



# Drones and Hydraulics

## At the service of water professions

International Conference

Paris-Cachan, 8-9 April 2015

### 3<sup>rd</sup> ANNOUNCEMENT

#### DESCRIPTION

Current measurement and test techniques in the water field are primarily performed at ground level or from space. Mid way between these two, the development and increasing reliability of drones, both aerial and aquatic, allow for the fast mass acquisition of information of all types, global or detailed, visual or digital.

Civil drones are growing in importance, through the number of manufacturers and operators (approximately 350 in France), their technical characteristics and their array of applications. Despite that current applications are largely oriented towards event media coverage, agriculture and industry, applications in the field of hydraulics and aquatic environments are increasingly numerous.

Discussions related to civil drones are mainly concentrated the "platform" or "system" technology, specifically cross-functional themes such as regulation or safety. They focus less on specialized instrumentation. The idea of a conference centered on the hydraulic applications for drones is innovative and unique in its focus on applications.

Furthermore, the different aerial or spatial approaches will be complementary rather than in opposition, given remote sensing. Drones allow for work in multiple spatial and temporal scales, as well as for mixing information of different types.

A real driving force for progress, civil drones allow occasionally inaccessible zones to be visualized, reinforce the safety of interventions and improve the quality of surveillance methods, while also being fast to implement and low cost.

The conference will highlight this specific contribution from drones, along with its possible impact on scientific and operational progress. It will promote dialogue between industry, researchers, users and administrations on technical, economic and legal issues.

#### ORGANIZING COMMITTEE

Jérôme LOYER, Veolia, chair of the conference

Paul Henri FAURE, Compagnie Nationale du Rhône

Catherine FREISSINET, Artelia

Florian MAURIS, EDF /DTG

Matthieu MONTROND, Hydro-Québec

Jean-Michel TANGUY, MEDDE, Commissariat Général au Développement Durable.

Brigitte BITON et Anna DUPONT, SHF



REGISTRATION: from 100 to 290 euros

[www.shf-hydro.org](http://www.shf-hydro.org)

## Preliminary program

### Wednesday 8 April

#### 9:30. Opening ceremony

#### 10:00. Session 1:

##### Environment and Hydroecology

River environmental monitoring (grass beds development, phytoplankton blooms in lentic waterbodies, Riparian vegetation, aquatic habitats)

Marine monitoring

**12:15.** The use of drones in urban hydrology and conclusion of Session 1, by

**Bruno Tassin**, Directeur de recherche, École des Ponts ParisTech

**13:45. Round Table chaired by Jérôme Loyer**, Directeur scientifique et innovation, Ginko-Véolia  
**Glance at the Drone sector**

with: **Fabien Guillotin**, Direction Générale de l'Aviation Civile, **Stéphane Morelli**, Président de la Fédération Professionnelle du Drone Civil, **Edouard Geffray**, secrétaire général de la Commission nationale de l'informatique et des libertés-(CNIL)

**15:35. Session 2: Progress in onboard measurement systems**

Hydrometry, auscultation by photogrammetry, quality monitoring, comparison and complementary drone/satellites.

**17:30. SHF awards ceremony**

**17:50. Get-together around the Posters and Booths**

### Thursday 9 April

**9:30. Session 3: Asset management of hydraulic facilities:** Old drills, dam monitoring, dikes, reservoirs, wastewater; underwater inspections

**12:40. Conclusion of Session 3 by**

**Gilles Feuillade**, Directeur Délégué de la Division Production & Ingénierie Hydraulique, EDF

**14:15 Session 4: Equipment and Services**

**14:45. Round Table chaired by**

**Jean-Michel Tanguy**, conseiller du directeur de la Recherche, Ministère de l'écologie, du développement durable et de l'énergie (MEDDE/CGDD)

• **Role of the MEDDE**

• **The point-of-view of stakeholders**, with

**Pascal Mialon**, attaché au Directeur EDF-DTG, **Flavien Viguier**, Directeur Technique de la Cellule drone SNCF, **Emmanuel de Maistre**, Directeur de RedBird, **Jean-Paul Chaloin**, Veolia, direction Technique Ile-de-France-Centre

**16:00: Closing session and**

**Best Photo Award ceremony**

#### EXHIBITION, POSTERS and SPONSORING

Aside the Scientific conference content, exhibitors are welcome to present their latest news and products. A space will also be dedicated to Posters.

Sponsors are welcome

Contact: [b.biton@shf-hydro.org](mailto:b.biton@shf-hydro.org)

#### COMPETITION OF THE BEST PHOTO OF A DRONE IN ACTION in the field of water.

A drone photo contest will be held during the conference. (photo of UAV )

To express your desire to participate:

[b.biton@shf-hydro.org](mailto:b.biton@shf-hydro.org) **before March 25.**

Practical information is available on the website.

[www.shf-hydro.org](http://www.shf-hydro.org)

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