

Alves, Ana Luísa
University of Minho
Nationality: Portuguese

Orientation: Sustainable Use of Marine Resources
Specialization Area: Transformation and Valorization
Research Line: 2.16 New products of marine origin



PhD project: Bioengineered marine collagen based membranes for cornea regeneration as strategy for biotechnological valorization of codfish skins

Supervisors: Dr. Tiago H. Silva (University of Minho)
Dr. Ricardo Perez-Martín (Marine Research Institute-CSIC)

Summary: The fish processing industries generates tons of by-products, which valorisation may be based on the production of materials with biomedical relevance (biopolymers, similar to the ones present in our organism). This PhD project aims to use biotechnological tools on marine by-products to develop a new biomedical product, contributing to a more sustainable use of marine resources, a key pillar in both national and regional economy and research. To accomplish such challenging goal, marine by-products such skins will be used as raw-material for the extraction of collagen and gelatine. After its full characterization, the extracted collagen and gelatine will be used to create membranes aiming their use in cornea regeneration.

