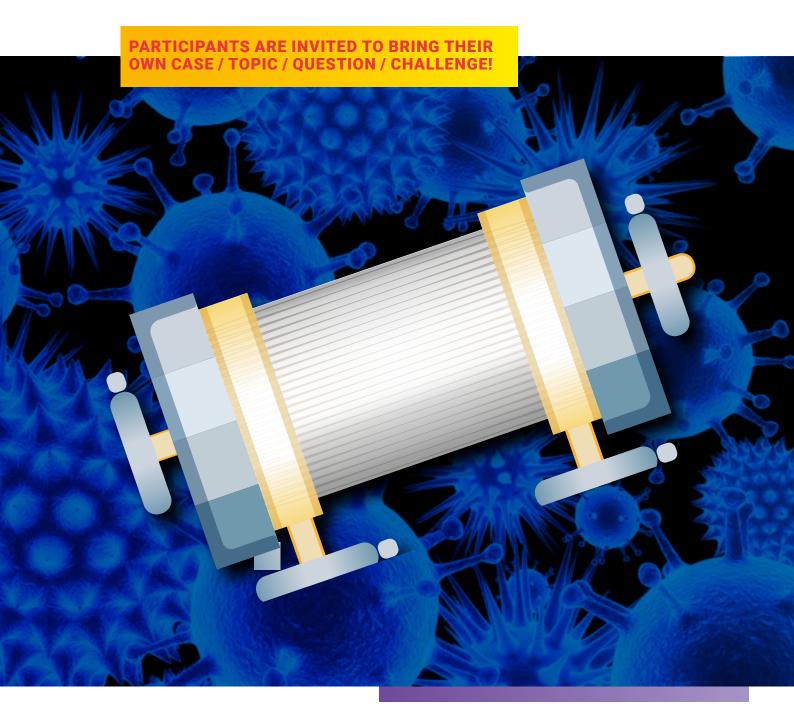


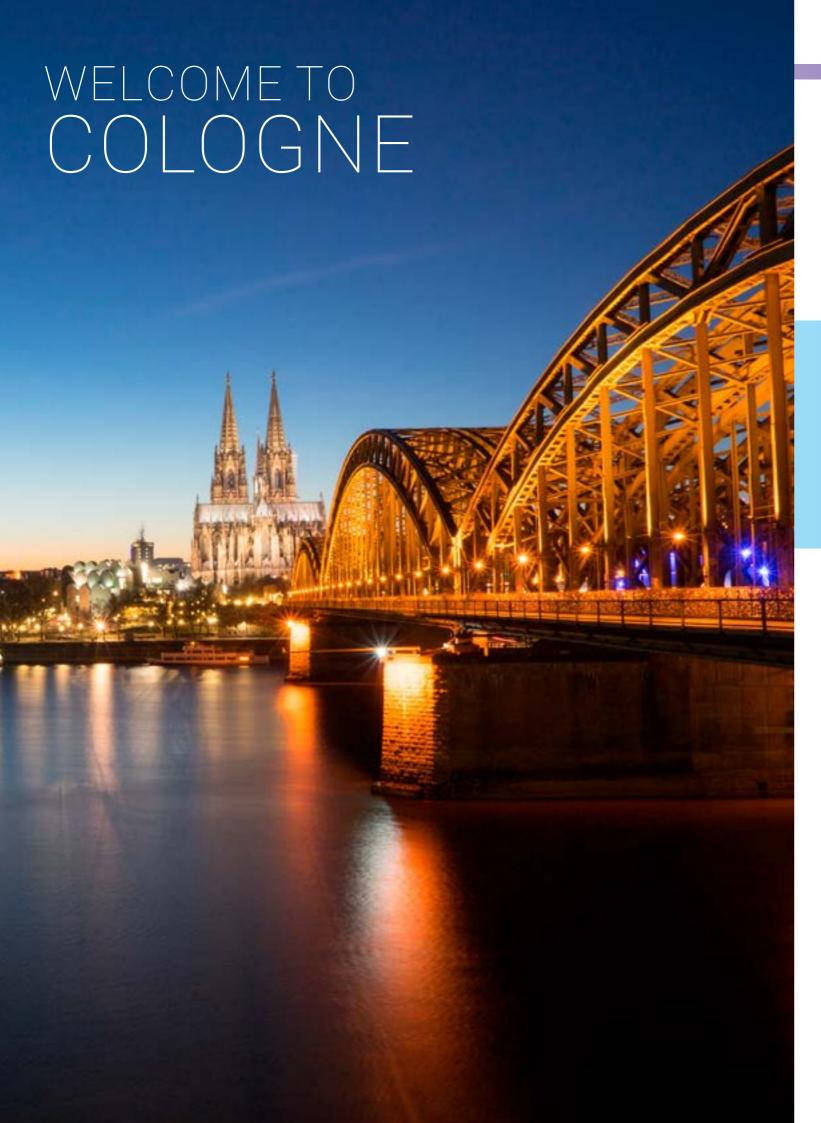
2019 PDA EUROPE TRAINING

All About Virus Filtration - A Practical Approach



10-11 SEPTEMBER 2019ASAHI KASEI BIOPROCESS EUROPE
COLOGNE, GERMANY





All About Virus Filtration

A Practical Approach

Overview

This training course about virus filtration will provide the attendees with a profound understanding about the current state of the art around this topic. A thorough introduction to virus filtration will be given as well as in-depth background and a mechanistic understanding about the principles of (parvo-) virus retention will be available to the attendees at the end of the course. An interactive session will address the question of "how to design an efficient virus filtration process?" and a practical session will provide some hands-on experience with lab- and production-scale virus filter modules.

