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Position Agriculture Constructions and Environmental Control
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Education

Year

Title, Institute

Graduate

Agricultural Engineer Diploma, Agricultural University of Athens
 Civil Engineer Diploma, University of Patras
 Mechanical Engineer Diploma, University of Patras

Post- Graduate

Post-Graduate Diploma in Solar Energy, University of Perpignan
 Diplôme d' Études Approfondies (D.E.A), University of Perpignan
 Master of Science in Meteorology, University of Athens, Greece
 Diplôme de Docteur Ingénieur. University of Perpignan

Post- Doc

Dr Dozent (Habilitation) in Agrometeorology, University of Patras, Greece

Professional Experience

Year

Position, Institute

1974-1978	Agricultural Engineer, "Sykourion Mills of Ch. KITTAS".
1978-1980	Researher, University of Perpignan and French National Institute of Agronomic Research (I.N.R.A.).
1983-1984	Agricultural Engineer, Ministry of Agriculture of Greece
1984- 1987	Research Scientist, Ministry of Agriculture of Greece
1987-1993	Professor, Technological Educational Institute of Messologi
1993 -1997	Associate Professor, University of Thessaly, School of Agriculture Crop and Animal Production, Greece
1997-2001	Professor, University of Thessaly, School of Agriculture Crop and Animal Production, Greece
2001- today	Professor, University of Thessaly, Department of Agriculture, School of Crop Production and Agriculture Environment, Greece

Research Interests

- Construction, equipment and functioning of greenhouses (covering and construction materials, greenhouse physics, heating, ventilation, cooling, shading, irrigation, fog, CO₂ enrichment, climate control systems, mechanical equipment, internal constructions etc).
- Using computational fluid dynamics (CFD) to improve the design of agriculture buildings.
- Hydroponic systems (setup, equipment, design).
- Energy technologies in agriculture with emphasis in energy savings and in the use of renewable energy sources in agriculture buildings.
- Facilities for postharvest treatment of agricultural products (storage installations, refrigeration rooms, packaging equipment, drying installations).
- Distance learning in greenhouse technologies and in energy in agriculture.

Research Projects

1. 1992- 1993: Theoretical and experimental study of natural ventilation in Mediterranean greenhouses (General Secretariat for Research and Technology, PLATON).
2. 1993- 1994: Traditional storage techniques for vegetables in Pilion (Research Committee,

- University of Thessaly).
3. 1994-1998: Investigation of greenhouse natural ventilation in Greece (General Secretariat for Research and Technology ΠΕΝΕΔ 94).
 4. 1995- 1996: Development of a software for optimal greenhouse climate control (General Secretariat for Research and Technology, PLATON).
 5. 1995- 1996: Energy plans for extended use of solar energy and biomass in small and medium cities (APAS).
 6. 1997-1998: Influence of a thermal screen on greenhouse energy performance (Research Committee, University of Thessaly).
 7. 1998-2000: Development of an environmental friendly greenhouse equipped with insect-proof screen suitable for Mediterranean conditions (General Secretariat for Research and Technology, PLATON).
 8. 1999-2001: Management of high humidity in greenhouses in Greece (General Secretariat for Research and Technology, YPER 97).
 9. 1999-2001: 100% fuel substitution in greenhouse heating by biomass (ALTENER II).
 10. 1999-2001: Regular RES courses for European Agricultural Engineers (ALTENER II).
 11. 2000-2002: New learning technologies for lifelong self learning on greenhouse engineering and management. A pilot trilingual web based tool (LEONARDO DA VINCI).
 12. 2001-2002: RES DISSEMINATION. Clean Energy and Agriculture. Summer courses for engineers (ALTENER).
 13. 2002-2004: Production of new UV-absorbing cover materials aiming to reduce greenhouse pest and diseases and assessment in field conditions (General Secretariat for Research and Technology, PAVET 2000).
 14. (2000-2005). Closed System for Water and nutrient management in horticulture (5^o European framework, Quality of Life).
 15. 2003- 2004: Optimisation of the heating of greenhouses (General Secretariat for Research and Technology, ENTEP).
 16. 2004- 2005. Behavior of pesticides in greenhouse environment (Ministry of Education, EPEAK, PYTHAGORAS).

