



**2019** PHARMA CONGRESS  
**17** Production & Technology  
 DÜSSELDORF, 9 - 10 APRIL 2019



# Pharma Congress

## Production & Technology

Düsseldorf/Neuss, 9/10 April 2019




### With the Speakers:

 **Ib Alstrup**  
 Danish Medicines Agency  
 Medicines Inspector

 **Dr Abdulaziz Awad**  
 Saudi Biotechnology Manufacturing Company  
 Board Member & CEO

 **Klaus Eichmüller**  
 Wolnzach, c/o Regional Council Darmstadt  
 Head of Inspectorate

 **Sandrine Favre**  
 Octapharma  
 Head Corporate Pharmaceutical Production

 **Dr Friedrich Haefe**  
 Boehringer Ingelheim Pharma  
 VP BP Fill & Finish Germany

 **Dr Philip Hörsch**  
 Vetter Pharma-Fertigung  
 Director QA

 **Dr Gerald Kindermann**  
 F. Hoffmann la-Roche  
 QA and GMP Compliance Lead

 **Dr Daniel Müller**  
 Local Authority of Baden-Württemberg  
 Head of GMP Inspectorate

 **Thomas Page**  
 Fujifilm Diosynth Biotechnologies  
 VP, Engineering & Asset Development

 **Gabriela Schallmeiner**  
 Austrian QP Association  
 Deputy Chair

 **Dr Arno Terhechte**  
 Regional Council Münster  
 GMP Inspector

and many others



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 HEIDELBERG**

Pharmaceutical Quality  
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**Overview**

Benefit from your colleagues' experience and from the direct information exchange at the Pharma Congress 2019 again – the guiding theme on 9/10 April 2019 will be once more "users report for users". And as before speakers will report about the challenges in their everyday business and about possible solution approaches. So, choose from presentations in five conferences.



**Key Notes**

**Pharma-Kongress – Overview**

**Key Note 9 April**



**Pharmaceutical industry in digital change**

Thomas Reiner, CEO, Berndt+Partner

- Changes in the value chains
- Opportunities and risks for production processes
- What can and will change for packaging?
- Strategies to benefit from change

**Key Note 10 April**



**EU GMP Inspection in Sterile/Aseptic Production**

Klaus Eichmüller, Wolnzach, c/o Regional Council Darmstadt, GMP Inspectorate, Germany  
 Head of Inspectorate

- Main focus areas of inspections
- Frequently detected findings
- Data Integrity issues – where are possible weak spots?
- Possible new areas due to the revision of Annex 1 and further regulatory changes

Conferences	One Day Ticket € 690,-	9 April 9:00–17:45 h	10 April 9:00–17:00 h
<b>ECA – Modern Sterile Operations</b>			
100% Control of Parenterals		✓	
Sterile Filtration			✓
<b>ECA – Aseptic Processing</b>			
Current Aseptic Technologies		✓	
RABS & Isolators			✓
<b>ECA – Data Integrity</b>			
Data Integrity		✓	✓
<b>ECA Modern Qualification</b>			
Modern Qualification			✓
Exhibition PharmaTechnica		✓	✓



**Steering Committee**



**Dr Friedrich Haefe**  
 Boehringer Ingelheim  
 Vice President BP Fill & Finish Germany



**Roland Szymoniak**  
 Sanofi  
 Manager Industrial Engineering & Transfer



**Dr Rainer Schmidt**  
 F.Hoffmann-La Roche  
 Site Manager Kaiseraugst



**Gert Moelgaard**  
 ECA Validation Interest Group  
 Consultant, Moelgaard Consulting



**Jörg Zimmermann**  
 Vetter Pharma-Fertigung  
 Vice President Vetter Development Service



**Frank Studt**  
 Chemengineering Business Design  
 Managing Director



**Dr Johannes Krämer**  
 CSL Behring  
 Manager Engineering



**Günter Körblein**  
 Tetragon Consulting  
 Senior Consultant



**Prof Franz Maier**  
 Former Manager Technology, Nycomed

**Exhibition**

Parallel to the conferences on 9 and 10 April there will be the large exhibition PharmaTechnica. Take advantage of this opportunity to get to know new technologies, products and services at the stands of the exhibitors. For that purpose there will be Live Demos integrated in some of the conferences again. These Live Demos will be conducted in the exhibition area. That way you will not only be introduced to technology in the conferences, but you will be able to touch and experience it. Get to know new concepts and technology – directly from leading companies. You will find the Live Demos in this programme under the respective conferences as well as on the Congress Website at [www.pharma-congress.com](http://www.pharma-congress.com). There you will also find the daily updated exhibitor list.

**Fees**

Charges for the one day tickets are € 690,- plus VAT (due to the special fees for the congress, ECA membership discounts are not applicable). These tickets allow you to attend any conference offered that day (you can also switch between the conferences any time). They include a lunch and beverages during the conferences and in breaks as well as the social event on the evening of the first congress day. Charges are payable after receipt of invoice. *(Please also see the information below)*

**Location**

Crowne Plaza (former Swissôtel) Congress Centrum Düsseldorf / Neuss  
Rheinallee 1  
41460 Neuss  
Tel.: +49 (0) 2131 77 - 00  
Fax: +49 (0) 2131 77 - 1367  
[emailus.neu02@gchhotelgroup.com](mailto:emailus.neu02@gchhotelgroup.com)

**Social Event**

The Social Event at the Pharma Congress is already a tradition, and is networking and relaxation at the same time.

On the evening of the first congress day, on 9 April 2019, all congress delegates and speakers are invited to a „Get together“ in the Congress Center. Take advantage of this opportunity for an information exchange and enjoy the laid-back atmosphere and the entertainment programme.

**Contacts****For questions regarding content:****ECA Modern Sterile Operations – 100% Control of Parenterals:**

Dr Robert Eicher (Fachbereichsleiter), Tel. +49 (0)6221/84 44 12,  
E-Mail: [eicher@concept-heidelberg.de](mailto:eicher@concept-heidelberg.de).

**ECA Modern Sterile Operations – Sterile Filtration / ECA Aseptic Processing / ECA Data Integrity:**

Dr Andreas Mangel (Fachbereichsleiter), Tel. +49 (0)6221/84 44 41,  
E-Mail: [mangel@concept-heidelberg.de](mailto:mangel@concept-heidelberg.de).

