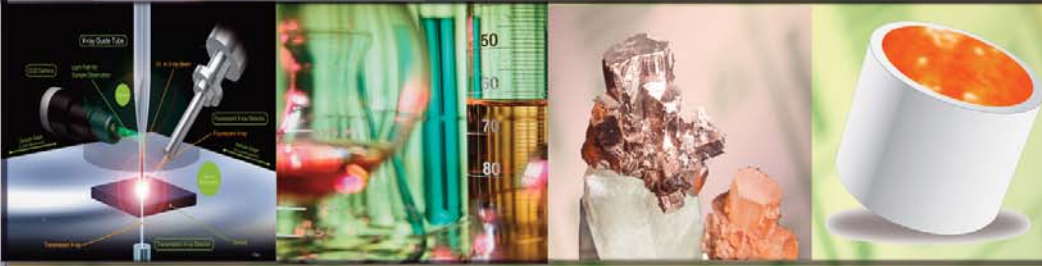
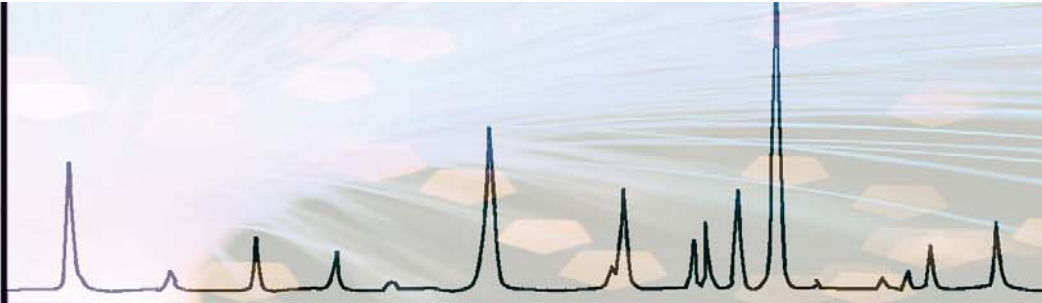


