

# DR. EHTASHAM MUSTAFA

## ELECTRICAL (POWER) ENGINEER

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Department of Electrical Engineering,  
Faculty of Engineering & Technology,  
Gomal University, Dera Ismail Khan,  
Pakistan.



## BIO DATA

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**D.O.B.:** 17<sup>th</sup> December, 1987

**PEC Regd. No.:** ELECT/27270

## EDUCATION

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|---|------------------|
| <b>Ph.D.</b> Budapest University of Technology & Economics,<br>Budapest, Hungary<br>Electrical Engineering ( <i>summa cum laude</i> )<br><b>Thesis:</b> “Investigation of Aging Processes of Insulating Materials in Multi-Stress Environment, Investigation of Novel Electrical Aging Quantities: A Case of Low Voltage Cables”<br><b>Advisor:</b> Dr. Zoltán Ádám Tamus | Sept’17- Sept’21 |
| <b>M.Sc.</b> University of Engineering & Technology, Peshawar, Pakistan<br>Electrical Engineering with specialization in Power<br><b>Thesis:</b> “Analytical Efficiency Evaluation of Modular Multilevel Converters for HVDC System”<br><b>Advisor:</b> Prof. Dr. Muhammad Naeem Arbab  | Feb’11- Mar’15   |
| <b>B.Sc.</b> University of Engineering & Technology, Peshawar, Pakistan<br>Electrical Engineering with specialization in Power  | Sept’05- Jul’09  |

## HONORS AND AWARDS

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| <b>3<sup>rd</sup> Prize in BMe Research Grant</b><br>Budapest University of Technology & Economics, Hungary  | 2021 |
| <b>Stipendium-Hungaricum Scholarship Award</b><br>A fully funded scholarship for pursuing a Ph.D. in Hungary | 2017 |

## RESEARCH EXPERIENCE

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**1. Condition-based Maintenance Technology Development for Nuclear Control and Instrumentation (C&I) Cable via Korea-Hungary Joint Research,**  
Budapest University of Technology & Economics, Budapest, Hungary 2017 to 2021  
Advisor: Dr. Zoltán Ádám Tamus

**2. Impact of Multi Stress on Low Voltage DC Cables,**  
Budapest University of Technology & Economics, Budapest, Hungary 2017 to 2021  
Advisor: Dr. Zoltán Ádám Tamus

**3. Analytical Efficiency Evaluation of Modular Multilevel Converters for HVDC System,**  
University of Engineering & Technology, Peshawar, Pakistan 2013 to 2015  
Advisor: Prof. Dr. Muhammad Naeem Arbab

## SUPERVISION/CO-SUPERVISION

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### M.Sc. Thesis

**1. Estimation of Lifetime of Thermally Degraded Instrument Cable used in ACP-1000 Power Plant, by Mr. Usama Ibrahim, MS Nuclear Power Engineering (2022) at Karachi Institute of Power Engineering, PIEAS. (Co-Supervisor)**

## WORKING EXPERIENCE

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**1. Gomal University, Dera Ismail Khan, Pakistan**  
**Lecturer,** 31<sup>st</sup> December 2012 till Date  
Department of Electrical Engineering, Faculty of Engineering & Technology  

- Teaching different courses of B.Sc. and M.Sc. Electrical Engineering.
- Supervising undergraduate and postgraduate students of Electrical Engineering.

**2. Workshop on Power System Protection & PLC**  
**Workshop Instructor,** 20-23 June 2023  
Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan, Pakistan

**3. Budapest University of Technology & Economics, Budapest, Hungary**  
**Research Assistant,** September 2017 to August 2021  
Department of Electric Power Engineering, Faculty of Electrical Engineering & Informatics  

- Performing different labs at High Voltage Laboratory.

**4. Pakistan Atomic Energy Commission, Chashma, Pakistan**  
**Junior Engineer (Electrical)** July 2012 to Dec 2012  

- Supervised all the related electrical works in the project.

