

Technician in Environmental Toxicology

The role

To perform toxicity and behavioural tests with zebrafish embryos and Daphnia using organic extracts from surface, reclaimed and wastewater treated effluents. To process biological samples for metabolomics and RNA seq analysis, to process RNA se data.

What do we look for?

- **Qualifications**
Degree or Master in Environmental Sciences, Chemistry, Pharmacy, Biotechnology, Bioinformatics, Biology
- **Professional experience**
It will be positively evaluated experience in toxicology, bioinformatics or molecular biology.
- **Competences**
Excellent level of English and knowledge of R and Python will be valued.

Working conditions

- **Contract duration: 1.5 years with possibility to be extended**
- Estimated annual gross salary: 1683 Euros/month
- Target start date: Immediate

The group

The [Environmental Toxicology group](#) studies and assesses the bioavailability and toxicity of existing and emerging contaminants and their mixtures. To this end, the group applies an array of lab toxicity tests (i.e. transgenic yeast, cell lines, zebrafish embryos and Daphnia magna models), and field assays conducted with feral fish and invertebrates from both marine and freshwater environments. Effects are assessed across different biological levels using transcriptomic, lipidomics, metabolomics, morphogenetic and specific cell response, including effects on whole organism and population. Some of the key achievements of the group involve the use of biomarkers and sentinel species to biomonitor contamination in marine and freshwater systems, the first evidence of endocrine disruption in fish (estrogenic effects in fish) and aquatic invertebrates, the application of -omic technologies to monitor effects and mode of action (MoA) on model species, the use of video-tracking technologies to assess neurobehavioral changes in model species, the determination of the 'obesogenic' effect of contaminants in fish, fish cell lines and invertebrates and the development of animal-free bioassays for endocrine disruption and related toxic effects for both human (placenta, lung) and fish (liver) cell models.

The institute

The **Institute of Environmental Assessment and Water Research (IDAEA)** is an environmental science institute devoted to the study of the human footprint on the biosphere. Much of the research work at this institute is centred on two of the great environmental challenges of our time: cleanliness and availability of water and quality of air.

Founded in 2008 as a member of the **Spanish National Research Council (CSIC)**, the Institute brings together a wide range of expertise in environmental science. It is organized under two Departments (Environmental Chemistry and Geosciences), established with a strong record of publication in top scientific journals, leading international projects, membership on international committees, and adopting a high-profile contribution to the identification and remediation of environmental problems.

IDÆA has demonstrated strengths in the analysis of organic pollutants and their impact on ecosystems, the study and management of water resources, the development of multivariate resolution algorithms in chemometrics, and in the study of inhalable particulate matter and toxic gases.

IDÆA has been recently awarded with the distinctive **Centre of Excellence “Severo Ochoa”** (2020-2023), distinction that indicates the high-quality scientific leadership and global impact of the work developed at the centre.

We offer a diverse and inclusive environment where no discrimination against disability, gender, nationality, religion or sexual orientation will occur during the selection process.

How to apply?

Those interested may email their **CV** and **motivation letter** to **Carlos Barata** (cbmqam@cid.csic.es), adding “TED Toxicology” to the email subject.

Deadline: 15/02/2023