**PhD position: chemobiology/(eco)toxicology**

**of endocrine-disrupting phthalates**

Esters of phthalic acid derivatives (or phthalates) are present in a multitude of everyday consumer products (most often PVC-type plastics, but also solvents, paints, glues, detergents and cosmetics), and are among the endocrine-disrupting compounds frequently singled out in both human health and the environment. We recently initiated an innovative, interdisciplinary strategy combining chemobiology and (eco)toxicology between our 2 partner laboratories (Laboratoire Interdisciplinaire des Environnements Continentaux, LIEC, UMR7360, Université de Lorraine and Laboratoire de Chémo-Biologie Synthétique et Thérapeutique, CBST, UMR 7199, Université de Strasbourg), providing a simple, rapid and sensitive method for quantifying model phthalates in cellular and *in vivo* models (*D. rerio* zebrafish). This tool, based on the use of representative synthetic phthalate analogues, will be exploited to characterize the localization and fate of phthalates (bioaccumulation, metabolism, excretion) at low concentrations, realistically reflecting chronic human and environmental exposures.

The PhD student will be involved in the design of phthalate analogues and their synthesis (directly or indirectly depending on his/her technical skills). He/she will have to assess the extent to which these compounds mimic the endocrine-disrupting activity of the corresponding reference phthalates (DBP, DEHP) in models linked to aquatic exposure (*D. rerio* zebrafish larvae and *D. rerio* cell lines). He will exploit these synthetic compounds to study their influx, organotropism, bioaccumulation and metabolism in these models at low concentrations representative of environmental phthalate levels.

**Candidate profile:**

The candidate should have experimental knowledge and skills in one or as many as possible of the following fields: ecotoxicology, toxicology, biochemistry and molecular biology, organic synthesis, analytical methods (especially HPLC). He/she must hold an M2 degree or equivalent in one of these fields. He/she must be comfortable communicating, presenting results and writing reports and scientific articles in English. He/she should be dynamic, capable of initiative, scientifically curious, open to collaboration, able to work in a team and quickly autonomous.

**Working environment:**

Biological experiments will be carried out at LIEC UMR7360 (Bridoux site, Metz, Environmental Toxicology team) under the supervision of Eric Battaglia and Bénédicte Sohm. Organic syntheses of reference phthalate analogues will be carried out at CBST (University of Strasbourg) under the supervision of Alexandre Specht. Information on the two laboratories can be accessed via the following links: https://liec.univ-lorraine.fr/ ; https://cbst.unistra.fr/

The candidate will report to the SIReNa doctoral school (http://www.doctorat.univ-lorraine.fr/fr/les-ecoles-doctorales/sirena/presentation) and will be expected to meet the requirements of this doctoral school in terms of doctoral student training (registration for training courses and validation of credits).

**To apply**: send your CV including the contact details of your referee(s), a covering letter and copies of your M1 and M2 diplomas if available, **via the CNRS website**, before July 27, 2025.

CNRS link to the job offer:
https://emploi.cnrs.fr/Offres/Doctorant/UMR7360-CATPIE-035/Default.aspx