



# **HYDROBIONETS Open Workshop**

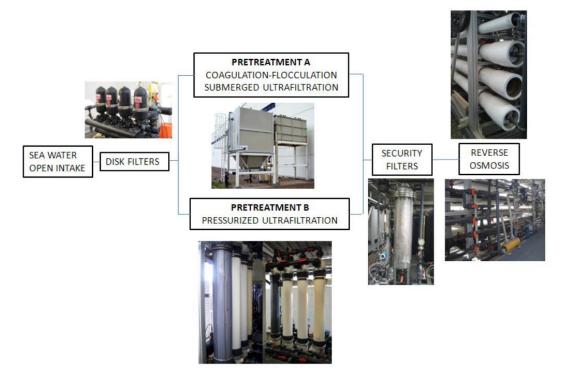
# **Autonomous Control of Large-scale Water Treatment Plants based on Self-Organized Wireless BioMEM Sensor and Actuator Networks**

We are pleased to announce an Open Workshop in the course of the EU-funded HYDROBIONETS Project. HYDROBIONETS focuses on the development of Self-Organized Wireless BioMEM Networks (WBNs) and their integration in a global system to monitor the complete water cycle in large-scale water treatment and desalination plants. The key feature is the insertion of BioMEM sensors in motes and the adaptation of the network functions to the specific requirements that these types of applications impose.

The aim of the Workshop is to interact with the user community and gather expert opinion in order to fine-tune the alignment of project aims and market needs. We will do this by introducing the technology being developed within HYDROBIONETS and having an open discussion to explore the opportunities and barriers for exploitation/commercialisation in the area of water treatment and desalination.

Date: Wednesday 29th October 2014, Time: 10:00 - 16:00

Venue: Hotel Regina, Calle Bergara, 4, Barcelona, Spain





#### **Background**

The problem of quality and quantity of water resources is a global challenge. Both an adequate amount of water and adequate water quality are essential for public health and hygiene. Waterborne diseases are among the leading causes of morbidity and mortality in developing countries. For example, of a population of roughly 6.1 billion, more than 1 billion lack access to potable water and approximately 5 million die yearly from water-related diarrhoea illnesses or infestations associated with poor drinking water and inadequate sanitation each year.

While Europe is largely considered as having adequate water resources, water scarcity and drought is an increasingly frequent and widespread phenomenon in the European Union. The EU is undertaking various initiatives to ensure access to good quality water in sufficient quantity for all Europeans, and to ensure the good status of all water bodies across Europe. Both water treatment and desalination plants play a major role in terms of obtaining large quantities of water with good quality. However, the costs associated with water desalination in particular are relatively high.

#### Agenda

A keynote presentation will be given by Pedro Miranda, International O&M Manager of Acciona Agua, who has significant experience of equipment commissioning and coordination in the water production arena. Further presentations will be given by a number of HYDROBIONETS partners following which there will be an opportunity to view some of the components and systems that are being developed within HYDROBIONETS (sensors, wireless networks, etc.) and a video of the system installed in a nearby desalination plant. This will be followed by an open discussion of the technologies presented and the barriers to entry in the marketplace. The Workshop agenda is outlined below.

10.00 10.00	WILL O CC
10:00 - 10:30	Welcome & coffee
10:30 - 10:45	Introduction to HYDROBIONETS (Prof. Baltasar Beferull-Lozano, University of
	Valencia, Spain)
10:45 – 11:15	Invited speaker from water industry (Pedro Miranda, International O&M manager
	of Acciona Agua)
11:15 – 11:45	HYDROBIONETS overview (Prof. Baltasar Beferull-Lozano, University of
	Valencia, Spain)
11:45 – 12:15	HYDROBIONETS presentation on Network Infrastructure and In-network
	processing (Viktoria Fodor, KTH, Baltasar Beferull-Lozano, UVEG)
12:15 – 12:45	HYDROBIONETS presentation on Distributed Control (Carlo Fischione, KTH)
12:45 – 13:45	Buffet lunch
13:45 – 14:15	HYDROBIONETS presentation on higher level information processing and
	visualization (George Tzagkarakis, FORTH)
14:15 – 15:00	Coffee/tea break and live demo of HYDROBIONETS components
15:00 – 15:15	Video of HYDROBIONETS system in desalination pilot plant
15:15 – 16:00	Open discussion
16:00	Close of Workshop

## Attendance and Registration

Attendance at the HYDROBIONETS Open Workshop is free. However, registration is essential, as places are strictly limited. To register, please use the attached registration form or visit <a href="https://www.hydrobionets.eu">www.hydrobionets.eu</a>. Please return all registration forms by e-mail to the HYDROBIONETS Project Manager, Dave Wenn (<a href="https://davew@ixscient.com">davew@ixscient.com</a>).

For further information, you may contact Baltasar Beferull-Lozano (baltasar.beferull@uv.es).



## Registration Form - HYDROBIONETS Open Workshop

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Please also use this form to express your interest in the HYDROBIONETS project.

Yes, I will participate in the HYDROBIONETS Open Workshop  I am interested in the activity but, unfortunately, cannot attend the Workshop	
Please enter ✓ in appropriate box	
My organisation is working in the following area:	
My specific interest is in:	
<u> </u>	

For further information, you may contact Baltasar Beferull-Lozano (<u>baltasar.beferull@uv.es</u>) or visit the project website at <u>www.hydrobionets.eu</u>.

