

Sunday, 8 September 2019	
08h00–21h00	Congress registration
09h30–16h00 Terrace Hall	Satellite Meeting by ECETOC “Hazard Identification, Classification and Risk Assessment of Carcinogens: Too Much or Too Little?” <i>(Attendance is free of charge but an additional registration is required)</i>
10h30–16h00	Continuing Education Courses (CEC), including coffee & lunch breaks
10h30–16h00 Veranda 4	CEC01 Development and evaluation of AOPs Chairs: Sharon Munn, Italy Tarja Kohila, Finland AOP Background and Principles Sharon Munn, European Commission, DG JRC, Italy AOP wiki and live demonstration Clemens Wittwehr, European Commission, DG JRC, Italy Weight of Evidence/Confidence Evaluation for AOPs Bette Meek, University of Ottawa, Canada Application of AOPs to consider biological plausibility of associations observed in epidemiological studies: exposure to pesticides and Parkinson's disease Andrea Terron, European Food Safety Authority, Italy Application of AOPs for the development of Defined Approaches (DA) and Integrated Approaches to Testing and Assessment (IATA) Gavin Maxwell, Unilever, UK
10h30–16h00 Helsinki Hall	CEC02 Application and integration of increasingly mechanistically driven tools for risk assessment Chairs: Richard Brown, Switzerland Greta Waissi, Finland Overview of WHO/IPCS chemical risk assessment methodology tools Richard Brown, WHO, Switzerland

	<p>WHO/IPCS mode of action / human relevance framework: principles and application in risk assessment George Fotakis, European Chemicals Agency (ECHA), Finland</p> <p>Application and utility of chemical-specific adjustment factors in risk assessment Virunya Bhat, WHO Collaborating Centre on Water and Indoor Air Quality and Food Safety at NSF International, US</p> <p>Expressing uncertainty in hazard characterization and exposure assessment of substances: Principles and practice using APROBA-Plus Bas Bokkers, RIVM, Netherlands</p> <p>Combined exposures to multiple chemicals – tiered integration of tools Bette Meek, University of Ottawa, Canada</p>
<p>10h30–16h00 Veranda 1</p>	<p>CEC03 The pre-specified protocol part of evidence-based assessment in toxicology Chairs: George Kass, Italy Jan Vondráček, Czech Republic</p> <p>The role of a pre-specified protocol in evidence-based assessments George Kass, EFSA, Italy</p> <p>Scoping, literature search strategy, inclusion and exclusion criteria Rex FitzGerald, University of Basel, Switzerland</p> <p>Assessing internal validity Annika Hanberg, Institute of Environmental Medicine (IMM), Sweden</p> <p>Summarizing and synthesizing the evidence Ursula Gundert-Remy, Charité Berlin, Germany</p> <p>Aspects of weight of evidence Detlef Wölfle, Germany</p>
<p>10h30–16h00 Finlandia Hall</p>	<p>CEC04 Real world safety assessments for data-poor products: How to approach data gaps <i>Supported by ILSI Europe</i> Chairs: Heli Miriam Hollnagel, Switzerland Mattias Öberg, Sweden</p>

	<p>Properties of typical products requiring safety assessments: Focus on non-intentionally added substances (NIAS) Thomas Gude, SQTS, Switzerland</p> <p>The use of Quantitative Structure-Activity Relationships (QSAR) and grouping approaches including read-across and category formation to fill data gaps Mark Cronin, John Moores University, UK</p> <p>Thresholds of toxicological concern (TTC) Heli Miriam Hollnagel, Dow Europe, Switzerland</p> <p>In vitro assays: Validated assays for regulatory purpose versus explorative assays for Research & Development and high throughput Manfred Tacker, University of Applied Sciences Vienna, Austria</p> <p>Data sources for exposure assessment Tatsiana Dudzina, ExxonMobil Biomedical Science Inc., Belgium</p> <p>Example case studies All speakers</p>
<p>10h30–16h00 Veranda 2</p>	<p>CEC05 Dietary exposure assessment <i>Supported by the Finnish Food Safety Authority</i> Chairs: Tero Hirvonen, Finland Juha Laakso, Finland</p> <p>Dietary exposure assessment: an overview Davide Arcella, European Food Safety Authority, Italy</p> <p>Unravelling the chemical information hiding in our food Stefan Voorspoels, Flemish Institute for Technological Research (VITO), Belgium</p> <p>Food consumption data Liisa Valsta, National Institute for Health and Welfare, Finland</p> <p>Total diet studies: benefits and challenges Véronique Sirot, ANSES (French Agency for Food, Environmental and Occupational Health & Safety), France</p>

