

Trends in Barrier Systems & Robotics

Part of PharmaCongress 2024

19/20 March 2024 Wiesbaden, Germany

Highlights

- Barrier Systems and the New EU GMP Annex 1 Requirements
- Robotics Technology in Pharmaceutical Manufacturing
- Case studies from:
 - Cilag / Janssen
 - GSK Vaccines
 - Lonza
 - Roche Diagnostics
 - PSM
 - Vetter Pharma-Fertigung

Speakers

Dr Annika Bernsdorf | GlaxoSmithKline Biologicals, Germany

Pasquale Cataldo | Roche Diagnostics, Germany

Dr Göran Crucius | Cilag/Janssen, Switzerland

Dennis Dürr | Roche Diagnostics, Germany

Thorsten Häfner | PSM, Germany

Kenan Kanmaz | Metall+Plastic, Germany,

Harald Kiesel | Skan, Switzerland

Didier Meyer | DMCompliance, France

Dr Daniel Müller | Local GMP Authority of Baden Württemberg, Germany

Julian Petersen | groninger & co., Germany

Katharina Schlereth | Labor LS, Germany

Dr Arne Schröder | Vetter Pharma-Fertigung, Germany

Antoine Toussaint | GSK Vaccines, Belgium

Patrick Wieland | Bausch+Ströbel, Germany

Dr Florian Witte | Boehringer Ingelheim Pharma, Germany







OBJECTIVES

This is why you will benefit from attending this conference:

- Case studies from various pharmaceutical companies deal with the implementation, qualification and operation of Isolators, RABS systems and Robots.
- You will discuss the current state of the art and new technological developments in Barrier Systems and Pharmaceutical Robotics Technology.
- You will get to know first-hand the new EU-GMP Annex 1 requirements on Barrier Systems
- Experts from pharmaceutical companies will share their knowledge regarding operational experience.

BACKGROUND

The protection against microbial contamination is the most important point for drugs produced by aseptic processes. Today the regulators require a stricter separation between operators and product in the form of an access barrier.

Two systems are on the market – RABS (Restricted Access Barrier System) and Isolators. But only isolators are referred to by the US FDA as advanced aseptic technology. Another consequence of the separation of operator and production process is the increased introduction of Robot Technology in the aseptic environment.

PROGRAMME 19 March 2024

Isolator / RABS: What is really new in Annex 1

Florian Witte, Boehringer Ingelheim

- Classification by the authorities and in the current Annex 1
- What is suitable for whom?
- Advantages and disadvantages of isolators and RABS
- What is new about the classic cleanroom?

Tackling Annex 1 Requirements by Robotics: On the Way to zero human Interaction in Lyo Vial Filling

Dr Arne Schröder, Vetter Pharma-Fertigung

- Cleanroom layout and processes for zero human interaction in lyo vial filling
- Replacement of manual processes by robots
- Challenges of implementing robots
- Lessons learned during the first years of commercial use

Robotics and Automation – The Enabler for a higher Quality and Annex 1 CCS Compliance

Thorsten Häfner, PSM

Julian Petersen, groninger & co

- Current Annex 1 requirements and the reduction or elimination of human intervention within the ISO 5 environment
- How the usage of automation and robotics can support CCS
- Applying robotics in the pharmaceutical environment based on executed applications within aseptic environments
- Details about how to completely remove an operator from the aseptic environment

Aseptic Process Simulation in a Robotic Filling Line

Dennis Dürr, Roche Diagnostics

- Short introduction/Oversight into APS and Robotic filling line
- Aseptic process simulations in robotic vs. conventional lines
- Thoughts and Rationales for APS in robotic filling line
- Insights into APS-concept for a robotic filling line

APS with a Gloveless Robotic Filling Line – Best Practices and Lessons learned

Thorsten Häfner, PSM

- How to execute an APS for gloveless filling lines
- $\, \blacksquare \,$ Challenges to overcome regarding the new Annex 1
- Is monitoring necessary in closed systems?
- Lessons learned in discussions with authorities

Barrier Systems – Current GMP Requirements

Dr Daniel Müller, Local GMP Authority of Baden-Württemberg, Germany

- Regulatory overview: most important guidelines for barriers/ isolators
- Revised Annex 1 section "barrier technologies" changes and current requirements
- Annex 1 fit for future now?



