

Reduction, Replacement, and Refinement (3Rs): Animal alternative approaches in ecotoxicology and risk assessment

CHAIRS: Adam Lillicrap, Mark Lampi



Thursday 15th May 2014, 08:10 – 12:50, room: Montreal

There are numerous technical and regulatory challenges that must be considered as part of the future of the 3Rs in environmental science. This session will highlight animal alternative assessment methodologies and strategies, with a focus on understanding the state of the science with respect to acute and chronic aquatic toxicity testing and bioaccumulation assessments. The session will explore new developments towards adopting efficient and predictive models (enhanced in silico, in vitro, in vivo models) for use in environmental risk assessment (ERA), hazard screening, and effluent toxicity assessment. Talks should help to facilitate a common understanding of the technical issues of the various techniques for any of the 3R's, and initiate discussion of the approaches used to balance the scientific complexity of the assessment process implemented by regulators. This session will cover, but is not limited to, the use of Adverse Outcome Pathways (AOPs), genomic analyses, advances for in vitro approaches, new applications of existing methods, innovative techniques for evaluating toxicity and bioaccumulation, innovative approaches to statistical modeling, and optimizing the use of existing data. This session is sponsored by the SETAC Animal Alternatives in Environmental Science Advisory Group which continues to explore the state of the science in method and strategy development.

PRELIM SESSION TYPE: Platform, Poster Spotlight and Poster

ADVISORY GROUP: Animal Alternatives in Environmental Science