

■ Reference: SPR1

■ Duration: 3 days

■ Dates: February 11-13, 2019  
June 17-19, 2019

■ Who should attend

OpenPlex users or people wishing to acquire an OpenPlex

■ From 9 am to 5 pm

## Objectives

- Learn how to optimize the experimental conditions according to the interaction to be analyzed
- Learn how to make biochip spotting
- Master the use of OpenPlex
- Learn how to analyze a kinetic data

## Program

### Day 1

- Introduction to kinetics of interaction: What is a «good» kinetic?
- Which biochip to choose according to the molecules to immobilize?
- How to optimize spotting (concentrations, buffers, reference, ...)?
- The important experimental parameters to be tested for SPRi (pH, stroke buffer, temperature, ...)
- Advice to be applied during the realization of the experiment (duration of kinetics, flow rate, regeneration, ...)
- Case studies

### Day 2

- Choose the right surface chemistry as a function of immobilized ligands
- Optimize experimental immobilization conditions (spotting buffer, pH, ligand concentration, duration of needle rinses / dryings, etc.)
- Master the different steps to program a spotting matrix\*
- Perform spottings

### Day 3

- Optimize the SPRi experimental conditions according to the interaction to be analyzed
- Master the use of OpenPlex
- Two models of interactions will be studied:
  - Study of a first interaction (protein / protein)
  - Study of a second interaction (DNA / DNA)
- Analysis of the data, and description of the different analysis software.

\*The choice of the spotter used must be defined when registering

## SPRi - XelPleX

■ Reference: SPRi2

■ Duration: 4 days

■ Dates: May 13-16, 2019  
October 21-24, 2019

■ Who should attend

XelPleX users or people wishing to acquire an XelPleX

■ From 9 am to 5 pm

### Objectives

- Learn how to optimize the experimental conditions according to the interaction to be analyzed
- Learn how to make a biochip spotting
- Master the use of XelPleX
- Learn how to analyze a kinetic data

### Program

#### Day 1

- Introduction to kinetics of interaction: What is a «good» kinetic?
- Which biochip to choose according to the molecules to immobilize?
- How to optimize spotting (concentrations, buffers, reference, ...)?
- The important experimental parameters to be tested in SPRi (pH, running buffer, temperature,...)
- Advice to be applied during the realization of the experiment (duration of kinetics, flow rate, regeneration, ...)
- Case studies

#### Day 2

- Choose the right surface chemistry as a function of immobilized ligands
- Optimize experimental immobilization conditions (spotting buffer, pH, ligand concentration, duration of needle rinses / dryings, etc.)
- \*Master the use of the spotter (master the different steps to program a spotting matrix)
- Performing spottings

#### Day 3

- Optimize the experimental conditions according to the interaction to be analyzed
- Master the use of XelPleX
- Two models of interactions will be studied:
  - Study of a first interaction (protein / protein)
  - Study of a second interaction (DNA / DNA)

#### Day 4

- Reminder on interaction kinetics
- Use of EzFit software. Analysis of different interactions (Ac / Ac, DNA / DNA, Protein / small molecule, ...)
- Carrying out analysis in «classical» mode (injection of several concentrations of the analyte) and in «single-injection» mode (injection of a single concentration of the analyte)

\*The choice of the spotter used must be defined when registering

## SPRI - Customer Training on their Applications

■ Reference: SPRI3

■ Duration: 4 days

■ Dates: March 11-14, 2019  
September 10-13, 2019

■ Who should attend

XelPleX or OpenPlex users

People wishing to acquire an XelPleX or an OpenPlex  
For this training the attendees should be from the same team

■ From 9 am to 5 pm

### Objectives

- Learn how to optimize experimental conditions in function of interactions to analyze
- Learn how to spot the biochip with the spotter defined by the user
- Master the use of the SPRI system, defined beforehand by the user
- Learn how to analyze data

### Program

#### Day 1

- Which biochip to choose according to the molecules to immobilize?
- How to optimize spotting (concentrations, buffers, reference, ...)?
- The important experimental parameters to be tested for SPRI (pH, running buffer, temperature, ...)
- Advice to be applied during the experiment (duration of kinetics, flow rate, regeneration, ...)
- Establishment of an experimental protocol

#### Day 2

- Choose suitable surface chemistry for immobilized ligands
- Perform spotting based on the previously defined protocol
- Advice about the maintenance of the instrument

#### Day 3

- Carry out the SPRI experiment as described in the protocol
- Master the use of the chosen SPRI device (XelPleX or OpenPlex)

#### Day 4

- Reminder on interaction kinetics
- Software use
- Data analysis

## 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 mentioned here are only available for HORIBA France training center.

### Registration

Fill in the form and:

- Email it to: [training.hfr@horiba.com](mailto:training.hfr@horiba.com)
- Or Fax it to: +33 (0)1 69 09 07 21
- 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 €, 150 € by taxi from Charles de Gaulle airport, 50 € 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/>

### Access to HORIBA FRANCE, Palaiseau

HORIBA FRANCE SAS  
Passage Jobin Yvon, Avenue de la Vauve,  
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 C or 91-10 and stop at Fresnel
- The company is a 5 minute walk from the station, on your left, turn around the traffic circle and you will see the HORIBA building

Around 150 € by taxi from Charles de Gaulle airport.

**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 C, 91-06 B or 91-10 stop at Fresnel
- The company is 5 minutes walk from the station, on your left, turn around the traffic circle and you will see the HORIBA building
- Or at Orly take the Bus 91-10 stop at Fresnel. The company is 5 minutes walk from the station, on your left, turn around the traffic circle and you will see the HORIBA building. 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 Jobin Yvon 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». Immediately 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 lights, 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 Jobin Yvon S.A.S., 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».

## Registration form

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

### Information

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

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

**Your contact:** HORIBA FRANCE SAS, 16-18 rue du Canal, 91165 Longjumeau, FRANCE Tel: + 33 1 64 74 72 00

**Fax:** + 33 1 69 09 07 21

**E-Mail:** [training.hfr@horiba.com](mailto: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:

**Tel: + 33 (0) 1 69 74 72 00, Fax: + 33 (0) 1 69 09 07 21, [training.hfr@horiba.com](mailto:training.hfr@horiba.com)**