

Annual Technical Meeting undertakes a reality check of the goals, image and effectiveness of ECETOC

On 12th June 2014, ECETOC brought together 46 scientists from its Member Companies, academia, journalism and the European Chemicals Agency (ECHA) for its Annual Technical Meeting (ATM), with the objective to assess how well it fulfils member company needs and regulatory aspirations at European and Global Levels, and to brainstorm how improvements can be made.



Derek Knight (ECHA)

"ECHA wants to be the hub of good regulatory science. We recognise there is a need to communicate regulatory needs to scientists to guide R&D and get concerted action"



Martin Kayer (BASF)

"Regulatory toxicology is less about Science and more about box-ticking – but it is here to stay and it is increasingly important because it's our license to operate"

The Chairs of the Scientific Committee and Board set the context in terms of scientific, regulatory and global business needs. Participants then heard about ECETOC's achievements in its Environment, Human Health and



Chris Money (Cynara Consulting)

"The TRA tool aligns industry work processes with regulatory needs – leading to significant savings and a reliable Chemical Safety Assessment. Without the TRA, CSA's couldn't have been done in time for REACH"

Exposure science programme. Finally, guests from ECHA and Chemical Watch gave their analysis of ECETOC from the outside, before participants broke out into groups to discuss the question: Have We Got It Right?

As a result of the brainstorm break-out groups, participants arrived at a number of Key Elements and Objectives



Mamta Patel (Chemical Watch)

"You will make headway with good arguments, supported by robust science – as long as the interests behind those arguments are openly stated. Be transparent about who's involved and what you are trying to achieve"

for Action which will be considered by the ECETOC Scientific Committee in October 2014, for incorporation into the overarching ECETOC strategy. The resulting decisions and developments will be presented at the 2015 ATM.

The full meeting report, including the list of Key Elements and Objectives for Action, can be downloaded from the following link: <http://bit.ly/ecetoc-2014ATMreport>

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Scientific Committee News

Retirement of ECETOC Chemicals Programme Manager, Henk Vrijhof

Henk Vrijhof retired at the end of January 2014. A senior staff member, Henk joined ECETOC in 1988 as an environmental scientist having worked in national and international government. We wish him well in his retirement.

New task force on adapting SimpleTreat for simulating behaviour of chemical substances

Following a call for nominations to member companies in February 2014, a task force is currently being set up to address the modelling assessment of wastewater treatment plants. In the EU, the fate of chemicals in wastewater treatment is currently simulated with SimpleTreat 3.1. RIVM is currently revising SimpleTreat 3.1 for simulating municipal wastewater treatment plants. A recent ECETOC workshop has provided major insights for advancing the modelling assessments of industrial wastewaters based on the revised SimpleTreat model.

It is proposed to establish an advanced simulation approach for industrial wastewater treatment. An advanced SimpleTreat module is to

be developed by Radboud University which can be customised for individual industrial wastewater treatment plants. This ECETOC Task Force will supervise the tool development, complement the tool framework and guidance for the use of this tool and develop regulatory support for the advanced simulation approach for chemicals in industrial wastewater treatment.

Rosemary Zaleski of ExxonMobil Biomedical Sciences joins the ECETOC Scientific Committee

The Scientific Committee welcomes as its latest member Rosemary Zaleski of ExxonMobil Biomedical Sciences where she is Section Head, Exposure Sciences, Occupational and Public Health (OPH) Division. Her areas of expertise include exposure factors, exposure modelling, and child-specific exposure assessment. Dr Zaleski is already active within ECETOC as a member of the Targeted Risk Assessment (TRA) task force and will be replacing Chris Money who recently retired from ExxonMobil. We also wish Chris well in his retirement.

The ECETOC Secretariat welcomes Madeleine Laffont as Human Health Scientist

The ECETOC Secretariat is delighted

to announce the appointment of Madeleine Laffont as Human Health Scientist. Within the remit of ECETOC's human health science areas, Madeleine will be managing task forces, workshops and Cefic LRI projects as well as representing ECETOC and its Membership in external projects and events. Madeleine has worked as an environmental health project management and communications consultant since 2010 (Qatar then Belgium). Prior to that, she managed a range of environmental health issues for Cefic (the European Chemical Industry Council) for eight years. Projects included Children's Environmental Health, Indoor Air, Stakeholder Engagement on Nanotechnologies and the Health Effects of Climate Change. She has represented Cefic at EU and International arenas such as SAICM (United Nations Strategic Approach to International Chemicals Management); WHO and NGO work groups as well as Trade Unions. Her earliest professional experience was in medical writing and petrochemical journalism in London, Paris and Hong Kong. Mrs Laffont has a degree in Medicine from Imperial College, School of Medicine, London. She is an expert communicator for the Nanoforce Network, a member of Age Action Alliance, and Health Action Forum International.



