

## WORKSHOP

### **“ICT tools for innovating Groundwater Management in a changing world”**

22<sup>nd</sup> September 2017

Assembly Hall Pascual Vila

CID - CSIC, 16 Jordi Girona

Barcelona (Spain)

Water resources, essential to life and human activities, are strongly connected to climate, currently changing and modifying the water cycle and, consequently, modifying socio-economic activities. These challenging uncertainties lead the European Union to invest in understanding, estimating and looking for innovative ways to manage possible scenarios. This is particularly true in the Mediterranean areas, where water scarcity is a major problem. Groundwater is a critical resource and needs to be carefully managed: for example, groundwater helps sustain agriculture and other water uses during drought periods, but then groundwater levels critically decrease with no chances to recover in some parts of the world.

To address these issues, the international workshop *ICT tools for innovating Groundwater Management in a changing world* will present the views of relevant keynote speakers on how water management (with a special focus on groundwater) can be improved by their experience in applying Information and Communication Technology Tools (ICT). The workshop is co-organized by the EU HORIZON 2020 FREEWAT project ([www.freewat.eu](http://www.freewat.eu)) and the Institute of Environmental Assessment and Water Research (IDAEA, environmental institute within the Spanish Research Council - CSIC), partner of the project.

The workshop will start with presentations aimed at providing an overview on present groundwater management conditions in Spain and Catalonia. After these, the efforts of the EC to promote ICT tools in water management and the roadmap for emerging technologies will be discussed. These more general contributions will be followed by presentations of some of the case studies involved in the FREEWAT project and where groundwater management solutions have been simulated using the open source and public domain FREEWAT platform. The case studies that will be presented include: a case study on transboundary aquifer management by UNESCO-IHP, groundwater management in islands by The Energy & Water Agency - Malta, and rural water management by ZETA AMALTEA – Spain and Scuola Superiore Sant’Anna, Italy. Finally, the views of other H2020 projects on the topic will be given by H2020 FATIMA and H2020 INTCATCH.

Claudia Muresan, from the European Union DG Agriculture and Rural Development, Water, Agro-Environmental Decision Support Systems, will provide insights on development of DSS at EU scale.

Attendees will have the possibility to share their views, comments and pose questions to the speakers both during the presentations and the final discussion.

The workshop is co-organised within the context of the **European Innovation Partnerships on Water** (EIP WATER [www.eip-water.eu](http://www.eip-water.eu)) – Action Groups “*Managed Aquifer Recharge Strategies and Actions*” and “*Water & Irrigated agriculture Resilient Europe*” and the **ICT4WATER** cluster initiative ([www.ict4water.eu](http://www.ict4water.eu)).

Participation is free, but registration is mandatory by sending an e mail to: [rotman.criollo@idaea.csic.es](mailto:rotman.criollo@idaea.csic.es)