Dear Horibarians, dear Partners and dear Customers,

2020 has been marked by the global health crisis and as flights interruption has led to the inability to travel, it has forced us to reshape our work habits. Facing a major decrease in face-to-face training sessions, we therefore had to adjust our commitments to ensure continuity and meet training needs despite numerous constraints. And we made it thanks to Digital.

E-Learning modules have experienced a growing interest with a real boom for autonomous modules which allows self-study for any category of users. In response to the travel restrictions, we also developed virtual classes usually reserved for theoretical topics and we have challenged ourselves to adapt our training methods to technical contents and to support ongoing sales and installations!

Undoubtedly, this year’s constraints have prompted creativity in the design of new training vectors.

The health crisis has given an impetus to digital training, which we must carry on. Projects are plentiful, and the objective is to create less linear, more flexible training paths, combining both face-to-face and distance training. To summarize, learning paths creation. This will keep our department busy for years to come!

Thibault CRES
Our commitments

- Modernize our sessions and training materials to be at the forefront of current teaching techniques:

  To this end, we are studying numerous projects which allows to facilitate and optimize your learning (e-learning, micro-learning, interactive MCQ, webinars, technical videos...) and we are constantly improving our teaching techniques and methods during face-to-face trainings. Furthermore, this year we are modernizing all our software for recording training sessions and distribution of documents.

- Improve and standardize the quality of our services in all Training Centers:

  All of our Training Centers are organized to offer you similar and standardized sessions for which we try to improve the quality of the content each year. For this, each center uses the same tools, the same criteria for certifying trainers and applies the same procedures that comply with our international certifications.

  One Company ! and One Training Standard.

- Promote respect for the environment in our daily work:

  We want to increase, even more, our commitment to respect the environment; thus we started the project to remove all the “quality” documents in paper format from our sessions in order to dematerialize them along with a full management of the electronic validation process.
Established in HORIBA (Thailand) Limited facilities, with decades of experience in Hematology, Biochemistry and Hemostasis (through a previous distribution partnership), Bangkok Training Center participates in the deployment of our instruments in Asia-Pacific. Like Montpellier’s, Bangkok Training Center offers training courses in the three domains of knowledge. Every month, the training session available is tailored to meet the needs expressed.

Using all modern pedagogical technologies and techniques: video, e-learning modules, face-to-face trainings, the Irvine Training Center trains more than 400 trainees per year. The Center gives technical trainings, application trainings and trainings oriented towards the use of our equipments. The face-to-face sessions take place partly in the offices in California but also directly in the Customer’s laboratory, handled by FSE (Field Service Engineers) & Application Specialists.
Based in our HORIBA Medical French site, in Montpellier, the Training Center welcomes each year more than 500 trainees, from more than 90 different nationalities.

The Training Center offers optimal working conditions:
- 5 Training rooms
- 50 instruments from all HORIBA Medical ranges (including the latest ones, as HELO* Solution and the new hemostasis instruments range)
- 1 e-learning & Webinar training room equipped with 8 computers

Thibault Cres
HORIBA Medical Training Manager
Green Belt in LEAN management and methods of continuous improvement specialty:
Clinical cases studies, educational engineering

Laurence Nguyen-Galzi
Digital Training Coordinator

Julien Hazouli
Hematology and Hemostasis Trainer
Referent for Yumizen H500 & H550

Eric Diaz
Expert Trainer in Hematology
Training Center Architect
Face-to-face Training Coordinator

Maurice Bois
Clinical Chemistry, Hemostasis and Hematology Trainer
Technical and Application referent for Clinical Chemistry

Margaux Boissiere
Hematology Trainer
Referent for Application trainings

Clément Dougados
Hematology and Clinical chemistry Trainer

Crucial in more than one way, the Indian market is booming. To reach a high level of customer satisfaction thanks to professional and efficient teams, HORIBA India invests heavily in its Training Center; with four training rooms equipped with all Hematology and Biochemistry ranges, one manager, one coordinator and two full time trainers, HORIBA India Training Center trains more than 250 trainees each year.

