

## Res. Asst. UMUTCAN OLMUŞ



### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Cukurova University, Makina Mühendisliği, Makine Mühendisliği, Turkey 2019

- Continues

Postgraduate, Cukurova University, Makina Mühendisliği, Makine Mühendisliği, Turkey

2016 - 2019

Undergraduate, Cukurova University, Mühendislik Mimarlık Fakültesi, Makine

Mühendisliği, Turkey 2009 - 2015

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Postgraduate, Analysis of desiccant air-conditioning system with PVT, Cukurova University, Makina Mühendisliği, Makine Mühendisliği, 2019

### Research Areas

Mechanical Engineering, Energy, Alternative Energy Resources, Solar energy, Thermodynamics, Heating, Refrigerating and Air Conditioning, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Cukurova University, Mühendislik Fakültesi, Makina Müh., 2018 - Continues

Research Assistant, Iskenderun Technical University, Faculty Of Engineering And Natural Sciences, Department Of Energy Systems Engineering, 2017 - 2018

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Performance evaluation of different types of indirect evaporative coolers: A CFD-based comparative study**  
GÜZELEL Y. E., OLMUŞ U., BÜYÜKALACA O.  
Journal of Building Engineering, vol.96, 2024 (SCI-Expanded)
- II. **Numerical investigation and ANN modeling of performance for hexagonal boron Nitride-water nanofluid PVT collectors**  
Büyükalaca O., Olmuş U., Güzelel Y. E., Çerçi K. N.  
Thermal Science and Engineering Progress, vol.43, no.101997, pp.1-18, 2023 (SCI-Expanded)
- III. **Seasonal analysis of a desiccant air-conditioning system supported by water-cooled PV/T units**  
Olmuş U., Güzelel Y. E., Büyükalaca O.  
ENERGY AND BUILDINGS, vol.2023, no.291, pp.1-14, 2023 (SCI-Expanded)
- IV. **Simulation of a desiccant air-conditioning system integrated with dew-point indirect evaporative cooler for a school building**  
GÜZELEL Y. E., OLMUŞ U., BÜYÜKALACA O.  
APPLIED THERMAL ENGINEERING, vol.217, 2022 (SCI-Expanded)
- V. **New multiple regression and machine learning models of rotary desiccant wheel for unbalanced flow conditions**  
GÜZELEL Y. E., OLMUŞ U., cerçi K. N., BÜYÜKALACA O.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.134, 2022 (SCI-Expanded)
- VI. **Performance assessment of a desiccant air-conditioning system combined with dew-point indirect evaporative cooler and PV/T**  
OLMUŞ U., Guzelel Y. E., PINAR E., ÖZBEK A., BÜYÜKALACA O.  
SOLAR ENERGY, vol.231, pp.566-577, 2022 (SCI-Expanded)
- VII. **Comprehensive modelling of rotary desiccant wheel with different multiple regression and machine learning methods for balanced flow**  
GÜZELEL Y. E., OLMUŞ U., Cerci K. N., BÜYÜKALACA O.  
APPLIED THERMAL ENGINEERING, vol.199, 2021 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Effect of operating parameters on the performance of rotary desiccant wheel energized by PV/T collectors**  
OLMUŞ U., GÜZELEL Y. E., ÇERÇİ K. N., BÜYÜKALACA O.  
Journal of Thermal Engineering, 2023 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Performance Investigation of PV/T Assisted Desiccant Wheel for Different Operating Parameters**  
OLMUŞ U., GÜZELEL Y. E., ÇERÇİ K. N., BÜYÜKALACA O.  
Int. Conference on Engineering, Natural and Applied Science 2021, Osmaniye, Turkey, 24 - 26 November 2021, pp.133
- II. **Döner Tip Nem Alıcının Performansına Dönme Hızının Etkisi**  
GÜZELEL Y. E., OLMUŞ U., ÇERÇİ K. N., BÜYÜKALACA O.  
6th International Mediterranean Science and Engineering Congress (IMSEC 2021), Antalya, Turkey, 25 - 27 October 2021, pp.623-628
- III. **Dairesel Silindir Etrafındaki Akış Yapısının Kontrü İçin Hibrit Control Elementi**  
PINAR E., DURHASAN T., ÖZKAN G. M., OLMUŞ U., AKILLI H., ŞAHİN B.  
7th International Symposium on Innovative Technologies in Engineering and Science, Turkey, 22 - 24 November 2019, vol.2, pp.905-915

- IV. **Experimental Investigation of Flow Structures Around side-by-side Yawed Cylinders in Shallow Water**  
KÜTÜK E., OLMUŞ U., DURHASAN T., AKILLI H.  
7th International Symposium on Innovative Technologies in Engineering and Science, Turkey, 22 - 24 November 2019, vol.2, pp.1138-1151
- V. **DAİRESEL SİLİNDİRİN YAKIN ARD İZİNİN DELİKLİ İKİ PLAKA YARDIMI İLE KONTROL EDİLMESİ**  
PINAR E., DURHASAN T., OLMUŞ U., ÖZKAN G. M., AKILLI H., ŞAHİN B.  
International Symposium on Advanced Engineering Technologies, Kahramanmaraş, Turkey, 2 - 04 May 2019, vol.1, pp.1422-1512
- VI. **Control of the Flow Structure of a Circular Cylinder Using Concentrically Installed Perforated Cylinder and Splitter Plate**  
PINAR E., YENİÇUN A., ÖZKAN G. M., DURHASAN T., OLMUŞ U., AKILLI H., ŞAHİN B.  
6th International Symposium on Innovative Technologies in Engineering and Science, Antalya, Turkey, 9 - 11 November 2018, pp.761-777
- VII. **Dairesel Silindirin Etrafındaki Akışın Delikli Plaka Yardımı ile Kontrol Edilmesi**  
PINAR E., DURHASAN T., ÖZKAN G. M., OLMUŞ U., ÇETİN a., AKILLI H., ŞAHİN B.  
Science and Research Congress Cyprus, 4 - 06 September 2018
- VIII. **Flow structure in the annular region of perforated shroud**  
DURHASAN T., PINAR E., ÖZKAN G. M., OLMUŞ U., AKILLI H., ŞAHİN B.  
Mediterranean Natural Sciences and Engineering Congress, 19 - 22 October 2017

## **Metrics**

Publication: 16