This conference will focus on current questions of barrier systems and robotics coming from FDA regulations as well as from the revised EU-GMP Annex 1, and it will specifically address the subject from the perspectives of pharmaceutical operators, planners and engineers.

TARGET AUDIENCE

This event is directed at decision-makers from pharmaceutical production, automation, development and quality assurance/control. It also addresses engineers and planners who need to be well

informed about current developments in the field of barrier systems and robotics.

MODERATORS

Didier Meyer, DMCompliance Dr Florian Witte, Boehringer Ingelheim Pharma

PROGRAMME 20 March 2024

Case Study on Management of Indirect Products Contact Parts in an Isolator

Antoine Toussaint, GlaxoSmithKline Vaccines

- Definition of indirect product contact part
- Regulation's requirement
- Example of implementation along the all lifecycle of indirect product contact parts

Meeting EU GMP Annex 1 Requirements: Sterilization of indirect Product Contact Parts in Filling Lines using Sterilization Container

Dr Annika Bernsdorf, GlaxoSmithKline Biologicals

- Overview of the design of the current filling isolators at a GSK Vaccines manufacturing site and the challenges linked to traditional sterilization methods for parts indirectly in contact with the product
- Explanation of the features and benefits of sterilization containers as a compliant solution
- Customization of the containers to accommodate larger parts, such as the stopper bowl and stopper hopper
- Development of an improved line setup with enhanced contamination control

Upgrade of H₂O₂ Dcontamination System for Production of RABS Vial Filling Line

Pasquale Cataldo, Roche Diagnostics

Kenan Kanmaz, Metall+Plastic

- Current process, why this upgrade Annex 1
- Project challenge timeline & installation vs. production
- Production shutdown and realization
- Risk and other key tasks of upgrading
- Results of project, cycles development and benefits
- Key features and advanced technologies of DECOpulse® effective H₂O₂ Bio-decontamination system

Case Study Janssen: Flexible fill & finish Equipment for Multi-Product Manufacturing Processes

Dr Göran Crucius, Cilag / Janssen

Patrick Wieland, Bausch+Ströbel

- Flexible multi-product fill and finish lines in pharmaceutical manufacturing offer several benefits that can help pharmaceutical companies improve their efficiency, flexibility and overall productivity
- Case Study of Janssens flexible pharma production to meet varying market demands and maintain product quality

Modern Sterile Test Isolators – Safe, Compliant, Efficient, Versatile

Katharina Schlereth, Labor LS Harald Kiesel, Skan

- Components of a modern Sterile Test Isolator
- Safe for operator and process
- Compliant during all aspects of use
- Efficient by adaptable to required processes
- Versatile in handling options

SPEAKERS



Dr Annika Bernsdorf

GlaxoSmithKline Biologicals, Dresden, Germany Pharmacist, PhD, joined GSK in 2007, different positions in aseptic manufacturing and Quality Assur-

ance, wealth of experience in vaccines manufacturing with focus on aseptic processes and sterility assurance.



Pasquale Cataldo

Roche Diagnostics, Mannheim, Germany
Pasquale Cataldo is an expert for sterile manufacturing and lab lead of the Sterile Drug Product Manu-

facturing (SDPM) Innovation Lab since 2019 at Roche Diagnostics GmbH in Mannheim / Germany.



Dr Göran Crucius

Cilag/Janssen – Pharmaceutical Company of Johnson & Johnson, Schaffhausen, Switzerland Responsible for execution of strategical projects

within BU Parenterals. Lead of Operational Readiness Team for new aseptic filling technologies and related topics.



