



Marine biological resources



# COMBINING PROCESSES TO INCREASE SHELLFISH HATCHERY SAFETY

The objective of the SOAP project is to study and develop an innovative hybrid process for the disinfecting and chemical decontamination of seawater upstream from shellfish farms. The technology involved in this process will be transferred to ensure the safety of the larval and spat stages of marine mollusc development by protecting against biological and chemical contaminants, whatever the quality of the water fed into the system.

SOAP will initially study the impact and performance of current systems for disinfecting shellfish hatcheries, particularly UV treatment, which can lead to the formation of toxic metabolites.

The project will then move to developing a process combining activated carbon and membrane filtering that will not generate by-products.

Finally, the overall process of disinfection and chemical decontamination will be assessed under controlled conditions to establish the input and operational parameters. The process will then be transferred to the sites of two commercial hatcheries, which are project partners, to evaluate performance in relation to water variability.

The SOAP project will contribute new knowledge about absorption mechanisms in the seawater matrix and, in particular, about damaging competition with natural organic matter, as well as the cut-off threshold for membrane filters.

Emerging pollutants, such as pesticides, drug residues and microplastics, will be specifically targeted.

The SOAP project is also recognised by the Pôle Mer Méditérranée cluster.

## **Partners**

## Companies

Novostrea, Sarzeau Vendée Naissain, Bouin

#### Research centers

LM2P2-Aix Marseille Université, Aix en Provence [Project Developer] École Nationale Supérieure de Chimie de Rennes, (ENSCR), équipe COS, Rennes Ifremer, Plateforme Mollusques Marins, Station de Bouin, Bouin Ifremer, Plateforme Mollusques Marins, Station de la Tremblade, La Tremblade Laboratoire GEPEA/IMTA, Saint Nazaire

## Funder

Fonds Européen pour les Affaires Maritimes et la Pêche (FEAMP)

## Labelisation

24/05/2019

## Overall budget

1 238 k€