	<p>Dietary exposure modelling: MCRA software Polly Boon, RIVM, Netherlands</p> <p>Statistical modelling: BIKE Model Jukka Ranta, Finnish Food Safety Authority, Finland</p>
<p>10h30–16h00 Veranda 3</p>	<p>CEC06 Determining safe exposure limits in occupational toxicology, application to pharmaceuticals</p> <p>Chairs: Nancy Claude, France Jyrki Liesivuori, Finland</p> <p>Key elements of reliable risk assessment of chemicals Corrado Galli, University of Milan, Italy</p> <p>Regulatory perspective on application of health based exposure limits (HBEL) in drug manufacturing Daniel Roth, Swissmedic, Switzerland</p> <p>Derivation of acceptable daily exposures (ADE) or Occupational exposure limits (OEL) – An industry approach Thomas Pfister, F. Hoffmann-La Roche, Switzerland</p> <p>Overcoming data gaps: Generic versus substance-specific approaches in health based exposure limit (HBEL) setting Ester Lovsin-Barle, Lonza, Switzerland</p> <p>Case study, special end points, route to route extrapolation Camille Jandard, Servier, France</p> <p>ECHA's experiences with OELs Stella Jones, ECHA, Finland</p>
<p>16h00</p>	<p>Opening of the exhibition</p>
<p>17h00–19h00 Finlandia Hall</p>	<p>Opening Ceremony incl. Keynote Lecture 1 and EUROTOX Merit Award Keynote Lecture by Markku Kulmala, University of Helsinki, Finland: Atmospheric aerosols: from molecular clustering to regional air quality and global climate</p> <p>Chairs: Kai Savolainen, President of the EUROTOX 2019 congress, Finland Heather Wallace, President of EUROTOX, UK</p>

19h00–21h00	Welcome Reception in the exhibition area	
Monday, 9 September 2019		
08h00–18h00	Congress registration	09h00–16h30 Exhibition
09h00–10h00 Finlandia Hall	Keynote Lecture 2 Harri Alenius, Karolinska Institutet, Sweden: Systems toxicology: a key towards reliable hazard prediction	
10h00–10h30	Coffee Break, Exhibition & Poster Viewing 1	
10h30–12h30 Veranda 1	<p>Session 01 Metabolic capacity and functionality of the gut microbiome <i>Supported by ECETOC</i> Chairs: Bennard van Ravenzwaay, Germany Georges Kass, Italy</p> <p>Determining the role of the gut microbiota in the toxicity of foodborne chemicals in vitro Karsten Beekmann, Wageningen University of Research, Netherlands</p> <p>Metabolomic applications to decipher gut microbial metabolic influence in health and disease François-Pierre Martin, Nestlé Institute of Health Sciences, Switzerland</p> <p>Influence of the microbiome on plasma metabolite patterns – an inter-omic approach Christina Behr, BASF & Wageningen University of Research, Germany</p> <p>Contribution of the gut microbiome to host endogenous and xenobiotic metabolism and the carcinogenic potential of the microbiome Kiran Patil, EMBL, Germany</p>	
10h30–12h30 Veranda 4	<p>Session 02 Fetus – the most sensitive individual Chairs: Kirsi Vähäkangas, Finland Orhan Hilmi, Turkey</p> <p>Fetal exposure to toxic compounds Kirsi Vähäkangas, University of Eastern Finland, Finland</p> <p>Environment and male reproductive health Niels Skakkebaek, Rigshospitalet Copenhagen, Denmark</p>	

	<p>Epigenetics in fetal susceptibility to toxicity Juliette Legler, Utrecht Institute for Pharmaceutical Sciences (UIPS), Netherlands</p> <p>Future trends in testing for developmental toxicity Aldert Piersma, RIVM, Bilthoven, Netherlands</p>
<p>10h30–12h30 Veranda 2</p>	<p>Session 03 The exposome – understanding the role of environmental exposure in human health and disease Chairs: Angela Mally, Germany Thomas Weiser, Switzerland</p> <p>EXPOsOMICS: Novel approach to the assessment of exposure to high priority environmental pollutants Oliver Robinson, Imperial College London, UK</p> <p>Chemical exposure metabolomics Benedikt Warth, University of Vienna, Austria</p> <p>The human early-life exposome and its link to children’s health Rémy Slama, INSERM, France</p> <p>Developing the regulatory utility of the exposome Elaine Faustman, University of Washington, US</p> <p>Panel discussion with all speakers</p>
<p>10h30–12h30 Helsinki Hall</p>	<p>Session 04 How innate immune cells recognize toxicants Chairs : François Huaux, Belgium Marc Pallardy, France</p> <p>Innate cells sense toxicants as microorganisms François Huaux, Université catholique de Louvain, Belgium</p> <p>Lessons for toxicology from pathogen sensing by the innate immunity Mohamed Lamkanfi, Ghent University, Belgium</p> <p>Metal-induced immunotoxicity: ionic metals, innate immune receptors and skin allergy Marc Pallardy, Université de Paris-Sud, France</p>

	<p>Scavenger receptors recognize toxicants Andrij Holian, University of Montana-Missoula, US</p> <p>Revisiting the paradigm of silica pathogenicity: molecular description of the toxicity-relevant surface features Francesco Turci, University of Torino, Italy</p>
<p>10h30–12h30 Finlandia Hall</p>	<p>Session 05 New tools and application in reg. risk assessment – moving toward mechanistic risk assessment <i>Supported by EU-ToxRisk Project</i> Chairs: Bob van de Water, Netherlands Eva Cecilie Bonefeld-Jørgensen, Denmark</p> <p>Development of <i>in vitro</i> tests – Quality assurance and cross system testing Tanja Waldmann, University of Konstanz, Germany</p> <p>Modeling the impact of several <i>in vitro</i> systems in a read-across approach – applicability of the Dempster Shafer Theory Ulf Norinder, SweTox, Sweden</p> <p>Incorporating QIVIVE and PBTK into toxicity testing and assessment Ciaran Fisher, SIMCYP, UK</p> <p>Development of qualitative and quantitative AOPs and their integration into risk assessment Frédéric Bois, INERIS, France</p>
<p>10h30–12h30 Veranda 3</p>	<p>Short Oral Communications I – Biotransformation: State-of-the-art Chairs: Martin Wilks, Switzerland Tarja Kohila, Finland</p> <p>Human gut microbial glycerol dehydratase function: impact on chemical metabolism and toxicological relevance <u>S. Sturla</u>¹, J. Zhang¹, K. Hurley¹, M. T. Empl², M. Schneider¹, G. Breves², P. Steinberg³, C. Schwab¹, C. Lacroix¹ ¹ ETH Zurich, Health Sciences and Technology, Zurich, Switzerland ² Fraunhofer Institute for Toxicology and Experimental Medicine ITEM, Hannover, Germany ³ Max Rubner-Institut, Karlsruhe, Germany</p> <p>Mechanistic understanding of DILI using Metabolomics <i>in vitro</i> <u>S. Sperber</u>¹, M. Köhne¹, B. Birk¹, V. Haake², T. Walk², H. Kamp¹, B. van Ravenzwaay¹ ¹ BASF SE, Experimental Toxicology and Ecology, Ludwigshafen, Germany</p>

