

# **CURRICULUM VITAE**

## **GENERAL INFORMATION**

**Name:** Kargas George

### **Current work Address:**

Agricultural University of Athens,  
Department of Natural Resources Management and Agricultural Engineering,  
Division of Water Resources  
75 Iera Odos, 11855 Athens Greece  
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### **Education**

Agricultural Engineer-Specialized in Land Reclamation and Agricultural Engineering  
(1980-1987).

PhD in Agricultural Sciences, Agricultural University of Athens.

Thesis Title: The effect of hysteresis on the distribution of liquids (water) in the porous bodies, 1998-2002

### **Professional and Academic status.**

Lecturer, Agricultural University of Athens, (2005-2010)

Assistant Professor, Agricultural University of Athens (2010-2015)

Associate Professor, Agricultural University of Athens (2015-2020)

Professor (2020-Present)

### **Languages**

English

### **Member**

- Geotechnical Chamber of Greece

- Hellenic Society of Agricultural Engineers
- Hellenic Hydrotechnical Association
- Hellenic Soil Science Society
- European Water Resources Association (EWRA)

### **Teaching**

Teaching and Research in the Department of Natural Resources Development & Agricultural Engineering, Agricultural University of Athens, namely:

**Undergraduate courses:** Soil Physics, Agricultural Hydraulics-Irrigation, Irrigation Systems, Drainage and Drainage Systems, crop response to water.

**Postgraduate courses:**

Special topics of Environmental Soil Physics  
Special topics in Soil Physics

### **Research activities:**

- Soil water movement in the unsaturated and saturated zone. Hysteresis in pore water
- Determination and evaluation of soil and substrates hydrological and physical properties
- Irrigation and Drainage in agricultural lands
- Investigation of soil water and solute regime in irrigated agriculture by the use of dielectric devices

### **Research Projects:**

**TITLE: Validity, limits and possible trends of coastal South Mediterranean traditional groundwater irrigated agriculture.** (*Contract No.8001-CT90-0012 1992*). Collaboration: Agricultural University of Athens, CIHEAM Bari, Bonifica S.p.A. and ENB Ltd. Financed by the C.E.C.

**TITLE: Monitoring of the sea water intrusion in the groundwater aquifers of Argolis Plain.** Financed by the C.E.C. and the Ministry of Agriculture of Greece. Scientific Responsible: Prof. A. Poulovassilis.

**TITLE: Rational application of irrigation and drainage under Greek conditions.**

Financed by the C.E.C. Scientific Responsible Prof. A. Poulovassilis.

**TITLE: Understanding the natural and anthropogenic causes of land degradation and desertification in the Mediterranean Basin.** Financed by the C.E.C, Scientific

Responsible: Prof. A. Poulovassilis.

**TITLE: «A surveillance system for assessing and monitoring of desertification»**

Financed by the C.E.C, Scientific Responsible: Prof. P.Kerkides

**TITLE: «Experimental investigation of the effects of treated municipal waste water use for olive orchards irrigation in Lakonia prefecture»** Scientific Co-ordinator Prof. Kerkides.

**TITLE: «Study of the soil water movement in irrigated agriculture»** Scientific Co-ordinator Prof. P. Kerkides.

**TITLE: «Research and Technological collaboration for the selection and composition of plant residues substrate for roof-tops-Urban Bioroof.»** 2013-2016. Scientific Responsible: As. Prof. P. Nektarios

**TITLE: «Incorporation of perlite in sandy soil as a measure to reduce irrigation water needs of turf grass and Bougainville».** 31/5/2021-31/10/2021. Scientific Responsible: Prof. J. Massas.

