

## Curriculum Vitae

1. **Name Surname:** Ataollah KHANLARI
2. **Date of Birth:** 1986
3. **Title:** Assistant Professor
4. **Education:**

Degree	Field	University	Year
Bachelor	Mechanical Engineering	Azad University, Iran	2009
Master	Clean Renewable Energies	Hacettepe University	2013
Doctorate	Energy Systems Engineering	Gazi University	2018

5. **Academic Titles**

Title	Department	University	Year/Period
Assistant Professor	Mechanical Engineering	Turkish Aeronautical Association University	2019-...

6. **Graduate Theses**

### 6.1. Master Theses

The applications of the solar wall systems in the world and applicability in Turkey

### 6.2. Doctorate Theses

Experimental and numerical analysis of plate heat exchangers

## 7. Research Interests

Thermodynamics, Heat Transfer, Fluid Mechanics, Heat Exchangers, Computational Fluid Dynamics (CFD), Renewable Energy Systems, Solar Energy Applications, Nanofluids, Heat Recovery Systems, Industrial Drying Systems, Heat Pump, Heat Pipe, Thermal Insulation.

## 8. Publications

### 8.1. Articles published in peer reviewed international journals (SCI, SCI Expanded)

- A22. Khanlari, A.** (2020). The Effect of Utilizing  $\text{Al}_2\text{O}_3\text{-SiO}_2$ /Deionized Water Hybrid Nanofluid in a Tube-Type Heat Exchanger, *Heat Transfer Research*, 51(11), 991-1005.
- A21. Khanlari, A.,** Sözen, A., Şahin, B., Di Nicola, G., Afshari, F. (2020). Experimental investigation on using building shower drain water as a heat source for heat pump systems, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, In press.
- A20.** Tuncer, A. D., **Khanlari, A.,** Sözen, A., Gürbüz, E. Y., Şirin, C., Güngör, A. (2020). Energy-exergy and enviro-economic survey of solar air heaters with various air channel modifications, *Renewable Energy*, 160, 67-85.
- A19.** Tuncer, A. D., Sözen, A., Afshari, F., **Khanlari, A.,** Şirin, C., Güngör, A. (2020). Testing of a novel convex-type solar absorber drying chamber in dehumidification process of municipal sewage sludge, *Journal of Cleaner Production*, 272, 122862.
- A18.** Afshari, F., Sözen, A., **Khanlari, A.,** Tuncer, A. D., Şirin, C. (2020). Effect of turbulator modifications on the thermal performance of cost-effective alternative solar air heater, *Renewable Energy*, 158, 297-310.
- A17.** Gürbüz, E. Y., Sözen, A., Variyenli, H. İ., **Khanlari, A.,** Ökten, M. (2020). Experimental and numerical analysis on using  $\text{CuO-Al}_2\text{O}_3$ /water hybrid nanofluid in a U-type tubular heat exchanger, *International Journal of Numerical Methods for Heat and Fluid Flow*, <https://doi.org/10.1108/HFF-04-2020-0195>.
- A16.** Tuncer, A. D., Sözen, A., **Khanlari, A.,** Amini, A., Şirin, C. (2020). Thermal performance analysis of a quadruple-pass solar air collector assisted pilot-scale greenhouse dryer, *Solar Energy*, 203, 304-316.
- A15. Khanlari, A.,** Sözen, A., Şirin, C., Tuncer, A. D., Güngör, A. (2020). Performance enhancement of a greenhouse dryer: Analysis of a cost-effective alternative solar air heater, *Journal of Cleaner Production*, 251, 119672.

