ondalys

Training session

Multivariate Data Analysis

Discover the basis of Chemometrics methods

Objectives

This training session on multivariate data analysis is intended for people wishing to:

- Learn the basic methods of data analysis
- Become autonomous in data processing
- Assimilate the key steps of data analysis methodology

During the training, the method principles are introduced by a geometric approach. Emphasis is placed on the practical use of the methods and the interpretation of the results.
Application exercises are proposed for each method. Training can be held on various chemometrics software: PLS_Toolbox® ou Solo® (Eigenvector Research Inc.), SIMCA® (Sartorius), Aspen Unscrambler® (AspenTech), or software under Matlab® environment (MathWorks).

Solo PLS_Toolbox SIMCA®

Information

- No prerequisites
- 2 days
- R&D, quality control, product development, process optimization, …
- In-house sessions
- Any data except spectral data
- Researchers, scientists and engineers
- Agriculture / food, Petrochemical, Pharmaceutical, Biotechnology, Chemistry, Environment…

Program

Day 1: Exploratory analysis

- Introduction - Chemometrics
- Principal Component Analysis (PCA)
  - ✓ Theoretical principle
  - ✓ Interpretation
  - ✓ Detection of outliers
  - ✓ *Application on data set and software*

Day 2: Quantitative predictive modeling

- Linear multivariate regression models (MLR, PCR, PLS)
- Theoretical principle of multivariate regressions (MLR, PCR, PLS…)
- Model validation methods
  - ✓ Detection of outliers
  - ✓ Optimization
  - ✓ *Application on data set and software*

☎ : +33 (0)4 67 67 97 87
✉ : formation@ondalys.fr

If one of your employees is disabled and needs a specific welcome, please let us know so that we can adapt the training accordingly.