### **Publications in Referred International Scientific Journals**

*Soil Science Society of America Journal*

*Vadose zone Journal*

*Transport in Porous Media*

*Soil and Tillage Research*

*Geoderma*

*Australian Journal of Soil Research*

*Archives of Agronomy and Soil Science*

*Water Resources Management*  
*Irrigation and Drainage (I.C.I.D.)*  
*Hydrological Sciences Journal*  
*Journal of Irrigation and Drainage Engineering (ASCE)*  
*Desalination and Water Treatment Journal*  
*Journal of Horticulture & Biotechnology*  
*European Journal of Horticultural science*  
*Scientia Horticulturae*  
*HortScience*  
*HortTechnology*  
*Urban Forestry & Urban Greening*  
*Ecological Engineering Journal*  
*Journal of Environmental Management*  
*Journal of Hydroinformatics*  
*Journal of Plant Nutrition and Soil Science*  
*Agricultural Water Management*  
*Water*  
*Environmental Modeling & Assessment*  
*Land*  
*Geosciences*  
*Soil system*  
*Hydrology*  
*Sensor*  
*European water Journal*  
*Water Utility Journal*  
*Acta Horticulturae*

### **List of Publications in Referred Journals**

1. A. Poulovassilis and **G. Kargas**, 2000. A note on calculating hysteretic behavior, *Soil Sci. Soc Am. J.*, vol.64 (6): 1947-1950.
  
2. M. Papafotiou, J. Chronopoulos, **G. Kargas**, M. Voreacou, N. Leodaritis, O. Lagogiani, S. Gazi, 2001. Cotton gin trash compost and rice

hulls as growing medium components for ornamentals, *Journal of Horticulture & Biotechnology* vol.76(4): 431-435.

3. M. Papafotiou, V. Asimakopoulou, P. Kouvari, I. Kovaeou, M. Phsyhalou, I. Lytra and **G. Kargas**, 2001. Cotton Gin Trash Compost as Growing Medium Ingredient for the Production of Pot Ornamentals, *European Journal of Horticultural science formerly Gartenbauwissenschaft*, Vol. 66 (5): 229-232.
4. M. Papafotiou, M. Phsyhalou, **G. Kargas**, I. Chatzipavlidis and J. Chronopoulos, 2004. Olive – mill compost as growing medium component for the production of poinsettia, *Scientia Horticulturae*, Vol 102 (2): 167-175.
5. **G. Kargas** and P. Kerkides, 2005. Hysteretic  $\Theta(S)$  curve prediction: Comparison of two models, *Transport in Porous Media*, 59(1): 97-113.
6. M. Papafotiou, **G. Kargas**, I. Lytra, 2005. Olive-mill waste compost as a growth medium component for foliage potted plants, *HortScience*, vol. 40(6): 1746-1750.
7. P. Kerkides, **G. Kargas** and I. Argyrokastritis, 2006. The effect of different methods used for hysteretic  $K(H)$  determination on the infiltration simulations, *Irrigation and Drainage*, 55: 403-418.
8. **G. Kargas**, P. Kerkides and A. Poulovassilis, 2007. A new method for calculating hysteretic  $K(S)$  relationship, *Transport in Porous Media* 68(2): 175-185.
9. A. Poulovassilis, **G. Kargas** and P. Kerkides 2008. Comments on the paper “Application of the “proportionate partitioning” method suggested by Poulovassilis and Kargas (2000) for determination of the domain distribution function” by Mualem and Beriozkin (2008), *Transport in Porous Media* 75: 223-226.

