Βιογραφικό Σημείωμα

1. Ατομικά στοιχεία

Όνομα : **Χασάπης Δημήτρης**
Βαθμίδα : Καθηγητής
Τηλέφωνο Εργασίας : 2321049101-243
Ηλεκτρονικό ταχυδρομείο : dcasap@ihu.gr

2. Σπουδές

1983 - 1986 ***Διδακτορική διατριβή*** στο Ινστιτούτο Θεωρητικής και Εφαρμοσμένης Φυσικής του ***Πανεπιστημίου Στουτγάρδης.***

1977 - 1983 Σπουδές στον κλάδο ***Διπλωματούχων Φυσικών*** του ***Πανεπιστημίου Στουτγάρδης***.

3. Ερευνητικά ενδιαφέροντα

Μακρομοριακή Νανοτεχνολογία μελέτης βισκοελαστικών ιδιοτήτων μη Νευτωνικών πολυμερών ρευστών με τις μεθόδους της Θερμοδυναμικής μη αντιστρεπτών διεργασιών. Θερμική και ηλεκτρική αγωγιμότητα σύνθετων υλικών.

4. Διοικητικές θέσεις

07.05.2019 ~ 05.02.2020	***Αντιπρόεδρος Οικονομικού Προγραμματισμού & Ανάπτυξης Διοικούσας Επιτροπής Διεθνούς Πανεπιστημίου της Ελλάδος***
01.12.2017 ~ 07.05.2019	***Πρύτανης του ΤΕΙ Κεντρικής Μακεδονίας***
02.02.2015 ~ 30.11.2017	***Μέλος και αντιπρόεδρος της Επιτροπής Εκπαίδευσης και Ερευνών***
30.07.2012 ~ 31.08.2016	***Μέλος του Συμβουλίου Διοίκησης του ΤΕΙ***
24.02.2009 ~ 05.12.2012	***Μέλος της Επιτροπής Εκπαίδευσης και Ερευνών***
01.09.2005 ~ 31.08.2008	***Αντιπρόεδρος Οικονομικού Προγραμματισμού & Ανάπτυξης***
	Πρόεδρος της Επιτροπής Εκπαίδευσης & Ερευνών του ΤΕΙ Κεντρικής Μακεδονίας
01.09.2003- 31.08.2005	***Διευθυντής της Σχολής Τεχνολογικών Εφαρμογών***
10.12.1999-31.08.2002	***Προϊστάμενος του Τμήματος Πληροφορικής & Επικοινωνιών***
01.09.1997-31.08.2000	***Προϊστάμενος του Τμήματος Μηχανολογίας***
	Αναπληρωτής Διευθυντής της Σχολής Τεχνολογικών Εφαρμογών

5. Επαγγελματική – επιστημονική – διδακτική εμπειρία

Χειμ. εξαμ. 2018-20	Διδασκαλία του μαθήματος **Εφαρμοσμένη Θερμοδυναμική** στο Μεταπτυχιακό Πρόγραμμα του Τμήματος Μηχανολόγων Μηχανικών
21.09.1987 - σήμερα	***Μέλος ΔΕΠ*** του Τμήματος Μηχανολόγων Μηχανικών με γνωστικό αντικείμενο ***«Φυσική – Θερμοδυναμική»***.
01.05.1984 – 01.07.1986	***Επιστημονικός συνεργάτης*** του *Ινστιτούτου Θεωρητικής και Εφαρμοσμένης Φυσικής του Πανεπιστημίου Στουτγάρδης* στα πλαίσια του ερευνητικού προγράμματος "Temporäre Polymernetzwerke" της Deutsche Forschungsgemeinschaft.
01.01.1984 – 30.04.1984	***Επιστημονικός Βοηθός*** στο ***Ινστιτούτο Θεωρητικής και Εφαρμοσμένης Φυσικής του Πανεπιστημίου Στουτγάρδης***. Αντικείμενο απασχόλησης: Ασκήσεις Ειδικής Θεωρίας Σχετικότητας.

6. Βιβλία

1 Δ. Χασάπης, ***Εργαστηριακές Ασκήσεις Φυσικής***, Ελληνικά Ακαδημαϊκά Συγγράμματα & Βοηθήματα, www.kallipos.gr, 2015

2 Δ. Χασάπης, ***Τεχνική Θερμοδυναμική***, Εκδόσεις Συμμετρία, 2012

3 Δ. Χασάπης**, *Θερμοδυναμική***, Β. Γκιούρδας Εκδοτική, (2η Έκδοση) 2006

4 Δ. Χασάπης, ***Εργαστηριακές Ασκήσεις Φυσικής***, Β. Γκιούρδας Εκδοτική, 2004

7. Συμμετοχή σε προγράμματα υπό την εποπτεία της Επιτροπής Ερευνών

2014-2015 *«Εργαστηριακές Ασκήσεις Φυσικής»*, **κύριος συγγραφέας** (ΕΣΠΑ – Δράση «Ελληνικά Ακαδημαϊκά Ηλεκτρονικά Συγγράμματα και Βοηθήματα»)

2012-2015 *«Αρχιμήδης ΙΙΙ – Seismic vulnerability assessment of the building stock in the city of serres»*, **μέλος κύριας ερευνητικής ομάδας**. (ΕΣΠΑ)

2006-2008: *«Ανάπτυξη των Ινστιτούτων Δια Βίου Εκπαίδευσης και λειτουργία προγραμμάτων δια βίου εκπαίδευσης στην ανώτατη εκπαίδευση»*, **ιδρυματικός επιστημονικός υπεύθυνος**. (ΕΠΕΑΕΚ - ΕΚΤ)

2006-2007: *«Αρχιμήδης ΙΙ - Σχεδιασμός και Βελτιστοποίηση Αεραγωγού Φυσικού Ελκυσμού με Χρήση Ηλιακής Ενέργειας»*, **επιστημονικός υπεύθυνος**. (ΕΠΕΑΕΚ - ΕΚΤ)

