



Strategic Science Area:
Science in Society



Strategic Science Area:
Intelligent Testing Strategies

ECETOC STRATEGIC SCIENCE AREAS AT EUROTOX ANNUAL MEETINGS

On the occasion of the annual Eurotox meeting in Rhodes 5-8 October 2008, ECETOC organised two sessions corresponding to two priority science areas: Intelligent testing strategies and Science in Society.

The 'Intelligent Testing Strategies' symposium was chaired by Guiseppa Malinverno of Solvay and Watze de Wolf of DuPont de Nemours, both members of ECETOC's Scientific Committee. Four speakers presented their views on critical issues related to the implementation of REACH:

- ✔ Evelin Fabjan (on behalf of Jack de Bruijn), ECHA: Introduction to REACH & intelligent testing strategies
- ✔ Inge Mangelsdorf, Fraunhofer ITEM: Animal testing information and development/use of quality assured databases
- ✔ Bob Safford, Unilever: Concept of thresholds of toxicological concern
- ✔ Dinant Kroese, TNO: Feasibility of non-testing approaches in human health assessments

Inside this issue |

> ECETOC @ EUROTOX 2008	1
> SG Corner	1
> Scientific Committee News	2
> 2009 Annual Technical Meeting	2
> ECETOC Young Scientist Awards 2008	2
> ECETOC @ EEMS 2008	3
> Latest Publications	3
> Forthcoming Meetings	3

This session was attended by ca. 300 participants from the Eurotox meeting. Feedback from the audience was overall positive, including from the newly appointed scientific advisor to the board of ECHA who actively participated in the ensuing discussion. Although the content of the presentations provided nothing new to those closely involved with REACH, it was mostly unknown to the majority of the academics in the audience, and, thus, gave them an insight into the challenges with REACH.

The session on 'Science in Society' was chaired by ECETOC's Secretary General and Prof. Corrado Galli, outgoing president of EUROTOX. Based on the fact that allegations are frequently made that the outcome of research is impacted by its source of funding, the invited speakers had been selected such that they would represent industry, governmental and academic organisations. They spoke about the importance of scientific rigour in research and avoiding conflict of interest:

- ✔ Lord Taverne, UK House of Lords: Keynote speech on science in society, increasing public confidence in the science of evaluating safety.
- ✔ Chris Money, ExxonMobil and member of ECETOC's Scientific Committee (on behalf of Matti Jantunen, KTL, because of travel problems): Science in society and the Cefic Long-range Research Initiative.
- ✔ Russell Thomas, Hamner Institute: The history and achievements of CIIT.
- ✔ Jim Bridges, University of Surrey: Advising government on health risks: Avoiding bias and conflict of interest.
- ✔ Ursula Gundert-Remy, BfR: Integration and interpretation of information from different sources for decision and policy making.

Considering the interest raised, the high attendance and the engaged debate during the final panel discussion, it was suggested to hold a similar session at a future Eurotox meeting (also see SG Corner).



Strategic Science Area:
Science in Society

SG CORNER

Science in Society

The concept of the Science in Society in ECETOC's Science Strategy may seem nebulous to some of you, as it is our newest area of activity and outside our traditional scope.

Succinctly, Science in Society is about making an impact with our science. It is about communicating to the members of the public, the scientific concepts behind risk assessment. In particular, it concerns the poorly understood ideas of relative risk, management of uncertainty and risk communication.

In order to illustrate I will draw upon selected activities of 2008:

Our 2008 Annual Technical Meeting was dedicated to the cost-benefit analysis of chemicals in the environment. This is a process requiring objectivity and scientific method. It was well attended, particularly by European regulators, notably ECHA, the European Chemicals Agency. They too are trying to find their way in this area. It is encouraging that ECHA subsequently requested 100 copies of the meeting report, to distribute among participants of an event on the subject to which ECETOC was invited.

