

## Asst. Prof. BAHADIR ACAR

### Personal Information

**Email:** [bacar@karabuk.edu.tr](mailto:bacar@karabuk.edu.tr)

**Web:** <https://avesis.karabuk.edu.tr/bacar>

### Education Information

Doctorate, Karabük Üniversitesi, Fen Bilimleri Enstitüsü, Makine Eğitimi (Dr), Turkey 2008 - 2011

Post Graduate, Bülent Ecevit Üniversitesi, Fen Bilimleri Enstitüsü, Makine Eğitimi (YI) (Tezli), Turkey 2005 - 2007

Under Graduate, Gazi Üniversitesi, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü, Turkey 1997 - 2001

### Academic Titles / Tasks

Assistant Professor, Karabük Üniversitesi, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, 2011 - Continues

Research Assistant, Karabük Üniversitesi, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü, 2004 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **A New Hybrid System Design for Thermal Energy Storage**  
CEYLAN İ., Ali I. H. G. , ERGÜN A., GÜREL A. E. , ACAR B., Islam N.  
JOURNAL OF THERMAL SCIENCE, vol.29, pp.1300-1308, 2020 (Journal Indexed in SCI)
- II. **Performance assessment of a novel design concentrated photovoltaic system coupled with self-cleaning and cooling processes**  
ACAR B., Gürel A. E. , ERGÜN A., CEYLAN İ., Ağbulut Ü., CAN A.  
Environmental Progress and Sustainable Energy, vol.39, 2020 (Journal Indexed in SCI Expanded)
- III. **EXPERIMENTAL INVESTIGATION ON THE EFFECT OF SOIL TYPE TO THE GROUND SOURCE HEAT PUMP'S PERFORMANCE AND ENERGY CONSUMPTION**  
ACAR B.  
THERMAL SCIENCE, vol.24, pp.843-852, 2020 (Journal Indexed in SCI)
- IV. **Performance analysis of using CuO-Methanol nanofluid in a hybrid system with concentrated air collector and vacuum tube heat pipe**  
KAYA M., GÜREL A. E. , Ağbulut U., CEYLAN İ., Celik S., ERGÜN A., ACAR B.  
ENERGY CONVERSION AND MANAGEMENT, vol.199, 2019 (Journal Indexed in SCI)
- V. **Laminar Forced Convection of Various Nanofluids in Sudden Expansion Channels Under Constant Heat Flux: A CFD Study**  
ACAR B.  
INTERNATIONAL JOURNAL OF APPLIED MECHANICS, vol.11, 2019 (Journal Indexed in SCI)
- VI. **Energy-exergy-ANN analyses of solar-assisted fluidized bed dryer**  
ERGÜN A., CEYLAN İ., ACAR B., ErKaymaz H.  
DRYING TECHNOLOGY, vol.35, pp.1711-1720, 2017 (Journal Indexed in SCI)
- VII. **Psychometric and thermodynamic analysis of new ground source evaporative cooling system**  
CEYLAN İ., ERGÜN A., ACAR B., AYDIN M.  
ENERGY AND BUILDINGS, vol.119, pp.20-27, 2016 (Journal Indexed in SCI)
- VIII. **Experimental Investigation of a Household Refrigerator Performance Using Chimney-Type**

## **Condenser**

GEDİK E., KILICASLAN E., ACAR B., ERGÜN A., ÖZBAŞ E.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.41, pp.1691-1697, 2016 (Journal Indexed in SCI)

### **IX. FREEZE-DRYING KINETICS AND DIFFUSION MODELING OF SAFFRON (CROCUS SATIVUS L.)**

ACAR B., SADIKOĞLU H., DOYMAZ İ.

JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.39, pp.142-149, 2015 (Journal Indexed in SCI)

### **X. Freeze Drying of Saffron (Crocus sativus L.)**

ACAR B., SADIKOĞLU H., ÖZKAYMAK M.

