

FT-IR/FT-NIR calibration training

Horizon software suite and PLS algorithm (TRA-0009)



A concise and informative FT-IR/FT-NIR calibration course for scientists, engineers, advanced operators, and laboratory technicians.

Measurement made easy.

Overview

This course is recommended to give you the background needed to understand the technology as it relates to your company. ABB's training can be custom-tailored to specific processes and workflow, and still provide the student with a solid foundation in FT-IR/FT-NIR theory utilizing the PLS industry standard calibration techniques. By concentrating on your specific application, you will receive training that can be used instantly upon completion of the course with the skill and confidence needed to develop robust PLS models using our own "real-world" data sets.

Training includes

- Understanding the basics of FT-IR/FT-NIR spectroscopy and ABB technology
- Understanding the concepts of chemometrics and the critical steps in model development including: application/process definition and design of experiment (DoE); data collection and pretreatment; model creation, optimization and validation
- Developing and updating chemometric models (with student's plant-specific or typical industry-related data) using Partial Least Squares (PLS) algorithm within Horizon MBTM using appropriate NIR spectra and laboratory primary method reference data

- Developing and implementing statistical discrimination criteria customized for your specific quality control requirements.
- Implementing models and discrimination criteria; customize a semi-automatic procedure in HorizonQA™

* For special projects or specific needs, ABB's chemometricians can also supply calibration services

Key features

Who should attend

- Chemists or managers, engineers and advanced operators/laboratory technicians with chemistry background
- Current and future users of ABB FT-IR/FT-NIR products
- Laboratory and at-line systems end-users

Duration

- 3 days

Location

- ABB Inc., Québec City, Canada
- On-site

Language

- English

Disclaimer

- Training documentation is provided in English only
- Training can be provided in English or French
- Training date is fixed upon PO reception and is dependent of availability of resources (trainer and computer)
- A maximum of three (3) computers will be at the trainees' disposition
- Hands-on exercises (2 days) restricted to maximum 6 trainees
- Travel and living expenses excluded, invoiced at cost +10% for administration fee, open PO required
- Travel time is also not included and will be invoiced separately
- Without prejudice, ABB workers may refuse to perform the training on-site if this site does not comply with industry-standard security requirements, which would put ABB's workers in danger

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