

Fluorescence for Beginners

■ Reference: FL1

Duration: 3 days

■ Dates: March 16-17, 2020 June 8-9, 2020 October 12-13, 2020 ■ Who should attend

Beginners in Fluorescence measurements.

■ From 9 am to 5:30 pm

Objectives

- Acquire theoretical and practical knowledge on fluorescence spectrometers
- · Learn how to use the software
- Acquire methodology for method development
- Learn how to set up an analytical strategy with an unknown sample
- Learn how to interpret results
- Learn how to follow the performance of the spectrometer over the time

₽ Program

Day 1

The Theory of the Fluorescence Principle

- Why and where fluorescence is used. Application review.
- Fluorescence Instrumentation presentation of the different parts of the instrument and their roles.
- How to select the spectrofluorometer according to the application needs.
- Practical session System and software presentation, Acquisition Parameters
 - FluorEssence Software presentation and environment: acquisitions modules, files handling, display of data, basic functions
 - Set up of acquisition parameters and single spectra measurement

Day 2

Focus on Fluorescence Lifetime Acquisitions: Theory

- Review of the existing methods to estimate the Fluorescence lifetime
- Fluorescence lifetime instrumentation presentation of the different parts of the instrument and their role

- How to select the spectrofluorometer according to the application needs.
- Practical session System and software presentation, Acquisition Parameters
 - DataStation Software presentation and environment: Acquisitions modules, file handling, display of data, basic functions
 - Fluorescence decay analysis

Day 3

Focus on Specific Measurements

- Polarization and anisotropy: theory and applications
- Matrix scan: Excitation Emission Matrix benefits (EEM)
- Time-resolved Emission Spectra (TRES): How to estimate the emission spectra during the deexcitation process
- Practical session:
 - Polarization acquisitions: parameters and spectral analysis
 - How to run an anisotropy decay and what information that can be extracted
 - TRES: Set up of acquisition parameters and data treatment



For further information, contact:





Fluorescence - Software

- Reference: FL2
- Duration: 1 day
- Date: March 18, 2020 June 10, 2020 October 14, 2020
- Who should attend

Existing customers of HORIBA spectrofluorometers

From: 9 am to 5:30 pm

Objectives

- Learn how to use the software
- Perform real case examples on demo and customer data

Program

- Introduction to the software
- Practical work on known datasets
- Practical work on customer data





For further information, contact:



Fluorescence Lifetime

■ Reference: FL3

■ Duration: 1 day

■ Date: March 19, 2020 June 11, 2020 October 15, 2020 ■ Who should attend

Existing customers (beginners-intermediate users) of HORIBA spectrofluorometers

■ From 9 am to 5:30 pm

Objectives

- · Acquire theoretical and practical knowledge on lifetime fluorescence
- Learn how to use the software
- Acquire methodology for method development
- Learn how to set up an analytical strategy with an unknown sample
- Learn how to interpret results

Program

- Description of the technique
- Use and advantages
- Basic time-resolved measurements
- Advanced time-resolved measurements (FRET, TR anisotropy)





For further information, contact:



Aqualog

- Reference: FL4
- Duration: 1 day
- Date: March 20, 2020 June 12, 2020 October 16, 2020
- Who should attend

Existing customers having a HORIBA spectrofluorometer

From 9 am to 5:30 pm

Objectives

- Acquire theoretical and practical knowledge on Aqualog fluorescence
- Discover Excitation Emission Matrix (EEM): Benefits vs. the standard spectral analysis
- EEMs applications and uses

Program

- Introduction to EEMs (Excitation-Emission Matrices)
- Data treatment: Chemometrics approach
- Description of the instrument (optics, configuration)
- Introduction to advanced techniques (Quantum Yield)
- Practical Session hands on use of the Aqualog instrument
 - Parameters setup
 - Data analysis





For further information, contact:



On-site Training

- Reference: TRAINSITE
- Duration: Mutually agreed
- Dates: By appointment

Objectives

- Basic training on techniques (ICP-OES, GDOES, PP-TOFMS, SPRi, Ellipsometry, Raman, Fluorescence ...)
- Presentation and use of the specific software
- Use of accessories