DRYING TECHNOLOGY, vol.29, pp.1622-1627, 2011 (Journal Indexed in SCI)

### **XI. EXPERIMENTAL INVESTIGATION OF COLLECTOR EFFICIENCIES ON SEPARATED AND CONNECTED HEAT PIPES**

ACAR B., ÖZ E. S., GEDİK E.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.23, pp.425-429, 2008 (Journal Indexed in SCI)

## **Articles Published in Other Journals**

- I. Design of Hazelnut Drying System Supported By Solar Energy, Investigation of Drying Performance and Determination of Proper Drying Model**  
ACAR B., DAĞDEVİREN A., ÖZKAYMAK M.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.10, pp.570-577, 2020 (Journal Indexed in ESCI)
- II. Economical Analysis of Huawei MA5622 External Active Access Device Charged by Photovoltaic Panel**  
ACAR B., BAS S., YILIZ O.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.10, pp.79-88, 2020 (Journal Indexed in ESCI)
- III. Yağ Soğutmalı Kondenser Tasarımının Termostat Kontrollü Bir Soğutucuya Uyarlanması ve Performans Deneylerinin İncelenmesi**  
ACAR B.  
Politeknik Dergisi, vol.22, pp.477-484, 2019 (Other Refereed National Journals)
- IV. Adaptation of Oil Cooled Condenser Design to A Thermostat Controlled Cooler and Performance Analysis**  
ACAR B.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.22, pp.477-484, 2019 (Journal Indexed in ESCI)
- V. Investigation of Energy Generation at Test System Designed by Use of Concentrated Photo-Voltaic Panel And Thermoelectric Modules**  
ACAR B., BAŞ Ş.  
International Journal of Renewable Energy Resources (IJRER), vol.8, no.4, pp.1859-1867, 2018 (Journal Indexed in ESCI)
- VI. Investigation of Energy Generation at Test System Designed by Use of Concentrated Photo-Voltaic Panel And Thermoelectric Modules**  
ACAR B., BAS S.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.8, pp.1859-1867, 2018 (Journal Indexed in ESCI)
- VII. Klima Santrallerinde Yoğuşan Suyun Geri Kazanımı İçin Alternatif Yöntemler**  
GÜREL A. E., CEYLAN İ., ERGÜN A., ACAR B.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.6, pp.893-901, 2018 (Other Refereed National Journals)
- VIII. Ev Tipi Soğutucuda Yağ Hazneli Kondenserin Sistem Performansı Üzerine Etkisinin İncelenmesi**  
KILIÇASLAN E., ACAR B., ARICIOĞLU M.  
Düzce Bilim ve Teknoloji Dergisi, vol.4, pp.475-485, 2016 (Other Refereed National Journals)

