



European
Commission

Agenda

Alternative approaches to modern toxicology



University of Vienna
27th – 28th June 2018

The European Commission's
science and knowledge service

Joint Research Centre

Joint
Research
Centre

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.

Aim

This programme aims to create awareness on alternative methods for chemical risk assessment (toxicology/food safety) in theory and practice

Outcome

On completion the participants should be aware of the role of Adverse Outcome Pathways (AOPs) and Physiologically Based Kinetic (PBK) models.



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Wednesday 27th June

Toxicodynamics (Brigitte Landesmann)	
09:00	Introduction and course outline
09:30	AOP Background and Principles
10:10	Discussion
10:20	Introduction to the case study
10:30	<i>Coffee break</i>
10:45	Break out I: Outlining an AOP
12:00	<i>Lunch break</i>
13:00	Discussion
13:45	AOP Wiki
14:15	Break out II: Finding information in the AOP Wiki
15:00	Discussion
15:45	<i>Coffee Break</i>
16:15	<i>In vitro</i> cell models
16:45	AOP applications
17:15	Wrap up
17:30	<i>End of day 1</i>

Thursday 28th June

Toxicokinetics (Alicia Pains)	
09:00	Introduction to Exposure, ADME (Absorption, Distribution, Metabolism, Excretion), and PBK (Physiologically-Based Kinetic) modelling
09:45	Overview of different PBK modelling approaches (hands-on)
10:15	Linking AOPs, kinetics, and exposure; AEP (Aggregate Exposure Pathway)
10:45	<i>Coffee break</i>
11:15	Tutorial on essential steps to build a PBK model (hands-on)
12:30	<i>Lunch break</i>
13:30	Break out III: PBK model application
14:30	Presentation of the results
15:15	<i>Coffee break</i>
15:45	Safety Assessment of chemicals – a challenge Interactive exercise
16:45	Wrap up
17:00	<i>End of day 2</i>