

Panagiotis V. Panagakis
Associate Professor

CURRICULUM VITAE

2019

Personal Information

Name	Panagiotis Panagakis
Father's Name	Vasilios
Mother's Name	Stavritsa
Birth Date	20 March 1963
Family Status	Married – Two children
Tel	210-5294024
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Studies

Undergraduate

Time Period	University	Degree
1980-1985	Agricultural University of Athens, Greece	Agronomist (major in Agricultural Engineering)

Graduate

Time Period	University	Degree
1986-1987	University of Florida ¹ , USA	Master of Engineering
1988-1993	Agricultural University of Athens, Greece	Ph. D in Agricultural Engineering

Research Experience

I have:

- Conducted non-funded research
- Submitted research proposals in the framework of numerous international and national calls
- Participated²:
 - As scientific coordinator in one (1) EU funded National project, namely No. 15
 - As researcher in twenty-six (26) other International and National projects concerning the following subjects:

¹ As a research assistant, during my graduate studies in Agricultural Engineering, I took the following courses: (1) Advanced Environmental Control of Agricultural Buildings, (2) Advanced Heat and Mass Transfer in Biological Systems, (3) Agricultural Decision Systems, (4) Applied Mathematics in Agricultural Engineering, (5) Biological and Agricultural Systems Analysis, (6) Elementary Differential Equations, (7) Numerical Analysis, (8) Special Topics (Agricultural Software Engineering), (9) Statistical Methods in Research I.

² Co-worked with numerous colleagues from Institutions around the world

Livestock Housing – Design of Agricultural Structures

1. Optimize production of animal housing in the Southern Region
2. Investigation and financial optimization of the young piglets thermal environment
3. Thermal microenvironment effects on early weaned piglets
4. Transient simulation of livestock facilities
5. Image analysis used for swine weighing – I
6. Image analysis used for swine weighing – II
7. Restructuring the livestock sector in mountainous Messinia
8. Sheep welfare as affected by floor surface moisture
9. PRISMA – Building physics infrastructure
10. Energy saving in livestock buildings
11. Demonstration of C₄ perennials (*Miscanthus*) as a basis material for the construction of building materials
12. Multi-faceted research in rabbits: a model to develop a healthy and safe production in respect with animal welfare
13. Organic husbandry of the Greek wild pig
14. Development of an automated innovative system for continuous live feed production in aquaculture hatchery units
15. Assessment techniques and technologies for reducing the environmental footprint of poultry facilities

Energy in Agriculture

16. Strategic R&D for better energy efficiency in the agricultural sector
17. Production of wax from polyethylene waste
18. AGREE: Agriculture and energy efficiency

Education

19. Development of a renewable energy education programme
20. Development of flexible and country specific distance learning packages
21. USAEE: University studies of Agricultural Engineering in Europe: a Thematic Network
22. POMSEBES: Policy oriented measures in support of the evolving Biosystems Engineering studies in USA – EU
23. ERABEE: Education and research in Biosystems or Agricultural and Biological Engineering in Europe; a Thematic Network
24. EUR-ACE Implementation
25. EUR-ACE Spread
26. TABE-Net: TransAtlantic Biosystems Engineering curriculum and mobility
27. Biosystems Engineering Digital Library and Introductory Textbook (ASABE)
28. INnovative educaTion foR sustaInable eNtrepreneurShip In Life sCIences INTRINSIC (ERASMUS+)

Publications

The Table below classifies all 121 publications [111 published, 7 not published and 3 University notes].

