

## Asst. Prof. AKIN İLHAN

### Personal Information

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 2014 - 2019

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, Turkey 2012 - 2014

Undergraduate, Cukurova University, Mühendislik Fakültesi, Makina Müh., Turkey 2001 - 2007

### Dissertations

Doctorate, Aerodynamics and Statistical Analyses of Conventional and Diffuser Augmented Wind Turbines , Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, 2019

Postgraduate, Efficiency analysis of an installed wind farm, Cukurova University, Fen Bilimleri Enstitüsü, Makina Mühendisliği, 2014

### Academic Titles / Tasks

Assistant Professor, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Enerji Sistemleri Mühendisliği, 2020 - Continues

### Academic and Administrative Experience

Deputy Head of Department, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Enerji Sistemleri Mühendisliği, 2022 - Continues

Anabilim Dalı Başkan Yardımcısı, Ankara Yıldırım Beyazıt University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği Anabilim Dalı, 2022 - Continues

Bölüm Komisyonları Başkanı , Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Enerji Sistemleri Mühendisliği, 2021 - Continues

Akademik Anabilim Kurulu Üyesi, Ankara Yıldırım Beyazıt University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği Anabilim Dalı, 2021 - Continues

Bölüm Seçim Kurulu Üyesi, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Enerji Sistemleri Mühendisliği, 2020 - Continues

Bölüm Akademik Teşvik Değerlendirme Komisyonu Üyesi, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Enerji Sistemleri Mühendisliği, 2020 - Continues

Doktora Yeterlilik Sınav Jüri Üyesi, Ankara Yıldırım Beyazıt University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği , 2020 - Continues

Lisansüstü Eğitim Kurulu Üyesi, Ankara Yıldırım Beyazıt University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği, 2020 - Continues

Lisansüstü Öğrenci Alımı Jüri Üyesi, Ankara Yıldırım Beyazıt University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği Anabilim Dalı, 2020 - Continues

## Courses

Basics of Renewable Energy , Undergraduate, 2021 - 2022  
Yüksek Lisans Danışmanlık, Postgraduate, 2020 - 2021, 2021 - 2022  
Principles of Wind Energy , Undergraduate, 2021 - 2022  
Uzmanlık Alan Dersi , Postgraduate, 2020 - 2021, 2021 - 2022  
Energy Management, Undergraduate, 2021 - 2022  
Sustainable Energy Production and Usage, Doctorate, 2020 - 2021, 2021 - 2022  
Graduation Project 2, Undergraduate, 2021 - 2022  
Fluid Mechanics , Undergraduate, 2021 - 2022  
Geothermal Energy , Undergraduate, 2021 - 2022  
Seminar, Postgraduate, 2020 - 2021  
Graduation Project 1, Undergraduate, 2021 - 2022  
Thermodynamics 2 , Undergraduate, 2020 - 2021  
Heat Transfer , Undergraduate, 2021 - 2022  
Numerical Methods for Engineers , Undergraduate, 2020 - 2021  
Thermodynamics 1 , Undergraduate, 2020 - 2021

## Jury Memberships

Competition, Teknofest , Ankara Yıldırım Beyazıt University, September, 2021  
Competition, Teknofest , Ankara Yıldırım Beyazıt University, September, 2020

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

- I. **Estimation of wind turbine output power using soft computing models**  
TÜMSE S., İLHAN A., BİLGİLİ M., ŞAHİN B.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.44, no.2, pp.3757-3786, 2022 (Peer-Reviewed Journal)
- II. **Forecasting of river water flow rate with machine learning**  
İLHAN A.  
Neural Computing and Applications, 2022 (Peer-Reviewed Journal)
- III. **One-hour ahead wind speed forecasting using deep learning approach**  
ÖZBEK A., İLHAN A., BİLGİLİ M., ŞAHİN B.  
Stochastic Environmental Research and Risk Assessment, 2022 (Peer-Reviewed Journal)
- IV. **Time-series prediction of hourly atmospheric pressure using ANFIS and LSTM approaches**  
BİLGİLİ M., İLHAN A., Ünal Ş.  
Neural Computing and Applications, 2022 (Peer-Reviewed Journal)
- V. **Particle Image Velocimetry Investigation of the Flow for the Curved Type Wind Turbine Shroud**  
İLHAN A., TÜMSE S., TAŞÇI M., BİLGİLİ M., ŞAHİN B.  
Journal of Applied Fluid Mechanics, vol.15, no.2, pp.373-385, 2022 (Peer-Reviewed Journal)
- VI. **A review: diffuser augmented wind turbine technologies**  
İLHAN A., ŞAHİN B., BİLGİLİ M.  
International Journal of Green Energy, 2021 (Peer-Reviewed Journal)
- VII. **Flow analyses of diffuser augmented wind turbines**  
İlhan A., ZONTUL H., TÜMSE S., BİLGİLİ M., ŞAHİN B.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2021 (Peer-Reviewed Journal)
- VIII. **Analysis of aerodynamic characteristics of 2 MW horizontal axis large wind turbine**  
İlhan A., Bilgili M., Şahin B.