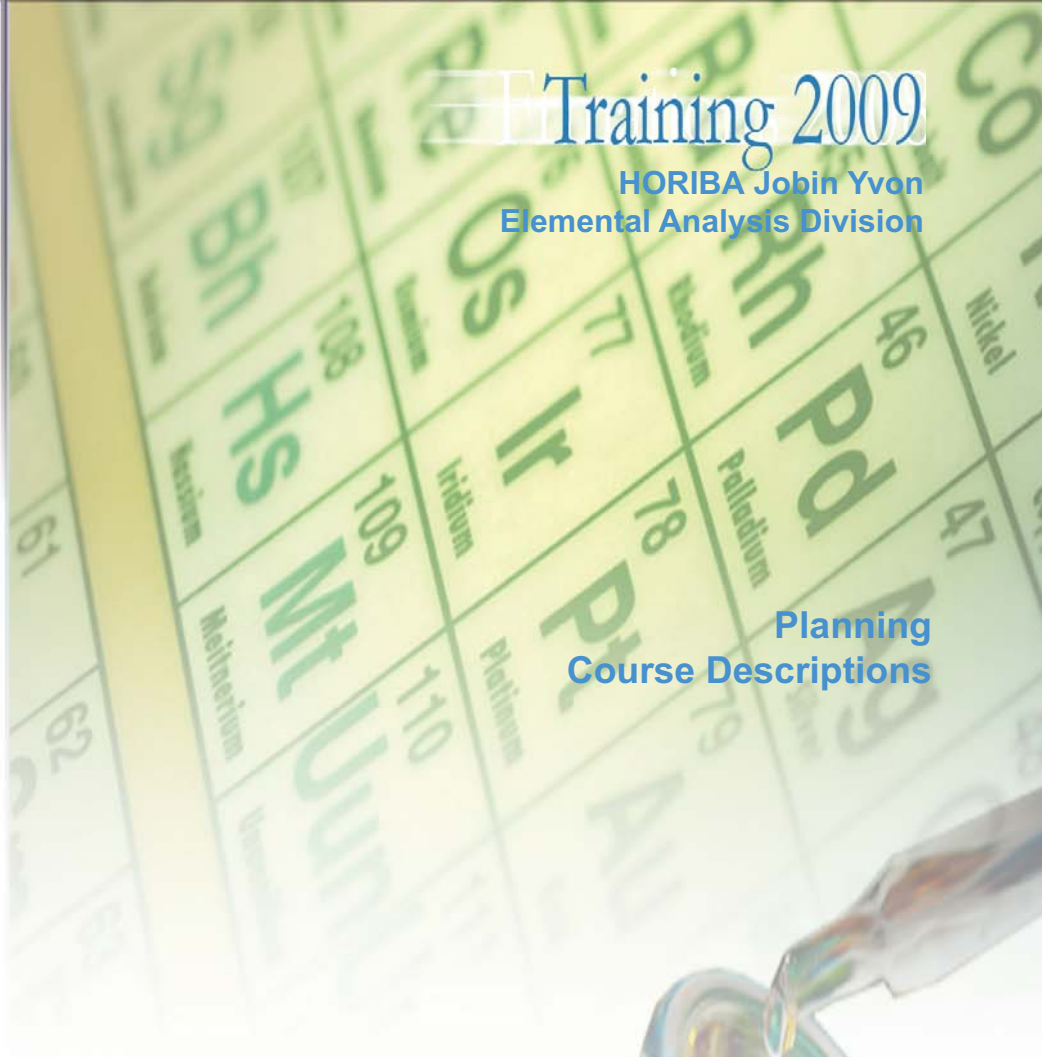
HORIBA JOBIN YVON



Training 2009

HORIBA Jobin Yvon
Elemental Analysis Division

Planning
Course Descriptions



2009 Training Courses

HORIBA Jobin Yvon have many types of training courses according to your requirements:

- **Training on-site** is performed by one of our HORIBA Jobin Yvon application chemists:

Training on-site will permit you to learn about the basic technique for your instrument on the basis of the technique, use of the software, learning of analytical methodology for your sample analysis requirements on the instrument.

The analytical assistance will teach you to optimize the development and validate your methods for your specific applications: optimise operating conditions, study possible of analytical problems and show how to correct for them.

- **Specialised courses:** for deep knowledge in a particular subject and at the same time exchanging your experiments and ideas with HORIBA Jobin Yvon specialists and other users of the technique.

- **Training course in our approved HORIBA Jobin Yvon training centre:** learn and share your experiments with other users and acquire the basic technique. For example, in ICP, ½ day for theory, use of the software, learn of the different analysis aspects: method creation, background correction, calibration, quantitative analysis... and 3 days for “hands-on” practice. You will be able to directly use this knowledge for your applications in your own laboratory.

Analytical Assistance, on-site training

Recieve the support from an analyst to optimise your analytical methods (sensitivity, speed...).

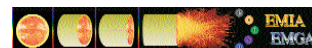
This assistance is done by one of our Application Engineer. Contact us for a customized program.

Assisana Analytical Assistance

Registration fees 1400 € HT per day, living and travelling expenses are not included.

In our Training Center

EMIA/EMGA/SLFA/XGT WR



HOR1	EMIA User training courses, Duration 1 day Registration fees: 640 € HT	September 7th, 2009
HOR2	EMGA User training courses, Duration 1 day Registration fees: 640 € HT	September 8th, 2009
HOR3	SLFA User training courses, Duration 1 day Registration fees: 640 € HT	September 9th, 2009
HOR4	XGT WR User training courses, Duration 1 day Registration fees: 640 € HT	September 10th, 2009

Glow Discharge Spectrometry



GD1 User training courses, Level 1, Duration 4.5 days

From monday 9:00 am to friday 12:00 am

Registration fees: 5000 € HT

March 30th to April 3th, 2009

November 23th to 27th, 2009

Spark



Sp User training courses, Duration 2 days

Consult us for information

Plasma



Pl1 User training courses for ACTIVA™, Duration 3.5 days

From monday 9:00 am to thursday 12:00 am

Registration fees: 2300 € HT

May 11th to 14th, 2009

November 2nd to 5th, 2009

Master + SOS: May 15th and November 21th, 2009 Registration fees: 660 € HT

Pl2 User training courses for ICP (excluded ACTIVA Family), Duration 3.5 days

From monday 9:00 am to thursday 12:00 am

Registration fees: 2300 € HT

February 16th to 19th, 2009

June 29th to July 2nd, 2009

September 21th to 24th, 2009



C/S Analyser training course on a HORIBA Analyser

Duration 1 day

Price 640 €

Date September 7th, 2009

Concerned Public

Users equipped with the C/S analyser, EMIA analyser

Objectives

Know how to optimise the instrumental parameters

Control of the analytical conditions

Interpret the results obtained

Training organization

The training is done in laboratories

The duration of the practical works is 1 day



09:00 – 17:00

- Presentation of HORIBA Jobin Yvon instruments
- Theory of the technique
- Description of the EMIA analyser
- Lack and mechanical tests
- Use and choice of accelerators and flux
- Preparation of sample capsules
- Software presentation
- Determination of the optimal analytical conditions
- Realisation of a calibration
- First level preventive maintenance
- Visit of the factory
- General Discussion

For further information, contact: Méhalia HABOUDOU
tel.: + 33 (0) 1 64 54 13 03 – fax: + 33 (0)1 69 09 17 27
E-mail : mehalia.haboudou@jobinyvon.fr

