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CURRICULUM VITAE

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OFFICE ADDRESS

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EDUCATION

Ph. D. Dept of Natural Resources and Agricultural Engineering, Agricultural University of Athens, 2001.
Diploma Dept of Natural Resources and Agricultural Engineering, Agricultural University of Athens, 1994

EMPLOYMENT

2008-	Technical University of Crete, Dept Environmental Emgineering
2004-2007	Post-doc Researcher Lab. Plant Physiology and Biochemistry, Dept of Biology, University of Crete
2002- 2004:	Post-doc Researcher National Foundation for Agriculture Research, Institute of Iraklio
2000-2001:	Army Service Hellenic Air Force
1995-2000:	Researcher National Foundation for Agriculture Research, Institute of Iraklio

RESEARCH INTERESTS

Effluent Reuse, Natural Treatment Systems, Plant Abiotic Stress, Nutrient and Carbon Cycling, Soil Quality and Degradation

ORGANIZATION OF SCIENTIFIC MEETINGS

1. International Conference on “Asset Management of Medium and Small Wastewater Utilities” Alexandroupolis Thrace, Greece, 3-4 July 2009.
2. 2nd IWA International Symposium on Water and Wastewater Technologies In Ancient Civilizations, Bari, Italy, May 28–30 2009.

3. 6th National Symposium of EEDYP: Integrated Water Management at Watershed Level, 14-16 June 2007, Chania, Greece.
4. International Conference on Water and Wastewater Management in Ancient Civilisations. October, 2006.
5. International Conference on Water Economics, Statistics, and Finance, Rethymno, Crete, Greece, 8-10 July 2005.
6. Regional Symposium on Water Recycling in Mediterranean Region, International Water Association (IWA), Iraklio, Greece, 26-29 September 2002.

TEACHING COURSES

1. Agricultural Engineering (graduate)
2. Decentralized Wastewater Management (graduate)
3. Hydrology and Environmental Models (post-graduate)

PUBLICATIONS

A. THESIS

Influence of Rootstock, Irrigation level and recycled water on Growth, Nutrition and Physiology of Sultana Grapevines. Dept of Natural Resources and Agricultural Engineering, Agricultural University of Athens Ph. D Thesis, p. 202.

B. BOOKS EDITION AND CONFERENCE PROCEEDINGS

1. Angelakis, A.N., Tsagarakis, K.P., Paranychianakis, N.V., Asano, T., 2002. *Water Recycling in Mediterranean Region.* Proceedings of Regional Symposium on Water Recycling and Reuse in Mediterranean Region. Iraklio, 26-29 September 2002, vol 1(p696) and vol 2(p180).
2. Angelakis, A.N., Paranychianakis, N.V., Tsagarakis, K.P., 2003. *Water Recycling in Mediterranean Region. Water Science and Technology: Water Supply*, vol 3.
3. Angelakis, A.N., Paranychianakis, N.V., 2011. *Water Recycling and Reuse. Water Journal* (in preparation).

C. CHAPTERS IN BOOKS

1. Angelakis, A.N. and Paranychianakis, N., 2003. Introduction. In: *State of the Art Report: Health Risks in Aquifer Recharge Using Reclaimed Water* (R. Aertgeerts and A.N. Angelakis, Eds). WHO, Water, Sanitation and Health Protection and the

Human Environment WHO, Geneva and WHO Regional Office for Europe, Copenhagen, Denmark, p.4-9.

2. Tsagarakis, K.P., Paranychianakis, N.V., and Angelakis, A.N. 2003. Country report Greece. In: *Aqualibrium - European Water Management between Regulation and Competition* (Mohajeri S. et al. Eds), ISBN : 92-894-6428-3. European Commission, Directorate-General for Research, Brussels, pp. 153-169.
3. Paranychianakis, N.V., Salgot, M., and Angelakis, A.N., 2010. Regulations for irrigation with of treated sewage water. In: *Treated Wastewater in Agriculture: Use and Impacts on the Soil Environments and Crops*, (Fine, et al., Eds) Wiley-Blackwell.