Who Should Attend:

- R&D scientists
- · Supervisors in manufacturing
- QA Manager (Regulatory Affairs, Pathogen Safety)

Learning Objectives:

Upon completion of the course the participant

- have understood virus filtration principles
- ability to set-up and handle virus filtration processes
- have an overview of filter types and material
- have understood challenges of different matrices
- have gained hands-on experience with virus filters / process set-ups
- have understood principles/requirements of filter integrity testing
- have an overview of current guidelines and regulations



Sebastian B. Teitz, PhD, Product Manager & Scientific Coordinator, Asahi Kasei Bioprocess Europe

Sebastian Teitz graduated from University of Cologne with a diploma in Genomic Imprinting, followed with a PhD in the Analysis of O-glycosylated Proteins. Sebastian has previously worked at Fred Hutchinson Cancer Research Center (Seattle, WA), looking into Cytomegalovirus and its role in Graft vs. Host Disease and Transplant Rejection and at NewLab BioQuality / Charles River as the Project Manager of Virus Clearance Studies, focusing on scientific liaison with customers. At Asahi his focus lies with the technical, scientific and regulatory support of customers and internal entities, as well as representation in various industry organizations, such as the PDA, BPOG and CAACB.



Andy Bailey, CEO, ViruSure GmbH

Andy Bailey is a virologist who served for 9 years at the MRC Virology Unit in Glasgow. In 1995, he moved to the industry sector, initially as Director of Virus Validation services with Q-One Biotech Ltd, and later at the Pathogen Safety group of Baxter Healthcare in Vienna, Austria. Over the last 20 years Andy has been actively involved in the virus and prion safety field, presenting at numerous regulatory agencies either in support of products at the UK MHRA, German PEI, French AFFSAPS, US FDA, KFDA (Korea), EMEA and JMHLW (Japan) supporting regulatory submissions for various products. He has extensive experience in regulatory affairs and virus safety issues. Since 2005 he has been the founder and CEO of ViruSure in Vienna, Austria, a company specialising in the virus and prion safety of biopharmaceutical products



Franz Nothelfer. Consultant

Franz Nothelfer is consultant for downstream processing and viral safety. Before his retirement in 2017, he was heading a position as associate director Protein Science at Boehringer Ingelheim Pharma (BI), responsible for the development of novel purification processes for therapeutic proteins and monoclonal antibodies. A major task of his team was the transfer, establishment and optimization of purification processes of customers to achieve robust and economic manufacturing processes. Franz started his career in 1971 at Dr. Karl Thomae GmbH (later BI). In 1979 he joined the newly founded biotechnology department and was involved in the first process transfer of a recombinant protein to BI in 1985. During his career at Boehringer Ingelheim he took over several challenging positions.



Michael Lasse, PhD, Study Director Supervisor, Charles River Biologics Testing Solutions

Michael Lasse graduated from the University of Rostock with a diploma in Biology working on programmed cell death in neural progenitor cells. At the University of Cologne his PhD studies in Biochemistry focused on recombinant protein expression of apoptosis relevant membrane proteins, chromatographic purification techniques and post-translational lipid modifications. Michael Lasse joined Charles River as a study director for viral clearance studies and is currently supervising an operational team within the viral clearance department focusing on chromatography and related topics like continuous processing.

TWO-DAY TRAINING COURSE TRAINING COURSE AGENDA

Tueso	lay, 10 September 2019	9:00 - 17:00
9:00	 Welcome and Theory 1 Introduction into eukaryotic DS manufacturing process Virus Filters in biopharmaceutical manufacturing Sources of virus load Reason/necessity for virus removal from DS Virus realm Sources of viruses Examples of virus contaminations (plasma, biotech) Outline of how to control the risk Relevance of virus safety in ATMPs and potential applications 	Sebastian Teitz Andrew Bailey
10:50	Coffee Break	
11:20	Theory 2: Case StudyUp- & Downscaling of a virus filtration step	Franz Nothelfer
12:50	Lunch Break	
13:50	 Hands-on 1: Set-up and Handling of Filters Set-up in lab-scale: hands-on Display of production scale filters Integrity tests: hands-on 	Sebastian Teitz
15:20	Coffee Break	
15:50	 Theory 3: Mechanistic principles of (Parvo-) Virus retention Designing a virus filtration process – assumption and points to consider 	Sebastian Teitz
17:00	End of Day 1	
18:00	Networking Dinner	