Publications		Total
<i>Published (I – VII)</i>		<i>111</i>
I	PhD Dissertation	1
	ME Thesis	1
II	Refereed Journals	30
III	Refereed International Conferences	23
IV	Refereed National Conferences	11
V	Chapter in Elsevier Book	1
VI	International Editions	18
VII	International Workshops	26
<i>Not-published (VIII – IX)</i>		<i>7</i>
VIII	National Conferences (invited speaker)	2
IX	Reports	5
<i>University Notes (X)</i>		<i>3</i>
TOTAL		121

Recognition

Citations

- 246 Scopus and 196 Web of Science citations
- The h index of Scopus is 7 and Web of Science is 7

International Journals

- Section Editor for CIGR Journal (*Section II: Structures and Environment*)
- Reviewer in:
 - Applied Engineering in Agriculture
 - Biosystems Engineering
 - Biotechnology and Bioengineering
 - CIGR Journal
 - Computers and Electronics in Agriculture
 - International Journal of Biometeorology
 - Journal of Thermal Biology
 - Science of the Total Environment
 - Solar Energy
 - TRANSACTIONS of the ASABE

Invitations - Membership

- Short-term scientific mission (COST Action 848) related to heat-stress (*i.e. tonic immobility test, open field test*) of rabbits (Istituto di Zootecnica, Universita di Milano, 2001).
- Leader of EurAgEng-SE15: '*Farm Building Structures and Environment*'.
- Member of ASABE PAFS-40/1 - *Animal Physiology and Welfare* and ASABE PAFS-40/2 - *Animal Housing Systems*.
- Member of CIGR Section II Board: Structures and Environment.
- Member of the *Animal Housing in Hot Climate Workgroup* (CIGR Section II). Coordinator (*up to 2009*) of the sub-group *Glossary and Basic Definitions*.
- Organizing Committee member and referee in:
 - *AgEng'08, AgEng'10, AgEng'12, AgEng'14 and AgEng'18*
 - *Agricultural Technologies in a Changing Climate* (Brisbane, Australia, 2009; SEAg)
 - *Emission from naturally ventilated buildings (Field measurement, reduction and assessment; CIGR - Section II, Quebec, Canada, 2010)*
 - *Engineering in Agriculture – Diverse Challenges Innovative Solutions* (Queensland, Australia, 2011; SEAg)
 - *7th Livestock Environment Symposium* (Benjig, China, 2005; ASABE)
 - 3rd, 5th, 6th and 7th International Conferences on *Precision Livestock Farming* organized during 2007, 2011, 2013 and 2015 in Skiathos, Prague, Leuven and Milan respectively (EC-PLF; European Committee for Precision Livestock Farming)
 - *International Higher Education 2010 and International Higher Education 2012* (Perth, Australia), *International Higher Education 2011* (Shanghai, China) and *International Conference on Educational Technologies 2013* (Malaysia)

Teaching

Graduate Courses

	Course	Specialization[#]	Semester
1	Environmental Friendly Design of Livestock Facilities ^E	Integrated design and materials for sustainable agricultural production	1 st
2	Natural Ventilation and RES in Livestock Housing ^E		2 nd

E: Elective; # Run until 2015

Undergraduate Courses

α/α	Course	Department	Semester
1	AutoCAD ^C	Agricultural Engineering	3 rd
2	Livestock Housing ^C	Agricultural Engineering	7 th
3	Livestock Housing ^C	Animal Science	8 th
4	Waste Management ^E	Agricultural Engineering	8 th
5	Environmental Control for Agricultural Buildings ^C	Agricultural Engineering	8 th

C: Compulsory, E: Elective

Educational material pertinent to some of the above classes has been uploaded to the Open eClass site (<http://openecclass.aua.gr/main/portfolio.php>) of the University and more specifically presentation and exercises concerning the following classes: (1) *AutoCAD*, (2) *Livestock Housing*, (3) *Waste Management* and (4) *Environmental Control for Agricultural Buildings*.

Graduate (Ph. D Dissertations and Master's Theses) and Undergraduate Theses

I have been the supervisor of one (1) Doctorate Dissertation successfully completed and participated as a member in the supervising committees for another (1) Doctorate Dissertation, five (5) M.Sc. Theses and more than thirtyfive (35) undergraduate Theses.