2006-2007: *«INTEREG III – Κέντρο Διεργασιών & Τεχνολογίας Προηγμένων Υλικών»*, επιστημονικός συνεργάτης με αντικείμενο «την μελέτη και βελτιστοποίηση των πρωτότυπων συστημάτων ανανεώσιμων πηγών ενέργειας και τη διάδοση και διάχυση των αποτελεσμάτων της έρευνας και την μεταφορά της τεχνο-

λογίας εξέλιξης προηγμένων συστημάτων εκμετάλλευσης ανανεώσιμων πηγών ενέργειας», **μέλος κύριας ερευνητικής ομάδας**. (ΕΠΕΑΕΚ - ΕΚΤ)

2005-2006 *«Ενσωμάτωση της υδροδυναμικής αλληλεπίδρασης στην μοριακή στατιστική θεωρία δυναμικών πολυμερών δικτύων»*, **επιστημονικός υπεύθυνος** (ΕΕΕ Τ.Ε.Ι. ΚΜ).

2005-2006 *«Εργαστηριακός Επιστημονικός Εξοπλισμός Τ.Ε.Ι. Σερρών»*, **επιστημονικός υπεύθυνος**. (ΕΠΕΑΕΚ - ΕΤΠΑ)

2004-2006: *«Αρχιμήδης Ι – Διερεύνηση κατάλληλης συνδεσμολογίας φωτοβολταϊκών μονάδων και τεχνικών CD-DC μετατροπέων για βέλτιστη προσαρμογή του φωτοβολταϊκού συστήματος σε διάφορα φορτία»*, **μέλος κύριας ερευνητικής ομάδας**. (ΕΠΕΑΕΚ - ΕΚΤ)

2003-2008 *«Ενίσχυση Σπουδών Πληροφορικής»* ΠΕ1: «αναμόρφωση Π.Π.Σ.», ΠΕ3: «μελέτη και δημιουργία εικονικών εργαστηρίων» & «ανάπτυξη ηλεκτρονικού εκπαιδευτικού υλικού με δυνατότητες πλήρους αυτοδιδασκαλίας». (ΕΠΕΑΕΚ - ΕΚΤ)

2003-2008 *«Προπτυχιακά Προγράμματα Σπουδών – Τμήμα Μηχανολογίας»* ΠΕ3: «εφαρμογή αναμόρφωσης ΠΠΣ-πιλοτική ανάπτυξη υλικού διδασκαλίας θεωρητικών και εργαστηριακών μαθημάτων» & ΠΕ5: «Αξιολόγηση-αποτίμηση αναμορφωμένου ΠΠΣ». (ΕΠΕΑΕΚ - ΕΚΤ)

2003-2005 *«Προπτυχιακά Προγράμματα Σπουδών – Κεντρική Δράση»* ΠΕ7: «αποτίμηση και αξιολόγηση του εκπαιδευτικού έργου του Τ.Ε.Ι. Σερρών» & ΠΕ8: «ενέργειες δημοσιότητας». (ΕΠΕΑΕΚ - ΕΚΤ)

2000-2002 *«Διεύρυνση Τριτοβάθμιας Εκπαίδευσης - Τμήμα Πληροφορικής & Επικοινωνιών και Τμήμα Γεωπληροφορικής & Τοπογραφίας»* **ιδρυματικός επιστημονικός υπεύθυνος**. (ΕΠΕΑΕΚ - ΕΚΤ)

1999-2000 *«Διεύρυνση Τριτοβάθμιας Εκπαίδευσης - Τμήμα Πληροφορικής & Επικοινωνιών»*, **αναπληρωτής επιστημονικός υπεύθυνος**. (ΕΠΕΑΕΚ - ΕΚΤ)

1999-2001 *«Μέτρηση Ραδιενέργειας στην Ατμόσφαιρα»*, **επιστημονικός υπεύθυνος**. (ΕΕΕ Τ.Ε.Ι. ΚΜ)

8. Εμπειρία σε αξιολόγηση ευρωπαϊκών προγραμμάτων

Αξιολογητής προτάσεων για το Πρόγραμμα «*Αρχιμήδης ΙΙ» του ΕΠΕΑΕΚ και «Πρακτικής Άσκησης» του ΕΣΠΑ*

9. Επιστημονικές εργασίες

- ✓ ***Διδακτορική διατριβή*** στο επιστημονικό πεδίο μακρομοριακής νανοτεχνολογίας με θέμα: *"Zur molekular-statistischen Theorie temporärer Polymernetzwerke –Theoretische Untersuchungen und Vergleich mit Experimenten", Institut für Theoretische und Angewandte Physik,* Universität Stuttgart.
- ✓ ***Διπλωματική εργασία*** με θέμα: *"Effektive Wärmeleitfähigkeit von Verbundwerkstoffen", Institut für Theoretische und Angewandte Physik,* Universität Stuttgart.