## Articles Published in Other Journals

- I. **Wind Farm and Installed Wind Power Analyses of Turkey**  
İlhan A., Bilgili M., Şahin B.  
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, vol.37, no.1, pp.171-185, 2022 (Peer-Reviewed Journal)
- II. **Aerodynamic Analysis of Onshore Commercial Large Scale Wind Turbine**  
İlhan A., Bilgili M., Şahin B.  
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, vol.36, no.4, pp.965-978, 2021 (Peer-Reviewed Journal)
- III. **Economic analyses of onshore commercial large scale wind power plant installed in Turkey**  
İLHAN A., BİLGİLİ M., ŞAHİN B.  
ENGINEERING SCIENCES, 2021 (Peer-Reviewed Journal)
- IV. **Analyses of Current Wind Energy Status of Turkey and its Future Prospect**  
İlhan A., Bilgili M., Şahin B.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.35, no.4, pp.1059-1071, 2020 (Peer-Reviewed Journal)
- V. **Investigation of Diffuser Augmented Wind Turbine Technologies**  
İLHAN A., BİLGİLİ M., ŞAHİN B.  
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, 2018 (Peer-Reviewed Journal)
- VI. **Statistical Analysis of Wind Energy Density in the Bababurnu-Çanakkale Region of Turkey**  
İLHAN A., BİLGİLİ M., ŞAHİN B.  
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, 2018 (Peer-Reviewed Journal)
- VII. **Estimation of Wind Power Output Curve using Artificial Neural Network**  
İLHAN A., BİLGİLİ M., ŞAHİN B., YAŞAR A., ÖZBEK A.  
International Journal of Natural and Engineering Sciences, 2017 (Peer-Reviewed Journal)
- VIII. **Wind Power Curve Estimation by Adaptive Neuro Fuzzy Inference System**  
İlhan A., Bilgili M., Özbek A., Yaşar A.  
International Journal of Natural and Engineering Sciences, vol.10, no.2, pp.55-62, 2016 (Peer-Reviewed Journal)
- IX. **Efficiency Analysis of an Installed Wind Farm**  
İlhan A., Bilgili M., Şahin B.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.30, no.1, pp.133-140, 2016 (Peer-Reviewed Journal)
- X. **An Overview of Turkey's Offshore Wind Energy Potential Evaluations**  
İLHAN A., BİLGİLİ M.  
Turkish Journal of Scientific Reviews, 2016 (Peer-Reviewed Journal)
- XI. **Estimation of Aerodynamic Characteristics for a Horizontal Axis Wind Turbine**  
İlhan A., Bilgili M., Şahin B., Akıllı H.  
International Journal of Natural and Engineering Sciences , vol.9, no.2, pp.51-57, 2015 (Peer-Reviewed Journal)
- XII. **Aerodynamic Characteristics of a Horizontal Axis Wind Turbine in Belen Hatay Turkey**  
BİLGİLİ M., YAŞAR A., İLHAN A., ŞAHİN B.  
International Journal of Natural and Engineering Sciences, vol.9, no.1, pp.54-58, 2015 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Aerodynamic Characteristics of Identical Horizontal Axis Wind Turbines in Eastern Mediterranean Region of Turkey**  
İlhan A., Bilgili M., Şahin B.  
5th International Conference on Advances in Mechanical Engineering İstanbul 2019, İstanbul, Turkey, 17 - 19

December 2019, pp.1573-1584

- II. **Theoretical Analysis of Different Capacity Wind Turbines Using the Blade Element Momentum Theory**  
İlhan A., Bilgili M., Şahin B.  
22nd Congress on Thermal Science and Technology (ULIBTK 2019), Kocaeli, Turkey, 11 - 14 September 2019, pp.1490-1499
- III. **Estimation of Wind Power Output Curve using Artificial Neural Network**  
İlhan A., Bilgili M., Şahin B., Yaşar A., Özbek A.  
3rd International Congress on Natural and Engineering Sciences, Belgrade, Serbia, 21 - 25 July 2017, pp.18
- IV. **Statistical Analysis of Wind Energy Density in the Babuburnu - Canakkale Region of Turkey**  
İlhan A., Bilgili M., Şahin B.  
3rd International Congress on Natural and Engineering Sciences, Belgrade, Serbia, 21 - 25 July 2017, pp.19
- V. **An Overview of Diffuser Augmented Wind Turbine Technologies**  
Şahin B., Bilgili M., İlhan A.  
2nd International Congress on Natural and Engineering Sciences, Skopje, Macedonia, 1 - 05 September 2016, pp.8
- VI. **An Overview of Turkey's Offshore Wind Energy Potential Evaluations**  
Bilgili M., İlhan A., Şahin B.  
2nd International Congress on Natural and Engineering Sciences, Skopje, Macedonia, 1 - 05 September 2016, pp.4
- VII. **Recent Developments in Design Characteristics of LowCapacity Wind Turbine Technologies**  
Bilgili M., İlhan A., Şahin B.  
8th International Ege Energy Symposium and Exhibition, Afyon Kocatepe University, Afyonkarahisar, Turkey, Afyonkarahisar, Turkey, 11 - 13 May 2016, pp.714-717
- VIII. **Estimation of Aerodynamic Characteristics for a Horizontal Axis Wind Turbine**  
İlhan A., Bilgili M., Şahin B., Akıllı H.  
International Congress on Natural and Engineering Sciences, Sarajevo, Bosnia And Herzegovina, 9 - 13 September 2015, pp.4
- IX. **Aerodynamic Characteristics of a Horizontal Axis Wind Turbine in Belen-Hatay, Turkey**  
Bilgili M., İlhan A., Yaşar A., Şahin B.  
International Congress on Natural and Engineering Sciences, Sarajevo, Bosnia And Herzegovina, 9 - 13 September 2015, pp.4

## Scientific Refereeing

Çukurova Üniversitesi Mühendislik Fakültesi dergisi, National Scientific Refreed Journal, August 2021

## Tasks In Event Organizations

İlhan A., Yaşar A., 3rd International Congress on Natural and Engineering Sciences, Scientific Congress, Belgrade, Serbia, Temmuz 2017

## Metrics

Publication: 29

Citation (Scopus): 1

H-Index (Scopus): 1