	<p>² Metanomics GmbH, Berlin, Germany</p> <p>Importance of non-mitochondrial pathways in drug-induced hepatic steatosis: investigations with 12 steatotic drugs in HepaRG cells <u>J. Allard</u>¹, S. Bucher¹, P.-J. Ferron², K. Begriche¹, P. Loyer¹, B. Fromenty¹ ¹ INSERM, NUMECAN, Rennes, France ² HCS Pharma, Loos, France</p> <p><i>In vitro</i> hepatic sulfation kinetics of selected bisphenols <u>D. Gramec Skledar</u>, M. Durcik, T. Tomašič, J. Trontelj, L. Peterlin Mašič University of Ljubljana, Faculty of pharmacy, Ljubljana, Slovenia</p> <p>New insights into Montelukast metabolism – possible implications to the drug’s adverse effects <u>C. F. Marques</u>^{1,2}, G. C. Justino¹, C. A. Gomes², M. M. Marques¹ ¹ Centro de Química Estrutural, Instituto Superior Técnico, Lisbon, Portugal ² Coimbra Institute for Clinical and Biomedical Research, Faculty of Medicine, University of Coimbra, Coimbra, Portugal</p> <p>Metabolism plays an important role in the <i>in vitro</i> hepatotoxicity of butylone, buphedrone, and 3,4-dimethylmetcathinone (3,4-DMMC) <u>R. R. Bravo</u>, H. F. Carmo, J. P. Silva, F. D. Carvalho, M. D. L. Bastos, D. C. Dias da Silva UCIBIO, REQUIMTE, FFUP, Department of Biological Sciences, Porto, Portugal</p> <p>Characterization of GCDC transport by human hepatic uptake transporters for <i>in vitro</i> testing purposes B. Tóth, V. Velky, Z. Tímár, <u>N. Szili</u>, E. Kis, Z. Gáborik, P. Krajcsi SOLVO Biotechnology, Budapest, Hungary</p> <p>Hepatotoxic fungicides affect molecular targets associated with the AOPs for cholestasis and steatosis <i>in vitro</i> C. Knebel¹, E. Zahn¹, S. Rieke¹, K. Brown¹, C. Kneuer¹, A. Braeuning², <u>P. Marx-Stoelting</u>¹ ¹ German Federal Institute for Risk Assessment, Pesticides Safety, Berlin, Germany ² German Federal Institute for Risk Assessment, Food Safety, Berlin, Germany</p>
12h30–13h30	Lunch Break, Exhibition & Poster Viewing 1
12h30–13h30 Terrace Hall	<p>Industry Session by WuXi AppTec Strategies for large molecule programs: What is needed for your IND submission?</p> <p>Sue McPherson, WuXi AppTec, Laboratory Testing Division, US</p>

<p>12h30–13h30 Veranda 1</p>	<p>Industry Session by Charles River Our EOGRTS experience – regulatory & practical considerations Chair: Manon Beekhuijzen</p> <p>Speakers: Manon Beekhuijzen, Pragati S. Coder, Sylvia Pelgrom, Charles River, US</p>
<p>13h30–14h30 Finlandia Hall</p>	<p>EUROTOX–SOT Debate Classification of substances as endocrine disruptors has a public health benefit Chairs: Félix Carvalho, Portugal George Daston, US</p> <p>EUROTOX speaker: Martin van den Berg, Utrecht University, Netherlands SOT speaker: Paul Foster, NIEHS (Retired), Research Triangle Park, NC, US</p>
<p>14h30–15h00</p>	<p>Coffee Break, Exhibition & Poster Viewing 1</p>
<p>15h00–17h00 Veranda 1</p>	<p>Session 06 Developments in the use of systematic review in chemical risk assessment Chairs: Richard Brown, Switzerland Martin Wilks, Switzerland</p> <p>Principles of systematic approaches for chemical risk assessment Annika Hanberg, Karolinska Institute, Sweden</p> <p>Getting the balance right between objectives and resources for a systematic review – the importance of problem formulation Martin Wilks, University of Basel, Switzerland</p> <p>Systematic review in the regulatory food safety area - Experiences from a JECFA evaluation Lianne de Wit, RIVM, Netherlands</p> <p>Use of systematic review methods by national programmes – examples from the USA Brandiese Beverly, US Government (NIEHS), US</p>
<p>15h00–17h00 Helsinki Hall</p>	<p>Session 07 Speeding up hazard assessment of nanomaterials Chairs: Bengt Fadeel, Sweden Félix Carvalho, Portugal</p> <p>Hazard assessment of engineered nanomaterials: setting the scene</p>

