HORIBA Scientific offers many types of training courses tailored to your particular requirements:

- **A la carte** training courses at our approved HORIBA Scientific training center. Learn and share your experience with other users and acquire the basics of the technique. You will be able to directly use this knowledge for your applications in your own laboratory.

- **Training on-site**, performed by one of our HORIBA Scientific application experts.

Our trainers are experts in each technique. They will provide trainings advice and guidance to make the most of your HORIBA Scientific instrument.

You will gain confidence and experience in the analysis of your samples.

To get the entire program and to get registered, please contact us at

training.hfr@horiba.com

Certificates are given to every attendee for every course.

All trainings are held in France or at your location and are conducted in English.

Raman

Acquire theoretical and practical knowledge on Raman spectrometers

Reference: RAM1 - **RAMAN for Beginners**
Duration: 3 days, from 9 am to 5:30 pm
Dates: February 12-14, 2018
May 14-16, 2018
July 9-11, 2018
October 8-10, 2018
November 19-21, 2018

Optional Add-ons days for RAM1 training

Learn how to use the DuoScan option

Reference: RAM1DS - **RAMAN DUOSCAN**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 15 & 16, 2018
May 17 & 18, 2018
October 11 & 12, 2018

Understand the Particle Finder Module

Reference: RAM1PF - **PARTICLE FINDER**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 15 & 16, 2018
May 17 & 18, 2018
October 11 & 12, 2018

Understand TERS Technology

Reference: RAM1TERS - **TERS**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 15 & 16, 2018
May 17 & 18, 2018
October 11 & 12, 2018

Acquire theoretical and practical knowledge on ULF kit

Reference: RAM1ULF - **Ultra Low Frequency kit**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 15 & 16, 2018
May 17 & 18, 2018
October 11 & 12, 2018

Acquire theoretical and practical knowledge on SERS

Reference: RAM2 - **Raman SERS**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 15, 2018
July 12, 2018
November 22, 2018

Understand the Multivariate Analysis Module

Reference: RAM3 - **Raman Multivariate Analysis**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 16, 2018
July 13, 2018
November 23, 2018

Understand Raman Spectroscopy & SPM Techniques

Reference: RAM4 - **Raman & SPM**
Duration: 3 days, from 9 am to 5:30 pm
Dates: February 12-14, 2018
May 14-16, 2018
November 19-21, 2018

Fluorescence

Acquire theoretical and practical knowledge on fluorescence

Reference: FLUO1 - **Fluorescence for Beginners**
Duration: 3 days, from 9 am to 5:30 pm
Dates: March 19-21, 2018
May 28-30, 2018
October 15-17, 2018

Learn how to use the software

Reference: FLUO2 - **Software**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 22, 2018
May 31, 2018
October 18, 2018

Acquire theoretical and practical knowledge on lifetime fluorescence

Reference: FLUO3 - **Lifetime**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 23, 2018
June 1, 2018
October 19, 2018

Acquire theoretical and practical knowledge on Aqualog fluorescence (EEMs)

Reference: FLUO4 - **Aqualog**
Duration: 1 day, from 9 am to 5:30 pm
Dates: April 3, 2018
June 4, 2018
October 22, 2018

Ellipsometry

Learn theory and modeling techniques

Reference: ELL1 - **Ellipsometry for Beginners**
Duration: 3 days, from Monday 9 am to 5:30 pm
Dates: March 26-28, 2018
November 19-21, 2018

Learn modeling techniques on complex sample

Reference: ELL2 - **Advanced Ellipsometry Techniques**
Duration: 3 days, from 9 am to 5:30 pm
Dates: June 5-7, 2018
December 3-5, 2018

SPRi

Learn how to use the OpenPlex

Reference: SPRi1 - **OpenPlex**
Duration: 3 days, from 9 am to 5:30 pm
Dates: February 12-14, 2018
July 2-4, 2018

Learn how to get the best from the XelPleX

Reference: SPRi2 - **XelPleX**
Duration: 4 days, from 9 am to 5:30 pm
Dates: May 14-17, 2018
October 22-25, 2018

