

# COURSES **2024**

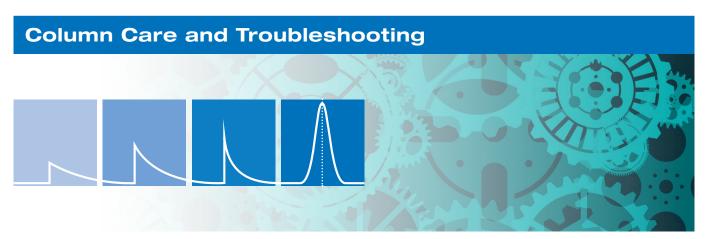


Online-Seminars and Workshops

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Changes in chromatograms can have many different reasons and may be traced back to all components of a chromatography system including the column. Strategic troubleshooting and knowledge on how to correct errors are therefore of great importance for daily work. This training will focus on column troubleshooting and also explain how to easily improve column lifetime.

#### **Contents and Learning Objectives**

- How to perform strategic troubleshooting
- Typical errors, their root causes and how to correct them
- Column care how to optimise your column's performance and lifetime

#### **Target Group**

All chromatography users

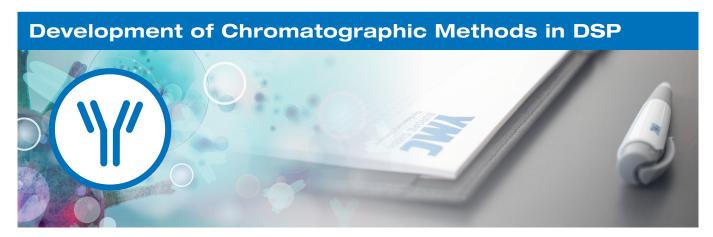
#### **Dates**

06.05.2024, 11 am (CEST), duration 2 hours 16.09.2024, 11 am (CEST), duration 2 hours

#### Price (net)

235 € / 285 CHF per participant including seminar documents and certificate of participation

#### **Platform**



This seminar will provide the basics of chromatographic methods used for the purification of biomolecules such as proteins and antibodies during downstream processing (DSP). In addition to the different separation modes, all important parameters for an efficient process development from small scale to the final scale will be discussed.

#### **Contents and Learning Objectives**

- Introduction to downstream processing and overview of chromatographic separation modes
- At the beginning of process development: selection of resins, buffers, and elution conditions
- On the way to an efficient process: determination of load and scale-up

#### **Target Group**

All chromatography operators who are new to DSP

#### **Dates**

13.05.2024, 11 am (CEST), duration 2 hours 18.09.2024, 11 am (CEST), duration 2 hours

#### **Price (net)**

235€ / 285 CHF per participant including seminar documents and certificate of participation

#### **Platform**

# **Method Development in Chiral Chromatography**



This seminar will provide all the important aspects of phase screening and method development in chiral HPLC and SFC. As method predictions are especially difficult for chiral chromatography, a special focus will be on the selection of chiral stationary phase and eluent. Based on specific examples you will learn how to optimise methods efficiently.

#### **Contents and Learning Objectives**

- What you have to consider at the start of a project: target (e.g. quality control, purification), sample characteristics and system specifications
- How to find the optimal column by phase screening.
- Through optimisation of resolution, run time and selectivity to the final method.

#### **Target Group**

All chromatography operators who are working with chiral separations

#### **Date**

18.11.2024, 11 am (CET), duration 2 hours

#### Price (net)

235 € / 285 CHF per participant

including seminar documents and certificate of participation

#### **Platform**



This seminar will provide all the basics of preparative HPLC and therefore will assist you during the complete procedure of process development beginning with method selection and optimisation in analytical scale through determination of the ideal load to scale-up to the final preparative scale.

