

# Final programme

## for NoMiracle - PHIME conference

Multiple Stressors – Novel Methods for Integrated Risk Assessment  
Aarhus, 28<sup>th</sup>–30<sup>th</sup> September 2009

Day 1		Monday 28 September 2009	
8:30 – 9:15	Registration: Lakeside Lecture Theatre 1250		
<b>PLENARY SESSION</b>	<b>Bartholin Building 1240</b> <b>Setting the stage</b> <i>Chair: Dr. Peter Pärt, Co-chair: Dr. Hans Løkke</i>		
9:30 – 9:40	<b>Welcome address</b> <i>Rector Lauritz B. Holm-Nielsen, Aarhus University, Denmark</i>		
9:40 – 10:00	<b>Welcome and introduction to the Conference</b> <i>Dr. Hans Løkke, NoMiracle Coordinator, Denmark</i>		
10:00 – 10:30	<b>Keynote: Protecting human health and ecosystems – connecting novel research, practice and policy on multiple stressors</b> <i>Dr. Dorota Jarosinska, European Environmental Agency (EEA), Denmark</i>		
10:30 – 11:00	Coffee & Tea Break, Lakeside Lecture Theatre 1250		
11:00 – 11:30	<b>Keynote: Human variability in toxicokinetics, chemical mixtures and uncertainty factors for chemical risk assessment</b> <i>Dr. Jean Lou Dorne, European Food Safety Agency (EFSA), Italy</i>		
11:30 – 12:00	<b>Keynote: Multiple Stressors – Novel Methods for Integrated Risk Assessment</b> <i>Dr. Bruno Hubsch, European Chemical Industry Council (CEFIC), Belgium</i>		
12:00 – 12:30	Discussion		
12:30 – 13:30	Lunch, Lakeside Lecture Theatre 1250		
<b>PARALLEL SESSIONS</b>	<b>1 Lakeside Lecture Theatre, Aud. 2 Building 1250</b> <b>Combined effects of natural stressors and chemicals</b> <i>Chair: Dr. Jürg Oliver Straub</i> <i>Co-chair: Prof. Martin Holmstrup</i>	<b>2 Lakeside Lecture Theatre, Aud. 3 Building 1250</b> <b>New concepts and techniques in fate and exposure assessment</b> <i>Chair: Prof. Gerrit Schüürmann</i> <i>Co-chair: Prof. Philipp Mayer</i>	
13:30 – 13:55	Integration of natural stressors in ecotoxicology: trends and future directions <i>Prof. Martin Holmstrup, Aarhus University, Denmark</i>	Abraham model for $K_{mw}$ as new surrogate for predicting bioconcentration and baseline toxicity <i>Prof. Gerrit Schüürmann, Helmholtz Centre for Environmental Research – UFZ, Germany</i>	
13:55 – 14:20	Interactions between natural environmental factors and toxic chemicals – a metaanalysis <i>Prof. Ryszard Laskowski, Jagiellonian University, Poland</i>	"Chemical activity" as a key parameter describing available exposure <i>Prof. Philipp Mayer, Aarhus University, Denmark</i>	
14:20 – 14:45	Effects of chemical and thermal stress on the bank vole, <i>Myodes glareolus</i> <i>Dr. Renata Swiergosz-Kowalewska, Jagiellonian University, Poland</i>	Passive dosing to control the exposure level of hydrophobic compounds and their mixtures <i>Dr. Kilian E. C. Smith, Aarhus University, Denmark</i>	
14:45 – 15:10	Chemicals and "natural" stressors: conceptual relations and implications for assessments <i>Dr. Timo Assmuth, Finnish Environmental Institute, Finland</i>	A water-sediment screening tool for measuring biodegradation of organic chemicals <i>Thomas Junker, ECT Oekotoxikologie GmbH, Germany</i>	
15:10 – 15:40	Coffee & Tea Break, Lakeside Lecture Theatre 1250		
15:40 – 16:05	Ecological vulnerability analysis as new conceptual technique in risk assessment <i>Dr. Marieke De Lange, Alterra, The Netherlands</i>	Modelled and monitored variation in space and time of PCB153 concentrations in air, sediment, soil and aquatic biota on a European scale <i>Dr. Mara Hauck, Radboud University, The Netherlands</i>	
16:05 – 16:30	Ecological exposure model for assessing the risk of chemical and non-chemical stressors to terrestrial vertebrates <i>Dr. Mark Loos, Radboud University, The Netherlands</i>	Modelling historical and recent human cadmium exposure in a zinc smelter area – a Belgian case study <i>Dr. Arnout R. Standaert, VITO, Belgium</i>	
16:30 – 16:55	Screening-level diagnosis of multi-stress impacts in natural species assemblages: practical eco-epidemiology <i>Dr. Leo Posthuma, RIVM, The Netherlands</i>	A full chain mechanistic approach assessing exposure to multi-source air pollutants and cancer risk <i>Dr. Dimosthenis Sarigiannis, Joint Research Centre of the European Commission, Italy</i>	
16:55 – 17:30	Discussion		
19:00	Conference dinner, University Building 1530		