10. **G. Kargas** and P. Kerkides, 2008. Water content determination in mineral and organic porous media by ML2 THETA PROBE, *Irrigation and Drainage*, 57: 435-449.
11. **G. Kargas** and P. Kerkides, 2009. Discussion of “Soil water content and salinity determination using different dielectric methods in saline gypsiferous soil” by Bouksila et. al. *Hydrological Sciences Journal* 54 (1): 210-212.
12. **G. Kargas** and P. Kerkides, 2009. Performance of the THETA PROBE ML2 in the presence of nonuniform soil water profiles. *Soil and Tillage Research* 103(2): 425-432.
13. I. Argyrokastritis, **G. Kargas** and P. Kerkides, 2009. Simulation of soil moisture profiles using K(h) from coupling experimental retention curves and one-step outflow data. *Water Resour. Management* 23: 3255-3266.
14. **G. Kargas** and P. Kerkides, 2010. Evaluation of a dielectric sensor for measurement of soil water electrical conductivity. *Journal of Irrigation and Drainage Engineering* (ASCE) 136 (8):553-558
15. **G. Kargas** and P. Kerkides, 2011. A contribution to the study of the phenomenon of horizontal infiltration. *Water Resour. Management* 25:1131-1141.
16. **G. Kargas**, P. Kerkides, M. Seyfried, A. Sgoumbopoulou, 2011 Wet Sensor Performance in Organic and Inorganic Porous Media with heterogeneous moisture distribution. *Soil Sci. Soc Am. J.* 75:1244-1252.
17. **G. Kargas**, P. Kerkides, A. Poulovassilis, 2012. Infiltration of rain water in semi-arid areas under three land surface treatments. *Soil and Tillage Research*, 120:15-24

18. **G. Kargas** and K. Soulis, 2012. Performance Analysis and Calibration of a New Low Cost Capacitance Soil Moisture Sensor 2012. *Journal of Irrigation and Drainage Engineering* (ASCE)138(7):632-641.
19. **G. Kargas**, P. Kerkides, 2012. Comparison of two models in predicting pore water electrical conductivity in different porous media 2012. *Geoderma* 189-190:563-576.
20. **G. Kargas**, N. Ntoulas and P. Nektarios, 2013. Moisture Content Measurements of Green Roof Substrates Using Two Dielectric Sensors. *HortTechnology* 23 (2):177-186.
21. Kotsiris G., P. Nektarios, N. Ntoulas and **G. Kargas**, 2013. An adaptive approach to intensive green roofs in the Mediterranean climatic region. *Urban Forestry & Urban Greening* 12(3):380-392.
22. M. Papafotiou, N. Pergialioti, E.A. Papanastassatos, L. Tassoula, I., **Kargas G.**, Massas I., 2013. Effect of substrate type and depth and irrigation frequency on growth of semiwoody Mediterranean species in green roofs, *ISHS Acta Horticulturae*, Volume 990, pp. 481-486.
23. **G. Kargas**, Bourazanis G. and Kerkides P. 2013. Could Dielectric Devices Replace Laborious Methodologies in Determining Soil Salinity. *Irrigation and Drainage Sys. Eng.* 2:110. doi:10.4172/2168-9768.1000110.
24. **G. Kargas**, N. Ntoulas, and P. Nektarios, 2013. Soil texture and salinity effects on calibration of TDR300 dielectric moisture sensor. *Soil Research* 51(4):330-340.
25. M. Papafotiou, N. Pergialioti, L. Tassoula, I. Massas and **G. Kargas**, 2013. Growth of native aromatic xerophytes in an extensive Mediterranean green roof, as affected by substrate type and depth, and irrigation frequency. *HortScience* 48(10) 1327-1333.