	<p>Bengt Fadeel, Karolinska Institutet Stockholm, Sweden</p> <p>High-content/high-throughput screening of nanomaterials Carsten Weiss, Karlsruhe Institute of Technology, Germany</p> <p>Systems biology approaches for nanomaterial hazard classification Dario Greco, University of Tampere, Finland</p> <p>Systems toxicology to support development of adverse outcome pathways Roland Grafström, Misvik Biology Turku, Finland</p>
<p>15h00–17h00 Veranda 2</p>	<p>Session 08 Human adaptation to environmental pollution: dose-response relationship revisited Chairs: Pavel Rossner, Czech Republic Heather Wallace, UK</p> <p>Hormesis for health, ageing and longevity Suresh Rattan, Aarhus University, Denmark</p> <p>Biomarkers for adaptive responses: how toxicology changes into pharmacology Aalt Bast, Maastricht University, Netherlands</p> <p>Clues to adaptation of the human population to the environment: lessons from Czech biomonitoring studies Pavel Rossner, Institute of Experimental Medicine Prague, Czech Republic</p> <p>MicroRNA response to environmental carcinogens: from adaptation to damage Alberto Izzotti, University of Genoa, Italy</p>
<p>15h00–17h00 Finlandia Hall</p>	<p>Session 09 Application of new approach methods and development of integrated approaches to testing and assessment – moving toward mechanistic risk assessment <i>Supported by EU-ToxRisk Project</i> Chairs: Hennie Kamp, Germany Emanuela Corsini, Italy</p> <p>Read-across concept in EU-ToxRisk and integration of new approach methods into risk assessment – example branched carboxylic acids Sylvia Escher, Fraunhofer ITEM, Germany</p>

	<p>Integration of new approach methods in a structure based read-across for DART effects Dinant Kroese, TNO, Netherlands</p> <p>Learnings from EU-ToxRisk read-across case studies: application of new approach methods Bob van de Water, Leiden University, Netherlands</p> <p>Ab initio- prediction of liver toxicity by <i>in vitro</i> systems and spatio-temporal modelling Jan Hengstler, IFADO, Germany</p>
<p>15h00–17h00 Veranda 4</p>	<p>Session 10 The process of ageing and its modulation: telomeres as biomarkers in <i>in vitro</i> and <i>in vivo</i> studies Chairs: Aristidis M. Tsatsakis, Greece Hilmi Orhan, Turkey</p> <p>Clinical aspects of Precision Medicine using as biomarkers telomere length, fatty acids and organic acids Dimitris Tsoukalas, E.I.Nu.M., Greece</p> <p>Low grade chronic inflammation and telomere shortening: immunosenescence process in human Ayse Basak Engin, Gazi University, Turkey</p> <p>Live fast, die young mode: influence of substance abuse on telomeres and telomerase Félix Carvalho, University of Porto, Portugal</p> <p>Telomeres biology involvement in thyroid neoplasia: from aging clock to aggressive cancers Corin Badiu, The Romanian Society of Psychoneuroendocrinology, Romania</p>
<p>15h00–17h00 Veranda 3</p>	<p>Short Oral Communications II – Nanotoxicology Chairs: Jan Vondráček, Czech Republic Eva Cecilie Bonfeld-Jørgensen, Denmark</p> <p>Gene expression profiling of an <i>ex vivo</i> human placenta perfusion model following exposure to engineered nanomaterials S. Chortarea¹, M. Pius¹, V. Fortino², L. Saarimäki³, P. Wick¹, D. Greco³, T. Buerki-Thurnherr¹ ¹ Empa, Swiss Federal Laboratories for Materials Science and Technology, Laboratory for Materials-Biology Interactions, St. Gallen, Switzerland ² University of Eastern Finland, Institute of Biomedicine, Joensuu, Finland ³ University of Tampere, Institute of Biomedical Technology, Tampere, Finland</p>

Grouping of representative nanomaterials is efficiently executed by combining high-throughput-generated biological data with physicochemical data

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Pulmonary pro-inflammatory effects of alumina nanoparticles and hydrogen chloride gas mixtures on rats after single and repeated inhalations

A. Bourgois^{1,2}, D. Saurat¹, A. Boyard¹, N. Guitard³, S. De Araujo¹, S. Renault⁴, F. Fargeau⁵, C. Frederic⁵, S. François³, S. Dekali¹

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Lung toxicity of industrial particles

B. Trouiller

INERIS, Experimental Toxicology Unit, Vernueil-en-Halatte, France

Silica nanoparticles induce the blood hypercoagulable state via miR-451/IL6R signaling pathway

L. Feng, M. Yang, P. Huang, J. Duan, Z. Sun

Capital Medical University, Department of Toxicology and Sanitary Chemistry, School of Public Health, Beijing, China

Food-grade TiO₂ (E171) nanoparticles cross the human placental barrier: an ex vivo study on isolated and perfused placentae

A. Guillard¹, E. Gaultier¹, C. Cartier¹, L. Devoille², J. Noireaux², L. Chevalier³, C. Oster², F. Grandin¹, C. Coméra¹, A. Cazanave¹, A. De Place⁴, M. Morin⁴, C. Vayssière⁴, S. Gambier⁵, N. Feltrin², F. De La Farge¹, V. Gayrard¹, V. Bach⁶, K. Chardon⁶, P. Fiscaro², N. Picard-Hagen¹, E. Houdeau¹