**5. National Transmission & Despatch Company (NTDC), Pakistan**  
**Assistant Manager (L&TR)** March 2012 to June 2012

- Worked in the Protection and Instrumentation (P&I) section at 500 kV Grid/Sub Station, Bad Bher, Peshawar, Pakistan.

**6. Gomal University, Dera Ismail Khan, Pakistan**

**Lecturer,**

December 2010 to February 2012

Institute of Engineering & Technology

- Taught the courses of Electrical Engineering to B.Sc. Electrical (Telecommunication) Engineering.

**7. Alamdar Engineering (Pvt.) Ltd., Lahore, Pakistan**

**Site Engineer,**

May 2010 to November 2010

- Supervised the Project of NTDC for the Construction, Erection, Testing & Commissioning of 220 KV Grid/Sub Station and Transmission Line from Kala Shah Kaku- Duri Grid/Sub Station, Lahore., Pakistan.

**8. Government College of Technology, Dera Ismail Khan, Pakistan**

**Lecturer,**

January 2010 to April 2010

Department of Electrical Engineering

- Taught the courses of Electrical Engineering to B.Tech. Electrical Engineering

**PUBLICATIONS**

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***Book***

- [1] **Mustafa, E.**, Analytical Efficiency Evaluation of Modular Multilevel Converter (MMC) for High Voltage Direct Current System, Germany: GRIN Publishing, 2016.

***Journal Publications***

- [2] Almani, A. A, Han, X. S., Umer, F., Hassan, R., Nawaz, A., Shah, A. A., and **Mustafa, E.**, “Optimal Solution for Frequency and Voltage Control of an Islanded Microgrid Using Square Root Gray Wolf Optimization,” *Electronics*, vol. 11(22), 3644, 2022.
- [3] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Implementation of Non-Destructive Condition Monitoring Techniques on Low-Voltage Nuclear Cables: II. Thermal Aging of EPR/CSPE Cables,” *Energies*, vol.15 (9), 3231, 2022.
- [4] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Aging Assessment of XLPE/CSPE LV Nuclear Power Cables under Simultaneous Radiation-Mechanical Stresses,” *Energy Reports*, vol.8 (4), 1028-1037, 2022.
- [5] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Condition. Monitroing of Photovoltaic Cables Based Cross-Linked Polyolefin Insulation Under Combined Accelerated Aging Stresses: Electrical and Mechanical Assessment,” *Energy Reports*, vol.8 (4), 1038-1049, 2022.
- [6] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Comparison of Mechanical and Low-Frequency Dielectric Properties of Thermally and Thermo-Mechanically Aged Low

- Voltage CSPE/XLPE Nuclear Power Plant Cables,” *Electronics*, vol. 10 (22), 2728, 2021.
- [7] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Aging Mechanism and Non-Destructive Aging Indicators of XLPE/CSPE Unshielded LV Nuclear Power Cables Subjected to Radiation-Mechanical Aging,” *Polymers*, vol. 13 (18), 3033, 2021.
  - [8] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Implementation of Non-Destructive Electrical Condition. Monitoring Techniques on Low Voltage Voltage Nuclear Cables: I. Irradiation Aging of EPR/CSP Cables,” *Energies*, vol. 14 (16), 5139, 2021.
  - [9] **Mustafa, E.**, Németh, R. M., Afia, R. S. A. and Tamus, Á. Z., “Parameterization of Debye Model for Dielectrics Using Voltage Response Measurements and a Benchmark Problem,” *Periodica Polytechnica Electrical Engineering and Computer Science*, vol. 65(2), 138-145, 2021.
  - [10] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Electrical and Mechanical Condition Assessment of Low Voltage Unshielded Nuclear Power Cables under Simultaneous Thermal and Mechanical Stress: Application of Non-Destructive Test Techniques,” *IEEE Access*, vol. 9, 4531-4541, 2021.
  - [11] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Dielectric Loss and Extended Voltage Response Measurements for Low Voltage Power Cables used in Nuclear Power Plant: Potential Methods for Aging Detection due to Thermal Stress,” *Electrical Engineering*, vol 103 (2), 899-908, 2021.
  - [12] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Dielectric Spectroscopy of Low Voltage Nuclear Power Plant Power Cables Under Simultaneous Thermal and Mechanical Stresses,” *Energy Reports*, vol.6 (9), 662-667, 2020.
  - [13] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Application of Non-Destructive Condition Monitoring Techniques on Irradiated Low Voltage Unshielded Nuclear Power Cables,” *IEEE Access*, vol.8, 166024-166033, 2020.
  - [14] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Condition Assessment of Low Voltage Photovoltaic DC Cables under Thermal Stress using Non-Destructive Electrical Techniques,” *Transactions on Electrical and Electronic Materials*, vol. 21 (5), 503-512, 2020.
  - [15] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Condition Monitoring Uncertainties and Thermal-Radiation Multistress Accelerated Aging Tests for Nuclear Power Plant Cables: A Review”, *Periodica Polytechnica Electrical Engineering and Computer Science*, vol. 64 (1), 2019, pp. 20-32, 2019.
  - [16] Khan, M. Y. A., **Mustafa, E.**, Nawaz, A, Saleem, N. and Illahi, U., “Sensor-Fusion Based Navigation for Mobile Robot in Outdoor Environment,” *Mehran University Research Journal of Engineering & Technology*, vol. 38, no. 1, 2019, pp. 113-128.