D. REFEREED JOURNAL PUBLICATIONS (Since 2005)

1. Paranychianakis, N.V. and Chartzoulakis, K.S., 2005. Irrigation of Mediterranean crops with saline water: From physiology to management practices. *Agriculture Ecosystems and Environment* 106, 171-187.
2. Borboudaki, K., Paranychianakis, N.V., and Tsagarakis, K.P., 2005. Integrated wastewater management at touristic areas for water recycling purposes including a case study. *Environmental Management* 36, 610-623.
3. Safarikas, N., Paranychanakis, N.V., Kotselidou, O., Angelakis, A., 2005. Drinking water policy in the frame of the directive 2000/60/ec with emphasis to drinking water. *Water Science Technology: Water Supply* 5(6), 243-250.
4. Paranychianakis, N.V., Nikolantonakis, M., Spanakis, Y., Angelakis, A.N., 2006. The effect of recycled water on the nutrient status of Soutlanina grapevines grafted on different rootstocks. *Agricultural Water Management* 81(1-2), 185-198.
5. Paranychianakis, N.V., Angelakis, A.N., Leverenz, H., Tchobanoglous, G., 2006. Treating wastewater through land treatments systems: A review of treatment mechanisms and plant functions. *Critical Reviews in Environmental Science and Technology* 36, 187–259.
6. Skopelitis, D.S., Paranychianakis, N.V., Paschalidis, K.A., Pliakonis, E.D., Yakoumakis, D., Delis, I.D., Kouvarakis, A., Papadakis, A.K., Stephanou, E., and Roubelakis-Angelakis, K.A., 2006. Abiotic stress generated ROS signal expression

- of anionic glutamate dehydrogenases to form glutamate for proline synthesis. *Plant Cell* 18, 2767-2781.
7. Tzanakakis, V.E., Paranychianakis, N.V., Angelakis, A.N. 2007. Performance of slow rate systems for the treatment of domestic wastewater. *Water Science Technology*, 55(1-2):139-47.
 8. Skopelitis, D.S., Paranychianakis, N.V., Spyros, A., Kouvarakis, A., Stephanou, E., Roubelakis-Angelakis, K.A. 2007. The isoenzyme seven of tobacco NAD(H)-dependent glutamate dehydrogenase exhibits high deaminating and low aminating activities in vivo. *Plant Physiology* 145, 1726-1734.
 9. Paranychianakis, N.V., Angelakis, A.N., 2008. Water stress and rootstock affected the development of leaf burns in grapevines irrigated with saline effluent. *Agricultural Water Management* 5, 375-382.
 10. Tzanakakis, V.E., Paranychianakis, N.V., Angelakis, A.N. 2009. Nutrient removal and biomass production by different plant species irrigated with primary treated domestic effluent. *Ecological Engineering* 35, 1485-1492.
 11. Moraetis, D., Stamati, F., Kotronakis, M., Fragia, T., Paranychianakis, N., Nikolaidis, N.P., 2011. Identification of hydrologic and geochemical pathways using high frequency sampling, REE aqueous sampling and soil characterization at Koiliaris Critical Zone Observatory, Crete. *Applied Geochemistry*, 26, 101-104.
 12. Tzanakakis, V.E., Paranychianakis, N.V., Angelakis, A.N., 2011. Effluent application to the land: Changes in soil properties and treatment potential. *Ecological Engineering* 37, 1757-1764.
 13. Paranychianakis, N.V., Salgot M., Marecos do Monte, M.H.F., Cirelli, G.L., Lazarova, V., and Angelakis, A.N., 2011 Quality criteria and Status of Effluent Recycling in EU-Countries: Need for a Uniform Approach. *Ecological Engineering* (in review).
 14. Giannakis, G., Kourgialas, N., Paranychianakis, N.V., Nikolaidis, N.P., Kalogerakis, N., 2011. Effects of municipal solid waste compost on soil properties and vegetables growth. *Resources Conservation and Recycling* (in review)

15. Tsiknia, M., Vagiakis, G., Tzanakakis, V.A., Paranychianakis, N.V. 2011. The Role of Vegetation in the Fate of Nitrogen in Land Application of Wastewater. *Soil Biology and Biochemistry* (in review).

