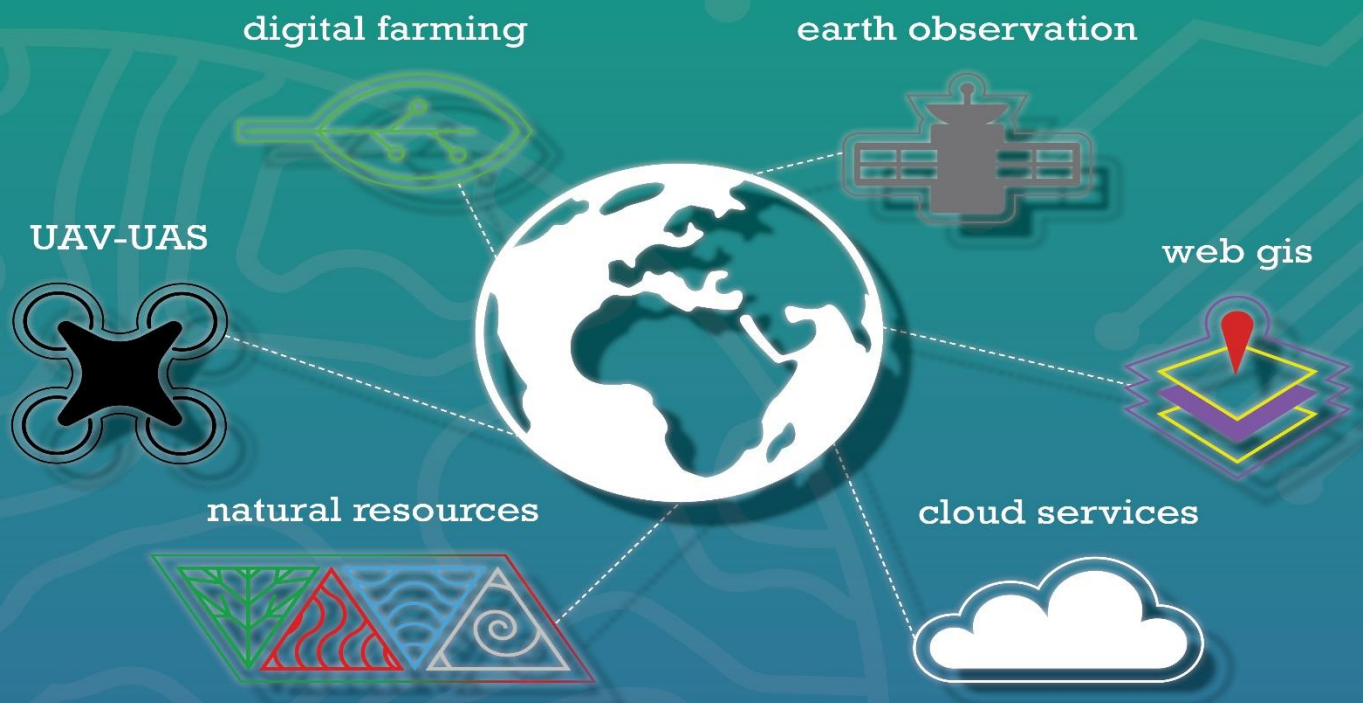


# 4<sup>th</sup> Congress of Geographical Information Systems and Spatial Analysis in Agriculture and Environment



May 24 - 25 - 26, 2022

at the Conference Center of Agricultural University of Athens



Congress Organizers



Geographic  
Information Systems  
Research Unit of AUA



Hellas GIS

Under the auspices of



ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ  
AGRICULTURAL UNIVERSITY OF ATHENS



MINISTRY OF  
ENVIRONMENT  
& ENERGY





## *Greetings of Organizing Committee*

Ladies and gentlemen,

We announce the 4th Congress of Geographical Information Systems and Spatial Analysis in Agriculture and Environment under the auspices of the Agricultural University of Athens and the Ministry of Environment and Energy which will take place on 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of May 2022 at the Conference Hall of the Agricultural University of Athens.

This Congress is now regarded as an institution for our country with ever-increasing success and response. During the congress, scientific papers will be presented covering the latest developments around the issues of Digital Rural Development and Environmental Sustainability, while many undergraduate and postgraduate students will be given the opportunity to encounter research results and practical applications.