- [17] Nawaz, A., **Mustafa, E.**, Saleem, N., Khattak, M.I., Shafi, M., and Malik, A., "Solving Convex & Non-Convex Static and Dynamic Economic Dispatch Problems Using Hybrid Particle Swarm Optimization," *Tehnick Vjesnik- Technical Gazette*, vol. 24, no. 4, 2017, pp. 1095-1102.
- [18] Nawaz, A., Saleem, N., **Mustafa, E.**, and Khan, U.A., "An efficient global technique for solving network constrained static and dynamic Economic Dispatch Problem," *Turkish Journal of Electrical Engineering and Computer Science*, vol. 25, 2017, pp. 73-82.
- [19] Khan, M., Yong, W., and **Mustafa, E.**, "Design and Simulation of Control Technique for Permanent Magnet Synchronous Motor Using Space Vector Pulse Width Modulation," *IOP Conference Series: Materials Science and Engineering*, pp. 1-6, 2017.
- [20] **Mustafa, E.**, Saad, M.M., Mustafa, B., Khan, M.S. and Nouman, M., "Arduino based Condition Monitoring of Different Parameters of Distribution Transformer," *The New Horizon*, vol. 88-90, 2015-2016, pp. 39-42.
- [21] Saleem, N., Shafi, M., **Mustafa, E.** and Nawaz, A., "A Novel Binary Mask Estimation based on Spectral Subtraction Gain-Induced Distortions for Improved Speech Intelligibility and Quality," *Technical Journal*, vol. 20, no. 4, 2015.
- [22] Saleem, N., **Mustafa, E.**, and Nawaz, A., "Ideal Binary Masking for Reducing Convolutional Noise," *International Journal of Speech Technology*, 2015, pp. 1-8.
- [23] Nawaz, A., Malik, T.N., Saleem, N., and **Mustafa, E.**, "Globalized Nelder Mead Trained Artificial Neural Networks for Short Term Load Forecasting," *Journal of Basic & Applied Scientific Research*, vol. 5, no. 3, 2015, pp. 1-13.
- [24] **Mustafa, E.**, and Arbab, M.N., "Analytical Efficiency Evaluation of Modular Multilevel Converter for HVDC System," *International Journal of Computer Applications*, vol. 107, no. 1, 2014, pp. 1-6.
- [25] Saleem, N., **Mustafa, E.**, Ali, S., and Khan, U., "Speech Intelligibility Prediction intended for State-of-the-Art Noise Estimation Algorithms," *Research Journal of Applied Sciences, Engineering, and Technology*, vol. 7, no. 2, 2014, pp. 296-302.