Learn how to run your samples

Reference: SPRi3 - **Customer training on their application**
Duration: 4 days,
from 9 am to 5:30 pm
Dates: March 12-15, 2018
September 10-13, 2018

GDOES

Learn theory and practice Glow Discharge Spectrometry

Reference: GD1- **GD for beginners**
Duration: 2 days, from 9 am to 5:30 pm
Dates: February 20-21, 2018
October 8-9, 2018

Learn how to quantify with GDL

Reference: GD2 - **GD quantification**
Duration: 2 days, from 9 am to 5:30 pm
Dates: February 19-20, 2018
October 10-11, 2018

Learn how to measure depth with DiP

Reference: GD3 - **DiP**
Duration: 1 day, from 9 am to 5:30 pm
Dates: February 23, 2018
October 12, 2018

ICP-OES

Learn how to use and optimize your ICP-OES

Reference: ICP - **ICP-OES**
Duration: 5 days, from 9 am to 5:30 pm
Dates: March 5-9, 2018
July 2-6, 2018
October 15-19, 2018

PSA

How to optimize any sample analysis

Reference: PSA1- **Laser Diffraction**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 13, 2018
October 8, 2018

Learn how to interpret results in DLS

Reference: PSA2 - **Light Scattering Technique**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 14, 2018
October 9, 2018

C/S/O/N/H Analyzer

Learn how to maximise results from the EMIA

Reference: HOR1- **C/S Analyzer**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 13, 2018
October 1, 2018

Learn how to maximise results from the EMGA

Reference: HOR2 - **O/N/H Analyzer**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 14, 2018
October 2, 2018

S & Cl Analyzer

Learn how to optimize S & Cl determination in Petroleum Products

Reference: HOR3 - **S & Cl analyzer for Petroleum products**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 15, 2018
October 3, 2018

XGT/MESA 50

Learn how to optimize the XRF Fluorescence analyzer

Reference: HOR4 - **X-Ray Fluorescence analyzer**
Duration: 1 day, from 9 am to 5:30 pm
Dates: March 16, 2018
October 4, 2018

On-site Training

Customized training at your site

Reference: TRAINSITE
Duration: 1 day, from 9 am to 5:30 pm
Dates: On request

On-line Training

Direct analytical help

Reference: TRAINLINE
Duration: 4 hours
Dates: On request

Location

Depending on the technique, there are three locations in France:

- Longjumeau (20 km from Paris),
- Palaiseau (26 km from Paris),
- Villeneuve d'Ascq (220 km from Paris)

Additional locations:

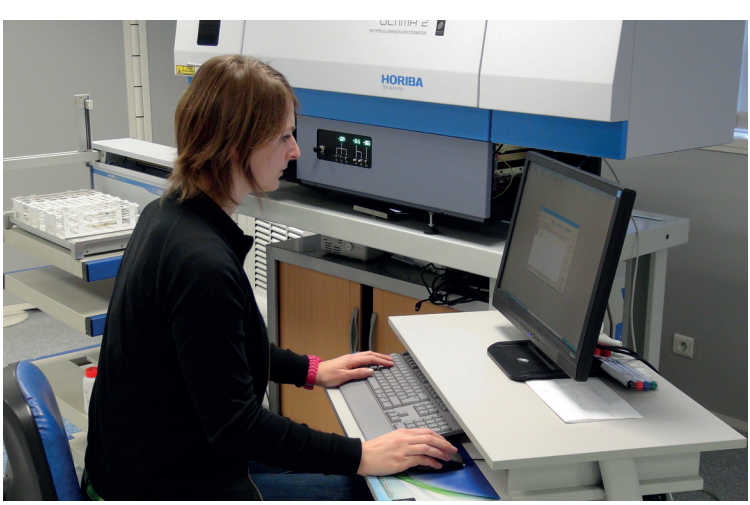
- At your facility for on-site training courses.
- Training courses can also take place in subsidiaries in Germany or in the USA.