**For questions regarding reservation, hotel, organisation, exhibition etc.:**

Ronny Strohwald (Organisation Manager), Tel. +49 (0)6221/84 44 51, E-Mail: [strohwald@concept-heidelberg.de](mailto:strohwald@concept-heidelberg.de).  
Detlef Benesch (Organisation Manager), Tel. +49 (0)6221/84 44 45, E-Mail: [benesch@concept-heidelberg.de](mailto:benesch@concept-heidelberg.de).

**Organiser**

CONCEPT HEIDELBERG – on behalf of the ECA Academy  
P.O. Box 10 17 64  
D-69007 Heidelberg  
Phone +49 (0)6221/84 44-0  
Fax +49 (0)6221/84 44 34  
E-Mail: [info@concept-heidelberg.de](mailto:info@concept-heidelberg.de)  
[www.gmp-navigator.com](http://www.gmp-navigator.com)

**PLEASE NOTE**

**Exhibition Visit:** The exhibition will also be open to visitors on both days who are not attending the Congress. Please be aware, though, that you will need to register in advance of the free of charge visit. The visitor registration will most likely be available on the website starting in early April 2019. The visit of the exhibition does not entitle you to also attend any of the conferences.

**Congress Materials:** Please note that there will not be any print-outs at the Congress. Instead you will receive all presentations prior to the Congress as Downloads. All Congress delegates (excluding exhibition visitors) will also receive the presentations on a USB stick at the registration center.

**Room Reservations:** There will be no room reservations via Concept Heidelberg. Please book your hotel room directly with the reservation form which you will receive together with your confirmation/invoice! Charges are payable after receipt of the invoice.

## With speakers from authorities and Industry (as of March 2019)

<b>Ib Alstrup</b>	<b>Danish Medicines Agency</b> Medicines Inspector.
<b>Gabriel Anderson</b>	<b>Novartis</b> Co-lead Novartis's visual inspection expert network.
<b>Dr Abdulaziz Awad</b>	<b>Saudi Biotechnology Manufacturing Company</b> Board Member and CEO.
<b>Eva-Maria Baumgartner</b>	<b>Syntacoll</b> Validation Manager.
<b>Stefan Bieler</b>	<b>IDT-Biologika</b> Process engineer at IDT-Biologika, Department Filling and Freeze Drying Vaccines.
<b>Dr Berthold DÜthorn</b>	<b>Robert Bosch Packaging Technology</b> Vice-President Robert Bosch Packaging Technology.
<b>Klaus Eichmüller</b>	<b>Wolznach, c/o Regional Council Darmstadt, GMP Inspectorate, Germany</b> Head of Inspectorate.
<b>Sandrine Favre</b>	<b>Octapharma</b> Head of Corporate Pharmaceutical Production.
<b>Dr Friedrich Haefele</b>	<b>Boehringer Ingelheim Pharma</b> Head of the department Biopharma Fill & Finish Germany.
<b>Dr Martin Haerer</b>	<b>Rommelag CMO</b> Responsible for Business Development, Technology Transfer and Research and Development, and acting as QP.
<b>Dr Matthias Kahl</b>	<b>Wilco</b> Head of Development and Lab Service.
<b>Kieran Keaney</b>	<b>Abbvie Ireland</b> Senior Engineer.
<b>Alan Kelly</b>	<b>Genzyme Ireland Ltd</b> Mechanical engineer in the technical development department.
<b>Dr Gerald Kindermann</b>	<b>F. Hoffmann La-Roche</b> QA and GMP Compliance Lead.
<b>Felix Krumbein</b>	<b>Roche Diagnostics</b> Head of Inspections-Systems-Support.
<b>Dr Jean-Denis Mallet</b>	<b>ECA</b> Former head of the French Inspection Department AFSSAPS.
<b>Dr Thomas Meindl</b>	<b>Labor LS</b> Division Manager.
<b>Didier Meyer</b>	<b>DMCompliance</b> Consultant at DMCompliance.
<b>Gert Moelgaard</b>	<b>ECA Validation Interest Group</b> Moelgaard Consulting.

## With speakers from authorities and Industry (as of March 2019)

Dr Daniel Müller	<b>Local Authority of Baden-Württemberg</b> Head of GMP Inspectorate Tübingen.
Thomas Page	<b>FUJIFILM Diosynth Biotechnologies</b> Vice President, Engineering & Asset Development.
Thomas Reiner	<b>Berndt+Partner</b> CEO; Board Member World Packaging Organisation.
Doris Rottenbusch	<b>Vetter Pharma-Fertigung</b> Leading a team of experts in Development Service - Technology & Process Transfer.
Knud Ryhl	<b>Novo Nordisk</b> Senior Lead Auditor / Senior Specialist.
Prof Farshid Sadeghipour	<b>Lausanne University Hospital</b> Head of Pharmacy.
Yves Samson	<b>ECA DI &amp; IT Compliance Interest Group</b> Kereon AG, CEO & e-Compliance SME.
Matthias Schaar	<b>Novartis Pharma, Stein</b> Teamleader Qualification & Infrastructure in Microbiological Department.
Gabriela Schallmeiner	<b>Austrian QP Association</b> Deputy Chair.
Dr Ute Schleyer	<b>Vetter Pharma Fertigung</b> Project Manager, Site & Plant Development.
Stefan Schoettle	<b>Roche Diagnostics</b> Head of Informatics Pharma Manufacturing Mannheim.
Dr Arno Terhechte	<b>Regional Council Münster</b> GMP Inspector.
Patrick Vanhecke	<b>GSK Vaccines</b> Expert in Isolator and Aseptic Filling Technologies and Room decontamination process.
Dr. Melanie Zerulla-Wernitz	<b>Vetter Pharma-Fertigung</b> Team Manager, Project & Service Analytics, Analytical Service Laboratory.
Jörg Zimmermann	<b>Vetter Pharma-Fertigung</b> Vice President Development Services.



### Objectives

You will get an overview on GMP- & compendial requirements for the testing of sterile pharmaceutical products concerning container-/Closure-Integrity testing and inspection of particles: what is state-of-the-art in the pharmaceutical industry is and which technologies are available.