Specialized notable lecturers will transfer their specialised knowledge and in general the scientific program is being structured with special care, to cover and embellish as many topics as possible.

As always there will be sessions with the scientists' research results - the scientists who will participate in the Congress, workshops and many other events which will be announced soon.

Furthermore, lectures will be presented by Private Institutions and Companies, in order to unfold the wide range of application of Geographical Information Systems, geospatial sciences and technologies as well as all the relevant scientific subjects associated with them.

Concluding, we would like to inform you that due to the health conditions, combined with the escalation on the issue of the pandemic, we have postponed both the year and the date of the Congress.

In an effort for the Congress being successful, we will try to have the maximum possible flexibility in all matters of the event, always observing the health protocols of the state.

We hope through everyone's participation in the Congress' success.

With my best regards,

Prof. Dionissios Kalivas

Agricultural University of Athens



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## Organising Committee

Kalivas Dionissios  
(Chairperson)

Agricultural University of Athens

Alexandris Thomas

Aristotle University of Thessaloniki

Lampropoulos Anastasios

National Technical University of Athens

Petropoulos George

Harokopio University

Soulis Konstantinos

Agricultural University of Athens

Triantakostas Dimitris

Hellenic Agricultural Organization – Demeter, Athens (ELGO)

Fountas Spyridon

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### ❖ Contact Info

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## Conference Scope & Topics

### Scope

Geographic Information Systems are digital systems for spatial variation which now-a-days combined with the evolution of new technologies for data collection -UAV-drones, digital cameras, sensors and more- and their transmission through IoT technologies (Internet of Things), as well as their emergence via internet, provide significant impetus into solving and confronting contemporary issues faced by the Agriculture in Greece, as well as by the Environmental sustainability.

The GIS Research Unit of Agricultural University of Athens by accomplishing congresses, specialized workshops – meetings and seminars, by participating in research projects and by implementing a vertebrate schedule aiming to scientific elaborations in the context of MSc Program “Geoinformatics and Spatial Analysis” of Natural Resources and Agriculture Engineering Department, contributes in confronting the demands of modern Agriculture and Fishery, the environmental issues, as well as in highlighting the role of GIS application to the process of their fulfilment. The collaboration with Hellas GIS is regarded crucial for the accomplishment of all mentioned above.

The purposes of Congress will be achieved through the specific conferences of scientific announcements, publications, workshops, and through presenting real Case Studies of Agricultural Operations in which all the sectors of a contemporary digital integrated and spatially defined Agriculture are combined, an assembly which represents the core element of Agriculture 4.0.

During Congress’ conclusion and in an agreeable environment, our Sponsors’ Exhibition - the strong communicative part of the Congress- will take place, where Executives of the best and most significant Business Entities of the Sector will present their products and services and will remain at congress’ participants’ disposal.





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## TOPICS

### ❖ **AGRICULTURE – LIVESTOCK – FISHERY**

- Spatial Digital Management of Farm & Agricultural Holding
  - Precision Agriculture, Smart Farming, Data Collection via Spatial Digital Technologies
  - Digital Management – Agricultural Production and of Agricultural Ecosystems Monitoring, Machinery of variable doses, inflows, agricultural products traceability
- Plant and Animal Production Protection
  - Crops' sanity issues and nutritional conditions identification
  - Spatiotemporal predictions of undesirable situations and their treatment
  - Weeds – Invasive Species
- Fishery
  - Sustainable Fishery through the contemporary geospatial technologies' application

### ❖ **NATURAL RESOURCES – ENVIRONMENT**

- Soil, Water, Climate – Land Evaluation
  - Land Suitability Classification – Soil Resources Protection
  - Water Resources Management, Land Assessment, Land Use Planning
- Forests – Ecosystems – Urban & Suburban Landscaping
  - Ecosystem Management, Forest Management Evaluation
- Natural Hazards- Natural Disasters
  - Fires, Landslides
  - Geographic Systems for the Natural Disasters' Management

