

## 25 years experience in GPC/SEC customer training

PSS offers seminars for GPC/SEC and related techniques since 25 years. Our teaching format is to combine lectures, hands-on lab work, hands-on software training, and individual instruction based upon the background and application of the participants.

You will experience: a comprehensive and effective learning experience  
small practical workgroups with an experienced tutor  
a relaxing atmosphere to discuss application questions and seminar topics

**Location:** Mainz, Germany

**Dates:** 04. - 05.03.2010

14. - 15.10.2010

**Course fee:** € 1.290 +  
VAT@19%

### **Course 899-0022**

#### **GPC/SEC Training Course**

This training course provides theory lectures and practical sessions for modern analysis of macromolecules using gel permeation chromatography (GPC), also known as size exclusion chromatography (SEC).

It covers the theoretical background of the separation technique, gives practical advice for reproducible and accurate analysis, and shows the application advantages as well as the limitations of GPC/SEC and GPC/SEC hyphenation with light scattering, viscometry and other techniques.

In the praxis sessions small workgroups (maximum 5 people) verify a GPC/SEC system, check the performance of the separation column, calibrate, and evaluate samples using different techniques. Each group has its own tutor, an experienced polymer chemist, to discuss also special applications and questions.

#### **Who should attend?**

This course is designed for analysts, managers and researchers who currently use or plan to use GPC/SEC in a laboratory. This entry level course focuses on providing and improving their overall skills set and gives hands-on GPC/SEC experience.

**Location:** Mainz, Germany

**Date:** 28. - 29.06.2010

**Course fee:** € 1.400,-+  
VAT@19%

### **Course 899-0025**

#### **Hands-on viscometry/light scattering training**

This training course covers all aspects for working with advanced detection methods and instruments for the determination of molar masses, sizes, and structures of macromolecules and biopolymers in solution.

Lectures providing the theoretical background of (multi angle) light scattering and viscometry will be followed by hands-on training sessions on practical aspects and data processing.

Tutored discussions in small workgroups and a trouble shooting session ensure that all aspects of molar mass sensitive detection are trained efficiently. Each group has its own tutor, an experienced polymer chemist, to discuss also special applications and questions.

#### **Who should attend?**

- All scientists working with techniques to determine the molar mass and the size of polymers in solution.
- Scientists interested in adding molar mass sensitive detection to their equipment.
- Users of light scattering and viscometry detectors (triple detectors) independent on the brand.

*25 years experience in GPC/SEC customer training*

**Location:** Mainz, Germany  
**Date:** 30.08.2010

**Course 899-0030**

**Reporting with the WinGPC Unity Report Designer<sup>plus</sup>**

This software training course is designed for present users of the WinGPC Unity ReportDesigner<sup>plus</sup> and for future clients planning to implement this versatile tool.

**Course fee:** € 490,-+  
VAT@19%

It offers lectures and a practical session given by an experienced polymer chemist with extensive knowledge about chromatography, WinGPC Unity and the ReportDesigner.

After successful participation each attendee should be able to create layouts (1 or more pages)

- with the company's choice of content, layout and style
- with meaningful result tables, figures and on-line calculated quality criteria
- with the optimum output format to support the company's workflow requirements.

**Location:** Mainz, Germany  
**Date:** 31.08.2010

**Course 899-0029**

**Use and optimization of WinGPC Unity MCDS**

This software training course is designed to give users of the Macromolecular Chromatography Data System (MCDS) WinGPC Unity a strong introduction to make a targeted and efficient use in the lab.

**Course fee:** € 490,-+  
VAT@19%

It offers lectures and a practical session given by an experienced polymer chemist with extensive knowledge about chromatography and WinGPC Unity.

After successful participation each attendee should be able

- to use WinGPC Unity basic functions efficiently
- to identify and apply WinGPC features for advanced analysis
- to optimize the workflow in the lab
- to obtain and qualify results

**Location:** Mainz, Germany  
**Date:** 01.09.2010

**Course 899-0031**

**Reliable data evaluation with the WinGPC modules viscometry and light scattering**

This software training course is designed for present users of the WinGPC Unity software modules viscometry, single angle light scattering, multi angle light scattering and for future clients planning to implement light scattering, viscometry or Triple detection.