10. Δημοσιεύσεις σε έγκυρα διεθνή επιστημονικά περιοδικά

1. **D. Chasapis**, D. Misirlis. P. Papadopoulos, K. Kleidis, "Thermodynamic analysis on the performance of a low-enthalpy geothermal field using a CO2 supercritical binary cycle", Chemical Engineering Transactions, 76:1009-10014 (2019).
2. M.C. Vlachou, J.S. Lioumbas, K. David, **D. Chasapis**, C. Schwarz Jack J.W.A.van Loon ,T.D. Karapantsios, *"Subcooled flow boiling in horizontal and vertical macro-channel under Earth-gravity and hyper-gravity conditions"* , International Journal of Heat and Mass Transfer 133:36-51(2019)
3. M.C. Vlachou, J.S. Lioumbas, K. David, **D. Chasapis**, T.D. Karapantsios, *"Effect of channel height and mass flux on highly subcooled horizontal flow boiling"*, Exp. Thermal and Fluid Science 83:157-168 (2017)
4. Sakonidou, E.P., Karapantsios, T.D., Balouktsis, A.I., **Chassapis, D.**, *"Corrigendum to "Modeling of the optimum tilt of a solar chimney for maximum air flow" [Sol. Energy 82 (2008) 80-94]"*, Solar Energy 86 (2): 809(2012)
5. E.P. Sakonidou, T.D. Karapantsios, A.I. Balouktsis, **D. Chassapis**, "Modeling of the optimum tilt of a solar chimney for maximum air flow", Solar Energy 82,80-94 (2008).
6. **D. Chassapis**, T.D. Karapantsios, A. Balouktsis, "Incorporation of hydrodynamic interaction forces to molecular statistical theory of temporary polymer networks in solution", European Polymer Journal 43, 3236-3249 (2007).
7. **D. Chassapis**, A. Balouktsis, T.D. Karapantsios, "Flow birefringence of temporary polymer networks", European Polymer Journal 38, 1071-1078 (2002).
8. A. Vlachos, T.D. Karapantsios, A. Balouktsis, **D. Chassapis**, "Design and testing of a new solar tray dryer", Drying Technology 20(6): 1243-1271 (2002).
9. A. Balouktsis, **D. Chassapis**, T.D. Karapantsios, "A nomogram method for estimating the energy produced by wind turbine generators", Solar Energy, **72**(3), 251-259 (2002).
10. G. Babos, **D. Chassapis,** "The calculation of the effective values of physical properties for random composites with circular inclusions", J. Phys. Solids 51:209-215 (1990).
11. **D. Chassapis**, G. Babos, R. Takserman-Krozer, E. Kröner, "Statistical mechanics of temporary polymer networks", Rheol. Acta 28: 193-201 (1989).
12. E. Kröner, **D. Chassapis**, R. Takserman-Krozer, "The physics of temporary polymer networks: a comparison of theory and experiment", Biological and Synthetic Polymer Networks, pp 185-205,O. Kramer ed., Elsevier Applied Science, London:1988.

Εργασίες δημοσιευμένες σε πρακτικά συνεδρίων

1. G. Panagopoulos , E. Kirtas , K. Mimidis, I. Sous, A. Kappos, I. Lialiampis & **D. Chasapis**, "Inventory of the building stock in the city of Serres (Greece) for seismic vulnerability assessment and loss estimation", 10th International Conference on Earthquake Resistant Engineering Structures, Opatija-Croatia, 29 June - 1 July 2015.
2. T. D. Karapantsios, A. I. Balouktsis, **D. Chassapis**, M. D. Petala, "A CFD model to estimate the effect of tilt and height on the natural air flow inside a solar chimney", WSEAS conference, Venice – Italy, 21-23 November 2007.
3. I. Balouktsis, A. Balouktsis, T. D. Karapantsios, **D. Chassapis**, K. David, K. Anastasiou "Load matching and optimization of directly coupled PV to water chillers pumping systems", WSEAS conference, Venice – Italy, 21-23 November 2007.
4. M.E. Theodoridou, **D. Chassapis**, A. Balouktsis, "The newly founded Department of Informatics in Serres: its purpose and structure", 3rd GLOBAL CONGRESS ON ENGINEERING

EDUCATION, Congress Proceedings, UICEE, ISBN: 0 7326 2201 8, p.p. 359-362 Glasgow Caledonian University 30 June – 5 July 2002.

5. Α. Μπαλουκτσής, **Δ. Χασάπης**, Θ. Καραπάντσιος, «Δημιουργία Νομογράμματος για τον Υπολογισμό της Μέσης Παραγόμενης Ισχύος μιας Ανεμογεννήτριας», Τεχνολογίες Ήπιων Μορφών Ενέργειας και Περιβάλλοντος, pp. 187-195, Αθήνα 11-12 Δεκεμβρίου 2000.

Συμβολή σε εργασίες τρίτων (δηλώνεται στο Acknowledgement)

- ✓ E. Kröner, R. Takserman-Krozer, "Statistical Theory of Streaming-Birefringence in Temporary Polymer Networks", B. Sedlacek ed., Walter de Gruyter and Co, Berlin:1985
- ✓ E. Kröner, "The viscoelasticity of temporary polymer networks", Morphology of polymers, B. Sedlacek ed., Walter de Gruyter and Co, New York:1986

11. Αναγνώριση επιστημονικού έργου

Ετεροαναφορές (τουλάχιστον 129):

