

Dear Partners

Xenemetrix growth continues..

As a part of our network growth, in the past week we have conducted a successful sales seminar for Xenemetrix solutions in Sokolsky Institute of Organic Catalysis and Electro-Chemistry, located in Almaty, Kazakhstan.

The seminar was held for scientists and laboratory heads of several research institutions from Almaty, and included a demonstration based on the new X-Calibur SDD LE, recently installed in Sokolsky institute.

By having ProEurasia Ltd. as Xenemetrix Partner for Kazakhstan, Uzbekistan and Tajikistan, the Xenemetrix EDXRF spectrometers and solutions are now successfully promoted in these markets.

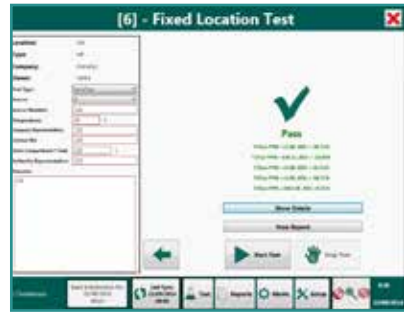
Yours,
Xenemetrix Team

Products Innovations

Easy nEXt upgrade

Easy nEXt is a client server platform for Analytical data collection for globally dispersed operations.

The software has been upgraded as of October 2014, so that any test can include up to five different elements in the same analysis, with Pass/Fail feature per each element with its independently defined values and ranges.



This new upgrade will make for an easier and faster operation of both simple and complex elemental analysis tasks, and will increase the accessibility of EDXRF operation by non-skilled operators.

For more information please contact us at: info@xenemetrix.com

Tip of the Month

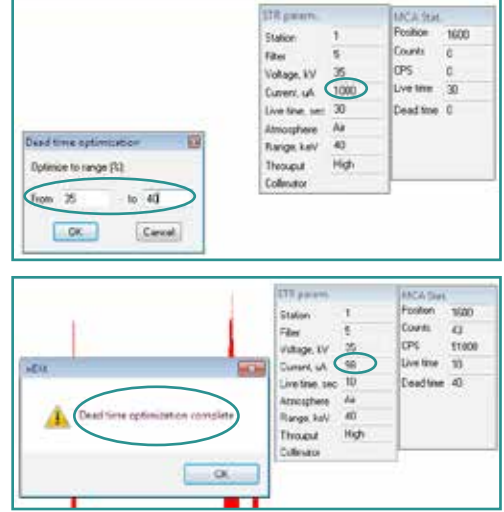
Dead Time optimization

Dead Time optimization is a tool that automatically defines the current settings, to achieve satisfactory Dead Time values for the maximum productivity of your system.

In order to use this option please follow these steps:

1. Set an initial value for current in "Acquisition Parameter" window
2. Click the "Tools" button and choose "Dead Time optimization"
3. Set the desired Dead Time range from 35 to 40 and click "OK"

At the end of the process, the initial current value will automatically be replaced to optimal one, and a message of "Dead Time optimization complete" will be displayed.



For more tips & support please contact us at: info@xenemetrix.com

Application Highlight

Quantitative elemental analysis of Slag from High Carbon Ferro Chromium

Slag from high Carbon Ferro Chromium, prepared as pressed briquettes, was quantitatively analyzed using Xenemetrix X-Calibur bench top EDXRF analyzer, equipped with Silicon Drift Detector and a fundamental parameter software, which does not require the use of calibration standards for quantitative analysis.

One slag sample in pressed pellet format was received for quantification of MgO, Al₂O₃, SiO₂, CaO, TiO₂, Cr₂O₃ and FeO content. Qualitative analysis was revealed in addition to a peak of Sulfur in the slag, which was then included in the quantitative analysis. The sample was analyzed "as is" in a vacuum environment, which is being used to ensure that light elements are not absorbed by the oxygen.

Quantitative analysis and Precision test: The slag was measured 10 times consecutively without the sample being moved in between acquisitions. The spectral data were analyzed using a standard less fundamental parameter method.

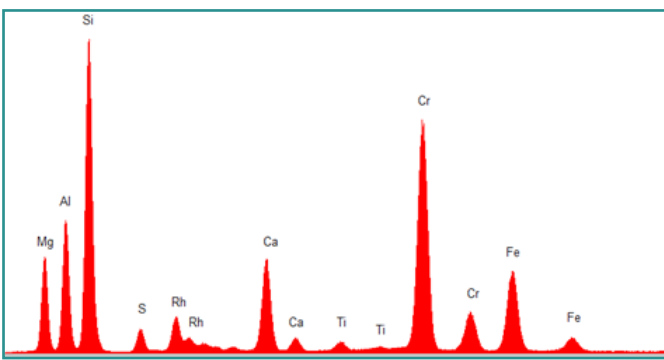


Figure 1: Typical spectrum of slag from high carbon ferro chromium (Rh L-lines peaks originated from X-Ray tube)

Table 1: Quantitative analysis and precision test results

| Repeat # | MgO [wt. %] | Al ₂ O ₃ [wt. %] | SiO ₂ [wt. %] | SO ₃ [wt. %] | CaO [wt. %] | TiO ₂ [wt. %] | Cr ₂ O ₃ [wt. %] | FeO [wt. %] |
|-------------------|-------------|--|--------------------------|-------------------------|-------------|--------------------------|--|-------------|
| Average [wt. %] | 33.72 | 24.52 | 31.18 | 1.20 | 2.24 | 0.21 | 4.82 | 2.13 |
| Std. Dev. [wt. %] | 0.17 | 0.22 | 0.08 | 0.07 | 0.01 | 0.01 | 0.03 | 0.01 |

Conclusions

This application shows the high potential of the EDXRF technology to perform simple, quick and non-destructive elemental analysis of slag samples, in a short time of 30 sec, without sample preparation.

In many occasions, elements were not expected to appear - such as Sulfur in this sample - were identified, and easily quantified by Xenemetrix X-Calibur SDD EDXRF analyzer.

For the full report please contact us: info@xenemetrix.com

Coming Next: Xenemetrix website becomes multilingual