Sandeep Bhattacharya
India Training Center Manager

Suthram Subramanyam
Clinical Chemistry Trainer

Sandeep Chahal
training center assistant & Training coordinator

Murali Ramachandran
Hematology Trainer

Eric Diaz
Expert Trainer in Hematology
Training Center Architect
Face-to-face Training Coordinator

Clément Dougados
Hematology and Clinical chemistry Trainer

*HORIBA Evolutive Laboratory Organization
The Brazilian Training Center, located near Sao Paulo, has already been operating for many years. Major actor for the HELO* Solution, more than 50 high range instruments are already installed in customer’s laboratories in Brazil and are running several thousand of samples per day! The Training Center is a crucial support ensuring simultaneously the transmission of knowledge to HORIBA Brazil staff, to HORIBA Brazil local distributors but also to all our Latin America’s distribution network.

In order to support the launch of the Yumizen Hematology range on the Chinese market (HELO* Solution, YH550), HORIBA (China) Trading Co, Ltd. get equipped with a state-of-the-art training Center which has opened its doors july-2019. Everything is being done to ensure that the Center is operational as soon as it is launched: certified trainers, equipped facilities and a fleet of instruments to meet this major challenge.

*HORIBA Evolutive Laboratory Organization

Minling Li
Shanghai Training Center Manager
Training center operation management and plan making, Specialty: Marketing Manager, Hematology Application Specialist

Jun Wang
Hematology Technical Trainer
Expert Service Engineer
More than 10 years of HORIBA Medical Service experience

Yi Xue
Hematology Technical Trainer
Excellent Service Engineer
Technology and malfunction analysis

Junbo Lai
Hematology Application Trainer
Experienced Application Engineer

Shanghai, China

Sao Paulo, Brazil

Fabio Oliveira
Training Center Manager

Charles Camargo
Trainer Manager
Training Coordinator

Barbara Lima
Trainer

Jaqueline Valente de Oliveira
Trainer

Fabio Simoes
Trainer

Qiong Gao
Hematology Application Trainer
Clinical laboratory medicine
Experienced Application Specialist

Ming Cao
Hematology Application Trainer
Clinical laboratory medicine
10 years’ work experience in hospital clinical laboratory

Yi Xue
Hematology Technical Trainer
Excellent Service Engineer
Technology and malfunction analysis

Jun Wang
Hematology Technical Trainer
Expert Service Engineer
More than 10 years of HORIBA Medical Service experience

Minling Li
Shanghai Training Center Manager
Training center operation management and plan making, Specialty: Marketing Manager, Hematology Application Specialist

Junbo Lai
Hematology Application Trainer
Experienced Application Engineer

Shanghai, China

Sao Paulo, Brazil
Hematology Discovery

Training Code
STD HEM DIS EN 2D

Revision
Jan-14, 2019

Training main objectives
Improve Hematology knowledge:
- Hematopoiesis
- Cytology
- Parameters and limits
Improve technologies knowledge:
- Hematology instruments technologies
- Reagents description
- Hardware description
- Software description

Skills targeted
At the end of the training course, the trainee should understand the hematology basics and HORIBA Medical Instruments main functions and technologies.

Duration and Schedule
The training takes place on 2 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning methods
• Theoretical presentations
• Instrument practice
• Jeopardy
• Reagents & spare parts manipulation
**HELO* Application**

*Training Code*
STD HELO* APP EN 5D

*Revision*
Feb-22, 2019

**Training main objectives**
- Run samples
- Run QC
- Results and alarms interpretation
- Be able to configure HELO* Solution
- Users configurations
- Laboratory configuration

**Skills targeted**
At the end of the training course, the trainee should be able to use HELO* Solution, customize any laboratory organization, be capable to train users after the installation and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily.

**Requirements & Recommendations**
Requirements: none for this course
Recommendations: have been previously trained on lower HORIBA Medical ranges

**Learning method**
- Theoretical presentation
- Instruments practice
- Role-play: Instruments demonstration, alarms
- Jeopardy
- Application exercises and troubleshooting
- Quiz

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**Multi-domains Discovery**

*Training Code*
STD MD DIS EN 5D

*Revision*
Jan-14, 2019

**Training main objectives**
- Improve Hematology knowledge:
  - Hematology
  - Cytology
  - Parameters
- Improve Biochemistry knowledge:
  - Molecules chemistry
  - Medical panels of Clinical Chemistry
  - Parameters
- Improve Coagulation knowledge:
  - Coagulation cascade
  - Parameters
- Improve technologies knowledge:
  - Hematology instruments technologies
  - Biochemistry instruments technologies
  - Coagulation instruments technologies
  - Hardware description
  - Software description
  - Reagents description

**Skills targeted**
At the end of the training course, the trainee should understand hematology, biochemistry and hemostasis basics and HORIBA Medical instruments main functions and technologies.