### Background

The 100% visual inspection of parenteral medicines, irrespective of the container type, is a requirement of the pharmacopeias. The inspection can be done manually or automatically – the latter being increasingly used. This is different for the testing of the integrity of the container/closure system. Here a 100% testing is only officially required for containers closed by fusion, e.g. ampoules. But, as the risk of unsterile containers due to cracks or leakages is high for the patient, some pharmaceutical companies also increasingly test the whole batch for integrity. This 100% testing is done with automated systems with different techniques, de-

pendent on the type of container.

In this conference we will discuss:

- What are the authorities' actual/future requirements?
- Which primarily automated testing techniques are available?
- What will change due to the revision of EU Annex 1?
- What are the requirements for Data Integrity for the automated testing systems?

### Moderator

Jörg Zimmermann, *Vetter Pharma Fertigung*

### Target Audience

This conference is directed at specialists from the areas engineering, production and QA dealing with the implementation and operation of automated systems for the CCI testing or visual inspection of sterile medicinal products.

## Programme



**Thomas Reiner**  
*Berndt+Partner*

### Pharmaceutical industry in digital change



**Pharmacopeial- and GMP-requirements for visual Inspection**  
**Dr Daniel Müller**, *Local Authority of Baden-Württemberg*

- Manual inspection (training, working place, qualification)
- Automated inspection (system validation and re-validation)
- Test sets (usage, storage, quality aspects)
- AQL testing as part of batch release
- Handling of rejects and ejects



**Pharmacopeial- and GMP-requirements for Container-/ Closure-Integrity Testing**  
**Dr Daniel Müller**, *Local Authority of Baden-Württemberg*

- Test of ampoules
- Test of vials and syringes, 100% vs sampling
- Test methods: blue dye test and others
- Inspection findings



**Data Integrity & Audit Trail Review for Visual Inspection Systems**  
**Felix Krumbein**, *Roche Diagnostics*

- General regulatory requirements regarding data integrity
- Complete, consistent, and accurate data in the context of Visual Inspection Systems
- Data integrity starts with a proper user access management
- Batch-wise modification of product-related configuration parameters
- Audit Trail review concepts



**Case Study Novartis: Fully automated Inspection Validation**  
**Gabriel Anderson**, *Novartis*

- New machine qualification
- Operational qualification
  - Particle defect detection
  - Physical defect detection
  - Leak detection equipment
- Performance qualification
  - Running conditions
  - Sampling plan



**Case Study Rommelag CMO – 100% inline CCIT Testing and Inspection of BFS ampoules**  
**Dr Martin Haerer**, *Rommelag*



**Dr Matthias Kahl**, *Wilco*

- Project overview
- Technical & regulatory requirements
- Machine concept
- Sample preparation
- Qualification and Validation
- Operation of the inspection system



In the practical part of the conference, suppliers will show you different components and solutions. You will come in contact with the equipment and you have the chance to discuss your questions immediately with technology experts.

- **Head Space Analysis for difficult to inspect containers**  
*Wilco*
- **Container-/Closure Integrity Testing with Nitrogen**  
*Lippok & Wolf*
- **Pulsed X-ray particle inspection**  
*Heuft*

## Objectives

- You will be informed on new regulatory and technological developments in sterile filtration
- You learn the influence of the Annex 1 revision to sterile filtration and how to interpret the requirements to PUPSIT (Pre Use Post Sterilisation Integrity Test)
- You will get case studies from pharmaceutical companies
- Live Demos will show you how technologies perform

## Background

Sterile Filtration is especially in the aseptic manufacture of medicinal products still the sterilisation method no 1 choice. The first draft of the Annex 1 revision defines comprehensive requirements with regard to the sterilisation. In light of these requirements the conference focuses on their practical implementation in pharmaceutical operations- and will also cover the controversially discussed question on pre-use post sterilisation integrity test.

## Programme



**Klaus Eichmüller**  
Wolnzach, c/o Regional Council Darmstadt,  
GMP Inspectorate, Germany

### EU GMP Inspection in Sterile/Aseptic Production



**Sterile Filtration - GMP inspector's view**  
Dr. Daniel Müller, Regierungspräsidium Tübingen

- Sterilisation methods & sterile filtration
- Regulatory documents on sterile filtration
- Draft Annex 1: requirements for sterile filtration process
- State of the art equipment & processing
- Experience from GMP inspections



In the practical part of the conference, suppliers will show you different components and solutions. You will come in contact with the equipment and you have the chance to discuss your questions immediately with technology experts.

- **Adoption of a Single-Use Sterile Filtration Assembly**  
Merck Chemicals
- **Sterilizing-grade Filtration in Biopharmaceutical Applications**  
Pall Biotech



**Case study: Inline-Filtration using peristaltic pump: Implementation of a pressure control**  
Doris Rottenbusch, Vetter Pharma-Fertigung

- Initial request from FDA
- Technical concept phase: market research and laboratory studies
- Implementation of a prototype set-up on a filling line
- Practical experience
- Outlook



Bild: Pall

## Moderator

Jörg Zimmermann, Vetter Pharma Fertigung

## Target Audience

The event is directed at specialists from the pharmaceutical industry as well as from suppliers who have to deal with sterile filtration technologies in clean in their daily practice.



**Sterile filtration – microbiological filter validation**  
Matthias Schaar, Novartis Pharma

- Requirements
- Initiating a scale down study
- How is the correlation to filter integrity testing



**Sterile filtration in aseptic processing using SUT**  
Alan Kelly, Genzyme

- Approach to qualification of SUT for Sterile filtration in an aseptic processing environment from design to commercial use.
- Mock-ups
- Location of bacterial retention filters inside or outside the isolator?
- Integrity testing (PUPSIT) with respect to Annex 1
- Handling of SUT sets
- Pre-sterilised – gamma irradiation of SUT sets



**Some "failing in operation" antimicrobial filtration systems**  
Dr. Jean-Denis Mallet

- Type of products concerned and their relative risks
- Some (sterile) antimicrobial filtration systems
- Position of the filter(s) to the filling equipment
- "Failing in operation" filter(s)
- Investigation: outcome of the product?