- IX. **Atık Baca Gazı Kullanımı ile Termoelektrik Jeneratörlerde Elektrik Üretiminin Faydalı Kullanımının Deneysel İncelenmesi**  
ÖZKAYMAK M., BAŞ Ş., ACAR B., YAVUZ C., BORAN K., TABAK A., VARIYENLİ H. İ. , ASAL Ö.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part:C, Tasarım Ve Teknoloji, vol.2, pp.289-298, 2014 (Other Refereed National Journals)
- X. **THERMO ECONOMIC OPTİMİZATION OF A VAPOUR COMPRESSED REFRIGERATION SYSTEM USING ALTERNATIVE REFRIGERANTS**  
ÖZKAYMAK M., ÖZKAYA M. G. , ACAR B.  
e-Journal of New World Sciences Academy, vol.5, pp.381-398, 2010 (Refereed Journals of Other Institutions)
- XI. **Thermo Economic Optimization of a Vapour Compressed Refrigeration System Using Alternative Refrigerants**  
ÖZKAYMAK M., ÖZKAYA M. G. , ACAR B.  
New World Sciences Academy, pp.381-398, 2010 (Other Refereed National Journals)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Isı Borulu Güneş Enerjili Su Isıtma Sisteminde Doğrusal Fresnel Lens Kullanımının Sistem Üzerine Etkisinin Deneysel İncelenmesi**  
ACAR B.  
INERS'19 3rd International Engineering Research Symposium, Düzce, Turkey, 5 - 07 September 2019, pp.80-84
- II. **Dondurularak kurutulan muzun Kinetik Modeli**  
ACAR B., DAĞDEVİREN A., ÖZKAYMAK M.  
4th International Symposium on Innovative Approaches in Engineering and Natural Science, 22 - 24 November 2019
- III. **ENERGY EFFICIENCY IN AIR CONDITIONING SYSTEMS: EVAPORATIVELY RECOVERY OF CONDENSED WATER**  
CEYLAN İ., ERGÜN A., GÜREL A. E. , ACAR B.  
1st International Technology Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018, pp.331
- IV. **Safran çiçeğinin alternatif kurutma yöntemi**  
ACAR B.  
Safran Hasadı Etkinliği, Turkey, 10 - 12 November 2017
- V. **Güneş Enerjili Isı Borularında Yansıtıcı Etkisinin Deneysel Karşılaştırılması**  
ÖZBAŞ E., ACAR B.  
1st International Conference on Energy Systems Engineering, Karabük, Turkey, 2 - 04 November 2017, pp.348-350
- VI. **Termoelektrikli Soğutma ve Isıtma Sisteminin Mini Sera Ortamında Kullanılarak Safran Çiçeği Yetiştirilmesi**  
ACAR B.  
1 st International Conference on Energy Systems Engineering, Karabük, Turkey, 2 - 04 November 2017, pp.336-339
- VII. **Effects Of The Ejector On Vapour Compression Cooling System**  
ACAR B., ERGÜN A., KILIÇASLAN E.  
International Conference on Engineering and Natural Science, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, vol.10, pp.2771-2777
- VIII. **Ev Tipi Bir Soğutucuda Eşanjör Kullanımının Soğutma Performansına Etkisinin İncelenmesi**  
ACAR B.  
ISITES2016 4TH International Symposium On Innovative Technologies In Engineering And Science, Antalya, Turkey, 3 - 05 November 2016, pp.677-686
- IX. **Effects of The Ejector Usage On Vapour Compression Cooling System**  
ACAR B., ERGÜN A., KILIÇASLAN E.  
ICENS International Conference on Engineering and Natural Science, 24 - 28 May 2016, vol.10, pp.2771-2777

- X. **Thermodynamic and Thermoeconomic Analysis of Split Type Air Conditioners Combined with Boiler**  
GEDİK E., ACAR B., KAYA M., SARIMEŞE K.  
International Conference on Engineering and Natural Sciences, SARAYBOSNA, Bosnia And Herzegovina, 24 - 28 May 2016, pp.995-1001
- XI. **Ev Tipi Bir Buzdolabının Kondenser Atık Isısının Benmari'de Kullanılmasının incelenmesi**  
KILIÇASLAN E., ÖZTÜRK M., ACAR B.  
ULIBTK'15 20. Ulusal Isı Bilimi ve Tekniği Kongresi, Balıkesir, Turkey, 2 - 05 September 2015, pp.1076-1080
- XII. **Energy Efficiency Enhancement of a Household Refrigerator Using With Oil Cooling Condenser**  
KILIÇASLAN E., ERGÜN A., GEDİK E., ACAR B., ÖZBAŞ E.  
International Conference on Engineering and Natural Science, Üsküp, Macedonia, 15 - 19 May 2015, pp.488-495
- XIII. **Numerical investigation of Al2O3 water nanofluid flow and heat transfer in sudden expansion channels**  
GEDİK E., MUHAMMED ATIF T., ERGÜN A., ACAR B.  
International Conference on Engineering and Natural Science, Skopje, Macedonia, 15 - 19 May 2015, pp.541-548

## Supported Projects

ACAR B., BAŞ Ş., Project Supported by Higher Education Institutions, Yoğunlaştırılmış Güneş Enerjisi Paneli ve Termoelektrik Modüllerin Kullanımı ile Tasarlanan Test Sistemindeki Enerji Üretiminin İncelenmesi, 2016 - 2019

ACAR B., Project Supported by Higher Education Institutions, GÜNEŞ ENERJİLİ SİSTEMLE FINDIK KURUTULMASI ZAMAN VE SICAKLIK OTOMASYONUNUN SAĞLANMASI, 2016 - 2017

ACAR B., Project Supported by Higher Education Institutions, EFFECTS OF THE EJEKTOR ON VAPOUR COMPRESSION COOLING SYSTEM, 2016 - 2016

## Citations

Total Citations (WOS):36

h-index (WOS):3