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# 1<sup>st</sup> Workshop on Agriculture and Aquaculture (AGRIAQUA'19) (in conjunction with Global IoT Summit 2019)

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# Paper Submission Guidelines

All final submissions should be written in English with a maximum paper length of six (6) printed pages see web conference for instructions. Papers must be submitted through EDAS.

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#### Important Dates

Deadline for paper submission: February 22, 2019 Acceptance Notification: March 31, 2019 Camera-Ready Submission: April 30, 2019

## Call for Papers

The Internet of Things (IoT) has the capability to transform the world we live in by bringing solutions that will enable more-efficient output, especially in terms of monitoring and management. However, the application of technology like IoT in agriculture could have the greatest impact. IoT is a powerful driver that will transform the entire farming and food domain into smart webs of connected objects that are context-sensitive and can be identified, sensed and controlled remotely. As such, we believe that IoT will be a real game changer in agriculture that drastically improves productivity and sustainability.

While aquaculture and IoT have exponentially grown in the world in the last years, the combination of both domains still remains at its early stage. Although water monitoring is at the center of the aquaculture activity, its complexity can often push fish farmers to neglect it. We believe that developing user-friendly IoT solutions for fish farming will lead to a new era of connected, responsible and efficient aquaculture. IoT for aquaculture needs to be smart, affordable, easy to deploy, reliable and highly efficient. Artificial Intelligence processing key data given by IoT can also provide new services addressing new challenges facing aquaculture (e.g be efficient but green). Video is much demanded on remote sites for security reason (eg poaching) but also for advance video processing bringing more information in aquaculture. We believe IoT and Agriculture or Aquaculture can represent a big opportunity.

This workshop will bring together experts from different EU projects, and others regions that are working in interdisciplinary issues in the areas of Agriculture or Aquaculture on IoT. The goal is to present the recent results from research, industry and standardisation bodies and exchange ideas for joint research activities in the future. Finally, the threats of the IoT mitigating boosting the economy while protecting the environment such as to reach Sustainable Development Goals will be identified and analysed, discussing also how the results of the projects can help mitigating these threats.

The technical topics of interest include, but are not limited to:

- IoT-based smart farming
- Automated irrigation system
- Livestock Monitoring and Management
- Smart Greenhouses
- End-to-end farm management systems
- Food Safety Traceability with IoT based technology
- loT for Food Quality Monitoring
- Low costs sensors- biosensors for aquaculture
- IoT for Integrated Multi-Trophic Aquaculture (IMTA°
- IoT for supporting circular economy
- Data models for agriculture, Aquaculture, water domain
- IoT enabling AI applications