**Duration and Schedule**
The training lasts 5 days, begins at 9 a.m. and ends at 5 p.m. daily.

**Requirements & Recommendations**
Requirements: none for this course
Recommendations: none for this course

**Learning method**
- Theoretical presentation
- Instrument practice
- Jeopardy
- Reagents & spare parts manipulating

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*HORIBA Evolutive Laboratory Organization*
Yumizen H1500, H2500 & P8000 Technical

Training Code
STD YH2500 TEC EN 5D

Revision
Feb-22, 2019

Training main objectives
Be able to use instruments
- Understand technical differences between YH1500 & YH2500
Be able to provide technical support to customers on the systems:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

Skills targeted
At the end of the training course, the trainee should understand the basic principles of hematology, categorize alarm messages, solve systems dysfunction, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: Prerequisite online modules have to be followed
Recommendations: have been previously trained on lower HORIBA Medical ranges

Documentation & specific tools used
• Theoretical presentation
• Instrument practice
• Jeopardy
• Maintenance processing
• Technical exercises and troubleshooting
• Quiz

Yumizen T6000 Technical

Training Code
STD YT6000 TEC EN 3D

Revision
Jan-23, 2019

Training main objectives
Understand functioning principles:
- Regular workflow
- High-priority racks
- Smoothing workflow
Be able to install
Be able to adjust:
- CIM adjustment
Be able to repair

Skills targeted
At the end of the training session, the trainee should be able to install, maintain and repair Yumizen T6000 instrument. The trainee should also be able to ensure independently the consistency of the devices optimal performances.

Duration and Schedule
The training lasts 3 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 4 p.m.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning method
• Theoretical presentation
• Instrument practice
• Jeopardy
• Maintenance processing
• Technical exercises and troubleshooting
• Quiz
Yumizen H2500 Use

Training Code
STD HELO* USE EN 4D

Revision
Feb-22, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents
Be able to use instruments:
- Calibration & QC handling
- Run patient sample

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems.

Duration and Schedule
The training lasts 4 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 4 p.m.
For SPS use training, 0.5 day (morning) is added to YH2500 use training, and at 2:00pm.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems.

Learning methods
• Theoretical presentation
• Instruments practice
• Jeopardy
• Clinical case studies
• Quiz

* HORIBA Evolutive Laboratory Organization

Yumizen H500 & H550 Application

Training Code
STD YH550 APP EN 3D

Revision
Jan-22, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents
Be able to use instruments:
- Calibration & QC handling
- Run patient sample
Be able to provide support to customers:
- Initial installation setup and training
- Answering questions regarding technology, alarms, pre-analytical

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems, answer customer questions, train customers, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training lasts 3 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 4 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous application experience in hematology systems.

Learning methods
• Theoretical presentation
• Instruments practice
• Role-play: Instruments demonstration, alarms
• Jeopardy
• Application exercises and troubleshooting
• Quiz
**Yumizen H500 & H550 Technical**

**Training Code**
STD YH550 TEC EN 5D

**Revision**
Jan-22, 2019

**Training main objective**
Improve Hematology knowledge:
- Basic principles
- Parameters normal values
- Reference methods
Be able to use Yumizen H500 & H550 instruments
Be able to provide technical support to customers:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

**Skills targeted**
At the end of the training course, the trainee should understand the basic principles of hematology, categorize alarm messages, solve systems dysfunction, and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 4 p.m.

**Requirements & Recommendations**
Requirements: none for this course
Recommendations: none for this course

**Documentation & specific tools used**
- Theoretical presentation
- Instrument practice
- Jeopardy
- Maintenance processing
- Technical exercises and troubleshooting
- Quiz

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**Yumizen H500 & H550 Use**

**Training Code**
STD YH550 USE EN 2D

**Revision**
Feb-22, 2019

**Training main objectives**
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents
Be able to use instruments:
- Calibration & QC handling
- Run patient sample
- Instrument user maintenances

**Skills targeted**
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical or clinical problems.

**Duration and Schedule**
The training lasts 2 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 4 p.m.

**Requirements & Recommendations**
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems.

**Learning methods**
- Theoretical presentation
- Instruments practice
- Jeopardy
- Clinical case studies
Yumizen SPS & ABX Pentra SPS

