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Nationality: Spanish

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Orientation: Integrated Management of the Sea

Specialization Area: Analysis and Environmental Evaluation

Research Area: 3.6 Pollution and environmental impacts

PhD project: Establishment of background values of PAHs and PAHs rented in sediments of the Spanish Atlantic coast.

Supervisors: Dr. Lucía Viñas Diéguez (Spanish Oceanographic Institute)

Summary: The results of the doctoral thesis, which involved the study of marine sediment samples from five areas distributed along the Spanish Atlantic coast (Golfo Ártabro, Ría de Arousa, Ría de Pontevedra, Ría de Vigo and Golfo de Cádiz) will allow the establishment of new evaluation criteria applicable in environmental studies.

Spanish legislation, through the transposition of the Framework Directives on the Marine Strategy and Water Framework Directive, as well as the OSPAR International Convention, establish measures for the protection of the marine environment against pollution and develop the necessary science to offer information and support for the sustainable use of the oceans. But to achieve this, it is necessary to define concentration values for the different substances that ensure the good state of the ecosystems, which are called background values or *background values*.

In this work, more than 20 sediment cores were analyzed, which allowed the determination of the background values, not available until now, for the evaluation of the contamination due to polycyclic aromatic hydrocarbons (PAHs), toxic compounds present in urban and industrial discharges and in oil spills to the sea.

