



**Z-902 C+**  
**NEW**



**X-555**  
**NEW**

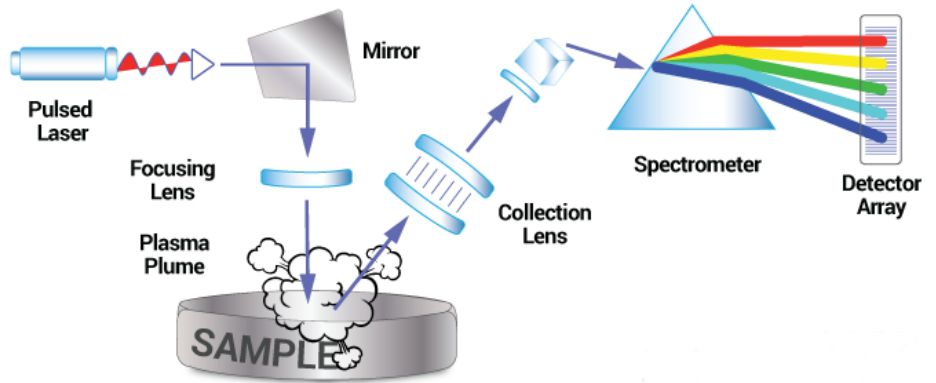
## Our Products and history



# LIBS

## Handheld Laser Induced Breakdown Spectroscopy

LIBS operates by using a pulsed, focused laser that is fired at a sample with sufficient pulse energy as to create a plasma around the area struck. Bound atomic electrons are stripped from the atoms comprising the material. As the plasma cools, atoms recombine with electrons and in the process emit light in the UV, optical and IR regimes.



- Minerals exploration
- Automotive industries (electric vehicles, e.g. lithium batteries)
- Supply-chain verification
- Manufacturing materials
- Environmental clean-up
- Space exploration
- Pipeline integrity
- Agriculture
- Nuclear and security
- Cultural heritage



### New Markets and Applications for LIBS

- Compounds used in food packaging, like PFAS – Perfluorinated alkylated substances (All Food contact surfaces, like Bags e.g. Microwave food bags) Wrappers, Cardboards, surfaces to prevent oil soakthrough)
- Hazardous substances in liquids (Oil, Water, Chemicals, brines)
- Agriculture – analysis of plants or fertilizers
- Minerals exploration, e.g. detection of Lithium in geological samples

World's only handheld LI-Analyzer

### Z-901 Li



Purpose-built handheld LIBS for **measuring lithium in rocks and brines**. Factory calibrated for lithium in pegmatite, clays and micas, including relevant base elements in the 350-675 nm range. SciAps also offers the Z-902 Lithium, containing a second spectrometer to extend the analytical range down to 210 nm for users testing brines for other elements, including boron, magnesium, calcium, and potassium.

### Z-903



The Z-903 accomplishes what no other portable analyzer has done. It's a handheld analyzer that **measures every element in the periodic table of the elements – from H to U**. It uses the same powerful laser as SciAps other Z-900 models, but with an extended spectrometer range from 190 nm to 950 nm. Includes Profile Builder software for PC or tablet for powerful benchtop functionality.



To



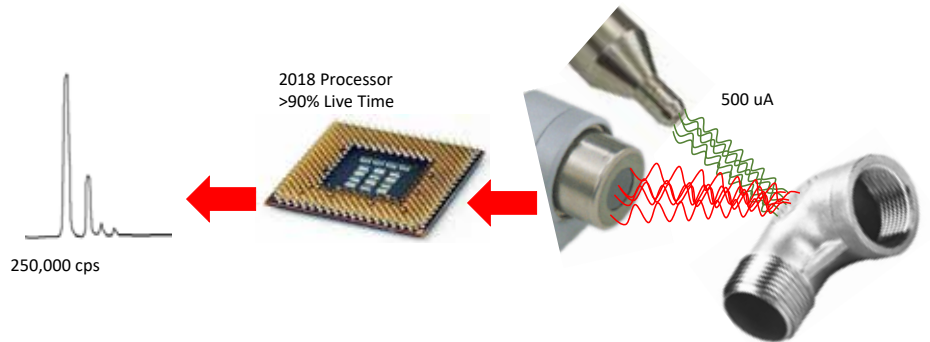
# XRF

## X-Ray Fluorescence Spectroscopy

**XRF** works by striking a sample with an x-ray beam from an x-ray tube, causing characteristic x-rays to fluoresce from each element in the sample. A detector measures the energy and intensity (number of x-rays per second at a specific energy) of each X-ray, which is transformed into an elemental concentration using either a non-standard technique such as fundamental parameters or user-generated calibration curves.

The presence of an element is identified by the element's characteristic X-ray emission wavelength or energy. The amount of an element present is quantified by measuring the intensity of that element's characteristic X-ray emission.

- PMI and metals analysis
- Environmental
- Regulatory / ROHS
- Scrap and recycling industry
- Research and Lab



### New Markets and Applications for XRF

- Mining and exploration
- Environmental and soil analysis
- Archeological research
- Pharma and medicals
- Rare earth elements
- Oil and gas industry



Get all the informations you want, right where you are! Fast and precise.



**X-550**  
**NEW**

The X-550 sets a new performance standard for handheld XRF. Weighing 2.8 lbs. (1.3 kg) with the battery, it's the **smallest, lightest, fastest XRF analyzer on the market**. It's fast on all alloys and as good on aluminums as it is on high temps for the scrap market, and it comes with fully loaded apps for NDT (Residuals, Sulfidic Corrosion, Alloy).



**Lightweight, small form-factor and high performance**

**X-200**

The Workhorse X-200 offers speed and performance superior to the top end analyzers from other brands. Equipped with SDD and optimized X-ray tube-detector geometry. The X-200 offers **best analytical performance combined with the lightweight and small form-factor design**. Fast on every alloy including aluminum alloys. For geochemical applications, it offers suites of elements for environmental, exploration, and mining. Other apps include soil, RoHS, PM, CarCat, Coat-ins, and Empirical App.



- Boston based analytical instrumentation company
- Founded in October of 2012
- Boston, MA Facility: Corporate HQ, R&D, Engineering, and Sales
- Subsidiaries in all strategic countries
- Presence in more than 100 countries worldwide



SciAps, Inc., is an instrumentation company specializing in portable analytical instruments to measure any element, any place on the planet.

Our industry-leading X-ray fluorescence (XRF) and laser-based (LIBS) analyzers are at work across every major industry – of which our favorite is scrap metal recycling. SciAps instruments are configured to measure elements in all types of materials.



### ONE BOX

The “sort everything” package! The Z for carbon steels, L-grade stainless upgrades, Li, Be, B in alloys. The X for everything else. They share the same UI, batteries, accessories. Either unit backs up the other for peak demand.

SciAps X and Z handheld analyzers run on the same software platform, operating system (Android App-based) and have the same user interface, making training and operation a breeze. The X and Z also operate on the same battery, use the same charger, and share other accessories.



### TEST STATION

Use SciAps Test Station to analyze small pieces in benchtop mode. Features an interlocking lid for your protection and super stable base to keep samples positioned correctly.

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