



INNOVATIVE PHOTONIC TECHNOLOGY

The smart clean sensors developed by IUMTEK are based on Laser Induced Breakdown Spectroscopy (LIBS) technology.

The LIBS technology is a real-time method for elementary analysis of all types of materials, without prior preparation, regardless of its state (liquid, solid or gas), LIBS uses a pulsed laser beam and optical lenses which is focused on the analyzed material and creates a plasma and photon emissions. This light-matter interaction results in data that can be qualitative and / or quantitative. The ergonomic and intuitive HIM software interface, as well as the automation of the data acquisition system proposed by IUMTEK ensure safe use. For further information: <https://iumtek.com/libS>.

IUMTEK has a team of experts in :

- Mechatronics-photonics
- Embedded software
- Data processing
- Analysis Protocols



TX1000 Analyzer



A cleantech enterprise for real-time analysis of elementary chemical elements

The TX1000 analyzer designed and manufactured by IUMTEK is a versatile instrument for the detection of elementary chemical elements which allows fast and reliable identification in solids, liquids and gaseous media. This solution enables real-time diagnosis at the heart of the industrial processes.

DETECT - ANALYZE - CONTROL - QUANTIFY

COMPLEMENTARY TECHNIQUES: XRF, ICP-AES, Raman

OUR PARTNERS



ADVANTAGES:

- Fast results with little or no preparation
- No waste
- Robust & versatile instrument
- On-site analysis
- Plug & Play
- Decision aid Tool
- Ease of use

MARKETS:

- Nuclear dismantling
- Materials expertise laboratories
- R&D laboratories
- Petrochemical industry
- Renewable energies
- Quality control
- Analysis of emissions smoke emissions

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A Cleantech enterprise for real-time analysis of elementary chemical elements

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SPECIFICATIONS:

- Any type of sample analysis
- Multi-elemental analysis
- Allow the detection of all the periodic table elements
- No sample prior preparation* of samples
- Analytical precision (from ppm to %)
- Fast analysis (in a few seconds)
- Layer to layer analysis
- Sample cleaning ability before analysis
- Nearly non-destructive analysis (crater diameter of ~150 µm)
- Analysis chamber for solid samples
- Analysis kits for liquids and gases (optional)

* Except for powders

PRISMA SOFTWARE:

- Instrument control
- Assistance Tools for interpretation
- Quantification tools
- Chemo metric tools to create models
- HIM - Interface man to machine - Office 2016

TX1000 ADVANTAGES:

- Control card
- Mastery of You determine the analysis parameters
- Automated instrument
- Ease of use / Expert mode
- Self-test



A team at your service:

IUMTEK's mission is to design real-time industrial in-situ chemical analyzers. We also offer photonics and software module developments dedicated to specific business applications.

Our services:

- On-site intervention
- Rental material for analysis campaigns

Entrust your samples to us
When you need characterization tests (on demand)

