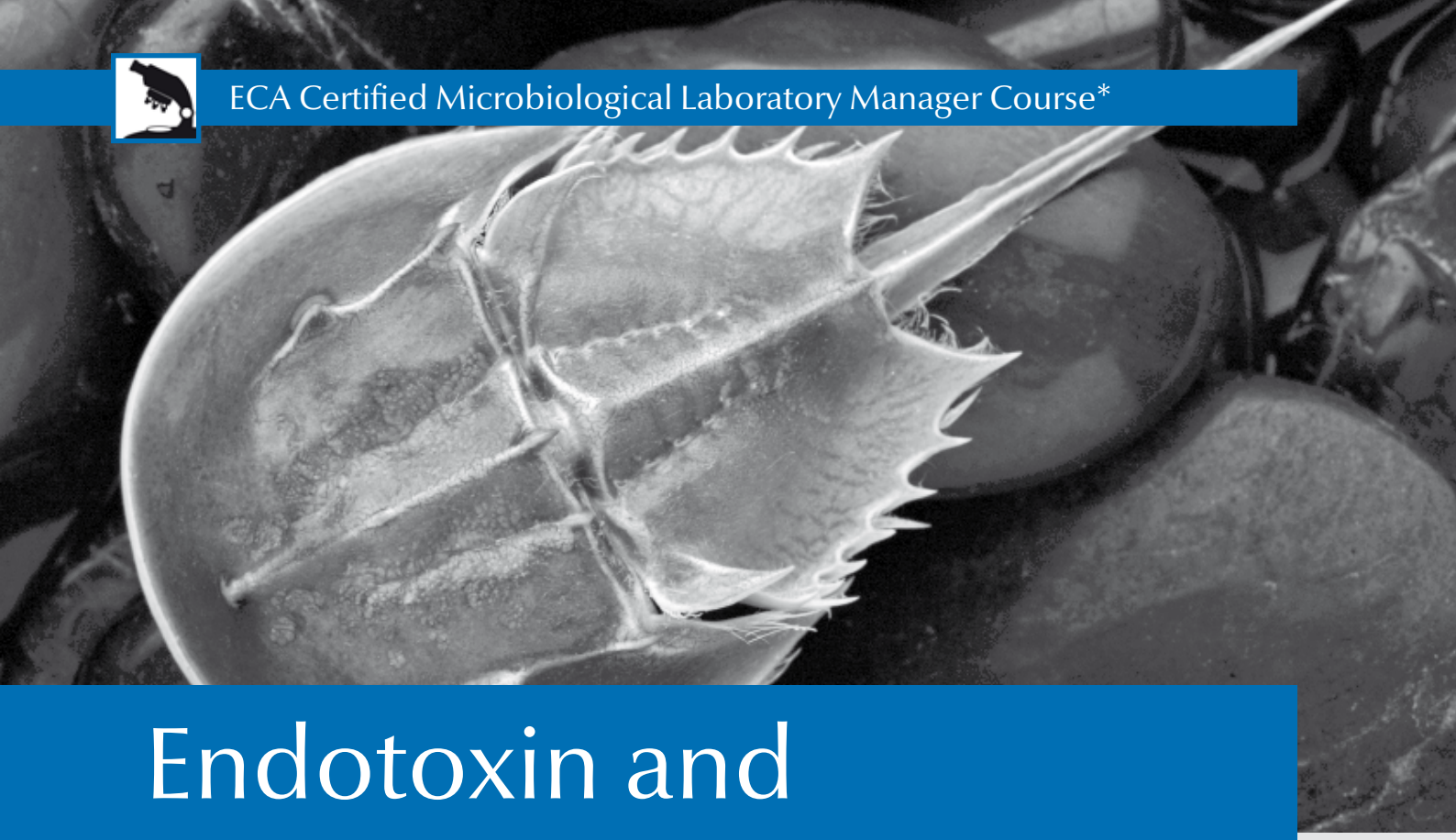
ECA Certified Microbiological Laboratory Manager Course*



Endotoxin and Pyrogen Testing

Classic and Alternative Test Methods

28 – 29 June 2011, Heidelberg Germany

SPEAKERS:

Dr. Anja Fritsch
Confarma France

Dr Dörte Gade
Sanofi Aventis

Dr Renaud Janssen
Helvoet Pharma

Dr Holger Kühn
SGS Institut Fresenius

Dr Michael Rieth
Merck

Dr Ingo Spreitzer
Paul Ehrlich Institut

Dr. Walter Zwisler
Zwisler Laboratories

LEARNING OBJECTIVES:

- First Approval Testing in a High Throughput Laboratory
- Depyrogenation
- Specific Use of LAL for Critical Substances
- Masking
- Testing of Packaging Materials
- The Monocyte Activation Test
- Other Alternative Pyrogen Testing Methods

ECA
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* This education course is recognised for the ECA GMP Certification Programme „Certified Microbiological Laboratory Manager". Please find details at www.gmp-certification.eu

Endotoxin and Pyrogen Testing

28 – 29 June 2011, Heidelberg Germany

Objectives

This Course will inform you about current developments in Endotoxin and Pyrogen testing as well as the practical use of established test system like LAL for Endotoxin testing, especially for critical substances.

