

# CURRICULUM VITAE

Panagiotis Panagakis  
Associate Professor

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## Personal Information

First Name	Panagiotis
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Date of birth	20 March 1963
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## Studies

YEARS	UNIVERSITY	DEGREE
1980-1985	Agricultural University of Athens	BSc (specialization in Agricultural Engineering)
1986-1987	University of Florida	Master of Engineering
1988-1993	Agricultural University of Athens	PhD

## Publications

PAPERS		TOTAL
Peer reviewed		
I	Dissertations	
	<i>MSc</i>	1
II	<i>PhD</i>	1
	International Journals	32
III	International Conferences	24
IV	National Conferences	11
V	Chapters in International Editions	2
Non-peer reviewed		
VI	International Editions	18
VII	International Workshops	26
VIII	University Notes <i>(revised)</i>	2
<b>ΣΥΝΟΛΟ</b>		<b>117</b>

## Research Experience

Participation in 28 projects spanning from *Livestock Housing* to *Design of Farm Structures* and from *Energy in Agriculture* to *Education in Agricultural Engineering* related issues.

## Recognition

- Associate Editor (Section II: Structures and Environment) of CIGR Journal: Agricultural Engineering International (2010–2020).
- Reviewer for:
  - 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
- The Institute of Animal Science at the University of Milan invited me for *short-term scientific mission* related to rabbit heat stress (COST Action 848, 2001)
- EurAgEng coordinator for workgroup SE15: '*Farm Building Structures and Environment*'.
- Member of the following workgroups:
  - ASABE-PAFS-40/1 - Animal Physiology and Welfare; Animal Housing Systems*
  - CIGR - Section II: Structures and Environment - Animal Housing in Hot Climate; Education in PLF*
- CIGR coordinator for subgroup *Glossary and Basic Definitions within working group Section II: Animal Housing in Hot Climate*.
- Chapter Editor of *Plant, Animal and Facility Systems* referring to:
  - (1) *Plant Production in Controlled Environments*  
[https://doi.org/10.21061/IntroBiosystemsEngineering/Plant\\_Controlled\\_Environment](https://doi.org/10.21061/IntroBiosystemsEngineering/Plant_Controlled_Environment)  
 and
  - (2) *Building Design for Energy Efficient Livestock Housing*  
[https://doi.org/10.21061/IntroBiosystemsEngineering/Livestock\\_Housing\\_Energy](https://doi.org/10.21061/IntroBiosystemsEngineering/Livestock_Housing_Energy)

The Chapter is included in *Introduction to Biosystems Engineering*, (Eds.) Holden, Wolfe, Ogejo and Cummins (2021), ASABE, St Joseph, MI and Virginia Tech Publishing, Blacksburg, VA, USA.

## Teaching

### Graduate Courses

A/A	COURSE	Π.Μ.Σ.	SEMESTER
1	DESIGN FOR SAFETY (HASP)		1 <sup>ST</sup>
2	ENVIRONMENTALLY FRIENDLY DESIGN OF LIVESTOCK HOUSING UNITS		1 <sup>ST</sup>
3	NATURAL VENTILATION AND RES IN LIVESTOCK HOUSING		2 <sup>ND</sup>
4	INDOOR ENVIRONMENTAL CONTROL FOR ANIMAL FACILITIES	DIGITAL TECHNOLOGIES AND SMART INFRASTRUCTURE IN AGRICULTURE	1 <sup>ST</sup>

### Undergraduate Courses

A/A	COURSE	SEMESTER
1	AUTOCAD	3 <sup>RD</sup>
2	LIVESTOCK HOUSING	7 <sup>TH</sup> , 8 <sup>TH</sup>
3	ENVIRONMENTAL CONTROL FOR ANIMALS	8 <sup>TH</sup>
4	WASTE MANAGEMENT	8 <sup>TH</sup>

### Graduate and Undergraduate Theses

They refer to:

- (a) Environmental control for productive animals and thermal welfare under various climatic conditions
- (b) Energy efficient design of livestock facilities

### **Subject Expertise**

- Simulation of farm animals' thermal microenvironment
- Experimental design in livestock units
- Collection and processing of data
- Behavioural study of farm animals as related to their micro-environment

## Papers

### PEER REVIEWED

#### Dissertations

- I1. Panagakis, P. B. 1987. *Comparison of ventilation systems and protein sources on the performance of young pigs*. University of Florida, Gainesville, Florida, Master of Engineering Thesis.
- I2. Παναγάκης, Π. 1993. *Early weaned pigs' production under various thermal conditions combined to nutrition* (in Greek). Agricultural University of Athens, PhD Thesis.

