

## **ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ**

### **ΜΥΣΤΡΙΩΤΗΣ ΑΝΤΩΝΙΟΣ**

**Ημερομηνία και τόπος γέννησης :** 8 Ιουλίου 1957, Αθήνα

#### **ΣΠΟΥΔΕΣ**

1. Πτυχίο από το Φυσικό Τμήμα του Πανεπιστημίου της Αθήνας (1980). Βαθμός πτυχίου άριστα (8,6).
2. Master of Science (1985), από το Φυσικό Τμήμα του Πανεπιστημίου του Illinois at Urbana-Champaign.
3. Διδακτορικό (Ph.D) (1986), από το Φυσικό Τμήμα του Πανεπιστημίου του Illinois at Urbana-Champaign. Τίτλος διατριβής: "From Determinism to Stochasticity".

#### **ΔΙΑΚΡΙΣΕΙΣ**

1. Προπτυχιακή υποτροφία του Ιδρύματος Κρατικών Υποτροφιών (1975-1979).
2. Teaching και Research assistanship από το Φυσικό Τμήμα του Πανεπιστημίου του Illinois at U-C (1980-1985).
3. Υποτροφία της Ευρωπαϊκής Ένωσης: HCM Individual Fellowship (1994-1996) από τό Πρόγραμμα Human Capital & Mobility.
4. Υποτροφία της Ευρωπαϊκής Ένωσης: TMR Return Grant (1996-1997) από τό Πρόγραμμα Training & Mobility of Researchers.
5. Υποτροφία για ερευνητικό έργο στα πλαίσια του Προγράμματος της ΓΓΕΤ «Προσφορά Σταδιοδρομίας στην Ελλάδα σε Ελληνόφωνους Ερευνητές του Εξωτερικού» (1999-2001).

#### **ΠΡΟΥΠΗΡΕΣΙΑ**

- 2002-** : Ερευνητής στο Εργαστήριο Γεωργικών Κατασκευών του Γεωπονικού Πανεπιστημίου της Αθήνας.
- 1999-2001** : Ερευνητής στο Εργαστήριο Γεωργικών Κατασκευών του Γεωπονικού Πανεπιστημίου της Αθήνας. Πρόγραμμα της ΓΓΕΤ «Προσφορά Σταδιοδρομίας στην Ελλάδα σε Ελληνόφωνους Ερευνητές του Εξωτερικού»
- 1998** : Ερευνητής στο Εργαστήριο Γεωργικών Κατασκευών του Γεωπονικού Πανεπιστημίου της Αθήνας.
- 1997-1998** : Ερευνητής στο Ινστιτούτο Γεωργικών Κατασκευών του Πανεπιστημίου του Μπάρι (Ιταλία).
- 1997** : Επισκέπτης ερευνητής στο Ινστιτούτο Γεωργικής Μηχανικής του Πανεπιστημίου του Αννόβερου (Γερμανία).
- 1996 -1997**: Ερευνητής στο Εργαστήριο Γεωργικών Κατασκευών του Γεωπονικού Πανεπιστημίου της Αθήνας. Return Grant από το Ευρωπαϊκό Πρόγραμμα Training and Mobility of Reasearchers (TMR).
- 1994 -1996**: Ερευνητής στο Τμήμα Αγροφυσικής του Insitute of Agricultural Engineering (IMAG-DLO), Wageningen (Ολλανδία). Individual fellowship από το Ευρωπαϊκό Πρόγραμμα Human Capital and Mobility.

- 1991-1994** : Ερευνητής στο Ερευνητικό Κέντρο Κρήτης (Ινστιτούτο Ηλεκτρονικής Δομής και Lasers).
- 1988-1991** : Επισκέπτης Αναπληρωτής Καθηγητής στο Φυσικό Τμήμα του Πανεπιστημίου Κρήτης.
- 1988** : Ερευνητής στο Πανεπιστήμιο του Bayreuth (Γερμανία).
- 1987-1988** : Επισκέπτης Επίκουρος Καθηγητής στο Φυσικό Τμήμα του Πανεπιστημίου Κρήτης.
- 1987** : Ερευνητής στο Ερευνητικό Κέντρο Κρήτης (Ινστιτούτο Ηλεκτρονικής Δομής και Lasers).
- 1986** : **Στρατιωτική θητεία.**
- 1980-1985** : Teaching και Research Assistant στο University of Illinois at U-C.

