

Agenda for the  
15<sup>th</sup> Summer School on Toxic Compounds in the  
Environment 2019  
and 3<sup>rd</sup> HBM4EU Training School

Date: 17/6 – 21/6/2019  
Venue: RECETOX, pavilion A29, Faculty of Science, Masaryk  
University, Kamenice 753/5, 625 00 Brno

**Instructors**

Petra Apel, Umweltbundesamt (UBA), Berlin, Germany  
Jos Bessems, Flemish Institute for Technological Research (VITO), Mol, Belgium  
Luděk Bláha, RECETOX, Masaryk University, Czech Republic  
Martin Bobák, UCL, United Kingdom  
Jurgen Buekers, Flemish Institute for Technological Research (VITO), Mol, Belgium  
Tony Fletcher, Public Health England (DH), UK (to be confirmed)  
Alenka Franko, University Medical Centre Ljubljana, Slovenia  
Alberto Gotti, Aristotle University of Thessaloniki, Greece  
Klára Hilscherová, RECETOX, Masaryk University, Czech Republic  
Milena Horvat, Department of Environmental Sciences, Jožef Stefan Institute, Ljubljana, Slovenia  
Spyros Karakitsios, Aristotle University of Thessaloniki, Greece  
Jana Klánová, RECETOX, Masaryk University, Czech Republic  
Lisbeth E. Knudsen, Department of Public Health, University of Copenhagen, Denmark  
Rosa Lange, Umweltbundesamt (UBA), Berlin, Germany  
Katarina Magulová, Secretariat of the Stockholm Convention, UNEP, Switzerland  
Eva Ougier, Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement  
et du travail (ANSES), Maisons-Alfort Cedex, France  
Hynek Pikhart, UCL, United Kingdom  
Tiina Santonen, Finnish Institute of Occupational Health (FIOH), Finland  
Denis Sarianni, Aristotle University of Thessaloniki, Greece  
Paul Scheepers, Radboud university medical center, Nijmegen, The Netherlands  
Martin Scheringer, Institute for Chemical and Bioengineering, ETH Zürich, Switzerland  
Hanna Tolonen, National Institute of Health and Welfare (THL), Helsinki, Finland,  
Haim Yacobi, UCL, United Kingdom

**Sunday, June 16, 2019**

Arrivals of participants

**DAY 1 - coordinator for programme: Prof. Jana Klánová, RECETOX**

<b>Summer School</b>			
RECETOX, pavilion A29, Kamenice 5, lecture room RCX 1, 2 <sup>nd</sup> floor			
<b>Monday, June 17, 2019</b>	8:30 – 9:00	<b>REGISTRATION:</b> RECETOX, pavilion A29, Kamenice 5, lecture room RCX 1, 2 <sup>nd</sup> floor	
		<b>Special topic: Delineating behavior (pharmacokinetics models) and effects (adverse outcome pathways) of HBM priority compounds</b> <b>Main theme of the day: PBPKs in HBM - basics, applications, interpretation, case studies</b>	
	9:00 - 9:30	Jana Klánová	Welcome and introductory remarks
	9:30 – 11:00	Jana Klánová	Title to be determined
	11:00 - 11:30	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	11:30 – 13:00	Denis Sarigiannis, Spyros Karakitsios, Alberto Gotti	Title to be determined
	13:00 – 14:00	<b>LUNCH:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	14:00 – 15:30	Martin Scheringer	Environmental and human exposure to persistent toxic substances: what can we learn from environmental fate models and pharmacokinetic models?
	15:30 – 16:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	16:00 – 17:30	Katarina Magulová	Global agenda to prevent and control releases of persistent toxic contaminants
		<i>Free evening</i>	

**DAY 2 – coordinator for programme: Prof. Ludek Blaha, RECETOX**

<b>Wednesday, June 18, 2019</b>	<b>Special topic: Delineating behavior (pharmacokinetics models) and effects (adverse outcome pathways) of HBM priority compounds</b>	
	<b>Main theme of the day: Adverse outcome pathways (AOPs) &amp; mechanistic toxicology</b> RECETOX, pavilion A29, Kamenice 5, lecture room RCX 1, 2 <sup>nd</sup> floor	
9:00-9:15	Luděk Bláha	Welcome to Day 2 Introduction - mechanistic toxicology and AOPs in chemical risk assessment and HBM