E. CONFERENCES

1. Nikolantonakis, M., Paranychianakis, N., 1998. Determination des besoins en eau de la variété Sultanine greddea sur 110R, sous les conditions climatiques de Crète. In: *Proceedings of 23th Congress Mondial de la Vigne et du Vin, Lisbonne, Portugal*. pp, I-70-I-75.
2. Paranychianakis, N.V., Chartzoulakis, K.S., Aggelides, S., Angelakis, A.N., 2000. Growth and gas exchange of Soultanina vines as affected by irrigation level, water quality and rootstock. 6th International Symposium on Grapevine Physiology and Biotechnology, June 2000 Iraklio, Greece.
3. Paranychianakis, N.V., Chartzoulakis, K.S., Angelakis, A.N., 2002. Genotypic responses of Soultanina grapevines in water relations and gas exchange under different irrigation regimes and water qualities. 13th Congress of FESPB, September 2-6, 2002. Hersonissos, Greece, p. 607.
4. Paranychianakis, N.V., Chartzoulakis, K.S., Aggelides, S., Angelakis, A.N., Grapevine growth and nutrition as affected by irrigation with secondary treated effluent. In: *Proceedings of Regional Symposium on Water Recycling in Mediterranean Region, Iraklio, Crete, Greece, 26-29 September 2002*, 1, pp. 457.
5. Chartzoulakis, K.S., Paranychianakis, N.V., 2003. Irrigation with saline water in the Mediterranean Region and its consequences on photosynthesis of fruits and vegetables. *Photosynthesis in a Changing World*, May 27 – June 3, 2003
6. Andronis, A.E., Pliakonis, H.D., Delis, I.D., Skopelitis, D.S., Giakoumakis, D.I., Papadakis, N.V., Paschalidis, K.A., Paranychianakis, N.V., and Roubelakis-Angelakis K.A., 2004. Physiological and Molecular responses of grapevine to salinity/drought. Cost858 Congress on Aquaporins, Mallorca Spain, 21-23 October 2004, S1/p4.
7. Paschalidis, K.A., Skopelitis, D.S., Pliakonis, H.D., Paranychianakis, N.V., and Roubelakis-Angelakis K.A., 2005. The Genes encoding for enzymes of polyamine biosynthesis and catabolism are developmentally regulated in *Vitis vinifera* L. and

- linked to abiotic stress response. COST858 Congress on Functional Gene and Analysis in Grapevine, Geileweilerhof, Germany, 6-7 October 2005. Book of Abstracts p. 14
8. Kapellakis, I.E., Tsagarakis, K.P., Avramaki, Ch., Paranychianakis, N.V., Angelakis, A.N. 2005. The role of geographical information systems on olive mill wastewater management: a case study in Crete, Greece. International Conference on Water Economics, Statistics, and Finance, Rethymno, Crete, Greece, 8-10 July 2005. vol 2, 87-92.
 9. Tzanakakis, V.E., Paranychianakis, N.V., and Angelakis, A.N., 2005. Treatment of Municipal Wastewater with Slow Rate Systems. In: Abstracts of IWA Conf. on Wastewater Reclamation and Reuse for Sustainability (WRRS 2006), November 8-11, 2005, Jeju Island, Korea, p.160.
 10. Skopelitis, D.S., Paranychianakis, N.V., Moschou, P., Paschalidis, K.A., Delis, I.D., and Roubelakis-Angelakis, K.A. 2006. New molecular strategies for tolerance of plants to salinity. 15th FESPB Congress, Lyon, France, 17-21 July 2006.
 11. Skopelitis, D.S., Paranychianakis, N.V., Moschou, P., Paschalidis, K.A., Andronis, E., Delis, I.D., Roubelakis-Angelakis, K.A. 2006. Molecular strategies affecting tolerance of plants to salinity. COST Meeting on Plant Abiotic Stresses, COST858 Meeting, Prague, Czech, 14-18 September 2006.
 12. Tzanakakis, V.E., Paranychianakis, N.V., and Angelakis, A.N., 2006. Evolution of land treatment concept for the management of wastes and polluted waters. In: Proceedings of 1st IWA International Symposium on Water and Wastewater Technologies in Ancient Civilizations October 28-30, 2006 Heraklion, Crete, 71-79.
 13. Damianos V. Skopelitis, Helen D. Pliakonis, Nikolaos V. Paranychianakis, K.A. Paschalidis, A. K. Papadakis Kalliopi A. Roubelakis-Angelakis. 2007 What is new about Glutamate Dehydrogenase? Nitrogen2007, Lancaster, UK, 27-31 July 2007.
 14. Tzanakakis, V.E., Paranychianakis, N.V., Angelakis A.N., 2008. Optimization of nutrient phytoremediation in land treatment systems by using different plant species. 4th European Bioremediation Conference 3-6 September 2008 Chania, Greece.
 15. Vasilaki, R., Paranychianakis, N., Gekas, V., 2008. The threat of desertification in the island of Crete: Current status, future trends and management practices. 2nd SEAS/IASME International Conference on Renewable energy sources (RES '08) Corfu, Greece, October 26-28, 223p.

