

## Editorial

This volume contains the peer-reviewed proceedings of the 10<sup>th</sup> International Conference on ICTs in Agriculture, Food and Environment (HAICTA 2022), that took place in Athens, Greece, September 22-25, 2022.

HAICTA is the Greek Branch of the European Federation for Information Technology in Agriculture (EFITA). The series of HAICTA conferences are an international venue for research in ICT, innovations and best practices in the agri-food sector and in rural development and constitute a leading international professional and scientific forum for IT experts, agronomists, animal husbandry experts, agri-food scientists, environmentalists, water engineers, veterinarians, spatial engineers and decision-makers. These conferences constitute an interdisciplinary forum in which researchers, practitioners, and policy makers can present and discuss the results of their research, the recent policies and development on agriculture, food and environment, new technologies and ICT emerging applications.

Year 2022 marked the 20th Anniversary of HAICTA Conferences, since the very first of the series was held in 2002 in Athens, Greece. After organizing the following HAICTA Conferences in eight different cities around Greece during these years, the Conference's Organizing Committee decided to return HAICTA 2022 back to its roots, in Athens, celebrating 20 years of successful International Conferences on Information and Communication Technologies in Agriculture, Food & Environment.

The HAICTA 2022 conference received 133 paper submissions, out of which 117 were accepted. The main topics covered included Precision Technologies in Crop and Livestock Production Systems, Environmental Impact Assessment, Innovation in Farms and Rural Areas, Decision Support Systems, Farm and Animal Health Monitoring and Data Recording Systems, Innovations in Food Hygiene and the Production of High Quality Food, Environmental-friendly farm and livestock production and Agro-ecology, Internet of Things, Sensor, RFID and Mobile/Wireless Network Applications, Modelling and Simulation in Climate Change and Water Resources Management. Out of those 117 papers, 70 were short papers and 47 were abstracts; 44 papers were presented as e-posters and 8 papers were presented in the Doctoral Consortium. This volume of proceedings covers 115 of them.

HAICTA 2022 was the 2nd Conference in the series to offer both in-person attendance, remote participation, and live streaming for those who couldn't attend, giving the chance for an even wider audience. Authors had the option to either present in-person at the Conference or remotely through teleconferencing. 47 papers were presented orally, while 27 through teleconferencing. All three days of the conference were live-streamed through the official YouTube channel of HAICTA and they remain available online and on-demand for anyone interested.

We are grateful to all authors who submitted their papers to the conference and to all HAICTA 2022 participants. We would also like to thank the reviewers, members of the Scientific Committee, for ensuring the Proceedings quality. HAICTA 2022 used a blind review process, and each submitted abstract and short paper was evaluated by one and two reviewers, respectively, who provided their valuable comments.

We are also grateful to the invited keynote speakers Lecturer Dr. Lynn Dicks (University of Cambridge), Assoc. Professor Spyros Fountas (Agricultural University of Athens) and Assist. Professor Mariska Van der Voort (Wageningen University), who shared their ideas and the results of their research with HAICTA community through their inspired lectures. We would also like to thank the Organizing Committee Chairs and the Conference Chairs for their support to our task.

We hope that the conference proceedings of HAICTA 2022 will promote the discussion within the scientific community regarding the integration of innovative ideas, solutions and practices, new digital technologies and research applications towards the development of sustainable and resilient environmental and agricultural systems.

#### The Editors

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