

## Res. Asst. Halil İbrahim Üçkol

### Personal Information

**Email:** uckol17@itu.edu.tr

**Web:** <https://avesis.itu.edu.tr/haliluckol>

**Address:** İTÜ Ayazağa Kampüsü, Elektrik- Elektronik Faültesi, 34469 Maslak – İstanbul

### International Researcher IDs

ScholarID: 0t7gYhQAAAAJ

ORCID: 0000-0002-5296-1896

ScopusID: 57215053256

Yoksis Researcher ID: 278915

### Education Information

Doctorate, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliđi, Turkey 2020 - Continues

Postgraduate, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliđi, Turkey 2017 - 2020

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 2012 - 2017

### Dissertations

Postgraduate, Convolutional neural network based partial discharge pattern classification of medium voltage cable terminations, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliđi, 2020

### Research Areas

Electrical and Electronics Engineering

### Academic Titles / Tasks

Research Assistant, Istanbul Technical University, Elektrik-Elektronik, Elektrik Mühendisliđi, 2018 - Continues

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

- I. **Identification of corona discharges based on wavelet scalogram images with deep convolutional neural networks**  
Üçkol H. İ., İlhan S.  
Electric Power Systems Research, vol.224, 2023 (SCI-Expanded)
- II. **Characterization of DC corona discharge current pulses using high-frequency measurement techniques**  
Üçkol H. İ., İlhan S.  
Measurement: Journal of the International Measurement Confederation, vol.218, 2023 (SCI-Expanded)
- III. **Viability of Fillers in HTV Silicone Rubber in the AC and DC Inclined Plane Tests**

Ghunem R. A., İlhan S., Üçkol H. İ., Tuzun D., Hadjadj Y.

IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION, vol.28, no.6, pp.2144-2151, 2021 (SCI-Expanded)

**IV. Workmanship defect classification in medium voltage cable terminations with convolutional neural network**

Üçkol H. İ., İlhan S., Özdemir A.

Electric Power Systems Research, vol.194, 2021 (SCI-Expanded)

**V. DC and AC electric field analysis and experimental verification of a silicone rubber insulator**

Üçkol H. İ., Karaca B., İlhan S.

ELECTRICAL ENGINEERING, vol.102, no.1, pp.503-514, 2020 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

**I. Evaluation of Surface Properties of Zinc Borate Filled HTV Silicone Rubber**

Özdemir İ., Üçkol H. İ., Aydoğan A., Soykan G., Ghunem R. A., İlhan S.

58th International Universities Power Engineering Conference, UPEC 2023, Dublin, Ireland, 30 August - 01 September 2023

**II. Investigations of Corona Discharge Images for Rod-Rod Electrode System Under HVDC**

Uçkol H. İ., Ozdemir I., İlhan S.

58th International Universities Power Engineering Conference, UPEC 2023, Dublin, Ireland, 30 August - 01 September 2023

**III. The Hydrophobicity Class Identification of Silicone-Rubber Samples using Deep Learning Algorithms**

Demiroglu N., Özdemir İ., Üçkol H. İ., İlhan S.

57th International Universities Power Engineering Conference (UPEC) - Big Data and Smart Grids, İstanbul, Turkey, 30 August - 02 September 2022

**IV. Corona Discharge Degradation and Dynamic Drop Tests for Hydrophobicity Evaluation of High-Temperature Vulcanizing Silicone Rubber Samples**

Bilgiç T. Ö., Üçkol H. İ., İlhan S., Kalenderli Ö.

2022 IEEE International Conference on High Voltage Engineering and Applications, ICHVE 2022, Chongqing, China, 25 - 29 September 2022

**V. Comparative Investigation of Corona Pulse Characteristics under DC and AC Voltages**

Üçkol H. İ., Bilgiç T. Ö., İlhan S.

2022 IEEE International Conference on High Voltage Engineering and Applications, ICHVE 2022, Chongqing, China, 25 - 29 September 2022

**VI. Hydrophobicity Loss of HTV Silicone Rubbers with different ATH Filler Types under AC Corona Discharges**

Akkoyun T., Üçkol H. İ., Bilgiç T. Ö., İlhan S.

13th International Conference on Electrical and Electronics Engineering, ELECO 2021, Virtual, Bursa, Turkey, 25 - 27 November 2021, pp.134-137

**VII. Influence of ATH Filler on Tracking and Erosion Resistance of HTV Silicone Rubbers under DC Voltages**

Gur C., Elmas M. V., Üçkol H. İ., İlhan S.

13th International Conference on Electrical and Electronics Engineering, ELECO 2021, Virtual, Bursa, Turkey, 25 - 27 November 2021, pp.138-141

**VIII. Investigation of correlation between temperature and leakage current in HTV silicone rubber by inclined plane tests HTV Silikon Yalıtkanlarda Sıcaklık ve Kaçak Akım Arasındaki Korelasyonun Eğik Düzlem Deneyi ile İncelenmesi**

Tüzün D., Üçkol H. İ., İlhan S.

12th International Conference on Electrical and Electronics Engineering, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.10-14

- IX. Defect classification in MV cable terminations based on residual neural network OG Kablo Başlıklarında Rezidüel Sinir Ağları Temelli Kusur Sınıflandırılması**  
Üçkol H. İ., İlhan S.  
12th International Conference on Electrical and Electronics Engineering, ELECO 2020, Bursa, Turkey, 26 - 28 November 2020, pp.6-9
- X. Partial Discharge Pattern Classification based on Deep Learning for Defect Identification in MV Cable Terminations**  
Üçkol H. İ., İlhan S., Özdemir A.  
7th IEEE International Conference on High Voltage Engineering and Application, ICHVE 2020, Beijing, China, 6 - 10 September 2020
- XI. AC and DC field distributions in glass, RTV-coated glass and composite insulators**  
Uckol H. İ., İLHAN S., ÖZDEMİR A.  
11th International Conference on Electrical and Electronics Engineering, ELECO 2019, Bursa, Turkey, 28 - 30 November 2019, pp.336-340

## **Metrics**

Publication: 16

Citation (WoS): 11

Citation (Scopus): 49

H-Index (WoS): 3

H-Index (Scopus): 4