



## BCS WORKSHOP

# Transfer and Maintenance of on-line NIR Calibration models

18<sup>th</sup> December 2008

ExxonMobil Chemical Europe  
Hermeslaan, 2  
B-1831 Machelen

Organisation:

The Belgian Chemometrics Society

<http://chemometrie.kvcv.be>

### Context

The last two decades, the use of NIR spectroscopy has increased tremendously. In many industrial areas, companies opt for (on-line) NIR calibration models as an alternative to time-consuming and expensive lab analyses. This is often the case throughout the whole production process: to check the quality of the feedstock at delivery, to obtain timely information on different process streams, and to quantify the quality of the end product.

Since fluctuations in process conditions, ambient conditions, raw materials, instrument performance, etc. are to be expected in the long run, on-line calibration models need to be continuously monitored and validated periodically. The presentation of **Cees Elenbaas** will illustrate how this so-called maintenance of on-line calibration models is done at Total.

Nevertheless, it is sometimes necessary to adapt on-line models to new 'conditions'. **Pierre Dardenne** will give a theoretical introduction on the Transfer of calibration models, with practical applications.

**Bart Nicolai** will highlight the importance of the transfer of calibration models for the prediction of apple maturity.

### Agenda

- 13.30 Welcome Coffee at ExxonMobil Chemical
- 14.00 [Transfer of NIR Calibration models](#)  
**Pierre Dardenne**, Quality of Agricultural Products department, CRA-W, Belgium
- 14.45 [Calibration transfer in apple maturity prediction by means of NIR spectroscopy](#)  
**Bart Nicolai**, Katholieke Universiteit Leuven, Flanders Centre of Postharvest Technology - BIOSYST-MeBioS
- 15.15 Coffee Break
- 15.45 [Validation and control of the performance of multivariate process infrared spectrophotometers](#)  
**Cees Elenbaas**, Total Raffinaderij Nederland
- 16.30 Reception

## Venue

The workshop will be hosted by ExxonMobil Chemical Europe in Machelen.

## Date of the workshop

December 18, 2008

## Fee

Participation to this workshop is €50, exclusive VAT.

## Registration

Registration is done by filling in the registration form at the website of the BCS (<http://chemometrie.kvcv.be/>).

## How to get to ExxonMobil Chemical Europe

Coming from the East : take the E40, and then the ringroad north. Stay on the right and take the first exit (Zaventem, NOT the airport). At the traffic light at the end of the exit, take a left, continue through the next traffic light until the roundabout, and take a left. EMC is then at the right in front of you ! So you will need to drive around the building to get to the visitor parking lot !

Coming from the South : take the Brussels-ringroad direction north, then the exit Zaventem (just before the airport exit). At the traffic light at the end of the exit, take a left, continue through the next traffic light until the roundabout, and take a left. EMC is then at the right in front of you ! So you will need to drive around the building to get to the visitor parking lot !

Coming from the North or West : take the Brussels-ringroad direction east, and then the exit Zaventem / Brussels, stay at the right, and then take the first exit Diegem. At the traffic light at the end of the exit, take a left. At the roundabout, take a right. EMC is then at the right in front of you ! So you will need to drive around the building to get to the visitor parking lot !

## The Belgian Chemometrics Society

The Belgian Chemometrics Society (BCS) operates as a section of the Royal Flemish Chemical Society (KVCV) and aims at promoting Chemometrics in Belgium with special attention for the interaction between academia and industry. Its main activity is the organisation of workshops and a bi-annual symposium.

Not a BCS member yet ? You are very welcome to join ! Just drop a line to [chemometrie@kvcv.be](mailto:chemometrie@kvcv.be)

## BCS Committee members:

Thomas De Beer  
Pierre Dardenne  
Bieke Dejaegher  
Juan Antonio Fernández Pierna  
Mauritz Kelchtermans  
Kristine Ooms  
Wouter Saeys  
Bas van den Bogaert  
Piet Van Espen