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⁴ Toulouse University Hospital, Toulouse, France

⁵ Luxembourg Institute of Science and Technology, Environmental Health Group, Belvaux, Luxembourg

	<p>⁶ Pérیتox UMR-I 01 (Perinatalıty and Toxic Risk), Jules Verne University, Amıens, France</p> <p>Long-term effects of inhaled nanoparticles in rats – Ceriumdioxide and Bariumsulfate <u>R. Landsiedel</u>¹, L. Ma-Hock¹, K. Wiench¹, S. Groeters¹, B. van Ravenzwaay¹, H. Ernst², D. Schaudien² ¹ BASF SE, Ludwigshafen am Rhein, Germany ² Fraunhofer-Institut für Toxikologie und Experimentelle Medizin ITEM, Hannover, Germany</p> <p>Environmental risks associated with nanoscale zerovalent iron-based nanomaterials during remediation applications <u>J. Semerad</u>^{1,2}, A. Sevcu³, J. Filip⁴, T. Cajtham^{1,2} ¹ Czech Academy of Sciences, Institute of Microbiology, Prague, Czech Republic ² Charles University, Faculty of Science, Institute for Environmental Studies, Prague, Czech Republic ³ Technical University of Liberec, Liberec, Czech Republic ⁴ Palacký University, Regional Centre of Advanced Technologies and Materials, Olomouc, Czech Republic</p>
<p>17h00–18h00</p>	<p>Speciality Section Meetings Open to all delegates. The Specialty Section Meetings will be accompanied by a cheese & wine reception.</p> <ul style="list-style-type: none"> • Carcinogenesis Specialty Section (Terrace Hall) • ERAS Risk Assessment Specialty Section (Veranda 1) • ITCASS Immunotoxicology Specialty Section (Veranda 2) • Molecular Toxicology Speciality Section (Veranda 3) • In vitro and in silico toxicology Specialty Section of EUROTOX (In2TOX SS) (Veranda 4)
<p>19h30–21h30</p>	<p>City Hall Reception, sponsored by the City of Helsinki</p>

Tuesday, 10 September 2019		
08h00–18h00	Congress registration	09h00–16h30 Exhibition
09h00–10h00 Finlandia Hall	<p>SOT Merit Award Lecture Chair: George Daston, SOT Vice President, US</p> <p>Bis-Indoles as receptor ligands and novel anticancer agents Stephen Safe, Texas A&M University, US</p>	
10h00–10h30	Coffee Break, Exhibition & Poster Viewing 2	
10h30–12h30 Veranda 2	<p>Session 11 Challenges of non-animal approaches for food safety: from inception to application <i>Supported by ILSI Europe</i> Chairs: Alan Boobis, UK Vesna Matović, Serbia</p> <p>High throughput screening in the risk and benefit assessment of food ingredients Ans Punt, RIKILT, Netherlands</p> <p>Adverse outcome pathways and beyond Mathieu Vinken, Vrije Universiteit Brussel, Belgium</p> <p>Strategies for avoiding animal testing in food safety and efficacy evaluation: challenges and opportunities Bob van de Water, Leiden University, Netherlands</p> <p>Regulatory perspective on non-animal approaches to assess foods and food ingredients Katrin Schutte, European Commission – DG Environment, Belgium</p>	
10h30–12h30 Helsinki Hall	<p>Session 12 Implications of biodistribution of inhaled nanoparticles: effects in organs other than the lung Chairs: Karin Sørig Hougaard, Denmark Mattias Öberg, Sweden</p> <p>The lung as a barrier to inhaled particles: dosimetry and biodistribution Flemming Cassee, RIVM, Netherlands</p>	

	<p>Effects of particles on the central nervous system Roel Schins, Leibniz Research Institute for Environmental Medicine, Germany</p> <p>Effects of particles on the placenta and fetus Luisa Campagnolo, University of Rome, Italy</p> <p>Effects of particles on male and female fertility Karin Sørig Hougaard, Danish Centre for Nanosafety, Denmark</p>
<p>10h30–12h30 Finlandia Hall</p>	<p>Session 13 Knowledge-based computational approaches in predictive toxicology <i>Supported by EU-H2020</i> Chairs: Ferran Sanz, Spain Mumtaz Işcan, Turkey</p> <p>The power of workflows – toxicological read across using the Open PHACTS discovery platform Gerard F. Ecker, University of Vienna, Austria</p> <p>Integrating explicit knowledge and statistics in the <i>in silico</i> modelling Emilio Benfenati, IRFMN, Italy</p> <p>Predicting with confidence: Toxicological <i>in silico</i> model building and prediction using Conformal Prediction Ulf Norinder, SweTox, Sweden</p> <p>Small is beautiful: application of local models in toxicology Manuel Pastor, University Pompeu Fabra, Spain</p>
<p>10h30–12h30 Veranda 1</p>	<p>Session 14 Understanding the interindividual variability in toxicity involving the psychotropic drugs Chairs : Bruno Mégarbane, France Félix Carvalho, Portugal</p> <p>Psychotropic drug poisonings admitted to the emergency department: epidemiology and morbidities Pieter de Paepe, University Hospital Ghent, Belgium</p> <p>Drug-induced toxicity at therapeutic doses versus acute overdose: physiopathological differences Florian Eyer, Technical University of Munich, Germany</p>