**Course fee:** € 490,-+  
VAT@19%

It offers lectures and practical PC sessions given by an experienced polymer chemist with extensive knowledge about chromatography, WinGPC Unity and the methods described above. Participants should be familiar with the basic WinGPC features and functions.

Previous attendance of the WinGPC Unity software training course (P/N 899-0029) is recommended, but not required. For clients interested in a hands-on training including live measurements with the instruments, PSS offers an alternative 2-day viscometry/light scattering hands-on training (P/N 899-0025).

After successful participation each attendee should be able

- to identify the best method for advanced molar mass determination

*25 years experience in GPC/SEC customer training*

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- of samples
- to determine important instrument and system constants
- to achieve reliable results from viscometers, light scattering detectors and Triple detectors
- to recognize and read molar mass results obtained with molar mass sensitive detectors correctly
- to evaluate data faster and with higher confidence

**Location:** Mainz, Germany  
**Date:** 02.09.2010

**Course 899-0032**

**Learn convenient SystemPilot instrument control**

This software training course is designed for present users of the WinGPC Unity SystemPilot and for future clients interested in implementing a convenient and cost effective infrastructure. It offers lectures and practical PC sessions given by an experienced polymer chemist with extensive knowledge about chromatography and WinGPC Unity. Participants should be familiar with the basic WinGPC features and functions. Previous attendance of the WinGPC Unity software training course (P/N 899-0029) is recommended, but not required.

**Course fee:** € 490,-+  
VAT@19%

After successful participation each attendee should be able

- to administrate the SystemPilot
- to program sample sequences efficiently
- to set intelligent and money saving end actions

**Location:** Mainz, Germany  
**Date:** 03.09.2010

**Course 899-0033**

**Ensure WinGPC Unity traceability and compliance**

This software training course is designed for WinGPC Unity Compliance Pack administrators, IT professionals responsible for CSV (computer system validation), and users responsible for validation. It offers lectures and practical PC sessions given by an experienced polymer chemist with extensive knowledge about chromatography and WinGPC Unity. Participants should be familiar with the basic WinGPC features and functions. Previous attendance of the WinGPC Unity software training course (P/N 899-0029) is recommended, but not required.

**Course fee:** € 490,-+  
VAT@19%

After successful participation each attendee should be able

- to administrate the WinGPC Unity Compliance Pack
- to identify and apply settings reflecting the company policy
- to control audit trails
- to set user level rights
- to perform meaningful IQ/OQ for GPC/SEC systems

**Location:** upon agreement  
**Dates:** upon agreement

**PSS GPC in-house training**

1-day on-site training with an experienced polymer chemist

**Potential subjects:**

- key concepts in polymer synthesis and liquid chromatography techniques (GPC/SEC/HPLC)
- fundamentals of GPC/SEC, separation mechanism, objectives
- experimental set-up parameters
- modern GPC/SEC column trends, column selection

**Course:** 899-0005  
**Course fee:** € 1510,-  
(1-4 persons)

**Course:** 899-0014

Page 3 of 4

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*25 years experience in GPC/SEC customer training*

- Course fee:** € 2.600,-  
(5-9 persons)
- Company seminars and seminars covering several days upon agreement
- best practice in GPC/SEC method development
  - instrument qualifications
  - calibration methods
  - how to be more successful and productive in GPC/SEC
  - novel approaches in copolymer analysis, multi detection and coupling with hyphenated techniques
  - tips&tricks for WinGPC (Unity) software
  - tips&tricks for applications

Programs, registration forms and additional information: see [www.polymer.de](http://www.polymer.de) or

phone: +49 (0)6131-96239-0  
E-mail: [info@polymer.de](mailto:info@polymer.de)

Fax: +49 (0)6131-96239-11

Please send information to:

- Course 899-0022 GPC/SEC Training Course
- Course 899-0025 Hands-on viscometry/light scattering training
- WinGPC Usermeeting
- GPC/SEC Usermeeting: Columns
- PSS GPC in-house training: please contact me!

Name \_\_\_\_\_

Company \_\_\_\_\_

Department: \_\_\_\_\_

Address \_\_\_\_\_

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Tel \_\_\_\_\_

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