

# SusChem 2017 Brokerage Event

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*Constructed wetlands for metal removal  
from industrial wastewaters in rural  
areas of environmental significance*

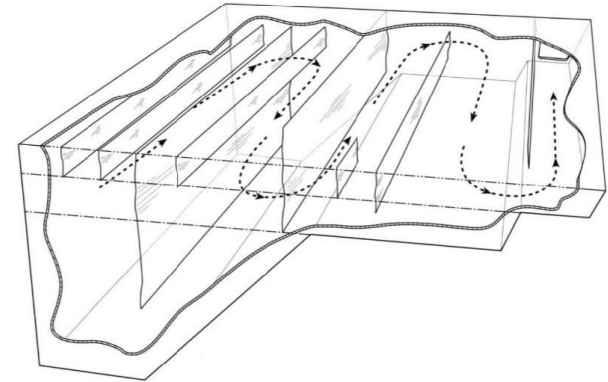
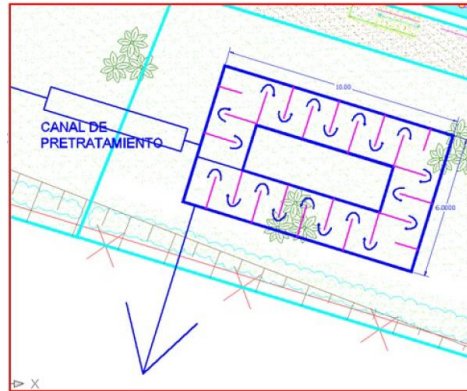


- Know-how of academic staff and researchers from the University of Salamanca, Spain.
- Offer to companies and institutions to carry out R + D + i, technical and analytical support, consulting and delivery of services and training courses for human resources in **Science, Technology and Management of Water**.
- CIDTA is partner of the *InduRe - Industrial Water Re-use and Recycling IEP Water Action Group*, the **Spanish Water Technology Platform**, the **Cluster of Environmental Sustainability** of the Junta de Castilla y León (Spain) and the **Water Alliance and Water Nexus Iberoamerican Platforms**.

### WORKING LINES

- **WATER CONTROL AND MONITORING:** Indicators of Water Pollution. Ecotoxicology and Cytotoxicity of Wastewaters. Pollution Dynamics of Natural Waters. Modeling of Water Resources.
- **WATER TREATMENT TECHNOLOGIES:** Bioremediation of metals polluted waters. Advanced oxidation processes and Photocatalysis. Anaerobic digestion of sewage sludge. Passive wastewater treatments in small municipalities.
- **WATER RESOURCES MANAGEMENT:** Expert systems for design, control and management of wastewater treatment plants. Evaluation of the efficiency of water use in urban and agricultural systems. Sociological analysis of needs, uses and management of water.

## Constructed wetlands for metal removal from industrial wastewaters in rural areas of environmental significance



**Design, construction and optimization of demonstration artificial wetlands to decontaminate heavy metals polluted wastewaters from small industrial parks scattered in rural areas to safely incorporate such effluents into the conventional or low cost wastewater treatments of the corresponding municipality.**

- Metal biosorption/bioaccumulation in hydraulic curtains of artificial wetlands.
- Biodegradation of pollutants by biofilms and phytoremediation.
- Use of local wastes as biadsorbent materials of metals, promoting circular economy, socio-economic development and a sustainable model of treatment, management and reuse of waters in rural areas.

**H2020 call and the deadline for submission:**

**CE-SC5-04-2019: Building a water-smart economy and society**

**19 Feb 2019**

18/10/2017

- **Recovery of metals as by-products of such wastewaters treatments**
- **Adding value to local wastes**
- **Reusing treated wastewater for agricultural irrigation**
- **Increasing the diversity and biodiversity of landscape**
- **Promoting local employment in environmental tourism**
- **Cost-effective and smart management of water in rural areas**
- **Compliance with the European Directive on environmental quality standards in depopulated areas with industrial activity**

There are an existing project consortium of 2 or 3 Research Teams with know-how on metal biosorption/bioaccumulation at pilot demonstration plant scale.  
<http://biometaldemo.eu>

## WE ARE LOOKING FOR PARTNERS

**SMALL MUNICIPALITIES, ASSOCIATIONS OF MUNICIPALITIES and INDUSTRIES (SMEs)** of rural areas in Europe, mainly of rural and depopulated areas in Southern (Mediterranean) Europe .

Municipalities and industries that have not yet implemented passive and low cost systems for the treatment of their metallized wastewaters and interested in implementing them.

**INDUSTRIES SPECIALIZED IN PHYTOREMEDIATION, IN THE USE OF MYCORRHIZAE**

**INDUSTRIES THAT PRODUCE AGRO-FOOD WASTES**



# Contact details for project idea(s) :

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