

## Res. Asst. PhD ARİF EMRE AKTAŞ

### Personal Information

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Otomotiv Mühendisliği, Turkey 2017 - 2023

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Otomotiv Mühendisliği, Turkey 2014 - 2017

Undergraduate, Cukurova University, Mühendislik Mimarlık, Otomotiv Mühendisliği, Turkey 2009 - 2014

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Heat transfer and fluid flow enhancement of tube bank heat exchangers with various cross-sections using computational fluid dynamics integrated with multi-objective genetic algorithm optimization method, Cukurova University, Mühendislik Fakültesi, Otomotiv Mühendisliği, 2023

Postgraduate, Thermodynamic simulation of transcritical organic rankine vapor compression refrigeration system using low GWP refrigerants, Cukurova University, Mühendislik Fakültesi, Otomotiv Mühendisliği, 2017

### Research Areas

Mechanical Engineering, Energy, Alternative Energy Resources, Thermodynamics, Heating, Refrigerating and Air Conditioning, Internal Combustion Engines, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Cukurova University, Fen Bilimleri Enstitüsü, Otomotiv Mühendisliği, 2015 - Continues

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

- I. **Optimizing the tube geometry to enhance thermohydraulic performance of tube bank heat exchanger**  
Aktas A. E., Kuru M. N., Erdinc M. T., Aydın O., Bilgili M.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.193, pp.108460, 2023 (SCI-Expanded)
- II. **An optimization study on thermo-hydraulic performance arrays of circular and diamond shaped cross-sections in periodic flow**  
Erdinç M. T., Aktaş A. E., Kuru M. N., Bilgili M., Aydın O.  
International Communications In Heat And Mass Transfer, vol.129, pp.1-16, 2021 (SCI-Expanded)

- III. **Numerical investigation of flow and heat transfer in axially-finned in-line tube banks**  
Nasif Kuru M., YILMAZ A., AKTAŞ A. E., Erdinc M. T.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2020 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Growth in turbine size and technological development of modern commercial large scale wind turbines in Türkiye**  
BİLGİLİ M., ALPHAN H., AKTAŞ A. E.  
Journal of Thermal Engineering, vol.10, no.2, pp.503-516, 2024 (ESCI)
- II. **Development of a prototype hydrogen vehicle**  
Yakaryilmaz A. C., Yildizhan Ş., Aktaş A. E., Baş O., Tosun E., Özgür T., Aydın K.  
International Journal of Automotive Engineering and Technologies, vol.9, no.4, pp.190-195, 2020 (Peer-Reviewed Journal)
- III. **Simulation of LiBr-Water Absorption Refrigeration Cycle Cooling Performance at Various Conditions**  
Erdinç M. T., Aktaş A. E., Yılmaz A.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.35, no.1, pp.211-220, 2020 (Peer-Reviewed Journal)
- IV. **Thermodynamic Analysis of an Intercity Bus Air-Conditioning System Working with HCFC, HFC, CFC and HC Refrigerants**  
BİLGİLİ M., Cardak E., AKTAŞ A. E., EKİNCİ F.  
International Journal of Automotive Engineering and Technologies, vol.8, no.1, pp.29-43, 2019 (Peer-Reviewed Journal)
- V. **Thermodynamic Analysis of Bus Air Conditioner Working with Refrigerant R600a**  
BİLGİLİ M., ÇARDAK E., AKTAŞ A. E.  
European Mechanical Science, vol.1, no.2, pp.69-75, 2017 (Peer-Reviewed Journal)
- VI. **Environmental, Economic and Technical Status of Fuel Cell Technology**  
AKTAŞ A. E., YAŞAR A.  
International Journal of Natural and Engineering Sciences, vol.11, no.1, pp.46-51, 2017 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Analytical and numerical investigation of a refrigeration cycle integrated with an other cycle for subcooling**  
YILMAZ A., AKTAŞ A. E., ERDİNÇ M. T., YILMAZ T.  
International Advanced Researches Engineering Congress-2017, 16 - 18 November 2017
- II. **A novel air-conditioning system for minimizing defrost in electrical vehicle heat pumps**  
YILMAZ T., YILMAZ A., ERDİNÇ M. T., AKTAŞ A. E.  
2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017
- III. **Exergy Analysis of an Intercity Bus Air-Conditioning System Working with HCFC, HFC, CFC and HC (Hydrocarbon) Refrigerants**  
BİLGİLİ M., ÇARDAK E., AKTAŞ A. E., EKİNCİ F.  
2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017
- IV. **Effect of Heat Source on System Performance of Organic Rankine Cycle Coupled Vapor Compression Cycle Activated by Engine Exhaust Waste Heat**  
AKTAŞ A. E., YILMAZ A.  
2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017
- V. **Cooling Performance Analyses of Ejector Refrigeration Systems for Vehicle Air Conditioning**  
YILMAZ A., AKTAŞ A. E.

2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017

**VI. Design of VTOL Unmanned Air Vehicle with Fixed Wing**

AYDIN K., KEİYİNCİ S., AKTAŞ A. E., YILDIZHAN Ş.

2nd International Mediterranean Science and Engineering Congress, 25 - 27 October 2017

**VII. Environmental, Economic and Technical Status of Fuel Cell Technology**

AKTAŞ A. E., YAŞAR A.

INTERNATIONAL CONGRESS on NATURAL and ENGINEERING SCIENCES 21-25 July 2017, 21 - 25 July 2017

**VIII. Thermodynamic analysis of a transcritical ejector refrigeration system using R134a under different working conditions**

YILMAZ A., AKTAŞ A. E.

IMSEC 2016, 26 - 28 October 2016, pp.4728-4731

## Supported Projects

AYDIN K., YILDIZHAN Ş., ÖZARSLAN H., Büyük N., KEİYİNCİ S., AKTAŞ A. E., Ün Ç., Project Supported by Higher Education Institutions, Karada ve Havada Gidebilen Elektrikli Araç Prototipi Geliştirilmesi, 2017 - 2018

AYDIN K., AKTAŞ A. E., ÖZGÜR T., BOZDEMİR Y. Z., BULUT Y. C., AYDIN A., TOSUN E., YILDIZHAN Ş., BAŞ O., EKMEKÇİ G., et al., Project Supported by Higher Education Institutions, Hidrojen Enerjisi İle Çalışan Hibrid Otomobil Geliştirme Projesi, 2017 - 2018

YAŞAR A., AKTAŞ A. E., Project Supported by Higher Education Institutions, Environmental, Economic and Technical Status of Fuel Cell Technology, 2017 - 2017

## Metrics

Publication: 18

Citation (WoS): 4

H-Index (WoS): 1