#### **Συνοπτική ιστορική ερευνητικών δραστηριοτήτων**

Ο Δρ. Αντώνιος Μυστριώτης είναι Φυσικός με διδακτορικό στη Φυσική (University of Illinois at U-C). Έχει 30 χρόνια ερευνητική εμπειρία σε θέματα Υπολογιστικής Φυσικής και αριθμητικών μοντέλων. Έχει συμμετάσχει σε πλήθος ερευνητικά Ευρωπαϊκά και Ελληνικά προγράμματα. Έχει εργαστεί σε ερευνητικά κέντρα (IMAG-DLO, Wageningen, Ολλανδία) και Πανεπιστήμια του εξωτερικού (Πανεπιστήμιο Bayreuth, Γερμανία και Πανεπιστήμιο του Bari, Ιταλία). Τα τρέχοντα ερευνητικά του ενδιαφέροντα περιλαμβάνουν Υπολογιστική Μηχανική και ιδιαίτερα Υπολογιστική Ρευστοδυναμική.

#### **ΣΥΝΕΡΓΑΣΙΑ ΜΕ ΔΙΕΘΝΗ ΠΕΡΙΟΔΙΚΑ**

Κριτής στα παρακάτω διεθνή περιοδικά:

1. Biosystems Engineering, Elsevier, Amsterdam, The Netherlands.
2. Journal of Wind Engineering and Industrial Aerodynamimcs, Elsevier, Amsterdam, The Netherlands.
3. Agronomie, INRA, France.

## ΔΗΜΟΣΙΕΥΣΕΙΣ

### Διατριβή

University of Illinois at Urbana-Champaign (1986): "From Determinism to Stochasticity".

- 1) A. D. Mistriotis and E. A. Jackson, *Physica Scripta* 35 (1987), 97-104 : "Transition to Stochasticity for a Periodically Perturbed Area-preserving System".
- 2) A. D. Mistriotis, St. Pnevmatikos and N. Flytzanis, *J. Phys. A* 21 (1988), 1253-1270 : "Recurrence Phenomena in Soliton Propagation in a Lattice with Impurities".
- 3) A. D. Mistriotis, H. Buttner, and W. Pesch, *J Phys. C* 21 (1988) L1021-1026: "Ground State Properties of Strongly Correlated Electrons on Finite Clusters".
- 4) A. D. Mistriotis, *Physica Scripta* 39, 33 (1989) : "A Study on the Short Time Dynamical Behavior of Hamiltonian Systems and its Relationship to Non-equilibrium Statistical Properties".
- 5) E. A. Jackson and A. D. Mistriotis, *J. Phys. Condens. Matter* 1, 1223 (1989) : "Thermal Conductivity of One-dimensional and Two-dimensional Lattices".
- 6) A. D. Mistriotis, N. Flytzanis, and S. Farantos, *Phys. Rev B* 39, 1212 (1989): "A Potential Model for Silicon Clusters".
- 7) A. D. Mistriotis, H. Buttner, and W. Pesch, *J. Phys. Condens. Matter*, 1 (1989), 891-900 : "Holes in Finite Electron Systems with Strong Correlation".
- 8) N. Flytzanis, A. D. Mistriotis, and S. Farantos, (1989) *Journal de Physique*, Colloque C3, suppl. 3, 50 (1989), 89 : "Nonlinear Structures in Silicon Clusters".
- 9) N. Flytzanis, A.D. Mistriotis and P. Vendras, *J. of Mech. Behavior of Materials*, 4 (1992), 41 : "Structure and Dynamics in Silicon"
- 10) A.D. Mistriotis, G.E. Froudakis, P. Vendras and N Flytzanis, *Phys. Rev. B* 47 (1993), 10648 : "A Model Potential for Silicon Clusters and Surfaces"
- 11) H. Fehske, H. Roeder, A. Mistriotis and H. Buttner, *J. of Physics Condensed Matter*, 5 (1993), 3565: "The phase diagram of the 2D Holstein-t-J model near half-filling"
- 12) A. Mistriotis, A. Zdetsis, G. Froudakis and M. Madhu, *J. of Physics Condensed Matter* 5 (1993), 6183 : "Reproduction of Quantum Tight-binding effects in silicon clusters by a 4-body classical model"
- 13) A. Zolotaryuk, A.D. Mistriotis and E. Economou, *Physical Review B*, 48 (1993), 13518 : "Polarons on a one-dimensional nonlinear lattice".
- 14) A.D. Mistriotis and E. Economou, *J. of Physics Condens. Matter*, 6 (1994), 421 : "Polarons on a one-dimensional lattice with two structural phases".
- 15) P. Tchofo Dinda, G. Vlastou-Tsinganos, N. Flytzanis, and A.D. Mistriotis, *Physics Letters A*, 191 (1994), 339 : "The melting behavior of small silicon clusters".
- 16) P. Tchofo Dinda, G. Vlastou-Tsinganos, N. Flytzanis, and A.D. Mistriotis, *Phys. Rev. B*, 51 (1995), 13697 : "Simulation of the melting behavior of small silicon clusters".
- 17) H. Fehske, H. Roeder, G. Wellein, A. Mistriotis, *Phys. Rev. B*, 51 (1995), 16582: "Hole-polaron formation in the two-dimensional Holstein t-J model - A variational Lanczos study".
- 18) A. Mistriotis, G.P.A. Bot, P. Picuno, G. Scarascia-Mugnozza, *J. of Agricultural and Forest Meteorology*, 85 (1997), 217: "Analysis of the efficiency of greenhouse ventilation using computational fluid dynamics".
- 19) A. Mistriotis, T. de Jong, M. Wagemans, and G.P.A. Bot, *Netherlands J. of Agricultural Science*, 45 (1997), 81: "Computational Fluid Dynamics (CFD) as a tool for the analysis of ventilation and indoor microclimate in agricultural buildings".
- 20) A. Mistriotis, C. Arcidiacono, P. Picuno, G.P.A. Bot, G. Scarascia-Mugnozza *J. of Agricultural and Forest Meteorology*, 88 (1997), 121: "Computational analysis of ventilation in greenhouses at zero and low wind speeds".