They all tackled issues such as:

- (a) Environmental control and welfare of animals
- (b) Evaluation of animal well-being in relation to husbandry conditions
- (c) Energy efficiency of livestock units

Subject Experience

- Simulation of thermal microenvironment within livestock buildings
- Experimental design and analysis related to animal housing
- Use of measuring systems and sensors
- Evaluation of climatic parameters and physiological indices as related to livestock heat stress
- Use of CCTV systems for continuous monitoring of animal behavior

Administrative Work

- Member of the University Senate (2006-2007)
- Member of the Department Graduate Committee (2007-2009, 2015-2018)
- Member of the Department Internal Evaluation Committee (2013-2018)
- Member of the Department assembly (2003–today)
- Member of the ECTS committee (2003-2016)
- Students' placement coordinator (2011-2015)

Membership in Societies

- Greek Society of Agricultural Engineers (HellAgEng)
- European Society of Agricultural Engineers (EurAgEng)
- American Society of Agricultural and Biological Engineers (ASABE)
- Commission Internationale du Génie Rural (CIGR)
- Canadian Society for Bioengineering (CSBE)

Published*PhD Dissertation*

- I1. Panagakis, P. 1993. *Thermal environment and nutritional aspect effects on the growth performance of early weaned piglets*. Agricultural University of Athens (in Greek).

ME Thesis

- I2. Panagakis, P.B. 1987. *Comparison of ventilation systems and protein sources on the performance of young pigs*. University of Florida, Gainesville, Florida.

Refereed Journals

- II1. Panagakis, P.B., R.A. Bucklin, W.R. Walker, P.H. Jones and G.E. Combs. 1989. *Comparison of the effects of ventilation systems on the performance of young pigs reared under summer conditions*. Applied Engineering in Agriculture 5(1): 109-112.
- II2. Panagakis, P.* and S. Kyritsis. 1991. *Effect of air temperature, relative humidity and velocity on early-weaned piglets: a review*. Farm Building Progress 105: 16-19.
- II3. Panagakis, P.* S. Kyritsis, D. Tambouratzis and G. Papadopoulos. 1991. *Evaluation of a pig annex ventilation system operating under summer conditions*. Applied Engineering in Agriculture 7(3): 353-357.
- II4. Panagakis, P.*, S. Kyritsis, G. Papadopoulos and D. Tambouratzis. 1992. *Spray cooling of early weaned piglets: A first approach*. Applied Engineering in Agriculture 8(1): 106-110.
- II5. Axaopoulos, P., P. Panagakis* and S. Kyritsis. 1992. *Computer simulation assessment of the thermal microenvironment of growing pigs under summer conditions*. TRANSACTIONS of the ASAE 35(3): 1005-1009.
- II6. Panagakis, P.B., R.A. Bucklin, W.R. Walker and G.E. Combs. 1993. *Comparison of heating systems and protein sources on the performance of early-weaned pigs reared under mild winter conditions*. Applied Engineering in Agriculture 9(1): 131-135.
- II7. Axaopoulos, P., P. Panagakis*, G. Pitsilis and S. Kyritsis. 1994. *AGRISIM: A PC user friendly program for growing-finishing swine buildings*. Applied Engineering in Agriculture 10(5): 735-738.
- II8. Panagakis, P.*, P. Axaopoulos and S. Kyritsis. 1996. *Misting control strategy for growing-swine under summer conditions*. Applied Engineering in Agriculture 12(6): 747-751.
- II9. Axaopoulos, P., P. Panagakis* and S. Kyritsis. 1998. *Experimental comparison of a solar assisted heat pump vs. a conventional thermosyphon solar system*. International Journal of Energy Research 22 (13): 1107-1120.
- II10. Axaopoulos, P., P. Panagakis*, A. Tsavdaris and D. Georgakakis. 2001. *Simulation and experimental performance of a solar-heated anaerobic digester*. Solar Energy 70(2): 155-164.
- II11. Axaopoulos, P., G. Pitsilis and P. Panagakis*. 2002. *Multimedia education program for an active solar hot water system*. International Journal of Solar Energy 22(2): 83 - 92.
- II12. Axaopoulos, P. and P. Panagakis*. 2003. *Energy and economic analysis of biogas heated livestock buildings*. Biomass and Bioenergy 24(3): 239-248.
- II13. Panagakis, P.*, S. Deligeorgis, G. Zervas and G. Laliotis. 2004. *Effects of three different floor types on the posture behaviour of semi-intensively reared Boutsiko breed dairy ewes*. Small Ruminant Research 53(1-2): 111-115.
- II14. Panagakis, P.* and P. Axaopoulos. 2004. *Comparison of two modeling methods for the prediction of degree-hours and heat-stress likelihood in a swine building*. TRANSACTIONS of the ASAE 47(2): 585-590.

