

- FORMAT -

2 days training

From Thursday morning to Friday evening



Lectures

Thursday morning - Webinar access (New)



Laboratory practicals

Thursday afternoon & all day Friday



Training certificate

Document continuous education in toxicology



Training provided in English

- REGISTRATION FEE* -

Private Sector
590 euros

Non-Private Sector
470 euros (20% Off)

Student
350 euros (40% Off)

Webinar
50 euros

* Price is without VAT.
The fee is identical for every event

TOPICS

JUNE 2017

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- 3 Updates on the Hepatotoxicity AOP Landscape and on the ADME Field Edition 2

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- 5 In Vitro-In Vivo Extrapolation (IVIVE) to Support Accurate Prediction of Hepatic Drug Disposition

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DECEMBER 2017

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1

In vitro Skin & Eye Models Part 1

This toxicological course with focus on hands-on training will, thanks to a number of companies engaged in the field of 3Rs, guide you through some of the validated OECD guidelines on local toxicity testing: 2 different skin models and a Cell based assay will be used to show practical applicability either in the field of skin irritation (EpiSkin, OECD TG 439), skin sensitization (SenzaGen, GARDskin test, OECD TGP 4.106) or skin permeability (Eurosafte).

An in vitro 3D reconstructed cornea-like model (EpiOcular) developed by MatTek will be used to demonstrate its applicability for eye irritation detection (OECD TG 492).



[Click and Register Eventbrite](#)

2

Tools for Read-Across

After one day of lectures on Read-Across, the participants will learn in the next two days how to integrate data and run them under CEFIC-LRI AMBIT2-tool (Nina Jeliaskova, IdeaConsult), ToxRead (Emilio Benfenati, Mario Negri), Toxtrack (Costanza Rovida, EU-Toxrisk21, CAAT-Europe), and REACH-Across (Anne Bonhoff, UL). Last but not least participants will be walked through into a case-study on reproductive toxicity (Elena Fioranzo, S-IN) as well as the integration of Read-Across dataset under IUCLID 6 (Monica Locatelli, REACH Mastery).

Participants should bring their laptop and download the programs ToxRead (www.toxread.eu), VEGA (www.vega-qsar.eu). AMBIT2 (http://cefic-lri.org/lri_toolbox/ambit/) will be used online.

Ecopa is also sponsoring up to 4 PhD students with a reduction fee of 350 euros per PhD student for the 3 days.



[Click and Register](#)

3

Updates on the Hepatotoxicity AOP Landscape & on the ADME Field - Season 2

The participants will discover and manipulate new hepatocellular models such as HepatoPearl (3Dspheroids by ESPCI), transgenic HepaRG from Japan (Kac), USA (Sigma) and France (INRA) as well as hepatoblastoma.

Moreover, participants will learn how to analyse the regular tox endpoints outcomes (e.g. comet assays) within these models. In silico liver aspects will also be tackled by demonstrating gene regulatory network and its quantification for cholestasis (Strand/Syngene, India).



[Click and Register Eventbrite](#)

4

Quantitative Human Cell & Effect Based In Vitro Bioanalysis for Assessing Endocrine Disrupting Compounds (EDCs)

You will learn how you can use a panel of standardized stable human and yeast reporter cell lines for rapid screening of hazards of pure chemicals and complex mixtures on multiple adverse outcome pathways (BioDetection Systems & BASF). This includes those pathways prioritized in the current regulatory context of EDC assessment, including interference with estrogen-, androgen-, and thyroid hormone signaling. This will include assessment of metabolic conversions (S9, metabolically competent liver cells - BIOPREDIC) of EDCs using various approaches and assessment of their effects on steroidogenesis.

Furthermore, the participants will integrate in silico read-across predictions (TNO) that can be particularly suited to confirm biological assays and vice-versa. Moreover, they will be presented information on QSAR models and their performance for a number of ED-related endpoints (DTU). Trainees will learn more about modern robotic and automated high throughput screening using down-scaled 96-wells to 384-wells formats. The chemical activated luciferase (CALUX) assays are available for testing of relevant matrices such as food, blood, urine, mother milk, and many different environmental matrices. All steps needed from extraction, clean-up, cell culture handling, luminometer analysis, and calculations of effect concentrations and toxic equivalents will be presented in state-of-the-art manner following current guidelines (e.g. ISO 17025, OECD TG455-like, ISO 19040-3).

Additionally a state-of-the-art open keynote will be presented by Elise Grignard (European Commission, JRC) along with several oral presentations on the current applications in chemicals, mixture toxicity, food, environmental, and public health testing.

**BioDetection Systems****7th - 8th
SEPTEMBER****Amsterdam
THE NETHERLANDS****10 seats**[Click and Register Eventbrite](#)**5**

In Vitro-In Vivo Extrapolation (IVIVE) to Support Accurate Prediction of Hepatic Drug Disposition

The goal of this workshop is to make attending scientists familiar with the design and conduct of typical in vitro experiments that are performed to profile the hepatic disposition characteristics of new drug candidates and/or xenobiotics.

Focus will be on sound protocols for generating high quality in vitro data that can subsequently be used as input in physiologically-based pharmacokinetic (PBPK) models.

Importantly, the workshop program will also cover adequate in vitro data processing as required before input into PBPK. Combination of data from various in vitro models will also aid in getting novel and mechanistic insights in drug disposition.