26. **G. Kargas** and K. Soulis, 2014. Discussion of "Calibration of the 10HS Soil Moisture Sensor for Southwest Florida Agricultural Soils" by David Spelman, Kristoph-Dietrich Kinzli, Tanya Kunberger. *Journal of Irrigation and Drainage Engineering* DOI: 10.1061/(ASCE)IR.1943-4774.0000647.
27. **G. Kargas** and P.A. Londra, 2014. Effect of tillage practices on hydraulic properties of a loamy soil. *Desalination and Water Treatment Journal*, 54(8), pp. 2138-2146.
28. **G. Kargas**, P. Kerkides and M.S. Seyfried. 2014. Response of Three Soil Water Sensors to Variable Solution Electrical Conductivity in Different Soils. *Vadose zone Journal* doi:10.2136/vzj2013.09.0169 September 2014, v.13.
29. M. Papafotiou, L. Tassoula, G. Liakopoulos, **G. Kargas**. 2015. Growth of the Native Xerophyte *Convolvulus cneorum* L. on an Extensive Mediterranean Green Roof under Different Substrate Types and Irrigation Regimes. *Hortscience*, 50(7):1118-1124.
30. Mpourazanis G., Londra P. **Kargas G.**, Argyrokastritis I., Kerkides P. 2015. Evaluation of porous medium hydraulic properties using experimental methods and RETC code. *Archives of Agronomy and Soil Science* 62(8):1147-1157.
31. **G. Kargas**, Kerkides P., Sotirakoglou K., Poulovassilis A. 2016. Temporal variability of surface soil hydraulic properties under various tillage systems. *Soil and Tillage Research* 158:22-31.
32. P. Londra, **G. Kargas**, J. Valiantzas. 2016. Evaluation of hydrodynamic characteristics of porous medium using RETC code. *YAPOTEXNIKA*, Volume (24) pp. 14-22.

33. Papafotiou M., Tassoula L., Liakopoulos G., **Kargas G.** 2016. Effect of substrate type and irrigation frequency on growth of Mediterranean xerophytes on green roofs. *Acta Horticultae*, 1108:309-316.
34. **G. Kargas**, P.A. Londra and J.D. Valiantzas. 2017. Estimation of near-saturated hydraulic conductivity values using a mini disc infiltrometer. *Water Utility Journal*. 16:97-104.
35. Soulis K. X., N. Ntoulas, P. A. Nektarios, **G. Kargas**. 2017. Green roof runoff reduction under different substrate depths and vegetation covers: the effect of initial substrate moisture conditions and total rainfall depth. *ISHS Acta Horticultae*, 1189: 541-544.  
<https://doi.org/10.17660/ActaHortic.2017.1189.108>.
36. **G. Kargas**, Ntoulas, N., Nektarios, P.A. and Kladou A. (2017). Soil moisture determination using the dielectric sensor TDR300 in porous media with increased salinity. *ISHS Acta Horticultae* 1189, 267-270. DOI:10.17660/ActaHortic.2017.1189.51.
37. **G. Kargas**, P. Mougou, A. Petsetidi and P. Kerkides. 2017. Soil water electrical conductivity determination based on the salinity index concept. *European Water Journal*, 59:343-349.
38. **G. Kargas**, Popescou P., Kaliontzis N., Marougas D., Kerkides P. 2017. Estimation of the Electrical Conductivity of Saturated Paste Extract using a dielectric sensor. *Journal of Irrigation and Drainage Engineering*. ([https://doi.org/10.1061/\(ASCE\)IR.1943-4774.0001156](https://doi.org/10.1061/(ASCE)IR.1943-4774.0001156)).
39. Soulis K., Ntoulas N., Nektarios P., **Kargas G.** 2017. Runoff reduction from extensive green roofs having different substrate depth and plant cover. *Ecological Engineering* 102:80-89.
40. **G. Kargas**, Persson M., Kanelis G., Markopoulou I., Kerkides P. 2017. Prediction of soil solution electrical conductivity by the permittivity corrected

linear model using a dielectric sensor. *Journal of Irrigation and Drainage Engineering* 143(8):04017030.