9:15 – 10:30	Denis Sarigiannis, Spyros Karakitsios, Alberto Gotti Luděk Bláha et al.	Training on AOPs – part 1 – Introduction to AOPs, linking AOPs to PBPK models
10:30 – 11:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
11:00-12:30	Denis Sarigiannis, Spyros Karakitsios, Alberto Gotti Luděk Bláha et al.	Training on AOPs – part 2 – Preparing AOPs, Weight of Evidence, Practical aspects
12:30 - 14:00	<b>LUNCH:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
14:00 – 15:30	Iva Sovadinová, Pavel Babica, Lola Bajard, Luděk Bláha et al.	Workshop – Prepare, construct and discuss your AOP Hands on – explore AOPWiki online (RCX2 – PC lecture room 3 <sup>rd</sup> floor)
15:30 – 16:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
16:00 – 17:00	Lola Bajard Klára Hilscherová Pavel Babica	Case studies and advanced approaches <ul style="list-style-type: none"> <li>• Flame retardants</li> <li>• Thyroid “disruptome”</li> <li>• Advanced approaches in mechanistic toxicity assessment</li> </ul>
17:00 – 17:30	Luděk Bláha et al.	Questions, discussion, wrap up
18:30 – 21:00	<b>DINNER</b>	

### DAY 3 - coordinator for programme: Jos Bessems, VITO

Wednesday, June 19, 2019	<b>Special topic: Risk assessment and use of HBM data</b>		
	<b>Main theme of the day: Case studies illustrating opportunities, challenges and gaps</b>		
	RECETOX, pavilion A29, Kamenice 5, <b>lecture room RCX 1, 2<sup>nd</sup> floor</b>		
	9:00 – 10:30	Tiina Santonen, Jos Bessems	Introduction to risk assessment Use of HBM in risk assessment
	10:30 – 11:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	11:00 – 12:30	Jos Bessems, Tony Fletcher	Data needs (e.g. toxicokinetics) for use of HBM in risk assessment/HIA PFAS Case study: Human epidemiological data versus animal toxicity data
	12:30 - 14:00	<b>LUNCH:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	14:00 – 15:30	Tiina Santonen	Two or three case studies illustrating the use of HBM in Excess Lifetime Cancer Risk (ELCR) assessment: Cr(VI), MOCA, o-toluidine (all occupational) and/or PAH (gen pop + occupational)
15:30 – 16:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor		
16:00 – 17:30	Jurgen Buekers, Jos Bessems	HBM-Based indicators for time trends and for differences between age groups, subpopulations and regions Cadmium case study: Environmental burden of disease	

## DAY 4 - coordinator for programme: Jos Bessems, VITO

Thursday, June 20, 2019	<b>Special topic: Risk assessment and use of HBM data</b>		
	<b>Main theme: HBM-Based indicators/Risk Communication and HBM Guidance Values (HBM-GV)</b>		
	RECETOX, pavilion A29, Kamenice 5, <b>lecture room RCX 1, 2<sup>nd</sup> floor</b>		
	9:00 – 10:30	Eva Ougier Paul Scheepers	Phthalates case study: Use of HBM-GV (as in HBM4EU) compared to DNEL internal approach ECHA RAC Risk communication
	10:30 – 11:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	11:00 – 12:30	Petra Apel, Rosa Lange, Eva Ougier	Establishing health-based HBM Guidance Values (HBM-GV) 1. Concept and additional benefit of HBM guidance values for the general population Case study 1 - Derivation of a HBM-GV for the general population referring to a selected phthalate 2. Specificities of the HBM-GV derivation for the occupational field Case study 2 - Derivation of a HBM-GV for workers with regard to cadmium
	12:30 – 14:00	<b>LUNCH:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
	14:00 – 15:30		topic and speaker to be determined
	15:30 – 16:00	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
16:00 – 17:30	Lisbeth Knudsen/Paul Scheepers/Alenka Franko/Milena Horvath/Hanna Tolonen	network event organized by WP2	
free evening			

## DAY 5 - coordinator for programme: Prof. Martin Bobák, UCL, United Kingdom

Friday, June 21, 2019	<b>Special topic: Epidemiological approach</b>		
	<b>Main theme: From contaminants to populations</b>		
	RECETOX, pavilion A29, Kamenice 5, <b>lecture room RCX 1, 2<sup>nd</sup> floor</b>		
	9:00 – 10:00	Martin Bobák	Air pollution and birth outcomes – epidemiological approach
	10:00 – 11:00	Hynek Pikhart	Multi-level models of determinants of health
	11:00 - 11:30	<b>COFFEE:</b> Na Lávce café, area of University Campus, 2 <sup>nd</sup> floor	
11:30 – 13:30	Haim Yacobi	Determinants of health and wellbeing in urban studies: qualitative approach	
12:30 – 13:00	wrap-up, certificates		

		<b>LUNCH:</b> take away
		end of the Summer school, departures of participants