For instance, combining rich in vitro data sets obtained in liver microsomes and hepatocytes supports determination of intrahepatic drug exposure as well as phenotyping in terms of disposition pathways. The workshop will offer opportunities for attendees to become familiar with recently developed in vitro model systems and their applications. As the workshop will focus on the IVIVE part of IVIVE-PBPK, it is relevant to scientists working in the field of 'classical' PBPK as well as scientists working with in vitro models.

**14th - 15th
SEPTEMBER****Leuven
BELGIUM****16 seats**[Click and Register Eventbrite](#)**KATHOLIEKE UNIVERSITEIT
LEUVEN**

6

In Silico Tools in Chemical's Hazard Assessments

In light of the limitations of existing non-animal based hazard assessment methodologies, particularly in the area of repeated dose as well as developmental and reproductive toxicity, read-across is currently considered to be the most applicable strategy in support of chemical's hazard assessment. In this context, in silico tools play a critical role in identifying and justifying analogues suitable for the assessment of chemicals for which hazard data are lacking.

This training is designed to give the necessary background along with tailored case studies to provide hands-on experience as to how in silico tools can be used in supporting a chemical's hazard assessments: for example as stand-alone tools or for the identification and justification of analogues for use in read-across.

 TOXminds
Product Safety & Regulatory Affairs **5th - 6th
OCTOBER** **Brussels
BELGIUM** **10 seats**[Click and Register Eventbrite](#)**7**

In vitro Skin & Eye models Part 2

In Part 2, more emphasis will be put on skin sensitization models such as h-CLAT (OECD TG 442E), DPRA (OECD TG 442C) or LuSens.

The participants will also perform the IL/18 epiderm for identification and classification of skin sensitizing chemicals (MatTek) as well as the GARD skin sensitization test that detects potency (Senzagen).

 **BASF**
We create chemistry **12th - 13th
OCTOBER** **Ludwigshafen
GERMANY** **9 seats**[Click and Register Eventbrite](#)**8**

Kidney Toxicity Testing & Best Practices Season 2

This two-day training will give a comprehensive overview of the most relevant and robust 2D and 3D kidney cell culture models and in vitro applications for the assessment of kidney-associated cytotoxicity.

Topics that will be covered during the course include:

1) Regulatory aspects

2) In vitro models and techniques that are valuable to measure toxicity:

- Normal, hTERT immortalized and iPSC-derived kidney cells
- 2D and 3D kidney culture (high density transwell culture, spheroids, microfluidic chips)
- Toxicity assessment using e.g. multi-well plates and Raman microspectroscopy with deep insight into read-out and interpretation of data.

 EVERCYTE
forever is just enough. **30th - 31st
OCTOBER** **Vienna
AUSTRIA** **8 seats**[Click and Register Eventbrite](#)

9

In Vitro Lung Models

The program will cover practical use of respiratory in vitro 3D tissues and exposure devices to evaluate acute and repeated dose inhalation toxicity. To mimic systemic context, interconnection strategies of lung tissues will be presented. Activities will be split into four sections:

- In vitro models and tests for inhalation toxicity assessment (human and rodent 3D models): **Epithelix**
- In vitro models and assays to detect lung carcinogenesis: **OncoTheis**
- Exposure strategies and devices for testing at the Air-Liquid. Interface: **Vitrocell**
- Interconnection of respiratory tissues and online detection of their integrity: **Hepia**.



16th - 17th
NOVEMBER



Geneva
SWITZERLAND



15 seats

[Click and Register Eventbrite](#)

10

Current Applications of Organs-on-a-Chip for the Pharmaceutical Industry

During this two-day hands-on training session hosted by Mimetas you will learn everything about the current applications of Organ-on-a-Chip within the Pharmaceutical Industry. Together with CN Bio and TissUse we are providing lectures and hands-on trainings on lung, kidney, and skin-liver models. The two-day training will be kicked off by a keynote of the European Medicine Agency.



16th -17th
NOVEMBER



Leiden
THE NETHERLANDS



15 seats

[Pre-Register Here](#)

11

Advance In-Vitro Cell Culture LAB Based Training

3D cell culture is playing an extremely important part in improving the human relevance of in vitro research and work towards the replacement of animals in scientific research.

This two-day workshops will combine hands-on laboratory training and seminar sessions to ensure participants have all the necessary skills and knowledge to commence 3D cell culture in perfusion conditions, which can be used across a wide variety of applications, including but not limited to;

- Safety and Toxicity testing
- Regenerative medicine
- ADME / DMPK
- Disease modelling
- Drug development
- Stem Cell research
- Cell maturation

Delegates will receive a grounding in both theory and practice, delivered by leading organisations in their respective fields, that will enable them to plan and optimise their own cell culture experiments using;

- Perfusion systems
- Scaffolds
- Gels
- Spheroids and Tissue slices
- Cell imaging.



Kirkstall



Late September



London
UK



16 seats



presents

HOT Hands-On Training Tools Dissemination for Toxicologists

CAAT has decided to further strengthen dissemination of alternatives test methods by launching CAAT-Academy.

- Validation of new methods has delivered 100s of protocols. The challenge remains to produce them and train staff to apply and implement the new technologies
- Shortage of trained staff in the public and private sector
- Scattered offers from tool providers (e.g. SMEs)
- Gap between test developers, future end-users and non-identified potential customers


HOSTS
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and
network




SUPPLIERS
expertise
and
solutions


TRAINEES
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and the engine to the future

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