

## Lect. PhD Mustafa Gürkan AYDENİZ

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği Bölümü, Turkey 1998 - 2005

Postgraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği Bölümü, Turkey 1995 - 1998

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektrik Mühendisliği Bölümü, Turkey 1991 - 1995

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Asenkron motorların hız algılayıcısız kontrolünde yeni bir algoritmanın geliştirilmesi ve uygulaması, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği Bölümü, 2005

Postgraduate, Step motor kullanılarak laser pointer'in yön kontrolü, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği Bölümü, 1998

### Research Areas

Electrical and Electronics Engineering, Power Electronics, Electrical Machine Theory and Design, Electric Motor Drivers, Engineering and Technology

### Academic Titles / Tasks

Lecturer PhD, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2009 - Continues

Research Assistant PhD, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2005 - 2009

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 1996 - 2005

## Courses

Elektromekanik Enerji Dönüşümü, Undergraduate, 2021 - 2022  
Elektrik-Elektronik'in Temelleri, Undergraduate, 2019 - 2020  
Elektrik Makinaları 2, Undergraduate, 2019 - 2020  
C Programlama Diline Giriş Ve Mühendislikte Uygulamaları, Undergraduate, 2019 - 2020  
Özel Elektrik Makinaları ve Uygulamaları, Undergraduate, 2019 - 2020

## Advising Theses

AYDENİZ M. G., Jet Motoru Hava Kanalları Yıkama Sistemi Tasarımı ve Otomasyonu, Postgraduate, H.Akkor(Student), 2016

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

- I. **Investigating Operating Modes and Converter Options of Dual Winding Permanent Magnet Synchronous Machines for Hybrid Electric Vehicles**  
Mese E., Yasa Y., Akca H., AYDENİZ M. G., GARİP M.  
IEEE TRANSACTIONS ON ENERGY CONVERSION, vol.30, no.1, pp.285-295, 2015 (SCI-Expanded)
- II. **A Luenberger-sliding mode observer with rotor time constant parameter estimation in induction motor drives**  
AYDENİZ M. G., ŞENOL İ.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.19, no.6, pp.901-912, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Design Manufacture and Performance Test of A Reciprocating Refrigeration Compressor**  
Kara Y. A., Uzunsoy D., Lekesiz H., Aydeniz M. G.  
Hittite Journal of Science and Engineering, vol.5, pp.15-24, 2018 (Peer-Reviewed Journal)
- II. **Asenkron Motor Kontrolünde Uzay Vektör Modülasyon Tekniğinin DSP Kullanımında Uygulanması**  
Ayçiçek E., Aydeniz M. G.  
Endüstri & Otomasyon Dergisi, no.142, pp.20-25, 2009 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Electric Machinery Experiments**  
Şenol İ., Bekiroğlu K. N., Zorlu Partal S., Aydeniz M. G., Ayçiçek E., Özçira S., Öner Y., Arabul A. Y., Ağçal A., Keskin Arabul F.  
Birsen Yayınevi, İstanbul, 2016
- II. **Electrical Machines Laboratory Experiments**  
Bekiroğlu K. N., Şenol İ., Zorlu Partal S., Aydeniz M. G., Ayçiçek E., Özçira S., Öner Y., Arabul A. Y., Ağçal A., Keskin F.  
Birsen Yayınevi, İstanbul, 2016

## Refereed Congress / Symposium Publications in Proceedings

- I. **Design and Optimization of Permanent Magnet Synchronous Motor for Electric Vehicle Applications**

Levent A. H., LORDOĞLU A., AYDENİZ M. G.

2nd IEEE Global Power, Energy and Communication Conference, GPECOM 2020, Virtual, Izmir, Turkey, 20 - 23 October 2020, pp.148-151

**II. An Investigation On Hot-Spot Temperature Calculation Methods Of Power Transformers**

ARABUL A. Y., ŞENOL İ., KESKİN ARABUL F., AYDENİZ M. G., ÖNER Y., Kalkan G.

International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, Paris, France, 27 August 2015, pp.1036-1040

**III. Investigating converter options for automotive grade permanent magnet synchronous generators**

Mese E., Yasa Y., Akca H., AYDENİZ M. G., AYZAZ M., Tezcan M.

2013 3rd International Conference on Electric Power and Energy Conversion Systems, EPECS 2013, İstanbul, Turkey, 2 - 04 October 2013

**IV. A New Electric Accessory Drive System for Hybrid Electric Vehicles**

Mese E., Yasa Y., Akca H., AYDENİZ M. G., GARİP M.

IEEE Energy Conversion Congress and Exposition (ECCE), North-Carolina, United States Of America, 15 - 20 September 2012, pp.1909-1916

**V. A Novel Approach to Sensorless Control of Induction Motors**

AYDENİZ M. G., Şenol İ.

ELECO 2009 6th International Conference on Electrical and Electronics Engineering, 01 November 2009

**VI. General Comparison of The Electrical Transportation Systems That Are Fed With 1x25kV or 2x25kV and Expectations From These Systems**

Görgün H., AYDENİZ M. G.

MELECON'98 9th Mediterranean Electrotechnical Conference IEEE, 01 May 1998

**VII. The Programme in Which We Calculate The Motor's Power, That Are Used in Electrical Transportation Systems, by Changing Parameters of The Motor's Power Formula and Result Curves**

Görgün H., AYDENİZ M. G.

MELECON'98 9th Mediterranean Electrotechnical Conference IEEE, 01 May 1998

**VIII. Comparison and Determination Electrical Motors Which Are Used in Electrical Transportation Systems**

Görgün H., AYDENİZ M. G.

MELECON'98 9th Mediterranean Electrotechnical Conference IEEE, 01 May 1998

**IX. Elektrikli Ulaşım Sistemlerinde Kullanılan Tahrik Motorlarının Karşılaştırılması ve Güçlerinin Belirlenmesi**

ŞENOL İ., Görgün H., Aydeniz M. G.

Elmeksem'97 IV.Elektromekanik Sempozyumu, 01 December 1997

**X. Elektrikli Ulaşım Sistemlerinin Tarihsel Gelişimi**

ŞENOL İ., Görgün H., Aydeniz M. G.

2. Ulusal Demiryolu Kongresi, 01 December 1997

## Expert Reports

**I. Menfi Tespit**

ÖZÇIRA S., AYDENİZ M. G., AYÇİÇEK E.

KÜÇÜKÇEKMECE 3. ASLİYE HUKUK MAHKEMESİ, pp.4, İstanbul, 2009

## Supported Projects

Bekiroğlu K. N., Aydeniz M. G., Şenol İ., Öner Y., Industrial Thesis Project, Development and Implementation of a Domestic Power Transformers Monitoring System, 2014 - 2016

AYDENİZ M. G., TUBITAK Project, Dört Pistonlu Yarı Hermetik Soğutma Kompresörü ve Test Düzenineğinin Geliştirilmesi,

2014 - 2015

TEZCAN M. M., AYDENİZ M. G., AKÇA H., GARİP M., TUBITAK Project, Hibrit Araç Uygulaması İçin Kuplajsız Çift Sargılı Elektrik Makinası Tasarımı ve Denetimi, 2010 - 2013

## **Metrics**

Publication: 19

Citation (WoS): 18

Citation (Scopus): 25

H-Index (WoS): 3

H-Index (Scopus): 3