Targeted Risk Assessment Tool

ECETOC Targeted Risk Assessment Tool updated to version 3.1 (TRAv3.1) and publication of related Technical Report no. 124

In response to feedback received from users of the TRA, ECETOC has further improved the consumer portion of the model by the inclusion of the ability to account for infrequent uses of consumer products. The changes which have been developed in cooperation with ECHA are now found as version 3.1 of the TRA and are also to be found within version 2.3 of Chesar <https://chesar.echa.europa.eu>

A detailed explanation of the rationale for the changes is contained in an Addendum to the previous ECETOC TRA Technical Report no.114 (just published as ECETOC Technical Report no.124) which provides further clarification of how ECETOC has applied 'transfer factors' in the TRA's prediction of oral, dermal and inhalation

exposures. These improvements now enable the information contained within developments such as the DUCC Specific Consumer Exposure Determinants <http://www.ducc.eu/Activities.aspx> to be suitably processed.

The update to version 3.1 was used as an occasion to include an updated SpERC list and improvements of the functionalities by offering the export and import of single substance datasets. Version 3.1 is available both as an integrated model and a standalone version for the consumer part, and can be found at the ECETOC TRA website <http://www.ecetoc.org/tra> together with updated user guides for these tools and ECETOC TRA Technical Reports.

The Addendum to ECETOC Technical Report 114 has been published as ECETOC Technical Report 124: Addendum to TR114: Technical Basis for the TRA v3.1. The Summary and free PDF of the report are available at <http://bit.ly/ecetoc-tr124>

Upcoming Events

Symposium on genotoxicity of nanomaterials

07.Jul.14, EEMS, Lancaster, UK Hosted by UKEMS

This symposium will review new developments since the previous ECETOC-EEMS symposia - published as special issues:

1. Genotoxicity of engineered nanomaterials held on 21 August 2009 in Florence; Guest editors: M. Donner & L. Tran *Nanotoxicology* 4 (2010): 345-424 <http://informahealthcare.com/toc/nan/4/4>

2. Toxicology / Genotoxicity of manufactured nanoparticles held on 11 September 2007 in Basel; Guest editors: H. Norppa & H. Greim *Toxicology Letters* 186 (2009):147-176 www.sciencedirect.com/science/journal/03784274/186/3

EEMS website:
<http://www.eemseu.org>

SETAC Europe 10th Special Science Symposium: Bioavailability of organic chemicals: Linking science to Risk Assessment and Regulation

14-15.Oct.14, Brussels, Belgium

The main objective of this symposium, of which ECETOC is a sponsor, is to identify and provide scientifically-based solutions to the challenges faced by regulators and industries in handling bioavailability issues during risk assessment and regulation of organic chemicals. The symposium will provide an opportunity for scientists, regulators, and industrial managers to intensify the exchange of knowledge and experience on these issues, with the goal to facilitate the implementation of bioavailability in the management and regulation of chemicals (e.g., REACH) and contaminated sites (including remediation). Download the flyer at <http://sesss10.setac.org>

3rd party event: Short course on toxicologic pathology in fish

15-17.Oct.14 Cefas Weymouth Lab., UK

Organisers Stephen W. Feist & Helmut Segner are pleased to announce the 2nd short course on toxicologic pathology in fish. The aim is to provide training in the methods and diagnosis of toxicopathological lesions in fish.

The course will take place at the Cefas Weymouth Laboratory, UK on the 15-17th October, 2014 and is sponsored by ECETOC. The course will place significant emphasis on "hands-on" practical training and the diagnosis of pathological changes in fish tissues. Further details will be made available via the European Association of Fish Pathologists (EAFP) (www.eafp.org) and BEQUALM (www.bequalm.org) websites. Download the flyer: <http://bit.ly/Toxicopath-course-flyer-2014>

Recent Events

2014 Environment Progress Review

29-30.Jan.14, Brussels, Belgium

At the end of January, ECETOC hosted its ever-popular annual 2-day scoping meeting to inform member company scientists of progress in current and recently completed environmental Cefic LRI projects, ECETOC task forces and workshops. The first day, with a record turnout of 41 participants, reviewed existing and recent activities whilst the second day focussed on identifying new ideas for ECETOC or Cefic LRI activities.

Science Scoping Meeting on Human Health & Human Exposure

05-06.Feb.14, Brussels, Belgium

On 5-6 February 2014, ECETOC brought together 38 scientists from its Member Companies, academia, the European Chemicals Agency (ECHA), the Joint Research Centre (JRC) and Cefic LRI to brainstorm breakthrough questions that if answered, will improve risk assessment. The objective of the Science Scoping Meeting was to help establish the mid to long-term ECETOC strategic science direction in the area of Human Health & Exposure and to provide suggestions for future

ECETOC and Cefic LRI programmes. The selected topics and breakthrough questions were presented to the ECETOC Scientific Committee later in February and also to the Cefic LRI SIG. If/when approved, Action Plans and RFPs will be developed. ECETOC implementation will start by Q4 2014 and LRI research will start Q1 2015.