41. Soulis K., Valiantzas J.D., Ntoulas N., **Kargas G.**, Nektarios P., 2017. Simulation of green roof runoff under different substrate depths and vegetation covers by coupling a simple conceptual and a physically based hydrological model. *Journal of Environmental Management* 200:434-445.
42. Londra P. and **Kargas G.** 2018. Evaluation of hydrodynamic characteristics of porous media from one step outflow experiments using RETC code. *Journal of Hydroinformatics* 20(3):699-707.
43. **G. Kargas** and P. Kerkides. 2018. Determination of soil salinity based on WET measurements using the concept of salinity index. *Journal of Plant Nutrition and Soil Science* 181(4): 600-605.
44. **G. Kargas**, Chatzigiakoumis I., Kollias A., Spiliotis D., Massas I., P. Kerkides. 2018. Soil salinity assessment using saturated paste and mass soil:water 1:1 and 1:5 ratios extracts. *Water* 10(11), 1589.
45. **G. Kargas**, Londra P., Anastasiou K. and P. Kerkides. 2018. A Note on One- and Three-Dimensional Infiltration Analysis from Mini Disc Infiltrometer. *Water* 10, 1783; doi:10.3390/w10121783.
46. **G. Kargas** and Soulis K. 2019. Performance evaluation of a recently developed soil water content, dielectric permittivity, and bulk electrical conductivity electromagnetic sensor. *Agricultural Water Management* Volume 213, pp. 568-579.
47. **G. Kargas**, Londra P. and P. Kerkides. 2019. Investigation of the Flux–Concentration Relation for Horizontal Flow in Soils. *Water* 2019, 11, 2442; doi:10.3390/w11122442.

48. **G. Kargas**, Londra P., Anastasatou M., Aand N. Moustakas. 2020. The effect of soil iron on the estimation of soil water content using dielectric sensors. *Water* 2020 12(2) DOI 10.3390/w12020598
49. **G. Kargas**, Londra P. and Sgoubopoulou A. 2020. Comparison of Soil EC Values from Methods Based on 1:1 and 1:5 Soil to Water Ratios and ECe from Saturated Paste Extract Based Method. *Water* 2020, 12(4) DOI 10.3390/w12041010
50. Soulis K., Londra P. and **G. Kargas**. 2020. Characterizing surface soil layer saturated hydraulic conductivity in a Mediterranean natural watershed. *Hydrological Sciences Journal*, 65(15) 2616-2629.
51. **G. Kargas** and P. A. Londra. 2020. Comparison of Two-Parameter Vertical Ponded Infiltration Equations. *Environmental Modeling & Assessment*, [doi.org/10.1007/s10666-020-09727-5](https://doi.org/10.1007/s10666-020-09727-5).
52. **G. Kargas**, Londra P and K. Sotirakoglou. 2021. Saturated hydraulic conductivity measurements in a loam soil covered by native vegetation: spatial and temporal variability in the upper soil layer. *Geosciences*. [doi.org/10.3390/geosciences11020105](https://doi.org/10.3390/geosciences11020105)
53. Tassula L., Papafotiou M., Liakopoulos G. and **G. Kargas**. 2021. Water use efficiency, growth and anatomic-physiological parameters of Mediterranean xerophytes as affected by substrate and irrigation on a green roof. *Notulae Botanicac Horri Agrobotanici Cluj-Napoca* Vol: 49(2). DOI: 10.15835/nbha49212283
54. **G. Kargas**, Soulis K and P. Kerkides. 2021. Implications of hysteresis on the horizontal soil water redistribution after infiltration. *Water* 2021 DOI:10.3390/w13192773.
55. **G. Kargas**, Londra P and K. Sotirakoglou 2022. The effect of soil texture on the conversion factor of 1:5 soil/water extract electrical conductivity

( $\text{EC}_{1:5}$ ) to soil saturated paste extract electrical conductivity ( $\text{EC}_e$ ).

