

PROGRAM



OpenEARTH 2

Conference on Climate Change
Adaptation and Mitigation
26-28 November 2024, Rethymnon, Crete

Project co-funded by the European Union and National Funds



In the framework of the LIFE ClimaMED project
**Innovative technologies for climate change mitigation
by Mediterranean agricultural sector**

Under the auspices of:



HELLENIC REPUBLIC
MINISTRY OF EDUCATION,
RELIGIOUS AFFAIRS AND SPORTS



HELLENIC REPUBLIC
Ministry of Rural Development
and Food



ΠΕΡΙΦΕΡΕΙΑ ΚΡΗΤΗΣ
REGION OF CRETE

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*Ministry Edu-Rel Aff-Sp: Greek Ministry of Education, Religious Affairs and Sports

Organizing Committee

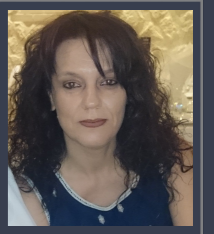
Damvakakis Titos, OMNIA, Ltd Cyprus
Kavasilis Stamatis, Benaki Phytopathological Institute
Kolovos Chronis, Benaki Phytopathological Institute
Koutsouraki Eleni, Green projects SA
Leyva Garrido, Francisca, University Miguel Hernández de Elche
Papadopoulos Nikos S., Foundation for Research and Technology
Roukounaki Elisavet, Benaki Phytopathological Institute
Zagklis Georgios, Benaki Phytopathological Institute

Best papers will be published after review in special issues of the following journals

- Sustainability
- Remote Sensing
- Applied Science
- Sci
- Euro-Mediterranean Journal of Environmental Integration
- Journal of Geographical Research
- Advances in Environmental and Engineering Research
- Multidisciplinary Adaptive Climate Insights



It is our pleasure to welcome you to OpenEARTH 2024, the 2nd International Conference dedicated to advancing climate change adaptation and mitigation. Organized by the LIFE ClimaMED project “Innovative technologies for climate change mitigation in the Mediterranean agricultural sector”, the conference brings together a diverse community of experts, policymakers, and practitioners to exchange insights and address urgent issues surrounding climate adaptation and mitigation in agriculture and beyond. This year’s focus is on fostering sustainable practices in agriculture and livestock farming through the adoption of advanced, effective technologies. We look forward to dynamic discussions and collaborative efforts that will drive meaningful progress toward climate resilience in the Mediterranean region.



Maria K. Doula

Benaki Phytopathological Institute

Topics

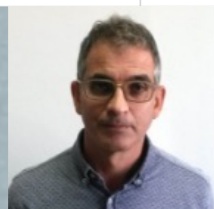
Adaptation of the Mediterranean agribusinesses to climate change
Circular economy and bioeconomy
Circular economy through environmental education
Climate change mitigation and adaptation by agricultural and livestock farming sectors
Climate change-risks and opportunities
Climate change-the role of stakeholders and policy makers
Coastal agriculture challenges
Decision making and support tools, web applications
Education for Sustainable Development
Environmental education at the different levels of the educational systems
Environmental education-The science of teaching
GIS and remote sensing in agriculture
Innovation and entrepreneurship initiatives
Life Cycle Sustainability Assessment and GHG emissions of agriculture
Modeling climate change and application to agriculture
Nature-based solutions and best management practices in agriculture and livestock farming
Resources management-Soil resources, threats, protection and management strategies
Environmental education-The science of teaching
Sustainable agribusinesses under climate change
Waste strategy
Water and wastewater treatment

9:00-9:30 Registration CENTRAL HALL

9:30-10:30 Welcome and Introductory Speeches

Chair: M.K.Doula. Ch. Giannakopoulos

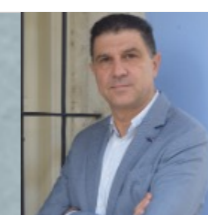
10:30-12:00 Plenary Session



Dr Christos Giannakopoulos
National Observatory of Athens
"Climate services in support of adaptation policies in the agribusiness"