You become informed about
- Regulatory requirements
- The different testing methods
- Use of the methods in daily routine
- Solutions for issues with interferences, inhibitors and masking
- Testing of packaging materials
- Application of alternative testing methods

Background

The LAL test is established in the last years as the preferred system for testing of Endotoxins , for in process control as well as for final release testing and was prescribed in the Pharmacopoeia. During the same period, the importance of alternative Pyrogen testing methods for the pharmaceutical industry increased considerably, because they provide an opportunity to reduce time and a possibility to close the gaps of the classic methods of rabbit testing and LAL.

Some of the reasons are:
- The LAL test is generally complicated due to potential interferences and inhibitors.
- LAL reagent has to be harvested from Horseshoe Crabs. An environmental or an ecological disaster
- Could extinguish the Limulus population.
- Contamination of biologicals by non-endotoxin pyrogens not detectable in LAL test is not unlikely.
- Animal experiments have to be reduced. Also the LAL test is not a true in vitro test.

Target Audience

This Conference is addressed to all persons of
- pharmaceutical manufacturers
- biopharmaceutical companies
- contract laboratories
- tissue establishments

who are involved in Endotoxin and Pyrogen Testing

Moderator

Axel H. Schroeder, Concept Heidelberg

Programme

Endotoxin and Pyrogen Testing – Requirements of Pharmacopoeia and other Guidelines
- Historical Data
- EP, USP JP
- FDA
- Aide memoire
- Requirements on method validation

Endotoxins and Pyrogenes – Background, Characteristics and Impact
- Definition Pyrogens - Bacterial Endotoxins
- Structure and function of LPS
- Activities of LPS in vivo: Fever/Sepsis
- Endotoxin threshold level

Validation for first Approval and Routine Use of the Chromogen-Kinetic an the Gel Clot Method
- Initial qualification of the laboratory
- Product specific validation
- Routine use of the LAL test

Elimination of interferences in the LAL test of critical Substances
- Acids
- Alcohols
- Antibiotics
- Amino acids
- Chelating agents
- Divalent cations
- Toxic substances

Depyrogenation – Methods and Requirements
- Reasons for depyrogenation / Endotoxin limits for DPs and Medical devices / How much endotoxin reduction is required?
- Official regulations / requirements for depyrogenation
- Methods of depyrogenation and their application
- Effectiveness of different depyrogenation methods esp. heat depyrogenation and washing processes
- Validation of depyrogenation processes

Alternative Testing Methods – Development and Implementation
- The 3-R Principle
- Ethical, Juristic and Scientific aspects
- The Issue of the „Gold Standard“
- Case Studies - MAT, rFc, „PAT“ (Pertussis ATP-Test)

LAL Endotoxin Testing in Oily Substances
- Bacterial endotoxin testing with the turbidimetric kinetic LAL test
- Recovery of spiked endotoxins
- Extraction of endotoxins from oily formulations
- Testing of water-in-oil emulsions

Endotoxin Removal from primary Packaging Materials for Parenterals

- Primary packaging materials for parenterals
- Endotoxin removal from elastomeric components
  - Manufacturing process for elastomeric closures
  - Determination of endotoxins on elastomeric components
  - Regulatory requirements
  - Washing of elastomeric stoppers
  - Washing validation
  - Packing of washed / dried stoppers
- Endotoxin removal from glass
  - Manufacturing processes for pharmaceutical glass
  - Depyrogenation of glass

MAT – The Monocyte Activation Test

- Validation
- Method a/B/C
- Pros and Cons
- Routine Use Method B

Optimized MAT using the Monocytic Cell Line MonoMac6

- Background of MonoMac6
- Pros and Cons of MAT Methods
- Practicle Examples

Current Experiences with MAT

- Differences between MAT and classical testing
- Unplanned additional benefits

Masking of Endotoxins

- Definition of masking
- Different types of masking
- Inactivation of masking
- Alternative methods

Endotoxin Testing with rFC and IPT

- Current situation of Limulus
- What ist he difference of the new methods
- Experiences with this tests
- Acceptance of the Pharmacopoeia

Social Event

On 28 June you are cordially invited to a social event. This is an excellent opportunity to share your experiences with colleagues from other companies in a relaxed atmosphere.

Speakers

Dr. Anja Fritsch, *Confarma France SARL*
Anja Fritsch studied Biochemistry / Molecular. At the beginning of 2011, she joined CONFARMA France as Chief Scientific Officer.

Dr Dörte Gade
Sanofi Aventis, Deutschland GmbH, Frankfurt, Germany
Dörte Gade studied biology at the University of Kiel with the focus on microbiology. In 2004 she obtained her PhD at the Max-Planck-Institute for Marine Microbiology in Bremen. Afterwards she joined the Max-Planck-Institute for Dynamics of Complex Technical Systems in Magdeburg as a Post Doc. In 2006 Dörte joined Sanofi-Aventis as laboratory manager of the Bacterial Endotoxin lab in Frankfurt.