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- II15. Panagakis, P.* and P. Axaopoulos. 2006. *Simulation comparison of evaporative pads and fogging on air temperatures inside a growing swine building*. TRANSACTIONS of the ASABE 49(1): 209-215.
- II16. Panagakis, P.* and P. Axaopoulos. 2008. *Comparing fogging strategies for pig rearing using simulations to determine apparent heat-stress indices*. Biosystems Engineering 99(1): 112-118.
- II17. Panagakis, P.*, V. Blanes-Vidal, T. Banhazi, J.C. Barbosa, E. Maltz, V. Da Cruz and D. Berckmans. 2009. *Glossary of terms on animal housing: interconnecting engineering, physical and physiological definitions*. CIGR Journal, XI.
- II18. Briassoulis, D., P. Panagakis, M. Chionidis, D. Tzenos, A. Lalos,, Ch. Tsinos, K. Berberidis and A. Jacobsen, 2010. *An experimental helical-tubular photobioreactor for continuous production of Nannochloropsis sp.* Bioresource Technology 101(17): 6768-6777.
- II19. Panagakis, P.* and E. Chronopoulou. 2010. *Preliminary evaluation of the apparent short-term heat-stress of dairy ewes reared under hot summer conditions*. Applied Engineering in Agriculture 26(6): 1035-1042.
- II20. Panagakis, P.* 2011. *Black-globe temperature effect on short-term heat stress of dairy ewes housed under hot climate*. Small Ruminant Research 100 (2-3): 96-99.
- II21. Axaopoulos, P., P. Panagakis* and I. Axaopoulos. 2014. *Effect of wall orientation on the optimum insulation thickness of a growing-finishing piggery building*. Energy and Buildings 84: 403-411.
- II22. Papanastasiou, D.K., T. Bartzanas, P. Panagakis and C. Kittas. 2014. *Assessment of a typical Greek sheep barn based on potential heat-stress of dairy ewes*. Applied Engineering in Agriculture 30(6): 953-959.
- II.23 Panagakis P.* 2016. *Potential seasonal heat-stress of sheep: assessment of four husbandry areas in Greece*. Accepted in: Applied Engineering in Agriculture.
- II24. Skoufos, I., I. Giannenas, D. Tontis, T. Bartzanas, C. Kittas, P. Panagakis and A. Tzora. 2016. *Effects of oregano (Origanum vulgare) essential oil and attapulgite (Magnesium Aluminium Phyllosilicate) on growth performance, and intestinal microbiota and morphometry in broiler chickens*. South African Journal of Animal Science 46(1): 77-88.
- II25. Papanastasiou, D.K., T. Bartzanas, P. Panagakis, G. Zhang and C. Kittas. 2016. *Study of heat-stress levels in naturally ventilated sheep barns during heat waves: development and assessment of regression models*. International Journal of Biometeorology 60: 1637–1644.
- II26. Panagakis P.* 2016. *Potential summer heat-stress of sheep at Greek husbandry areas of different landscape*. CIGR Journal 18(3): 44-50.
- II27. Axaopoulos, P., P. Panagakis*, I. Axaopoulos. 2017. *Optimization of external walls and roof insulation thickness of a growing-finishing piggery building*. TRANSACTIONS of the ASABE 60(2): 489-495.
- II28. Papanastasiou, D.K., P. Panagakis, V. Anestis, T. Bartzanas, I. Skoufos, A. Tzora and C. Kittas. 2018. *Environmental conditions, potential heat-stress state and their relations in a sheep barn under hot climate*. CIGR Journal Special issue - Animal Housing in Hot Climate: 87-100.
- II29. Axaopoulos, P., P. Panagakis* and I. Axaopoulos. 2018. *Optimization of ventilation rates for growing-finishing piggeries*. CIGR Journal 20(3): 71-77.
- II30. Manolakos, D., P. Panagakis, T. Bartzanas and K. Bouzianas. 2019. *Use of heat pumps in HVAC systems for precise environment control in broiler houses: system's modeling and calculation of the basic design parameters*. Computers and Electronics in Agriculture 163: 104876.