Dennis Dürr

Roche Diagnostics, Mannheim, Germany After several stations within Roche Diagnostics GmbH, Dennis is currently working as process vali-

dation engineer with main emphasis on aseptic process simulations



Thorsten Häfner

PSM, Schiffweiler, Germany
From 2017-2022 Director Business Development,
Product Management and Marketing at groninger &

co. gmbh. Vice President of Business Development at PSM GmbH since 2022.



Kenan Kanmaz

Metall+Plastic, Radolfzell, Germany Kenan Kanmaz has been working for more than 12 years as technical engineer in the clean room

section. Currently he works as Technical Sales Manager for METALL+PLASTIC GmbH (since 2016).



Harald Kiesel

Skan, Allschwil, Switzerland Harald Kiesel Dipl.-Ing, MBA is strategic Product Manager at Skan and responsible for the portfolio of

sterile test isolator. In this position he is mainly working for shaping the offering of Skan isolators to meet market needs.



Didier Meyer

DMCompliance, France
Didier worked 7 years with Millinore

Didier worked 7 years with Millipore Europe in various positions of sales, marketing and training. Since

1983 he has worked in the development of isolation technology in the Biopharma industry with La Calhène. Currently he is consultant at DMCompliance.



Dr Daniel Müller

Local GMP Authority of Baden Württemberg, Germany Currently Daniel Müller is head of GMP inspectorate (local competent authority) at Tuebingen, Germany.

Since 2001 he has been working as GMDP inspector, conducting national inspections as well as EMA- and overseas inspections.



Julian Petersen

groninger & co., Germany

After a short timeout in the semiconductor/metrology business Julian returned to the pharmaceutical

fill&finish business as a Sales Director responsible for the DACH market. Now leading the Business Development and Product management.



Katharina Schlereth

Labor LS, Bad Bocklet, Germany Katharina studied Biology at the University Würzburg. 2009 she joined Labor LS AG in Bad Bocklet,

Germany, where she is responsible for sterility testing. Her current position is Division Head, Microbiological Testing of Sterile Products



Dr Arne Schröder

Vetter Pharma Fertigung, Ravensburg, Germany Arne Schröder, Ph.D., joined Vetter in 2016. Since 2017 he is working as Head of Production in the

area of manufacturing and filling of sterile drug products, which includes various vial, single/dual-chamber cartridge and SCF syringe filling lines.



Antoine Toussaint

GSK Vaccines, Wavre, Belgium 12 years of experience in GSK vaccines in several roles: Manager in QC department in Environmental

monitoring / Sterility Assurance Manager for primary and secondary operations / Global Sterility Assurance Lead on Technology Barrier, Facility Design, HVAC & Disinfectant.



Patrick Wieland

Bausch+Ströbel, Germany
Patrick Wieland is a senior sales professional with
more than 10 years of working experience in the

pharmaceutical industry.



Dr Florian Witte

Boehringer Ingelheim Pharma, Ingelheim, Germany For more than 20 years in different positions at Boehringer Ingelheim. Florian Witte has headed the

quality assurance unit for device development since 2021.





The guiding theme of the GMP PharmaCongress 2024 on 19/20 March will be "users sharing challenges and solutions in practice". Therefore, benefit from your colleagues' experience and from the direct information exchange at the GMP PharmaCongress & GMP PharmaTechnica 2024.

The Conference Tracks

As a participant you can switch between any of the **11 conference tracks** any time and also visit the PharmaTechnica Expo with more than 110 international exhibitors.