#### International 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. <https://doi:10.13031/2013.26487>.
- 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. <https://doi:10.13031/2013.26234>.
- 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. <https://doi:10.13031/2013.26040>.
- 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. <https://doi:10.13031/2013.28694>.
- 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. <https://doi:10.13031/2013.25975>.
- 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. <https://doi:10.13031/2013.25907>.
- 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. <https://doi:10.13031/2013.25708>.
- 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. [https://doi.org/10.1002/\(SICI\)1099-114X\(19981025\)22:13<1107::AID-ER426>3.0.CO;2-E](https://doi.org/10.1002/(SICI)1099-114X(19981025)22:13<1107::AID-ER426>3.0.CO;2-E).
- 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. [https://doi.org/10.1016/S0038-092X\(00\)00130-4](https://doi.org/10.1016/S0038-092X(00)00130-4).
- 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. <https://doi.org/10.1080/01425910214358>.

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- II12. Axaopoulos, P. and P. Panagakis\*. 2003. *Energy and economic analysis of biogas heated livestock buildings*. Biomass and Bioenergy 24(3): 239-248. DOI:10.1016/S0961-9534(02)00134-4.  
[https://doi.org/10.1016/S0961-9534\(02\)00134-4.](https://doi.org/10.1016/S0961-9534(02)00134-4)
- 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. <https://doi.org/10.1016/j.smallrumres.2003.08.021>.
- 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. <https://doi:10.13031/2013.16039>.
- 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. <https://doi:10.13031/2013.20240>.
- 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. <https://doi:10.1016/j.biosystemseng.2007.10.007>.
- 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*. Agricultural Engineering International: 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.  
<https://doi.org/10.1016/j.biortech.2010.03.103>.
- 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. <https://doi.org/10.13031/2013.35911>.
- 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.  
<https://doi.org/10.1016/j.smallrumres.2011.06.006>.
- 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.  
<https://doi.org/10.1016/j.enbuild.2014.07.091>.
- 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. <https://doi.org/10.13031/aea.30.10256>.
- II23. Panagakis P.\* 2016. *Potential seasonal heat-stress of sheep: assessment of four husbandry areas in Greece*. Applied Engineering in Agriculture 32(1): 125-129.  
<https://doi.org/10.13031/aea.32.11451>.
- 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. <https://doi.org/10.4314/sajas.v46i1.10>.
- 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.  
<https://doi.org/10.1007/s00484-016-1153-8>.
- II26. Panagakis P.\* 2016. *Potential summer heat-stress of sheep at Greek husbandry areas of different landscape*. Agricultural Engineering International: CIGR Journal 18(3): 44-50.

- II27. Axaopoulos, P., P. Panagakis\* and 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. <https://doi:10.13031/trans.12009>.
- 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*. Agricultural Engineering International: 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*. Agricultural Engineering International: 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. <https://doi.org/10.1016/j.compag.2019.104876>.
- II31. Tzanidakis, Ch., P. Simitzis, K. Arvanitis and P. Panagakis. 2021. *An overview of the current trends in precision pig farming technologies*. Livestock Science 249: 104530. <https://doi.org/10.1016/j.livsci.2021.104530>.
- II32. Panagakis\*, P., D. Manolakos and P. Axaopoulos. 2021. *Optimal financial insulation thickness of a broiler house*. Agricultural Engineering International: CIGR Journal 23(2): 99-110.

#### *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 2<sup>nd</sup> 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: Inted 2008, 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. Fehrman, 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. Fehrman. 2011. *The transition from Agricultural to Biosystems Engineering University studies in Europe*. In: The 9<sup>th</sup> 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 9<sup>th</sup> 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: 6<sup>th</sup> 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. *Environmental friendly poultry production using novel precision livestock techniques*. In: 7<sup>th</sup> 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. <https://doi:10.1063/1.5138515>.
- III24. Norton, T., T. Brown-Brandl, P. Panagakis, V. Cruz, H. Diefes-Dux and S. Calvet. 2022. *Educating for Precision Livestock Farming: The knowledge, skills and abilities to meet future industry and societal needs*. In: 10<sup>th</sup> European Conference on Precision Livestock Farming (EC-PLF 2022), Vienna, Austria, *in press*.

