

**Project:** AQUA-GOX2 (ICFO, ACSA-Sorigué)

## AQUA-GOX2

### **AQUA-GOX2- Development of high impact membranes based on graphene for water treatment**

This project focuses on the optimization of the cost of membranes for their use at the level of water treatment through the incorporation of nanostructures on the surface of the membrane. To do this, different cheap commercial membranes will be used and 2-dimensional materials will be incorporated in combination with other nano-materials through different deposition methods, as determined in the previous AQUA-GOX project.

Thanks to these coatings, it is expected to improve the anti-fouling properties, permeability and reduce the maintenance and washing costs of the membranes, substantially increasing their performance compared to those currently on the market, but at a lower cost. At the end of the project, a membrane will be obtained that presents improved capabilities in terms of mechanical robustness, hydrophilicity and chemical stability.