Bild: Merck

### Objectives

Reasons to attend this conference:

- You will be informed on new regulatory and technological developments in sterile / aseptic manufacture
- You learn how current GMP and production requirements have to be implemented technologically in sterile manufacture
- You will get case studies from pharmaceutical companies
- Live Demos will show you how technologies perform

### Background

GMP regulations only define general requirements for equipment – it has to be suitable for the intended work process, easy to clean and without any negative influence on the product quality. Questions like how these general requirements have to be fulfilled concretely in sterile manufacture, which points call for special attention and which new technologies

will be used in the future are in this conference's focus. Speakers from the pharmaceutical industry and from planning and engineering companies deal with pivotal developments in the field of sterile manufacture.

### Moderator

Gert Moelgaard, *ECA Validation Interest Group*

### Target Audience

The event is directed at specialists from the pharmaceutical industry as well as at engineers and planners who have to deal with current aseptic technologies in clean areas in their daily practice.

It particularly addresses the departments:

- Production
- Quality assurance
- Engineering / Technology

## Programme



Thomas Reiner  
*Berndt+Partner*

### Pharmaceutical industry in digital change



### Innovative therapeutic options – a challenge to aseptic technologies

Gert Moelgaard, *ECA Validation Interest Group*

The landscape of pharmaceutical products and production is changing fast at the moment. The next generation of treatments becomes a reality and raise significant challenges to production, facilities and technologies of the future. New therapies are making significant progress and the pharmaceutical manufacturing is starting to adapt to the challenges.



### The evolution of current aseptic technologies

Dr. Friedrich Haeefe, *Boehringer Ingelheim Pharma*

Today's aseptic production and regulations holds many interesting possibilities, mainly due to new process improvements such as bio-tech titer improvements, single use technology and flexible aseptic production technologies and 100% inline controls. The new regulations on EU Annex 1 on Sterile Products and Annex 17 on Real Time Release Testing and Parametric Release gives new challenges and opportunities for practical production.



### Delivery of a Flexible Aseptic Filling Facility to a CMO

Dr. Abdulaziz Awad, *Saudi Biotechnology Manufacturing Company*

- Platforms Modular Aseptic Solutions (MAS) for new facility design
- Flexibility in design options
- Off-site construction
- Flexibility of filling in pre-sterilized containers
- Flexibility formulating in different batch sizes
- Flexibility of adding lyophilization of mAb products



In the practical part of the conference, suppliers will show you different components and solutions. You will come in contact with the equipment and you have the chance to discuss your questions immediately with technology experts.

- **Bosch PreVAS Single-Use Dosing System**  
PreVAS means: - PreValidated / - PreAssembled / PreSterilized  
Robert Bosch

- Sterilizer validation / qualification made easy  
Ellab
- Fully automatic and integrated particle detection system for filters in hot air sterilization tunnels and LAF units  
Bausch + Ströbel
- Virtual Reality in a Robotic Nest Filling Line with Tub Decontamination System  
Steriline



### Case study Vetter Pharma-Fertigung: Next steps in the development of V-CRT®; Analytical monitoring of H<sub>2</sub>O<sub>2</sub> decontamination processes

Dr. Ute Schleyer & Dr. Melanie Zérulla-Wernitz,  
*Vetter Pharma-Fertigung*

- Within the Vetter Cleanroom Technology (V-CRT®) concept a batch specific H<sub>2</sub>O<sub>2</sub> decontamination of the entire cleanroom mitigates the risk of microbial contamination
- To mitigate the risk of the decontamination agent on the drug product, an encompassing H<sub>2</sub>O<sub>2</sub> monitoring system was established
- Whereas H<sub>2</sub>O<sub>2</sub> is continuously monitored in the cleanroom, analysis of filled syringes, cartridges and vials is carried out upon customer's request
- Therefore, the advanced technology together with the comprehensive analytical approach reaches quality and safety standards well exceeding cGMP requirements



### Substitution of formaldehyde room decontamination by hydrogen peroxide and acceleration of decontamination process by application of innovative catalyst technology for effective decomposition of hydrogen peroxide

Stefan Bieler, *IDT-Biologika*  
Dureid Qazzazie, *Skan*

- Required performance of the decontamination process (kill of bacterial and viral bio indicators)
- Comparison of the different decontamination processes regarding room and HVAC requirements
- Implementation of catalysts in different room and HCAV scenarios
- Acceleration of degassing process with catalyst (presenting tests results)
- Principle of heterogeneous H<sub>2</sub>O<sub>2</sub> catalysis



## 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 Barrier Systems.
- You will discuss the current state of the art and new technological developments in Barrier Systems technology.
- You will get to know first hand the new EU-GMP Annex 1 draft requirements on Isolators and RABS
- 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 more strict 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.

This conference will focus on current questions of barrier systems 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.

## Moderator

Didier Meyer, *DMCompliance*

## Target Audience

This event is directed at decision-makers from pharmaceutical production, 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.

## Programme



**Klaus Eichmüller**

*Wolnzach, c/o Regional Council Darmstadt,  
GMP Inspectorate, Germany*

### EU GMP Inspection in Sterile/Aseptic Production



### Closure Processing System for rubber stoppers: key aspects to consider to ensure process robustness in routine production

*Sandrine Favre, Octapharma*

- Introduction into Octapharma project
- CPS design phase
- Cycle development and process characterization
- Learnings



### Case study GSK Vaccines: Isolator decontamination by H<sub>2</sub>O<sub>2</sub> nebulization process

*Patrick Vanhecke, GSK Vaccines*

- VHP process versus H<sub>2</sub>O<sub>2</sub> nebulization process
- Cycle development for nebulization process
- Pros and Cons for both processes
- Manufacturing applications



### Key considerations for gene therapy manufacturing from early stage to fill-finish operations

*Thomas Page, Fujifilm Diosynth Biotechnologies  
Ross Gold, Vanrx Pharmsystems*

- The importance of flexibility and high containment requirements;
- Applications of closed systems in designing the manufacturing process
- Differences in facility design, qualification and validation for gloveless isolators versus conventional isolators and
- Treating facilities as pieces of equipment for advanced therapy manufacturing



In the practical part of the conference, suppliers will show you different components and solutions. You will come in contact with the equipment and you have the chance to discuss your questions immediately with technology experts.

