INTERNATIONAL IBERIAN NANOTECHNOLOGY LABORATORY

Project Title:	*(Eco)toxicology of nanomaterials: "in vitro" models*
Project Short description	Nanotechnology is a fast developing field which poses challenges for its safety assessment and management. The technology involves production of materials in a size range of less than 100 nanometres that is able to interact with biological systems at cellular and molecular range and that implies the appearance of great reactive surface area and relevant. Many kinds of nanomaterials are already widely used and in continuous development (e.g. targeted drug delivery, gene therapy, and semiconductors) with functionalizations that could drastically modify their activities on biological systems. Taking all this into account safety of nanomaterials to the public and the environment is of general and great interest. This project will investigate the fate and effects of a range of manufactured nanomaterials to selected aquatic invertebrate (mainly filter feeding molluscs) and microalgae species at tissular, cellular and sub-cellular level. This work will contribute directly to the assessment of environmental risks posed by nanomaterials.
Expected Start/end date	To be agreed with the University Supervisor (6 months foreseen)
Required degree and Background knowledge of students, minimum gradepoint average, etc…	We are seeking for a motivated student with a degree in one of the following disciplines: Biology, Biochemistry, Food Technology, and/or Chemistry. Background in cellular biology, toxicology and/or electronic and fluorescence microscopy would be desirable.

Supervisor at INL

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