Refereed International Conferences

- III1. Panagakis, P.* and S. Kyritsis. 1993. *Reduced temperature effects on the performance of early-weaned pigs*. Paper: 93-4576. In: ASAE International Winter Meeting, Chicago, IL.
- III2. Axaopoulos, P., P. Panagakis*, G. Pitsilis and S. Kyritsis. 1994. *Design and optimization of a growing-finishing swine building using transient simulation*. Paper: 94C-042. In: AgEng'94 International Conference on Agricultural Engineering, Milan, Italy.
- III3. Panagakis, P.* , P. Axaopoulos and S. Kyritsis. 1996. *Stochastic assessment of a misting control strategy for growing-swine under summer conditions*. Paper: 96B-080. In: AgEng'96 International Conference on Agricultural Engineering, Madrid, Spain.
- III4. Panagakis, P.* , M. Soundra-Nayagam, O. Benchikh, L. Freris and S. Kyritsis. 1996. *Development of a renewable energy education programme*. In: Fifth International Symposium on Renewable Energy Education, Oldenburg, Germany.
- III5. Panagakis, P.* , D. Briassoulis, E. Dimas, K. Berberidis and P. Karaivazoglou. 2000. *Early-weaned piglets weight estimation using image analysis*. Paper: 00-AE-019. In: AgEng2000, Agricultural Engineering into the Third Millennium, Warwick, UK.
- III6. Panagakis, P.* and P. Axaopoulos. 2004. *Prediction of cooling degree-hours and heat-stress likelihood using steady-state and transient method in a swine building*. Paper: FB04-616. In: New Trends in Farm Buildings, International Symposium of the CIGR 2nd Technical Section, Evora, Portugal.
- III7. Panagakis, P.* and P. Axaopoulos. 2006. *Simulation comparison of fogging strategies based on growing swine apparent heat-stress indices*. Paper: 440119580405. In: AgEng'06 Agricultural Engineering for a Better World, Bonn, Germany.
- III8. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2006. *University studies of Agricultural Engineering in Europe: in a crucial transition from Agricultural to Biosystems Engineering*. Paper: 440119580903. In: AgEng'06 Agricultural Engineering for a Better World, Bonn, Germany.
- III9. Martino, P.A., C. Lazzaroni, F.M.G. Luzi, P. Panagakis and M. Verga. 2006. *Evaluation of the microbial environment of rabbit cages with and without enrichment strategies*. In: EAAP 2006, Session 5: Interaction between management, animal and farmer health, Antalya, Turkey.
- III10. Briassoulis, D., P. Panagakis, E. Nikopoulos and F. Ayuga. 2008. *The emerging evolution from Agricultural Engineering to Biosystems Engineering studies in Europe*. Paper: 868. In: Inted²⁰⁰⁸, International Technology, Education and Development Conference, Valencia, Spain.
- III11. Panagakis, P.* and S. Deligeorgis. 2008. *Preliminary evaluation of the short term thermal comfort of dairy ewes reared under Greek summer conditions*. Paper: OP-705. In: AgEng'08, Agricultural and Biosystems Engineering for a Sustainable World, Crete, Greece.
- III12. Panagakis, P.* , D. Briassoulis, E. Nikopoulos, J.P. Douzals, G. Scarascia-Mugnozza, P. Febo, A. Comparetti, J. Fehrmann, F. Ayuga, S. Mostaghimi, M.L. Wolfe, G. Riskowski, K.C. Ting and R. Kanwar. 2008. *Policy oriented measures in support of the evolving Biosystems Engineering studies in USA – EU*. Paper: OP-1885. In: AgEng'08, Agricultural and Biosystems Engineering for a Sustainable World, Crete, Greece.
- III13. Panagakis, P.* , V. Blanes-Vidal, J.C. Barbosa, T. Banhazi, V.F. Da Cruz, E. Maltz and D. Berckmans. 2008. *Glossary and basic definitions for animal housing in hot climates*. Paper: PAP0205. In: CIGR - International Conference of Agricultural Engineering, Iguassu Falls City, Brazil.