### DECOpulse® – The H<sub>2</sub>O<sub>2</sub> bio-decontamination system with atomization-driven evaporation

*Metall + Plastics*

### Frequently Asked Questions about Ensuring Integrity in Containment & Barrier Systems

*MK Versuchsanlagen und Laborbedarf*



### Aseptic meets high-potent – setting the stage for next level ADC processing

*Kieran Keaney, Abbvie Ireland  
Matthias Angelmaier, Bosch*

- General introduction into customer site
- Introduction into project scope
- Dedicated line solutions and technology
- What have been the major challenges and highlights from a client's perspective



### The specific case of use of isolators and biosafety cabinets type III in Hospital Pharmacy

*Prof. Farshid Sadeghipour, Lausanne University Hospital*

- Isolators for Non-Toxic Aseptic preparations
- Isolators and BSC an for Cytostatic Injectable preparations
- Sterility testing
- Perspectives with ATMP
- Perspectives with automation



Bild: Sken



Bild: Bosch

## Objective

- You will get a deeper understanding what European inspectors expect from pharmaceutical companies in regard to Data Integrity
- You will learn how to prepare your company for an successful inspection in regard to Data Integrity
- You will learn how to investigate Data Integrity issues in your company especially in manufacturing and engineering
- You will discuss supplier's responsibility in Data Integrity compliance

## Background

Even though Data Integrity has been one of the basic GMP principles for years, multiple Data Integrity citations have been reported by FDA und European inspectors during the last 3 years. Many US Warning Letters and EU Non-Compliance Reports deal with serious Data Integrity violations. Data Integrity questions have been and will continue be the focus of many GMP inspections.

As a consequence international authorities – FDA, EMA, PIC/S, WHO, MHRA - published (draft) documents to describe the regulatory expectations of Data Integrity.

Although all guidelines are not intended to impose additional regulatory burden to the regulated companies, a lot of uncertainty predominates the pharmaceutical industry how to implement these requirements into the daily business and how to integrate supplier's experience.

## Programme



**Thomas Reiner**  
*Berndt+Partner*

### Pharmaceutical industry in digital change



### Data Integrity in manufacturing and engineering environments - Another source of weaknesses or Compliance by Design?

*Yves Samson, ECA DI & IT Compliance Interest Group*

- Identifying applicable data integrity requirements
- Design review: how to promote and to secure compliant design
  - Product, process, data, system
- Securing data integrity during the engineering and commissioning activities
- Necessity to rely on secure and robust IT infrastructure



### Requirements in Data Integrity

*Dr. Gerald Kindermann, F. Hoffmann La-Roche*

- Data Integrity – Data species & ALCOA principles
- Hot topic - Myths Critical factors for DI program
- DI problems
- Case study DI in the manufacturing area System / data mgmt.
- User set up



### Inspecting DI in Manufacturing – what does an inspector expect?

*Dr. Arno Terhechte, Bezirksregierung Münster*

- Regulatory Update (Chapter 4, Annex 11, PIC/S Guidance Good Practices for Data Management and Integrity)
- Definitions of Data, Raw Data, original data in Manufacturing
  - Aggregation of Data
  - Paper Records versus Continuous Monitoring / E-Records
- Upgrade / Modernizing the QMS with regard to Data Integrity
- Self Inspection, Assessment, Data Flow Analysis
- Data Integrity with regard to Outsourced Activities
- Data Integrity during Inspection / Inspection Findings



### Data Integrity from a QP's Perspective

*Gabriela Schallmeiner, Austrian QP Association*

- The Regulatory Pillar
  - regulatory baseline on data integrity
  - regulatory Impact on the Qualified Person (QP)
- The Qualified Person's "Data" Challenge
  - Quality Management (QM) System Fundamentales
  - How GMP documents/data are related
- Make Data Integrity Integral to a Qualified Person's Daily Work
  - Data Integrity Impact on the QP
  - What gives a QP the confidence to certify a batch



### How QA can check for data integrity in electronic systems

*Knud Ryhl, Novo Nordisk*

- A practical approach to data integrity
- Examples of where to look for applied data integrity
- How to approach data integrity when you have no clue of where to start
- Computer systems are manageable



### Requirements for the Audit Trail and the Audit Trail Review – from industry's point of view

*Eberhard Kwiatkowski, PharmAdvantageIT*

## Moderator

Yves Samson, *Kereon & CEO, e-Compliance SME*



## Target Audience

- Managers and staff from Manufacturing, QA and Engineering of pharmaceutical companies and suppliers
- Auditors (internal and external) responsible for performing self-inspections or external audits and needing to understand and assess data integrity

## Programme



**Klaus Eichmüller**

*Wolnzach, c/o Regional Council Darmstadt,  
GMP Inspectorate, Germany*

**EU GMP Inspection in Sterile/Aseptic Production**



**Audit trail functionality and review – expectations from an inspector**

*Ib Alstrup, Danish Medicines Agency*

- Good documentation practice
- Qualities of the audit trail functionality
- Qualification of the audit trail functionality
- Audit trail review



**Data Integrity requirements to technical suppliers – Expectations to equipment suppliers and engineering service providers**

*Yves Samson, ECA DI & IT Compliance Interest Group*

- Regulatory management: knowing and understanding regulatory requirements
- Configurability to support customer process requirements
- System design expectations
- Cybersecurity requirements and constraints for equipment
- Effective support of review activities



**Expectations of an inspector on a training system with respect to data management**

*Klaus Eichmüller, Wolnzach, c/o Regierungspräsidium Darmstadt, GMP Inspectorate, Germany*

- Introduction
- Expectations on the system
- Expectations not met - examples



**A Paperless Lab, a Good Idea for Data Integrity, Risk Minimization and Lean Management?**

*Dr. Thomas Meindl, Labor LS*

- Data integrity by avoidance of human errors by use of electronic data evaluation and documentation
- Minimization of contamination risk due to contaminated paper.
- Optimization and reduction of errors by implementation of electronic workflows
- Paper management: avoidance of excessive use of prints in order to save space in physical archives



**Data Integrity Assessment Manufacturing: Preparation, Conducting and Remediation Activities**

*Stefan Schoettle, Roche Diagnostics*

- Authorities focus
- Corporate Guidelines
- Assessment Project
- Best practises
- Challenges

## Objectives

Pharmaceutical professionals and suppliers of equipment, systems and engineering to the pharmaceutical industry will get an overview of the "Modern Qualification" approach and the templates and examples for use in projects in the future. The conference includes

- User Requirement Specifications
- Critical Aspects of manufacturing systems
- GEP and its influence to leverage qualification activities
- Cost-effective cooperation between suppliers and their pharmaceutical customers

## Background

For pharmaceutical companies and suppliers to the pharmaceutical industry a good partnership on Testing, Qualification and Validation is increasingly important.