Prof Ana Pérez Gimeno
University Miguel Hernández of Elche
"Climate Change and the presence of microorganisms in drinking water"



Prof. Antonis A. Zorpas
Open University of Cyprus
"Meeting the invisible visitors of the future"

12:00-12:30



CENTRAL HALL

SESSION I: Decision making and support tools web applications

Chair: K. Lagouvardos, N. Tsotsolas

12:30 Developing an early warning system for the Municipality of Rethymno
K. Lagouvardos, V. Kotroni

12:45 A digital platform for the support of organic farmers in Greece
M.Tsiafouli, M.C. Papadopoulou, Ch. Argyropoulos, A. Papadakis, V. Kontoulis, S. Kalaitzaki, O. Kasmeridou, N. Vidakis

13:00 A web-GIS platform for monitoring and evaluating GHGs emissions from the Mediterranean agricultural sector
A. Hliaoutakis, N. S. Papadopoulos, M.K. Doula, N. Papadopoulos

13:15 Decision support tools for farmers in an IoT telemetry platform
N. Tsotsolas, E. Koutsouraki

13:30 Increasing water efficiency for olive cultivation in island regions
N. Kourgialas, G. Morianou, G. Sismani, G. Arampatzis

13:45 A new Decision Support System for efficient fertigation and pest management for greenhouse crops in the Mediterranean Region (on-line)
T. Bouslama, I.B.Aissa, M.Mansour, H.Jeder, A.Mavarro, A. Laarif

14:00 Floods: Urban flash floods and early warning systems (on-line)
M.D. Xenodochoy

14.:15 Discussion-End of Session I

HALL "KALOS ONTAS"

SESSION II: Climate change mitigation and adaptation by the agricultural and livestock farming sector

Chair: J. Navarro Pedreño, K. Chartzoulakis

Assessing ecosystem services from High Nature Value farmlands using satellite remote sensing
M. C. Papadopoulou, K. Garane, M.-E.. Koukouli

Smart irrigation improves irrigation efficiency at farm level under climate change
K. Chartzoulakis, I. Kasapakis, T. Tzatzani, A. Papafilippaki

Biochar as a sustainable soil amendment for Mediterranean olive groves; soil nitrogen kinetics and greenhouse gas emissions
G. Giannopoulos, V.A.Tzanakakis, P.E.Barouchas, D. Kalderis, I. Anastopoulos

Water security and strategies against climate change
M-A. Salcedo, J. Navarro-Pedreño, A. Pérez-Gimeno

Mixed vs conventional agricultural systems
M. K. Doula, G. Zagklis, S. Kavasilis

Variability of Soil Properties in the Algerian Sahara Pivot Irrigation Systems
L. Gouacem, A.Benslama, F. Benbrahim, A. Hadjeb, T. Rodríguez-Espinosa, J. Navarro Pedreño

Land evaluation for wheat cultivation in Greece, combining soil and climate requirements and future climate projections
G. Tsitselis, G. Kitsara, Ch.Kolovos, P. Machaira, I. Lemesios, Y. Troyanos, Ch.Giannakopoulos, M. K. Doula

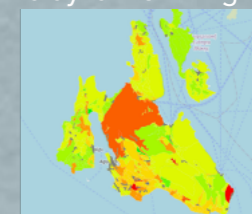
Discussion-End of Session II

CENTRAL HALL 15:30-17:30

INTERACTIVE LAB
Hands-On Training

Climate Adaptation and Management apps

The interactive workshop offers participants the opportunity to engage directly with climate adaptation web applications through hands-on exploration and real-time guidance from the experts. Designed as an open discussion rather than a formal presentation, the session allows participants to test the tools, ask questions, and exchange insights in a dynamic "living lab" format



Applications aimed at supporting regional and local authorities will be featured, making this session highly valuable for professionals seeking practical solutions for climate resilience.

