



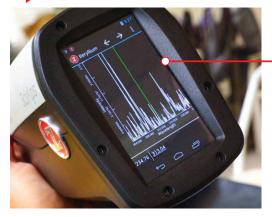
Element Pro App

Analyzing the Periodic Table of Elements for any sample just got faster, better and portable!

Test Anything

Figure out what Elements are present in seconds. Use Profile Builder to build quantitative calibrations if desired.





The Entire Periodic Table of Elements ...in a few seconds

Introducing the Z Series handheld LIBS analyzers, with the ElementPro App.

The Z-500 is the world's most advanced handheld analyzer using laser-induced breakdown spectroscopy (LIBS). It features a spectral range of 190 nm - 850 nm (extendable to 930 nm) allowing it to measure lines from every element in the periodic table. The Z features a powerful laser operating at 5-6 mj/pulse, with user-settable surface cleaning shots and beam rastering. The integrated, user-replaceable argon purge delivers greatly improved precision and detection limits, compared to air-based analysis. The Z also features an on-board camera/video, making it a powerful tool for analyzing homogenous samples, inclusions or non-homogenous regions within a heterogeneous sample and coated materials. The user-adjustable cleaning and rastering offers successive same-spot laser shots to burn through surface material either for cleaning or depth profiling. Laser rastering provides sample average over several locations.

How Element Pro Works:

Test any sample, no calibrations needed

After a few seconds, the Z examines the spectral data, and searches the on-board proprietary library of LIBZ emission lines and relative emission strengths built. As shown the Z displays the list of all elements found in the sample, with a "likelihood" rating and an estimated relative abundance. Elements that have a high probability of being present, because most or all of their emission lines were detected, are in green.

Spectral viewing

Need to hone in on one or more elements? Simply tap on an element icon and the Z's software zooms to the spectral regions for that element. Tap on any line and the software zooms into the spectral region around that specific emission line. It also shows a green vertical indicator wherever emission lines should be. This allows instant visual confirmation of elemental presence.

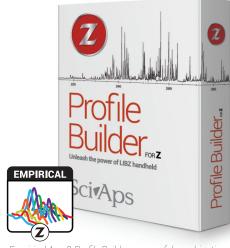


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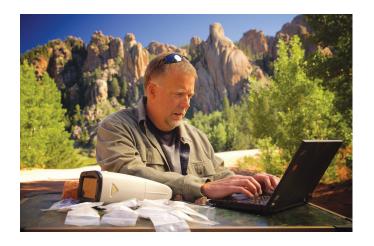
Need Quantitative Chemistry? Add our **Empirical App** and **ProfileBuilder** to Generate Calibration Models

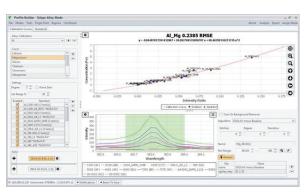
SciAps Profile Builder (PB) frees you from factory generated calibrations and methods. PB is loaded with common industry CRMs (assays) and users may add their own. Users may add new elements to the analysis and build calibration curves using an intensity ratio of the analyte line(s) to one or more matrix elements. The software allows users to easily select between a variety of common preprocessing methods such as Savitzky-Golay smoothing to reduce noise, nth derivative to

reduce baseline, or baseline subtraction. Users can quickly optimize spectral pre-processing on their sample set by observing the effect on the calibration curve in real time. Connectivity is via USB and wireless. Or, choose an element to see where the lines for that particular element are expected. Once you know the line, simply create a region around it and build a calibration curve. The software will guide users by suggesting common emission lines for each element of interest.



Empirical App & Profile Builder a powerful combination





LIBZ Delivers a Whole New World of Analysis for Rock Samples

Introducing the GeoChem Pro App

For the first time ever, geoscientists can perform micro analysis in the field with a hand held device. Specific minerals, veins, inclusions or other regions of interest in rocks can be viewed and analyzed with pinpoint accuracy, yielding elemental "heat maps." Determine both what elements reside in a sample, and where those elements are distributed.

This powerful app can: Instantly visualize "hot spots" for selected wavelengths related to specific elements or ratios and indices of elements. • Assist understanding the formation of ore bodies and geological events in the field. • Drive selection of samples for further laboratory analysis using electron microprobe. • LA-ICP-MS [Laser Ablation ICP MS] and XRF/SEM methods can be optimized by understanding elemental spatial distributions in the field.



By determining the spatial distribution of elements and their associations with one another, geoscientists can often deduce the mineral or mineral family present and subtle indications of geological processes at a micron scale.