Project time and cost can be saved if the pharmaceutical requirements on Good Engineering Practices, Qualification and Validation are well known. Therefore ECA has developed a Good Practice Guide for "Modern Qualification" - a guide to effective qualification based on Customer-Supplier partnership.

Qualification and validation have been mandatory activities for many years in the pharmaceutical industry. But new international regulations based on quality risk management principles can enable a better and more cost-effective approach to design, testing and documentation of supplier activities - in partnership with pharmaceutical customers.

**You will get a free copy of ECA Good Practice Guide: "Modern Qualification – A guide to cost effective qualification based on Customer-Supplier Partnership."**

## Moderator

Gert Moelgaard, *ECA Validation Interest Group*

## Target Audience

Managers from the pharmaceutical industry and especially their suppliers of pharmaceutical equipment and services who may be influenced by the Annex 15 revision and FDA Process Validation Guidance regarding Qualification/Verification and Process Validation activities.

## Programme



**Klaus Eichmüller**  
*Wolnzach, c/o Regierungspräsidium  
Darmstadt, GMP Inspectorate, Germany*

### EU GMP Inspection in Sterile/Aseptic Production



**Welcome and introduction to ECA Modern Qualification Guide**  
*Gert Moelgaard, ECA Validation Interest Group*

- ECA's Modern Qualification Guide
- Good cooperation between suppliers and customers - what works?
- What can a supplier do to enable cost-effective qualification projects?
- Trends in Qualification and Validation



**Integrated Qualification – Customer Supplier Collaboration as outlined in the new ECA Guideline**  
*Dr. Berthold Dühorn, ECA Validation Interest Group*

- Risk Assessment and Risk Management
- Specifications – task for both contractual partners
- Test documentation and execution
- Importance of Qualification Project Management
- Collaboration spirit as key success factor



**European requirements for Qualification and Validation**  
*Klaus Eichmüller, Wolnzach, c/o Regierungspräsidium  
Darmstadt, GMP Inspectorate, Germany*

- Qualification and validation requirements in EU Annex 15
- The importance of good cooperation between customers and suppliers
- Qualification observations from an inspector's perspective
- Qualification and Validation in the future ?



**Open discussion of ECA's Modern Qualification Guide and feedback to the next version**  
*Gert Moelgaard, ECA Validation Interest Group*

- The development of the Modern Qualification Guide
- Plans for a new Integrated Qualification and Validation guide
- ECA Conference with launch of the next version
- Feedback



**Using ECA's Modern Qualification Guide as a pharmaceutical customer**  
*Eva-Maria Baumgartner, Syntacoll*

- International standard, common language with suppliers
- Using the best ideas in our company
- Categories of equipment: benefit during qualification
- What would we expect from our suppliers?
- Integrated Qualification and Validation from a pharma perspective





## Pharma Congress App



Just download the Pharma Congress app and use the numerous functions even before the congress. Please note that some of the functions require an Internet connection.

### Programme

Get detailed information about each programme and create your personal agenda with speakers and lectures that you are interested in. To download the lectures, you need an internet connection once.

### Speakers

Are you curious about the main speakers? In the app you will find all the details! Check out the speakers and learn more about their sessions and their topics.

### Exhibitors, Partners & Sponsors

Learn more about the nearly 90 exhibitors at PharmaTechnica and the sponsors of the Pharma Congress 2019.

### Notifications

Thanks to the push-up messages, you will not miss anything! Always get the latest news and updates on the event directly on your smartphone or tablet (requires internet connection).

### Feedback on lectures and speakers

Did you particularly like a lecture or speaker? Then rate it or her/him in the event app! This is the only way to assess which topics & other aspects of the congress were of particular interest to you.

### Surveys

Tell us what you think about the Pharma Congress 2019. Your feedback will help us make future events better (requires Internet connection).

The **Pharma Congress 2019 App** can be found from end of March in the stores:



## Lottery

As every year there is also a lottery this year – and again with various interesting prizes. So you may want to participate – it's worth it! All you have to do is to have 10 exhibitors confirm your visit at their stand by signature and stamp on the lottery pass. Then drop the completed pass at the congress registration desk and you'll participate. Lottery passes are available at the registration. Please note: The winner will be drawn and notified after the Congress.



## Live Demos

The Live Demos integrated at some conferences in 2014 for the first time have made the Pharma Congress even more practical. The aim of these demos is not only to present technology at the conferences, but also to make it a real experience. That's why this year you'll find Live Demos as part of individual conferences as well as other "free" Demos. In the agenda on the following pages you will find an overview of all presentations in which the leading companies will demonstrate their latest products and services.








