

# Glow Discharge Optical Emission Spectroscopy

## Reference

GD1

## Module 1

**Duration:** 4 sessions of 2h30

**Dates:** 9, 10, 11 and 12 April 2024

**Schedule:** 10 am to 12.30 pm  
(France time zone; UTC+2 )

**Prerequisites:** dedicated to HORIBA customers only.

**Location:** online via Teams

## Modules 2

**Duration:** 2 days

**Dates:** 29 and 30 April 2024

**Schedule:** 9 am to 5 pm

**Prerequisites:** dedicated to HORIBA customers only and to have completed Module 1

**Location:** 14 Boulevard Thomas Gobert,  
91120 Palaiseau - France

## Price per participant

**Module 1 only:** 495 €

**Modules 1 & 2 :** 1650 €

## Objectives

- Make full use of the software
- Know how to optimize instrument parameters and analysis modes
- Carry out measurements of various types of samples
- Master volume and surface calibration
- Know the accessories
- Know how to perform a diagnosis of the instrument

## Learning methods

The trainer adapts the course program according to the questionnaires received. The group is 6 people maximum to promote practice and exchanges.

## Certification

A diploma is delivered at the end of the course.

## Course language

English



## PROGRAM

### Module 1 (Online Training on Microsoft Teams)

#### Overview of the GD technique, instrument and software:

- Full command of the software
- Operating in simulation mode
- Export/Import. Data transfer
- Examples of measurements and operating conditions
- Principles of optics and Spectroscopy
- GD plasma and interaction plasma/ samples
- Pulsed mode and synchronized pulsed mode
- Principles of calibration
- Particularities of surface calibration
- Samples selection
- Principles of DIP (Differential Interferometry Profiling)
- Various analysis modes
- Accessories overview

### Module 2 (Face-to-face training at HORIBA France Palaiseau site)

#### Functioning and use of the hardware and software:

- Daily verification procedure
- Analysis of different samples and data processing
- Optimization of the instrument operating conditions
- How to use the pulsed mode and the synchronous pulsed mode
- How to use the monochromator and image mode
- Calibration optimization

#### Presentation of specific functions and accessories:

- UFS and other plasma gases
- Plasma cleaning
- DIP (Differential Interferometry Profiling)
- Different accessories

#### Maintenance