- **Εργασία 10.2:**
  1. Yuriy Bilonoga, Oksana Maksysko, "Specific features of heat exchangers calculation considering the laminar boundary layer, the transitional and turbulent thermal conductivity of heat carriers", International Journal of Heat and Technology, 36(1):11-20 (2018)
  2. Jianguo Yana, Pengcheng Guoa, Qincheng Bib, Zhaohui Liub, Qiaoling Zhang, Zhendong Yang, "*Pressure drop for highly subcooled water flow boiling under high heat and mass fluxes*", Applied Thermal Engineering, 124:1061-1074 (2017)
  3. Yuriy Bilonoga, Oksana Maksysko, "*Modeling the interaction of coolant flows at the liquid-solid boundary with allowance for the laminar boundary layer*", International Journal of Heat and Technology, 35(3):678-682 (2017)
- **Εργασία 10.3:**
  1. Ana I.F. Nunesab, Marta J.N., Oliveira Panão, "*Passive Cooling Load Ratio method*", Energy and Buildings, 64:209-217-1074 (2013)
- **Εργασία 10.4:**
  1. Ratthasak Prommas, SahachaiPhiraphat, Phadungsak Rattanadecho, "Energy and Exergy Analyses of PVRoof Solar Collector", Int. J. of Heat and Technology, 37(1):303-3012 (2019)
  2. B. Mokhtari Shahdost, F. Razi Astaraei, A. Ebrahimi-Moghadam, M. Hossein Ahmadi *"Experimental and numerical investigations of a novel chimney system for power generation using the combination of fossil fuel power plant exhaust gases and ambient air*", Energy Sci. Eng., 1-13 (2019)
  3. P. Das, V.P. Chandramohan, *"Effect of chimney height and collector roof angle on flow parameters of solar updraft tower (SUT) plant"*, J. of Thermal Analysis and Calorimetry, 136(1):133-145 (2019)
  4. C. Jiménez-Xamán, J. Xamán, , I.Hernández-Pérez, I. Zavala-Guillén, J. Arce, M.J.Jiméneze, *"Solar chimneys with a phase change material for buildings: An overview using CFD and global energy balance"*, Energy and Buildings, 186:384-404 (2019)
  5. I. Zavala-Guillén, J. Xamán, I. Hernández-Pérez, I. Hernández-Lopéz, C. Jiménez-Xamán, P. Moreno-Bernal, D.Sauceda, *"Ventilation potential of an absorber-partitioned air channel solar chimney for diurnal use under Mexican climate conditions"*, Applied thermal Engineering, 149:807-821 (2019)
  6. Ahmed A.Serageldin, Ali K.Abdelrahman, Shinichi Ookawarac, *"Parametric study and optimization of a solar chimney passive ventilation system coupled with an earth-to-air heat exchanger"*, Sustainable Energy Technologies and Assessments, 30:263-278 (2018)
  7. X. Cheng, L. Shi, P. Dai, G. Zhang, W. Yang, J. Li, *"Study on optimizing design of solar chimney for natural ventilation and smoke exhaustion"*, Energy and Buildings, 170:145-156 (2018)

8. L. Shi, *"Theoretical models for wall solar chimney under cooling and heating modes considering room configuration"*, Energy, 165(B):925-938 (2018)

9. P. Das, V.P. Chandramohan, *"CFD analysis on flow and performance parameters estimation of solar updraft tower (SUT) plant varying its geometrical configurations"*, Energy Sources, 40:1532-1536 (2018)

10. L. Shi, G. Zhang, W. Yang, D. Huang, X. Cheng, S. Setunge, *"Determining the influencing factors on the performance of solar chimney in buildings"*, Renewable and Sustainable Energy Reviews, 88:223-238 (2018)

11. Seyedeh Sahar Hosseini, Abas Ramiar, Ali Akbar Ranjbar, *"Numerical investigation of natural convection solar air heater with different fins shape"*, Renewable Energy, 117:488-500 (2018)

12. Sahachai Phiraphata, Ratthasak Prommasa, Withaya Puangsombutb, "*Experimental study of natural convection in PV roof solar collector*", Int. Communications in Heat and Mass Transfer, 89:31-38 (2017)

13. Catherine Baxevanou, Dimitris Fidaros, "*Numerical Study of Solar Chimney Operation in a Two Story Building*", Procedia Environmental Sciences, 38:68-76 (2017)

14. Seyedeh Sahar, Hosseini Abas, Ramiar Ali, AkbarRanjbar,"*Numerical investigation of rectangular fin geometry effect on solar chimney*", Energy and Buildings 155:296-307 (2017)

15. Mehrdad Ghalamchi Alibakhsh Kasaeian, Mehran Ghalamchi, Niloufar Fadaei, Reza Daneshazarian, "*Optimizing of solar chimney performance using electrohydrodynamic system based on array geometry*", Energy Conversion and Management, 135:261-269 (2017)

16. M.A. Hosien, S.M.Selim, "*Effects of the geometrical and operational parameters and alternative outer cover materials on the performance of solar chimney used for natural ventilation*", Energy and Buildings, 138:355-367 (2017)

17. M.J. Maghrebi, R. Masoudi Nejad, S. Masoudi, "*Performance analysis of sloped solar chimney power plants in the southwestern region of Iran*", Int. Journal of Ambient Energy, 38 (6):542-549 (2017)

18. L.M. Kumar, V. Sivaramakrishnan, M. Premalathaand M. Vivekanandan, "*Interpretation on Result of Directions of Suction Opening on Solar Chimney Coherent with Building "*, J. of Sci. & Industrial Research , 75:194-199 (2016)

19. Mahendra Kumar Verma, Vikas Bansal, "*A Review on Performance Analysis of Passive Cooling and Ventilation System "*, Int. J. of Engineering Technology, Management and Applied Sciences, 4(4):355-365 (2016)

20. Long Shi, Guomin Zhang, Xudong Cheng, Yan Guo, Jinhui Wang, Michael Yit Lin Chew, "*Developing an empirical model for roof solar chimney based on experimental data from various test rigs*", Building and Environment, 110:115-128 (2016)

21. G. He, J. Zhang, S. Hong, "*A new analytical model for airflow in solar chimneys based on thermal boundary layers*", Solar Energy, 136:614-621 (2016)

22. Long Shi, Guomin Zhang, "*An empirical model to predict the performance of typical solar chimneys considering both room and cavity configurations*", Building and Environment, 103:250-261 (2016)

23. Yonggang Lei, Yuwen Zhang, Fei Wang, XunWang, "*Enhancement of natural ventilation of a novel roof solar chimney with perforated absorber plate for building energy conservation*", Applied Thermal Engineering, 107:653-661 (2016)

24. Shuli Liu, Yongcai Li, "*An experimental study on the thermal performance of a solar chimney without and with PCM*", Renewable Energy, 81:338-346 (2015)

25. Mehran Ghalamchi, Alibakhsh Kasaeian, Mehrdad Ghalamchi, "Experimental *study of geometrical and climate effects on the performance of a small solar chimney*", Renewable and Sustainable Energy Reviews, 43:425-431 (2015)