Live Demos






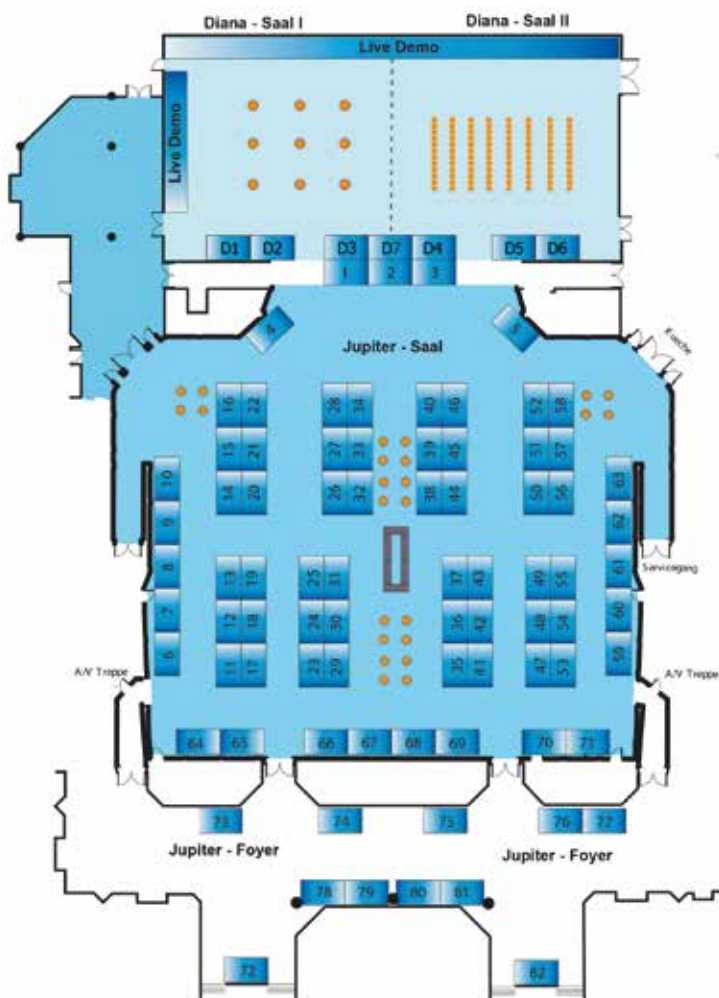
Time	ECA – Modern Sterile Operations 100% Controf of Parenterals	ECA – Aseptio Current Aseptio
9:00 h		
9:15 h		
9:30 h		Pharmaceutical Indu Thomas Reiner, CE
9:45 h		
10:00 h		
10:15 h		Br
10:30 h		
10:45 h	Pharmacopeial- and GMP-requirements for visual inspection <i>Dr Daniel Müller, Local Authority of Baden-Württemberg</i>	Innovative therapeutic options – a challenge to aseptic <i>Gert Moelgaard, ECA Validation Interest Group</i>
11:00 h		
11:15 h		
11:30 h	Pharmacopeial- and GMP-requirements for Container-/Closure-Integrity testing <i>Dr Daniel Müller, Local Authority of Baden-Württemberg</i>	The evolution of current aseptic technologies <i>Dr Friedrich Haefele, Boehringer Ingelheim Pharma</i>
11:45 h		
12:00 h		
12:15 h		Lunch
12:30 h		
12:45 h		Live Dem
13:00 h		Live Demo Ortn
13:15 h		Live Demo analy
13:30 h		
13:45 h	Data Integrity & Audit Trail Review for Visual Inspection Systems <i>Felix Krumbein, Roche Diagnostics</i>	Delivery of a Flexible Aseptic Filling Facility to a CMO <i>Dr Abdulaziz Awad, Saudi Biotechnology Manufacturing Compan</i>
14:00 h		
14:15 h		Bosch PreVAS Single-Use Dosing System – PreVAS mea PreSterilized – Bosch
14:30 h	Case Study Novartis: Fully automated inspection validation <i>Gabriel Anderson, Novartis</i>	Sterilizer validation / qualification made easy <i>Ellab</i>
14:45 h		Fully automatic and integrated particle detection system <i>Bausch + Ströbel</i>
15:00 h		Virtual Reality in a Robotic Nest Filling Line with Tub Decontaminat <i>Steriline</i>
15:15 h		
15:30 h		Br
15:45 h		
16:00 h	Case Study Rommelag CMO – 100% inline CCIT Testing and Inspection of BFS ampoules <i>Dr Martin Haerer, Rommelag</i> <i>Dr Matthias Kahl, Wilco</i>	Case study Vetter Pharma-Fertigung: Next steps in the decontamination processes <i>Dr Ute Schleyer &amp; Dr Melanie Zerulla-Wernitz, Vetter Pharma-Fertig</i>
16:15 h		
16:30 h	Head Space Analysis for difficult to inspect containers <i>Wilco</i>	Substitution of formaldehyde room decontamination b nation process by application of innovative catalyst tec peroxide <i>Stefan Bieler, IDT-Biologika</i> <i>Dureid Qazzazie, Skan</i>
16:45 h	Container-/Closure Integrity Testing with Nitrogen <i>Lippok &amp; Wolf</i>	
17:00 h	Pulsed X-ray particle inspection <i>HEUFT</i>	
17:15 h		
17:30 h	Discussion	Discussion
18:00 h		Social Event for Congress Dele































Technologies c Technologies	ECA – Data Integrity	Time
Industry in digital change CO, Berndt+Partner		9:00 h
		9:15 h
		9:30 h
		9:45 h
Break		10:00 h
		10:15 h
c technologies	Data Integrity in manufacturing and engineering environments - Another source of weaknesses or Compliance by Design? <i>Yves Samson, ECA DI &amp; IT Compliance Interest Group</i>	10:30 h
		10:45 h
		11:00 h
	Requirements in Data Integrity <i>Dr Gerald Kindermann, F. Hoffmann La-Roche</i>	11:15 h
		11:30 h
		11:45 h
n Break		12:00 h
		12:15 h
		12:30 h
no FASTEC		12:45 h
r Reinraumtechnik		13:00 h
rticon instruments		13:15 h
y	Inspecting DI in Manufacturing – what does an inspector expect? <i>Dr Arno Terhechte, Regional Council Münster</i>	13:30 h
		13:45 h
		14:00 h
ns: - PreValidated / - PreAssembled /		14:15 h
	Data Integrity from a QP's Perspective <i>Gabriela Schallmeiner, Austrian QP Association</i>	14:30 h
n for filters in hot air sterilization tunnels and LAF units		14:45 h
tion System		15:00 h
Break		15:15 h
		15:30 h
development of V-CRT®; Analytical monitoring of H <sub>2</sub> O <sub>2</sub> gung	How QA can check for data integrity in electronic systems <i>Knud Ryhl, Novo Nordisk</i>	15:45 h
		16:00 h
y hydrogen peroxide and acceleration of decontami- nology for effective decomposition of hydrogen	IRequirements for the Audit Trail and the Audit Trail Review – from industry's point of view <i>Eberhard Kwiatkowski, PharmAdvantageIT</i>	16:15 h
		16:30 h
		16:45 h
	Discussion	17:00 h
		17:15 h
legates, Speakers and Exhibitors		17:30 h
		18:00 h

