

**Prieto Rodríguez Puime, Antero**  
University of Vigo  
Nationality: Spanish

Orientation: Ocean Observation and Global Change  
Specialization Area: Ocean Observation  
Research Line: 1.4 Biological Oceanography



**PhD project: Study of coupling between phytoplankton and heterotrophic bacteria and its influence in the marine microbial communities**

Supervisors: Dr. Emilio Fernández Suárez (University of Vigo)  
Dr. Eva Teira González (University of Vigo)

**Summary:** Biogeochemical cycles have undergone numerous anthropogenic alterations in the last decades, having an important impact on coastal marine systems. Nitrogen cycle have received important impacts caused by human activities like fertilizers or the cultivation of nitrogen-fixing plants. These alterations affect the coastal organisms. The study of the microbial plankton response is very interesting because we can observe the response in a small time-scale. In this work we will investigate the role of the interaction (positive) between phytoplankton and the heterotrophic bacteria in the microbial plankton response to nutrient additions with the trophic coupling blocked (samples treated with bacteriostatic antibiotic) or with the trophic coupling active (samples without antibiotic).