14:30-15:30 Lunch

20:00 Ice Breaking event


9:00-9:30	Registration for Educational Sessions-Εγγραφή για τις συνεδρίες Εκπαίδευσης (in Greek)
9:30-10:00	CENTRAL HALL Welcome and Introductory Speeches
10:00-11:00	EDUCATION-Plenary Session
	<p>Sofia Theodoridou Ministry of Education, Religious Affairs and Sports “To do or not to do?...and if so, what can I/We do?”</p>
	<p>Georgios Mamakis Ministry of Education, Religious Affairs and Sports “The role of education for sustainability in Greek schools”</p>
Συνεδρία III: Περιβαλλοντική εκπαίδευση στα διαφορετικά επίπεδα του εκπαιδευτικού συστήματος	
Προεδρείο : Α. Μαρματάκη, Κ. Πετρογιάννη, Σ. Θεοδωρίδου	
11:00	Τι άλλαξε στις απόψεις των μαθητών για την κλιματική αλλαγή από το 2011 μέχρι σήμερα <u>Π. Γιωτοπούλου, Ε. Αλεξοπούλου</u> -12ο Γενικό Λύκειο Πάτρας
11:15	Η μετατροπή του Εσπερινού Γυμνασίου με Λ.Τ. Πύργου σε αειφόρο σχολείο <u>Ι.Γεωργίου, Β. Λιάπη</u>
11:30	Climademy: Ένα Ευρωπαϊκό δίκτυο εκπαιδευτικών για την κλιματική αλλαγή <u>Α. Γκινούδη, Ν. Καλυβίτης, Μ. Κανακίδου, Δ. Σταύρου</u>
11:45	Ηλεκτρονικά Λογισμικά Τηλεπισκόπησης στην Περιβαλλοντική Εκπαίδευση στην ελληνική Πρωτοβάθμια και Δευτεροβάθμια εκπαίδευση (on line) <u>Δ. Ρόρρης, Α. Γαλάνη</u>
12:00	Αρχιτεκτονικά οικοδομήματα εμπνευσμένα από την τεχντροπία της κυφέλης και τη ζωή των μελισσών (on-line) <u>Ε. Θεοδωράκη, Δ. Σακελλαρίου</u> -1ο ΕΠΑ.Λ Καρδίτσας
12:15-12:45	
Συνεδρία IV: Περιβαλλοντική εκπαίδευση στα διαφορετικά επίπεδα του εκπαιδευτικού συστήματος	
Προεδρείο : Α. Γκινούδη, Ι. Γεωργίου	
12:45	Ποιοτική εκπαίδευση για βιώσιμη ανάπτυξη: Η σημασία του γραμματισμού υγείας στην επίτευξη των παγκόσμιων στόχων <u>Α. Γιωτάκου</u>
13:00	Η αξιοποίηση του Arduino από σχολείο για τη μελέτη της ποιότητας των υδάτινων πόρων <u>Ι. Γεωργίου, Β. Λιάπη</u>
13:15	Σχολική περιβαλλοντική ηθική νοημοσύνη (on line) <u>Β. Ντάμτσιου</u>
13:30	Τριτοβάθμια επεξεργασία λυμάτων και υγρών αποβλήτων-Η περίπτωση της Λίμνης Παμβώτιδας των Ιωαννίνων (on line) <u>Α. Ρήγα, Ε. Δημουλά</u>
13:45	Δράση για την παγκόσμια ημέρα νερού: Οι μαθητές των δημοτικών σχολείων μπορούν να φέρουν την αλλαγή (on line) <u>Δ. Φίλιου, Ν. Καλογερίδης</u>
14:00	Περιβαλλοντική ευαισθητοποίηση μέσα από το μάθημα της Φιλοσοφίας (Β Λυκείου) (on-line) <u>Ε. Σακαρέλλου, Ι. Τριπουλά</u>
14:15-15:15	Ελαφρύ Γεύμα

HALL "KALOS ONTAS"

SESSION V : Waste management, Nature-based solutions, Climate change-policy makers and stakeholders