Registration

To register please request the form, or go the web page.

training.hfr@horiba.com

www.horiba.com/scientific/training







HORIBA
Scientific

Ultima Expert

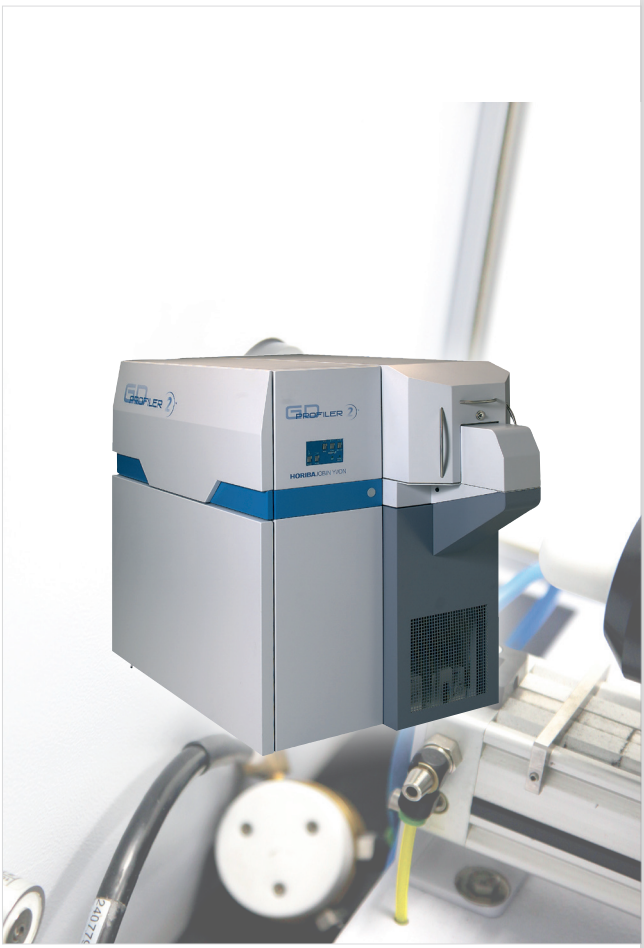
Emission spectrometry

- Unique plasma torch design offers the most versatile and accurate analyses
- Accessories for varied applications
- High resolution and full wavelength coverage
- Easy to handle, easy to maintain

XploRA Nano

AFM-Raman system

- Fully automated operation. Start measuring within minutes, not hours!
- Compatible with red and NIR Raman excitation lines thanks to 1.3 µm AFM laser diode
- Top and side AFM-Raman optical coupling with high NA (up to 100X, 0.7NA)
- Co-localized AFM-Raman image with optimized illumination spot size from the top
- TERS-proven label-free chemical nano-imaging
- Ag AFM-TERS tips available



GD Profiler 2

Elemental composition profiling

- Conductive, non-conductive and hybrid samples
- Quantitative depth profiling
- All elements can be simultaneously measured, including light elements (C, H, O, N, Cl, Li, Na, etc.)
- Depth resolution at the nm range
- Patented DiP – built-in interferometer for direct measurement of crater depth

Fluorolog® -3

Fluorescence spectroscopy

- Light source: 450 W Xenon lamp
- Spectral range: 185 nm~14 µm
- Sensitivity (SNR): > 15000:1 FSD method
  > 30000:1 RMS method
- All-reflective optics
- Fully computer-controlled
- Interchange wide range of computer controlled accessories: spectrometers, detectors, sources, and more
- TCSPC Fluorescence lifetime capability

LA-960

Particle size analyzer

- Laser Diffraction
- Measurement range: 10 nm-5000 µm
- Sample types: Powder, emulsion, suspension
- Sample amount: 10 mg~5 g
- Various dispersion modules: Wet/Dry analysis, low/high quantity
- Measurement time: 1 minute (from liquid filling, sample dispersion, measurement data acquisition, rinse)
- Solvent compliant
- Ultrasonic probe to improve dispersion

UVISEL PLUS

Reference Spectroscopic Ellipsometer

- New optics and electronics for fast and accurate measurements
- Phase modulation with a high frequency PEM for pure and efficient polarization without moving optical components
- 3 Achromatic microspots down to 50 µm
- Spectral range from 190 nm~ 920 nm, or 190 nm~2100 nm

HORIBA Scientific

JOBIN YVON Technology

2018

Training Courses