydride forming elements, such as arsenic, selenium or antimony. The advantages of both techniques result in a clear improvement of the detection and determination limits. Moreover, cross-over effects and matrix influences are minimized.

solidAA®

Solid samples can be analyzed directly, without elaborate sample preparation, with the help of the solid analysis technique. Almost all elements can be determined precisely in varied materials. It is also possible to carry out the calibration with liquid standards and the addition of a modifier, reducing the user's efforts to a minimum.

solidAA® at a glance:

- Analysis of the original sample
- Wide measurement range
- True micro-method
- Avoiding hazardous and expensive reagents
- Easy handling
- Immediate results
- High sensitivity



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Based on patented
ISAS Technology

ISAS
Institute for Analytical Sciences



Subjects to changes in design and scope of delivery as well as further technical development!