

## Asst. Prof. Oktay ARIKAN

### Personal Information

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### Education Information

Doctorate, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Elektrik Mühendisliği, Turkey  
2003 - 2009

Post Graduate, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, Turkey 2001 - 2003

Under Graduate, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Elektrik Mühendisliği,  
Turkey 1997 - 2001

### Research Areas

Electrical and Electronics Engineering, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, 2018 - Continues

Assistant Professor, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, 2009 - 2018

Research Assistant, Yıldız Teknik Üniversitesi, Faculty of Electrical & Electronics, Elektrik Mühendisliği, 2001 - 2009

### Professional Experience

Deputy Head of Department, Yıldız Teknik Üniversitesi, Elektrik Mühendisliği, 2011 - 2014

### Advising Theses

Arıkan O., Elektrik Dağıtım Sistemlerinde Ark Arızalarının Tespiti, Analizi ve Azaltılması, Post Graduate,  
S.BAYKUL(Student), 2019

Arıkan O., Raylı ulaşım sistemlerinde elektriksel enerji verimliliğinin artırılması, Post Graduate, A.YILDIZ(Student), 2018

ARIKAN O., FARKLI ARIZA DURUMLARI DIKKATE ALINARAK ENERJİ İLETİM SİSTEMİ İÇİN EN UYGUN RÖLE AYAR  
DEGERLERİNİN BELİRLENMESİ, Post Graduate, H.Aydın(Student), 2017

ARIKAN O., Enerji İletim Hatlarındaki Yapısal Değişikliklerin Röle Koordinasyonu Üzerindeki Etkileri, Post Graduate,  
Ö.Gürsanlı(Student), 2017

ARIKAN O., Elektrik Enerjisi İletim Hatlarında Arıza Akımlarının Sınırlandırılması, Post Graduate, N.Akay(Student), 2016

ARIKAN O., Yüksek Gerilim Yer Altı Kablolarının Isıl Analizi, Post Graduate, B.Küçükaydın(Student), 2015

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

- I. **Use of Tan delta and Partial Discharge for Evaluating the Cable Termination Assembly**  
Uydur C. C. , ARIKAN O.  
ENERGIES, vol.13, 2020 (Journal Indexed in SCI)
- II. **A new approach to limit fault current with series-parallel resonance strategy**  
ARIKAN O., Kucukaydin B.  
ELECTRICAL ENGINEERING, vol.102, pp.1287-1296, 2020 (Journal Indexed in SCI)
- III. **A New Approach for Grid-Connected Hybrid Renewable Energy System Sizing Considering Harmonic Contents of Smart Home Appliances**  
Erenoğlu A. K. , Çiçek A., Arıkan O., Erdiñç O., Catalao J. P. S.  
APPLIED SCIENCES-BASEL, vol.9, no.545860, 2019 (Journal Indexed in SCI)
- IV. **Analyses of the insulating characteristics of mineral oil at operating conditions**  
TASLAK E., ARIKAN O., KUMRU C. F. , Kalenderli Ö.  
ELECTRICAL ENGINEERING, pp.1-11, 2017 (Journal Indexed in SCI)
- V. **Survey of power quality in Turkish national transmission network**  
Kocatepe C., Kekezoğlu B., Bozkurt A., Yumurtacı R., İnan A., Arıkan O., Baysal M., Akkaya Y.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, pp.1880-1892, 2013 (Journal Indexed in SCI)
- VI. **Assessment of power quality terms on energy distribution systems: a case study of Istanbul**  
KEKEZOĞLU B., BOZKURT A., ARIKAN O., KOCATEPE C., YUMURTACI R., BAYSAL M.  
PRZEGLAD ELEKTROTECHNICZNY, vol.88, 2012 (Journal Indexed in SCI)
- VII. **Power quality assessment of grid-connected wind farms considering regulations in turkey**  
Kocatepe C., Inan A., ARIKAN O., YUMURTACI R., KEKEZOĞLU B., BAYSAL M., BOZKURT A., Akkaya Y.  
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.13, pp.2553-2561, 2009 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Investigation of line displacement in terms of electrical field distribution and safe right of way distance in energy transmission systems**  
Kumru C. F. , Arıkan O.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.26, pp.279-285, 2020 (National Refereed University Journal)
- II. **Investigation of the Effect of Arc Flash Fault Reduction Methods: Sample Application for Industrial Plant**  
Arıkan O., Baykul S.  
Avrupa Bilim ve Teknoloji Dergisi, pp.589-605, 2019 (Other Refereed National Journals)
- III. **Performance Analysis of Stand-Alone Hybrid (Wind-Photovoltaic) Energy System**  
Arıkan O., İşen E., Kekezoğlu B.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.25, pp.571-576, 2019 (National Refereed University Journal)
- IV. **Technical And Economical Efficiency Analysis For DC Electric Railway Systems**  
Yıldız A., Arıkan O.  
Avrupa Bilim ve Teknoloji Dergisi, no.16, pp.729-739, 2019 (Other Refereed National Journals)
- V. **Arc Flash Faults Calculations, Hazard Analysis and Reduction Methods**  
Baykul S., Arıkan O.  
International Journal of Advances in Computer and Electronics Engineering (IJACEE), vol.4, pp.1-9, 2019 (Refereed Journals of Other Institutions)
- VI. **An Algorithm for Transmission Distance Relay Setting Calculation Under Network Topology Change**  
Arıkan O., Gürsanlı Ö., Aydın H., Yağmur E. A.  
International Journal Of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering

