



# **ICP-OES Complete Training**

#### Reference

ICP4

#### Price

3 025€ per attendee

#### **Duration**

5 days

#### **Dates**

23-27 September 2024

#### **Schedule**

From 9 am to 5.00 pm

## Maximum number of attendees

5 people

#### Registration deadline

23 August 2024

## Location

14 Boulevard Thomas Gobert, 91120 Palaiseau - France

#### **Prerequisites**

Dedicated to HORIBA customers only and knowledge of the technique and equipment.

### Who should attend

Users of HORIBA Scientific ICP-OES

# spectrometers.

#### Certification

A diploma is delivered at the end of the course.

# Learning method

Theoretical presentation and instruments practice.

## Course language

English

## **Objectives**

- Theoretical and practical knowledge on ICP-OES spectrometers.
- Learn how to use the software (latest version used in the laboratory).
- Learn methodology for method development and major analytical parameters.
- Know how to set up an analytical strategy with an unknown sample.
- Interpret results.
- Follow the performances of the ICP-OES spectrometer over the time.
- Identify dysfunctions and their origins and solve these dysfunctions.



# **PROGRAM**

## Day 1

#### Theory:

- · Theory of ICP-OES
- · Principle and instrumentation
- · Method development strategy
- · Wavelength selection
- · Optimization of parameters
- · Spectral interferences
- · Analytical performances

# Day 2

# Practical - Method creation and optimization:

- · Method creation
- · Optimization of gas flow
- · Optimization of sheath gas
- · Optimization of integration time

## Day 3

## **Practical - Method creation and optimization:**

- · Method development
- · Wavelength selection
- · Semi-quantitative analysis.
- · Slit selection

# Day 4

## Practical - Analytical performance:

- · Background position
- · Detection limit calculation
- Spectral interferences
- · Matrix effect

# Day 5

# Analysis of unknown samples:

Result validation