- A14. Khanlari, A.,** Sözen, A., Afshari, F., Şirin, C., Tuncer, A. D., Güngör, A. (2020). Drying municipal sewage sludge with v-groove triple-pass and quadruple-pass solar air heaters along with testing of a solar absorber drying chamber, *Science of The Total Environment*, 709, 136198.
- A13. Khanlari, A.,** Yılmaz Aydın, D., Sözen, A., Gürü, M., Variyenli, H. İ. (2020). Investigation of the influences of kaolin-deionized water nanofluid on the thermal behavior of concentric type heat exchanger. *Heat Mass Transfer*, 56, 1453-1462.
- A12.** Güler, H.Ö., Sözen, A. Tuncer, A. D., Afshari, F, **Khanlari, A.,** Şirin, C., Güngör, A. (2020). Experimental and CFD survey of indirect solar dryer modified with low-cost iron mesh, *Solar Energy*, 197, 2020, 371-384.
- A11.** Afshari, F., Şahin, B., **Khanlari, A.,** Manay, E. (2020). Experimental optimization and investigation of compressor cooling fan in air to water heat pump, *Heat Transfer Research*, 51(4), 319-331.
- A10. Khanlari, A.,** Güler, H. Ö., Tuncer, A. D., Şirin, C., Bilge, Y. C., Yılmaz, Y., Güngör, A. (2020). Experimental and numerical study of the effect of integrating plus-shaped perforated baffles to solar air collector in drying application, *Renewable Energy*, 145, 1677-1692.
- A9.** Sözen, A., Gürü, M., **Khanlari, A.,** Çiftçi, E. (2019). Experimental and numerical study on enhancement of heat transfer characteristics of a heat pipe utilizing aqueous clinoptilolite nanofluid, *Applied Thermal Engineering*, 160, 114001.
- A8.** Sözen, A., **Khanlari, A.,** Çiftçi, E. (2019). Heat transfer enhancement of plate heat exchanger utilizing kaolin-including working fluid, *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, 233 (5), 626-634.
- A7. Khanlari, A.,** Sözen, A., Variyenli, H. İ., Gürü, M. (2019). Comparison between heat transfer characteristics of tio<sub>2</sub>/deionized water and kaolin/deionized water nanofluids in the plate heat exchanger, *Heat Transfer Research*, 50(5):435-450.
- A6. Khanlari, A.,** Sözen, A., Variyenli, H. İ. (2019). Simulation and experimental analysis of heat transfer characteristics in the plate type heat exchangers using TiO<sub>2</sub>/Water nanofluid, *International Journal of Numerical Methods for Heat & Fluid Flow*, 29 (4), 1343-1362.
- A5.** Aktaş, M., Sözen, A., Amini, A., **Khanlari, A.** (2017). Experimental analysis and CFD simulation of infrared apricot dryer with heat recovery, *Drying Technology*, 35, 766-783.
- A4.** Aktaş, M., **Khanlari, A.,** Amini, A., Şevik, S. (2017). Performance analysis of heat pump and infrared-heat pump drying of grated carrot using energy-exergy methodology, *Energy Conversion and Management*, 132, 327-338.
- A3.** Aktaş, M., **Khanlari, A.,** Aktekeli, B., Amini, A. (2017). Analysis of a new drying chamber for heat pump mint leaves dryer, *International Journal of Hydrogen Energy*, 42, 18034-18044.

- A2.** Özdemir, M.B., Aktaş, M., Şevik, S., **Khanlari, A.** (2017). Modeling of a convective-infrared kiwifruit drying process, *International Journal of Hydrogen Energy*, 42, 18005-18013.
- A1.** Aktaş, M., Şevik, S., Amini, A., **Khanlari, A.** (2016). Analysis of drying of melon in a solar-heat recovery assisted infrared dryer, *Solar Energy*, 137, 500-515.

## **8.2. Papers delivered in international conferences and printed as proceedings**

- B16.** Ateş, İ., Afshari, F., Tuncer, A.D., Şahin, B., **Khanlari, A.**, 2019. Experimental study on airfoil angles in horizontal axis wind turbine. 2nd International Conference on Technology and Science, Burdur, Turkey.
- B15.** **Khanlari, A.**, Sözen, A., Polat, F., Şirin, C., Düden Örgen, F.K., Tuncer, A.D., Güngör, A., 2019. Statistical analysis of the wind energy potential of Western Mediterranean Region, Turkey. 2nd International Conference on Technology and Science, Burdur, Turkey.
- B14.** Afshari, F., **Khanlari, A.**, Sözen, A., Şirin, C., Tuncer, A. D., Güngör, A. (2019). CFD analysis on fin and baffle configurations in solar air collector, 2nd International Conference on Technology and Science, Burdur, Turkey.
- B13.** Afshari, F., Sözen, A., Tuncer, A. D., **Khanlari, A.**, Şirin, C., Güngör, A. (2019). Effect of tilt angle on PV front glass and tedlar temperature, 2nd International Conference on Technology and Science, Burdur, Turkey.
- B12.** Tuncer, A. D., Sözen, A., Afshari, F., Şirin, C., **Khanlari, A.**, Güngör, A. (2019). Testing of a solar air heater made with scrap metal elbows: utilization of recycled materials, 2nd International Conference on Technology and Science, Burdur, Turkey.
- B11.** Tuncer, A. D., Sözen, A., Şirin, C., **Khanlari, A.**, Afshari, F. (2019) Recent overview on waste management in Turkey: biomass energy utilization potential, International Congress of Energy, Economy and Security, İstanbul, Turkey.
- B10.** Afshari, F., Şahin, B., **Khanlari, A.**, Manay, E. (2019, September) Effects of water temperature on the performance of water cooled-thermoelectric refrigerator, 22nd Congress on Thermal Science and Technology (ULIBTK-2019), Kocaeli, Turkey.
- B9.** **Khanlari, A.**, Sözen, A., Afshari, F., Şahin, B. (2019, April) A Comparative Study on Two Stage Water Cooled-Thermoelectric Refrigerators, Separate and Consecutive Modes, 2nd INTERNATIONAL CONFERENCE on ENERGY RESEARCH (ENRES-2019), Marmaris, Turkey.
- B8.** Afshari, F., Dehghanpour, H., **Khanlari, A.** (2018, December). A basic comparison between numerical methods provided by ansys cfx, ansys fluent and abaqus standard. IV. ULUSLARARASI MESLEKİ VE TEKNİK BİLİMLER KONGRESİ, Erzurum, Turkey.