- III14. Panagakis, P.* and E. Chronopoulou. 2009. *Preliminary evaluation of the apparent short term heat-stress of dairy ewes reared under hot summer conditions*. Paper: 095969. In: ASABE Annual International Meeting, Reno, Nevada, USA.
- III15. Briassoulis, D., P. Panagakis*, K. Navickas. 2010. *Structural developments towards the Biosystems Engineering programs of studies in Europe*. REF: 444. In: AgEng'10, Towards Environmental Technologies, Clermont-Ferrand, France.
- III16. Aguado, P., F. Ayuga, D. Briassoulis, P. Panagakis, P. Febo, A. Comparetti, G. Scarascia-Mugnozza, C. O' Donell, K. Navickas and J. Fehrmann. 2011. *The transition from Agricultural to Biosystems Engineering University studies in Europe*. In: The 9th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2011, Orlando, Florida, USA.
- III17. Wolfe, M.L., P. Panagakis, T. Wynn Thompson, F. Gentile, G. Danao, A. Ramirez, C. O'Donnell and C. Whysong. 2012. *Introduction to Biosystems Engineering in the era of the bio-based economy: teaching resources development*. Paper: 121337900. In: ASABE Annual International Meeting, Dallas, Texas, USA.
- III18. Papanastasiou, D.K., T. Bartzanas, P. Panagakis and C. Kittas. 2012. *Preliminary findings on seasonal heat-stress of sheep*. Paper: ILES12-0214. In: The 9th International Livestock Environment Symposium (ILES IX), ASABE, Valencia, Spain.
- III19. Papanastasiou, D.K., G. Zhang, T. Bartzanas, P. Panagakis, T. Norton and C. Kittas. 2013. *Development of models to assess potential sheep heat-stress during heat waves*. In: 6th European Conference on Precision Livestock Farming (EC-PLF 2013), Leuven, Belgium, pp. 391-396.
- III20. Balafoutis, A.T., F. Baptista, D. Briassoulis, L.L. Silva, P. Panagakis and S.J.R Marques. 2013. *Energy efficiency enhancement and greenhouse gas emissions reduction from traditional to organic vineyard cultivations in Greece and Portugal*. In: The First International Symposium on Agricultural Engineering (ISAE—2013), Belgrade, Serbia, pp. VII-27 – VII-36.
- III21. Balafoutis, A., F. Baptista, D. Briassoulis, L.L. Silva, P. Panagakis and D. Murcho. 2014. *Comparative studies on energy efficiency and GHG emissions between traditional and organic olive groves in Greece and Portugal*. C0344, In: AgEng'14, Engineering for improving resource efficiency, Zurich, Switzerland.
- III22. Bartzanas, T., D. K. Papanastasiou, I. Skoufos, A. Tzora, D. Fidaros, C. Baxevanou, P. Panagakis and C. Kittas. 2015. In: 7th European Conference on Precision Livestock Farming (EC-PLF 2015), Milan, Italy, pp. 811-819.
- III23. Panagakis P. and P. Axaopoulos. 2019. *Comparison of heating and cooling loads in a controlled environment growing-finishing piggery under different climatic conditions*. In: Technologies and Materials for Renewable Energy, Environment and Sustainability: TMREES19Gr, ISBN: 978-0-7354-1937-7, Athens, Greece.