- 21) B. von Elsner, D. Briassoulis, D. Waaijenberg, A. Mistriotis, Chr. Von Zabeltitz, J. Gratraud, G. Russo, R. Suay-Cortes, J. agric. Engng Res. 75 (2000) 1-16: "Review of Structural and Functional Characteristics of Greenhouses in European Union Countries, Part I: Design Requirements".
- 22) B. von Elsner, D. Briassoulis, D. Waaijenberg, A. Mistriotis, Chr. Von Zabeltitz, J. Gratraud, G. Russo, R. Suay-Cortes, J. agric. Engng Res. 75 (2000) 111-126: "Review of Structural and Functional Characteristics of Greenhouses in European Union Countries, Part II: Typical Designs".
- 23) G. Scarascia-Mugnozza, A. Mistriotis, P. Picuno, Riv. di Ingeneria Agraria 1 (2001), 11-19: "Greenhouse Natural Ventilation: Review of Numerical Methods and Analysis of Ventilation Efficiency".
- 24) A. Mistriotis and D. Briassoulis, Computers and Electronics in Agriculture 34 (2002), 191-205: "Numerical estimation of the internal and external aerodynamic coefficients of tunnel greenhouse structure with openings".
- 25) D. Briassoulis, A. Mistriotis, D. Eleftherakis (2007), Polymer Testing, Volume 26, Issue 6, September 2007, Pages 822-832: "Mechanical behaviour and properties of agricultural nets—Part I: Testing methods for agricultural nets"
- 26) D. Briassoulis, A. Mistriotis, D. Eleftherakis (2007), Polymer Testing, Volume 26, Issue 8, December 2007, Pages 970-984: "Mechanical behaviour and properties of agricultural nets. Part II: Analysis of the performance of the main categories of agricultural nets".
- 27) S. Castellano, G. Scarascia Mugnozza, G. Russo, D. Briassoulis, A. Mistriotis, S. Hemming, D. Waaijenberg, (2008), Applied Engineering in Agriculture Vol. 24(6): 799-808: "Plastic nets in agriculture: a general review of types and applications".
- 28) D. Briassoulis, A. Mistriotis (2009), Integrated structural design methodology for agricultural protecting structures covered with nets, Biosystems Engineering 105: 205-220.
- 29) A. Giannoulis, A. Mistriotis, D. Briassoulis (2010) "Experimental and Numerical Investigation of the Airflow around a Raised Permeable Panel", Journal of Wind Engineering & Industrial Aerodynamics, vol. 98, p. 808-817.
- 30) D. Briassoulis, A. Mistriotis, A. Giannoulis, (2010) "Wind forces on porous elevated panels", Journal of Wind Engineering & Industrial Aerodynamics, vol. 98, p. 919-928.
- 31) A. Giannoulis, T. Stathopoulos, D. Briassoulis, A. Mistriotis (2012) "Wind loading on vertical panels with different permeabilities" Journal of Wind Engineering and Industrial Aerodynamics 107–108:1–16.
- 32) A. Mistriotis, S. Castellano (2012) "Airflow through net covered tunnel structures at high wind speeds" Biosystems Engineering 113(3):308–317
- 33) D. Briassoulis, A. Mistriotis, A. Giannoulis, D. Giannopoulos (2013) "Optimized PLA-based EMAP systems for horticultural produce designed to regulate the targeted in-package atmosphere" Industrial Crops and Products 48, 68–80
- 34) A. Giannoulis, A. Mistriotis, D. Briassoulis (2015) "Design and analysis of the response of elastically supported wind-break panels of two different permeabilities under wind load" Biosystems Engineering, 129, 57-69
- 35) A. Mistriotis, D. Briassoulis, A. Giannoulis, S. D'Aquino (2016) "Design of biodegradable bio-based equilibrium modified atmosphere packaging (EMAP) for fresh fruits and vegetables by using micro-perforated poly-lactic acid (PLA) films" Postharvest Biology and Technology, 111, 380-389
- 36) S. D'Aquino, A. Mistriotis, D. Briassoulis, M. L. Di Lorenzo, M. Malinconico, A. Palma (2016), "Influence of modified atmosphere packaging on postharvest quality of cherry tomatoes held at 20 °C" Postharvest Biology and Technology, 115, 103-112