	<p>Alcohol poisonings: understanding inter-individual toxicokinetic differences and effect variations Ana Ferrer-Dufol, Zaragoza University, Spain</p> <p>Lithium poisoning: how the ingestion pattern can modify its neuropharmacokinetics and neurotoxicity Bruno Mégarbane, Paris-Diderot University, France</p>
<p>10h30–12h30 Veranda 4</p>	<p>Session 15 Investigative Toxicology Leaders Forum (ITLF): Scientific advancements and case studies for the optimization of drug discovery. Trends in investigative toxicology Chairs: Teija Oinonen, Finland Thomas Weiser, Switzerland</p> <p>Olson revisited – Translational Analysis of Safety Data (IMI eTRANSafe) François Pognan, Novartis Pharma AG, Switzerland</p> <p>Application of <i>in vitro</i> pharmacokinetic simulations using “microformulator” technology for quantified risk assessments Clay Scott, AstraZeneca, US</p> <p>Development of 3D eye models for early assessment of retinal toxicity. A CRACK-IT Challenge Philip Hewitt, Merck KgaA/ERT, Germany</p> <p>Development of <i>in vitro</i> systems for ADC toxicity Terry van Vleet, AbbVie, Germany</p>
<p>12h30–13h30</p>	<p>Lunch Break, Exhibition & Poster Viewing 2</p>
<p>12h30–13h30 Terrace Hall</p>	<p>Industry Session by Citoxlab How to navigate and interpret EC regulations on endocrine disruption testing using available guidance and testing platforms</p> <p>Weight of evidence brought by OECD level 3 test methods using <i>in vitro</i> aquatic embryos Gregory Lemkine, WatchFrog, France</p> <p>Combining smart study design in regulatory toxicology with targeted investigations to determine endocrine disruption potential and human relevance Pramila Singh, Citoxlab, France</p>

<p>12h30–13h30 Veranda 3</p>	<p>Industry Session by Instem Leveraging the combined power of technology, expertise and regulatory standards for safer outcomes</p> <p>Gordon Baxter, Instem, UK</p> <p>Marc Ellison</p>
<p>13h30–14h30 Finlandia Hall</p>	<p>ILSI/HESI Lecture</p>
<p>14h30–15h00</p>	<p>Coffee Break, Exhibition & Poster Viewing 2</p>
<p>15h00–17h00 Veranda 2</p>	<p>Session 16 Chemical risk assessment using human <i>in vitro</i>, <i>ex vivo</i>, <i>in silico</i> and biomonitoring data Chairs : Anne Marie Vinggaard, Denmark Sue Gibbs, Netherlands</p> <p>Chemical risk assessment: How well do human <i>in vitro</i> and <i>in silico</i> data predict the <i>in vivo</i> situation? Imran Shah, EPA, US</p> <p>PBK modeling for chemical risk assessment: <i>in vitro</i> biomarkers for developmental toxicity and their extrapolation to the <i>in vivo</i> situation Yvonne Rietjens, Wageningen University, Netherlands</p> <p>Prediction of adverse male reproductive health effects using <i>in vitro</i> tests and PBK modelling Anne Marie Vinggaard, Technical University of Denmark/SSCT & ESTIV, Denmark</p> <p>Human biomonitoring and complex serum mixture effects as biomarkers of impact on fetal growth Eva Bonefeld-Jørgensen, Aarhus University, Denmark</p>
<p>15h00–17h00 Veranda 1</p>	<p>Session 17 Experimental comprehensive toxicological studies simulating real-life exposures: Long-term combined exposures on multi end-points Chairs: Aristidis M Tsatsakis, Greece Juha Laakso, Finland</p> <p>Experimental designs and protocols from methodology to application: problems and solutions Anca O. Docea, University of Medicine and Pharmacy Craiova, Romania</p> <p>Oxidative stress biomarkers in long-term toxicity studies of combined exposures</p>

	<p>Dimitrios Kouretas, University of Thessaly, Greece</p> <p>Comparative evaluation and challenges in translating endpoints from experimental studies to human epidemiological observations Antonio Hernández, University of Granada School of Medicine, Spain</p> <p>The concept of Toxicology safety evaluations in 21st century Aristidis M Tsatsakis, University of Crete, Greece</p>
<p>15h00–17h00 Finlandia Hall</p>	<p>Session 18 Biomarkers in predictive toxicology and risk assessment Chairs: Eugenia Dogliotti, Italy Mathieu Vinken, Belgium</p> <p>The exposome in practice Oliver Robinson, Imperial College London, UK</p> <p>Microfluidic systems to identify new biomarkers Henriette Lanz, Mimetas – The Organ on a Chip Company, Netherlands</p> <p>Lessons learnt from ‘omics’ technologies <i>in vivo</i> in the last decades Heidrun Ellinger-Ziegelbauer, Bayer AG, Germany</p> <p>Use of biomarkers in the assessment of risk from environmental contamination by perfluorinated compounds: strengths and weaknesses Tony Fletcher, Public Health England, UK</p>
<p>15h00–17h00 Helsinki Hall</p>	<p>Session 19 Endocrine disruption: identification of root causes <i>Supported by ECETOC</i> Chairs: Bennard van Ravenzwaay, Germany Kirsi Myöhänen, Finland</p> <p>ED identification in the EU and the use of weight of evidence Philip Botham, Syngenta, UK</p> <p>Dose-response relationship of single and combined exposure to ED chemicals <i>in vitro</i> & <i>in vivo</i> Steffen Schneider, BASF, Germany</p>