[Water, 14\(4\), 642; doi.org/10.3390/w14040642](https://doi.org/10.3390/w14040642)

**56.** **G. Kargas**, Koka D., Londra P. 2022. Determination of Soil Hydraulic Properties from Infiltration Data Using Various Methods. *Land* 11(6), 779; <https://doi.org/10.3390/land11060779>

**57.** **G. Kargas**, Koka D., Londra P. 2022. Evaluation of Soil Hydraulic Parameters Calculation Methods Using a Tension Infiltrometer. *Soil Syst.* 2022, 6, 63. <https://doi.org/10.3390/soilsystems6030063> 6 (63)

**58.** **G. Kargas**, P. Londra, D. Koka, A. Sgoubopoulou. 2022. Relationships between saturated paste and 1:1 or 1:5 soil/water extract sodium adsorption ratios. *Irrigation. and Drainage.* 2022. <https://doi.org/10.1002/ird.2775>

**59.** **G. Kargas**, Londra P and K. Sotirakoglou 2022. Evaluation of soil salinity using the dielectric sensor WET-2. *Soil Research* - <https://doi.org/10.1071/SR22163>

**60.** **G. Kargas**, P. Kerkides, P. Londra 2023. Study of the Soil Water Movement in Irrigated Agriculture. *Water* 15(1), 127; <https://doi.org/10.3390/w15010127>

**61.** **G. Kargas**, D. Koka, P. Londra. 2023. Revisiting of a Three-Parameter One-Dimensional Vertical Infiltration Equation. *Hydrology*, 10(2), 43; <https://doi.org/10.3390/hydrology10020043>

**62.** **G. Kargas**, P. Kerkides, P. Londra. 2023. Study of the Soil Water Movement in Irrigated Agriculture II. *Water*. 2023, 15, 2033. <https://doi.org/10.3390/w15112033>

63. G. Kargas, N. Ntoulas, and A. Tsapatsouli. 2023. Use of WET-2 Dielectric Sensor for Salinity Determination on an Extensive Green Roof Substrate. *Sensors*. 23(13), 5802; <https://doi.org/10.3390/s23135802>
64. P.A. Petsetidi and G. Kargas 2023. Assessment and Mapping of Soil Salinity Using the EM38 and EM38MK2 Sensors: A Focus on the Modeling Approaches. *Land* 12 (10), <https://doi.org/10.3390/land12101932>
65. D. Koka, G. Kargas, P. Londra. 2023. Comparison of Soil Hydraulic Properties Estimated by Steady- and Unsteady-Flow Methods in the Laboratory. *Water* 15 (20), 3554, <https://doi.org/10.3390/w15203554>.
66. G. Kargas, D. Koka, P. Londra. 2023. Determination of soil Hydraulic Conductivity using a tension infiltrometer. *YDROTECHNIKA* (32):14-36.
67. G. Kargas, D. Koka, P. Londra L. Mindrinos. 2024. Comparison of prediction methods of the advance phase completion time in furrow irrigation *YDROTECHNIKA* (33):1-12
68. Fragkos A., Loukatos D., Kargas G., Arvanitis K. 2024. Response of the TEROS 12 Soil Moisture Sensor under Different Soils and Variable Electrical Conductivity. *Sensors* 24(7), 2206; <https://doi.org/10.3390/s24072206>.
69. Kargas G., D. Koka, P. Londra and L. Mindrinos. 2024. Comparison of Methods Predicting Advance Time in Furrow Irrigation. *Water* 16(8), 1105; <https://doi.org/10.3390/w16081105>

### International Editions

1. Poulovassilis A., P. Kerkides, S. Aggelides, T. Mimides, M. Psychogios, S. Alexandris, G. Kargas and A. Sgoumbopoulou.(1996) “Sustainability of irrigated agriculture”, L.S. Pereira et al. (Eds), *Kluwer Academic Publishers*, pp. 601-613, 1996.