Publications in Peer Reviewed Journals

1. Kittas C., 1986. "Estimation des besoins d' aération des serres en Grèce". Agronomie, 6 (7), 629-632.
2. Kittas C, 1985. "Study of the Convective Heat Transfer Phenomena in a Greenhouse (in Greek). Techn Chronika - B, 5 (4): 45-60.
3. Κίττας K., 1985. "Determinative Factors of the Greenhouse Air Temperature". Techn Chronika - B, 5 (4): 61-77.
4. Kittas C., 1986. "Estimation des besoins de chauffage des serres en Grèce". Agronomie, 6 (7), 633-638.
5. Kittas C., 1986. "Greenhouse Cover Conductances". Boundary Layer Meteorology, 36, 213-225.
6. Kittas C., 1987 (in Greek). "The Significance of the Sun Position to the Rational Installation of the Protected Cultivations in Greece". Techn Chronika - B, 7 (1): 5-31.
7. Kittas C., Chiapale J.P., Villele de O., Aries F., 1987. Modèle d' estimation de la température de paroi d' une serre". Agricultural and Forest Meteorology, 29, 131-142.
8. Kittas C. 1986 (in Greek) "Water Consumption in Greenhouses". Techn Chronika - B, 6(4): 5-29.
9. Kittas C., 1987. "Energy behaviour and location of greenhouse in Greece". International Journal of Energy Systems, 7 (3), 64-71.
10. Kittas C., 1986. "The response of a greenhouse to climate features as a tool to its equipment design". International Journal of Energy Research, Vol. 11, 531-540.
11. Kittas C., 1987. "Un modèle d' estimation des des déperditions énergétiques diurnes des serres". Agronomie, 7 (3), 175-181.
12. Kittas C., Chiapale J.P., Villele de O., Aries F., 1987. " Paramètres significatifs du déterminisme de la température de l' air de la serre". Agricultural and Forest Meteorology 40, 265-277.
13. Kittas C., 1985 (in Greek). "The greenhouse, a Tool of Bioclimatology Modification". Techn