Dr. Renaud Janssen, *Helvoet Pharma Belgium N.V., Alken, Belgium*
For over 20 years Renaud Janssen has been holding R&D, Technical Support and Quality functions at Helvoet Pharma. He currently is Technical Support Director for Helvoet Pharma worldwide. Renaud is a member of various normalization committees in the field of pharmaceutical rubber.

Dr Holger Kühn, *SGS Institute Fresenius, Taunusstein, Germany*
Holger Kühn studied Biology at the Univerisities of Heidelberg and Gladgow with the focus om Molecular Biology and Biochemistry. He got his degree at the University of Regensburg. Since 2008, he is project Manager Microbiology at the SGS Institute Fresenius.

Dr Michael Rieth, *Merck KGaA, Darmstadt, Germany*
After the study of biology at University Göttingen and his degree, Michael Rieth was employed at biosyn pharmaceuticals in Stuttgart as head of quality control and service laboratory. From 1990 to 1998 he was employed in different positions of QC and QA as head of laboratory. Since 1999 works at Merck, Darmstadt in the microbiological quality control of the pharmaceutical production.

Dr Ingo Spreitzer, *Paul-Ehrlich-Institut, Langen, Germany*
Ingo Spreitzer studied Biology at the University Mainz, Germany, and was awarded a doctorate in 2000. Since 2001 he has been working as a scientist at the Paul-Ehrlich-Institut .In October 2004 Ingo Spreitzer was appointed Deputy of Section 1/3, "Microbial Safety and Parasitology". Duties: Pyrogen testing (rabbit and alternatives); LAL-Testing. He is a Member of the Working Party "Pyrogentest" of the German Pharmacopeia Commission; PEI delegate in the Microbiology Commission, and Member of the Working Parties "Monocyte Activation Test" and Bacterial Endotoxins" of the European Pharmacopeia Commission.

Dr Walter Zwisler, *CEO Zwisler Laboratories, Konstanz, Germany*
Dr. Walter Zwisler, studied Biology at the University of Konstanz and got his phD at the University of Oldenburg.
After research activities in Israel and on the German Research Vessel `Polarstern´ he joined 2001 the Qualis Laboratorium, Konstanz. Amongst other microbiological Quality Control Assays, the InVitro Test for Pyrogens is a key topic of his Laboratory (Accredited, GMP/GLP compliance) with customers from Europe and the US. The Lab was renamed into Zwisler Laboratorium GmbH in 2010.

Easy Registration

Reservation Form:
CONCEPT HEIDELBERG
P.O. Box 10 17 64
69007 Heidelberg
Germany

Reservation Form:
+ 49 6221 84 44 34

e-mail:
info@concept-heidelberg.de

Internet:
www.gmp-compliance.org

If the bill-to-address deviates from the specifications on the right, please fill out here:

CONCEPT HEIDELBERG
P.O. Box 101764
Fax +49 (0) 62 21/84 44 34

D-69007 Heidelberg
GERMANY

Reservation Form (Please complete in full)

+ 49 6221 84 44 34

Endotoxin and Pyrogen Testing
28 – 29 June 2011, Heidelberg Germany

☐ Mr ☐ Ms

Title, first name, surname

Company Department

Important: Please indicate your company's VAT ID Number **P.O. Number (if applicable)**

Street/P.O. Box

City Zip Code Country

Phone/Fax

E-Mail (please fill in)

General terms and conditions
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 the following processing fees: Cancellation
- until 2 weeks prior to the conference 10 %
- until 1 weeks prior to the conference 50 %
- within 1 week prior to the conference 100 %.

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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)!

Date

Tuesday, 28 June 2011, 09.30 – 18.00 h
(Registration and coffee 09.00– 09.30 h)
Wednesday, 29 June 2011, 08.30 – 16.00 h

Venue

nh Hotel Heidelberg
Bergheimer Str. 91
69115 Heidelberg
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Phone +49 (0)6221 1327 0
Fax +49 (0)6221 1327 100

Fees

ECA Members € 1,490.- per delegate plus VAT
APIC Members € 1,590.- per delegate plus VAT
(does not include ECA Membership)
Non-ECA Members € 1,690.- per delegate plus VAT
EU GMP Inspectorates € 845.- per delegate plus VAT
The conference fee is payable in advance after receipt of invoice and includes conference documentation, dinner on the first day, lunch on both days and all refreshments. VAT is reclaimable

Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the conference hotels. Reservation should be made directly with the hotels not later than 30 May 2011. You will receive a room reservation form when you have registered for the event. Please use this form for your room reservation or be sure to mention "VA 6883 ECA Event" to receive the specially negotiated rate for the duration of your stay. 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.

Conference Language

The official conference language will be English.

Organisation and Contact

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