Refereed National Conferences

- IV1. Axaopoulos, P., P. Panagakis and S. Kyritsis. 1996. *Experimental performance of a solar assisted heat-pump and a solar heat exchanger*. 5th National Conference on RES, Vol. A, Athens, p. 385-392 (in Greek).
- IV2. Panagakis, P.* , K. Berberidis, D. Briassoulis, P. Karaivazoglou and E. Dimas. 2000. *Estimation of early weaned piglets weight using image analysis*. 2nd National Conference of HellAgEng, Volos, p. 449-456 (in Greek).
- IV3. Panagakis, P.* , S. Deligeorgis, G. Zervas, G. Laliotis, G. Zabeli, C. Koutsotolis and A. Mantzios. 2002. *Effect of floor type on the soil surface humidity and posture behaviour of dairy ewes*. 18th National Conference of Hellenic Zootechnical Society, Ioannina (in Greek).

- IV4. Briassoulis, D., P. Panagakis and M. Chionidis. 2008. *Design of a helical-tubular photobioreactor for continuous production of Nannochloropsis sp.* 4th National Conference of the Hellenic Phycology Society, Volos, Greece, pp. 54. (in Greek).
- IV5. Panagakis, P.* 2011. *Black-globe temperature effect on short-term heat stress of dairy ewes.* Paper 5.5. 7th National Conference of HellAgEng, Athens, Greece. (in Greek).
- IV6. Papanastasiou, D.K., T. Bartzanas, P. Panagakis and C. Kittas. 2013. *Seasonal variation of potential sheep heat-stress conditions inside a naturally ventilated barn.* 8th National Conference of HellAgEng, Volos, Greece, pp. 451-455.
- IV7. Papanastasiou, D.K., G. Zhang, T. Bartzanas, P. Panagakis and C. Kittas. 2013. *Development of long time series of climate conditions inside livestock buildings – an application to study potential sheep heat-stress under hot weather.* 8th National Conference of HellAgEng, Volos, Greece, pp. 382-385.
- IV8. Balafoutis, A., D. Briassoulis, P. Panagakis and G. Papadakis. 2013. *Energy efficiency enhancement and greenhouse gas emissions reduction from traditional to organic olive grove and vineyard cultivations.* 8th National Conference of HellAgEng, Volos, Greece, pp. 316-320.
- IV9. Papanastasiou, D.K., I. Skoufos, T. Bartzanas, M. Markousi, G. Mpaltogiannis, K. Michas, P. Panagakis, A. Tzora and C. Kittas. 2015. *Ammonia and particulate matter levels in broilers houses.* 9th National Conference of HellAgEng, Thessaloniki, Greece, pp. 316-320. (in Greek).
- IV10. Papanastasiou, D.K., I. Skoufos, T. Bartzanas, G. Mpaltogiannis, K. Michas, P. Panagakis, A. Tzora and C. Kittas. 2015. *Time variation of air pollutants in broiler facilities.* 13th Pan-Hellenic Veterinary Conference, Athens. (in Greek).
- IV11. Tzanidakis, Chr., P. Simitzis, K. Arvanitis and P. Panagakis. 2019. *Precision livestock farming (PLF) techniques in pig husbandry.* 11th National Conference of HellAgEng, Volos, Greece.