#### **Book Chapters**

- [26] **Mustafa, E.**, Afia, R. S. A., Bal, S. and Tamus, Á. Z., "Study of Electrical Integrity of Low Voltage Nuclear Power Cables in Case of Plant Life Extension," *IFIP Advances in Information and Communication Technology*, vol. 577, 2020.
- [27] Afia, R. S. A., **Mustafa, E.**, Bal, S. and Tamus, Á. Z., "Investigating the Complex Permittivity of Low Voltage Power Cables Under Different Stresses," *IFIP Advances in Information and Communication Technology*, vol. 577, 2020.

- [28] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “ Investigation of Complex Permittivity in XLPO based Photovoltaic DC Cables due to Thermal Aging,” *Lecture Notes in Electrical Engineering*, vol. 598 (1), 2019.
- [29] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “ Thermal Aging of Photovoltaic Cables based Cross-Linked Polyolefin (XLPO) Insulation,” *Lecture Notes in Electrical Engineering*, vol. 598 (1), 2019.
- [30] **Mustafa, E.**, Tamus, Á. Z., Afia, R. S. A. and Asipuela, A., “Thermal Degradation and Condition Monitoring of Low Voltage Power Cables in Nuclear Power Industry,” *IFIP Advances in Information and Communication Technology*, vol. 553, 2019.
- [31] Afia, R. S. A., Tamus, Á. Z. and **Mustafa, E.**, “Effect of Combined Stresses on the Electrical Properties of Low Voltage Nuclear Power Plant Cables,” *IFIP Advances in Information and Communication Technology*, vol. 553, 2019.

### **Conference Papers**

(Peer-Reviewed)

- [32] Ibrahim, U., Ahmed, I., Ahmed, N., Abbasi, A.R., **Mustafa, E.**, and Ullah, H., “Degradation of Silicon Rubber-based Nuclear Power Plant I&C Cable under Accelerated Thermal Aging,” in 4<sup>th</sup> *IEEE International Conference on Computing, Mathematics and Engineering Technologies (iCoMET)*, Sukkur, Pakistan, Mar. 17-18, 2023.
- [33] Khan, M.Y.A., Ahmed, M., **Mustafa, E.**, and Nawaz, A., “ Future Perspective of Smart Meters, Net Metering and Electricity Market for Power Distribution companies in Pakistan,” in 4<sup>th</sup> *IEEE International Conference on Computing, Mathematics and Engineering Technologies (iCoMET)*, Sukkur, Pakistan, Mar. 17-18, 2023.
- [34] Khan, M.Y.A., Ahmed, M., and **Mustafa, E.**, “Future Prospective of HVDC System in Pakistan,” in 4<sup>th</sup> *IEEE International Conference on Computing, Mathematics and Engineering Technologies (iCoMET)*, Sukkur, Pakistan, Mar. 17-18, 2023.
- [35] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Thermal-Mechanical Accelerated Aging Tests of XLPO Insulation Based Photovoltaic Cables: Inverse Aging Behavior,” in *IEEE 4<sup>th</sup> International Conference AND Workshop in Obuda on Electrical and Power Engineering, CANDO-EPE '21*, Budapest, Hungary, Nov. 17-18, 2021.
- [36] **Mustafa, E.**, Afia, R. S. A., and Tamus, Á. Z., “Application of Novel Electrical Aging Markers for Irradiated Low Voltage Nuclear Power Plant Power Cables,” in *IEEE 3<sup>rd</sup> International Conference AND Workshop in Obuda on Electrical and Power Engineering, CANDO-EPE '20*, Budapest, Hungary, Nov. 18-19, 2020.
- [37] Afia, R. S. A., **Mustafa, E.**, and Tamus, Á. Z., “Extended Voltage Response Measurement of Low Voltage Nuclear Power Cables under Simultaneous Thermal and Mechanical Aging,” in *IEEE 3<sup>rd</sup> International Conference AND Workshop in Obuda*

