



New research to protect human and environmental health focuses on improved testing for Endocrine Disrupting Chemicals

Press release: March 2019

A timely new project funded by the European Union (EU) will explore how to improve current testing tools for Endocrine Disrupting Chemicals (EDCs), particularly for chemicals that are less studied so far. Launched in January, the **ERGO** project aims to break down the wall between human health and environmental testing of endocrine disrupters and focuses on EndocRine **G**uideline **O**ptimisation.

EDCs are mostly man-made, found in various materials such as pesticides, metals, additives or contaminants in food, and in personal care products. EDCs produce adverse effects via a disruption of the human body's endocrine (hormone) system, and they are suspected to be associated with altered reproductive function in males and females; increased incidence of breast cancer; abnormal growth patterns and neurodevelopmental delays in children, as well as changes in immune function. Human exposure to EDCs can occur via ingestion of food, dust and water, via inhalation of gases and particles in the air, and through the skin.

In the EU, criteria have been developed to identify pesticides, biocides and other chemicals with endocrine disrupting properties. However, current testing tools do not always appropriately identify effects, particularly those related to certain less-studied or newly emerging EDCs. New and improved approaches are urgently needed to better protect human and environmental health against the hazards of EDCs. At the recent project kick-off meeting in Antwerp (Belgium) at the end of January, **ERGO** Project Coordinator Henrik Holbech from the University of Southern Denmark (SDU), explained that *"ERGO works with a ground-breaking approach, aiming to break down the barrier which currently exists between the different research fields that investigate adverse effects of EDCs in different vertebrate classes, from fish and amphibians (non-mammalian vertebrates) to humans (mammalian vertebrates). Now, regulatory procedures for identification and assessment of EDCs are separated for human health and the environment. This means that useful data from non-mammalian vertebrate research tests have so far been disregarded in human health research and vice versa"*.

Implementation of the **ERGO** Integrated Approach to Testing and Assessment (IATA) strategy in regulations of EDCs will make hazard assessment faster, cheaper, simpler and safer. It will support industry in the development of EDC-free products benefitting both the environment and human health.

Henrik Holbech adds: *"ERGO brings together a strong team of multidisciplinary experts from industry, regulatory bodies and research institutes involving 16 partners from Europe, Japan and the United States. ERGO is expected to have far-reaching impacts, not only contributing to improved testing and guidelines, but also contributing to the regulation of EDCs, protecting human and environmental health"*.

ERGO is part of a cluster of eight research projects from the Call 'New Testing and Screening Methods to Identify Endocrine Disrupting Chemicals' funded by the EU Horizon 2020 Research and Innovation programme. Each project is concentrating on a different aspect of new testing and screening methods identifying EDCs. The Joint Launch Event of Projects was held at the European Commission in Brussels on 31st January 2019.

More information coming soon at: www.ergo-project.eu **Follow us on Twitter:** [@ERGO_EU](https://twitter.com/ERGO_EU) or **Contact us:**

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Caption: The **ERGO** consortium at the project's kick-off meeting in Antwerp on 28th January 2019

Notes for the Editor:

“ERGO – Breaking down the wall between human health and environmental testing of endocrine disrupters: Endocrine Guideline Optimisation is funded by the European Union Horizon 2020 research and innovation programme under Grant Agreement No. 825753 with a budget of over €6 million and will run from 2019 to the end of 2023.

The 16-partner strong **ERGO** consortium is well distributed over the world and brings together a well-balanced mix of research bodies, industry, enterprises, agencies and consultancies from Denmark, France, Czech Republic, United States, United Kingdom, Japan, Germany, Belgium and Ireland.

ERGO is coordinated by the University of Southern Denmark (SDU). The SDU Ecotoxicology Group is the leading research group in environmental endocrine disruption in Denmark with more than 20 years of experience in the development and validation of OECD Test Guidelines for detection and evaluation of endocrine disrupting chemicals. The group is experienced in the development of highly sensitive biomarkers and endpoints for endocrine disruption in both vertebrates and invertebrates, and collaborates with research groups, contract laboratories and business organizations worldwide. Henrik Holbech has been a researcher in ecotoxicology and endocrine disruption at SDU since 2000. He has developed and validated OECD Test Guidelines to detect endocrine disrupting chemicals since

2001 and has been a member of OECD VMG-Eco and OECD Fish Drafting Group since 2006. More information is available at <https://portal.findresearcher.sdu.dk/en/>.

AquaTT is the project communication and dissemination partner.



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