- Chronika - B, 7 (2): 5-28.
14. Kittas C., 1988 (in Greek). "A simplified Method for Estimating the Greenhouse Heating Needs". Techn Chronika - B, 8 (1): 109-121.
 15. Kaouris Y.G., Kittas C., Santamouris M., 1989. "Regional Monthly Estiamtion of Greenhouse Energy consumption - Application to Greece". Solar and Wind Technology, Vol. 6, No 3, pp. 225-233.
 16. Kittas C., 1990. "Solar Radiation of a Greenhouse as a Tool to its Irrigation Control". International Journal of Energy Research, Vol. 14, 881-892.
 17. Kittas C., 1990. "L' ombreggiamento quale fattore di conduzione razionale delle colture protette in Grecia". Colture Protette, 1, 95-101.
 18. Kittas C., 1992. "Influence d' un brise-vent sur les pertes convectives et radiatives d' une serre". Boundary Layer Meteorology 61: 99-111.
 19. Kittas C., 1993. "Modifications du comportement thermique et mécanique d' une serre, induites par un brise-vent situe et amont". Agronomie, 13, 105-108.
 20. Kittas C., 1994. "Détermination du coefficient global de transmission de chaleur à travers la paroi d'une serre ". Agricultural and Forest Meteorology, 69, 205-221.
 21. Kittas C., 1993 (in Greek). "Climatic suitability of a region for cultivations under cover". Techn Chronika - B, 12 (3): 7-27.
 22. Kittas C. Giaglaras P., 1994 (in Greek). "Contribution to the Evaluation of the Greenhouse Crops Water Needs". Techn Chronika - A, 14 (22): 113-127.
 23. C. Kittas, B. Draoui, T. Boulard., 1995. "Quantification du taux d' aération d' une serre à ouvrant continu en toiture". Agricultural and Forest Meteorology, 77:95-111
 24. C. Kittas, 1995. "A simple climagraph for characterizing regional suitability for greenhouse cropping in Greece". Agricultural and Forest Meteorology, 78: 133-141
 25. C. Kittas, T. Boulard, M. Mermier, G. Papadakis., 1996. "Wind induced air exchange rates in a greenhouse tunnel with continuous side openings". Journal of Agricultural Engineering Research, 65, 37-49
 26. C. Kittas, T. Boulard, G. Papadakis, 1997. "Natural ventilation of a greenhouse with ridge and side openings; sensitivity to temperature and wind effects". Transactions of ASAE 40(2) , 415-425.
 27. Boulard, P. Feuilloley, C. Kittas, 1997. "Natural ventilation performances of seven greenhouse and tunnel types." Journal of Agricultural Engineering Research, 67,249-266.
 28. T. Boulard, G. Papadakis, C. Kittas, M. Mermier, 1997. "Characterisation of the air flow and associated sensible heat exchanges in a naturally-ventilated greenhouse." Agricultural and Forest Meteorology ,88,111-119.
 29. T. Boulard, C. Kittas, G. Papadakis, M. Mermier, 1998. " Pressure field and air flow at the opening of a naturally- ventilated greenhouse". Journal of Agricultural Engineering Research, 71,93-102.
 30. C. Kittas, A. Baille, 1998. "Determination of the spectral properties of several greenhouse cover materials. Evaluation of specific parameters related to plant response." Journal of Agricultural Engineering Research, 71,193-202.
 31. C. Kittas, A. Baille, P. Giaglaras, 1999. " Influence of Covering Material and Shading on the Spectral Distribution of Light in Greenhouses". Journal of Agricultural Engineering Research, 73, 341-351.
 32. N. Katsoulas, A. Baille, C. Kittas, 2001. Effect of misting on transpiration and conductances of a greenhouse rose canopy. Agricultural and Forest Meteorology, 106, 233-247.
 33. C. Kittas, N. Katsoulas, A. Baille, 2001. Influence of greenhouse ventilation regime on microclimate and energy partitioning of a rose canopy during summer.Journal of Agricultural Engineering Research, 79(3), 349-360.
 34. A. Baille, C. Kittas, N. Katsoulas, 2000. Influence of whitening on greenhouse microclimate and crop energy partitioning. Agricultural and Forest Meteorology, 107(4), 293-306.
 35. C. Kittas ,A Jaffrin, Th. Bartzanas, 2001. Greenhouse evaporative cooling: measurements & data analysis. Transactions of ASAE 44(3) , 683-689.
 36. Ch. Lykas, P. Giaglaras, C. Kittas, 2001. Availability of iron in hydroponic nutrient solutions for rose crops. Journal of Horticultural Science and Biotechnology, 76 (3): 350-352.
 37. Ch. Lykas, V. Exarchou, K. Gourgoulianis, P. Giaglaras, Th. Gemptsos, C.Kittas, P. –A. Molyvdas, 2001. Noxious gases in greenhouses. Ann Agric Environ Med, 8: 99-101.
 38. T. Bartzanas, T. Boulard, C. Kittas, 2002. Numerical simulation of the airflow and temperature

