



## **Dr. Irshad Ullah**

Assistant Professor  
Professional Engineer & HEC Approved PhD Supervisor  
Dept. Energy Engineering Technology  
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### **EDUCATION**

<b>PhD in Electrical Power Engineering</b> University Tun Hussein Onn Malaysia,	<b>Spring 2014–Spring 2018</b>
<b>Masters in Electrical Power</b> Stafford Shire University, UK	<b>Fall 2010 – Spring 2012</b>
<b>B.Sc. Electrical Engineering</b> CECOS University, Peshawar, Pakistan	<b>Fall 2006 – Fall 2010</b>

### **AWARDS AND ACHIEVEMENTS**

- **PhD Distinction.**
- **HEC Approved PhD Supervisor (October 2021 – October 2024)**

### **TEACHING INTERESTS**

Designing insulators, Towers, Transmission lines, Electric and Magnetic field, etc.

Single Line Diagram, Transient Analysis, Different Effects and Control in Power System.

Load flow analysis, Distortion, Harmonics, etc.

Electrical designing of buildings.

### **RESEARCH INTERESTS**

High Voltage Engineering, Building Lightning Protection, Renewable Energy,	High Tension Transmission lines, Energy Manage Power System Grounding,	Electrical Machines Power System Operation & Protection AI application in Power System
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### **EXPERIENCE**

- **Assistant Professor** Aug 2022 – Present  
Department of Energy Engineering Technology  
University of Technology Nowshera, KPK, Pakistan
- **Assistant Professor** September 2018 – August 2022  
Department of Electrical Engineering  
CECOS University of IT and Emerging Sciences, Peshawar, Pakistan
- **Outcome Base Education (OBE) coordinator** September 2018 – March 2020  
Department of Electrical Engineering  
CECOS University Department of Electrical Engineering
- **Semester Coordinator** June 2019 – March 2020  
Department of Electrical Engineering

## **CECOS University Department of Electrical Engineering**

- **Head of Department** **March 2020 – August 2021**  
Department of Electrical Engineering  
**CECOS University Department of Electrical Engineering**
- **PhD. Research Assistant** **Spring 2014–Spring 2018**  
**University Tun Hussein Onn Malaysia**

### **SOFTWARE SKILLS**

- Ansys Maxwell.
- PSCAD
- ETAP
- Auto CAD, Revit
- Lab View

### **FUNDED PROJETS**

- Ignite Funded Project 2021 RS 75K
- Ignite Funded Project 2020 RS 72 k
- Applied for National Research Program for Universities RS 2.5 million.

### **RESEARCH PUBLICATIONS**

#### **Journal Papers**

1. Waqas Rahim, Irshad Ullah, MNR Baharom, Nasim Ullah, Ahmad Aziz Ahmadi “Lightning Protection, Cost Analysis and Improved Efficiency of Solar Power Plant for Irrigation System” MDPI Sustainability, Vol. 14, no.10, 2022. (SCIE).
2. Rizwan Ahmad, Faisal Khan, Irshad Ullah, Arshad Jamal, “Application of mineral compounds for high voltage portable grounding system: An experimental study”, MDPI Electronics, Vol. 11, no. 17, 2021. (SCIE).
3. Mamoon ur Rashid, Irsahd Ullah, Mehran, “Techno-Economic Analysis of Grid-Connected Hybrid Renewable Energy System for Remote Areas Electrification Using Homer Pro,” Journal of electrical Engineering and Technology, Vol.17,no1, 2022. (SCI).
4. Irshad Ullah, MNR Baharom, H.Ahmad, B.Das, J.Ali, H.M.Luqman, Zainab Zainal,“ Experimental and Electromagnetic Field Approach for the Development of Modified Building Protection System,” Journal of Electrical Engineering and Technology, Vol.15 no.1, 2020.(SCI).
5. Jawad Ali, Noorsaliza Abdullah, Irshad Ullah, “Ultra-Wideband Antenna Development to Enhance Gain for Surface Penetrating Radar” Wireless Personal Communication,Vol.112 no.1, 2020. (SCIE).
6. Irshad Ullah, MNR Baharom, H. Ahmad, Fazle Wahid, H.M.Luqman, Zainab Zainal, B.Das “Smart Lightning Detection System for Smart-City Infrastructure Using Artificial Neural Network,” Wireless Personal Communication, Vol.104 no.4, 2019. (SCIE).
7. Imaad Khatak, Faisal Khan, Irshad Ullah, “Characteristics of R407C as an Environment-Friendly Alternate to SF6 for High Voltage Application, Journal of Electrical Engineering and Technology,” 2022. (SCI) Accepted for publication.
8. Irshad Ullah, MNR Baharom, H.Ahmad, B.Das, J.Ali, H.M.Luqman, Zainab Zainal,“ On the Contribution of Modified Electromagnetic Radiation Due to Lightning Strike and Prediction of Lightning for Scaled Geometrical Structures.” MDPI Measurements. 2022. (SCIE) Accepted for publication.
9. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal, “Electric Filed Intensity of the Lightning Strikes on Lightning Air Terminals Installed on Building Structures” International Journal of Electrical and Computer Science, Vitae, pg. 5 2017. Scopus index.

10. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal, "Lightning Effect on Scaled Protected and un--Protected Building Structures; A Simulation Approach" Indonesian Journal of Electrical and Computer Science, 2017. Scopus index.
11. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal, "Performance of the Lightning Air Terminal for the Macro Model of Buildings" 2016. Scopus index.
12. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal "Lightning Flash Fatalities: A Quantitative Review" ARPN Journal of Engineering and Applied Science, 2015.Scopus index.

### **Conference Papers**

13. Salman Khan, Irshad Ullah, Azam khan, "Analysis and Mitigation of Harmonics in Wind Turbine & PV Grid Connected" ICAT, UET Peshawar, 2021.
14. Ali Ahmed Salem; Rahisham Abd Rahman; Nor Akmal Mohd Jamail; Nordiana Azlin Othman; Irshad Ullah; Hafisoh Binti Ahmad, "New Approach for Monitoring Contamination Level on Outdoor Insulator Based on Harmonics Components of the Leakage Current", IEEE Conference on the Properties and Dielectric Material, Johor Malaysia,2021
15. Muhammad Jawad, Irshad Ullah, Noman Ullah, Fiasal Khan, Wasiq Ullah, Muhammad Umair, "Comaprison of Rectangular and Trapezoidal Slot Structure Switched- Flux Permanent Magnet Machine Utilizing Analytical Technique", International Conference on Computing, Mathematics and Engineering Technologies iCoMET,2020.
16. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal, "Lightning Strike Probability on Macro Geometrical Structures" IEEE 10th International Power Engineering and Optimization Conference, 2016.
17. Irshad Ullah, MNR Baharom, H. Ahmad, H.M.Luqman, Zainab Zainal, "Practical Investigation for the Selection of Best Structure as Lightning Protection" 1st International Conference on Industrial Engineering, 2017.
18. Irshad Ullah, MNR Baharom, H. Ahmad, H.M. Luqman, Zainab Zainal, "Development of a Small Scale Test Model to Study Impulse Flashover and Attachment Pattern of Protected Building Structures due to Lightning Strikes, IEEE 2nd International Conference on Electrical, Electronics and Optimization, 2017.