

Development and validation of standardised methods and their use in regulatory frameworks

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The importance of standardisation, within the context of environmental sciences, is that it provides a level of International harmonisation for the generation and interpretation of data and ensures that tests fulfill internationally established minimum criteria . With the increasing need for more targeted hazard assessment strategies that will be required for risk assessment in the future both for aquatic and soil ecotoxicology, standards from a regulatory perspective are likely to play a significant role to ensure that robust and reliable data are generated subject to valuation based on internationally accepted concepts. Beside others, the Organisation for Economic Co-operation and Development (OECD) and the International Organisation for Standardisation (ISO) make significant contribution to meeting the regulatory demand for standardized test methods; OECD focusing on the assessment of chemicals while ISO dealing with the determination of water and soil quality. Over the last few years significant milestones have been accomplished or developments are currently in progress for new standards in environmental sciences. This session aims to explore some of these advances by presenting instructive examples from both, aquatic and soil ecotoxicology. Additionally, the process involved with ISO and the development of new standards will be discussed. Within this session, we also welcome new ideas for test methods, biomarker endpoints, and standards relating to sampling and characterisation procedures (e.g. nano-materials, microplastics), chemical analysis and statistical approaches which may be of future relevance for assessing soil, sediment as well as fresh and marine water quality. This session is being led by representatives from International Organisation for standardisation within ISO technical committee 147 (Water Quality) and technical committee 190 (Soil Quality).