

AG/Committee Name: Global Advisory Group for Bioaccumulation Assessments ('B' SAG)

Submitted by: Henriette Selck/Aurelia Lapczynski

Date: 15 March 2014

Council/Board Liaison: Miguel A Mora (mmora@tamu.edu)

Staff liaison: Bruce Vignon

Technical Committee liaison: Katherine von Stackelberg

Executive Summary

The BSAG provides a venue, as a global advisory group, for the SETAC membership to meet and discuss various aspects of bioaccumulation science. This has been a very active area of research over the last decade, and, through SETAC, has resulted in numerous publications and workshops focused initially on aquatic bioaccumulation assessment (in vitro and in vivo) but has expanded to field and terrestrial assessment, bioaccumulation of nano-particles, and areas of overlap with animal alternatives for assessment.

Organization

The purpose of the Global SETAC Advisory Group on Bioaccumulation Assessments ('B' SAG) is to advance the state of bioaccumulation science, and increase the use of sound science in decision-making through the use of models, *in vitro*, and *in vivo* data for bench-scale, site-specific and regional bioaccumulation assessments. For more information see <http://www.setac.org/group/AGBioaccumulation>.

The current co-chairs of the BSAG are Henriette Selck (Roskilde University/Academia) and Aurelia Lapczynski (RIFM/Industry). The Steering Committee is typically comprised of 3-5 members from each of the tripartite sectors at SETAC.

Activities Summary

In vitro Short Course (SETAC Nashville):

'In vitro methods for the determination of test chemicals metabolism utilizing fish liver subcellular fractions and hepatocytes'. Karla Johanning, Michelle Embry, and John Nichols

BSAG Sessions:

SETAC Glasgow: 'Advantages and disadvantages of using trophic magnification factors to assess food web biomagnification', chaired by K Borga and K Kidd.

SETAC Nashville: Advances in the Estimation and Assessment of Terrestrial Bioaccumulation, Chair: Bruce Hope

Other:

One of the papers that resulted from the 2009 Lab Field Workshop, "Explaining differences between bioaccumulation measurements in laboratory and field data using a probabilistic modelling approach," by **Henriette Selck, Ken Drouillard, Karen Eisenreich, Bart Koelmans, Annemette Palmqvist, Anders Ruus, Dan Salvito, Irv Schultz, Robin Stewart, Annie Weisbrod, Nico van den Brink, and Martine van den Heuvel-Greve** has received two high-profile recognitions for being a key paper in advancing the science of risk assessment. Writing these manuscripts took a lot of extra time and effort post-workshop!

Integrated Environmental Assessment and Management (IEAM) has given it a **Best Paper Award 2012 Honorable Mention**, and the Society of Toxicology Risk Assessment Specialty Section recognized it as one of the “**Top 10 Best Papers Advancing the Science of Risk Assessment**” for 2012.

Business and Planning Meetings

BSAG Meetings were held at Glasgow and Nashville meetings in 2013.

Key discussion points:

- Session proposals for SETAC Basel and Vancouver
- B-SAG member’s involvement in the initiative to revise the OECD 305 Guideline.
- Update on recent or on-going workshops/project within bioaccumulation community:
 - HESI workshop on terrestrial bioaccumulation
 - Series of HESI bioaccumulation Webinars
 - Join Environ Canada and HESI project to refine current terrestrial models
 - Workshop on ionizing compounds
 - CEFIC project/ring trial on sediment sampling
 - ECETOC Task Force to evaluate current PBT criteria

Future Plans

Business and Planning Meetings & workshops

One of the key endeavors, in addition to continued highlighted sessions at Basel and Vancouver, is to actively engage in a forthcoming workshop on bioaccumulation cosponsored by ECHA and Cefic-LRi scheduled for September 2014.

BSAG Sessions:

SETAC Basel: ‘Bioaccumulation processes and mechanisms: Implications for experimental assessments and modelling’, chaired by M Nendza, H Selck, A Lapczynski, C Schlechtriem.

SETAC Vancouver:

Special session on ‘Evaluating Ionogenic Chemicals: Moving Beyond PBT Criteria’, chaired by Todd Gouin, Bryan Brooks, Mark Bonnell

‘Bioaccumulation, Science & Regulation’, chaired by F Gobas, J Arnot and M Bonell

Short Course (SETAC Vancouver):

A short course has been proposed by F Gobas for SETAC Vancouver

Membership Communications

- Identification and communication with decision-makers and scientists to create and apply information on new bioaccumulation-related tests and assessment approaches
- Organizing regular business meetings and technical sessions at SETAC meetings
- Hosting workshops on emerging issues and offer short courses.
- SAG communities webpage. Needs improvement, it is currently not updated

B-SAG Steering Committee (2012)

Academia:

Henriette Selck (Co-Chair, Roskilde University)

Frank Gobas (Simon Fraser University, Canada)

Jon Arnot (University of Toronto, Canada)

Dayanthi Nugegoda (RMIT University, Australia)

Heather Leslie (IVM, VU University, The Netherlands)

Business:

Aurelia Lapczynski (Co-Chair, RIFM, USA)

Dan Salvito (RIFM, USA)

Michelle Embry (ILSI-HESI, USA)

Marc Leonard (L'Oreal, France)

Government:

Derek Muir (Environment Canada)

Theo Traas (RIVM, The Netherlands)

Marlies Halder (ECVAM, Italy)

Larry Burkhard (USEPA)

Mark Bonnell (Environment Canada)