O/N/H user training course on a HORIBA Analyser

Duration 1 day

Price 640 €

Dates September 8th, 2009

Concerned Public

Users equipped with the O/N/H Analyser, EMGA Analyser

Objectives

Know how to optimise the instrumental parameters

Control of the analytical conditions

Interpret the results obtained

Training organization

The training is done in laboratories

The duration of the practical works is 1 day

09:00 – 17:00

- Presentation of HORIBA Jobin Yvon instruments.
- Theory of the technique
- Description of the EMGA analyser
- Lack and mechanical tests
- Use and choice of accelerators and flux
- Preparation of sample capsules
- Software presentation
- Determination of the optimal analytical conditions
- Realisation of a calibration
- First level preventive maintenance
- Visit of the factory.
- General Discussion



For further information, contact:
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E-mail : mehalia.haboudou@jobinyvon.fr

Sulfur in oil user training course on a HORIBA Analyser

Duration 1 day

Price 640 €

Dates September 9th, 2009

Concerned Public

Users equipped with the S in oil Analyser, SLFA Analyser

Objectives

Know how to optimise the instrumental parameters

Control of the analytical conditions

Interpret the results obtained

Training organization

The training is done in laboratories

The duration of the practical works is 1 day



09:00 – 17:00

- Presentation of HORIBA Jobin Yvon instruments
- Theory of the technique
- Description of the SLFA analyser
- Preparation of sample capsules
- Software presentation
- Determination of the optimal analytical conditions
- Realisation of a calibration and interpretation of the results
- First level preventive maintenance
- Visit of the factory
- General Discussion

For further information, contact:

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HORIBAJOBIN YVON

Explore the future

HORIBA

XGT user training course on a HORIBA Analyser

Duration 1 day

Price 640 €

Dates September 10th, 2009

Concerned Public

Users equipped with the XGT Analyser

Aim Know how to optimise the instrumental parameters

Control of the analytical conditions

Interpret the results obtained

Training organization

The training is done in laboratories.

The duration of the practical works is 1 day.



09:00 – 17:00

- Presentation of HORIBA Jobin Yvon instruments
- Theory of the technique
- Description of the XGT analyser
- Software presentation
- Realisation of a calibration
- Identification of the different peaks in the spectra
- First level preventive maintenance
- Correction of interferences spectra
- Visit of the factory
- General Discussion

GDS user training courses

Duration 4.5 days

Price 5 000 €

Dates From March 30th to April 3th, 2009, or from November 23th to 27th, 2009

Concerned Public

Users equipped with Horiba Jobin Yvon GDS

Objectives Know how to optimise the instrumental parameters

Use quickly the software

Control a bulk and a surface calibration

Realise an analysis of unknown samples

Know the accessories

Know how to do the diagnostic of the instrument

Training organization

The training is done in training room and in laboratories

The duration of the practical works is 4 days

1st Day 09:00 – 17:00

- a) Fundamentals of GD-OES (theory)
- Principle, source, optics, structure of the software, some applications
 - Operational methodology
 - Principles of instrument control
- b) How to do an analysis in GD-OES (practice)
- Instrument control
 - Important parameters
 - Creation of an analytical method
 - Optimisation for a given application
 - Precautions
 - Qualitative analysis
 - Curve treatments

2nd Day 09:00 – 17:00

- a) Principle of calibration (theory) for bulk and surface
- Sequence of measurement
 - Reference materials
 - Sample preparation
 - Bulk analysis principles
 - Surface analysis principles
- b) Example of calibration (practice). Bulk calibration creation of an analytical program, calibration, optimisation, recalibration, Minicalibration, SPC

3rd Day: Practice 09:00 – 17:00

- a) Use of the monochromator
- N+1 channel
 - Image
- b) Maintenance (cleaning). Lamp/lens
- c) Tests of different anodes (2mm, 7mm)
- d) Diagnostic tests. QC software
- e) Preparation of a calibration for surface. Reference materials. Layered samples. Measurement of sputtering rates

4th Day: Practice 9:00 – 17:00

Example of a calibration for surface.

