

EXPERIMENTAL STATION FOR WATER AND WASTEWATER TREATMENT

Innovations and benefits - Water purification processes and technologies.

Set up of an experimental station consisting of various pilot and laboratory-scale plants for the treatment of different types of pollutants, organic and inorganic, contained in aqueous matrix. Analytical instrumentation to determine chemical species in liquid matrix.

Use - Consultancy and studies for the development of eco-friendly business strategies aimed at solving problems related to the treatment, disposal and recycling of process water. The service user can be identified in any small and medium-sized enterprises which use water and / or generates waste to be disposed and / or recycled in their production cycle. Hence, the service offered to a company consists of testing different treatment systems in the laboratory on real wastewater in order to identify the best process and the best operating conditions adapted to the specific case. This service includes the study to optimize the process water cycle.

Applications and ongoing Activities - **TiDe Project:** optimization process for the wastewater treatment of the tanning industry aimed at its reuse.

AQUASYSTEM project: Innovative procedures and technologies for a planned and integrated management of water resources, energy optimization and quality control in the Integrated Water Cycle ". Design and construction of two prototype plants for the simulation of a domestic water network and a sewage network

SMART CASE Project: Multifunctional innovative solutions for the optimization of primary energy consumption and indoor livability of the building system ". Study and laboratory activities for the treatment of domestic waters containing emerging pollutants.

Collaborations with companies

Consortium TRE (STRESS building district), Ariston S.p.A (tanning and dyeing of hides and skins).