- (IJIREEICE), vol.4, pp.508-513, 2016 (Refereed Journals of Other Institutions)
- VII. **Effects of Power Quality Terms on Passive Power Filters**  
ARIKAN O., KEKEZOĞLU B., KUMRU C. F.  
European Journal of Engineering and Technology, vol.4, pp.25-38, 2016 (Refereed Journals of Other Institutions)
- VIII. **Investigation Of Power Definitions And Power Factor Under Non-Sinusoidal Conditions**  
Kocatepe C., Koroğlu S., Arıkan O.  
Sigma Mühendislik ve Fen Bilimleri Dergisi, pp.117-126, 2015 (Other Refereed National Journals)
- IX. **Wind energy potential of Marmara region in Turkey**  
İşen E., Arıkan O., Kocaman Ç., Kekezoğlu B.  
International Journal Of Energy And Environment, vol.6, pp.17-26, 2015 (Non-Refreed Journal)
- X. **Comparison of Charge Controllers on PV Panel Performance: An Experimental Study**  
Arıkan O., Kekezoğlu B., Durusu A., İşen E., Erduman A., Bozkurt A.  
International Journal of Advancements in Electronics and Electrical Engineering – IJAEEEE, vol.3, pp.121-125, 2014 (Refereed Journals of Other Institutions)
- XI. **Elektrikli Ofis Cihazlarında Güç Faktörü ve cosnin İncelenmesi**  
KEKEZOĞLU B., ARIKAN O., KOCATEPE C., YUMURTACI R., BAYSAL M., BOZKURT A.  
3e Electrotech, 2008 (National Non-Refreed Journal)
- XII. **Elektrikli Ofis Donanımlarının Harmonik Etkilerinin İncelenmesi**  
KEKEZOĞLU B., ARIKAN O., KOCATEPE C., YUMURTACI R., BAYSAL M., BOZKURT A.  
3e Electrotech, 2008 (National Non-Refreed Journal)

## Books & Book Chapters

- I. **Harmonic Effects of Power System Loads: An Experimental Study**  
KOCATEPE C., YUMURTACI R., ARIKAN O., BAYSAL M., KEKEZOĞLU B., BOZKURT A., KUMRU C. F.  
in: Power Quality Issues, Zobaa A., Editor, Intech, Rijeka, pp.175-200, 2013
- II. **High Voltage Technique with Solved Problems Vol. 1**  
Kalenderli Ö., Kocatepe C., Arıkan O.  
Birsen Yayınevi, İstanbul, 2005
- III. **Enerji Kalitesi ve Harmonikler Kurs Notu**  
KOCATEPE C., UMURKAN N., ATTAR F., YUMURTACI R., KARAKAŞ A., ARIKAN O.  
Elektrik Mühendisleri Odası, İstanbul, 2005
- IV. **ELEKTRİK TESİSLERİNDE HARMONİKLER**  
KOCATEPE C., UZUNOĞLU M., YUMURTACI R., Karakaş A., ARIKAN O.  
Birsen Kitap Yayınevi, İstanbul, 2003

