

## Res. Asst. Fırat AKIN

### Personal Information

**Office Phone:** [+90 212 383 5805](tel:+902123835805)

**Email:** [fakin@yildiz.edu.tr](mailto:fakin@yildiz.edu.tr)

**Web:** <https://avesis.yildiz.edu.tr/fakin>

### International Researcher IDs

ScholarID: Ne8fapEAAAAJ

ORCID: 0000-0003-3523-2023

Publons / Web Of Science ResearcherID: AAZ-9148-2020

ScopusID: 57221921030

Yoksis Researcher ID: 328488

### Education Information

Doctorate, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, Turkey 2021 - Continues

Postgraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, Turkey 2019 - 2021

Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, Turkey 2015 - 2019

### Research Areas

Power System Analysis, Protection Systems, High Voltage Technique, Dielectric Materials and Devices

### Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Electrical Engineering Department, 2020 - Continues

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

- I. **Multi-physics modelling and performance analysis of an air-core reactor in the framework of solid-state fault current limiters**  
AKIN F., ARIKAN O., Kucukaydin B.  
Electric Power Systems Research, vol.231, 2024 (SCI-Expanded)
- II. **Breakdown strength analysis of XLPE insulation types: A comparative study for multi-layer structure and voltage rise rate**  
Camalov M., Orucov A., Hashimov A., Arikan O., Akin F.  
Electric Power Systems Research, vol.223, 2023 (SCI-Expanded)
- III. **The effect of thermal aging on solid insulating materials: A case study for dielectric loss and dissipation factor based evaluations under different voltage levels and frequencies**  
Akin F., Arikan O.

Engineering Failure Analysis, vol.148, 2023 (SCI-Expanded)

**IV. Analysis of breakdown mechanism based on contact area and field enhancement factor of different electrode-material combinations**

Akın F., Arıkan O.

International Journal of Energy Research, vol.46, no.9, pp.12674-12686, 2022 (SCI-Expanded)

## Articles Published in Other Journals

**I. Analysis of Solid Insulating Materials Breakdown Voltages Under Different Voltage Types**

AKIN F., ARIKAN O., UYDUR C. Ç.

Turkish Journal of Electrical Power and Energy Systems, vol.2, 2022 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

**I. Load Forecasting for Trakya University**

Uydur C. Ç., Akın F., Güçlü S., Dursun B.

3rd International Conference on Innovative Academic Studies, 26 September - 28 October 2023, pp.246-254

**II. Thermal Performance Analysis Of Overhead Conductors**

Dinç M., Arıkan O., Akın F.

ISAS2022 - 5th International Symposium on Innovative Approaches in Smart Technologies, İstanbul, Turkey, 28 May 2022

**III. Investigation of AC and DC Breakdown Behavior on Different Solid Insulating Materials**

Akın F., Arıkan O., Uydur C. Ç.

International Conference on Electrical and Electronics Engineering, ELECO, Bursa, Turkey, 25 - 27 November 2021, pp.142-146

**IV. The Effect of Harmonic Components on Dielectric Performance of Solid Insulating Materials**

Akın F., Arıkan O.

Elektrik Elektronik ve Biyomedikal Mühendisliği Konferansı, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.1-5

## Supported Projects

TOKER Ö. S., KARASU S., ÖZMEN D., ARIKAN O., BEKİROĞLU H., KARAMAN S., AKIN F., BOZKURT F., Project Supported by Higher Education Institutions, Endüstriyel Gıda Atıklarından Elde Edilen Proteinlerin Yüksek Gerilim Uygulamasıyla Modifiye Edilerek Model Gıdalarda Kullanım Olanaklarının Araştırılması, 2023 - Continues

Uydur C. Ç., Arıkan O., Akın F., Güçlü S., Dursun B., Project Supported by Higher Education Institutions, Yapay Zeka Yöntemleri ile Trakya Üniversitesi Elektrik Enerjisi Talep Tahmini, 2022 - 2023

## Metrics

Publication: 9

Citation (Scopus): 4

H-Index (Scopus): 1