



Project Information Sheet

ECUVal

Programme area:	First and Market Replication Projects
Coordinator:	Carmen Gutiérrez-Bouzán Universitat Politècnica de Catalunya (UPC), Spain E-mail: gutierrez@intexter.upc.edu Tel: +34 937398008
Partners:	Fundació Privada per la Innovació Tèxtil d'Igualada (FITEX), Spain ICOMATEX, Spain GRAUSA, Spain
Website:	www.ecuval.eu
Benefits (max. 150 characters incl. space):	Reduction of water consumption in dyeing processes from 70 to 100%. Saving of 15-60% electrolyte. No chemicals are needed, no residues are generated.
Keywords:	Photo-electrochemical treatment, colour removal, effluent reuse
Sector:	Green Business
Type of solution	Technology
Duration:	15/01/2015 – 14/07/2017
Budget:	€ 1.476.511 (EU contribution: 50%)
Contract number:	ECO/13/630452

Summary

ECUVal project is focussed on assessing the feasibility of a photo-electrochemical treatment for the degradation of dyes contained in textile effluents and the subsequent scale-up of the technique at commercial level. The creation a sustainable business model and the evaluation of its exploitation are also an important goal.

Currently, the technical requirements for the ECUVal system operation have been established. Mixtures of exhausted dyeing and washing effluents from reactive processes are the most suitable. Effluents are decolourised after 10-30 minutes of electrochemical treatment and they can be reused in new dyeing processes.

In addition, functional requirements and design guidelines of the industrial pilot have been established. The user interface to control the different components of ECUVal system has been designed. The ECUVal system operates in batch mode and is equipped with the suitable control instruments. The current step of ECUVal project development is the implementation and validation of the pilot at industrial scale.

The market study and the preliminary business plan have been prepared. This information is now being expanded, mainly to better target the potential users of the ECUVal system in the different European countries. Spain, Italy and Germany have been selected as a starting point for this study. Several criteria are important to ensure the implementation of ECUVal, mainly water scarcity, environmental policy and water cost.

Expected and/or achieved results

- Functional requirements for the ECUVal system operation.
- Design of ECUVal system, user interface and selection of the main control instruments.
- Upcoming implementation and validation at industrial scale.
- Definition of the potential consumers and market of ECUVal system.
- Exploitation of the technology

The information sheet will be published in the [Eco-Innovation website](#). The EASME reserves the right to edit the information sheet for content and length