#### National Conferences

- IV1. Αξαόπουλος, Π., Π. Παναγάκης και Σ. Κυρίτσης. 1996. *Πειραματικές επιδόσεις ηλιοβοήθουμενης αντλίας θερμότητας και ηλιακού θερμοσιφωνικού συστήματος*. 5<sup>o</sup> Εθνικό Συνέδριο για τις Ήπιες Μορφές Ενέργειας, Τόμος Α, Αθήνα, σελ: 385-392.
- IV2. Παναγάκης, Π.\*, K. Μπερμπερίδης, Δ. Μπριασούλης, Π. Καραϊβάζογλου και E. Δήμας. 2000. *Εκτίμηση βάρους νεαρών χοιριδίων με χρήση τεχνικών επεξεργασίας εικόνας*. 2<sup>o</sup> Εθνικό Συνέδριο Γεωργικής Μηχανικής, Βόλος, σελ: 449-456.
- IV3. Παναγάκης, Π.\*, Σ. Δεληγεώργης, Γ. Ζέρβας, Γ. Λαλιώτης, Γ. Ζαμπέλη, K. Κουτσοτόλης και A. Μάντζιος. 2002. *Η επίδραση του τύπου του δαπέδου στην επιφανειακή εδαφική υγρασία και στη συμπεριφορά προβατίνων*. 18<sup>o</sup> Ετήσιο Επιστημονικό Συνέδριο της Ελληνικής Ζωοτεχνικής Εταιρείας (EZE), Ιωάννινα.
- IV4. Μπριασούλης, Δ., Π. Παναγάκης και M. Χιονίδης. 2008. *Σχεδιασμός κλειστού ελικοειδούς φωτο-αντιδραστήρα για συνεχή παραγωγή Nannochloropsis sp.* 4<sup>o</sup> Πανελλήνιο Συνέδριο Ελληνικής Φυκολογικής Εταιρείας, Σύγχρονες Τάσεις της Έρευνας στην Οικολογία, Βόλος, σελ: 54.
- IV5. Παναγάκης, Π.\* 2011. *Επίδραση των θερμοκρασιών μαύρης σφαίρας στη βραχυπρόθεσμη θερμική καταπόνηση προβατίνων*. Άρθρο 5.5. 7<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Αθήνα.
- IV6. Papanastasiou, D.K., T. Bartzanas, P. Panagakis and C. Kittas. 2013. *Εποχιακή διακύμανση των συνθηκών θερμικής καταπόνησης εντατικά εκτρεφόμενων προβάτων στο εσωτερικό φυσικώς αεριζόμενου στάβλου*. 8<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Βόλος, σελ: 451-455.
- IV7. Papanastasiou, D.K., G. Zhang, T. Bartzanas, P. Panagakis and C. Kittas. 2013. *Δημιουργία μακράς χρονοσειράς κλιματικών συνθηκών στο εσωτερικό κτηνοτροφικών κτιρίων – εφαρμογή στη μελέτη της πιθανής θερμικής καταπόνησης εντατικά εκτρεφόμενων προβάτων κατά τη διάρκεια ημερών με καύσωνα*. 8<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Βόλος, σελ: 382-385.
- IV8. Balafoutis, A., D. Briassoulis, P. Panagakis and G. Papadakis. 2013. *Βελτίωση ενεργειακής αποδοτικότητας και μείωση αεριών του θερμοκηπίου από συμβατικούς σε βιολογικούς ελαιώνες και αμπελώνες*. 8<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Βόλος, σελ: 316-320.
- IV9. Παπαναστασίου, Δ. K., I. Σκούφος, Θ. Μπαρτζάνας, M. Μαρκούση, Γ. Μπαλτογιάννης, K. Μίχας, Π. Παναγάκης, A. Τζώρα και K. Κίττας. 2015. *Επίπεδα αμμωνίας και αιωρούμενων σωματιδίων εντός πτηνοτροφείων ορνίθων κρεοπαραγωγής*. 9<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Θεσσαλονίκη, σελ: 316-320.
- IV10. Παπαναστασίου, Δ. K., I. Σκούφος, Θ. Μπαρτζάνας, Γ. Μπαλτογιάννης, K. Μίχας, Π. Παναγάκης, A. Τζώρα και K. Κίττας. 2015. *Χρονικές διακυμάνσεις της συγκέντρωσης ρύπων του αέρα σε πτηνοτροφεία*. 13<sup>o</sup> Πανελλήνιο Κτηνιατρικό Συνέδριο, Αθήνα.
- IV11. Tzanidakis, Ch., P. Simitsis, K. Arvanitis and P. Panagakis. 2019. *Precision livestock farming (PLF) techniques in pig husbandry*. 11<sup>o</sup> Πανελλήνιο Συνέδριο της ΕΓΜΕ, Βόλος.

