From Eye to Insight

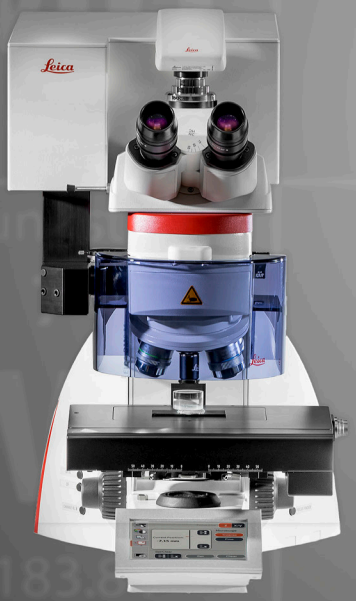
Leica MICROSYSTEMS

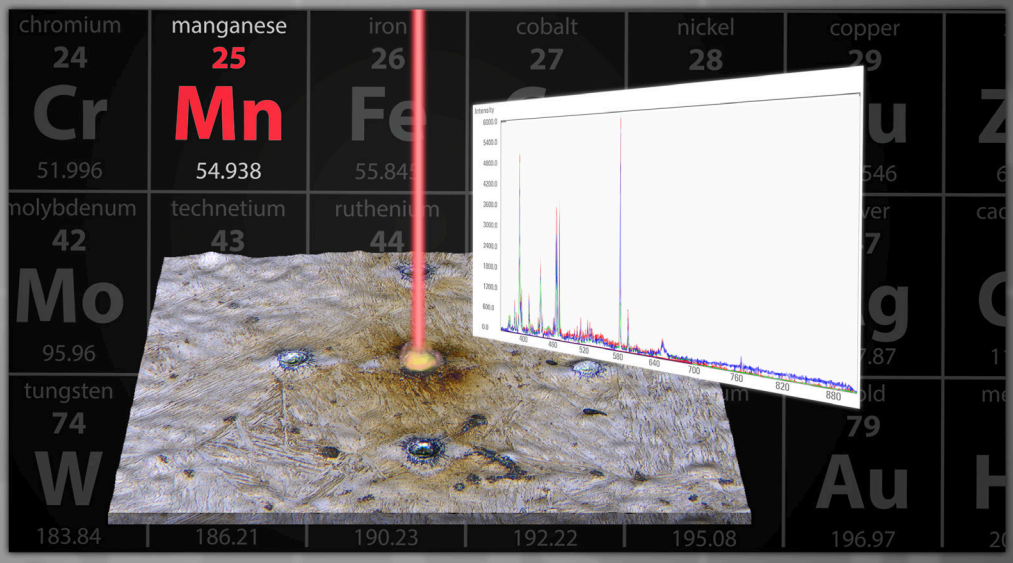
2 systems in 1 for visual & chemical analysis

1 second to a chemical fingerprint

0 sample preparation

Done!



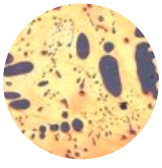


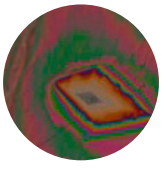
DM6 M LIBS materials analysis solution

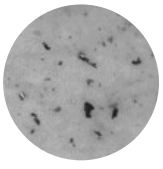
VISUAL AND CHEMICAL INSPECTION IN ONE STEP SAVES 90% OF YOUR TIME

Visually inspect and chemically analyze in a single work step with your DM6 M LIBS materials analysis solution. The integrated laser spectroscopy function delivers the chemical composition of the microstructure that you see in the microscope image – within a second.

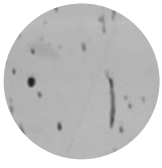
Typical applications in Material Science


Metallography


Earth science


Technical cleanliness


Forensic


Non-metallic inclusions


Pharmacy

Accurate testing with 90% less time expenditure

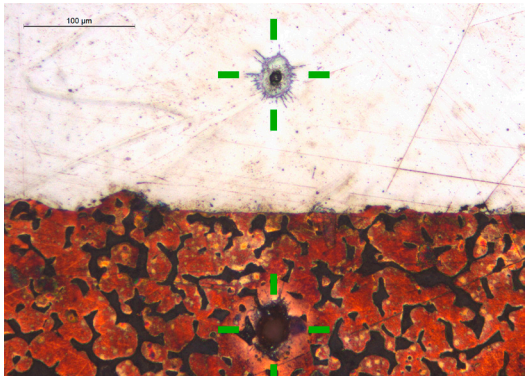
Speed up your workflow. The LIBS module turns a Leica optical microscope into a 1-step solution that combines visual inspection and chemical analysis right at your workspace. Determine the composition of what you have visually identified within seconds. Use LIBS to perform advanced material analysis 90% faster compared to inspection with SEM/EDS. Surface contamination or coatings can also be easily removed. Chemical mapping and micro-drilling are further analytical steps.