Technical

Training Code
STD SPS TEC EN 5D

Revision
Jan-22, 2019

Training main objective
Be able to provide technical support to customers on SPS Ranges:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

Skills targeted
The trainee must be able to install, maintain and repair ABX Pentra SPS and YUMIZEN SPS instruments at the end of this training session.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning methods
- Theoretical presentation
- Instrument practice
- Jeopardy
- Maintenance processing
- Technical exercises and troubleshooting
- Quiz

10 days
66 hours

Pentra DX DF Nexus

Technical

Training Code
STD NEX TEC EN 10D

Revision
Jan-21, 2019

Training main objectives
Be able to use Pentra Nexus Instruments
- Understand technical differences between Pentra Nexus DX and Pentra Nexus DF
Be able to provide technical support to customers on Pentra Nexus instruments :
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

Skills targeted
At the end of the training course, the trainee should understand the basic principles of Hematology, categorize alarm messages, solve systems dysfunction, and independently ensure the consistency of the devices optimal performances.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning methods
- Theoretical presentation
- Instrument practice
- Jeopardy
- Maintenance processing
- Technical exercises and troubleshooting
- Quiz
**Pentra DX-DF Nexus Use**

**Training Code**  
STD NEX USE EN 4D

**Revision**  
Feb-22, 2019

**Training main objectives**  
- Improve Hematology knowledge: Measure, Parameters, Reagents
- Be able to use instruments: Calibration & QC handling, Run patient sample

**Skills targeted**  
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems.

**Duration and Schedule**  
The training lasts 4 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

**Requirements & Recommendations**  
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems.

**Learning methods**  
- Theoretical presentation
- Instruments practice
- Jeopardy
- Clinical case studies
- Quiz

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**ABX Pentra ML Application**

**Training Code**  
STD ML APP EN 5D

**Revision**  
Jan-22, 2019

**Training main objectives**  
- Be able to use ML system
- Be able to train customers in the use of ML system
- Be able to provide support to customers: Initial installation setup, Answering questions regarding technology, alarms, pre-analytical

**Skills targeted**  
At the end of the training course, the trainee should be able to install, configured, use and train in how to use the ML system, be capable to perform dictionary back up, EQC module use and configuration, be capable to train the Laboratory users.

**Duration and Schedule**  
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

**Requirements & Recommendations**  
Requirements: none for this course
Recommendations: none for this course

**Learning methods**  
- Theoretical presentation
- Instruments practice
- Role-play: Instruments demonstration, alarms
- Jeopardy
- Application exercises and troubleshooting
- Quiz
Pentra 60 & Pentra 80 Ranges
Technical

Training Code
STD P60/P80R TEC EN 5D

Revision
Feb-21, 2019

Training main objectives
Improve Hematology knowledge:
- Basic principles
- Parameters normal values
- Reference methods
Be able to use P60 & P80 Ranges instruments:
- Understand technical differences between P60 & P80 Ranges
Be able to provide technical support to customers on P60 & P80 Ranges:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

Skills targeted
At the end of the training course, the trainee should understand the basic principles of Hematology, categorize alarm messages, solve systems dysfunction, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 4 p.m.

Requirements & Recommendations
Requirements: Prerequisite online modules have to be followed
Recommendations: have been previously trained on lower HORIBA Medical ranges

Learning methods
• Theoretical presentation
• Instruments practice
• Role-play: Instruments demonstration, alarms
• Jeopardy
• Application exercises and troubleshooting
• Quiz

Pentra XLR Use

Training Code
STD PXLR USE EN 3D

Revision
Feb-21, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents
Be able to use instruments:
- Calibration & QC handling
- Run patient sample

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems.

Duration and Schedule
The training lasts 3 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems

Learning methods
• Theoretical presentation
• Instrument practice
• Jeopardy
• Clinical case studies
• Quiz
Pentra 60 Use

Training Code
STD P60 USE EN 2D

Revision
Feb-22, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents
Be able to use instruments:
- Calibration & QC handling
- Run patient sample

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems.

Duration and Schedule
The training lasts 2 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems.