26. Hou C., Xu L ., "*Influence of Installation Mode and Latitude on Collector Performance*", Procedia Engineering, 121:1907-1912 (2015)

27. Kshirsagar MP, Kalamkar VR, "*A mathematical tool for predicting thermal performance of natural draft biomass cookstoves and identification of a new operational parameter*", Energy, 154:651-662 (2015)

28. Lee D.S., Hung T.S., Lin J.R., Zhao J., "*Experimental investigations on solar chimney for optimal heat collection to be utilized in organic Rankine cycle*", Applied Energy, 93(1):188-201 (2015)

29. Imran A.A., Jalil J.M., Ahmed S.T., "*Induced flow for ventilation and cooling by a solar chimney*", Renewable Energy, 78:236-244 (2015)

30. Liu S., Li Y., "*An experimental study on the thermal performance of a solar chimney without and with PCM*", Renewable Energy, 81:338-346 (2015)

31. Tan A.Y.K. , Wong N.H. ,"*Influences of ambient air speed and internal heat load on the performance of solar chimney in the tropics*", Solar Energy, 102:116-125 (2014)

32. García A., Partl M.N., "*How to transform an asphalt concrete pavement into a solar turbine*", Applied Energy, 119:431-437 (2014)

33. Cao F., Li H., Ma Q., Zhao L., "*Design and simulation of a geothermal–solar combined chimney power plant*", Energy Conversion and Management 84:186-195 (2014)

34. Mohammad O.Hamdan, "*Analysis of solar chimney power plant utilizing chimney discrete model*", Renewable Energy, 56:50-54 (2013)

35. Mohammadjavad Mahdavinejad et al., "*The Study on Optimum Tilt Angle in Solar Chimney as a Mechanical Eco Concept*", Frontiers of Engineering Mechanics Research, 2(3):71-80 (2013)

36. Song Hao Wang et al., "*A Study of Solar Panel Chimney for House Ventilation*" Applied Mechanics and Materials, 422:118-122 (2013)

37. Alex Yong Kwang Tan, Nyuk Hien Wong, "*Parameterization Studies of Solar Chimneys in the Tropics*", Energies, 6:145-163 (2013)

38. Gang Li et al., "*A Compressible Transient Model of the Solar Chimney and Heat Collector*" Applied Mechanics and Materials, 283:15-21 (2013)

39. Mohammad O. Hamdan, "*Analysis of solar chimney power plant utilizing chimney discrete model",* Renewable Energy**,** 56:50-54 (2013)

40. I.P. Koronaki, "*The impact of configuration and orientation of solar thermosyphonic systems on night ventilation and fan energy savings"*, Energy and Buildings, 57:119–131 (2013)

41. Ana I.F. Nunes, Marta J.N. Oliveira Panão, "*Passive Cooling Load Ratio method"*, Energy and Buildings, 64:209–217 (2013)

42. Fei Cao, Liang Zhao, Huashan Lib, Liejin Guo, *"Performance analysis of conventional and sloped solar chimney power plants in China"*, Applied Thermal Engineering 50:582–592(2013)

43. Guillermo Quesada, Daniel Rousse, Yvan Dutil, Messaoud Badache, Stéphane Hallé, "A comprehensive review of solar facades. Opaque solar facades", Renewable and Sustainable Energy Reviews, 16:2820-2832 (2012)

44. Leticia de Oliveira Neves, Maurício Rori, "*Procedures for estimating the potential use of solar chimneys for natural ventilation enhancement in low-rise buildings*", Ambient. constr., 12 (1):177-192 (2012)

45. Taengchum T., Chirarattananon S., Exell R.H.B., *"A Study on a Combined Light Pipe and Solar-heated Ventilation Stack"*, KKU Res. J. 17(2): 217-226 (2012)

46. Amori, K.E., Mohammed, S.W., *"Experimental and numerical studies of solar chimney for natural ventilation in Iraq"*, Energy and Buildings, 47:450-457(2012).

47. Shi, L., Chew, M.Y.L., *"A review on sustainable design of renewable energy systems"*, Renewable and Sustainable Energy Reviews, 16 (1): 192-207(2012).

48. A Kumar, NS Thakur, R Makade, MK Shivhare, "*Optimization of tilt angle for photovoltaic array*", Int. Journal of Eng. Science and Technology 3 (4): 3153-3161(2011)

49. Jalal M. Jalil, Zinah Jaber Khalaf, "*Induced Buoyancy In Inclined Solar Chimney For Natural Ventilation*", Eng. & Tech. Journal, 29(2):183-194 (2011)
50. K.S. Ong, B.T. Tan, "*Temperature Profiles in the Flow Channel of a Natural Convection Solar Air Heater*", J. of Energy and Power Engineering 5:129-134 (2011)
51. Premkumar M., Ramachandran S., "*Thermal analysis of copper and chromium alloy, copper and aluminium solar absorber*", International Journal on Design and Manufacturing Technologies, 5(1):37-40 (2011).
52. Tawfeeq Wesmi M. Salih, *"Adaption for the Wind Energy by using the Solar Nozzle"*, J. of College of Education, 5:21-35 (2011).
53. Khanal R., Lei C., *"Solar chimney-A passive strategy for natural ventilation"*, Energy and Buildings, 43 (8):1811-1819(2011)
54. Afriyie J.K., Rajakaruna H., Nazha M.A.A., Forson F.K., *"Simulation and optimisation of the ventilation in a chimney-dependent solar crop dryer"*, Solar Energy, 85 (7):1560-1573(2011)
55. Ashok Kumar et al., "*Optimization of a tilt angle for photovoltaic array"*, International Journal of Engineering Science and Technology (IJEST), 3(4):3153- 3161(2011)
56. Chami N., Zoughaib A., *"Modeling natural convection in a pitched thermosyphon system in building roofs and experimental validation using particle image velocimetry"*, Energy and Buildings 42 (8):1267-1274(2010)
57. Bernardes M.A.d.S., von Backström T.W., *"Evaluation of operational control strategies applicable to solar chimney power plants"* Solar Energy 84 (2):277-288(2010)
58. Tian Pau Chang, "*The Sun's apparent position and the optimal tilt angle of a solar collector in the northern hemisphere",* Solar Energy, 83, Issue 8: 1274-1284 (2009)
59. Chang T.P., *"The Sun's apparent position and the optimal tilt angle of a solar collector in the northern hemisphere"*, Solar Energy 83 (8):1274-1284(2009)
60. Ramadan Bassiouny, Nader S.A. Korah, *"Effect of solar chimney inclination angle on space flow pattern and ventilation rate",* Energy and Buildings,41, Issue 2:190-196 (2009)
61. Marco Aurélio dos Santos Bernardes, Theodor W. Von Backström, Detlev G. Kröger *"Analysis of some available heat transfer coefficients applicable to solar chimney power plant collectors"* , Solar Energy 83:264–275 (2009)