## Refereed Congress / Symposium Publications in Proceedings

- I. **The Effects of Overvoltage Aging on 20 kV XLPE Power Cable**  
UYDUR C. Ç. , ARIKAN O., KÜÇÜKAYDIN B., DURSUN B., KUMRU C. F.  
11th INTERNATIONAL CONFERENCE on ELECTRICAL and ELECTRONICS ENGINEERING, Bursa, Turkey, 28 - 30 November 2019
- II. **The Effect of Insulation Defects on Electric Field Distribution of Power Cables**  
Uydur C. Ç. , ARIKAN O., Kalenderli Ö.  
2018 IEEE International Conference on High Voltage Engineering and Application (ICHVE), Atina, Greece, 10 September 2018, pp.1-4
- III. **Increasing The Electrical Energy Efficiency In Urban Rail Systems**  
YILDIZ A., ARIKAN O.  
International Symposium on Electrical Railway Transportation Systems, ERUSIS 2017, 27 - 28 October 2017, pp.54-

- IV. **Güç Sistemlerinde Arıza Akım Sınırlamasına Yöntemlerinin İncelenmesi**  
AKAY n., ARIKAN O., KARACASU Ö.  
Elektrik - Elektronik ve Biyomedikal Mühendisliği Konferansı (ELECO 2016), Turkey, 1 December - 03 November 2016
- V. **LOADING ASSESSMENT OF LV AND MV CABLES SYSTEM LAID INTO SAME TRENCH IN DISTRIBUTION NETWORK**  
ARIKAN O., Küçükaydın B.  
4th Interbational Conference on Advanced Technology & Science, Roma, Italy, 23 November 2016, pp.224-227
- VI. **Reliability Analysis of a Wind/PV/Battery Hybrid System: A Case Study for YTU Davutpasa Campus**  
Durusu A., Kekezoğlu B., Erduman A., Arıkan O., İşen E., Bozkurt A.  
2th South East European Conferance on Sustainable Development of Energy Water and Environment Systems, Koper, Slovenia, 15 - 17 June 2016, pp.1-6
- VII. **An Investigation on Electric Field Distribution Around 380 kV Transmission Line for Various Pylon Models**  
KUMRU C. F. , KOCATEPE C., ARIKAN O.  
International Conference on Power and Energy Systems Engineering, Paris, France, 27 - 28 August 2015
- VIII. **Electrical Analysis of Corn Oil as an Alternative to Mineral Oil in Power Transformers**  
TASLAK E., KOCATEPE C., ARIKAN O., KUMRU C. F.  
International Conference on Power and Energy Systems Engineering, Paris, France, 27 - 28 August 2015
- IX. **Effects of Compensation on Distribution System Technical Losses**  
KEKEZOĞLU B., KOCATEPE C., ARIKAN O., Hacıaliefendioğlu Y., Uçar G.  
17th International Conference on Power and Energy Systems, Paris, France, 27 August 2015, pp.2400-2405
- X. **Current Carrying Capacity Analyses Of Power Cables**  
ARIKAN O., Küçükaydın B.  
19th International Symposium on High Voltage Engineering (ISH 2015), Pilsen, Czech Republic, 23 August 2015
- XI. **An Investigation on Vegetable Oils as Potential Insulating Liquid**  
Kocatepe C., TASLAK E., Kumru C. F. , Arıkan O.  
World Academy of Science, Engineering and Technology, 01 August 2015, vol.9, pp.627-630
- XII. **Electrical Analysis of Corn Oil as an Alternative to Mineral Oil in Power Transformers**  
TASLAK E., Kocatepe C., Arıkan O., Kumru C. F.  
World Academy of Science, Engineering and Technology, 01 August 2015, vol.9, pp.714-718
- XIII. **Electrical Properties of Low Density Polyethylene/Zinc Oxide Nanocomposite Films in Narrow Frequency Range**  
BERBER YAMAK H., Altan M., ARIKAN O.  
5th International Advances in Applied Physics and Materials Science Congress, Muğla/Fethiye, Turkey, 16 - 19 April 2015
- XIV. **Analysis of Effects of Electric Field Strength Occurred By Energy Transmission Lines On Human Health**  
KUMRU C. F. , ARIKAN O., KOCATEPE C.  
International Symposium on Sustainable Development, 15 - 18 May 2014
- XV. **Reliability analysis of hybrid energy systems: Case study of davutpasa campus**  
Kekezoğlu B., Arıkan O., Erduman A., Isen E., Durusu A., Bozkurt A.  
IEEE EuroCon 2013, Zagreb, Croatia, 1 - 04 July 2013, pp.1141-1144
- XVI. **Breakdown Voltage Analysis of Insulating Oils Under Different Conditions**  
KOCATEPE C., ARIKAN O., TASLAK E., KUMRU C. F.  
01 October 2013
- XVII. **Breakdown Strength Analysis of the Transformer Insulation Oil Due to Different Standards**  
AKÇA H., KOCATEPE C., ARIKAN O., KUMRU C. F. , AYAZ R.  
18th International Symposium on High Voltage Engineering, 25 - 30 August 2013, pp.1343-1347
- XVIII. **Investigation of Effect of Temperature Variation In A High Voltage Cable On Electrical Insulation**

Kumru C. F. , Arıkan O., Kocatepe C., Kalenderli Ö.