Program

Schedule of On-site Training (Example)

- Daily use of the instrument (start up, checking, routine analysis)
- Software review
- Maintenance
- Operating conditions optimization

Agenda is discussed and prepared by mutual agreement



For further information, contact:



On-line Training

■ Reference: TRAINLINE

■ Duration: 4 hours divisible

■ Dates: by appointment

■ Who should attend

All users of HORIBA analyzers equipped with internet access

Objectives

Training or analytical assistance on any kind of instrument commercialized by HORIBA Scientific with the possibility to use the 4 hour package in modules (30 minutes minimum each)

₽ Program

To be defined when making the appointment

Prerequisite

A first connection (free of charge) will be done to ensure that the connection works properly

Packaging use follow up

An e-mail will be sent to the customer after each connection to keep him informed about time remaining in his package



For further information, contact:



Practical information

Courses range from basic to advanced levels and are taught by application experts. The theoretical sessions aim to provide a thorough background in the basic principles and techniques. The practical sessions are directed at giving you hands-on experience and instructions concerning the use of your instrument, data analysis and software. We encourage users to raise any issues specific to their application. At the end of each course a certificate of participation is awarded.

Standard, customized and on-site training courses are available in France, Germany, USA and also at your location.

Dates mentionned here are only available for HORIBA France training center.

Registration

Fill in the form and:

- Email it to: training.hfr@horiba.com
- Or Fax it to: +33 (0)1 69 31 32 20
- More information: Tel: +33 (0)1 69 74 72 00

General Information

The invoice is sent at the end of the training. A certificate of participation is also given at the end of the training.

We can help you book hotel accommodations.

Following your registration, you will receive a package including training details and course venue map. We will help with invitation letters for visas, but HORIBA FRANCE is not responsible for any visa refusal.

Pricing

Refreshments, lunches during training and handbook are included.

Hotel transportation, accommodation and evening meals are not included.

Location

Depending on the technique, there are three locations: Longjumeau (France, 20 km from Paris), Palaiseau (France, 26 km from Paris), Villeneuve d'Ascq (France 220 km from Paris) or at your facility for on-site training courses. Training courses can also take place in subsidiaries in Germany or in the USA.

Access to HORIBA FRANCE, Longjumeau

HORIBA FRANCE SAS

16 - 18 rue du canal - 91165 Longjumeau - FRANCE

Depending on your means of transport, some useful information:

- if you are arriving by car, we are situated near the highways A6 and A10 and the main road N20
- if you are arriving by plane or train, you can take the train RER B or RER C that will take you not far from our offices.

(Around 15 \in , 150 \in by taxi from Charles de Gaulle airport, 50 \in from Orly airport).

We remain at your disposal for any information to access to your training place. You can also have a look at our web site at the following link:

http://www.horiba.com/scientific/contact-us/france/visitors-guide/

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Access to HORIBA FRANCE, Palaiseau

HORIBA FRANCE SAS

14, Boulevard Thomas Gobert - Passage Jobin Yvon - CS 45002 - 91120 Palaiseau - FRANCE

From Roissy Charles de Gaulle Airport By Train

- Take the train called RER B (direction Saint Remy Les Chevreuse) and stop at Massy-Palaiseau station
- At Massy-Palaiseau station, take the Bus 91-06 and stop at La Ferme de la Vauve.
- The company is a 5 minute walk from the station (see the map below).
- Around 150 € by taxi from Charles de Gaulle airport.





For further information, contact:



Practical Information

From Orly Airport By Train

- At Orly airport, take the ORLYVAL, which is a metro line that links the Orly airport to the Antony RER station.
- At Antony station, take the RER B (direction St Remy Les Chevreuse) and stops at Massy-Palaiseau station.
- At Massy-Palaiseau station, take the Bus 91-06 and stop at La Ferme de la Vauve.
- The company is 5 minutes walk from the station, (see the map opposite).
- Or at Orly take the Bus 91-10 stop at La Ferme de la Vauve. The company is 5 minutes walk from the station, (see the map opposite). We remain at your disposal for any information to access to your training place. You can also have a look at our web site at the following link:

http://www.horiba.com/scientific/contact-us/france/visitors-guide/

Around 50 € by taxi from Orly airport.