- **Εργασία 10.5:**

1. S. I. Laneuville, S. L. Turgeon, P. Paquin, *"Changes in the Physical Properties of Xanthan Gum Induced by a Dynamic High-Pressure Treatment"*, Carbohydrate Polymers, 92(2):2327–2336 (2013)

- **Εργασία 10.6:**

1. R. Pantani, *"Validation of a model to predict birefringence in injection molding"*, Eur. Pol. J. 41:1484-1492 (2005)

- **Εργασία 10.7:**

1. Haque AKMM, Hasan M, Shibly MAH, Hasan MF, Rashid MMU and Huque S. Design, *"Development and Performance Analysis of Photo Voltaic Powered Solar Dryer"*. Adv Res Text Eng. 4(1): 1034 (2019)

2. R. K. Aggarwal, *"Review of Solar Drying Technology for Agricultural Crops"*, Int. J. of Engineering Science and Mathematics 7(1):451-459 (2018)

3. K.V. Pavani, Priyanka Aduri, *"Effect of Packaging Materials on Retention of Quality Characteristics of DehydratedGreen Leafy Vegetables duringStorage"*, Int. J. of Environment, Agriculture and Biotechnology, 3(1):256-259 (2018)

4. Dutta P.P., Kumar A. (2017) Development and Performance Study of Solar Air Heater for Solar Drying Applications. In: Prakash O., Kumar A. (eds) Solar Drying Technology. Green Energy and Technology. Springer, Singapore

5. B. Ali, *"Techno-economic optimization for the design of solar chimney power plants"*, Energy Conversion and Management, 138:461–473 (2017)

6. J.B. Hussein, K.B. Filli, M.O. Oke, *"Thin layer modelling of hybrid, solar and open sun drying of tomato slices"*, Research J. of Food Science and Nutrition, 14: 15–27 (2016)

7. M. Mokhtarian, H. Tavakolipour, A. Kalbasi-Ashtari *"Energy and exergy analysis in solar drying of pistachio with air recycling system"*, Drying Technology, 34(12): 1484–1500 (2016)

8. A. Agrawal, R.M. Sarviya, *"Experimental performance of a new design of solar dryer for drying osmotically dehydrated cherry tomatoes"*, Renewable Energy, 94: 147–156 (2016)

9. S. Nabnean, S. Janjai, S. Thepa, K. Sudapraser, R. Songprakorpa, B.K. Balab, *"Experimental performance of a new design of solar dryer for drying osmotically dehydrated cherry tomatoes"*, Renewable Energy, 94: 147–156 (2016)

10. Ashish Agarwal, R.M. Sarviya, *"An experimental investigation of shell and tube latent heat storage for solar dryer using paraffin wax as heat storage material"*, Engineering Science and Technology, 19(1): 619–631 (2016)

11. Mahesh Kumar, Sunil Kumar Sansaniwal, PankajKhatak, *"Progress in solar dryers for drying various commodities"*, Renewable and Sustainable Energy Reviews, 55: 346–360 (2016)

12. A. Aggarwal, T.K. Rawat, M. Kumar, D.K. Upadhyay, "*Evaluating a Hybrid Passive Solar-Electrical Dryer For Drying grapes*", Advances in Environmental Biology, 9(3):353-155 (2015)

13. B. Sepehrimehr, A. Kohan, "*Evaluating a Hybrid Passive Solar-Electrical Dryer For Drying grapes*", Advances in Environmental Biology, 9(3):353-155 (2015)

14. K. C. Okafor, O. U. Oparaku, I. E. Achumba, G. N. Ezeh,K. O. Chilakpu, "*R-SGEMS: A Novel Green Energy Management System for Renewable Energy Utility "*, Int. J. f Energy Policy and Management, 1(1):6-19 (2015)

15. Aghbashlo M., Mortaza J., Mueller J., Mobli, H., et al., "*Modeling and Simulation of Deep-Bed Solar Greenhouse Drying of Chamomile Flowers*", Drying Technology 33(6):684-695 (2015)

16. Hegde V.N., Hosur V.S., Rathod S.K., Harsoor P.A. Narayana K.B., "*Design, fabrication and performance evaluation of solar dryer for banana*", Energy, Sustainability and Society 5(23):1-12 (2015)

17. Hamdan M.O., Khashan S. (2014) Numerical Investigation of Solar Chimney Power Plant in UAE. In: Hamdan M., Hejase H., Noura H., Fardoun A. (eds) ICREGA'14 - Renewable Energy: Generation and Applications. Springer Proceedings in Energy. Springer, Cham

18. Aissa W., El-Sallak M., Elhakem A., "*Performance of solar dryer chamber used for convective drying of sponge-cotton*", Thermal Science 18(2):451-462 (2014)