**Papers in conference proceeding**  
**International Congresses**

1. A. Poulovassilis, S. Aggelides, P. Kerkides, , T. Mimides, M. Psychoyou, S. Alexandris, **G. Kargas** and A. Sgoumbopoulou. Cadmium concentration in groundwater's in the valley of Iria-Peloponnese. *First International Congress on the “Environment”*. Abstracts Geotechnical Chamber of Greece, Athens, p.55, March 1993
2. A. Poulovassilis, S. Aggelides, P. Kerkides, , T. Mimides, M. Psychoyou, S. Alexandris, **G. Kargas** and A. Sgoumbopoulou. Soil Salt accumulation in the valley of Iria-Peloponnese due to irrigation with brackish groundwater. *First International Congress on the “Environment”*. Abstracts Geotechnical Chamber of Greece, Athens, p.56, March 1993
3. A. Poulovassilis, S. Aggelides, P. Kerkides, , T. Mimides, M. Psychoyou, S. Alexandris, **G. Kargas** and A. Sgoumbopoulou. Nitrate concentrations in the groundwater of Iria and Argolis. *First International Congress on the “Environment”*. Abstracts Geotechnical Chamber of Greece, Athens, p.57, March 1993
4. A. Poulovassilis, S. Aggelides, P. Kerkides, , T. Mimides, M. Psychoyou, S. Alexandris, **G. Kargas** and A. Sgoumbopoulou. Sea water intrusion in the coastal aquifers of Iria Peloponnese due to overpumping. *First International Congress on the “Environment”*. Abstracts Geotechnical Chamber of Greece, Athens, p.59, March 1993
5. A. Poulovassilis , T. Mimides , A. Nikolopoulos , M. Psychoyou , A. Sgoumbopoulou , P. Kerkides , S. Alexandris , S. Aggelides , **G. Kargas** and P.Giannoulopoulos. «Validity, limits and possible trends of coastal south Mediterranean traditional groundwater irrigated agriculture». *In Proc. International Conference on “Land and Water Management in the Mediterranean Region”*,pp. 73-99, Bari, 4-8 Sept. 1994.

6. **G. Kargas**, P. Patsialou, P. Kerkides. Comparative evaluation of methodologies used in the determination of the hydraulic properties of porous media. *In Proceedings European Water Resources Association (EWRA) Symposium on “Water resources management: Risk and Challenges for the 21<sup>st</sup> century”*, pp. 891-902, Izmir, Turkey, 2-4 September 2004.
7. **G. Kargas** and P. Kerkides. A contribution to the study of the phenomenon of horizontal infiltration. *In Proc. EWRA 7th International Conference, Water Resources Conservancy and Risk Reduction Under Climatic Uncertainty*, 25-27 June 2009, Limassol Cyprus, pp 125-133.
8. **G. Kargas** and P. Kerkides and M.S. Seyfried. 2011. Comparison of two dielectric sensors for soil water measurements. (Poster) *VI International Symposium EWRA “Water engineering and management in a changing environment”* 29/6-2/7/2011. Katania Italy.
9. **G. Kargas** and P.A. Londra. 2013. Effect of tillage and no-tillage practices on hydraulic properties of a loam soil. *1st EWaS-MED International Conference: Improving Efficiency of Water Systems in a changing natural and financial environment*, Thessaloniki, Greece, 11 – 13 April 2013. Paper 103.
10. M. Papafotiou, N. Pergialioti, E.A. Papanastassatos, L. Tassoula, I. Massas, **G. Kargas** 2013. Effect of substrate type and depth and irrigation frequency on growth of semiwoody Mediterranean species in green roofs, *ISHS Acta Horticulturae 990: II International Symposium on Woody Ornamentals of the Temperate Zone Gent, Belgium, Editors J. Van Huylenbroeck, M.C. Van Labeke, K. Van Laere*.
11. M. Papafotiou, L. Tassoula, G. Liakopoulos, **G. Kargas**. 2014. Effect of Substrate Type and Irrigation Frequency on Growth of Mediterranean Xerophytes at Extensive Green Roofs. *The 29<sup>th</sup> International Horticultural Congress*, Brisbane, Australia, 17-22 August 2014.

