First Call for Papers to the
4th International Workshop on Intelligent Systems for Agriculture Production and Environment Protection (ISAPEP'20)
http://isapep.ucam.edu/

IMPORTANT DATES

- Paper submission deadline: 25th March 2020
- Notification of acceptance: 25th April 2020
- Camera Ready Deadline: 1st May 2020
- Workshop Date: 22nd or 23rd June 2020. Venue: **Polytechnic University of Madrid, Madrid, Spain**

MOTIVATION

Two of the most important worldwide challenges we need to face are to increase food production and protect the environment against factors such as climate change and environmental degradation. This requires the development of optimum environmental management strategies supported by the access to better information on environmental media condition (e.g., soils, waters, sediments, wastes). In order to fulfil this requirement, there is a need to increase the spatial density of environmental media data to ensure their right characterisation in a timely manner. This demand is enhanced by the fact that environmental media are highly heterogeneous and diverse temporally. Due to the high cost and time of traditional laboratory analysis, environmental sampling is often restricted. This increases the possibility of having undetected contamination and poor environmental media characterisation leading to environmental degradation and reducing the profitability of economic activities (e.g., agriculture). Intelligent systems represent alternative analysis tools by providing cost effective, rapid and real time measurement of environmental media, resulting in a new era for their characterisation and assessment. The development of this field offers an exciting opportunity for science advance and commercial application to capture the benefits of new technologies to assist the management of global environmental and economical problems. This development has applications in a wide range of areas (e.g., mining, contamination, agriculture, industrial processes) and requires the input of a number of disciplines (e.g., mathematics/statistics, telecommunications/informatics, environmental sciences). In this context, the use of intelligent systems will be paramount to understand, optimize and automate agricultural and environmental processes.

This workshop will therefore focus on the use of intelligent systems to overcome the issues related to the lack of productivity of farming systems and environmental degradation in natural, urban and human-transformed environments. This will involve the integration of solutions from different disciplines such as engineering, telecommunications, mathematics/statistics and agricultural, environmental,and computer science. The workshop will represent an opportunity to debate the state-of-the-art, cutting-edge challenges and the collaborations required.

TOPICS

Areas of interest include, but are not limited to, the following ones:

- Agriculture Information Technologies
- Smart farming
- Precision agriculture
- Environmental degradation assessment and rehabilitation
- Environmental monitoring
- Linking environmental characterisation and broad management
- Intelligent forecasting applications
- Intelligent applications for ecological disaster management

- Intelligent waste management
- Sensor technologies and monitoring
- Sensor development
- Crowdsensing for environmental applications
- Multi sensor and data fusion
- Intelligent resource allocation and decision making tools
- Intelligent applications for ensuring food security
- Intelligent tools and methods for farming system design
- Big Data for agriculture and environmental problems
- Smart cities: intelligent transport, waste management, pollution control
- Industrial monitoring systems: water/energy/materials use efficiency, waste management, remote monitoring
- IoT for the monitorization of energy systems

PUBLICATION

All accepted papers will be published in an Open Access volume in the Book Series on Ambient Intelligence and Smart Environments Series (IOS Press). The Workshops Proceedings published by this Book Series are indexed in the Conference Proceedings Citation Index - Science (CPCI-S) by Thomson Reuters. Previous editions were indexed by Scopus. We are also negotiating a special issue in a relevant journal in this area for extended selected papers (more information in the next CFP).

SUBMISSIONS

Authors wishing to participate in this event should format their papers according to the IOS Press style, with a length of at least 6 but no more than 10 pages. Latex and Word templates can be found in http://www.iospress.nl/service/authors/latex-and-word-tools-for-book-authors/
See more details on the submission system in http://isapep.ucam.edu/submissions.html

All submitted papers will be submitted to a peer-review process by referees with expertise in the area. This process will result in constructive feedback to the authors and the selection of the best contributions to be presented in the workshop and published in the proceedings.

WORKSHOP FORMAT

The core of the event will be the presentation of recent advances in research and applications followed by a debate aiming to encourage a critical reflection on the subject. We also encourage authors to include demos about tools and applications. Following the presentations of selected papers, a discussion panel will focus on critical issues that should be addressed at both academic and professional level. Interaction will be encouraged throughout the event. Online presentations may be accepted (previously contacted and accepted by the organizers).

PROGRAM CHAIRS & CONTACT INFORMATION
- Andrés Muñoz, Universidad Católica de Murcia, Spain (amunoz at ucam.edu)
- José Martín Soriano-Disla, Centro Tecnológico de la Energía y el Medio Ambiente, Spain, (martin.soriano at cetenma.es)