19. Hamdan M. O., "*Analysis of solar chimney power plant utilizing chimney discrete model*", Renewable Energy 56 (Special Issue: SI):50-54 (2013)

20. Farkas I., "*Integrated Use of Solar Energy for Crop Drying*", Drying Technology 1(8):866-871 (2013)

21. Bagheri H., Arabhosseini A., Kianmehr M.H., Chegini G.R., *"Mathematical modeling of thin layer solar drying of tomato slices"*, Agric Eng Int: CIGR Journal 15(1):146-153(2013)

22. James Stiling, Simon Li, Pieter Stroeve , Jim Thompson, Bertha Mjawa, Kurt Kornbluth, Diane M. Barrett, *"Performance evaluation of an enhanced fruit solar dryer using concentrating panels"*, Energy for Sustainable Development, 16(2):224–230 (2012)

23. H.R. Feili, E.M. Aghaee, A. Taslimi, *"Study of Chemical and Microbiological Properties of Saffron Dehydrated by using Solar Drying System"*, Int. J. of Renewable Energy Research-IJRER, 2(4):13–18 (2012)

24. W. Aissa, M. El-Sallak, A. Elhakem, *"An experimental investigation of forced convection flat plate solar air heater with storage material"*, Thermal Science, 16(4):1105–1116 (2012)

25. Stiling J., Li S., Pieter Stroeve P., Thompson J., Bertha Mjawa B., Kornbluth K., Barrett D.M., *"Performance evaluation of an enhanced fruit solar dryer using concentrating panels"*, Energy for Sustainable Development, 16:224–230 (2012)

26. Guillermo Quesada, Daniel Rousse, Yvan Dutil, Messaoud Badache, Stéphane Hallé, "*A comprehensive review of solar facades. Opaque solar facades"*, Renewable and Sustainable Energy Reviews, 16(5): 2820–2832(2012)

27. Jan Gliński, Józef Horabik, Jerzy Lipiec, *Encyclopedia of Agrophysic,* Springer Science + Business Media, 2011

28. Hamdan, M.O., *"Analysis of a solar chimney power plant in the Arabian Gulf region"*, Renewable Energy, 36 (10):2593-2598(2011)

29. Farkas I., *"Application of solar drying technologies for biological products conservation"*, Environmental Engineering and Management Journal, 10 (8):1207-1212(2011)

30. Belessiotis, V., Delyannis, E., *"Solar drying"*, Solar Energy, 85 (8):1665-1691(2011)

31. B.M.A. Amer, M.A. Hossain, K. Gottschalk, *"Design and performance evaluation of a new hybrid solar dryer for banana"*, Energy Conversion and Management, 51(4):813-80(2010)

32. Fudholi A., Sopian K., Ruslan M.H., Alghoul M.A., Sulaiman M.Y. , *"Review of solar dryers for agricultural and marine products"*, Renewable and Sustainable Energy Reviews 14 (1):1-30(2010)

33. Meza-Jiménez J., Ramírez-Ruiz J., Luna-Solano G., Andrade-González I., *"Low-cost solar thermodynamic drying system for the dehydration of roselle (Hibiscus sabdarifa L.)"*, Drying Technology, 27 (4):621-624(2009)

34. Janjai, S., Lamlert, N., Intawee, P., Mahayothee, B., Boonrod, Y., Haewsungcharern, M., Bala, B.K., Muller, J. *"Solar drying of peeled longan using a side loading type solar tunnel dryer: Experimental and simulated performance"*, Drying Technology 27 (4):595-605 (2009)

35. Akbulut A, Durmuş A, *"Thin layer solar drying and mathematical modeling of mulberry"*, Int. J. of Energy Research 33(7): Pages 687-695 (2009)

36. Hossain M.A , Amer, B.M.A, Gottschalk K, *"Hybrid solar dryer for quality dried tomato"*, Drying Technology 26(12):1591-1601 (2008)

37. Farkas, I, *"Solar drying"*, Stewart Postharvest Review 4(2), art. No. 9 (April 2008)

38. Patil R.T, Shukla, B.D, *"A novel design of crop dryer for use in developing countries"*, Drying Technology 24(5):663-669 (2006)

39. Ghazanfari A, Tabil Jr L, Sokhansanj S, *"Evaluating a solar dryer for in-shell drying of split pistachio nuts"*, Drying Technology 21 (7):1357-1368 (2003)

- **Εργασία 10.8:**

1. Mazhar H. Baloch, Jie Wang, Ghulam S. Kaloi, Ali Asghar Memon, A. Sattar Larik, Poonam Sharma, *"Techno-Economic Analysis of Power Generation from a Potential Wind Corridor of Pakistan: An Overview"*, Environmental Progress & Sustainable Energy 38 (2)Q706-720 (2019)

2. Shiva Prashanth Kumar Kodicherla, Satyanarayana Gaddada & Nagaraju Shaik, " *Wind energy potential and economic evaluation of WPS using WECSs in three selected locations of Northern Ethiopia*", African Journal of Science, Technology, Innovation and Development, 10(2):179-187 (2018)

3. B. Hu, Y.LI, H. Yang, J. Wang, "*Wind speed model based on kernel density estimation and its application in reliability assessment of generating systems"*,J. Mod. Power Syst. Clean Energy, 5(2): 220-227 (2017)

4. Mazhar H Baloch, Safdar A Abro, Ghulam Sarwar Kaloi, Nayyar H Mirjat, Sohaib Tahir, M Haroon Nadeem, Mehr Gul, Zubair A Memon, Mahendar Kumar, "*A research on electricity generation from wind corridors of Pakistan (two provinces): a technical proposal for remote zones*", Sustainability, 9(9):1611-1642 (2017)

