

## Session: The future of human health assessment



### Using new methodologies for a better understanding of the health impacts of petroleum substances



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Cat-App was initiated with the aim of minimizing the need for testing in vertebrate animals under regulatory programmes. This is achieved by grouping petroleum substances (PS) to make the most optimal use of the toxicological information on PS by read-across of the available data within and (where needed and justified) between these groups. A framework will be developed for grouping based on chemical-biological properties combining multiple streams of information comprising PS production type/refining process, physical-chemical properties, chemical analytical profiles, existing (eco)toxicological data and a comprehensive array of biological responses in a broad spectrum of in-vitro systems.

matic and informed testing approach only as a last resort when read across to fill data gaps is not possible.

This strategy will eventually address mandatory human health hazard end points under REACH while significantly reducing the use of vertebrate animals for toxicity testing without underestimating the potential hazards.

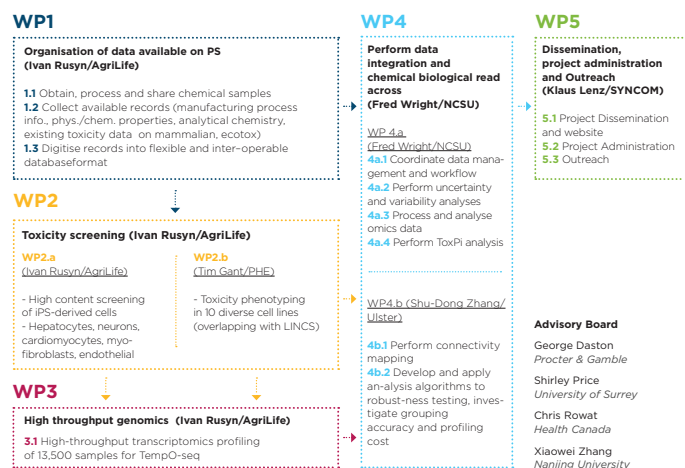
The intention is to inform a broad spectrum of stakeholders globally (commercial entities, regulatory agencies and non-governmental organizations), concerned with public health and well-being, and to promote application of the Cat-App framework which is expected to eventually have a wide and diverse applicability domain.

Direct implementation of the Cat-App framework in the Concawe REACH strategy by applying the approach and submitting the data in the petroleum REACH dossiers will fill data gaps in the already-existing in-vivo toxicological data on PS, and help to develop a prag-

### Cat-App work programme

Cat-App: New technologies to underpin the category approaches and read across in regulatory programmes

Project Management: Hans Ketelslegers / Concawe  
Steering: Scientific Committee / Concawe



Institute abbreviations:  
AgrILife: Texas A&M AgrILife Research - NCSU: North Carolina State University - PHE: Public Health England  
Ulster: Ulster University - SYNCOM: SYNCOM R&D consulting GmbH

### Timeline

MS1: All petroleum substances available as DMSO extracts for testing in in vitro assays

MS2: Quality control report of preliminary In Vitro analyses

MS3: Initial workflow for Chemical-Biological Read-across and ToxPi visualisation available