	<p>A perspective of ED and Regulation in the EU Helen McGarry, UK Health Safety Executive, UK</p> <p>Epidemiology – a new perspective on root causes of observations Gerard Swaen, Maastricht University, Netherlands</p>
<p>15h00–17h00 Veranda 3</p>	<p>Session 20 Investigative Toxicology Leaders Forum (ITLF): Scientific advancements and case studies for the optimization of drug discovery Chairs: Philip Hewitt, Germany Marc Pallardy, France</p> <p>DILI revisited – key results of the IMI project MIP-DILI Philip Hewitt, Merck, Germany</p> <p>Bile acid sequestration by cholestyramine mitigates FGFR4 inhibition-induced ALT elevation Heiko Schadt, Novartis Pharma, Switzerland</p> <p>Elucidating the role of mitochondrial dysfunction in drug-induced intrahepatic cholestasis Sophie Penman, Servier/Liverpool University, UK</p> <p>Mitochondrial toxicity in the context of hypoxia Katie O'Brien, GSK/Cambridge University, UK</p>
<p>15h00–17h00 Veranda 4</p>	<p>Sponsored Symposium Promotion of safe nanotechnology through global networking <i>Sponsored by EC4SafeNano (EU H2020-project No 723623) / INERIS</i> Chairs: Anna-Kaisa Viitanen, Finland Hannu Norppa, Finland</p> <p>Nanosafety – Importance of global networking Juan Riego-Sintes, The Joint Research Centre, Italy</p> <p>Safe nanotechnology – Actions in South-America Ricardo Azevedo, University of Brasilia, Brazil</p> <p>Introduction of the Centre of European Organisations for Safe Nanotechnology Emeric Frejafon, INERIS, France</p>

	<p>Nanosafety networks in Asia N. N.</p> <p>Open discussion with all speakers Moderated by Kai Savolainen, FST, Finland</p>	
20h00–0h00	Congress Dinner at Clarion Hotel	

Wednesday, 11 September 2019		
08h00–13h00	Congress Registration	09h00–12h00 Exhibition
08h30–09h30 Finlandia Hall	<p>Bo Holmstedt Memorial Fund Lecture Chair: Herman Autrup, Denmark</p> <p>Understanding fundamental quantitative principles is a prerequisite for improving toxicological science and risk assessment Wout Slob, Bilthoven, Netherlands</p>	
09h30–11h30 Helsinki Hall	<p>Session 21 Comprehensive toxicological profiles in nanoformulations for blood brain barrier Chairs: Petra Henrich-Noack, Germany Heather Wallace, UK</p> <p><i>In vivo</i> imaging of nanoparticles' effects and side effects in the healthy and diseased brain Petra Henrich-Noack, Otto-von-Guericke University, Germany</p> <p>Extracellular matrix and nanoparticles interaction – breaching new barriers? Dragana Nikitovic, University of Crete, Greece</p> <p>Amphiphilic poly-N-vinylpyrrolidone nanoparticles as drug carriers: Synthesis – Characterisation – Properties – Toxicological profile – Applications Mikhail Shfilman, D.I. Mendeleev University of Chemical Technology Moscow, Russia</p> <p>Bio-inspired nanoparticles in neuroscience Monica Neagu, 'Victor Babes' National Institute of Pathology Bucharest, Romania</p>	
09h30–11h30	Session 22	

<p>Veranda 1</p>	<p>Advancing toxicological evaluations in resolving current policy controversies in GMO products Chairs: Michael Antoniou, UK Aristidis Tsatsakis, Greece</p> <p>Integrating multiple 'omics' analysis to study the effects of herbicide-tolerant crops Robin Mesnage, King's College London, UK</p> <p>Adverse outcome pathways (AOPs) and challenges in chronic studies with GMOs Martin Wilks, University of Basel, Switzerland</p> <p>Risks from genetically modified plants; past, present and the future Marina Goumenou, University of Crete, Greece</p> <p>Scientific challenges for GMO regulation in Europe – the EFSA GMO Panel Chair's perspective Hanspeter Naegeli, University of Zurich, Switzerland</p>
<p>09h30–11h30 Veranda 2</p>	<p>Session 23 Optimization of existing and construction of new testing strategies for skin sensitization potency Chairs: Dirk Petersohn, Germany Emanuela Corsini, Italy</p> <p>Development of performance-based test guideline for skin sensitization Silvia Casati, European Commission, Italy</p> <p>Chemical reactivity mapping of skin sensitizers in a reconstituted human epidermis model using HRMAS NMR Spectroscopy Jean-Pierre Lepoittevin, Strasbourg University, France</p> <p>A defined approach for skin sensitization potency integrating <i>in silico</i>, <i>in chemico</i> and <i>in vitro</i> cell data Isabel Ferreira, University of Coimbra, Portugal</p> <p>Practical application of existing and new testing strategies/defined approaches for risk assessment of cosmetic compounds Dirk Petersohn, Henkel, Germany</p>
<p>09h30–11h30 Finlandia Hall</p>	<p>Session 24 Toxic epidemics: why should we still be worried in 2019? Chairs: Bruno Mégarbane, France Vesna Matović, Serbia</p> <p>The opioid analgesics</p>