18th International Symposium on High Voltage Engineering, Seoul, South Korea, 25 - 30 August 2013, pp.1104-1109

- XIX. Introduction to Hybrid System - Yildiz Technical University**  
Arıkan O., İşen E., Durusu A., Kekezoğlu B., Bozkurt A., Erduman A.  
IEEE Eurocon 2013, Zagreb, Croatia, 1 - 04 July 2013, pp.1145-1149
- XX. The Influence of Voltage and Frequency Variations on Insulation Quality of a High Voltage Cable**  
KOCATEPE C., KUMRU C. F. , AYAZ R., ARIKAN O., AKÇA H.  
IEEE EUROCON, 1 - 04 July 2013, pp.964-968
- XXI. Reliability Analysis of Hybrid Energy Systems Case Study of Davutpasa Campus**  
Kekezoğlu B., Arıkan O., Erduman A., İşen E., Durusu A., Bozkurt A.  
IEEE Eurocon 2013, Zagreb, Croatia, 1 - 04 July 2013, pp.1141-1144
- XXII. The Influence of Voltage and Frequency Variations on Insulation Quality of a High Voltage Cable**  
KOCATEPE C., Kumru C. F. , Ayaz R., Arıkan O., Akça H.  
01 July 2013
- XXIII. Yüksek Gerilim Tesislerinde Kullanılan Yalıtkan Yağların Delinme Dayanımı Analizi**  
Kocatepe C., Arıkan O., Taslak E., Kumru C. F.  
5. Enerji Verimliliği ve Kalitesi Sempozyumu, Kocaeli, Turkey, 23 - 24 May 2013, pp.156-160
- XXIV. Yüksek Gerilim Tesislerinde Kullanılan Yalıtkan Yağların Delinme Dayanımı Analizi**  
KOCATEPE C., ARIKAN O., TASLAK E., KUMRU C. F.  
01 May 2013
- XXV. Measurement of the dielectric performance of an instrument transformer at different voltage and frequencies**  
Arıkan O., Kumru C. F. , Kocatepe C.  
2012 International Conference on High Voltage Engineering and Application, ICHVE 2012, Shanghai, China, 17 - 20 September 2012, pp.451-454
- XXVI. Electric field measurement and analysis around a line model at different voltage levels**  
Kocatepe C., ARIKAN O., KUMRU C. F. , Erduman A., UMURKAN N.  
2012 International Conference on High Voltage Engineering and Application, ICHVE 2012, Shanghai, China, 17 - 20 September 2012, pp.39-42
- XXVII. Yüksek Gerilim Kablolarındaki İzolasyon Problemlerinin Elektrik Alan Dağılımına Etkisi**  
Kocatepe C., Arıkan O., Kumru C. F. , Orhan O. D.  
Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu, Bursa, Turkey, 29 November - 01 December 2012, pp.189-193
- XXVIII. Yüksek Gerilim Kablolarının Farklı Döşeme Koşullarında Isıl Analizi**  
Kocatepe C., Arıkan O., Kumru C. F. , Akbulut A.  
Elektrik-Elektronik ve Bilgisayar Mühendisliği Sempozyumu, Bursa, Turkey, 29 November - 01 December 2012, pp.194-198
- XXIX. Modeling and Control of a Wind Turbine with a Permanent Magnet Synchronous Generator**  
İŞEN E., BOZKURT A., KOCATEPE C., ARIKAN O., KEKEZOĞLU B.  
International Conference on Nuclear & Renewable Energy Resources (NURER 2012), İstanbul, Turkey, 20 May 2012, pp.1-6
- XXX. Influence of Harmonics on a Grid Connected Wind Farm System Under Variable Wind Speed Conditions**  
BOZKURT A., KOCATEPE C., ARIKAN O., KEKEZOĞLU B., İŞEN E.  
International Conference on Nuclear & Renewable Energy Resources (NURER 2012), İstanbul, Turkey, 20 May 2012, pp.1-7
- XXXI. The Effect of Blade Size on Wind Turbine Performance**  
BOZKURT A., KOCATEPE C., KEKEZOĞLU B., ARIKAN O., İŞEN E.  
International Conference on Renewable Energy Utilization (ICREU 2012), Coimbatore, India, 04 January 2012, pp.435-439