Estimating toxicity thresholds for aquatic ecological communities from sensitivity distributions

11.Feb.14, Amsterdam, Netherlands

Organised in collaboration with the Environment Agency of England, this workshop brought together 42 participants representing industry, academia and regulatory bodies in equal proportions, and including 2 university students invited under ECETOC support of young scientists. The meeting discussed and reported current thinking on when and how species sensitivity distributions, SSDs, should be used and how the methodology might be further developed.

Three key aspects were considered:
1. What is the ecological relevance of an SSD?
2. What SSD statistical models are

available for deriving toxic thresholds (HC5/PNEC) for aquatic communities?
3. regulatory application
A workshop report is currently in preparation.

SETAC Europe 2014: Young Scientist Award

15.May.14 Basel, Switzerland

The ECETOC Best Platform Award honours the early career scientist with the best platform presentation at the SETAC Europe Annual Meeting. The award winner receives a monetary prize and free registration to the next SETAC Europe Annual meeting. Steffi Böhme of the Helmholtz Centre for Environmental Research (Department of Bioanalytical Ecotoxicology) won this year's award for her presentation 'Visualisation of silver nanoparticle uptake by Laser Ablation - Inductively Coupled Plasma Mass Spectrometry'. http://basel.setac.eu/awards-programme/young_scientist_award

ECETOC Annual General Meeting (AGM) and Annual Technical Meeting (ATM)

12.Jun.14, Brussels, Belgium

Please see our lead article on page 1 for a full review of the ATM.

Latest publications



ECETOC 2013 Annual Report

The ECETOC 2013 Annual Report was published in advance of the Annual General & Annual Technical Meetings in June. An overview of ECETOC activities during 2013 is provided, along with reviews of the year by the Chairman of the Board, Dr Martin Kayser (BASF), the Chair of the Scientific Committee, Dr Bennard van Ravenzwaay (BASF) and the Secretary General Dr Alan Poole. The report is available in pdf format via <http://bit.ly/ecetoc-2013ar>

TR124: Addendum to TR114: Technical Basis for the TRA v3.1

ECETOC Technical Report 114 (ECETOC, 2012) Appendix F described the broad concept of the Specific Consumer Exposure Determinant (SCED). Following the release of version 3 of the TRA in 2012, various industry sectors have begun to develop SCEDs for their products. However, during the development of SCEDs, it has become apparent how conservative the current TRA algorithms are in their treatment of uses that are only carried out infrequently.

It must be remembered that version 3 adopts the algorithms contained in ChR15 of the REACH Technical Guidance (ECHA, 2010). But these assume that consumer uses of a substance are daily. This is clearly not the case with all consumer products. At the same time, groups compiling SCEDs were not always clear on the meaning that ECETOC ascribes to the 'transfer factors' applied in the base algorithms.

This Addendum to Report TR114 sets out how infrequent uses of consumer products can now be evaluated in the TRA (as an enhancement contained in version 3.1) together with an extended clarification of the use of the term 'transfer factor'. It also provides further explanation of the basis behind the "Outdoor" and "Indoor" options which version 3.1 of the tool provides when conducting an inhalation exposure assessment for consumers.

The conditions under which the updated SpERCs should be incorporated when undertaking a TRA-based environmental exposure assessment are also clarified.

The Addendum is published as ECETOC Technical Report 124: Addendum to TR114: Technical Basis for the TRA v3.1. The PDF of the report is available at <http://bit.ly/ecetoc-tr124>

Article: Editorial - Epigenetics and chemical safety

van Ravenzwaay B, Kleinjans J, Vrijhof H. 2014. Mutation Research/Genetic Toxicology and Environmental Mutagenesis 764–765:1-2.
<http://dx.doi.org/10.1016/j.mrgentox.2014.01.008>

The papers in this issue are based on presentations at the EEMS symposium (17 September 2012) and the ECETOC workshop on Epigenetics and Chemical Safety, held in Rome, 5–6 December 2011. The proceedings of the ECETOC workshop have been published in 2012 as Workshop Report No. 23 (<http://bit.ly/ecetoc-wr23>)

The current full catalogue of ECETOC publications can be downloaded at <http://bit.ly/ecetoc-catalogue>

All ECETOC reports and related explanatory science newsflashes are freely available from our website:
www.ecetoc.org/publications

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EUROPEAN CENTRE FOR ECOTOXICOLOGY AND TOXICOLOGY OF CHEMICALS

Avenue E. Van Nieuwenhuyse 2 Bte. 8, B-1160 Brussels, Belgium
Tel: +32 2 675 3600 Fax: +32 2 675 3625 VAT: BE 0418344469

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