The GMP PharmaCongress Conference Tracks	19 March 2024	20 March 2024
Non-Sterile Products – Challenges in Manufacturing & Quality	✓	n.a.
GMP – Green or Good Manufacturing Practice?	✓	n.a.
Packaging/Packaging Materials – Challenges & Solutions	n.a.	✓
European Aseptic Conference – Technology	✓	✓
Trends in Barrier Systems & Robotics	✓	✓
Modern Cleanroom Technology	✓	✓
Digitalisation & Artificial Intelligence	✓	✓
GMP for Pre-Filled Syringes (PFS)	✓	✓
Lyophilization – Modern Techniques & New Requirements	✓	✓
ATMPs – Hurdles & Achievements in Quality and Safety	✓	✓
Vaccines – Advantages & Challenges in Manufacturing	✓	✓
GMP PharmaTechnica Expo	✓	✓

Keynote on 19 March 2024

The CEPI Project – 40 Countries – 1 Billion Euros for Vaccines Dr Guido Dietrich, CEPI

Do you know the worldwide importance of CEPI? And why is this so important for everyone working in pharmaceutical production? Our first keynote will address a very important new development. More than 40 countries, several non-governmental organizations and the European Commission are involved in the Coalition for Epidemic Preparedness Innovations (CEPI).

What is the goal?

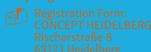
The goal of CEPI is to develop, produce and distribute a vaccine as quickly as possible in the event of the next global pandemic, i.e. within 100 days.

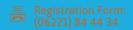
What is the current budget?

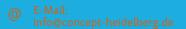
For the first 5 years alone, a budget of one billion euros has been made available.

In the Live Demo Area in the PharmaTechnica Expo hall you will benefit from the exhibitors' demonstrations – presenting their latest technology, products and services. Take advantage of these live performances – and get to feel and experience their products. For a list of all companies exhibiting at PharmaTechnica, please see the exhibitor list and plan on the website at www.pharma-congress.com.

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Exhibitor	Stand	Live Demo	
boTec	A 7	TBN	
MKVersuchsanlagen	A 12	TBN	
Ellab	A 16	TBN	
Bausch+Ströbel	A 33	OMNIA - Boost your processes and step closer to your pharmaceutical plant of the future.	
PHARMAPLAN	A 37	Accelerated Design Decisions enabled by Digital Twins	
Quascenta Pte	В 6	Using an Intelligent Lifecycle-Based Solution for Streamlined Product Tracking, Design Optimization, Collaboration, and Reporting	
ZETA	B 12	TBN	
IWT / Tecniplast	B 15	High pressure cleaning in pharmaceutical production. Advantages, challenges, sustainability and savings	
MBV	B 20	TBN	
Emerson Automation Solutions	B 22	TBN	
Atec Steritec	B 28	Safe & Sterile Transfer with Minimal Operator Intervention	
REA Elektronik	B 29	Experts in Printing and Code Verification of pharmaceutical and medical-device packaging (f.e.UDI/MDR)	
Friedrich Sailer	B 31	Shining Solutions: Live Demo of Cutting-Edge Stainless Steel Cleanroom Equipment	
Merck	B 32	Annex 1's "Specific Risks Associated with Single-Use Systems"	
Particle Measuring Systems	C 7	Facility Monitoring Systems	
Yokogawa	C 9	Flow Imaging using FlowCam for High Performance Products to warrant constant excellent Quality	









Congress Dates

Tuesday, 19 March 2024, 09.00 - 18.00 h Wednesday 20 March 2024, 09.00 - 17.00 h Registration

Tuesday & Wednesday, 19/20 March 2024, 08.00 - 09.00 h

Fees

The one day ticket is available for € 690,- plus VAT, both days for € 1,380.- plus VAT. It includes participation in any track on that day and the visit of the PharmaTechnica Expo. In addition, lunch and beverages during the tracks and in breaks as well as the social event on the evening of the first congress day, 19 March is included; please mark if you would like to attend the Social Event. The fee is payable in advance after receipt

Venue

RheinMain CongressCenter (rmcc) Friedrich-Ebert-Allee 1 | 65189 Wiesbaden Phone: +49 (0) 611 1729-444

E-Mail: veranstaltungsservice-rmcc@wicm.de

Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms close to the CongressCenter. You will receive a room reservation form when you have registered for the conference. Reservation should be made directly with the hotel. Early reservation is recommended.

