

Code Number and Title:**LRI-ECO33: Increasing understanding of dietary toxicity and biotransformation in environmental testing.*****Background***

Understanding of exposure of organisms in the environment via the diet is an area of growing interest as the regulatory arena expands to include risk via uptake and storage of chemicals from the environment.

Recent updates in the REACH PBT/vPvB Assessment Guidance document indicate that if a substance is defined as “B” or “vB” based on a valid BCF, it will remain so regardless of whether biomagnification or trophic magnification occurs. This is based on the assumption that the organisms (e.g. fish) are assumed to experience adverse perturbation through the uptake and storage of the chemical, which could cause unpredictable effects on the individual organism and populations of the organism, and in turn could cause unknown impacts on the food chain, for example due to reduced food for predators.

This project will assess the state of the science in dietary toxicity assessment in environmental testing, both terrestrial and aquatic, and will make recommendations on test guidelines, and research needs.

This information is most relevant for hydrophobic substances where there might not be another choice than dietary tests. The present project will then help in the interpretation of those tests for final decision about B/vB properties.

Scope and Objectives

- Assess the state of science of dietary toxicity testing in environmental risk assessment via compilation of existing data and methods by mining databases and open literature, including assigning validity criteria to existing data.
- Recommend guidance for the interpretation of existing dietary toxicity data and identify a research/testing framework with the goal of identifying a recommended dietary toxicity method.
- Use existing data to evaluate the assumption of adverse perturbations of highly hydrophobic substances regardless of trophic magnification.

Deliverables

This project is intended to be a desk-based study. The final report shall contain an executive summary (2 pages max), a main part (max. 50 pages) and a detailed bibliography. It is expected that the findings will be developed into at least one peer reviewed publication, following poster(s) and presentation(s) at suitable scientific conference(s), and/or the organisation of a workshop to discuss the findings.

Cost and Timing

Start in 2015/16, duration 1 years.
Budget in the order of € 125 000.

Partnering/Co-funding

Applicants should provide an indication of additional partners and funding opportunities that can be appropriately leveraged as part of their proposal. Partners can include, but are not limited to, industry, government/regulatory organizations, research institutes, etc. Statements from potential partners should be included in the proposal package.

Fit with LRI objectives/Possible regulatory and policy impact involvements/ Dissemination

Applicants should provide information on how their proposal is aligned with LRI objectives. Furthermore, an indication on how the results could influence regulatory and policy areas should be provided. Dissemination plans should also be laid down.

DEADLINE FOR SUBMISSIONS: 6 Sept 2015

Please visit www.cefic-lri.org for general information about the LRI funding programme, guidelines for grant applications and links to application documents.