16. Angelakis, A., Paranychianakis, N., 2009. Statistics on water and wastewater sectors from European countries. 2nd International Conference on Water Economics, Statistics, and Finance, International Water Association, Alexandroupolis, Greece, July 2009.
17. Kapellakis, I.E., Paranychianakis, N.V., Tsagarakis, K.P., Angelakis A.N., 2009. Treatment of olive mill wastewater with constructed wetlands asset management of medium and small wastewater utilities, IWA, Alexandroupolis, Greece, July 2009.
18. Livaniou, I., Paleologos, E., and N. Paranychianakis. (2010). Water needs in coastal locations for sustainable agricultural and touristic developments. Protection and Restoration of the Environment X, Corfu, Greece, 5-9 July, 2010.
19. Tsiknia, M., Vaggiakis, I., Tzanakakis, V.A., Paranychianakis, N.V., 2011. The Role of Vegetation in the Fate of Nitrogen in Land Application of Wastewater. 5th European Bioremediation Conference, 4-7 July 2011 Chania, Crete, Greece.
20. Giannakis, G., N. Kourgialas, N.V. Paranychianakis, N.P. Nikolaidis, N. Kalogerakis (2010). Effects of solid waste compost on vegetable growth and metal accumulation. 5th European Bioremediation Conference, 4-7 July 2011 Chania, Crete, Greece.
21. Kotronakis, M., Kourgialas, N., Stamati, F., Paranychianakis, N., Nikolaidis, N., Kalogerakis, N. 2011. Evolution of soil carbon and aggregate formation after addition of compost amendments. 5th European Bioremediation Conference, 4-7 July 2011 Chania, Crete, Greece.
22. Stamati, F.E., Kotronakis, M., Fragia, T., Paranychianakis, N., Kalogerakis, N., Nikolaidis, N.P., 2011. Modeling carbon sequestration potential in cretan soils. 5th European Bioremediation Conference, 4-7 July 2011 Chania, Crete, Greece.
23. Paranychianakis, N.V., Giannakis, G., Nikolaidis, N.P., Kalogerakis, N., 2011. Effects of Municipal Solid Waste Compost Amendments on Carbon and Nitrogen Cycling in a Clayey Soil. Goldschmidt2011, August 14-19, Prague, Czech Republic.

REVIEWS

24. *Agriculture Ecosystems and Environment; Environmental Management; Water Resources Management, J. Environmental Management, Agricultural Water Management, Desalination, Arid Soils and Management, J Chemical Technology and Biotechnology, J. American Society of Horticultural Sciences,*

RESEARCH PROJECTS

1. EOX-DEDISA – Improving the Reclamation and Reuse of the Organic Fraction of Municipal Solid Wastes in Agricultural and Environmental Applications European Economic Space and Ministry of Economy (50-50%) Total 2,200,000 € - TUC Funding 260,000 € (**Equal participation with Profs Nikolaidis and Kalogerakis**)
2. SoilTrec: 12/2009 – 11/2014 EU-FP7, Total Budget 7,000,000 € - TUC Funding 705,400 € (**Research Assistant**).
3. Wastewater Treatment and Reclamation and Reuse Guidelines in Greece. Period 2008-2009. Union on Greek Municipalities, Athens, Greece. Budget: 30,000 €. **Coordinator**
4. EU-INCO “Mediterranean Dialogue on Integrated Water Management (MELIA)”, 2005-2007. Dr. A. Angelakis, NAGREF (**Research Assistant**).
5. “Traditional Water Techniques: Cultural Heritage for a Sustainable Future (SHADUF)” 2004-2006. Dr. A. Angelakis, NAGREF. Budget: 108,200 €. (**Research Assistant**)
6. Pythagoras: “New Strategies to Understand the Plants Tolerance Mechanisms to Abiotic and Biotic Stresses” 2004-2006. E.II.E.A.E.K. II. Prof: K.A. Roubelakis-Angelakis. University of Crete, Dept Biology, Budget: 45,000€. (**Research Assistant**).
7. General Secretariat of Research and Technology, Joint Research Greece-Turkey "Management of Olive Mill Wastewater through Land Treatment Systems " 2003-04, Dr. A. Angelakis, NAGREF, Budget: 15,000€ (**Research Assistant**)
8. EU-INCO-MED “Development of Cost Effective Reclamation Technologies for Municipal Wastewater and the Appropriate Agricultural Use of the Treated Effluent Under (semi-) Arid Conditions” 2000-2003. Dr. A. Angelakis, NAGREF, Budget: 128,400€ (**Research Assistant**).
9. General Secretariat of Research and Technology, Joint Research Greece-China. “Study of Tolerance Mechanisms of Grapevines (*Vitis vinifera* L.) to Salinity” 2000-2002, ΓΓΕΤ. Dr. Chartzoulakis, NAGREF, Budget: 25,000€ (**Research Assistant**).
10. EU-INTEREG II. "Improvement of Grapevine Cultural Practices: Section 4 Estimation of Grapevine Irrigation Requirements” 1998-2000. Dr. A. Angelakis, NAGREF, Budget: 103,000€. (**Research Assistant**).