5. MH Baloch, GS Kaloi, ZA Memon, "*Current scenario of the wind energy in Pakistan challenges and future perspectives: A case study*", Energy Reports , 2:201-210 (2016)

6. Y Zheng, R Zhao, "*Characteristics for wind energy and wind turbines by considering vertical wind shear*", Journal of Central South University, 22(6):2393-2398 (2015)

7. Shahnawaz Farhan Khahro, Kavita Tabbassum, Amir Mahmood Soomro, Xiaozhong Liao, Muhammad Bux Alvi, Lei Dong, M. Farhan Manzoora, "*Techno-economical evaluation of wind energy potential and analysis of power generation from wind at Gharo, Sindh Pakistan*", Renewable and Sustainable Energy Reviews , 35:460-474 (2014)

8. Muyiwa S. Adaramola, Martin Agelin-Chaab, Samuel S. Paul , "*Assessment of wind power generation along the coast of Ghana*", Energy Conversion and Management, 77:61-69 (2014)

9. S. Diaf, G. Notton, "*Evaluation of electricity generation and energy cost of wind energy conversion systems in southern Algeria*", Renewable and Sustainable Energy Reviews 23:379–370 (2013)

10. S. Diaf, G. Notton, *"Technical and economic analysis of large-scale wind energy conversion systems in Algeria"*, Renewable and Sustainable Energy Reviews 19:37–51 (2013)

11. Chun Su, Quan Jin, Yequn Fu, *"Correlation analysis for wind speed and failure rate of wind turbines using time series approach"*, J. Renewable Sustainable Energy 4, 032301 (2012)

12. Sunday O. Oyedepo, Muyiwa S. Adaramola, Samuel S. Paul, *"Analysis of wind speed data and wind energy potential in three selected locations in south-east Nigeria"*, International Journal of Energy and Environmental Engineering, 3:7 (2012).
13. Ahmed, A.S., *"Electricity generation from the first wind farm situated at Ras Ghareb, Egypt"*, Renewable and Sustainable Energy Reviews 16 (3): 1630-1635(2012)
14. Paul, S.S., Oyedepo, S.O., Adaramola, M.S., *"Economic assessment of water pumping systems using wind energy conversion systems in the southern part of Nigeria"*, Energy Exploration and Exploitation 30 (1):1-18(2012)
15. M.R.S Siti, M. Norizah , M. Syafrudin, *"The Evaluation of Wind Energy Potential in Peninsular Malaysia"*, International Journal of Chemical and Environmental Engineering 2(4):284-291 (2011)
16. Gasljevic G., Lamovec J., Jancar J., *"Undifferentiated (embryonal) liver sarcoma: synchronous and metachronous occurrence with neoplasms other than mesenchymal liver hamartoma"*, Annals of Diagnostic Pathology 15(4)Q250-256 (2011)
17. Akdağ, S.A., Gler, O., *"A comparison of wind turbine power curve models"*, Energy Sources, Part A: Recovery, Utilization and Environmental Effects 33 (24):2257-2263(2011)
18. Adaramola, M.S., Paul, S.S., Oyedepo, S.O., *"Assessment of electricity generation and energy cost of wind energy conversion systems in north-central Nigeria"*, Energy Conversion and Management 52 (12):3363-3368(2011)
19. Jin, Q., Su, C., *"Wind energy assessment of wind farms based on power-law process and modified parameter estimation method"*, Zhongguo Dianji Gongcheng Xuebao/Proceedings of the Chinese Society of Electrical Engineering 30 (35)Q: 107-111 (2010).
20. García-Bustamante, E., González-Rouco, J.F., Jiménez, P.A., Navarro, J., Montávez, J.P., *"A comparison of methodologies for monthly wind energy estimation"*, Wind Energy 12 (7):640-659(2009)
21. J.A. Carta, P. Ramirez, S. Velasquez, "*A review of wind probability distribution used in wind energy analysis: Case studies in the Canary islands*", Renewable and Sustainable Energy Reviews, 13, Issue 5:933-955 (2009)
22. N. Eskin, H. Artar, S. Tolun, "*Wind energy potential of Gökceada Island in Turkey*", Renewable and Sustainable Energy Reviews 12(3):839-851 (2008)
23. Sathyajith Mathew, "Wind Energy", pp. 55-88, Springer-Verlag Berlin Heidelberg 2006
24. E. Kavak Akpinar, S. Akpinar, "*An assessment on seasonal analysis of wind speeds in Northern Spain*", Energy Conversion and Manegement 46(11-12):1848-1867 (2005)
25. I.A. Perez, M.A. Garcia, M.L. Sanchez, B. de Tore, "*Analysis of height variations of solar-drived wind speeds in Northern Spain*", J. of Wind Eng. And Industrial Aerodynamics, 92(10):875-894 (2004)
26. Tsang-Jung Chang, Yu-Ting Wu, Hua-Yi Hsu, Chia-Ren Chu, Chun-Min Liao, "*Assessment of wind characteristics and wind turbine characteristics in Taiwan*", Renewable Energy, 28(6):851-871 (2003)

- **Εργασία 10.9:**

1. G. W. Milton "*The Theory of Composites*", pp. 333&335, Cambridge University Press 2002
2. D. Jeulin, A. Le Coent, *"Morphological modelling of random composites" ,* in *Continuum Model and Discrete Systems,* K.Z. Markov (editor) (1996)
3. Le Coent, Anthony, *"Microstructure observation and statistic modeling of composites dielectric properties"*. PhD thesis Géostatistique, Centre de Géostatistique, ENSMP (Ecole Nationale Supérieure des Mines de Paris) (1995)

- **Εργασία 10.11:**

1. D.R. Alexrad, W. Frydrychowicz, M.R. Kamal, "*Stochastic analysis of polymer melts with binary structure*", Z. Angew. Math. Phys 43:536-551 (1992))