- on Electrical and Power Engineering, CANDO-EPE '20*, Budapest, Hungary, Nov. 18-19, 2020.
- [38] **Mustafa, E.**, Afia, R. S. A., and Tamus, Á. Z., “Investigation of Electrical and Mechanical Properties of Low Voltage Power Cables under Thermal Stress,” in *IEEE International Conference on Diagnostics in Electrical Engineering (Diagnostika'20)*, Pilsen, Czech Republic, Sep. 1-4, 2020.
  - [39] Afia, R. S. A., **Mustafa, E.**, and Tamus, Á. Z., “Condition Assessment of XLPO Insulated Photovoltaic Cables Based on Polarisation/Depolarisation Current,” in *IEEE International Conference on Diagnostics in Electrical Engineering (Diagnostika'20)*, Pilsen, Czech Republic, Sep. 1-4, 2020.
  - [40] **Mustafa, E.**, Afia, R. S. A., and Tamus, Á. Z., “Investigation of Photovoltaic DC Cable Insulation Integrity under Thermal Stress,” in *IEEE 3<sup>rd</sup> International Conference on Dielectrics, ICD'20*, Valencia, Spain, July 5-9, 2020.
  - [41] Afia, R. S. A., **Mustafa, E.**, and Tamus, Á. Z., “Assessment of Nuclear Power Plant Power Cables Under Thermal and Mechanical Stresses,” in *IEEE 3<sup>rd</sup> International Conference on Dielectrics, ICD'20*, Valencia, Spain, July 5-9, 2020.
  - [42] Khan, M. Y. A., Ibrahim, M., Ali, M., Khan, H. and **Mustafa, E.**, “Cost Benefit Based Analytical Study of Automatic Meter Reading (AMR) and Blind Meter Reading (BMR) used by PESCO (WAPDA),” in *3<sup>rd</sup> IEEE International Conference on Computing, Mathematics and Engineering Technologies (iCoMET)*, Sukkur, Pakistan, Jan. 29-30, 2020.
  - [43] Ahmed, W., Khan, Z. A., Khan, U. H., Alam, Z., Qasuria, H. T. and **Mustafa, E.**, “Neural Network based Robust Nonlinear GMPPT Control Approach for Partially Shadow Conditions of Solar Energy System,” in *IEEE International Conference on Emerging Trends in Smart Technologies (ICETST)*, Karachi, Pakistan, Mar. 26-27, 2020.
  - [44] Afia, R. S. A., **Mustafa, E.** and Tamus, Á. Z., “Evaluation of Thermally Aged Nuclear Power Plant Power Cables Based on Electrical Condition Monitoring and Regression Analysis,” in *International IEEE Conference AND Workshop in Obuda on Electrical and Power Engineering, CANDO-EPE '19*, Budapest, Hungary, Nov. 20-21, 2019.
  - [45] **Mustafa, E.**, Saleem, N., Nawaz, A., Malik, A., and Khan, M.Y.A., “Power Loss and Efficiency Analysis of Clamp Double Sub Module Using Analytical and Numerical Method,” in *IEEE 1<sup>st</sup> International Conference on Electrical, Communication and Computer Engineering, ICECCE'19*, Swat, Pakistan, July 24-25, 2019.
  - [46] **Mustafa, E.**, Afia, R. S. A. and Tamus, Á. Z., “Electrical Integrity Tests and Analysis of Low Voltage Photovoltaic Cable Insulation under Thermal Stress,” in *IEEE 7<sup>th</sup> International Youth Conference on Energy, IYCE'19*, Bled, Slovenia, July 3-6, 2019.

