

**Ferreira da Silva, Carla Ofélia**

University of Aveiro

Nationality: Portuguese

Orientation: Integrated Management of the Sea

Specialization Area: Analysis and Environmental assessment

Research Line: 3.6 Pollution and environmental impacts



**PhD project: Marine Invaders – Impact of the invasive macroalgae *Asparagopsis armata* in marine and coastal environments**

Supervisors: Dr. Marco Lemos (Politechnic Institute of Leiria)

**Summary:** Invasion by exotic species is one of the main threats to the oceans. In this PhD work, the target species of study is the red algae *Asparagopsis armata*. This algae is able to overlap with other native species by easily occupying coastal ecosystems, occasionally forming red tides. This phenomenon is seen at certain times of the year, on the Portuguese coast, especially on the Peniche beaches. Besides the rapid propagation, it has a very threatening characteristic for our coastal biodiversity: this algae is chemically defended. This means a negative impact on the life present in tide pools and areas with high *A. armata* density. This algae can cause effects on invertebrate communities over a period of time equivalent to a tide.

Thus, the main objective of this work is to unveil the impacts and understand how this invasive species acts in the coastal systems. This type of biological pollution - which is a result of global changes, causing major ecological problems, such as loss of biodiversity, is becoming more and more worrying.



Impact of the invasive macroalgae *Asparagopsis armata*  
in marine and coastal environments