

BRINGING BIOLOGY INTO RISK ASSESSMENT FOR THE OIL AND GAS INDUSTRY

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Project management
Effects of mixtures
Species sensitivity
Monitoring program evaluation

Biological effects modelling
Species sensitivity
Ecology
Population modelling

We develop and perform targeted R&D projects focusing on integrating state of the art biological models into the effects side of Environmental Risk Assessment. This includes the full sequence from data to model to parameter (estimation).

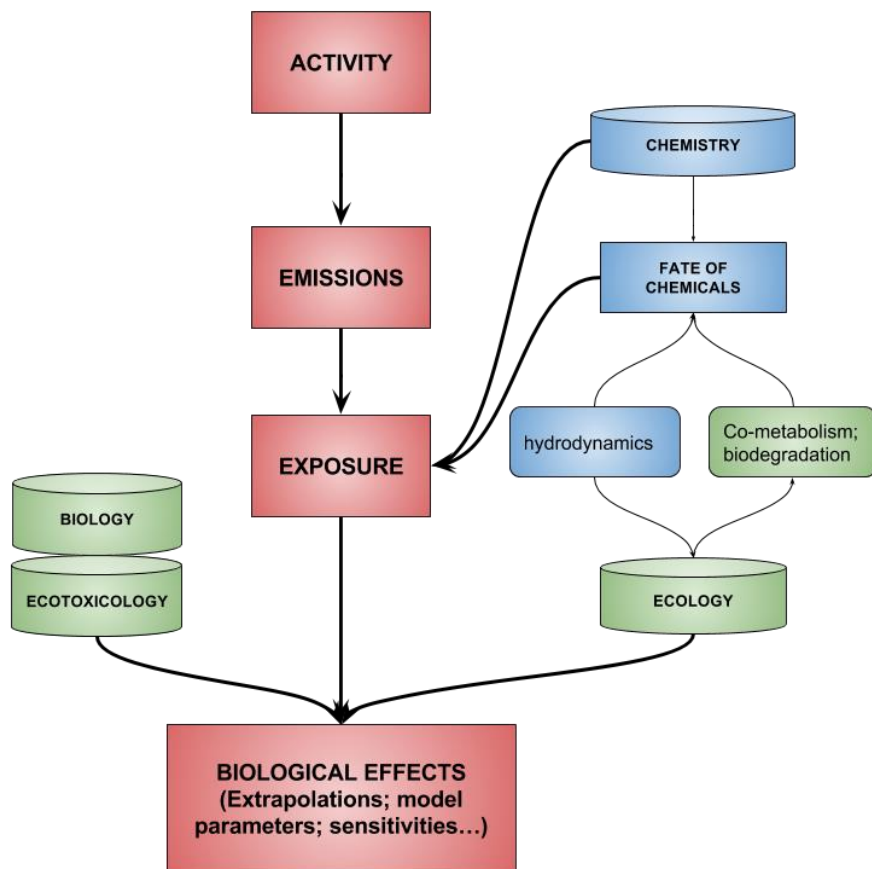
State of the art effect based approaches are:

- ✓ easier to communicate to stakeholders and public.
- ✓ the starting point for developing rational and cost effective monitoring approaches.

Contact us to know more



Songa platform by Pernilla Carlsson



AIM: INCLUDING BIOLOGICAL EFFECTS INTO NEXT GENERATION ERA FOR THE OIL & GAS INDUSTRY

Biological Effects are

- ✓ easier to communicate to stakeholders and the public.
- ✓ the starting point for developing rational and cost effective monitoring approaches.

Our work reinforces the scientific underpinning of ERA. We focus on the effects side of the ERA process by integrating properties of species with chemical properties, environmental chemistry, ecology and physics.



ENVIRONMENTAL RISK ASSESSMENT REQUIRES

- AN OVERVIEW OF THE HABITAT, DYNAMICS OF SPECIES RESIDING THEREIN,
- AN UNDERSTANDING OF THE TOXICITY OF CHEMICALS (AND THEIR BIODEGRADATION),
- PHYSICAL AND CHEMICAL ASPECTS OF CHEMICAL FATE AND TRANSPORT.

HOLISTIC APPROACH

WE INTEGRATE INFORMATION ON SPECIES PROPERTIES AND ENVIRONMENTAL CHEMISTRY.

WE INCLUDE BIOLOGICAL CONSIDERATIONS TO UNDERSTAND THE LINK BETWEEN THE ENVIRONMENT AND BIO-DEGRADABILITY OF COMPOUNDS, MAKING THE LINK BETWEEN EXPOSURE AND EFFECTS.

OUR R&D

EXTRAPOLATION TECHNIQUES TO PREDICT EFFECTS ON UN-TESTED SPECIES AND THEIR HABITATS.

EFFECT MODELS OF SIMULTANEOUS EXPOSURE TO MULTIPLE COMPOUNDS (MIXTURES).

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