- distribution in a tunnel greenhouse equipped with insect- proof screen in the openings. Computers and Electronics in Agriculture, 43, 207-221.
39. J.C. Roy; T. Boulard; C. Kittas; S. Wang, 2002. Convective and Ventilation Transfers in Greenhouses, Part 1:Greenhouse considered as a Perfectly Stirred Tank. Biosystems Engineering 83 (1): 1-20.
 40. T. Boulard; C. Kittas; J.C. Roy; S. Wang, 2002. Convective and Ventilation Transfers in Greenhouses, Part 2:Determination of the Greenhouse Distributed Climate. Biosystems Engineering, 83 (2): 129-147.
 41. C. Kittas, T. Boulard, T. Bartzanas, N. Katsoulas, M. Mermier, 2002. Influence of an insect screen on greenhouse ventilation. Transactions of the ASAE, 45(4): 1083- 1090.
 42. N. Katsoulas, A. Baille, C. Kittas, 2002. Influence of Leaf Index on Canopy Energy Partitioning and Greenhouse Cooling Requirements. Biosystems Engineering, 83 (3): 349-359.
 43. Bartzanas Th., Kittas C., 2003. Numerical Simulation oh the Influence of Ventilator Configuration in Greenhouse Microclimate..Geotechnical Scientific Issues, 14 (4): 14- 23.
 44. C. Kittas, T. Bartzanas, A. Jaffrin, 2003. Temperature Gradients in a Partially Shaded Large Greenhouse Equipped with Evaporative Cooling Pads. Biosystems Engineering, 85(1): 87- 94.
 45. C. Kittas; N. Katsoulas, A.. Baille, 2003. Influence of Aluminised Thermal Screens on Greenhouse Microclimate and Night Transpiration. Transactions of the ASAE, 46(6): 1653- 1663.
 46. T. Bartzanas; T. Boulard; C. Kittas, 2004. Effect of Vent Arrangement on Windward Ventilation of a Tunnel Greenhouse. Biosystems Engineering, 88(4): 479-490.
 47. C. Kittas, M. Karamanis, N. Katsoulas, 2005. Air Temperature Regime in a Forced Ventilated Greenhouse with Rose Crop. Energy and Buildings, 37 (8): 807- 812.
 48. T. Bartzanas, M. Tchamitchian, C. Kittas, 2005. Influence of the Heating Method on Greenhouse Microclimate and Energy Consumption.Biosystems Engineering, 91(4): 487-499.
 49. T. Bartzanas, N. Katsoulas, C. Kittas, T. Boulard and M. Mermier, 2005. The Effect of Vent Configuration and Insect Screens on Greenhouse Microclimate, International Journal of Ventilation, 4(3): 103-202.
 50. N Katsoulas, C Kittas, G Dimokas, Ch Lykas, 2006. Effect of Irrigation Frequency on Rose Flower Production and Quality. Biosystems Engineering, 93(2): 237-244.
 51. N. Katsoulas, T. Bartzanas, T. Boulard; M. Mermier, C. Kittas, 2006. Effect of Vent Openings and Insect Screens on Greenhouse Ventilation. Biosystems Engineering, 93(4): 427-436.
 52. Ch. Lykas, N. Katsoulas, P. Giaglaras, C. Kittas, 2006. EC and pH. Prediction in a Recirculated Nutrient Solution of a Greenhouse Soilless Rose Crop. Journal of Plant Nutrition, 29: 1585-1599
 53. C. Kittas, M. Tchamitchian, N. Katsoulas, P. Karaikou, Ch. Papaioannou, 2006. Effect of two new UV-absorbing greenhouse-covering films on growth and yield of an eggplant soilless crop. Scientia Horticulturae, 110(1): 30-37.
 54. T. Bartzanas, C. Kittas. Greenhouse Microclimate and Dehumidification Effectiveness under Different Ventilators Configuration. In press Building and Environment..

Presentations in Conferences

1. Chiapale J.P., Kittas C., Villele de O., 1981. Estimation régionale des besoins de chauffage des serres. *Acta Horticulturae*, 115: pp 493-503 (International congress I.S.H.S. "Energy in protected cultivations", Dublin, Sept. 1980).
2. .Chiapale J.P., Kittas C., Villele de O., 1984. Estimation des besoins de ventilation d' une serre plastique. *Acta Horticulturae* 154, 257-266 (International Congress I.S.H.S. "Plastics in Mediterranean countries", Naubel, Tunisie, Febr. 1984).
3. Kittas C., Kaouris Y., 1984. Estimation des besoins diurnes de ventilation des serres plastiques en Grèce. Proceedings of AMSE International Congress on modelling and simulation. Vol. 3.1, Athens, June 1984.
4. Kittas C.,1984. Un simple modèle d' estimation de consommation d' énergie pour le chauffage des serres en Grèce. Proceedings of AMSE International Congress on modelling and simulation. Vol. 3.1, Athens, June 1984.
5. G.D. Nanos, C. Kittas, 1997. "An alternative low-cost storage for kiwifruit" *Acta Horticulturae* 444:

625- 628.