- B7.** Sözen, A., **Khanlari, A.**, Çiftçi, E. (2018, June). Experimental investigation on the effects of kaolin/deionized water nanofluid usage in a plate type heat exchanger. 6th European Conference on Renewable Energy Systems (ECRES), İstanbul, Turkey.
- B6.** Sözen, A., **Khanlari, A.**, Çiftçi, E. (2018, June). Experimental and numerical analysis of the influences of TiO<sub>2</sub>-containing nanofluid utilization on heat transfer enhancement of a plate heat exchanger. 6th European Conference on Renewable Energy Systems (ECRES), İstanbul, Turkey.
- B5.** **Khanlari, A.**, Ay, İ. (2017, September). A numerical study on determination of the optimal hole diameter and pitch value for the unglazed transpired solar collectors, International Engineering Research Symposium (UMAS), Düzce, Turkey.
- B4.** Durmuş, G., Uluer, O., Aktaş, A., Karaağaç, İ., **Khanlari, A.**, Ağbulut, Ü., Çelik, D. N. (2017, March). A study on some factors affecting on CO<sub>2</sub> curing of expanded perlite based thermal insulation panel. Proceedings of 3rd International Sustainable Buildings Symposium (ISBS), Dubai, UAE.
- B3.** Uluer, O., Aktaş, A., Karaağaç, İ., Durmuş, G., **Khanlari, A.**, Ağbulut, Ü., Çelik, D. N. (2017, January). Manufacturing of expanded perlite based heat insulation material using theoretical thermal conductivity prediction model results. Istanbul International Conference on Progress in Applied Science, İstanbul, Turkey.
- B2.** Aktaş, M., **Khanlari, A.**, Aktekeli, B., Amini, A. (2016, August). Development of a new drying chamber for heat pump mint leaves dryer. IV. European Conference on Renewable Energy Systems (ECRES), İstanbul, Turkey.
- B1.** Özdemir, M.B., Aktaş, M., Şevik, S., **Khanlari, A.**, Özkan, M. (2016, August). Energy consumption and drying kinetics modeling of an infrared system with heat recovery. IV. European Conference on Renewable Energy Systems (ECRES), İstanbul, Turkey.

### **8.3. Articles published in other peer reviewed international journals (ESCI)**

- C6.** Sözen, A., **Khanlari, A.**, Tuncer, A. D., Şirin, C., Afshari, F., Güngör, A. (2020). Empirical Investigation of Small-Scale Aluminium Wool Packed Solar Air Heater Made with Waste Material, Journal of Polytechnic, <https://doi.org/10.2339/politeknik.710448>.
- C5.** Variyenli, H. İ., **Khanlari, A.** (2019). Analyzing the Environmental Effects of Conventional and Condensing Combi Boilers Using Natural Gas, Journal of Polytechnic, DOI: 10.2339/politeknik.592313.
- C4.** Sözen, A., **Khanlari, A.**, Çiftçi, E. (2019). Experimental and numerical investigation of nanofluid usage in a plate heat exchanger for performance improvement, Int. Journal of Renewable Energy Development, 8 (1), 27-32.

- C3. Khanlari, A., Ay, İ.** (2019). A numerical study on determination of the optimal hole diameter and pitch value for the unglazed transpired solar collectors. *Journal of Polytechnic*, 22 (1), 163-168.
- C2. Uluer, O., Aktaş, A., Karaağaç, İ., Durmuş, G., Khanlari, A., Ağbulut, Ü., Çelik, D. N.** (2018). Mathematical calculation and experimental investigation of expanded perlite based heat insulation materials' thermal conductivity values. *Journal of Thermal Engineering*, 4, 2274-2286.
- C1. Ünlü, G., Boran, K., Aktaş, M., Khanlari, A.** (2018). İnfrared enerjili-ısı pompalı plc kontrollü bir kurutucuda kabak çekirdeği kurutulması. *Politeknik Dergisi*, 21(3) : 519-525.

#### **8.4. Articles published in peer reviewed national journals**

- D3. Variyenli, H. İ., Afshari, F., Khanlari, A.** (2019). Investigating on environmental effects of different combi boilers using lpg fuel, *El-Cezerî Journal of Science and Engineering*, 6, (3), 681-690.
- D2. Uluer, O., Karaağaç, İ., Aktaş, A., Durmuş, G., Ağbulut, Ü., Khanlari, A., Çelik, D. N.** (2018). An investigation of usability of expanded perlite in heat insulation technologies. *Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi*, 24, 36-42.
- D1. Ay, İ., Khanlari, A.** (2015). Güneş Duvarı Sisteminin Çalışma Prensibi ve Türkiye'deki Uygulanabilirliği. *Gazi Üniversitesi Fen Bilimleri Dergisi Part: C, Tasarım Ve Teknoloji*, 3(3), 525-533 [In Turkish].

#### **9. Projects directed and participated**

Project Assistant; TÜBİTAK-1003, 2015-2017.