- 12.** **G. Kargas**, Maratheftis A., V. Demetriou A. Petsetidou, E. Karidas, G. Bourazanis and P. Kerkides. An Empirical Relationship between Bulk Electrical Conductivity of Soil Saturated Paste and the Electrical Conductivity of Saturated Paste Extract. *9<sup>th</sup> World Congress EWRA*, Instabul Turkey, 10-13 June, 2015.
- 13.** Soulis K. X., Ntoulas N., Nektarios P. A., **Kargas G.** 2016. Green roof runoff reduction under different substrate depths and vegetation covers: The effect of initial substrate moisture conditions and total rainfall depth. *6<sup>th</sup> International Conference on Landscape & Urban Horticulture*, Athens, Greece, 20-25 June, 2016.
- 14.** **Kargas G.**, Ntoulas N., Nektarios P.A, Kladou A. 2016. The effect of salinity in the determination of soil moisture by using a dielectric device. *6<sup>th</sup> International Conference on Landscape & Urban Horticulture*, Athens, Greece, 20-25 June, 2016. (Poster).
- 15.** **G. Kargas** , P. Mougiov, A. Petsetidi and P. Kerkides. Soil water electrical conductivity determination based on the salinity index concept. *10<sup>th</sup> World Congress EWRA*, Athens Greece, **5-7/7/2017**.
- 16.** **G. Kargas**, P. Londra and K. Anastasiou. 2018. Investigation of the relationship between three and one-dimensional infiltration using a mini disc infiltrometer. *EWAS3*, Lefkada Island, Greece, 27-30/6/2018.
- 17.** **G. Kargas**, I. Chatzigiakoumis, A. Kollias, D. Spiliotis, and P. Kerkides. 2018. An investigation of the relation between the electrical conductivity of the soil saturated paste extract EC<sub>e</sub> with the respective values of the mass soil/water ratios 1:1 and 1:5 (EC<sub>1:1</sub> and EC<sub>1:5</sub>). *EWAS3*, Lefkada Island, Greece, 27-30/6/2018.
- 18.** **G. Kargas**, P. Londra, E. Karistinou, D. Katsipis, K. Soulis. 2019. Evaluation of the Square Root Time model in estimating the evaporation from a bare

loam soil. *11<sup>th</sup> World Congress EWRA*, Madrid Spain, 25-29/6/2019 (Extended abstract). pp. 291-292.

**19.** K.X. Soulis, P. Londra, G. Metaxas, **G. Kargas.** 2019. Hydraulic conductivity spatiotemporal variability in watersheds. *11<sup>th</sup> World Congress EWRA*, Madrid Spain, 25-29/6/2019 (Extended abstract). pp. 201-202.

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### National Congresses

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- 80.** P.A. Petsetidi, **G. Kargas**, P. Londra. Assessment of soil salinity using the EM38-MK2 electromagnetic sensor in Laconia. *16<sup>o</sup> Congress of Hellenic Soil science Society, , 4-6/12/2023 2023 Athens, pp. 89.*
- 81.** **G. Kargas.**, P. Londra. And Karpenisiotis D. Calibration of dielectric WET sensor in hematite mineral. *16<sup>o</sup> Congress of Hellenic Soil science Society, , 4-6/12/2023 2023 Athens, pp. 83.*

### Other Publications

1. Honorary volume for Prof. Emeritus Christos Tzimopoulos
- A. Poulovassilis, **G. Kargas** and P.Kerkides, 2009. A comparison of two methodologies for calculating hysteretic paths in a reproducible hysteresis loop pp. 98-116.

### Technical Reports

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Report, 1991. Second Periodic report, 1992. Third Periodic report, 1993. Final report, 1994.

2. Poulovassilis A., Liakatas A., Kerkides P., Aggelides S., Rizos S.. Gavanozis J., Anadranistakis M., Alexandris S., Psychoyou M. **Kargas G.**, Sgoubopoulou A «Rational water application for irrigation and drainage purposes under Greek conditions», 1996. Final Report 1996.