Day 2 Tuesday 29 September 2009		
PARALLEL SESSIONS	<b>1 Lakeside Lecture Theatre, Aud. 2 Building 1250</b> <b>Mixture effects – description and prediction</b> Chair: Dr. David Spurgeon Co-chair: Dr. Claus Svendsen	<b>2 Lakeside Lecture Theatre, Aud. 3 Building 1250</b> <b>Risk of mixed exposures to metals</b> Chair: Prof. Staffan Skerfving Co-chair: Prof. Alfred Bernard
	8:30 – 9:00	Assessing mixture effects using a systematic biology approach <i>Dr. David Spurgeon, Population, Molecular and Community Ecology Centre for Ecology &amp; Hydrology, UK</i>
9:00 – 9:30	Cell-based screening methods in immunotoxicology – benefits and limitations <i>Prof. Albert Duschl, University of Salzburg, Austria</i>	Public health impact of long-term, low-level mixed elements exposure in susceptible population strata – results from the EU project PHIME <i>Prof. Staffan Skerfving, PHIME Coordinator, Lund University, Sweden</i>
9:30 – 10:00	Coffee & Tea Break, Lakeside Lecture Theatre 1250	
10:00 – 10:30	Mixture toxicity studies with zebrafish ( <i>Danio rerio</i> ) and chironomids ( <i>Chironomus riparius</i> ): effects on different biological levels <i>Miriam Langer, LimCo International, Germany</i>	Mechanisms to cope with cadmium excess in plants <i>Prof. Michael Gjedde Palmgren, University of Copenhagen, Denmark</i>
10:30 – 10:55	Systems biology assessment of binary mixture effects in the social amoeba <i>Dictyostelium discoideum</i> <i>Dr. Francesco Dondero, DISAV, University of Piemonte Orientale, Italy</i>	Exposure to metals from ferroalloy plants: preliminary results of exposure assessment and neurofunctional survey in Italian adolescents <i>Dr. Silvia Zoni, University of Brescia, Italy</i>
10:55 – 11:20	Assessment of the potential of prochloraz to enhance the effect of esfenvalerate in aquatic microcosms <i>MSc. Maj-Britt Andersen, University of Copenhagen, Denmark</i>	Mixed exposure to metals and oxidative DNA damage, influence of gene-metal interactions – report from ongoing projects <i>Dr. Karin Broberg, Lund University, Sweden</i>
11:20 – 11:45	Anomalous behaviour of chemical binary mixtures <i>Prof. Miloň Tichý, National Institute of Public Health, Czech Republic</i>	Mercury as a risk factor for myocardial infarction and stroke: the Northern Sweden Study <i>MSc. Maria Wennberg, Umeå University, Sweden</i>
11:45 – 12:15	Development of a toxicological database to aid the risk assessment of exposure to mixtures of compounds <i>Dr. Richard Glass, Food and Environment Research Agency, UK</i>	Impact of lead, cadmium and inorganic mercury on the health of adolescents: a biomarkers study in Belgium <i>Prof. Alfred Bernard, Catholic University of Louvain, Belgium</i>
12:15 – 12:30	Discussion	
12:30 – 13:30	Lunch, Lakeside Lecture Theatre 1250	
PARALLEL SESSIONS	<b>1 Lakeside Lecture Theatre, Aud. 2 Building 1250</b> <b>Mixture effects – patterns and trends</b> Chair: Dr. David Spurgeon Co-chair: Dr. Dorota Jarosinska	<b>2 Lakeside Lecture Theatre, Aud. 3 Building 1250</b> <b>Integrated risk concepts and governance</b> Chair: Prof. Mikael Hildén Co-chair: Dr. Ad Ragas
	13:30 – 13:55	Deviations from the reference models and the possibility of predicting higher level mixture effects from binary mixture toxicity results. <i>Dr. Claus Svendsen, Population, Molecular and Community Ecology Centre for Ecology &amp; Hydrology, UK</i>
13:55 – 14:20	Assessing ecotoxicological risk for pesticide mixtures in aquatic and terrestrial ecosystems <i>Prof. Marco Vighi, University of Milano Bicocca, Italy</i>	Developing a framework for research on individual-level Medical Risk Management <i>Dr. Laurel Austin, Copenhagen Business School and University of Copenhagen, Denmark</i>
14:20 – 14:45	Mixtures of hormetic compounds: what do you get? <i>Dr. Nina Cedergreen, University of Copenhagen, Denmark</i>	Risk governance from cumulative stressors <i>Dr. Christina Benighaus, DIALOGIK, Germany</i>
14:45 – 15:10	Critical aspects and future perspective in assessing ecotoxicological risk for aquatic and terrestrial communities <i>Dr. Serenella Sala, University of Milano Bicocca, Italy</i>	The interface between Risk Assessors and Risk Managers in the emerging European Risk Regulatory Mode <i>Prof. Alberto Alemanno, HEC Paris, Luxembourg</i>
15:10 – 15:25	Discussion	
15:25 – 15:50	Coffee & Tea Break, Lakeside Lecture Theatre 1250	
POSTER SESSION	<b>Chemical fate and exposure</b> Chair: Prof. Gerrit Schüürmann <b>Effects of mixtures of chemicals and combinations of chemicals and other stressors</b> Chair: Dr. Claus Svendsen	<b>Cumulative risks in complex systems</b> Chair: Dr. Ad Ragas <b>Risk perception, risk communication and assessment-governance links</b> Chair: Prof. Mikael Hildén
	15:50 – 16:35	Short presentation of posters / Poster corners
16:35 – 18:00	<b>P O S T E R S</b>	
19:00	Official reception, Aarhus Townhall	