6. C.Kittas, T. Boulard, G. Papadakis, 1997. Ventilation flow rates through combined ridge and side openings of a greenhouse; an experimental study. *Acta Horticulturae* 443, 31-38 (Proceedings of the International Congress for greenhouse technologies in mild climates. Tel Aviv 12-17 May 1996).
7. C. Kittas, T. Boulard, G. Papadakis, M. Mermier. Mapping of air and energy fluxes along a greenhouse large opening through three dimensional anemometer. 1st Mediterranean Colloquium on protected cultivation. October 6-9, 1996, Agadir, Morocco.
8. C. Kittas, A. Baille, 1997. Determination of spectral properties of several greenhouse cover materials. Evaluation of specific parameters related to plant response. Proc. of the 14th International Congress for Plastics in Agriculture, 216- 224, Tel Aviv, March 9-14,1997.
9. C. Kittas, A. Baille, P.Giaglaras, 1998. In - situ measurements of solar radiation in greenhouses: influence of cover materials and shading techniques. Proc. of the 13th International Congress on Agricultural Engineering, Vol.4, 243-250, Rabat, Morocco, 2-6 February 1998.
10. P. Giaglaras, A. Baille, C. Kittas, 1998. Prediction of the effects of CO₂ enrichment and artificial lighting on the performance of a greenhouse production system. IFAC-CAEA 98 Congress,14-17 Juin 1998, Athens, Greece.
11. P. Giaglaras, Ch. Lykas, C. Kittas, 1998. Dynamic Simulation of a Nutrient Solution's Composition in a Closed Hydroponics System. IFAC-CAEA 98 Congress,14-17 Juin 1998, Athens, Greece.
12. C. Kittas, G. Papadakis, Th. Bartzanas. Cooling of Greenhouses. 1st National Congress in Floriculture, Volos, 27-29 May 1998 (in Greek).
13. G. Papadakis, C. Kittas, Th. Bartzanas. Renewable Energy Sources. Possibilities for implementation in Floriculture. 1st National Congress in Floriculture, Volos, 27-29 May 1998 (in Greek).
14. C. Kittas, G. Papadakis, P. Giaglaras, 1998. Heat and mass transfer processes in the greenhouse ecosystem. E-Proceedings of the International Conference on Agricultural Engineering AgEng98, Oslo, August 24-27, 1998.
15. C. Kittas, A. Baille, Th. Bartzanas, 1998. Climate Control of Medirannean Greenhouses: Practices and Perspectives. 1st National Conference of the Hellenic Society of Agricultural Engineers, Athens,11-13 December 1998, 195-208 (in Greek).
16. Th. Bartzanas, P. Giaglaras, C.Kittas, 1998. Types, Equipment. Energetic Evaluation and Potential Energy Saving in the Greenhouses of Magnesia Region(GR). Proceedings of the 1st National Conference of Hellenic Society of Agricultural Engineers, Athens 11- 13 December 1998, 109-120, (in Greek).
17. N. Katsoulas, Th. Bartzanas, C. Kittas, 1998. Experimental determination of overall heat loss coefficient in a plastic greenhouse. Proceedings of the 1st National Conference of Agriculture Engineers, Athens 1999, 185-194, (in Greek).
18. T. Boulard, S. Wang, R. Haxaire, C. Kittas , G. Papadakis, M. Mermier, 1999. "Air flows, temperature and humidity patterns in a greenhouse tunnel". *Acta Horticulturae*, 507, 53-60. (Proceedings of the 3rd International Workshop on "Models for plant growth and control of the shoot and root environments in greenhouses", Ramat Gan , Israel, February 21-26, 1999).
19. C. Kittas, A. Baille, N. Katsoulas, 1999. "Transpiration and canopy resistance of greenhouse soilless roses in Greece. Measurements and modeling". *Acta Horticulturae* 507, 61-68. (Proceedings of the 3rd International Workshop on "Models for plant growth and control of the shoot and root environments in greenhouses", Ramat Gan , Israel, February 21-26, 1999).
20. C. Kittas, P. Giaglaras, Th. Bartzanas, G. Gangas. "Heating Energy Saving in Greenhouse for Ornamental Plant Production in Magnesia Region (GR)". Proceedings of AgEnergy'99 Conference, Athens- Greece, 2-5 June 1999, Vol.2, 872-879.
21. C. Kittas, G. Papadakis, Th. Bartzanas, P. Giaglaras, 1999. "Renewable Energy Sources and Energy Saving in Mediterranean Greenhouses". Proceedings of AgEnergy'99 Conference, Athens- Greece, 2-5 June 1999, Vol.2, 919-926.
22. Kittas, C., A. Baille, Katsoulas, N., 1999. Estimation of crop transpiration under cover. Proceedings of the 4th International Conference of GCMWS: "Management of Water Sources in Sensitive Regions of Greece", Volos, Greece, 17- 19 June 1999, Volume 1: 170-176 (in Greek).