At the end of 2008, we organised two sessions at the annual meeting of Eurotox, where we ran a very stimulating session on intelligent testing strategies and also a science in society session. This latter was dedicated to the thorny issue of industry funding of research in the health and environment areas. The sessions started with a provocative and highly entertaining presentation by Lord Taverne to set the scene. From industry, the achievements of the Cefic Long-range Research Initiative (LRI) and the Hamner Institute (previously CIIT) were highlighted. The regulators addressed the mechanisms for avoiding bias and conflict of interest when evaluating data.

SG CORNER continued..

The subject was considered novel by the Eurotox audience, -an institution which was previously more focussed on the academic side of toxicology- but was sufficiently well received that we have been invited to hold a similar session in 2010.

Another encouraging development in ECETOC's stakeholder status has been its invitation to participate in two standing committees formed by ECHA, the European Chemicals Agency. These are the MSC (Member State Committee) and the RAC (Risk Assessment Committee). These committees met in 2008 and the MSC has already identified 14 Substances of Very High Concern (SVHC).

Likewise, in November 2008 ECETOC was invited to participate in an event organised by the European Commission's DG Sanco entitled: 1st International Conference on Risk Assessment 'Global Risk Assessment Dialogue'. This meeting was very constructive and is clearly a vehicle for our input on methodology and science in chemical risk assessment. Industry's views were accepted as being as valid as those of all other stakeholders.

What a contrast, then, to a WHO Europe symposium in Madrid 3 weeks earlier to which ECETOC was invited as a WHO-recognised NGO. This symposium was entitled: 'International Public Health Symposium on environment and health research: Science for policy, policy for science: bridging the gap'. Compared to the DG Sanco meeting, this meeting was like being in a parallel universe. Industry was represented by very few invitees and its science denounced as biased to the extent that some participants felt it should be excluded from consideration. From equal stakeholder to pariah, it seems that ECETOC's objective of promoting sound 'Science in Society' still has some way to go!



Dr. Neil Carmichael
Secretary General

ECETOC YOUNG SCIENTIST Awards 2008

In 2008 ECETOC sponsored two awards for young scientists and is pleased to announce this year's winners:

For the **environmental science related award**, the ECETOC Young Scientist Award at the Society of Environmental Toxicology and Chemistry (SETAC) Europe Annual Congress (Warsaw, Poland, 25-29 May 2008) went to:

Ms Emma Schymanski of the UFZ-Helmholtz Centre for Environmental Research in Germany for her platform presentation, entitled 'The use of MS classifiers and structure generation to assist in the identification of unknowns in effect-direct analysis.'



SCIENTIFIC COMMITTEE NEWS

The Scientific Committee is a central organ of ECETOC, meeting 6 times a year to peer-review and guide the work programme. ECETOC members have access online to detailed minutes of each meeting. It is the intention of this column to share key committee developments since the last newsletter with our subscribers:

Input to European Commission committees' preliminary report on risk assessment methodologies and approaches for mutagenic and carcinogenic substances.

In response to the call for comments from Directorate General Health & Consumer Protection (DG Sanco)'s committees: (SCHER, SCCP, SCENIHR) on the aforementioned report ECETOC's Scientific Committee expressed its support for this well written and accurate report which outlined the most current thinking on the subject. The Committee also welcomed their expression of the concept that certain genotoxic carcinogens may act through threshold pathways such as DNA repair and thus would require a DNEL instead of a DMEL approach and their acknowledgment that MOE and TCC approaches be viewed as proper DMEL derivation methodologies for mutagenic and carcinogenic substances.

Involvement in the OSIRIS Project under FP6

Member of the Committee, Dr. Watze de Wolf (DuPont) is representing ECETOC in the Advisory Group of OSIRIS, a project under the EU 6th Framework Programme. At the stakeholder workshop of the OSIRIS consortium, 17 November 2008 he was asked to give his opinion on behalf of ECETOC, on the desired outcome of this project. He pointed out that the project would only be useful if it will meet the needs of- and will be delivered in time for the implementation of REACH. He also stressed that industry as well as authorities within Europe (ECHA and other) and beyond would need to accept the outcome; it should be accessible to all partners, and the system be kept up-to-date in the future.