Chair: K. Komnitsas, H. Karasali

10:00	Climate Change in Western Macedonia during delignitization: Challenges and Opportunities for stakeholders and policymakers <u>P. Farmaki</u> , A. Tranoulidis
10:15	Sustainable animal composting: The role of natural zeolite and elemental sulphur in compost quality <u>S. Kavasilis</u> , M.K.Doula, A.A. Zorpas, L. Cambanis
10:30	Environmental response to the use of sewage sludge on European Mediterranean degraded soils M-B. Almendro-Candel, I.-G. Lucas; J Navarro-Pedreño; <u>A. Pérez-Gimeno</u> ; M-T. Rodríguez-Espinosa, M.M. Jordán
10:45	An integrated framework for the certification of low carbon agricultural production based on field GHG measurements G. Bartzas, M.K.Doula, A. Hliaoutakis, N.S.Papadopoulos, N. Tsotsolas, <u>K. Komnitsas</u>
11:00	Suitability maps for waste disposal:The case of Ionian and Aegina islands <u>M.K.Doula</u> , Ch. Kolovos, G.Zagklis, G.Tsitselis
11:15	Environmental benefits and recycling potential of agricultural plastic wastes <u>E. Karasali</u> , A. ,Marousopoulou
11:30	Discussion-End of Session V

12:00-12:45 

SESSION VI: Life Cycle Sustainability Assessment, GHGs emissions of agricultural production

Chair: G. Bartzas, M. Tsangas

12:45	Evaluating the environmental impacts of agricultural products at farm level using an integrated life cycle assessment methodology <u>G. Bartzas</u> , M.K.Doula, K. Komnitsas
13:00	Life Cycle Assessment of the environmental impact of a research project <u>M. Tsangas</u> , P. Loizia, S. Zorpa, A. Zorpas
13:15	Environmental Literacy of the Greek family through its children. Case study on household carbon footprint. <u>S. Theodoridou</u> , S. Golfopoulos, D.Alexakis, E. Polyrides
13:30	Pistachio carbon footprint:Data from Central Greece <u>M.K. Doula</u> , D.Dimou, Tzanakakis, V. Christodoulakis, Ch. Kolovos, E.Roukounaki
13:45	Discussion-End of Session VI

14:15-15:15 Lunch

CENTRAL HALL

SESSION VII : Education for sustainable development

Chair: M. Christoforaki, G. Mamakis

15:15	An experiential learning teaching approach on climate change, in 2nd grade of Greek School Lyceum in Biology Lesson. <u>I. Taliouri</u>
15:30	Improving students' knowledge and attitudes about heatwaves through the digital game "HEATWAVE CITY" <u>M.Christoforaki</u> , M. Koutra-Iliopoulou, E. Chatzara, M. Skoufoglou, E. Mavtikaki, A. Galani
15:45	From ashes to awareness: An educational approach to understanding wildfires and environmental impact in N. Evia <u>I.S. Lafazanis</u> , E. Kapsi, A.E.Tsagkarakis, K. Kotsidis.
16:00	From fire in forest, to flood. Forest fire and its consequences on soil <u>S. Theodoridou</u> , Th. Zagas, E. Polytides
16:15	Discussion-End of Session VII

CENTRAL HALL 16:30 - 18:00

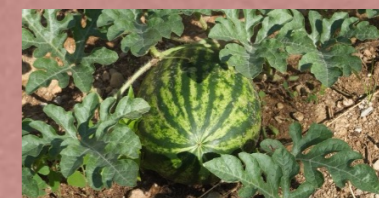
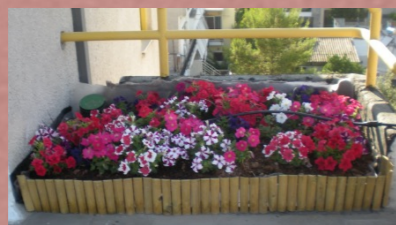
ΠΡΑΚΤΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Καλλιεργώντας το μέλλον: Σχολικοί Κήποι, Αστικοί Λαχανόκηποι και Πράσινα Δώματα"

Σταμάτης Καβασίλης

Μπενάκειο Φυτοπαθολογικό Ινστιτούτο

Το διαδραστικό εργαστήριο προσφέρει την ευκαιρία σε εκπαιδευτικούς και πολίτες να γνωρίσουν πρακτικές τεχνικές για τη δημιουργία και διαχείριση σχολικών κήπων, αστικών λαχανόκηπων και φυτεμένων δωμάτων.