Learning methods
• Theoretical presentation
• Instrument practice
• Jeopardy
• Clinical case studies
• Quiz

Micros 60 Ranges Technical

Training Code
STD MIC TEC EN 5D

Revision
Feb-22, 2019

Training main objectives
Improve Hematology knowledge:
- Basic principles
- Parameters normal values
- Reference methods
Be able to use Micros 60 Ranges instruments
- Understand technical differences between Micros 60, Micros 60 ES, CT/OT Ranges
Be able to provide technical support to customers on Micros 60 Ranges:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

Skills targeted
At the end of the training course, the trainee should understand the basic principles of Hematology, categorize alarm messages, solve systems dysfunction, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Documentation & specific tools used
• Theoretical presentation
• Instruments practice
• Jeopardy
• Maintenance processing
• Technical exercises and troubleshooting
• Quiz
ABX Micros ES60 Use

Training Code
STD MIC ES60 USE EN 1D

Revision
Feb-22, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents

Be able to use instrument:
- Calibration & QC handling
- Run patient sample

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems.

Duration and Schedule
The training lasts 1 day, begins at 9 a.m. and ends at 5 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous experience in hematology systems.

Learning methods
• Theoretical presentation
• Instrument practice
• Jeopardy
• Clinical case studies
• Quiz

Low & Middle Ranges Application

Training Code
STD LOW MID APP EN 3D

Revision
Mar-13, 2019

Training main objectives
Improve Hematology knowledge:
- Measurement
- Parameters
- Reagents

Be able to use instruments:
- Calibration & QC handling
- Run patient sample

Be able to provide support to customers:
- Initial installation setup and training
- Answering questions regarding technology, alarms, pre-analytical

Skills targeted
At the end of the training course, the attendee should understand hematology principles, analyze if an alarm is due to technical, clinical problems, answer customer questions, train customers, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training lasts 5 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 4 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in hematology
Recommendations: have previous application experience in hematology systems.

Learning methods
• Theoretical presentation
• Instruments practice
• Role-play
• Jeopardy
• Application exercises and troubleshooting
• Quiz
Biochemistry Discovery

Training Code
STD BIO DIS EN 2D

Revision
Jan-14, 2019

Training main objectives
Improve Biochemistry knowledge:
- Chemistry molecules
- Medical panels of Clinical Chemistry
- Parameters

Improve Technologies knowledge:
- Clinical chemistry technologies
- Hardware description
- Software description
- Reagent description
- Application calculation

Skills targeted
At the end of the training course, the trainee should understand the clinical chemistry basics and HORIBA Medical instruments main functions and technologies.

Duration and Schedule
The training lasts 2 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning methods
- Theoretical presentations
- Instrument practice
- Jeopardy
- Reagents & spare parts manipulation
Pentra C400 Range

**Application**

**Training Code**
STD PC400 APP EN SD

**Revision**
Jan-03, 2019

**Training main objectives**
- Improve Biochemistry knowledge:
  - Application calculations
  - Medical panels of Clinical Chemistry
  - Reagents
- Improve technologies knowledge:
  - Analyzers
  - Calculation & calibration
- Be able to use Pentra C400 instruments:
  - Reagent, calibration & QC handling
  - Run patient sample
- Be able to provide support to customers:
  - Initial installation setup and training
  - Applications modification and creation
  - Answering questions regarding technology, alarm, pre-analytical

**Skills targeted**
At the end of the training course, the attendee should understand the biochemistry application on Pentra C400, analyze if an alarm is due to technical, clinical or pre-analytical problems, answer customer questions, train customers, and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

**Requirements & Recommendations**
Requirements: basic knowledge and experience in clinical chemistry
Recommendations: have previous application experience in biochemistry systems.

**Learning methods**
- Theoretical presentation
- Instruments practice
- Role-play: Instruments demonstration, alarms
- Jeopardy
- Application exercises and troubleshooting
- Quiz

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**Technical**

**Training Code**
STD PC400 TEC EN SD

**Revision**
Jan-03, 2019

**Training main objectives**
- Improve Biochemistry knowledge:
  - Chemistry molecules
  - Measurements
  - Application calculations
  - Medical panels of Clinical Chemistry
  - Reagents
- Be able to use Pentra C400 instruments:
  - Reagent, calibration & QC handling
  - Run patient sample
- Be able to provide technical support on Pentra C400 Range:
  - Installation process
  - Maintenances
  - Adjustments
  - Troubleshooting

**Skills targeted**
At the end of the training course, the attendee should understand the basic of Biochemistry principles, analyze if an alarm is due to technical, clinical or pre-analytical problems, solve systems malfunctioning, and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 4 p.m.

**Requirements & Recommendations**
Requirements: Prerequisite online modules have to be followed
Recommendations: have some previous technical experience in others diagnostics systems.