Day 3		Wednesday 30 September 2009	
PARALLEL SESSIONS	<b>1</b> Lakeside Lecture Theatre, Aud. 2 Building 1250	<b>2</b> Lakeside Lecture Theatre, Aud. 3 Building 1250	
	<b>New concepts and techniques for risk assessment</b> <i>Chair: Dr. Ad Ragas</i> <i>Co-chair: Prof. Mikael Hildén</i>	<b>Risk presentation and visualisation</b> <i>Chair: Dr. Peter van den Hazel</i> <i>Co-chair: Dr. Joost Lahr</i>	
9:00 – 9:30	Probabilistic ecotoxicological assessment factors <i>Dr. Mijke van Oorschot, Radboud University, The Netherlands</i>	Maps as tools to visualise cumulative risks of pollutants <i>Dr. Joost Lahr, Alterra, The Netherlands</i>	
9:30 – 10:00	Soil quality and ecosystem services <i>Dr. Jack Faber, Alterra, The Netherlands</i>	GIS-based decision support systems for spatial-oriented assessment and communication of ecological and human health risks <i>Prof. Antonio Marcomini, University Ca' Foscari of Venice, Italy</i>	
10:00 – 10:30	Coffee & Tea Break, <a href="#">Lakeside Lecture Theatre 1250</a>		
10:30 – 11:00	The critical issue of finding worst-case <i>Dr. Peter Borgen Sørensen, Aarhus University, Denmark</i>	Geographically based indicator for pesticide risk <i>Dr. Christian Kjær, Aarhus University, Denmark</i>	
11:00 – 11:30	Can uncertainty analysis be harmonised within the FP6 funded IP projects when dealing with health impact assessments? <i>Dr. Alexandre Zenié, Joint Research Centre of the European Commission, Italy</i>	A cumulative assessment of pesticides in Europe <i>Dr. Alberto Pistocchi, Joint Research Centre of the European Commission, Italy</i>	
11:30 – 12:00	Toxicity profiling: an effect-based integrative tool for water quality assessment <i>Dr. Timo Hamers, VU University, The Netherlands</i>	Risks in Urbana: A showcase for novel methods to assess cumulative risks <i>MSc. Louise Preeker, Radboud University, The Netherlands</i>	
12:00 – 12:30	Discussion		
12:30 – 13:30	Lunch, <a href="#">Lakeside Lecture Theatre 1250</a>		
PLENARY SESSION	Bartholin Building 1240		
13:30 – 14:45	<b>World Café:</b> <b>Dealing with uncertainty and ambiguity in risk management</b> <i>Organised by Prof. Mikael Hildén, and Dr. Ad Ragas</i>		
14:45 – 15:00	Coffee & Tea Break, <a href="#">Lakeside Lecture Theatre 1250</a>		
15:00 – 16:00	<b>Panel discussion:</b> <b>Strategies for testing and risk assessment of multiple stressors: Is a shift of paradigm and change of test guidelines possible?</b> Marked advances, reduced uncertainty and even less testing may be obtained by introducing novel methods in guidelines for current risk assessment such as distinct characterisations of compound-matrix interactions in terms of H-bounding QSAR prediction and chemical activity assessment, and prediction of mixture toxicity in time using Dynamic Energy Budget-based approaches  <i>The panel discussion is introduced by Prof. Philipp Mayer, and Dr. Jan Baas, giving the scientific background</i>  <i>Chair: Dr. Hans Løkke</i>  <i>Panel:</i> <i>Dr. Peter Pärt, Health and Environment Interactions, European Commission, Italy</i> <i>Dr. Jean Lou-Dorne, European Food Safety Agency (EFSA), Italy</i> <i>Dr. Bruno Hubesch, European Chemical Industry Council (CEFIC), Belgium</i> <i>MSc. Magnus Løfstedt, Danish Environmental Protection Agency, Denmark</i> <i>Prof. Staffan Skerfving, PHIME Coordinator, Lund University, Sweden</i>		
16:00	Closure of the conference		