Access to HORIBA FRANCE, Villeneuve d'Ascq

HORIBA FRANCE SAS 231 rue de Lille, 59650 Villeneuve d'Ascq - FRANCE

By Road from Paris

- When entering Lille, after the exit «Aéroport de Lequin», take the direction «Bruxelles, Gand, Roubaix». Immmediatly take the direction «Gand / Roubaix» (N227) and No «Bruxelles» (A27) Nor «Valenciennes» (A23).
- You will then arrive on the ringroad around Villeneuve d'Ascq. Take the third exit «Pont de Bois».

 At the traffic light turn right and follow the road around, (the road will bend left then right). About 20m further on you will see the company on the right hand side where you can enter the car park.

By Road from Belgium (GAND - GENT)

Once in France, follow the motorway towards Lille. After «Tourcoing / Marcq-en-Baroeul», follow on the right hand side for Villeneuve d'Ascq. Take the exit «Flers Chateau» (This is marked exit 6 and later exit 5 - but it is the same exit). (You will now be following a road parallel to the motorway) Stay in the middle lane and go past two sets of traffic lights; at the third set of lighte, move into the left hand lane to turn under the motorway.

At the traffic lights under the motorway go straight, (the road shall bend left then right). About 20 m further you shall see the company on the right hand side where you can enter the car park.

Aeroplane

From the airport Charles de Gaulle take the direction 'Terminal 2' which is also marked TGV (high speed train); where you can take the train to 'Lille Europe'.

Train - SNCF

There are two train stations in Lille - Lille Europe or Lille Flandres. Once you have arrived at the station in Lille you can take a taxi for HORIBA FRANCE SAS, or you can take the underground. Please note both train stations have stations for the underground.

Follow the signs:

- 1. From the station «Lille Flandres», take line 1, direction «4 Cantons» and get off at the station «Pont de bois».
- 2. From the station «Lille Europe», take line 2, direction «St Philibert» and get off at the following station «Gare Lille Flandres» then take line 1, direction «4 Cantons» and get off at the station «Pont de Bois».

Bus

Bus n°43, direction «Hôtel de Ville de Villeneuve d'Ascq», arrêt «Baudoin IX».



For further information, contact:



| Registration form | |
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| Training course: | Date: |
| Family Name: | First Name: |
| Company/Organisation: | |
| Address: | |
| Telephone Number: | Fax: |
| Email: | |
| Purchase order number: | |
| Invitation letter requested: Yes No | |
| If yes: | Hotel accommodation: |
| Passport number: | Date of arrival: |
| Date of passport validity: | Date of departure: |
| Date of birth: | Additional hotel dates (if requested in Paris) |
| Place of issue (as mentioned on the passport): | |
| Date & signature | Stamp of the company |
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Information

Registration: Fill in the form and send it back by FAX or Email four weeks before beginning of the training.

Registration fees: Registration fees include the training courses and documentation. Hotel, transportation and living expenses are not included except lunches which are taken in the HORIBA Restaurant during the training.

Your contact: HORIBA FRANCE SAS, 14, Boulevard Thomas Gobert - Passage Jobin Yvon - CS 45002 - 91120 Palaiseau - France

Tél: +33 (0)1 69 74 72 00 Fax: +33 (0)1 69 31 32 20 E-Mail: training.hfr@horiba.com Siret Number: 837 150 366 00024

HORIBA Scientific continues contributing to the preservation of the global environment through analysis and measuring technology

Certified ISO 14001 in 2009, HORIBA Scientific is engaged in the monitoring of the environmental impact of its activities during the development, manufacture, sales, installation and service of scientific instruments and optical components. Training courses include safety and environmental precautions for the use of the instruments



For further information, contact: