

ENGR. TILA MUHAMMAD

PEC Reg. No: Electro / 13032 **IEEE Membership No:** 92856064

Cell No: +92333-9346781 **Office No:** 0519019776 **E-mail:** tila.muhammad@iiu.edu.pk

PROFESSIONAL EXPERIENCE:

1. International Islamic University, Islamabad, Pakistan Faculty of Engineering and Technology, Department of Electronic Engineering
Lab Engineer February 2011 to Present
2. SciFlair LCC Pvt. Ltd.
Consultant December 2014 to 2016
3. Power Electronic R&D Lab IIUI
Co. PI December 2014 to Present

Primary responsibilities include teaching, research, development and other departmental and administrative duties. During this period following activities were carried out at IIUI:

TEACHING:

Designed and taught courses of Power Electronic, Electronic Circuit Design, Power Distribution and Utilization, Power Generation and Utilization, Power Generation, and Power Industrial Electronics.

Designed and taught Lab courses of Basic Electrical Engineering, Electronics Circuit Design, Control System, Instrumentation and Measurement, Power Electronics and Electrical Machine.

I have developed a new Power Electronic Lab along with the designing of its course at International Islamic University Islamabad, which is fully functional from more than 6 years.

I played a key role in development of Power System and Electrical Machine Laboratories.

CO-PI POWER ELECTRONIC RESEARCH AND DEVELOPMENT LABORATORY:

I am working on different types of converters in this lab. The designing of converters, prototype development, prototype testing and commercialization of design is the prime aim. Creating research interest of students and faculty members in the field of power electronic is the main goal of this laboratory.

RESEARCH AND DEVELOPMENT PROJECTS:

Worked as a consultant for one and half year for SciFlair LLC Pvt. Ltd. on Power inverter designing and development.

SUPERVISOR OF WINNING FINAL YEAR PROJECTS:

1. Project advisor for the winner of Final Year Project, academic year 2013 –2014 at 5th open house.
2. Project advisor for the 3rd position of Final Year Project, academic year 2013 –2014 at 5th open house.
3. Project advisor for the 3rd position of Final Year Project, academic year 2013 –2014 at 6th open house.
4. Project advisor for the Final Year Project, won 2nd position at EMCOT COMSAT Abbottabad.
5. Project advisor for Integration of Micro Grid with National Grid using Grid Tie Inverter which got 3rd position in 2015 –2016 at 7th Open House Female Campus
6. Project advisor for Final Year Project “Design and Development of a Novel Three Phase Multilevel Inverter” which got 1st position in 2015 –2016 at 7th Open House Female Campus
7. Project advisor for Final Year Project “Design and Development of Mini Grid for Distributive for Generation” which got 1st position in 2016 –2017 at 8th Open House
8. Project advisor for Final Year Project “Design and Development of Solar Electric Geyser” which got 2st position in 2016 –2017 at 8th Open House Iqra College of Technology
9. Project advisor for Final Year Project “Design and Development of Novel Cascaded Multilevel Grid Tie Inverter” which got 1st position in 2016 –2017 at 9th Open House Female Campus
10. Project advisor for Final Year Project “Solar Based Refrigeration System” which got 3rd position in 2016 –2017 at 9th Open House Female Campus
11. Project advisor for Final Year Project “Power Management and Control of Hybrid Distributive Power Generation System” which got 1st position in 2016 –2017 at 10th Open House Female Campus
12. Project advisor for Final Year Project “Feedback control of asymmetric multilevel inverter for grid-tie application” which got 3rd position in 2016 –2017 at 10th Open House Female Campus
13. Project advisor for Final Year Project “Design and Development of Indigenous Micro Hydro Power Plant” which got 2st position in 2016 –2017 at 10th Open House Iqra College of Technology
14. Project advisor for Final Year Project “Digital Control of Grid Tie Inverter” which got 1st position in 2018 –2019 at 12th Open House Female Campus

PUBLICATIONS

- I. Muhammad, Tila, et al. "Generation of isolated DC voltage sources for multilevel inverters." *Power Generation System and Renewable Energy Technologies (PGSRET)*, 2015. IEEE, 2015.
- II. Muhammad, Tila, et al. "DC voltage regulator for battery less PV system using MPPT." *Power Generation System and Renewable Energy Technologies (PGSRET)*, 2015. IEEE, 2015.
- III. Muhammad, Tila, et al. "Performance analysis of Amplify Quantize and Forward Relaying in Network Coded based system at various relay locations." *Emerging Technologies (ICET), 2015 International Conference on*. IEEE, 2015..
- IV. Muhammad, Tila, et al. "Cascaded Symmetric Multilevel Inverter with Reduced Number of Controlled Switches." *International Journal of Power Electronics and Drive Systems (IJPEDS)* 8.2 (2017).
- V. Three-Phase AC-DC Voltage Disturbance Rejection Control Strategy by Using Inverter Decoupling Topology Authors: Faisal Mehmood Shah, Han Minxiao, Tila Muhammad, Wang xxxie and Muhammad Awais (Presented at *PGSRET, 2018. IEEE*)

ADMINISTRATIVE DUTY:

Lab Engineer and incharge of Electrical Machine and Power System Labs at Department of Electronic Engineering, Faculty of Engineering and Technology, International Islamic University Islamabad, where my responsibilities are up gradation and development, inventory and providing research environment to students.

Ex-Member of different departmental committees

- i. FET 4th Open House Publicity and Transport Committee
- ii. FET 5th Open House Publicity and Transport Committee
- iii. Technical Purchase Committee
- iv. National workshop on Energy organizing committee
- v. National workshop on Advance Electronics Publicity and Printing Committee
- vi. Student Guidance Committee
- vii. Departmental Change of Scope Committee
- viii. Industrial Liaison and Internship Cell

IEEE IUI STUDENT BRANCH COUNSELOR:

Founder and Founding Counselor of IEEE IUI Student Branch, here my primary responsibilities were to promote curriculum and co-curriculum activities to create healthy environment for the learning of our students. Arrangement of events, workshops, seminars, study trips and competitions were in the core responsibilities of IEEE IUI Student Branch Counselor.

NWPERI-1, NWPERI-2 and NWPERI-3 SECRETORY:

I have arranged and conducted a National Workshop on “Power Electronics with Renewable Integration” Sponsored by HEC, NI in collaboration with PEC, IEEE Young Professional Lahore, IEEE PES and IEEE Islamabad Section. I served in this workshop as workshop secretory.

ICISE 2016 Tutorial SECRETORY:

I have conducted Tutorial Session of International Conference on Intelligent System Engineering 2016 (ICISE 2016). This was one complete day program of the three days conference. Where the 6 hours lectures were delivered.

QUALIFICATION:

PhD (Electronic Engineering)	(Research is in progress)
	International Islamic University Islamabad

MSEE (Electronics Engineering)	3.3 CGPA (74 %)
	2012 - 2015, International Islamic University Islamabad

BS (Electronics Engineering)	3.28 CGPA (76.41%)
	2006 - 2010, International Islamic University Islamabad

FS.c (Pre-Engineering)

A grade

2002 - 2004, Govt. Post Graduate College Charsadda KPK

Matriculation (Science)

A grade

2000-2002, Islamia Children Academy Behlola Wali Bagh Charsadda.

REFERENCE :

1. Dr. Adnan Umar Khan
Asst. Professor
DEE, FET, International Islamic University Islamabad
2. Prof. Dr. Muhammad Amir
Ex-Dean,
FET, International Islamic University Islamabad