

# Initiative towards improving our understanding of persistence in the 21st century

Feedback on a Cefic LRI - Concawe Workshop  
Held in Helsinki on 27 September 2018  
on recent developments in science supportive  
to the persistence/biodegradation assessment

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See Poster Corner Thursday May 30th, 2019  
Start Time: 8:30 AM ID: TH124

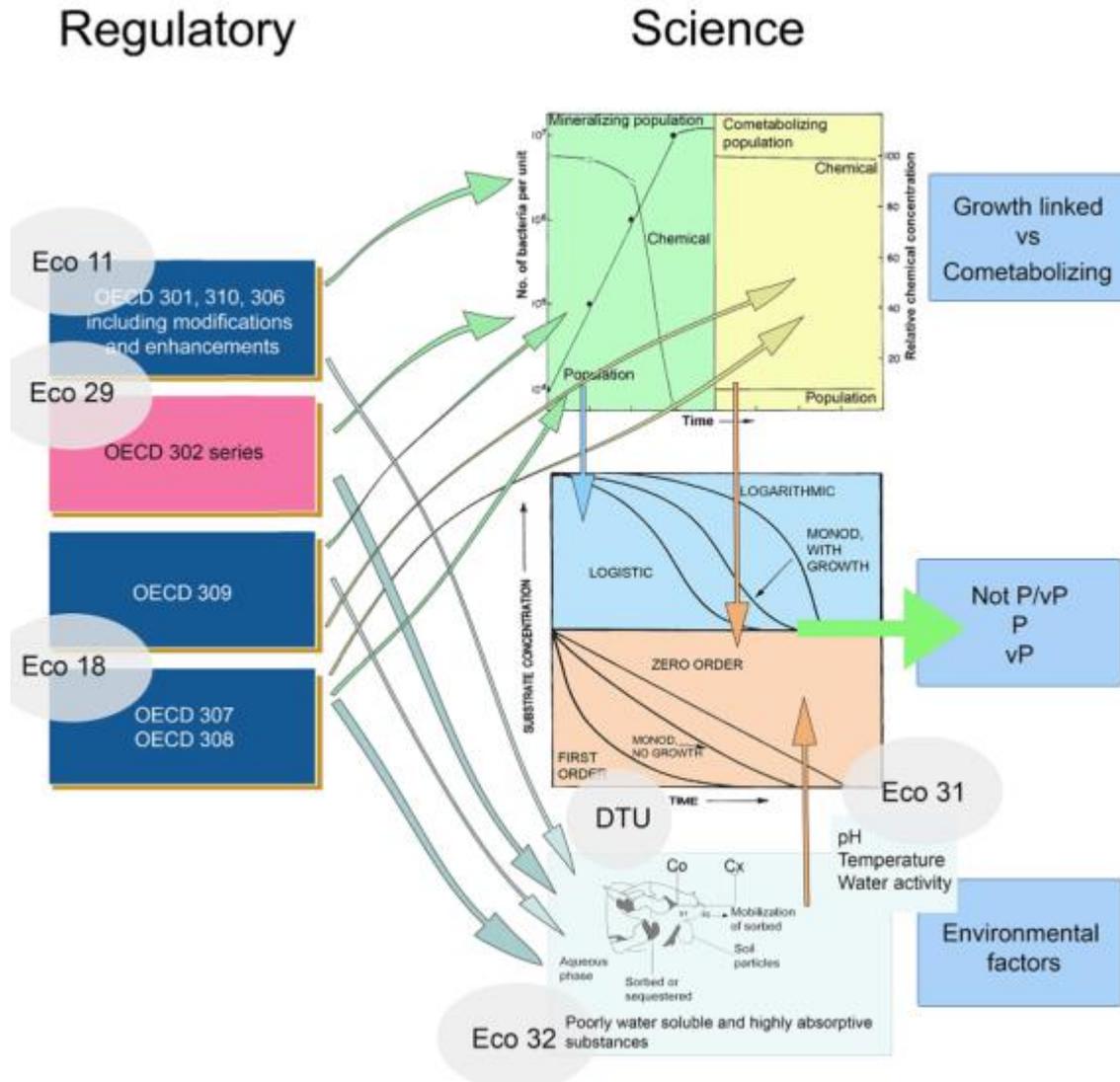


# Assessing the environmental Hazard of Chemicals

- Based primarily on their so-called **PBT** properties
  - Persistence (**P**),
  - Bioaccumulation (**B**) and
  - Toxicity (**T**).
- Persistence assessment is a cornerstone of chemical assessment as this determines environmental exposure and is a key parameter for estimating risk of long-term adverse effects on biota.
- Persistence assessment for organic chemicals is based predominantly on biodegradation using Biodegradation Screening Tests (BSTs) originally designed to assess surfactants
- REACH regulations require simulation tests where, for many substances, there are significant challenges in their conduct, interpretation and relevance for determining persistence
- In comparison to B and T assessments P assessments remain poorly defined and have significant limitations especially for assessing difficult to test and/or complex substances

Cefic, Concawe and numerous research activities illustrate the limitations of current 'P' methods and the need to improve these and incorporate into chemical regulations.

# To be P, or not to be P, that is the question? Making sense out of tests and the science!



## Workshop intended to act as a catalyst to:-

- Forge links between Concawe, Cefic and other key 'persistence' research activities (past and present)
- Recognise importance of linking specific research projects to provide a more holistic persistence assessment
- Need for key messages and links from research has to be disseminated to improve understanding of chemical persistence
- Need to understand and assess how scientific knowledge can be incorporated into better regulations?
- Recognise of links between persistence (P), Bioaccumulation/bioavailability (B) and Toxicity
- Start to assess and address specific challenges posed by UVCBs (Unknown or Variable Composition, Complex Reaction Products and Biological Materials)

Need to start to restore order from chaos and go back to basics and understand the fundamental science behind the tests and what these can really tell us about P

## Helsinki Workshop intention was to work towards improvements

Clear need for better communication/interactions and consider how new knowledge can be

- Translated into sound advice/rules that are generally applicable to chemicals
- Better definition of the importance of these factors and their influence on persistence
- Determine criteria that represent sound science
- Clarify how findings interlink with other areas/activities
- Need for transparency, easy to understand processes
- Help regulators and other stakeholders “see the wood from the trees”
- Generate proposals to improve persistence assessments – move into the 21st Century

**Focus was on developing "reasonable & applicable" messages, avoid developing "perfect but complicated" advice and come with “a solution not a problem”!**





**Thank you!**  
**Come see our poster presentation TH124**  
**for more information**

**LRI SECRETARIAT**

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