

## Asst. Prof. HALE BAKIR

### Personal Information

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### International Researcher IDs

ORCID: 0000-0001-5580-0505

Yoksis Researcher ID: 116609

### Education Information

Doctorate, Konya Technical University, Graduate Education, Training And Research Institute, Turkey 2016 - 2021

Postgraduate, Selcuk University, Faculty Of Engineering, Turkey 2013 - 2016

Undergraduate, Firat University, Faculty Of Engineering, Turkey 2008 - 2012

### Research Areas

Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Sivas Teknik Bilimler Meslek Yüksekokulu, Elektronik Ve Otomasyon, 2022 - Continues

Research Assistant, Konya Technical University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2018 - 2021

Research Assistant, Selcuk University, Faculty Of Engineering, 2013 - 2018

Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Elektrik Elektronik Mühen., 2012 - 2013

### Courses

Otomatik Kontrol, Associate Degree, 2021 - 2022

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

- I. **Implementation of Water Cycle Optimization for Parametric Tuning of PI Controllers in Solar PV and Battery Storage Microgrid System**  
Dhar R. K. , Merabet A., Bakir H., Ghias A. M. Y. M.  
IEEE SYSTEMS JOURNAL, vol.16, no.2, pp.1751-1762, 2022 (Peer-Reviewed Journal)
- II. **Experimental evaluation of water cycle technique for control parameters optimization of double-fed induction generator-based wind turbine**  
Bakir H., Merabet A., Dhar R. K. , Kulaksiz A. A.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.24, no.4, pp.890-898, 2021 (Peer-Reviewed Journal)

- III. **Bacteria foraging optimisation algorithm based optimal control for doubly-fed induction generator wind energy system**  
Bakir H., Merabet A., Dhar R. K. , Kulaksiz A. A.  
IET RENEWABLE POWER GENERATION, vol.14, no.11, pp.1850-1859, 2020 (Peer-Reviewed Journal)
- IV. **Modelling and voltage control of the solar-wind hybrid micro-grid with optimized STATCOM using GA and BFA**  
Bakir H., Kulaksiz A. A.  
ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH, vol.23, no.3, pp.576-584, 2020 (Peer-Reviewed Journal)
- V. **Sensorless Control of a PMSM Drive Using EKF for Wide Speed Range Supplied by MPPT Based Solar PV System**  
Anwer A. M. O. , Omar F. A. , Bakir H., Kulaksiz A. A.  
ELEKTRONIKA IR ELEKTROTEHNIKA, vol.26, no.1, pp.32-39, 2020 (Peer-Reviewed Journal)
- VI. **ADAPTIVE ENERGY MANAGEMENT FOR THE SMART HOME**  
Bakir H., Kulaksiz A. A.  
ELECTRONICS WORLD, vol.123, no.1975, pp.42-45, 2017 (Peer-Reviewed Journal)

### Articles Published in Other Journals

- I. **OPAL-RT kullanarak DFIG tabanlı rüzgar enerji sisteminde güç kontrolü**  
BAKIR H., Merabet A., KULAKSIZ A. A.  
European Journal of Science and Technology, pp.373-379, 2020 (Peer-Reviewed Journal)
- II. **Şebeke-bağlantılı Solar NNK İnverterde Güç ve Harmonik Kayıplarının İyileştirilmesi için Etkin Modülasyon Yöntemlerinin Gerçekleştirilmesi**  
younas u., BAKIR H., KULAKSIZ A. A.  
Nevşehir Bilim ve Teknoloji Dergisi, vol.8, pp.120-129, 2019 (Peer-Reviewed Journal)
- III. **Matlab / Simulink kullanarak STATCOM ile Güneş Fotovoltaik-Rüzgar Hibrit Enerji Sisteminin Performans Analizi ve Simülasyonu**  
BAKIR H., KULAKSIZ A. A.  
Nevşehir Bilim ve Teknoloji Dergisi, pp.135-144, 2018 (Peer-Reviewed Journal)
- IV. **ANN based sizing of battery storage in a stand alone PV system**  
KULAKSIZ A. A. , AKDEMİR B., BAKIR H.  
Journal of Automation and Control Engineering, vol.4, no.1, pp.8-12, 2016 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. **Monitoring and Diagnosis for Photovoltaic Fields in Turkey**  
BAKIR H.  
in: New Trends in Engineering and Applied Natural Sciences, Assoc. Prof. Enes YİĞİT, Assist Prof. Umut ÖZKAYA, Editor, DUVAR YAYINEVİ, pp.73-82, 2022

### Refereed Congress / Symposium Publications in Proceedings

- I. **THE DETECTION OF DETERIORATED PV MODULES IN TURKEY**  
BAKIR H.  
1ST INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE ON SUSTAINABLE ENGINEERING AND TECHNOLOGY (ISRCSET'22), İstanbul, Turkey, 13 May 2022, pp.284-289
- II. **FV PANELLERDE ARIZA TESPİTİ VE ANALİZİ**

BAKIR H.

1ST INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE ON SUSTAINABLE ENGINEERING AND TECHNOLOGY (ISRCSET'22), İstanbul, Turkey, 13 May 2022, pp.290-294

**III. Modelling and Voltage Control of the Solar-Wind Hybrid Micro-Grid with Optimized STATCOM**

BAKIR H., KULAKSIZ A. A.

2019 23rd International Conference Electronics, Palanga, Lithuania, 17 - 19 June 2019

**IV. Adaptive Neuro-Fuzzy Interface System-based Energy Management Application for a Residential Photovoltaic On-Grid System**

BAKIR H., younas u., ÜNSAL ÇELİMLİ D. B. , KULAKSIZ A. A.

International Conference on Energy Research, Marmaris, 11 - 13 April 2019

**V. Performance Analysis and Simulation of Solar PV-Wind Hybrid Energy System with STATCOM using Matlab/Simulink**

BAKIR H., KULAKSIZ A. A.

2nd International Conference on Material Science and Technology in Cappadocia (IMSTEC'17), 11 - 13 October 2017

**VI. Energy Management Application to Reduce Peak Load in a Photovoltaic Power Integrated Grid**

BAKIR H., KULAKSIZ A. A.

8.EGE ENERGY SYMPOSIUM, Afyonkarahisar, Turkey, 11 - 13 May 2016

## Supported Projects

Bakır H., Kulaksız A. A. , Project Supported by Higher Education Institutions, FOTOVOLTAİK SİSTEM ENTEGRELİ AKILLI ŞEBEKE İÇİN ZİGBEE AYGITLARI İLE ENERJİ KONTROLÜ VE İZLEMENİN GERÇEKLEŞTİRİLMESİ, 2014 - 2016

## Scientific Refereeing

Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), Other Indexed Journal, August 2022

Konya Mühendislik Bilimleri Dergisi, Other journals, August 2021

INTERNATIONAL JOURNAL OF ENERGY RESEARCH, SCI Journal, July 2021

## Metrics

Publication: 17

Citation (WoS): 47

Citation (Scopus): 58

H-Index (WoS): 2

H-Index (Scopus): 3

## Scholarships

2214 yurtdışı doktora bursu, TÜBİTAK, 2019 - 2019