Wedn	esday, 11 September 2019	9:00 - 15:30
9:00	Wrap-up Day 1	All
13:50	 Hands-on 2: Set-up of filtrations with different protein solutions Documentation 	All
10:30	Coffee Break	
11:00	 Theory 4: Introduction/background part for viral clearance - methods, guidelines How to organize a virus clearance study Challenges in VC studies Historical data Case studies for VC studies Continuous manufacturing aspects in combination with virus filtration 	Michael Lasse
12:30	Lunch Break	
13:30	Revisit Filtration Results	Sebastian Teitz
13:30	Interactive session: Bring your own case/topic/question/problem/challenge for discussion! Participants have the opportunity to address real-life challenges during the implementation of a virus filtration process – from bencht-top development through to commercial scale-up.	All
15:00	Wrap-up, Q&A	All
15:30	End of Course	

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Germany

All About Virus Filtration - A Practical Approach

10-11 September | Cologne | Germany

For contact at PDA Europe registration-europe@pda.org

TRAINING LOCATION

Asahi Kasei Bioprocess Europe Gottfried-Hagen-Strasse 20 51105 Cologne

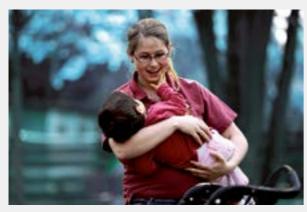
CONTACT INFORMATION

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Education Program Inquiries Elke von Laufenberg

training-europe@pda.org



children's hospice "Sonnenhof"

The Sonnenhof Hospice, located near PDA's office in Berlin, offers support and assistance to families with children suffering from incurable and/or debilitating diseases. At Sonnenhof, children, together with their families, can spend the time they have left as they wish and find some relief from their suffering. Instead of purchasing expensive gifts for the conference speakers, PDA has decided to donate this amount to the Sonnenhof Hospice. You can also contribute and help us increase the amount, it is easy:

buy a package of chewing gums at the registration desk. THANK YOU!

To know more about the Sonnenhof Hospice, please visit www.bjoern-schulz-stiftung.de



GENERAL ADDRESS

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3 Email: registration-europe@pda.org

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CONFIRMATION: Transmitting your filled-in registration form constitutes a binding application for the specific event. PDA Europe will send you a confirmation including payment details. A legally binding contract is concluded once PDA Europe has sent a written invoice by mail to you. A payment confirmation will be sent to you within one week once payment has been received. You must have this written confirmation to be considered enrolled for this PDA event. PDA Europe reserves the right to deny access to anyone unable to provide written confirmation that all dues have been fully settled. SUBSTITUTIONS: If you are unable to attend, substitutions are welcome and can be made at any time, including on site at the prevailing rate. If you are registering as a substitute attendee, please indicate this on the registration form. Changes are free of charge until 2 weeks prior to the start of the event. After this two-weeks period, there will be a charge of \$\infty\$ 100 excl. VAT per name change. REFUNDS: Refund requests must be sent to PDA Europe. If your written request is received on or before 11 August 2019 you will receive a full refund minus a 150 € excl. VAT handling fee. After that time, no refund or credit requests will be approved. If you are an unpaid registrant and do not attend the event, you are responsible for paying the registration fee. On-site registrants are not guaranteed to receive conference materials until all advanced registered attendees receive them. PDA Europe works PCI-Compliant. **EVENT CANCELLATION**: PDA reserves the right to modify the material or speakers/instructors without notice, or to cancel an event. If an event must be canceled, registrants will be notified by PDA as soon as possible and will receive a full refund. PDA will not be responsible for airfare penalties or other costs incurred due to cancellation. For more details, contact PDA at registration-europe@pda.org or fax to +49 30 436 55 08-66.

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DA EUROPE EVENTS



2019

2 September 2 September 3-4 September 5 September

Interest Group Meeting Freeze Drying Interest Group Meeting Technology Transfer

BioManufacturing

Interest Group Meeting Vaccines

* Munich, Germany

2 September **5 September** Interest Group Meeting Technology Transfer

Project Management in the Pharmaceutical Industry

Munich, Germany

24-25 September Pharmaceutical Freeze Drying Technology

* Berlin, Germany

24-25 September Particles in Injectables

* Berlin, Germany

21 October 21 October 21 October 22-23 October Workshops: Innovating the Journey from Manufacturing to the Patient Innovative Drug Delivery Systems/Combination Products Impact of Pre-filled Syringe Components on Biopharmaceuticals The Universe of Pre-filled Syringes and Injection Devices

* Gothenburg, Sweden

12-13 November 14 November

Pharma Logistics & Outsourced Operations Interest Group Meeting Supply Chain Management

* Lisbon, Portugal

2020

25-26 February **Parenteral Packaging** Basel, Switzerland

21-22 April

Visual Inspection Forum

Berlin, Germany

Subject to change

For latest info: europe.pda.org

Shortlist 14 Aug 2019



GENERAL INFORMATION

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