23. Kittas, C., Baille, A., Katsoulas, N., 2000. Influence of misting on the diurnal hysteresis of canopy transpiration rate and conductance in a rose greenhouse. *Acta Horticulturae*, 534, 155-161. (Proceedings of the international conference on Greenhouse Techniques towards the 3rd Millenium. September 5-8, 1999 Haifa, ISRAEL).
24. Katsoulas, N., Nanos, G., Kittas, C., 2001. CO₂ enrichment and photosynthesis in a greenhouse tomato crop. Proceedings of the 19th Scientific Conference of Greek Society of Horticultural Sciences, Iraklion Creta, Greece, 25- 27 October 1999, Volume 6: 255-258 (in Greek).
25. C.Kittas, A.Jaffrin, Th.Bartzanas,2000. Greenhouse Evaporative Cooling. Measurements and Data Analysis. *Acta Horticulturae* 534, 67-74 (Proceedings of the international conference on Greenhouse Techniques towards the 3rd Millenium. September 5-8, 1999 Haifa, ISRAEL).
26. Giaglaras P., Baille A., Kittas C., 1999. Rational Use of Energy Pot Plants Production in Systems. Proceedings of the 6th National Conference of the Solar Engineering Institute, Volume B': 1- 12, Volos- Greece,3-5 November 1999 (in Greek).
27. Kittas, C., Karamanis, M, Katsoulas, N., 1999. Study of variables determining air temperature in a forced ventilated plastic rose greenhouse. Proceedings of the 6th National Conference of Institute of Solar Engineering Institute, Volume B, 35-42. Volos-Greece, 3-5 November 1999 (in Greek).
28. C. Kittas, A. Baille, N. Katsoulas, 2001. Transpiration and energy balance of a greenhouse rose crop in Mediterranean summer conditions. *Acta Horticulturae* 559, Volume I, 395- 400 (Proceedings of the International Symposium on Protected Cultivation in Mild Winter Climates: Current Trends for Sustainable Technologies Cartagena - Almeria, Spain, 7-11 March 2000).
29. Ch. Lykas, P. Giaglaras, C. Kittas, 2001. Nutrient solution management in recirculating soilless culture of rose in mild winter climates. *Acta Horticulturae* 559, Volume II, 543-548 (Proceedings of the International Symposium on Protected Cultivation in Mild Winter Climates: Current Trends for Sustainable Technologies Cartagena - Almeria, Spain, 7-11 March 2000).
30. Katsoulas, N., Lykas, Ch., Giaglaras, P., Kittas, C. Management of nutrient solution in a closed hydroponic system with a rose crop in the region of Magnisia-Greece. 2nd National Conference in Floriculture: «Current trends and new technologies in floriculture of 2000». Volos-Greece, 24-26 May 2000 (in Greek).