- Optimisation of the curves
- Recalibration
- Possible artefacts

5th Day: Theory and Practice 9:00 – 12:00

- Advanced features in the software
- Special applications
- Published papers
- Reference books and ISO standards
- Layered mode for surface calibration
- Round Table: Discussions, information. Questions/Answers

For further information, contact:

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ICP user training courses

all ICP excluded ACTIVA Family

Duration 3.5 days

Price 2 300 €

Dates From February 16th to 19th, 2009 - From June 29th to July 2nd, 2009
From September 21st to 24th, 2009

Concerned Public User equipped with the ICP

Objectives Acquire theoretical and practical knowledges on the ICP-AES technique on the HORIBA

Jobin Yvon spectrometer

Control of the use of the software

Know the methodology of an analytical development

Know how to do the diagnostic of the instrument

Training organization

The training is done in training room and in laboratories only with the V5 software version

Duration of the theoretical part: 4 hours

Duration of the practical part: 21 hours

1st Day 09:00 – 17:00

- Theory of ICP-OES
- Description of the spectrometer HJY ICP
- Presentation of the different accessories and their application
- Presentation of the software
- What is the methodology to develop one analytical program?
- Practice of the software by several exercices (1):
 - Creation of an analytical method
 - Optimisation of the nebulization
 - Determination of the detection limit
 - Choice of the wavelength?
 - Use of the different parameters of the soft and the instrument

2nd Day 09:00 – 17:00

- Practice of the software by several exercices (2)
 - Background correction : importance and how to put it
 - Influence of the sheath gas
 - Creation of the ‘ Diagnostic’ Method to follow the performance of the instrument in the time
 - Use of the « Semi-quantitative » method for the quick determination of metals in an unknown sample

3rd Day 09:00 – 17:00

- Specific Analytical methods:
 - Standard Addition
 - Inter-élément correction
 - Internal standard
- Option to choose according to the demand of customers
 - Generator of hydrures, CMA
 - Oil analysis
 - Chlorure Analysis
 - Image Software

4th Day 9:00 – 12:00

- Option to choose according to the demand of customers (end)
 - SOS
 - Generator of hydrures, CMA
 - Oil analysis
 - Chlorure Analysis
 - Image Software
- Summary of the training, discussions

For further information, contact:

Méhalia HABOUDOU

tel.: + 33 (0) 1 64 54 13 03 – fax: + 33 (0)1 69 09 17 27

E-mail : mehalia.haboudou@jobinyvon.fr

HORIBAJOBIN YVON

Explore the future

HORIBA

ACTIVA user training courses

Duration 3.5 days

Price 2 300 €

Dates From May 11th to May 14th, 2009, From November 2nd to November 5th, 2009

Concerned Public Users equipped with the ACTIVA

Objectives Acquire theoretical and practical knowledges on the ICP-AES technic on the HORIBA Jobin Yvon spectrometer
Control of the use of the software
Know the methodology of an analytical development
Know how to do the diagnostic of the instrument

Training organization

The training is done in training room and in laboratories only with the V5 software version

Duration of the theoretical part: 4 hours

Duration of the practical part: 21 hours

1st Day 09:00 – 17:00

- Theory of ICP-OES
- Description of the spectrometer HJY ICP
- Presentation of the different accessories and their application
- Presentation of the software
- What is the methodology to develop one analytical program?
- Practice of the software by several exercices (1):
 - Creation of an analytical method
 - Optimisation of the nebulization
 - Determination of the detection limit
 - Choice of the wavelength?
 - Use of the different parameters of the soft and the instrument

2nd Day 09:00 – 17:00

- Practice of the software by several exercices (2)
 - Background correction : importance and how to put it
 - Influence of the sheath gas
 - Creation of the ‘ Diagnostic’ Method to follow the performance of the instrument in the time
 - Use of the « Semi-quantitative » method for the quick determination of metals in an unknown sample

3rd Day 09:00 – 17:00

- Specific Analytical methods :
 - Standard Addition
 - Inter-élément correction
 - Internal standard
- Option to choose according to the demand of customers
 - MASTER -SOS
 - Generator of hydrures, CMA
 - Oil analysis
 - Chlorure Analysis
 - Image Software

4th Day 9:00 – 12:00

- Option to choose according to the demand of participants (end)
 - MASTER-SOS
 - Generator of hydrures, CMA
 - Oil analysis
 - Chlorure analysis
 - Image Software
- Summary of the training, discussions

For further information, contact:

Méhalia HABOUDOU

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Registration Form

Training course:.....

Date:.....

Family Name :.....

First Name:.....

Company:.....

Address:.....

Phone Number:.....

Fax Number:.....

E-Mail :.....

Contract number:.....

Invitation letter requested:

if yes:

Passport number:.....

Validity of passport:.....

Date of birth:.....

Booking of a room:

Date of arrival at the hotel:.....

Date of departure from hotel:.....

Stamp of the company

Date and signature

Information

Registration: fill the form and send it back by fax.

Registration fees: the registration fees include the training courses fees and the documentation. Transportation and living expenses are not included. Lunches can be taken in the HORIBA Jobin Yvon Restaurant and invoiced after the training.

Your contact: Méhalia HABOUDOU

HORIBA Jobin Yvon SAS, Elemental Analysis Division, 16-18 rue du Canal, 91165 Longjumeau Cedex, FRANCE

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HORIBA Jobin Yvon Elemental Analysis Division Analyse...

...Your Analytical Partner



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