

VLXE

One day polymer course

After taking the course the participants will know how to use the general and the polymer part of VLXE for Excel. The focus is on given a working knowledge of VLXE and calculating phase behaviour of solvent(s)/Polymer systems.

The course

The course will cover all key elements of using VLXE for Excel on polymer systems

- Interface
 1. Introduction
 2. Project sheet
 3. Functions in Excel
 4. Databases
 5. Wizards

- Models
 1. PC-SAFT type equations of state

- Polymer module
 1. Distributions
 2. Polymer
 3. Copolymers
 4. Properties
 5. Phase behaviour calculations

The theory will be presented in lectures and exemplified through hands-on exercises in the use of VLXE.

VLXE will provide one month licenses to cover the licenses needs for the course.

Who should participate?

Engineers engaged in studies of polymers or other complex mixtures, plant operators or others interested in applying PVT simulation software for calculation of phase behaviour and fluid properties.

Prerequisite

Users should have access to a PC with Excel 2003 or newer. A working knowledge of Excel is needed.

Preliminary course schedule

The day will consist of lectures and hands-on exercises. Lectures are kept short and users are encouraged to bring their own problems to the course.

- Lecture
 1. Introduction to VLXE
 2. Options and modules
 3. Models (Equations of state)
 4. Type of components (Standard/polymer/copolymer)
 5. What's special about polymer thermodynamic
 6. Create a new project using the databases
 7. Use the wizard to create a calculation
 8. Link calculations
 9. DDBST polymer database integration
 10. Fitting of polymer parameters

- Exercises
 1. Create a new project using the databases
 2. Edit the project settings
 3. Perform a cloud calculation (As range and as row output)
 4. Calculate a phase envelope
 5. Link flash calculations
 6. Change the components included in a calculation
 7. Change the units used in a calculation
 8. Use the goal seeker in Excel to solve a simple problem
 9. Phase diagrams for polymer systems
 10. Distribution
 11. What is needed of experimental data

For more information please contact VLXE:

Dr. Torben Laursen
VLXE ApS
Diplomvej 376
2800 Lyngby
Denmark
+45 88 70 81 54 (Office)
+45 27 20 02 16 (Cell)
+45 88 70 80 90 (fax)
e-mail: tl@vlxe.com
Homepage: www.vlxe.com