- XXXII. **Investigation of Harmonic Effect in Turkey's Iron Steel Industry**  
KEKEZOĞLU B., KOCATEPE C., YUMURTACI R., ARIKAN O., BAYSAL M., BOZKURT A., AKKAYA Y., Özdemirci E.  
The 6th International Conference, 2008 Power Quality and Supply Reliability (PQ2008), Parnu, Estonia, 27 August 2008, pp.435-439
- XXXIII. **Harmoniklerin Kompanzasyon Tesisleri Üzerindeki Etkilerinin Rezonans Olayları Bakımından İncelenmesi**  
YUMURTACI R., ARIKAN O., BOZKURT A., KOCATEPE C., BAYSAL M., KEKEZOĞLU B.  
Enerji Verimliliği ve Kalitesi Sempozyumu (EVK 2007), Kocaeli, Turkey, 17 May 2007, pp.272-277
- XXXIV. **Dağıtım Sisteminde Kısa Devre Gücünün Harmonik Bozulmaya Etkisi**  
KOCATEPE C., YUMURTACI R., BAYSAL M., ARIKAN O., BOZKURT A., KEKEZOĞLU B.  
Enerji Verimliliği ve Kalitesi Sempozyumu (EVK 2007), Kocaeli, Turkey, 17 May 2007, pp.267-271
- XXXV. **Analysis of AC Motor Drives as a Harmonic Source**  
KEKEZOĞLU B., ARIKAN O., BOZKURT A., KOCATEPE C., YUMURTACI R.  
4th International Conference on Electrical and Power Engineering (EPE 2006), Iasi, Romania, 12 October 2006, pp.832-837
- XXXVI. **The Analysis of Magnetic Fields in Nonlinear Load Conditions by Using Matlab/Simulink**  
İZGİ E., İNAN A., ARIKAN O., BOZKURT A., NAKİR İ.  
4th International Conference on Electrical and Power Engineering (EPE-2006), Iasi, Romania, 12 October 2006, pp.653-660
- XXXVII. **Güç Sistemlerinde Araharmonikler Ve Etkileri**  
KEKEZOĞLU B., KOCATEPE C., YUMURTACI R., BAYSAL M., ARIKAN O., BOZKURT A.  
Enerji Verimliliği ve Kalitesi Sempozyumu (EVK 2007), Kocaeli, Turkey, 17 May 2005, pp.263-266
- XXXVIII. **Kompakt Floresant Lambaların Harmonik Kaynağı Olarak İncelenmesi**  
YUMURTACI R., ARIKAN O., BOZKURT A.  
Enerji Verimliliği ve Kalitesi Sempozyumu (EVK 2005), Kocaeli, Turkey, 17 May 2005, pp.207-211

## Supported Projects

ARIKAN O., KUMRU C. F. , TASLAK E., Project Supported by Other Official Institutions, Dağıtım Şebekesinde Kullanılan Yeraltı Kablolarının Arıza-Yanma-Ömür Kısalması Durumlarının İncelenmesi, Sebeplerinin Analizi ve Çözüm Önerilerinin Sunulması, 2015 - 2016

ARIKAN O., Project Supported by Other Official Institutions, Dağıtım Şebekelerinde Gerçeğe En Yakın Teknik Kayıp Seviyesinin Dinamik Olarak Belirlenmesi için Metodoloji ve Yazılım Gelistirilmesi, 2014 - 2016

Durusu A., Arıkan O., Kekezoğlu B., Bozkurt A., Kumru C. F. , Kocatepe C., Tanrıöven M., Project Supported by Higher Education Institutions, Küçük Ölçekli Hibrid Rüzgar Güneş Enerji Sistemlerinde Güvenilirlik Analizi Davutpaşa Kampüsü Örnek Uygulaması, 2012 - 2015

Durusu A., Baysal M., Selamoğulları U. S. , Boynueğri A. R. , Kekezoğlu B., Arıkan O., Kocatepe C., Uzunoğlu M., Karakaş A., Project Supported by Higher Education Institutions, Enerji Tasarrufu ve Sürdürülebilirliği Sağlayacak Biçimde Akıllı Şebeke Altyapısına Yönelik Yol Aydınlatması Sistemi - Yıldız Teknik Üniversitesi Davutpaşa Kampüsü Uygulaması, 2012 - 2014

## Citations

Total Citations (WOS):36

h-index (WOS):3