Chapter in Elsevier Book

- V1. Bucklin, R.A., I. A. Nääs and P.B. Panagakis. 1992. *Energy Use in Animal Production.* Chapter: 17. In: (Ed.) R. C. Fluck. *Energy in World Agriculture, Vol. 6: Energy in Farm Production*, ISBN 0-444-88681-8. Elsevier, Amsterdam, The Netherlands, pp. 257-266.

International Editions

- VII. Briassoulis, D. and P. Panagakis. 2003. *Current Structure of Agricultural Engineering Studies in Europe.* Proceedings of the 1st USAEE Workshop, Madrid, Spain, ISBN 960-92379-0-8.
- VI2. Briassoulis, D. and P. Panagakis. 2003. *Research Activities in European University Institutes of Agricultural Engineering.* Proceedings of the 2nd USAEE Workshop, Palermo, Italy, ISBN 960-92379-1-6.
- VI3. Briassoulis, D. and P. Panagakis. 2004. *A Review on the ECTS System.* Proceedings of the 3rd USAEE Workshop, Dijon, France, ISBN 960-92379-2-4.
- VI4. Briassoulis, D. and P. Panagakis. 2004. *Agricultural Sciences Part of Core Curricula in Agricultural Engineering University Studies.* Proceedings of the 4th USAEE Workshop, Leuven, Belgium, ISBN 960-92379-3-2.
- VI5. Briassoulis, D. and P. Panagakis. 2005. *Establishment of an Accreditation System in Agricultural Engineering University studies in Europe.* Proceedings of the 5th USAEE Workshop, Dresden, Germany, ISBN 960-92379-4-0.
- VI6. Briassoulis, D. and P. Panagakis. 2005. *Agricultural Engineering Programmes Meeting the FEANI and EurAgEng Criteria.* Proceedings of the 6th USAEE Workshop, Budapest, Hungary, ISBN 960-92379-5-9.
- VI7. Nääs, I.A., P. Zappavigna, V. Fitas Cruz and P. Panagakis. 2006. *Animal Housing in Hot Climates: A multidisciplinary view.* CIGR - Section II, Horsens, Denmark, ISBN 87-88976-94-7.

- VI8. Briassoulis, D. and P. Panagakis. 2006. *Restructuring Agricultural/Biosystems Engineering Studies and Employability in Europe*. Proceedings of the 7th USAEE Workshop Vilnius, Lithuania, ISBN 960-89313-0-4.
- VI9. Briassoulis, D. and P. Panagakis. 2006. *Tools for Quality Assurance and Assessment of Agricultural Engineering Programmes, TUNING Lines & Disappearing Rare Knowledge*. Proceedings of the 8th USAEE Workshop, Bonn, Germany, ISBN 960-89313-5-5.
- VI10. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2007. *Policy oriented measures in support of the evolving Biosystems Engineering studies in USA–EU*. Proceedings of the 1st POMSEBES Workshop, Minneapolis, USA, ISBN 978-960-89313-8-1.
- VI11. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2008. *Develop policy measures to enhance the quality and the linkage of education and research in Biosystems Engineering, promote bilateral research cooperation and establish common recognition procedures for the EU and the US relevant programs of studies*. Proceedings of the 2nd POMSEBES Workshop, Crete, Greece, ISBN 978-960-6806-05-6.
- VI12. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2008. *Definition of the Emerging Biosystems Engineering discipline in Europe*. Proceedings of the 1st ERABEE Workshop, Madrid, Spain, ISBN 978-960-6806-04-9.
- VI13. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2008. *Update and Expand the Scope of Biosystems Engineering Programs of Studies Placing Emphasis on the Emerging Areas of Bio-fuels, Biomaterials and Quality of Products*. Proceedings of the 2nd ERABEE Workshop, Dublin, Ireland, ISBN 978-960-6806-07-0.
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