- [47] Afia, R. S. A., **Mustafa, E.**, Asipuela, A. and Tamus, Á. Z., “Non –Destructive Condition Monitoring of Nuclear Plant Power Cables,” in *IEEE 7<sup>th</sup> International Youth Conference on Energy, IYCE’19*, Bled, Slovenia, July 3-6, 2019.
- [48] Asipuela, A., **Mustafa, E.**, Afia, R.S.A., Tamus, Á. Z., and Khan, M.Y.A., “Electrical Condition Monitoring of Low Voltage Nuclear Power Plant Cables:  $\tan\delta$  and Capacitance,” in *IEEE 4th International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET’18)*, Islamabad, Pakistan, Sep. 10-12, 2018, pp. 503-509.
- [49] **Mustafa, E.**, Ali, M.Y.A., Saleem, N., Nawaz, A., and Zafar, A., “Modular Multilevel Converter based HVDC System Efficiency Evaluation Using Analytical Method,” in *IEEE 4th International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET’18)*, Islamabad, Pakistan, Sep. 10-12, 2018, pp. 503-509.
- [50] **Mustafa, E.**, Afia, R.S.A., and Tamus, Á. Z., “A Review of Methods and Associated Models used in Return Voltage Measurement,” in *IEEE International Conference on Diagnostics in Electrical Engineering (Diagnostika’18)*, Pilsen, Czech Republic, Sep. 4-7, 2018, pp. 69-72.
- [51] Afia, R.S.A., **Mustafa, E.**, and Tamus, Á. Z., “Mechanical Stresses on Polymer Insulation Materials,” in *IEEE International Conference on Diagnostics in Electrical Engineering (Diagnostika’18)*, Pilsen, Czech Republic, Sep. 4-7, 2018, pp. 170-173.

#### REVIEWER ACTIVITY

<b>IEEE</b>	IEEE Transactions on Dielectrics and Electrical Insulation, IEEE Transactions on Transportation Electrification, Canadian Journal of Electrical and Computer Engineering, IEEE Access
<b>Elsevier</b>	Nuclear Engineering & Technology
<b>IET</b>	IET Generation, Transmission & Distribution, High Voltage
<b>Springer</b>	Electrical Engineering
<b>MDPI</b>	Energies, Polymers, Electronics, Materials
<b>Wiley</b>	Journal of Applied Polymer Science
<b>Taylor &amp; Francis</b>	Fusion Science & Technology
<b>De Gruyter</b>	International Journal of Emerging Electric Power Systems, Reviews on Advanced Materials Science
<b>Conferences</b>	International Conference on Dielectrics (ICD’22), International Symposium on High Voltage (ISH’19)



## PROFESSIONAL SERVICES

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### **Technical Member, Procurement Committee, Peshawar High Court, Dera Ismail Khan Bench.**

Being a Technical Member of the Procurement Committee, I provided technical assistance for the estimation and then procuring the heavy-duty generators and solar systems for the office buildings and judicial lodges of Peshawar High Court, Dera Ismail Khan Bench.

### **Program Coordinator, Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan.**

Having an additional charge of Program Coordinator, I had the responsibilities of providing administrative support, maintaining student records, organizing the examinations for the Semester System at the Faculty and also handling all the matters related to the Examination and academics.

### **Member, Outcome Based Education (OBE) Implementation and CQI Committees, Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan.**

Being a member of OBE implementation and CQI committees, I have to review the CLOs and PLOs attainment for the whole academic session. Moreover, the actions required are then recommended based on the evaluation.

### **Chief Tabulator on Semester System of Examination, Gomal University, Dera Ismail Khan.**

Having an additional responsibility of Chief Tabulator on Semester System of Examination, I had the responsibility for being Semester Coordinator at the University level.

### **Member, Departmental Supervisory Committee, Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan.**

Working as a Member of the Departmental Supervisory Committee, I had to evaluate the synopsis (proposal), the thesis of the postgraduate students along with assigning the supervisor.

### **Focal Person, Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan.**

Worked as a Focal Person (Department) to Higher Education Commission (HEC) of Pakistan on the Project “Prime Minister’s Fee Reimbursement Scheme” and “Prime Minister National Laptop Scheme”, I had to consult with HEC for the nominations and verifications of the candidates for the schemes.

### **Member of Admission Committee, Department of Electrical Engineering, Faculty of Engineering & Technology, Gomal University, Dera Ismail Khan.**

Being a Member of the Admission Committees for undergraduate and postgraduate programs at the faculty, I had to scrutinize the documents and also have to work on the preparation of the merit lists along with the conduction of interviews of the applicants.