**Learning methods**
- Theoretical description
- Instrument practice
- Jeopardy
- Maintenance practice
- Technical exercises and troubleshooting
- Quiz
Pentra C400 Range Use

Training Code
STD PC400 USE EN 4D

Revision
Jan-03, 2019

Training main objectives
Improve Biochemistry knowledge:
- Application methods overview
Improve technologies knowledge:
- Analyzers
- Calculation & calibration
Be able to use and maintain Pentra C400 instruments:
- Reagent, calibration & QC handling
- Run patient sample
- User’s maintenances
- Basic user’s troubleshooting

Skills targeted
At the end of the training course, the attendee should get a good easy going on the instrument, understand Pentra C400 functioning and setting, analyze and understand instrument alarm and flags.

Duration and Schedule
The training takes place on 4 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in clinical biochemistry
Recommendations: have previous experience in biochemistry systems.

Learning methods
- Theoretical presentation
- Instruments practice
- Jeopardy
- Application exercises

Pentra C200 Range Application

Training Code
STD PC200 APP EN 5D

Revision
Jan-03, 2019

Training main objectives
Improve Biochemistry knowledge:
- Application calculations
- Medical panels of Clinical Chemistry
- Reagents
Improve technologies knowledge:
- Analyzers
- Calculation & calibration
Be able to use Pentra C200 instruments:
- Reagent, calibration & QC handling
- Run patient sample
Be able to provide support to customers:
- Initial installation setup and training
- Applications modification and creation
- Answering questions regarding technology, alarm, pre-analytical

Skills targeted
At the end of the training course, the attendee should understand the biochemistry application on Pentra C200, analyze if an alarm is due to technical, clinical or pre-analytical problems, answer customer questions, train customers, and independently ensure the consistency of the devices optimal performances.

Duration and Schedule
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily.
Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: basic knowledge and experience in clinical chemistry
Recommendations: have previous application experience in biochemistry systems.

Learning methods
- Theoretical presentation
- Instruments practice
- Role-play: Instruments demonstration, alarms, answers
- Jeopardy
- Application exercises and troubleshooting
- Quiz
**Pentra C200 Range Technical**

**Training Code**
STD PC200 TEC EN 5D

**Revision**
Jan-03, 2019

**Training main objectives**

- Improve Biochemistry knowledge:
  - Chemistry molecules
  - Measurements
  - Application calculations
  - Medical panels of Clinical Chemistry.
  - Reagents
- Be able to use Pentra C200 instruments:
  - Reagent, calibration & QC handling
  - Run patient sample
- Be able to provide technical support on Pentra C200 Range:
  - Installation process
  - Adjustments
  - Troubleshooting

**Skills targeted**

At the end of the training course, the attendee should understand the basic of biochemistry principles, analyze if an alarm is due to technical, clinical or pre-analytical problems, solve systems malfunctioning, and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**

The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily.

**Requirements & Recommendations**

**Requirements**: Prerequisite online modules have to be followed

**Recommendations**: have some previous technical experience in others diagnostics systems.

**Learning methods**

- Theoretical description
- Instrument practice
- Jeopardy
- Maintenance practice
- Technical exercises and troubleshooting
- Quiz

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**Pentra C200 Range Use**

**Training Code**
STD PC200 USE EN 3D

**Revision**
Jan-03, 2019

**Training main objectives**

- Refresh Biochemistry knowledge:
  - Application refresh
- Improve technologies knowledge:
  - Analyzers
  - Calculation & calibration
- Be able to use and maintain Pentra C200 Instruments:
  - Reagent, calibration & QC handling
  - Run patient sample
  - User’s maintenances
  - Basic user’s troubleshooting

**Skills targeted**

At the end of the training course, the attendee should get a good easy going on the instrument, understand Pentra C200 functioning and setting, analyze and understand instrument alarm and flags.

**Duration and Schedule**

The training takes place on 3 days, begins at 9 a.m. and ends at 5 p.m. daily.

**Requirements & Recommendations**

**Requirements**: basic knowledge and experience in clinical biochemistry

**Recommendations**: have previous experience in biochemistry systems.

**Learning methods**

- Theoretical presentation
- Instruments practice
- Jeopardy
- Application exercises
Hemostasis Discovery

Training Code
STD HEMO DIS EN 2D

Revision
Avril, 2020

Training main objectives
Improve Hemostasis knowledge:
- Coagulation cascade
- Parameters
Improve technologies knowledge:
- Hemostasis instruments technologies
- Hardware description
- Software description
- Reagents description

Skills targeted
At the end of the training course, the trainee should understand the hemostasis basics and HORIBA Medical instruments main functions and technologies.