31. Giaglaras P., Safouri Ch., Kittas C., Tsitsipis I. Natural control methods against insect pests in greenhouse: Insect proof nets and photoselective cover materials. 2nd National Conference in Floriculture: «Current trends and new technologies in floriculture of 2000». Volos-Greece, 24-26 May 2000 (in Greek).
32. Th. Bartzanas, H. Fatnassi, D. Feidaros, C. Kittas. Investigation of Greenhouse Natural Ventilation using numerical methods (CFD). Proceedings of the 2nd National Conference of the Hellenic Society of Agricultural Engineers, Volos- Greece, 3- 5 September 2000, 366-373, (in Greek).
33. P. Giaglaras, Th. Bartzanas, C. Kittas, 2000. Insects screens in greenhouses: System's analysis. Proceedings of the 2nd National Conference of the Hellenic Society of Agricultural Engineers, Volos- Greece, 3- 5 September 2000, 331-339 (in Greek).
34. C. Kittas, N. Katsoulas, Th. Bartzanas, P. Giaglaras, M. Karamanis, Ch. Lykas, 2000. Energetic evaluation of a greenhouse thermal screen. Proceedings of the 2nd National Conference of the Hellenic Society of Agricultural Engineers, Volos- Greece, 3- 5 September 2000, 221-228 (in Greek).
35. Kavouras, S., Katsoulas, N., Kittas, C., 2000. Transpiration and stomatal conductance of rose plants. Measurements using porometer. Proceedings of the 2nd National Conference of the Hellenic Society of Agricultural Engineers, Volos- Greece, 3- 5 September 2000, 398-405 (in Greek).
36. M. Karamanis, C. Kittas, 2000. Word wide net: a tool for reinforcing the education in agricultural engineering. Application in teaching of "Greenhouse climate management" course. Proceedings of the 2nd National Conference of the Hellenic Society of Agricultural Engineers, Volos- Greece, 3- 5 September 2000, 417- 424 (in Greek).
37. Th. Bartzanas, C.Kittas, 2000. Numerical simulation (CFD) of greenhouse heating. Proceedings of 1st Southeastern Europe Fluent Users Group Meeting 20 October 2000, Thessaloniki, S5: 48-53.
38. A. Koutra , J.A. Calzoni P. Giaglaras, G. Riva C. Kittas. Fuel Substitution in Greenhouse Heating by biomass - Targeted actions for Magnesia (Greece). XIV Memorial CIGR World Congress, Nobember 28- December 1, 2000, Tsukuda, Japan.