### ❖ **GEOSPATIAL TECHNOLOGIES – SPATIAL ANALYSIS**

- Geoinformatics & Geospatial Technologies
  - GIS, Web-GIS
  - Remote Sensing, Satellite Data, DGPS, Data Transfer via Wireless Networks (IoT)
  - Use of Cloud Service's for the Management of Spatial Data of Large Volume, Applications Development
- Spatial Data Analysis – Spatial Statistics – Geostatistics
  - Spatial exploratory data analysis, Spatial Statistical Models, Spatial Interpolation
  - Neural Networks and AI and Spatial Information



May 24 - 25 - 26, 2022

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## General Information

### ❖ Congress Organizers

The 4<sup>th</sup> Congress of Geographical Information Systems and Spatial Analysis in Agriculture and Environment is sponsored by the Agricultural University of Athens and the Ministry of Environment & Energy and organized by Geographic Information Systems Research Unit and the Hellas Geographic Information Systems (Hellas GIS).



ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ  
AGRICULTURAL UNIVERSITY OF ATHENS



### ❖ Congress Website

<http://giscongress.aua.gr/>

### ❖ Conference's Date and Venue

May 24<sup>th</sup>-25<sup>th</sup> -26<sup>th</sup>, 2022

Conference Hall of the Agricultural University of Athens  
(75, Iera Odos Rd, 118 55 Athens)

### ❖ Important Dates

Abstract Submission:	March 11 <sup>th</sup> , 2022
Paper documentation Acceptance:	March 28 <sup>th</sup> , 2022
Final Document Submission:	April 11 <sup>th</sup> , 2022
Online Subscriptions until:	May 2 <sup>nd</sup> , 2022

### ❖ Paper's submission Guidelines

Please visit <http://giscongress.aua.gr/>

### ❖ Publications in Scientific journals

- Special Issue | Scientific journal **Geomatics**:

o Geographical Information Systems and Spatial Analysis in Agriculture and Environment

- Special Topic | Επιστημονικά Περιοδικά Remote Sensing, Agriculture, Land, Drones:  
o Remote Sensing and Geoinformatics in Agriculture and Environment

### ❖ Official Language

Greek is the Congress' official language. Oral and written announcements may be submitted in English; these will not be translated.

### ❖ Certificates

All Congress participants will receive a certificate after the Event's conclusion.



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### ❖ Workshops

Attendance to workshops is restricted only to Congress' participants. Workshops will focus on specific updated topics. Those who will attend the workshops will receive an additional certificate for this participation.

For more information, please visit: <http://giscongress.aua.gr/>

### ❖ Posters' Exhibition Venue

Scientific Posters will be available for Congress' participants at the Multipurpose Chamber of the Agricultural University of Athens Alumni Association – next to the Conference Hall

### ❖ Sponsor's Exhibition

The companies and institutions, that support the Event of the 4<sup>th</sup> Congress, will have special stands to welcome the participants.

This exhibition will take place in the garden of the Agricultural Museum, which is housed at the Agricultural University of Athens.

### ❖ Right to participate

Category	Fee	Included
Participants	70 €	<ul style="list-style-type: none"> <li>❖ Participation in the Congress Event</li> <li>❖ Congress material</li> <li>❖ Congress minutes</li> <li>❖ Posters' Exhibition</li> <li>❖ Sponsors' Exhibition</li> <li>❖ Coffee – lunch breaks</li> <li>❖ Reception</li> </ul>
Authors (Paper Submission)		
Postgraduate students/ PhD candidates (without submitting a paper)	50 €	
Undergraduate students	free	<ul style="list-style-type: none"> <li>❖ Participation in the Congress Event</li> <li>❖ Congress material</li> <li>❖ Posters Exhibition</li> <li>❖ Sponsors Exhibition</li> </ul>

### Notes

- ❖ The participants may acquire previous Congress' minutes in an additional fee of 10 euros.
  - Participants & Authors (80 €)
  - Postgraduate students, PhD candidates (without submission of paper) (60 €)
- ❖ Undergraduate students may participate in coffee and lunch breaks, reception, and may acquire current and previous Conference Minutes in an additional fee of 20 euros
- ❖ Workshops' participation additional fee: **20 € / workshop.**