### **Ηλεκτρονικές δημοσιεύσεις**

- 1) G. Scarascia-Mugnozza, A. Mistriotis, and P. Picuno, (2000): “Optimization of greenhouse natural ventilation by numerical methods”, <http://www.cipa-cidapa.com>, CIPA, Paris, France.
- 2) A. Mistriotis, A. Giannoulis, D. Giannopoulos, and D. Briassoulis, (2011): “Analysis of the effect of perforation on the permeability of biodegradable non-barrier films”, *Procedia Food Science* 1, p. 32-38.

### **Άλλες δημοσιεύσεις με κριτές**

- 1) Mistriotis A; Briassoulis D (2008), *Acta Horticulture*, vol. 801, 963-970: “Wind loads on net covered structures”.
- 2) Castellano S.; Mistriotis A (2008), *Acta Horticulture*, vol. 801, 869-875: “Air Flow through Net Covered Arched Structures”.
- 3) Mistriotis A; Giannoulis A; Briassoulis D (2012), *Acta Horticulture*, “Numerical estimation of wind loads on a greenhouse protected by a net-covered windbreak analysed as an integrated system” *Acta Horticulture* 952:169-176

## ΑΝΑΦΟΡΕΣ

Σύνολο αναφορών: 905

Σύνολο εταιροαναφορών: 850

h-index: 14

## ΣΥΜΜΕΤΟΧΗ ΣΕ ΣΥΝΕΔΡΙΑ

1. Summer School on Elemental and Molecular Clusters, Erice, Sicily (1987).
2. 8th General Conference of the Condensed Matter Division of European Physical Society, Budapest (1988). "A New Potential for Silicon Clusters"(poster presentation).
3. 2nd Graduate Summer Course in Computational Physics. "Numerical Methods for Parallel Vector Computers. "Lausanne, Switzerland, (1988).
4. 4th Hellenic Conference in Solid State Physics (1988). A. Mistriotis, N. Flytzanis and St. Farantos. "A new potential Model for Silicon, valid for Clusters  $Si_n$  ( $n>6$ ) and the Crystal" (poster presentation).
5. 4th Workshop "Nonlinear Evolution Equations and Dynamical Systems", June 1989, Xania, Greece. "On the Short Time Behavior of Dynamical Systems" (oral presentation).
6. III Summer School in Nonlinear Systems, August 1989, Samos, Greece. "Thermal Conductivity of One-dimensional Lattices" (invited speaker).
7. 2nd "SCIENCE" Workshop in "Localization and Transport Fluctuations in Microclusters" (1992), Crete, Greece. " Localization of Holes in 2-D t-J model with electron-phonon coupling" (oral presentation).
8. PATRA European Management Workshop on Teleworking and Flexible Working Practices, London, (1993).
9. 5th European Conference on "Industrial Technologies", Brussels, (1994).
10. C. von Zabeltitz, D. Briassoulis, B. von Elsner, D. Waaijenberg, G. Russo, A. Mistriotis and P. Roux. *Review of structural and functional characteristics of greenhouses in several EU-countries*. Oral presentation at AgEng Conference in Madrid, September 23-26 (1996).
11. G.P.A. Bot, T. Boulard, A. Mistriotis, G. Papadakis, P. Feuilloley, P. Picuno, G. Scarascia-Mugnozza. *New techniques in greenhouse ventilation analysis*. Oral presentation at AgEng Conference in Madrid, September 23-26 (1996).
12. Mistriotis, A, T. de Jong, M. Wagemans and G.P.A. Bot, 1997, *The Analysis of ventilation and indoor microclimate in agricultural buildings by Computational Fluid Dynamics (CFD)*. Proceedings IMACS/IFAC second International Symposium on Mathematical Modelling and Simulation in Agricultural and Bio-Industries, Budapest, Hungary, pp. 289-295.
