

# iUMTEK

## REAL-TIME IN SITU AND SAFE REMOTE ANALYSIS

### + WHO ARE WE?

iUMTEK is a cleantech startup. The company was co-founded with CEA Investissement, the CEA's venture fund, and has a research partnership with the CEA's energy research division (since October 2017).

### AN INNOVATIVE PHOTONIC TECHNOLOGY

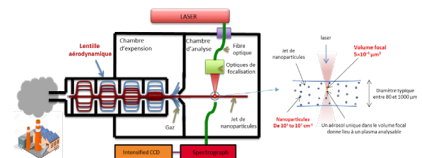
iUMTEK designs real-time in situ industrial chemical analyzers. iUMTEK can also develop custom photonics and software on request.

The company's solution utilizes laser-induced breakdown spectroscopy (LIBS) to interpret the spectra obtained from the plasma by analyzing a database of elements representative of the emission lines. The positions and intensities of the emission lines indicate which elements are present in the plasma (the material being analyzed) and in what concentrations.

The **LIBS TX 1000 LIBS analyzer** is iUMTEK's flagship instrument. This versatile instrument, designed and manufactured by iUMTEK, can quickly and reliably detect elemental chemicals in solids, liquids, and gases.

### iUMTEK @ CES 2021

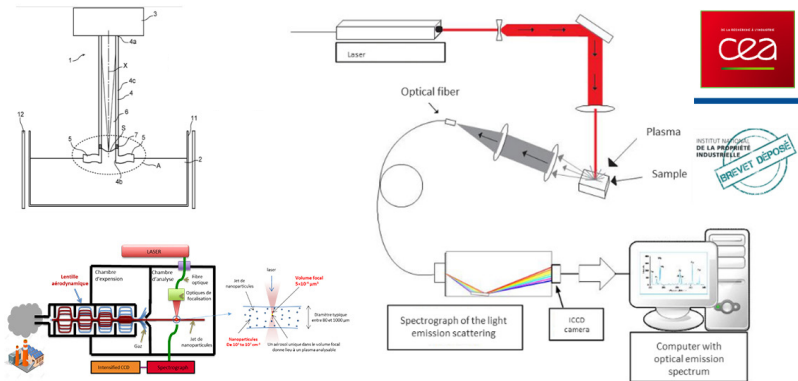
iUMTEK will present a demonstrator that measures ultrafine particles (under  $0.1 \mu\text{m}$ ). There is currently no solution on the market for this type of analysis. And, given the growing use of nanoparticles in a wide variety of products (paint, cosmetics, food, etc.), this type of analysis will be instrumental in improving industrial performance. iUMTEK is helping to bring LIBS technology, ideal for in situ real-time monitoring and diagnostics, to the market.



## + WHAT'S NEW?

iUMTEK designs and manufactures chemical diagnostic and decision-assistance instruments vital to optimizing processes for environmental performance, energy efficiency, and the circular economy. iUMTEK stands out for instruments capable of measuring nanoparticles (or ultrafine particles) the size of a single atom or cell.

With its innovative technology, iUMTEK is poised to help manufacturers in a wide range of industries improve the quality of their products and services.



## SCIENCE FOR A BETTER FUTURE

iUMTEK's technology can improve quality and help companies become more efficient. It is science that will help create a better future in that it:

- Limits downtime and production losses
- Supports air quality monitoring and testing near sensitive areas

And, because iUMTEK's technology can be used to analyze nanoparticles, it will also be of use in applications like healthcare and medicine of the future.



## INTERESTED IN THIS TECHNOLOGY?

Ronald Berger-Lefebure  
 ronald.bergerlefebure@iumtek.com  
 www.iumtek.com  
 Tel.: +33 670 275 250

## APPLICATIONS

- Industrial process control in all of the manufacturing industries
- Sample testing in R&D
- Nuclear decommissioning
- Stack emission testing (air pollution, water pollution, and soil testing)

### KEY FIGURES

- €300K revenue in 2020
- 5 employees
- 4 patents
- Together, the iUMTEK team brings 20+ years of experience implementing LIBS in measurement instruments.

## + WHAT'S NEXT?

iUMTEK has set its sights on addressing all of the company's multidisciplinary fields and bringing its customers chemical analysis solutions to meet their unique needs. Over the next few years, the company will focus its business development efforts on a variety of markets in France, the rest of Europe, the Americas, and Asia-Pacific, as well as in all other growing markets worldwide.

The goal is to be an innovative greentech startup firmly established on the risk management, health, and environmental markets.



iUMTEK is a CEA spinoff.