연구직 업무분야 세부 직무설명

1. 환경안전성 분야

Field: Environmental Science, Biochemistry, (Eco)toxicology, Molecular Biology

Responsibilities

The Environmental safety group contribute to the protection of human health from discharged environmental pollutants including chemicals, microplastics, particulate matter and Nanoparticles etc and provides the basis for improving the welfare of the ecosystem. Direction in our laboratory explores the environmental model organism to study the interplay between in silico and in vitro in ecotoxicity studies according to OECD test guideline. We are seeking professional with experience hazard chemical monitoring and extensive knowledge of alternatives to animal testing.

(1) General toxicity assessments of toxicants can be analyzed by using (bio)indicators e.g. microalgae, Daphnia magna, fish.

(2) Toxicological mechanisms can be identified in molecular basis by using in vitro system with specific gene activity and metabolomics.

(3) Regulatory relevance on chemical can be applied to predict toxic effects by using in silico methods. e.g. (Q)SAR, Exposure scenario

This individual will work on environmental pollutants-related research projects, including research design, study bio-monitoring and establish adverse outcome pathways. This position offers significant opportunities for professional growth in environmental issues with the international group.

2. 바이오센서 분야

Overview

The Biosensor Group of the KIST Europe is offering a senior researcher position in the field of **selective and sensitive detection/monitor sensors of small organic molecules**. The group mainly contributes to research on human and ecosystem safety from chemical exposure in the environment. The successful candidate will have the opportunity to participate environmental safety related projects with multidisciplinary team

Area of Research

We open a position for environment related projects having assessment and sensing issues. The candidate will conduct research into design and development of probe materials and sensing methods based on molecular recognition that can selectively detect and monitor small organic molecules or biomarkers in complex aqueous solutions at extremely low concentrations, and fabrication of sensor elements using them. Candidates must have an excellent understanding, and preferably direct experience, of one or more of the following areas: selective probe/antigen development, sensing signal transduction mechanism and various data processing.