Dr. John Doe
Scientific Committee Chairman

Updates to the science strategy and work plan

At the end of 2008, the Committee undertook a review of activities within each strategic science area (SSA) and the work plan for 2009 and beyond. Members can download them from the home page of <http://members.ecetoc.org>

This review process was stimulated by some external speakers, who contributed to shaping ECETOC's work programme in line with regulatory motions: Dr. Paul Whitehouse (UK Environment Agency for England and Wales) was invited to talk about the Water Framework Directive and its impact on chemicals management; Dr. Gernot Klotz (Cefic Research and Innovation) joined the November meeting to update the Committee on indoor air quality issues and their link to chemicals and sensitive sub-populations; while Dr. Madhuri Singal (Research Institute for Fragrance Materials) kindly explained the respiratory sciences programme of RIFM.

2009 ANNUAL TECHNICAL MEETING TO PROMOTE YOUNG SCIENTISTS

This year's Annual Technical Meeting, 9-10 June in Brussels, will offer young scientists peer-visibility and networking opportunities with an invited audience from industry, academia and regulators.

ECETOC would like to encourage young scientists from its member companies by facilitating this 1½ day forum that also includes young scientists from academic/research organisations. Institutions will be asked to nominate a young scientist to present on the application of new approaches in toxicology and ecotoxicology to risk assessment.

The event will start with a poster competition on the evening Tuesday 9 June and continue on Wednesday 10 June with selected platform presentations and breakout sessions. The best poster will be judged by participants at an interactive cocktail reception and the winning young scientist will be awarded a prize at the end of the event.

How to nominate

1. On behalf of the young scientist, the nominator should submit an abstract and short biography prepared in MS Word by email to info@ecetoc.org
2. The abstract should contain the following information:
 - o Title of presentation
 - o Name, affiliation and address of the presenting author
 - o Description, maximum 300 words
 - o Indicate whether the author would like to give a platform presentation
 - o E-mail address for communication
3. The biography should include key career dates to provide evidence of their eligibility.
4. Nominations should be submitted by 27 February 2009.

Eligibility criteria

1. The young scientist can have up to 10 years of experience post-doctorate;
2. Only one scientist per organisation is eligible.
Under exceptional circumstances however, more than one scientist could be considered;
3. The scientist should be the first and presenting author of their poster;
4. The scientist should be nominated.

For the **human health related science award**, the ECETOC Young Scientist Award at the European Societies of Toxicology (EUROTOX) Annual Congress (Rhodes, Greece, 5-8 October 2008) went to: Ms Nathalie Lambrecht of CARDAM VITO in Belgium for her poster, entitled 'Pathway analysis of dendritic cell markers for skin sensitization.'

The winners have been encouraged to use the awarded prizes for the advancement of their careers.



7TH ECETOC SYMPOSIUM AT EEMS ANNUAL MEETING LOOKS AT THRESHOLDS FOR GENOTOXINS AND THEIR APPLICATION IN RISK ASSESSMENT

Strategic Science Area:
Risk, hazard and precaution

For the 7th occasion since 1998, ECETOC supported EEMS, the European Environmental Mutagen Society with the organisation of a symposium on 25 September, the last day of its 2008 annual general meeting, held in Cavtat, Croatia. Cefic's Long-range Research Initiative (LRI) kindly sponsored the event.

Although the subject matter is one which can elicit doubt, the tone of the symposium was very positive. However, the involvement of speakers from a regulatory background, along with the sound defensible science presented by all speakers, resulted in a very successful consideration of the subject. This was also reflected in the nature of the questions posed to speakers and responses given.

The presentations clearly demonstrated the existence of thresholds for DNA damaging mutagens as well as aneugens, thus changing the paradigm that 'one molecule is sufficient to cause cancer' even for classes of genotoxins (such as alkylating agents) for which linear dose response relations have been considered to be the norm. Yet, for some compounds there appears to be no clear threshold, or none which will be relevant for risk assessment. If the underlying biological mechanism can be explained satisfactorily, the genotoxic threshold may be extrapolated with confidence to estimate a safe dose for man.