**Member of Review Committee for Semester System, Gomal University, Dera Ismail Khan.**

Worked as a Member of the Review Committee regarding the Gomal University Semester System of Examinations Regulations and Gomal University Statutes and Regulations for M.Phil. and Ph.D. degree programs since December 2015.

**Nominee of Quality Enhancement Cell (QEC), Gomal University, Dera Ismail Khan.**

Being a Nominee of Quality Enhancement Cell (QEC) to Institute of Computing & Information Technology, Gomal University, Dera Ismail Khan for Postgraduate Proposal and Thesis Defense, I had to evaluate the quality of the research work and presentation of the scholars.

#### **WORKSHOPS/TRAININGS**

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- i. One Day Research Skills Development Course on **“To Patent or to Publish? That is not the Question”** by Dr. Jokuti Andras, Doctoral School of Electrical Engineering, Budapest University of Technology & Economics, Budapest, 30<sup>th</sup> March 2021.
- ii. One Day Research Skills Development Course on **“In the Spotlight: Improving Effective Presentation Skills”** by Szabo Krisztina, Szemere Alexandra, Doctoral School of Electrical Engineering, Budapest University of Technology & Economics, Budapest, 26<sup>th</sup> March 2021.
- iii. One Day Research Skills Development Course on **“Tips for Scientific Publications”** by Prof. Dr. Andras Recksi, Doctoral School of Electrical Engineering, Budapest University of Technology & Economics, Budapest, 22<sup>nd</sup> November 2018.
- iv. One Day Research Skills Development Course on **“Publish Better in English”** by Reka Feher, Doctoral School of Electrical Engineering, Budapest University of Technology & Economics, Budapest, 15<sup>th</sup> November 2018.
- v. One Day CPD Short Course on **“Renewable Energy Resources (Solar)”** by Engr. Faiz Muhammad Bhutta held at PEC Headquarters, Islamabad, 27<sup>th</sup> April 2017.
- vi. 4 – Day National Workshop on **“Resonant & Soft Switching Techniques in Power Electronics”** by Dr. Khurram Khan Afridi held at LUMS, Pakistan, 14<sup>th</sup> – 17<sup>th</sup> July 2016.
- vii. 5 – Day International Workshop **“Teaching the Teachers (A Concept Workshop): Feedback Control Systems”** by Dr. Asad Ali Abidi held at LUMS, Pakistan, 24<sup>th</sup> – 28<sup>th</sup> August 2015.
- viii. One day Training as **Presiding Officer** by Election Commission of Pakistan.
- ix. One and half month **Nuclear Orientation Course (NOC)** by Pakistan Atomic Energy Commission at Pakistan Institute of Engineering & Applied Sciences (PIEAS), Nilore, Islamabad.

## **VOLUNTEER SERVICES**

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### **i. Volunteer at International Alumni Volunteer Program**

Alumni Network Hungary, Directorate for Study in Hungary.

### **ii. Member of Organizing Committee**

Internationals Symposium on High Voltage (ISH'19), Budapest, Hungary.

## **LANGUAGES**

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**English:** Advanced Listener, Speaker, Reader, and Writer with **IELTS Band: 6.5 (Overall)**

**Urdu:** Native Language

## **COMPUTER SKILLS**

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**Programming:** C Language, C++ Language

**Applications:** OMICRON Dirana, MS Office, MATLAB, Origin, Verilog HDL, PSpice, Electronic Workbench, PSim, Proteus

## **OTHER**

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Member of **College Cricket Team**, 2004-05.

Winner of District **Table Tennis Championship**, 2004-05.

## **REFERENCES**

---

### **1. Dr. Habil. Zoltán Ádám Tamus**

Associate Professor

Department of Electric Power Engineering

Faculty of Electrical Engineering & Informatics

Budapest University of Technology & Economics, Hungary

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### **2. Dr. Javed Iqbal**

Assistant Professor/Head of Department

Department of Electrical Engineering

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Gomal University, Dera Ismail Khan, Pakistan

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**3. Dr. Armaghan Zafar**

Postdoctoral Research Associate

Multi Robot Planning

Australian Centre for Field Robotics

The University of Sydney, NSW, Australia

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