*Chapters in International Editions*

- 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.  
<https://doi.org/10.1016/B978-0-444-88681-1.50022-3>
- V2. Tzanidakis, Ch., P. Simitzis and P. Panagakis. 2022. *Precision Livestock Farming (PLF) Systems – Improving Sustainability and Efficiency of Animal Production*. Chapter 15. In: (Ed.) F. P. G. Márquez. *Sustainability - Cases and Studies in using Operations Research and Management Science Methods*, ISSN: 0884-8289. Springer, *in press*.

**NON-PEER REVIEWED**

*International Editions*

- VI1. Briassoulis, D. and P. Panagakis. 2003. *Current Structure of Agricultural Engineering Studies in Europe*. Proceedings of the 1<sup>st</sup> 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 2<sup>nd</sup> 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 3<sup>rd</sup> 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 4<sup>th</sup> 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 5<sup>th</sup> 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 6<sup>th</sup> 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 7<sup>th</sup> 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 8<sup>th</sup> 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 1<sup>st</sup> 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 2<sup>nd</sup> 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 1<sup>st</sup> 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 2<sup>nd</sup> ERABEE Workshop, Dublin, Ireland, ISBN 978-960-6806-07-0.
- VI14. Panagakis, P., V. Blanes-Vidal, J.C. Barbosa, T. Banhazi, V.F. da Cruz, E. Maltz and D. Berckmans. 2009. Eds. *Glossary of Terms on Animal Housing: Basic Engineering, Physical and Physiological Definitions*. CIGR - Section II, Aarhus, Denmark, ISBN 87-91949-38-6.
- VI15. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2009. *Third Cycle University Studies in Europe: Current Schemes and Possible Structured Programs of Studies in Agricultural Engineering and in the Emerging Discipline of Biosystems Engineering*. Proceedings of the 3<sup>rd</sup> ERABEE Workshop, Uppsala, Sweden, ISBN 978-960-6806-11-7.
- VI16. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2009. *Research Activities in the First Two Cycles of European Biosystems Engineering University Studies*. Proceedings of the 4<sup>th</sup> ERABEE Workshop, Valetta, Malta, ISBN 978-960-6806-12-4.
- VI17. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2010. *Quality Assurance and Assessment frameworks of Biosystems Engineering Studies*. Proceedings of the 5<sup>th</sup> ERABEE Workshop, Prague, Check Republic, ISBN 978-960-6806-13-1.
- VI18. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2010. *Enhancing the Attractiveness of European Study Programs in Biosystems Engineering*. Proceedings of the 6<sup>th</sup> ERABEE Workshop, Clermont-Ferrand, France, ISBN 978-960-6806-14-8.

#### *International Workshops*

- VII1. Panagakis, P. and S. Kyritsis. 1988. *Hot water needs for animal production in South Europe*. In: (Ed.) S. Kyritsis. "Solar Water Heating Systems for Rural Areas", FAO-CNRE Bulletin No.22, CNRE Workshop, Naxos, Greece, pp. 35-37.
- VII2. Panagakis, P. and S. Kyritsis. 1988. *Energy conservation in swine buildings: management practices and engineering techniques*. In: (Eds.) E. H. Oksanen and K. Kocsis, "Energy Conservation in Agriculture", FAO-CNRE Bulletin No. 23, CNRE Consultation, Helsinki, Finland, pp. 153-155.
- VII3. Panagakis, P., S. Kyritsis, L. Freris, M. Soundra-Nayagam and O. Benchikh. 1995. *Development of a renewable energy education programme*. In: (Eds.) A. Zervos and M. Sala, "Renewable Energy Development–European Conference and APAS-RENA Contractors Meeting", Venice, Italy, pp. 3-8.
- VII4. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2003. *Overview of Agricultural Engineering studies in Europe*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 1<sup>st</sup> USAEE Workshop – "Current Structure of Agricultural Engineering studies in Europe" – ISBN 960-92379-0-8, Madrid, Spain, pp. 4-44.
- VII5. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2003. *Current structure of Agricultural Engineering studies in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 1<sup>st</sup> USAEE Workshop – "Current Structure of Agricultural Engineering studies in Europe" – ISBN 960-92379-0-8, Madrid, Spain, pp. 85-89.
- VII6. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2003. *Overview of research activities in European University Institutes of Agricultural Engineering*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 2<sup>nd</sup> USAEE Workshop – "Research Activities in European University Institutes of Agricultural Engineering" – ISBN 960-92379-1-6, Palermo, Italy, pp. 5-24.
- VII7. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2003. *Research activities in Greek University Institutes of Agricultural Engineering*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 2<sup>nd</sup> USAEE Workshop – "Research Activities in European University Institutes of Agricultural Engineering" – ISBN 960-92379-1-6, Palermo, Italy, pp. 58-61.

