

Sustainable use of process water (Reuse of water in food and bioprocessing Industry (REWARD))

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Aim and Description:

The main aim of this project is to reduce water consumption in the food and bioprocessing industry.

This will be achieved by:

- 1) Maximizing reuse of process water and minimizing intake of potable water without compromising safety – working towards the closed factory - by implementing Process Analytical Technology and Quality by Design methodologies
- 2) Facilitating active monitoring and control of process and cleaning water for enhanced production and/or cost reductions in a sustainable way using dairy processes as a model system
- 3) Enable real-time monitoring of the chemical and biological water quality and equipment surfaces by employing novel in-line spectroscopy and developing nano-technology based measurement principles
- 4) Forming a strategic research project and a knowledge platform between leading universities, major service providers and the industry aimed at solving problems related to water reuse by introducing new state of the art technologies and methodologies.