Registration

Via the attached reservation form, by e-mail or by fax message. Or you register online at www.gmp-compliance.org.

Presentations/Certificate

The presentations for this event will be available for you to download and print before and after the event. Please note that no printed materials will be handed out on site and that there will not be any opportunity to print the presentations on site. After the event, you will automatically receive your certificate of participation.

Conference language

The official conference language will be English.

Organisation and Contact

ECA has entrusted Concept Heidelberg with the organisation of this event. **CONCEPT HEIDELBERG** P.O.Box 10 17 64

69007 Heidelberg, Germany Phone: +49 (0) 62 21 / 84 44-0 | Fax: +49 (0) 62 21 / 84 44 34 info@concept-heidelberg.de | www.concept-heidelberg.de

For questions regarding content please contact: Dr Andreas Mangel (Operations Director) at +49 (0) 62 21 / 84 44 41, or at mangel@concept-heidelberg.de

For questions regarding organisation please contact: Mr Ronny Strohwald (Organisation Manager) at +49 (0) 62 21 / 84 44 51, or at strohwald@concept-heidelberg.de

If the bill-to-address deviates from the specifications	Reservation Form (Please complete in full)		
on the right, please fill out here:	Trends in Barrier Systems & Robotics Part of PharmaCongress 2024 19/20 March 2024, Wiesbaden, Germany Day 1 & 2 (19/20 March 2024) Day 1 (19 March 2024) Day 2 (20 March 2024)		
	Yes, I would also like to take part in the Social Event on the evening of 19 March 2024.		
	□Mr □Ms □Mx □Dr		
CONCEPT HEIDELBERG P.O. Box 101764 Fax +49 (0) 62 21/84 44 34 D-69007 Heidelberg GERMANY	First name, Surname		
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	City Zip Code		
	Country		
	Phone/Fax		
	E-Mail (please fill in)		

- If you cannot attend the conference you have two options: 1. We are happy to welcome a substitute colleague at any time. 2. If you have to cancel entirely we must charge

- 2. If you have to cancel entirely we must charge the following processing fees:

 Cancellation until 4 weeks prior to the conference 10 %,

 Cancellation until 3 weeks prior to the conference 25 %,

 Cancellation until 2 weeks prior to the conference 50 %

 Cancellation within 2 weeks prior to the conference 100 %.

 CONCEPT HEIDELBERG reserves the right to change the materials, instructors, or speakers without notice or to cancel an event if the event must be cancelled, registrants will be notified as

soon as possible and will receive a full refund of fees paid.

CONCEPT HEIDELBERG will not be responsible for discount airfare penalties or other costs incurred due to a cancellation.

Terms of payment: Payable without deductions within 10 days after receipt of invoice. Important: This is a binding registration and above fees are due in case of cancellation or non-appearance. If you cannot take part, you have to inform us in writing. The cancellation fee will then be calculated according to the point of time at which we receive your message. In case you do not appear at the event without having informed us, you will have to pay the full registration fee, even if you have not made the payment yet. Only after we have received

your payment, you are entitled to participate in the conference (receipt of payment will not be confirmed)! (As of July 2022). German law shall apply. Court of jurisdiction is Heidelberg. Privacy Policy: By registering for this event, I accept the processing of my Personal Data. Concept Heidelberg will use my data for the processing of this order, for which I hereby declare to agree that my personal data is stored and processed. Concept Heidelberg will only send me information in relation with this order or similar ones. My personal data will not be disclosed to third parties (see also the privacy policy at http://www.gmp-compliance.org/eca_privacy. html). I note that I can ask for the modification, correction or deletion of my data at any time via the contact form on this website.