Στόχος είναι η προώθηση της περιβαλλοντικής εκπαίδευσης και η ενίσχυση της αειφορίας στις τοπικές κοινότητες, μέσα από δραστηριότητες που ενθαρρύνουν την άμεση επαφή με τη φύση και την καλλιέργεια φυτών σε αστικό περιβάλλον.

Οι συμμετέχοντες θα έχουν τη δυνατότητα να ενημερωθούν για τις καλύτερες πρακτικές και να ανταλλάξουν ιδέες και εμπειρίες σε ένα ζωντανό και δημιουργικό περιβάλλον.

20:00 Gala Dinner

The town of Rethymnon still maintains its old aristocratic appearance, with its buildings dating from the 16th century, arched doorways, stone staircases, Byzantine and Hellenic-Roman remains, small Venetian harbor and narrow streets.

https://www.interkriti.org/crete/rethymnon/rethymnon_city.html



<https://www.rethymno.gr/city>

POSTER SESSION

Student Artistic Competition

CENTRAL HALL

Chair: F. Tinivella, , S.Kavasilis

10:00	A rapid and low cost methodology based in a combination of optical spectroscopy and machine learning techniques in detecting PAH's and mineral oils pollutants in extra virgin olive oil. E. Orfanakis, E. Charitoudi, M. Spantidaki <u>M. Velegrakis</u>
10:10	A web-mobile tool for collecting and analyzing survey data. GHG emissions and SOC changes determination in LIFE ClimaMED project. <u>Ch. Kolovos</u> , S. Kavasilis, G. Zagklis, G.Tsitselis, M.K.Doula
10:20	Exploring bioethical dilemmas in animal mortalities and human remains composting: Towards a sustainable future <u>S. Kavasilis</u> , M.K.Doula, A.A. Zorpas, L. Cambanis
10:30	<i>Citrus sinensis</i> waste as a source of essential oils for crop protection <u>M. Lo Vetere</u> , A. Bisio, E. Guido, A-P. Lanteri
10:40	Characteristics of poultry farm waste from broiler rearing chambers <u>S. Kostaras</u> , D.Dimou, S. Kavasilis, E.Roukounaki, M.K.Doula
10:50	"Listening" to the wetland of Axios, Loudias, Aliakmon Delta <u>P. Tsachouridou</u>
11:00	Contribution to the study of the physical environment of the San Juan River basin, Dominican Republic J-F. Nova-Marmolejos, M-B. Almendro-Candel, <u>M. M. Jordán</u>
11:10	Sensitivity analyses as a response to the environmental vulnerability of tourism activity in Caribbean countries D. Salciccia-Frezza, T. Rodríguez-Espinosa, <u>J. Navarro-Pedreño</u>
11:20	Degradation of biocides throughout successful composting practices <u>G-Ch. Mouselinou</u> , S. Kavasilis, E. Chysochou, H. Karasali, L. Cambanis, M.K.Doula
11:30	Promoting circular economy through composting floral design business wastes and other green wastes <u>D. Dimou</u> , S. Kavasilis, L. Campbanis, V. Krassa
11:40	Discussion-End of Session V

14:15 Lunch

12:00 - 14:00

Μαθητικός Διαγωνισμός Αφίσας
Υπεύθυνες συντονισμού : **Ε. Δεσποτίδου, Κ. Γιαβρίδη**
Υπουργείο Παιδείας, Θρησκευμάτων και Αθλητισμού

ΕΔΑΦΟΣ
Καλλιεργώ με σεβασμό
Προστατεύω με πάθος



OpenEARTH 2020



OpenEARTH 2024

Thank you for your participation..see you again in

OpenEARTH 202?

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