#### **Contents and Learning Objectives**

- Differences between analytical and preparative chromatography
- Important preparative process parameters: purity, yield and productivity the "triangle" of preparative chromatography
- Outline of preparative method development: three steps to your preparative method

#### **Target Group**

All chromatography operators who are new to the field of preparative chromatography

#### **Date**

20.11.2024, 11 am (CET), duration 2 hours

#### Price (net)

235 € / 285 CHF per participant

including seminar documents and certificate of participation

#### **Platform**

# **Your Individual Online Seminar**

# Would you prefer a dedicated seminar only for your company?

# Do you want a seminar on a different topic?

For many years, YMC has been well-known for its profound knowledge in all fields of liquid chromatography. Therefore, just let us know should you wish to have your own training date or a custom seminar on your specific topic. This may be based not only on the shown Online Seminars outlined above but also on different topics such as:

- · Basics of HPLC
- Column selection: how to find the optimum column for your target separation
- Method development: how to optimise resolution and run time
- Theory of glass column packing
- ... and many more

#### Let us develop your individual seminar together. Your advantages:

- · Topics and duration by agreement
- · Date by agreement
- Fixed costs

Use the request form at

https://ymc.eu/customer-training-and-education.html

or contact

Dr. Mathias Hehn

m.hehn@ymc.eu

# Workshop

# **Glass Column Packing in Laboratory Scale**



This workshop will enable you to pack laboratory scale glass columns with a biochromatography resin. The principles of preparation, packing methods and column qualification discussed in the theoretical part will directly be practiced in the laboratory by flow-packing. Helpful tips for troubleshooting and column maintenance will complement the workshop.

#### **Contents and Learning Objectives of the Theoretical Session**

- Stationary phases: characteristics and application areas
- Basic requirements for a well packed column
- Calculations and slurry preparation
- Packing procedures: flow packing, axial compression and pack-in-place
- Column qualification: determination of HETP and asymmetry using pulse test and transition analysis
- Troubleshooting: what you can learn from column performance evaluation results
- Column maintenance: how to exchange spare parts and check column functionality

#### **Contents and Learning Objectives of the Practical Session**

Packing, qualification and unpacking of a lab scale glass column with an ion exchange resin

#### **Target Group**

• All glass column users

#### **Date**

15.–16.05.2024; end of workshop around noon of the second day

#### Location

YMC Europe GmbH Schöttmannshof 19 46539 Dinslaken Germany

#### **Price (net)**

1,200 €/1,400 CHF per participant including seminar documents, certificate of participation, lunch and coffee breaks Travel and accommodation cost are *not* included.

#### **Requirements for Participation**

Please note the following conditions to participate in the practical part:

- no open-toed shoes
- · long legwear
- no contact lenses

Protective clothing and gear such as lab coats, safety glasses and protective gloves will be provided.

# Workshop



This workshop will enable you to pack pilot scale glass columns with a biochromatography resin. The principles of preparation, packing methods and column qualification discussed in the theoretical part will directly be practiced in the laboratory by flow-packing. Helpful tips for troubleshooting and column maintenance will complement the workshop.

#### **Contents and Learning Objectives of the Theoretical Session**

- Stationary phases: characteristics and application areas
- Basic requirements for a well packed column
- Calculations and slurry preparation
- Packing procedures: flow packing, axial compression and pack-in-place
- Column qualification: determination of HETP and asymmetry using pulse test and transition analysis
- Troubleshooting: what you can learn from column performance evaluation results
- Column maintenance: how to exchange spare parts and check column functionality

#### **Contents and Learning Objectives of the Practical Session**

Packing, qualification and unpacking of a pilot scale glass column with an ion exchange resin

#### **Target Group**

All glass column users

#### **Date**

06.-07.11.2024; end of workshop around noon of the second day

#### Location

YMC Europe GmbH Schöttmannshof 19 46539 Dinslaken Germany

#### Price (net)

1,500 € / 1,700 CHF per participant including seminar documents, certificate of participation, lunch and coffee breaks Travel and accommodation cost are not included.

#### **Requirements for Participation**

Please note the following conditions to participate in the practical part:

- no open-toed shoes
- long legwear
- no contact lenses

Protective clothing and gear such as lab coats, safety glasses and protective gloves will be provided.

# Workshop



This three-day seminar provides an introduction to continuous chromatography with hands-on practice with capture and polishing processes for biomolecules. These processes lead to improvements in productivity and manufacturing costs while reducing environmental footprint. Attendees will acquire the basic tools to design, run and evaluate multicolumn processes and to quantify these improvements, serving as basis for an economic evaluation. As the least complex of all multicolumn processes, the workshop is focused on twin column chromatography.