- VII8. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2004. *Overview of current developments in Higher Education in Europe – ECTS*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 3<sup>rd</sup> USAEE Workshop – “A Review on the ECTS system” – ISBN 960-92379-2-4, Dijon, France, pp. 5-18.
- VII9. Briassoulis, D., E. Nikopoulos and P. Panagakis. 2004. *ECTS system in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 3<sup>rd</sup> USAEE Workshop – “A Review on the ECTS system” – ISBN 960-92379-2-4, Dijon, France, pp. 60-65.
- VII10. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2004. *Overview of the strategic objectives & current status of core curricula development*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 4<sup>th</sup> USAEE Workshop – “Agricultural Sciences part of core curricula in Agricultural Engineering University studies” – ISBN 960-92379-3-2, Leuven, Belgium, pp. 5-19.
- VII11. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2004. *Agricultural sciences core curricula in Agricultural Engineering University studies in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 4<sup>th</sup> USAEE Workshop – “Agricultural Sciences part of core curricula in Agricultural Engineering University studies” – ISBN 960-92379-3-2, Leuven, Belgium, pp. 67-75.
- VII12. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2005. *Accreditation procedure of Agricultural Engineering studies in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 5<sup>th</sup> USAEE Workshop – “Establishment of an Accreditation System in Agricultural Engineering University studies in Europe” – ISBN 960-92379-4-0, Dresden, Germany, pp. 76-82.
- VII13. Nikopoulos, E., D. Briassoulis and P. Panagakis. 2005. *Greek Agricultural Engineering programmes meeting the FEANI and EurAgEng criteria*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 6<sup>th</sup> USAEE Workshop – “Agricultural Engineering Programmes meeting the FEANI and EurAgEng criteria” – ISBN 960-92379-5-9, Budapest, Hungary, pp. 65-80.
- VII14. Nikopoulos, E., D. Briassoulis and P. Panagakis. 2006. *Restructuring Agricultural / Biosystems Engineering studies and employability in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 7<sup>th</sup> USAEE Workshop – “Restructuring Agricultural / Biosystems Engineering studies and employability in Europe” – ISBN 960-89313-0-4, Vilnius, Lithuania, pp. 53-57.
- VII15. Panagakis, P., D. Briassoulis and E. Nikopoulos. 2006. *Tools for Quality Assurance and Assessment of Agricultural Engineering programmes, Tuning subject-area lines and Disappearing Rare Knowledge in Greece*. In: (Eds.) D. Briassoulis and P. Panagakis, Proceedings of the 8<sup>th</sup> USAEE Workshop – “Tools for Quality Assurance and Assessment of Agricultural Engineering programmes, TUNING lines & Disappearing rare knowledge” – ISBN 960-89313-5-5, Bonn, Germany, pp. 46-51.
- VII16. Mostaghimi, S., D. Briassoulis, P. Panagakis and E. Nikopoulos. 2007. *The new (emerging) discipline of Biosystems Engineering*. In: Proceedings of the 1<sup>st</sup> POMSEBES Workshop – “Policy oriented measures in support of the evolving Biosystems Engineering studies in USA – EU” – ISBN 978-960-89313-8-1, Minneapolis, USA, pp. 11-24.
- VII17. Panagakis P., D. Briassoulis and E. Nikopoulos. 2008. *Definition of the emerging Biosystems Engineering discipline in Greece*. In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 1<sup>st</sup> ERABEE Workshop – “Definition of the emerging Biosystems Engineering discipline in Europe” – ISBN 978-960-6806-04-9, Madrid, Spain, pp. 63-69.
- VII18. Briassoulis, D., S. Mostaghimi, P. Panagakis and E. Nikopoulos. 2008. *Develop a uniform structure (framework) for compatible programs of the Biosystems Engineering discipline*. In: Proceedings of the 2<sup>nd</sup> POMSEBES Workshop – “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” – ISBN 978-960-6806-05-6, Crete, Greece, pp. 6-17.

