## **CRISTINA PABLOS CARRO**

Researcher of University King Juan Carlos

"Experiences of research projects in the field of water treatment in industry:
DEVELOPMENT AND EVALUATION OF NEW PHOTOCHEMICAL AND BIOLOGICAL
PROCESSES FOR THE TREATMENT AND REUSE OF WATER IN FOOD INDUSTRIES
(WATER4FOOD)"

Nowadays the demand of packed fruit and vegetables ready for fresh consumption (4<sup>th</sup> range of food) shows an excessive increase all over Europe. In addition, the sector is characterized by a high consumption of potable water (40 m³/ton). There is, therefore, a need to develop new technologies for the treatment and reuse of waste water which are able to: 1) eliminate fruit-and-vegetable-derived pesticides; 2) and control the population of diseases-causing microorganisms due to contaminated food consumption. Furthermore, predictive models and those that minimize chemical and biologicals risks have been evaluated in the final product.