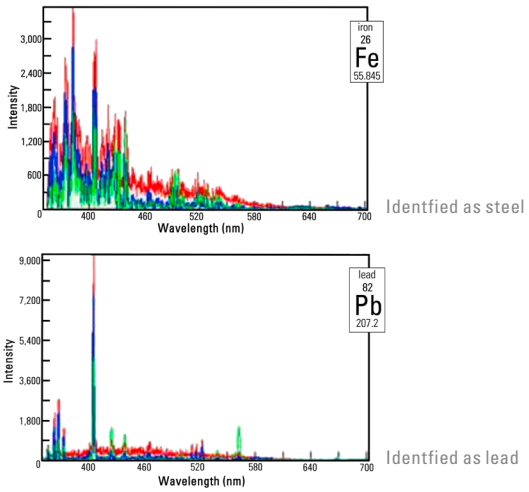
Easy one-click handling

Examine exactly what you see via the eyepieces or camera with a single click for fast and simple identification and interpretation.
No additional expertise by the operator is required.

Identify with confidence

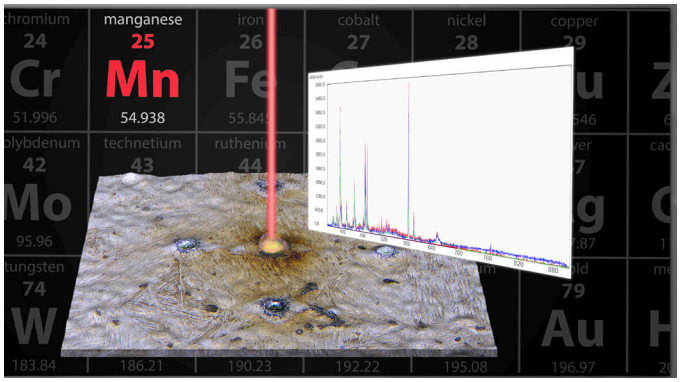
Obtain elemental information and interpretation of what you see in the microscope within seconds. No risk of losing the link to the area of interest when transferring the sample to other devices.





Analyzing with LIBS

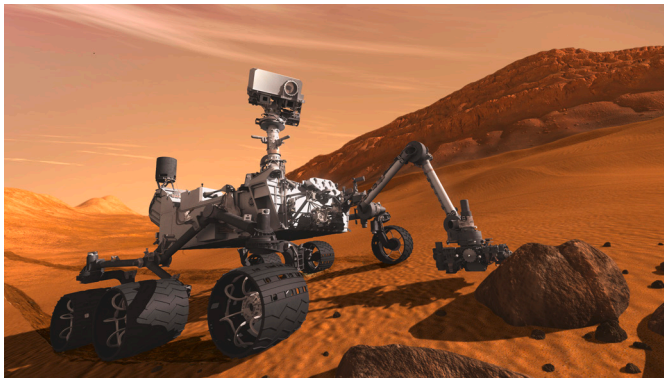
LIBS stands for laser induced breakdown spectroscopy. A high energetic laser pulse ablates a small fraction of the sample and generates a plasma. When the plasma cools down, it emits a light of characteristic wavelength. This spectrum is then used as the chemical fingerprint of what you see in the microscope image.



The laser pulse strikes the surface and a plasma is induced

LIBS – Proven on Mars

LIBS is solid, reliable, and does not need extensive sample preparation like other analysis methods. This fact made LIBS the first choice when equipping the NASA Mars rover Curiosity. Prepare to discover the unexpected.



The Mars rover Curiosity is equipped with a LIBS spectrum analyzer
Image courtesy NASA/JPL-Caltech

CONNECT WITH US!

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