

TRAINING TOOLS for the biobased economy



Bio Base Europe
Training Center

Process simulation and e-learning for operators

Educating the next generation of (bio-) process operators and technicians

One of the main challenges that the technology sector throughout North West Europe currently faces is the recruitment of a well skilled labour force. Companies looking to employ process operators, technicians or, more specifically bioprocess operators, risk encountering **possible labour shortages**.

Actively promoting technical professions among the potential students is one possible solution, **enhancing the existing educational infrastructure** is another.

One of the Bio Base North West Europe (NWE) project's aims is to promote innovation and training for the biobased economy. For training future professionals for the industry, the project is focussing on **secondary vocational, educational institutes and technical colleges** in the North West European countries.

The Bio Base Europe Training Center (BBETC) not only offers state of the art practical training facilities, but also web based process simulation, e-learning and testing capabilities.

Even if modern educational environments teach students both the theory and practical aspects of the various topics, a full range of demo-installations for (bio-)chemical processes will not be available in most cases. This is where **e-learning and process simulations** become most useful enriching regular lessons with up-to-date practical sessions, that are engaging and instructive. Furthermore competencies and skills will be developed, and can also be monitored, tested and tracked by use of the web platform's capabilities.

For the **(bio-)process industry** itself, process simulations and e-learning can make a huge contribution to the training of employees. Although installations became increasingly reliable, start-up and shutdown procedures nevertheless remains a key factor. Such competencies and skills can be monitored and trained using process simulations.

BBETC's web based library

The Bio Base Europe Training Center (BBETC) in Terneuzen (NL) offers state of the art practical training facilities for operators and technicians.

These training capabilities, which include web based process simulations and e-learning, have been developed within the INTERREG IVb project 'Bio Base NWE' and have been co-financed by the Dutch Province of Zeeland. From October 2015 these tools will be made available and accessible by BBETC's web platform.

Educational institutes for vocational training of process operators and technicians, as well as private companies in the bio- and petro-chemical sectors based in the North West Europe countries will be able to benefit from a low cost entry and up-to-date library in English and Dutch which includes a.o. the following topics:

Process simulations

- Synthesis-Distillation train
- Heat Exchanger
- Drying, etc.

E-learning

- Steam boiler
- Measurement technology
- Pumps and compressors
- Absorption and Extraction
- Fermentation, etc.

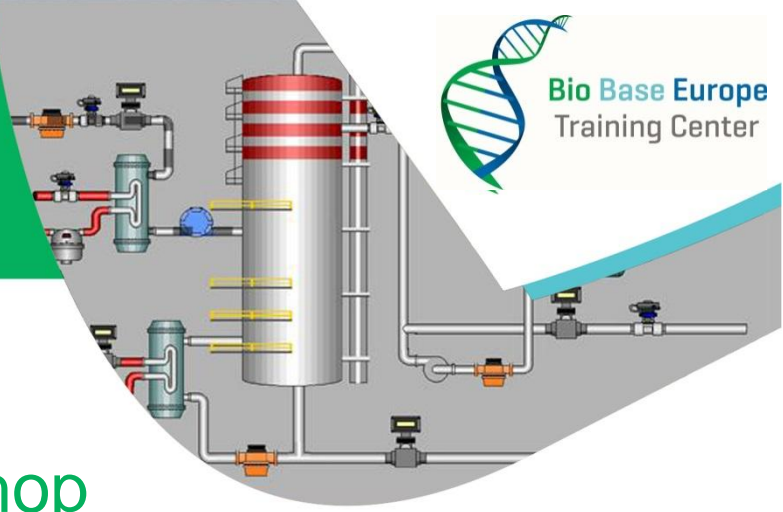
Testing

Furthermore, an examination database is available to test the acquired knowledge and understanding of students or employees. This also enables certification of the trainees.

Coming up in October 2015:
a specific introduction and training workshop in each of the NWE countries



TRAINING TOOLS for the biobased economy



An introduction workshop

The Bio Base NWE project is organising workshops to demonstrate the simulations and e-learning tools that Bio Base Europe Training Center (BBETC) has developed.

In October 2015, BBETC's instructors will tour the NWE countries to give live demonstrations of the capabilities of her web based platform and state of the art library of e-learning tools and process simulations.

The agenda for each session will consist of:

- Introduction to the Bio Base NWE project and its achievements
- Demonstration of the training tools
- Advantages of process simulation and e-learning in technical education
- Discussions on training opportunities
- Networking reception

This free of charge event is intended for:

- **Secondary vocational technical schools**
 - Directors
 - Staff and team management
 - Teachers (process and maintenance)
- **(Bio-)Process industry**
 - Directors
 - HR & training staff
 - Team management

This introduction and training event is free of charge for attendees from educational institutes and industry and is enabled by Biobase NWE and the Province of Zeeland.

For information and registration of this event: contact our website or (see below) or your national Bio Innovation Agent or call BBETC +31 115 724994.

Venue

United Kingdom

October 15th 2015

10.00 – 14.00 h.

**Biocentre (boardroom)
York Science Park
Innovation Way Heslington
York, YO10 5NY**

Program

- 10.00 *welcome and coffee/tea*
- 10.30 *opening and results from Bio Base NWE (J.P. Leenknecht, director BBETC)*
- 11.00 *digital training tools: process simulation and e-learning (instructor ILE Belgium)*
- 11.45 *break and lunch*
- 12.30 *web based platform and testing (instructor L&M Netherlands)*
- 13.15 *practical demonstrations (navigate yourself)*
- 14.00 *closing and network reception*

For more information and registration: visit <http://www.biobasenwe.org/en/events/>