This workshop is provided by FHNW University of Applied Sciences and Arts Northwestern Switzerland in collaboration with YMC ChromaCon.

#### **Contents and Learning Objectives**

- Introduction to continuous chromatography for biomolecules
- · Theory of multi-column chromatography
- · Design of multi-column chromatography processes
- Hands-on training on twin column equipment for capture and polishing applications
- Process performance evaluation and scale-up
- · Introduction to process modelling

#### **Target Group**

• Separation scientists and process development engineers who already have some familiarity with single column chromatography.

#### **Date**

10.-12.09.2024

#### Location

FHNW Campus Muttenz
FHNW University of Applied Sciences and Arts Northwestern Switzerland
Hofackerstrasse 30
4132 Muttenz
Switzerland

#### Price (net)

3,000 CHF per participant

including seminar documents, certificate of participation, lunch and coffee breaks, evening program/dinner Travel and accommodation cost are not included.

For further information and registration for this workshop please visit https://www.fhnw.ch/en/continuing-education/lifesciences/continuous-chromotography

# Inhouse Seminars and Workshops



We will be happy to welcome you to a seminar in Dinslaken. Or we could also come to your site!

- You can't attend a seminar on our site?
- You want a number of colleagues to benefit from our seminars?
- You require a special seminar tailored to your needs?

# Of course, you can also book a seminar on your site!

Choose your seminar from our seminar and workshop program (please refer to the overview on page 15). The date, location and number of attendees can be arranged according to your specific requirements.

#### Your benefits:

- Topics and duration by agreement
- . Date and location by agreement
- · Flexible number of attendees
- Fixed costs

You can use the contact form at

https://ymc.eu/customer-training-and-education.html

or you can directly contact:

Dr. Mathias Hehn m.hehn@ymc.eu

# Course Overview

Course topicw	Art	Duration	Price per person (net)	Dates	Available as Inhouse training?
Method Development in Chiral Chromatography	Online seminar	2 hours	235€/285CHF	18.11.2024, 11 am CET	yes*
Introduction to Preparative HPLC	Online seminar	2 hours	235€/285CHF	20.11.2024, 11 am CET	yes*
Development of Chromatographic Methods in DSP	Online seminar	2 hours	235€/285CHF	13.05.2024, 11 am CEST 18.09.2024, 11 am CEST	yes*
Column Care and Troubleshooting	Online seminar	2 hours	235€/285CHF	06.05.2024, 11 am CEST 16.09.2024, 11 am CEST	yes*
Glass Column Packing in Laboratory Scale	Workshop (YMC Europe, Dinslaken)	1.5 days	1,200 € / 1,400 CHF	15.–16.05.2024	yes**
Glass Column Packing in Pilot Scale	Workshop (YMC Europe, Dinslaken)	1.5 days	1,500 € / 1,700 CHF	0607.11.2023	yes**
Continuous Chromatography for mAbs/Oligonucleotides and Peptides	Workshop (FHNW University of Applied Sciences and Arts Northwestern Switzerland, Muttenz, Switzerland)	3 days	3,000 CHF	10.–12.09.2024	

<sup>\*</sup> Duration by agreement; typically from 4 hours to 8 hours

<sup>\*\*</sup> Duration by agreement; typically from 1 days to 2 days

# Registration and Terms of Attendance

#### Registration

For registration, please use the forms on our website:

https://ymc.eu/customer-training-and-education.html

Please send the completed form to m.hehn@ymc.eu.

#### Terms of attendance at the seminars and workshops

Enrolment for a seminar becomes effective by YMC sending the confirmation of enrolment. YMC Europe GmbH reserves the right to change content and agenda of an event as well as to cancel an event.

If an event does not take place, a possible claim for a refund from YMC is limited to the reimbursement by YMC up to the amount paid as the contribution for attendance. However, a refund will only be granted if YMC and the participant cannot agree upon an alternative date.

The following charges apply in case you need to cancel your participation:

- 30 to 15 days prior to the event = 50% of the event price
- from 14 days prior to the event = 100% of the event price

As an alternative to your cancellation, an alternative colleague of yours may participate in the event without extra charge.



#### YMC Europe GmbH

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