13. A. Mistriotis, P. Picuno, G.P.A. Bot, G. Scarascia-Mugnozza. *Computational study of the natural ventilation driven by buoyancy forces in greenhouses*. Poster presentation in IFAC Workshop *Mathematical and Control Applications in Agriculture*, Hannover, Germany, September 28 - October 2, 1997.
14. D. Briassoulis, Y. Tsirogiannis, A. Mistriotis. *Wind loading on greenhouse structures*. Poster presentation at AgEng Conference in Oslo, August 24-27 (1998).
15. A. Mistriotis, D. Briassoulis. *Numerical modelling of the wind pressure distribution on greenhouse structures*. Oral presentation at AgEng Conference in Warwick, July 2-7 (2000).
16. A. Mistriotis, D. Briassoulis. *CFD simulations for calculating internal and external aerodynamic coefficients of typical greenhouse structures with openings*. AIIA 2001: International Workshop "Greenhouse design and crop engineering", Pizzomunno-Vieste, Italy, September 14, 2001.
17. A. Mistriotis, D. Briassoulis. *Wind Pressure Distribution on Plastic-covered Low-tunnels Used in Protected Cultivation*. GREENSYS 2004 Conference, Leuven, Belgium, September 12-16, 2004.

18. D. Briassoulis and A. Mistriotis (2006). *Full-scale measurement of the aerodynamic coefficients for agricultural nets*. CIGR World Congress Agricultural Engineering for a Better World, Bonn, Germany 3-7 September 2006, paper **FV434A**.
19. A. Mistriotis, D. Eleftherakis and D. Briassoulis (2006). *Numerical estimation of wind loads on a windbreak segment covered with plastic net*. CIGR World Congress Agricultural Engineering for a Better World, Bonn, Germany 3-7 September 2006, paper **FV252A**.
20. A. Mistriotis and D. Briassoulis (2007), *Wind loads on net covered structures*. International Symposium on High Technology for Greenhouse System Management, GREENSYS2007, Napoli, Italy, 4-6 October 2007.
21. Mistriotis A; Briassoulis D (2007), *Ventilation Performance of Net Covered Arched Structures*. International Symposium on High Technology for Greenhouse System Management, GREENSYS2007, Napoli, Italy, 4-6 October 2007.
22. A. Giannoulis, A. Mistriotis and D. Briassoulis (2008). *Experimental and numerical analysis of the airflow around a raised permeable panel*. International Conference on Agricultural Engineering, AgEng2008 Hersonissos, Greece 23 - 25 June 2008, paper **1179933**.
23. A. Giannoulis, D. Briassoulis, and A. Mistriotis (2010). *Analysis of the response of elastically supported wind-break panels under wind load*. International Conference on Agricultural Engineering, AgEng2011 Clermont-Ferrand, France, 6-8 September 2010, **REF412**.
24. A. Mistriotis, A. Giannoulis, D. Giannopoulos, and D. Briassoulis, (2011): *Analysis of the effect of perforation on the permeability of biodegradable non-barrier films*. 11<sup>th</sup> International Congress on Engineering and Food, iCEF11, Athens, Greece, 22-26 May 2011, p. 849-850.
25. A. Mistriotis, A. Giannoulis, D. Briassoulis (2011), *Numerical estimation of wind loads on a greenhouse protected by a net-covered windbreak analysed as an integrated system*. International Symposium on "Advanced technologies and management towards sustainable greenhouse ecosystems"- GREENSYS2011, Halkidiki, Greece, 5-10 June 2011.