



Press release

Horizon 2020 European project for research and innovation REMEB kicks off

- **REMEB seeks to respond to the social challenges linked to climate change and the environment**
- **The project aims to develop recycled ceramic membranes for wastewater reuse**

The first meeting of the European project REMEB took place on 14th and 15th September in Benicàssim, Castellón (Spain), in order to begin coordinating the various activities proposed in the project. In this first *kick-off*, the main objectives and the different work packages in which the project is organized, and every partner's role have been presented. The project is aimed at the development of a ceramic membrane bioreactor based on ceramic and agro-industrial by-products for wastewater reuse.

The project, led by FACSA (Sociedad de Fomento Agrícola Castellonense SA), in which Centro Cerámico participates as a partner, has a total budget of 2,361,622.50 Euros, and is funded by the European Union through the Horizon 2020 programme. The project starting now is scheduled for completion in August 2018.

This initial meeting has served as the backdrop for presentation and first point of contact for the renowned private sector companies, public administrations and research centres integrating REMEB.

REMEB is integrated by a total of 11 partners from seven different countries: FACSA as project coordinator, the Spanish Institute for Ceramic Technology ITC-UJI, the French engineering company IMECA Process, the consultant company from Cyprus ATLANTIS, the Norwegian company BIOWATER, the Council of Chambers of Commerce of Valencia, Castellón laboratory for research and environmental projects IPRDMA, the Italian ceramic centre CENTRO CERAMICO, the ceramic research centre SAM in Turkey, Antonio Ariño University in Colombia and the Wastewater Management Entity of Murcia region ESAMUR.

Objective: eco-friendly membranes for wastewater reuse

REMEB arises from the research in the field of low cost recycled ceramic membranes. Its aim is to develop a water treatment that combines biological treatment with membrane technology, in particular, a membrane bioreactor (MBR).

Along these lines, the most innovative aspect of the project is the development and validation of a full-scale MBR with inorganic membranes made from ceramic and agro-industrial processes wastes, which are not currently used in similar procedures. In this sense, the validation of the MBR will be held in the wastewater treatment plant (WWTP) of Aledo, Murcia (Spain).

As there are no references to commercial inorganic membranes made from wastes, this project is a challenge at a research and technical level, mainly because of the important social, economic and industrial impact involved.

Specifically, REMEB MBR would decrease the membrane manufacturing cost - currently not implemented due to high-economic cost, opening the doors, in turn, to new research in the field of water reuse.

European project of the Horizon 2020 programme

The project (ref. 641 998), with a duration of three years, was awarded in February this year in the framework of the call H2020-WATER-2014-two stage and the topic Water-Ia-2014, Horizon 2020. Thus, in 2014, the REMEB proposal was presented in two stages, in April and September respectively, being approved and granted among more than 170 project proposals.

REMEB is funded by the Horizon 2020 programme, which promotes projects and initiatives for research, technological development and innovation. This project is namely focused on the "Climate action, environment, resource efficiency and raw materials", identified societal challenges in Europe in relation to security, climate change and environmentally friendly production methods, among others.