Duration and Schedule
The training takes place on 2 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

Requirements & Recommendations
Requirements: none for this course
Recommendations: none for this course

Learning methods
- Theoretical presentation
- Instrument practice
- Jeopardy
- Reagents & spare parts manipulation
**Hemostasis Range Application**

**Training Code**
STD HEMO RANGE APP EN SD

**Revision**
Avril, 2020

**Training main objectives**
Improve Hemostasis knowledge:
- Measurement
- Parameters
- Reagents
Be able to use Hemostasis instruments:
- Reagent, calibration & QC handling
- Run patient sample
Be able to provide support to customers:
- Initial installation setup and training
- Applications modification and creation
- Answering questions regarding technology, alarms, pre-analytical

**Skills targeted**
At the end of the training course, the attendee should understand hemostasis principles, analyze if an alarm is due to technical, clinical or pre-analytical problems, answer customer questions, train customers, and independently ensure the consistency of the devices optimal performances.

**Duration and Schedule**
The training takes place on 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

**Requirements & Recommendations**
Requirements: basic knowledge and experience in hemostasis
Recommendations: have previous application experience in coagulation systems.

**Learning methods**
- Theoretical presentation
- Instrument practice
- Role-play: Instruments demonstration, alarms
- Jeopardy
- Application exercises and troubleshooting
- Quiz

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**Hemostasis Range Technical**

**Training Code**
STD HEMO RANGE TEC EN SD

**Revision**
Avril, 2020

**Training main objectives**
Improve Hemostasis knowledge:
- Coagulation cascade
- Parameters
- Reagents
Improve technology knowledge:
- Analyzers
- Calculation & calibration
Be able to use Hemostasis instruments:
- Reagent, calibration & QC handling
- Run patient sample
Be able to provide technical support:
- Installation process
- Preventive maintenances
- Adjustments
- Troubleshooting

**Skills targeted**
At the end of the training session, the trainee should understand basics of Hemostasis principles, be able to analyze if an alarm is due to technical, clinical or pre-analytical issues, and solve systems malfunctioning. The trainee should also be able to ensure independently the consistency of the devices optimal performances.

**Duration and Schedule**
The training lasts 5 days, begins at 9 a.m. and ends at 5 p.m. daily. Last day, end of the training at 2 p.m.

**Requirements & Recommendations**
Recommendations: have some previous technical experience with other diagnostic systems. Recommendations: none for this course

**Learning methods**
- Theoretical presentation
- Instrument practice
- Jeopardy
- Maintenance processing
- Technical exercises and troubleshooting
- Quiz
E-Learning

Our E-learning modules are made by trainers and approved by experts; information is exhaustive and the same for everyone. A final quiz verifies the knowledge; if passed, a training certificate attests the follow-up, which can be a requirement for accreditations and tenders. Each trainee can replay a sequence as many times as desired.

No business trip to organize, no transport nor accommodation costs, no administrative forms to fill in (visa, invitations…): the working time is optimized and the logistic reduced.

Available Modules:
- Yumizen H500 use in English
- Yumizen H500 use in French
- Yumizen H500 use in Spanish
- Yumizen H500 use in Portuguese
- Micros ES 60 use in English
- Micros Care ST use in Italian
- Control blood, Westgard rules and QCP in English
- Control blood, Westgard rules and QCP in French

Virtual Classes

Trainees and trainer are connected to a dedicated platform, they can see and hear each other, see the presentation, video or exercises prepared by the trainer and ask in real time, all the questions they have in mind.
Online Training Program

**Hematology** Beginner

**Code**
STD ONLINE HEM BEG EN 1S

**Revision**
Apr. 24, 2020

**Training main objectives**
To improve medical laboratories knowledge:
- Disciplines
To improve Hematology knowledge:
- Blood cells
- Cytology
- Parameters normal ranges

**Skills targeted**
At the end of the training course, the trainee should understand the hematology basics and blood parameters normal range.