39. Katsoulas, N., Kittas, C., Baille, A, 2001. Estimating transpiration rate and canopy resistance of a rose crop in a fan-ventilated greenhouse. *Acta Horticulturae*, 548, 303-309 (Proceedings of the International Symposium on Growing Media and Hydroponics, August 31 – September 6 1999, Halkidiki, Macedonia, Greece).
40. Th. Bartzanas, T. Boulard and C.Kittas, 2002. Numerical Simulation of the Airflow and Temperature Patterns in a Greenhouse Equipped with Insect-Proof Screen in the Openings. *Acta Horticulturae* 578: 351- 358 (Proceedings of the International Symposium on Design and Environmental Control of Tropical and Subtropical Greenhouses, Taiwan, 15-18 April 2001).
41. C.Kittas and Th. Bartzanas, 2001. Prediction of temperature distribution in a large greenhouse equipped with evaporative cooling. International Symposium on Design and Environmental Control of Tropical and Subtropical Greenhouses, Taiwan, 15-18 April 2001.
42. Th. Bartzanas, C. Kittas, 2003. New methods in greenhouse microclimate research. Proceedings of the 20th National Conference of the Greek Society of Horticultural Sciences, Cyprus,29 October- 1 November 2001, 354-357, (in Greek).
43. C. Kittas, H. Labropoulos, N. Katsoulas, Th. Bartzanas, 2003. Influence of insect screens on greenhouse ventilation. Proceedings of the 20th National Conference of the Greek Society of Horticultural Sciences, Cyprus,29 October- 1 November 2001, 346- 349 (in Greek).
44. G. Dimokas, Ch. Lykas, P. Giaglaras, K. Kittas, 2003. Use of plant morphological characteristics for bending technique application in a rose crop. Proceedings of the 20th National Conference of the Greek Society of Horticultural Sciences, Cyprus,29 October- 1 November 2001, 298- 301 (in Greek).
45. Katsoulas, N., Kittas, C., 2003. Effect of leaf area index on greenhouse rose crop transpiration. Proceedings of the 20th Scientific Conference of National Conference of the Greek Society of Horticultural Sciences, Cyprus,29 October- 1 November 2001, 318-321 (in Greek).
46. Th. Bartzanas, C. Kittas. Improving greenhouse ventilation efficiency with computational fluid dynamics. 2nd Southeastern Europe Fluent Users Group Meeting, 31 October- 2 November 2001, Bucharest, Romania.
47. Vatsnidou A., Kostopoulou B., Giaglaras P., Tsitsipis I., Kittas C. Effect of an insect proof screen on insects population in a tomato greenhouse. 9th National Entomological Congress, Ioannina, 13-16 November 2001.
48. C. Kittas and N. Katsoulas A. Baille, 2003. Influence of Aluminized Thermal Screens on Greenhouse Microclimate and Night Transpiration, *Acta Horticulturae* 614, Volume 1, 387- 392 (Proceedings of the International Symposium on Product and process innovation for Protected cultivation in mild winter climate, March 5-8, 2002, Ragusa- Italy).
49. Th. Bartzanas and C. Kittas. Design optimization of heating and ventilation systems with Numerical Methods. Proceedings of the Proceedings of the 1st Conference of Hellenic Association of ICT in Agriculture, Food and Environment, Athens, 6-7 June, 2002, 243- 252.
50. S. Tsalapatas, P. Giaglaras, S. Kavouras, P. Karaiksou, C. Kittas. "GEM", an e-Community for the dissemination of information on Greenhouse Technology. Proceedings of the 1st Conference of Hellenic Association of ICT in Agriculture, Food and Environment, Athens, 6-7 June, 2002, 261- 266.
51. Th. Bartzanas, T. Boulard, C. Kittas. Analysis of greenhouse ventilation performance using computational fluid dynamic tools. E-Proceedings of the International Conference on Agricultural Engineering AgEng2002, Budapest, Hungary, 30 June – 4 July 2002.
52. C. Kittas, Th. Bartzanas, T. Boulard, 2002. Influence of the heating system on greenhouse microclimate during night time. E-Proceedings of the International Conference on Agricultural Engineering, AgEng2002, Budapest, Hungary, 30 June 30 - 4 July 2002.
53. C. Kittas, P. Giaglaras, A. Koutra, 2002. Heating of greenhouses using biomass in Magnesia (Greece). Proceedings of the 7th National Conference of the Institute of Solar Engineering, Patra- Greece, 6- 8 November 2002, Volume B, 169- 176(in Greek).
54. Th. Bartzanas, C. Kittas, 2002. Optimization of Greenhouse Heating using Numerical Methods. Proceedings of the 7th National Conference of the Institute of Solar Engineering, Patra- Greece, 6- 8 November 2002, Volume B, 243- 250 (in Greek).
55. Kittas, C., Katsoulas, N., 2002. Use of thermal screens for greenhouse energy saving. Influence

- on greenhouse microclimate. Proceedings of the 7th National Conference of the Institute of Solar Engineering, Patra- Greece, 6- 8 November 2002, Volume B, 251-258 (in Greek).
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