

## **DEADLINE EXTENSION**

### **Call for Papers**

#### **International Workshop on “Irrigation and Energy”**

**14 October 2015; 09:00-15:30 hours at Montpellier, France**

Compared to the traditional gravity-fed irrigation systems, most modern systems are energy consumers. Irrigation energy footprint and cost are increasing steadily. Therefore, it is not surprising that, more and more, farmers and water users associations are engaged in active research and negotiations to reduce energy consumption, increase energy efficiency, and reduce energy costs and tariffs. On the other hand, on-farm energy generation, such as hydraulic energy, solar energy, geo-energy and bio-energy, is another option that farmers and water users associations are investigating and testing to reduce their energy dependence and cost.

The design of pipe systems, either collective networks or irrigation application systems, uses energy criteria by setting head loss limits. The same applies, for instance, to the selection and dimensioning filters and emitters. Proper maintenance contributes to save energy. Operational measures to save irrigation water such as reducing distribution and application losses have direct effect on energy savings. More specific energy saving measures are: optimization of the design and operation of pumping stations to minimize investment and energy cost; identification and correction of critical points in the network that are responsible for extra energy consumption; network sectoring for water rotation by grouping hydrants according to homogeneous energy demand.

Although energy audits are more and more common, both in private and collective irrigation systems, to identify means to reduce energy consumption, farmers' preferred measures are not saving energy but are related to the reduction in the cost of energy. Optimal contracting with the supplier company has become main concern of water users associations and individual farmers.

Irrigation & energy is therefore a multi-faceted multiple-actor issue. Technical, economic and environmental aspects are linked in many ways involving farmers, water users associations, energy suppliers, engineers, and other stakeholders. The objective of the workshop is to open a forum where researchers can show their research outcomes, where all actors can discuss their interests, where innovation finds a medium to flow and spawn. The workshop could also be the seed of a new working group on irrigation & energy.

The abstracts/papers are invited on the following sub-topics:

- pumping optimization
- optimising networks and operation

- low pressure emitters and networks
- on-farm, on-district energy generation for irrigation
- irrigation scheduling to minimise energy cost
- cutting edge irrigation/energy solutions
- local to global irrigation energy footprint

#### **SCHEDULE FOR SUBMISSION OF ABSTRACTS/FULL PAPERS**

Possible contributors are invited to submit abstract and papers to the ICID conference until.  
**April 15, 2015**

#### **SCIENTIFIC COMMITTEE:**

Gilles Belaud, Montpellier Supagro/G-eau, France

Sami Bouarfa, Irstea/G-eau, France

Luciano Mateos, CSIC-IAS, Córdoba, Spain

Bruno Molle, Irstea/G-eau, France

Juan A. Rodríguez Díaz, University of Córdoba, Spain

Carole Sinfort, Montpellier Supagro/ITAP, France

#### **CONTACT CO-ORDINATES:**

**Workshop Organizer:** Gilles Belaud, Supagro/G-Eau (E-mail: [gilles.belaud@supagro.fr](mailto:gilles.belaud@supagro.fr))

**Workshop Organizer:** Luciano Mateos, CSIC Cordoba (E-mail: [ag1mainl@uco.es](mailto:ag1mainl@uco.es) )