**Duration and Schedule**
The online training is organized in 1 session of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations
- Quiz

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**Hematology** Intermediate

**Code**
STD ONLINE HEM INT EN 3S

**Revision**
Jun. 05, 2020

**Training main objectives**
To improve Hematology knowledge:
- Blood cells
- Cytology of mature and immature cells
- Parameters normal ranges
- Hematopoiesis
- Basics hematological pathologies

**Skills targeted**
At the end of the training course, the trainee should understand the hematology basics, blood parameters normal range, hematopoiesis and blood lineages, cytology of mature and immature cells and some basic pathologies corresponding to blood parameters.

**Duration and Schedule**
The online training is organized in 3 sessions of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations
- Quiz
**Hemostasis** Beginner

**Code**
STD ONLINE HEMO BEG EN 1S

**Revision**
Sept. 23, 2020

**Training main objectives**
- To improve Hemostasis knowledge:
  - Coagulation cascade
  - Parameters
- To improve technologies knowledge:
  - Hemostasis instruments technologies
  - Hardware description
  - Software description
  - Reagents description

**Skills targeted**
At the end of the training course, the trainee should understand the hemostasis basics and HORIBA Medical instruments main functions and technologies.

**Duration and Schedule**
The online training is organized in 1 session of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations
- Quiz

**Biochemistry** Beginner

**Code**
STD ONLINE BIO BEG EN 1S

**Revision**
Jun 15, 2020

**Training main objectives**
- To improve Biochemistry knowledge:
  - Molecules Chemistry
  - Medical panels of Clinical Chemistry
  - Parameters
- To improve technologies knowledge:
  - Clinical chemistry technologies
  - Application overview

**Skills targeted**
At the end of the training course, the trainee should understand the clinical chemistry basics and technologies associated.

**Duration and Schedule**
The online training is organized in 1 session of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations
- Quiz
### Malaria

**Code**
STD ONLINE MALARIA EN 1S

**Revision**
Jan. 04 2021

**Training main objectives**
To improve knowledge on Malaria:
- Demographics
- Clinical symptoms
- Pathogenesis
- Diagnosis
- Challenges
- Malaria flag on Horiba instruments
  .Pentra XLR/80XL
  .Yumizen H550

**Skills targeted**
At the end of the training course, the trainee should understand Malaria pathology and diagnosis, Malaria detection challenges, Malaria flags on Pentra XLR/80XL, data-mining and Malaria and Dengue flags on Yumizen H550.

**Duration and Schedule**
The online training is organized in 1 session of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations

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### HELO Tools

**Code**
STD ONLINE HELO TOOLS EN 1S

**Revision**
Jan. 05 2021

**Training main objectives**
To improve knowledge on HELO tools:
- HELO Data Collection
- HELO Solution Configurator
- HELO Workflow Simulator
- HELO Installation Preparation
- HELO Lab Creator

**Skills targeted**
At the end of the training course, the trainee should understand the purpose of each tool and how to use it.

**Duration and Schedule**
The online training is organized in 1 session of 3 hours.

**Requirements & Recommendations**
Requirements: none
Recommendations: none for this course

**Learning methods**
- Theoretical presentations
Quality Slide Program 2.0

Code
STD ONLINE QSP EN 1S

Revision
Jan. 05 2021

Training main objectives
To improve knowledge on Quality Slide Program 2.0:
- Integration on HELO Solution
- Old Vs Affordable Modern way
- Offers
- New version
- Use
  - Activation
  - Users account
  - Training
  - Report

Skills targeted
At the end of the training course, the trainee should understand the integration of QSP2.0 in HELO Solution, how to use it and how to promote it among customers.

Duration and Schedule
The online training is organized in 1 session of 3 hours.

Requirements & Recommendations
Requirements: none
Recommendations: none for this course

Learning methods
- Theoretical presentations

Yumizen P8000 rules

Code
STD ONLINE YP8000 RULES EN 4S

Revision
Apr. 06, 2020

Training main objectives
To be able to provide support to customers:
- Rules creation
- Rules customization
To be able to train customers

Skills targeted
At the end of the training course, the trainee should understand how the Yumizen P8000 rules work and should be able to create and customize rules.

Duration and Schedule
The online training is organized in 4 sessions of 3 hours each.

Requirements & Recommendations
Requirements: none
Recommendations: YP8000 basic training

Learning methods
- Theoretical presentations
- Demonstrative videos
- Application exercises
- Quizzes
Your contacts

International Training Organization and Management:
thibault.cres@horiba.com

Training planification:

E-training (e-learning courses and virtual classrooms):
training.med@horiba.com