Time	ECA – Modern Sterile Operations Sterile Filtration	ECA – Aseptic Processing RABS & Isolators
9:00 h		
9:15 h		 <p>EU GMP Inspection in St Klaus Eichmüller, Wolnzach, c/o Regional Co</p>
9:30 h		
9:45 h		
10:00 h		Br
10:15 h		
10:30 h	Sterile Filtration - GMP inspector's view <i>Dr Daniel Müller, Local Authority of Baden-Württemberg</i>	Closure Processing System for rubber stoppers: key aspects to consider to ensure process robustness in routine production <i>Sandrine Favre, Octapharma</i>
10:45 h		
11:00 h	Adoption of a Single-Use Sterile Filtration Assembly <i>Merck Chemicals</i>	 <p>Case study GSK Vaccines: Isolator decontamination by H<sub>2</sub>O<sub>2</sub> nebulization process <i>Patrick Vanhecke, GSK Vaccines</i></p>
11:15 h		
11:30 h	Sterilizing-grade Filtration in Biopharmaceutical Applications <i>Pall Biotech</i>	
11:45 h		
12:00 h		Lunch
12:15 h		Live Demo
12:30 h		Live Demo
12:45 h		Live Demo
13:00 h		
13:15 h	Case study: Inline-Filtration using peristaltic pump: Implementation of a pressure control <i>Doris Rottenbusch, Vetter Pharma-Fertigung</i>	Key considerations for gene therapy manufacturing from early stage to fill-finish operations <i>Thomas Page, Fujifilm Diosynth Biotechnologies</i> <i>Ross Gold, Vanrx Pharmasystems</i>
13:30 h		
13:45 h		 <p>DECOpulse® – The H<sub>2</sub>O<sub>2</sub> bio-decontamination system with atomization-driven evaporation <i>Metall + Plastics</i></p> <p>Frequently Asked Questions about Ensuring Integrity in Containment &amp; Barrier Systems <i>MK Versuchsanlagen und Laborbedarf</i></p>
14:00 h	Sterile filtration – microbiological filter validation <i>Matthias Schaar, Novartis Pharma</i>	
14:15 h		
14:30 h		
14:45 h		Br
15:00 h		
15:15 h	Sterile filtration in aseptic processing using SUT <i>Alan Kelly, Genzyme</i>	Aseptic meets high-potent – setting the stage for next level ADC processing <i>Kieran Keaney, Abbvie Ireland</i> <i>Matthias Angelmaier, Bosch</i>
15:30 h		
15:45 h		
16:00 h	Some "failing in operation" antimicrobial filtration systems <i>Dr Jean-Denis Mallet</i>	The specific case of use of isolators and biosafety cabinets type III in Hospital Pharmacy <i>Prof Farshid Sadeghipour, Lausanne University Hospital</i>
16:15 h		
16:30 h		
16:45 h	Discussion	Discussion
17:00 h		

ECA – Data Integrity	ECA – Modern Qualification	Time
Sterile/Aseptic Production		9:00 h
Regional Council Darmstadt, GMP Inspectorate, Germany		9:15 h
		9:30 h
Break		9:45 h
		10:00 h
Audit trail functionality and review – expectations from an inspector <i>Ib Alstrup, DMA</i>	Welcome and introduction to ECA Modern Qualification Guide <i>Gert Moelgaard, ECA Validation Interest Group</i>	10:15 h
		10:30 h
		10:45 h
Data Integrity requirements to technical suppliers - Expectations to equipment suppliers and engineering service providers <i>Yves Samson, ECA DI &amp; IT Compliance Interest Group</i>	European requirements for qualification and validation <i>Klaus Eichmüller, Wolnzach, c/o Regional Council Darmstadt, GMP Inspectorate, Germany</i>	11:00 h
		11:15 h
		11:30 h
Break		11:45 h
		12:00 h
Beratherm		12:15 h
no Getinge		12:30 h
– CRB Group		12:45 h
Expectations of an inspector on a training system with respect to data management <i>Klaus Eichmüller, Wolnzach, c/o Regional Council Darmstadt, GMP Inspectorate, Germany</i>	Using ECA's Modern Qualification Guide as a pharmaceutical customer <i>Eva-Maria Baumgartner, Syntacoll</i>	13:00 h
		13:15 h
		13:30 h
A Paperless Lab, a Good Idea for Data Integrity, Risk Minimization and Lean Management? <i>Dr Thomas Meindl, Labor LS</i>	Integrated Qualification – Customer Supplier Collaboration as outlined in the new ECA Guideline <i>Dr. Berthold Dütthorn, ECA Validation Interest Group</i>	13:45 h
		14:00 h
		14:15 h
Break		14:30 h
		14:45 h
Data Integrity Assessment Manufacturing: Preparation, Conducting and Remediation Activities <i>Stefan Schoettle, Roche Diagnostics</i>		15:00 h
		15:15 h
	Open discussion of ECA's Modern Qualification Guide and feedback to the next version <i>Gert Moelgaard, ECA Validation Interest Group</i>	15:30 h
		15:45 h
		16:00 h
		16:15 h
Discussion		16:30 h
		16:45 h
		17:00 h

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Agidens		11
AID Diagnostika		73
Albrecht		59
analyticon instruments		12
Atec Pharmatechnik		46
b+b Automations- und Steuerungstechnik		64
Bausch + Ströbel		1
BEKO TECHNOLOGIES		6
Beratherm		50
Bilfinger Industrietechnik Salzburg		81
BLOCK		19
Borer Chemie		34
castus		62
Chemengineering Holding		29
Chemische Fabrik Dr. Weigert		30
COMECER GROUP		18
CONCEPT GMP Engineering		49
CRB Group		31
DIOSNA Dierks & Söhne		77
Ellab		58
Fastec		56
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Franz Ziel		41
Frewitt fabrique de machines		51
GEA Group		16
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Gemü Gebr. Müller		35
Getinge		27



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