However, this may not be possible for all compounds. Expert judgement on a case-by-case basis is necessary at this stage of knowledge of the biological basis of genotoxicity thresholds. Although the symposium showed that there is clear progress in using thresholds in risk assessment, and growing acceptance of the principle by regulatory authorities, more research is needed to develop a better understanding of the underlying mechanisms. The ECETOC symposium was well attended by over 300 (out of a total of 400) registered EEMS conference participants, mostly from academia, government, contract research organisations and the pharmaceutical/chemical industry. Participants of a subsequent ECETOC workshop on DNA adducts (Cavtat, 25-26 September) were also in attendance. The audience, including many key and young scientists, showed a high interest in the practical application of genotoxic thresholds in chemical risk assessment.

All speakers at the symposium have been committed to writing a manuscript for publication as a special issue of Mutation Research, together with papers from the DNA adduct workshop. The issue will count as ECETOC Monograph.

LATEST Publications

Workshop Report 12 Workshop on Triggering and Waiving Criteria for the Extended One-Generation Reproduction Toxicity Study, 14-15 April 2008, Barza d'Ispra, Italy published August 2008

Workshop Report 13 Counting the Costs and Benefits of Chemical Controls: Role of Environmental Risk Assessment in Socio-Economic Analysis 4 June 2008, Brussels, Belgium published September 2008



ECETOC In Brief

ECETOC, European Centre for Ecotoxicology and Toxicology of Chemicals, was established in 1978 as a scientific, non-profit, non-commercial association, financed by 49 of the leading companies with interests in the manufacture and use of chemicals. A stand-alone organisation, it was established to provide a scientific forum through which the extensive specialist expertise in the European chemical industry could be harnessed to research, review, assess and publish studies on the ecotoxicology and toxicology of chemicals.

Website

Be sure to visit www.ecetoc.org to download any of our [publications](#)

FORTHCOMING Meetings

February

- 12 Scientific Committee meeting ECETOC Offices, Brussels
- 26 Targeted Risk Assessment Members Workshop Cefic Meeting Rooms, Brussels

March

- 6 Pharmaceuticals and the environment scoping meeting ECETOC Offices, Brussels

April

- 1-2 Linear Polydimethylsiloxanes task force meeting ECETOC Offices, Brussels
- 17 LRI HEMT meeting ECETOC Offices, Brussel

- 21-22 Scientific Committee meeting ECETOC Offices, Brussels

- 30 Cyanide Antidotes task force meeting ECETOC offices, Brussels

June

- 9 Board meeting (morning) Bedford hotel, Brussels
- 9 Annual General Meeting (AGM) (afternoon) Bedford hotel, Brussels
- 10 Annual Technical Meeting (ATM) Bedford hotel, Brussels

- 16 Dermal Risk task force presentation at OEESC (Occupational and Environmental Exposure of Skin to Chemicals) Conference Edinburgh, Scotland

- 25 Scientific Committee meeting ECETOC Offices, Brussels

- 29-30 Guidance on interpreting endocrine disrupting effects within the constraints of REACH and the revised 91/414 directive workshop Barcelona, Spain

August

- 21 ECETOC-EEMS Symposium at ICEM 'Nano(geno)toxicology' Firenze, Italy

Next Edition ...

We will provide details on the developments with ECETOC's targeted risk assessment tool

EUROPEAN CENTRE FOR ECOTOXICOLOGY AND TOXICOLOGY OF CHEMICALS

Av. E. Van Nieuwenhuyse 4 (Bte) 6 B-1160 Brussels, Belgium

Tel: +32 2 675 3600 Fax: +32 2 675 3625 VAT: BE 041834469

For more information about ECETOC and/or the content of this e-newsletter, please contact us info@ecetoc.org