

Opportunities for Animal Alternatives Implementation in the Evolving OECD Fish Testing Framework

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The OECD Fish Testing Framework (FTF) was proposed by the USEPA to OECD in 2009. The goals were to review existing fish testing guidelines in the context of regulatory needs and data requirements, address animal welfare concerns and to define a possible testing strategy for fish tests. A workshop in 2010 and subsequent follow-up meeting in 2011 developed a document that focused on assessments of 13 existing/proposed fish Test Guidelines and subjects relevant to fish testing. Chapters were reviewed in detail and future recommendations for action were proposed to address various needs. Flow diagrams exemplify how tests could be integrated into an overall strategy for assessing toxicity of chemicals to fish.

This presentation reviews opportunities for animal alternative approaches in the FTF. These will be placed in the context of in vivo tests required in many regulatory situations for the registration of industrial chemicals, pharmaceuticals, and agrochemicals. The Framework integrates current thinking regarding screening assessments, acute toxicity, chronic toxicity, bioaccumulation, and endocrine disruption determinations. Ample room exists for improved use of in vitro, embryo tests, threshold approaches, and implementation of robust experimental designs. The overall goal is to minimize animal use while maximizing the collection of information useful in hazard and risk assessment, and classification and labelling. Method development needs and future opportunities will be identified throughout.

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