	<p>Bruno Mégarbane, Paris-Diderot University, France</p> <p>The new psychoactive substances Paul Dargan, Guy's and St Thomas' NHS Foundation Trust, UK</p> <p>The anticholinesterasic pesticides Michael Eddleston, University of Edinburgh, UK</p> <p>The toxic alcohol Sergey Zacharov, Prague University, Czech Republic</p>
<p>09h30–11h30 Veranda 4</p>	<p>Session 29 Species specific gastrointestinal (GI) toxicity in rabbits – what does it mean for prenatal developmental toxicity (PNDT) studies and their regulatory use? Chairs: Jarlath Hynes, UK Kirsi Myöhänen, Finland</p> <p>GI toxicity in rabbit – mechanisms and relevance for human Manon Beekhuijzen, Charles River Laboratories, Netherlands</p> <p>Rabbit PNDT studies and GI toxicity; what are the regulatory consequences for plant protection products? Mary Moxon, ECPA Consultant, European Crop Protection, Belgium</p> <p>Alternative species and methods for PNDT testing for pharmaceuticals Céline Pique, Charles River Laboratories, France</p> <p>Regulatory considerations for the evaluation of rabbit PNDT studies submitted under REACH and/or BPR Ulrike Reuter, ECHA, Finland</p>
<p>11h30–12h00</p>	<p>Coffee Break & Exhibition</p>
<p>12h00–14h00 Veranda 4</p>	<p>Session 25 Detection, assessment, management and communication of risk in mass human toxic exposures Chairs: Paul Dragan, UK Mumtaz İşcan, Turkey</p> <p>Warfare scenarios involving chemicals Horst Thiermann, German Army Institute of Pharmacology and Toxicology, Germany</p>

	<p>Environmental contamination by organochlorine residues: Lindane manufacture residues Ana Ferrer-Dufol, Zaragoza University, Spain</p> <p>Outbreaks by contaminated food and beverages Sergey Zacharov, Prague University, Czech Republic</p> <p>Risk communication in mass poisoning situations – what do we do, where do we go? Charles McKay, University of Connecticut School of Medicine, US</p>
<p>12h00–14h00 Finlandia Hall</p>	<p>Session 26 Suitability of non-animal approaches in different industries: One size fits all? Chairs: Phillip Bellion, Switzerland Greta Waissi, Finland</p> <p>Non-animal approaches in the safety assessment of food and cosmetic ingredients: similarities and differences Phillip Bellion, DSM Nutritional Products, Switzerland</p> <p>Hurdles to improve validation of alternative methods for chemicals and proposed solutions Robert Landsiedel, BASF, Germany</p> <p>Alternative approaches in the early phases of pre-clinical toxicology. What is really used in the pharmaceutical industry? Thomas Steger-Hartmann, Bayer AG, Germany</p> <p>Establishing scientific credibility/validity of new approaches for different decision-making contexts Joao Barroso, European Commission Joint Research Centre (JRC), Italy</p> <p>Panel discussion with all speakers What can be leveraged across sectors and what not?</p>
<p>12h00–14h00 Veranda 2</p>	<p>Session 27 Neurotoxicity in the scientific and regulatory outlook Chairs: Georges Kass, Italy Martin Wilks, Switzerland</p> <p><i>In vitro</i> model of neurotoxicity Ellen Fritsche, Leibniz Research Institut for Environmental Medicine, Germany</p> <p>Exploring chemically induced neurotoxicity mode of action</p>

	<p>Barbara Viviani, University of Milano, Italy</p> <p>Toward the regulatory application of DNT in vitro assays Andrea Terron, European Food Safety Authority, Italy</p> <p>The use of zebrafish as an alternative model for behavioural testing Hilda Witters, Vito, Belgium</p>
<p>12h00–14h00 Veranda 1</p>	<p>Session 28 Hepatotoxicity: mechanisms, new insight into liver function, and possibilities of <i>in vitro</i> prediction Chairs: Jan Hengstler, Germany Hilmi Orhan, Turkey</p> <p>Insight into mechanisms of hepatotoxicity by two-photon microscopy and derivation of predictive <i>in vitro/in silico</i> systems Jan Hengstler, Leibniz Research Centre for Working Environment and Human Factors (IfADo), Germany</p> <p>Computational modeling of cellular stress pathway activity and application in liver toxicity prediction Joost Beltman, Leiden University, Netherlands</p> <p><i>In vitro</i> metabolome data and a comparison to the <i>in vivo</i> situation Hennicke Kamp, BASF, Germany</p> <p>Activation of cytoprotective adaptive responses in liver cells by the antibiotic nitrofurantoin Stefan Schildknecht, University of Konstanz, Germany</p>
<p>12h00–14h00 Helsinki Hall</p>	<p>Session 30 Substances of Unknown or Variable composition, Complex reaction products or Biological materials (UVCBs); new challenges in their toxicological evaluation and risk management in REACH Chair: David Bell, Finland Jyrki Liesivuori, Finland</p> <p>The chemical composition of UVCBs – challenges in characterization Michal Skowron, ECHA, Finland</p> <p>Assessment of the hazardous properties of UVCBs George Cartlidge, ECHA, Finland</p> <p>How to establish read-across within a category of UVCBs- an industrial perspective Mike Penman, Penman Consulting, Belgium</p>

	<p>Regulatory Risk Management of UVCB substances- challenges and effective implementation Chrystele Tissier, ECHA, Finland</p>
<p>14h00–14h30 Finlandia Hall</p>	<p>Closing Ceremony and Awards presentation</p>

Due to the very dense scientific programme you might wish to arrange your travel schedule accordingly. In line with this, we recommend to arrange for accommodation early in advance, as the availability of a suitable hotel room might not be granted at a later stage. Detailed information can be found online: [EUROTOX 2019 hotel reservation](#).