

## TASK REPORT

### NATURAL AND ENVIRONMENTAL SCIENCES DEPARTMENT

#### **Study of the Physical and Chemical Properties on Ceuta's Beaches. Coastal Plankton and Sabulicola Fauna**

Our city is located within a very vulnerable natural space where we can find a very rich biodiversity.

Due to the fact that Ceuta's geomorphology has the shape of a tombolo, its coastline is a key spot for sustainable development as well as for its citizens' quality of life.

In connection with the topic, a 2º Bachillerato students' group (students at last year of Spanish Non-Compulsory Upper Secondary Education) whose names are: **Antonio Jesús Escalante Díaz, Fernando Galán Paredes and Samuel Inga Rodríguez**, was assigned in October 2011 the following task: Study of Ceuta's beaches in order to learn both their physicochemical properties (i.e., average temperature, acidity, saltiness, light penetration, composition of sands and pebbles) as well as the biotic constituents in the coastal plankton and the fauna under the sand (sabulicola).

Students collected their samples from two Ceuta's beaches: La Ribera Beach (one of Ceuta's Southern beaches which is filled with artificial sand), and Punta Blanca Beach (a natural Northern beach). All samples were analyzed in our high school laboratory.

The main aims of our task were the following:

- Get to know Ceuta's coastline from a closer approach and with better observation and analysis capability.
- Increase students' environmental awareness of our rich natural heritage and its high vulnerability.
- Qualify students (and therefore, our citizens) to develop an environmental brigade as a pressure group against state and private bodies' negative environmental actions. Such an eco-friendly group would reconcile the principles of natural heritage protection with city development by avoiding the harmful use of natural resources. This way, we would walk towards a land management based on sustainable solutions.

The products of this activity were the result of a laborious [task](#) for which all the necessary steps in a scientific-experimental research were carefully followed. Besides, we photographed and filmed some of the most interesting moments of our work in order to fulfil our goals regarding motivation, as well as spread and awareness of environmental problems.