PhD project: Biodiversity and conservation of *Zostera marina* meadows in the Northwest of the Iberian Peninsula: biological and phycological approach

Summary: The meadows of *Zostera marina* are considered priority habitat for conservation in the EU but their knowledge on northwestern coast of the Iberian Peninsula is how much insufficient. This study aims to fill these gaps in floristic and ecological aspects of *Z. marina* meadows. The objectives are: (i) To delimit the location and extension of the eelgrass meadows in the Northwest of Iberian Peninsula, by describing the habitat-type, quantifying the major abiotic parameters that determine their distribution and describing the biology and vitality of eelgrass meadows. (ii) To analyze the diversity of eelgrass meadows in northwestern Iberian through the study of its accompanying flora and epiphytes, by identifying the main species and comparing the floristic composition and diversity among meadows from different sites and sectors. (iii) To study temporal variations of associated flora with *Z. marina* meadows and its relation to environmental factors such as light and temperature, as well as the dynamics of growth and reproduction of dominant species. (iv) To assess the conservation status of eelgrass meadows in northwestern Iberian and to select areas of interest to be considered in conservation plans. In the sampling, the extension of each meadow will be delimited through transects, different abiotic parameters will be measured and photographs will be taken to register the appearance of the community. Eelgrass coverage and coating of the accompanying flora will be visually estimated; as well as shoot eelgrass density will be measured. Eelgrass plants will be collected to study the epiphytic species on *Z. marina*. The samples will be studied considering the floristic composition by taxonomic groups (Rhodophyta, Ochrophyta and Chlorophyta).