- VII19. Ting, K. C., D. Briassoulis, P. Panagakis, E. Nikopoulos, J. M. Aerts and M. L. Wolfe. 2008. *Describe the Biological/Biosystems Engineering programs of study in the US and the current trends in EU, focusing on education and research.* In: Proceedings of the 2<sup>nd</sup> POMSEBES Workshop – “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” – ISBN 978-960-6806-05-6, Crete, Greece, pp. 19-43.
- VII20. Febo, P., F. Ayuga, G. Scarascia-Mugnozza, R. Kanwar, D. Briassoulis, P. Panagakis, E. Nikopoulos, G. Riskowski and A. Comparetti. 2008. *Identify needs of industry (current and future employers).* In: Proceedings of the 2<sup>nd</sup> POMSEBES Workshop – “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” – ISBN 978-960-6806-05-6, Crete, Greece, pp. 45-51.
- VII21. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2008. *Update and expand the scope of Biosystems Engineering programs of studies in Greece placing emphasis in the areas of bio-fuels, bio-materials and quality of products.* In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 2<sup>nd</sup> ERABEE Workshop – “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” – ISBN 978-960-6806-07-0, Dublin, Ireland, pp. 63-68.
- VII22. Panagakis P., D. Briassoulis and E. Nikopoulos. 2009. *Third cycle University studies in Europe: Current schemes and possible structured programs of studies in Agricultural Engineering and in the emerging discipline of Biosystems Engineering – the case of Greece.* In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 3<sup>rd</sup> ERABEE Workshop–Third cycle University studies in Europe: Current schemes and possible structured programs of studies in Agricultural Engineering and in the emerging discipline of Biosystems Engineering” – ISBN 978-960-6806-11-7, Uppsala, Sweden, pp. 81-95.
- VII23. Briassoulis, D., P. Panagakis and E. Nikopoulos. 2009. *Meeting the needs of the biobased economy through the evolution of the emerging Biosystems Engineering studies in Europe.* In: The 1<sup>st</sup> International Symposium on Green Energy, Cluj-Napoca, Romania, 2009, pp. 15-20.
- VII24. Briassoulis, D., E. Nikopoulos and Panagakis P. 2009. *Research activities in the first two cycles of European Biosystems Engineering University studies & rare knowledge in Greece.* In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 4<sup>th</sup> ERABEE Workshop – “Research activities in the first two cycles of European Biosystems Engineering University studies” - ISBN 978-960-6806-12-4, Valetta, Malta, pp. 82-87.
- VII25. Panagakis P., D. Briassoulis and E. Nikopoulos. 2010. *Quality Assurance and Assessment frameworks of Biosystems Engineering studies-the case of Greece.* In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 5<sup>th</sup> ERABEE Workshop – “Quality Assurance and Assessment frameworks of Biosystems Engineering studies” - ISBN 978-960-6806-13-1, Prague, Check Republic, pp. 68-74.
- VII26. Panagakis P., D. Briassoulis and E. Nikopoulos. 2010. *Enhancing the attractiveness of European study programs in Biosystems Engineering-the case of Greece.* In: (Eds.) D. Briassoulis, P. Panagakis and E. Nikopoulos, Proceedings of the 6<sup>th</sup> ERABEE Workshop – “Enhancing the attractiveness of European study programs in Biosystems Engineering” – ISBN 978-960-6806-14-8, Clermont-Ferrand, France, pp. 68-72.

#### *University Notes (revised)*

- VIII1. Panagakis, P. 2017. Swine Units. Lab. of Farm Structures (in Greek), AUA, Athens, Greece, pp. 160.
- VIII2. Panagakis, P. 2022. Environmental Control for Animals. Lab. of Farm Structures (in Greek), AUA, Athens, Greece, pp. 67.