

Address: HoD office
Department of Electrical Engineering,
Federal Urdu University of Arts Science and Technology
G-7/1 Islamabad, 44000, Pakistan.
Mob: +92-345-9532660, email: Hanifuet@yahoo.com

Engr. Dr. Hanif Ullah

EDUCATION:

- April 15—May 16 **Post-Doctorate.** Warsaw University of Technology Poland
- March 12—March 15 **Ph.D. (PROGRAMME IN DESIGN, MANUFACTURING AND MANAGEMENT OF INDUSTRIAL PROJECTS)**
Universitat Politecnica de Valencia (UPV), Valencia Spain.
Field of Specialization: Renewable Energies, Thin film Solar Cells.
Thesis Title: “SIMULATION STUDIES OF THIN FILM PHOTOVOLTAIC DEVICES”
Advisor: Prof. Dr. Bernabe Mari Soucase
Online: <https://riunet.upv.es/handle/10251/48800>
- Sep 06—August 10 **MS (Electronic Engineering)**
International Islamic University (IIU), Islamabad Pakistan.
Field of Specialization: Electronic and telecommunication subjects,
24 credit hours course work and 06 credit hours thesis work.
Thesis Title: “Routing and Wavelength Assignment in Optical Burst Switched Network”
- Nov 01—September 05 **BSc Electrical Engineering**
University of Engineering and Technology (UET)
Peshawar (Pakistan)
Electrical Engineering courses major in communication
Pakistan Engineering Council (PEC) membership no.: ELECT/21369.

Research Interest

Photovoltaic Solar cells, Next generation solar Cells, Thin-film Solar cells, Renewable Energy Systems
Semiconductor materials and devices, Optical communication, Electric Circuits, Electrical Engineering subjects.

On Job Experiences

- January 2017-
present
May 16 – present **Head of Department (HOD)**
Department of Electrical Engineering
- Assistant Professor**
Department of Electrical Engineering
Federal Urdu University (FUUAST) Islamabad, Pakistan.
Courses : Advance Optical Fiber communication systems,
Renewable energy Systems, Basic Electrical Engineering,
Applied Physics,
- April 15—May 16 **Post-Doctorate researcher**
Warsaw University of Technology Poland.
INTERWEAVE Project Erasmus Mundus Partnership Asia-Europe Erasmus
Mundus Programme
- March 12—April 15 **Erasmus Mundus researcher at Universitat Politecnica de Valencia Spain**
Erasmus Mundus Project, IDEAS Innovation and Design for Euro-Asian Scholars
- Oct 05— March 12 **Lecturer**
Electrical Engineering Department FUUAST Islamabad Pakistan
Courses: Basic Electrical Engineering(BEE), Semiconductors
devices, Electronic Circuit, Data Communication, Computer
communication and networks, Optical Fibre Communication,
Opto-electronics.

Achievements:

- Merit Scholarship by University of Engineering and Technology Peshawar for year 2003 and 2004.
- Merit Scholarship by International Islamic University (IIUI), Islamabad Pakistan. for year 2006 and 2007.
- Sponsorship by European Union through its Erasmus Mundus program (IDEAS Innovation and Design for Euro-Asian Scholars) to conduct research for 24 month at Universitat Politècnica de Valencia (UPV), Valencia Spain
- Sponsorship by European Union through its Erasmus Mundus Program (INTERWEAVE Project Erasmus Mundus Partnership Asia-Europe Erasmus Mundus Programme) to conduct research for 10 month at Warsaw University of Technology Poland.

Academic Affiliations:

- Member, Pakistan Engineering Council (PEC).
- Member, Institute of Engineers Pakistan (IEP).
- Higher Education Commission (HEC) approved Ph.D. Supervisor.
- Member of Valencia ACOGE, Spain.
- Member of Rural development Organization, Pakistan

RESEARCH PUBLICATIONS:

1. **Hanif Ullah**, and Bernabé Marí. "Numerical analysis of SnS based polycrystalline solar cells," *Superlattices and Microstructures* 72 (2014): 148-155.
2. **Hanif Ullah**, Bernabé Marí, and Hai Ning Cui. "Investigation on the Effect of Gallium on the Efficiency of CIGS Solar Cells through Dedicated Software," *Applied Mechanics and Materials* 448 (2014): 1497-1501.
3. Ullah, Shafi, **Hanif Ullah**, Ferial Bouhjar, Miguel Mollar, and Bernabé Marí. "Synthesis of in-gap band CuGaS₂: Cr absorbers and numerical assessment of their performance in solar cells." *Solar Energy Materials and Solar Cells* (2017).
4. Rahat Ullah, Fisal, N., Safdar, H., Khalid, Z., Maqbool, W., and **Hanif Ullah**. "Stochastic Geometry Based Dynamic Fractional Frequency Reuse for OFDMA Systems," *Jurnal Teknologi*, 67(1), (2014).
5. **Hanif Ullah**, Bernabé Marí "Boosting the efficiency of CIGS-based solar cells using dedicated software," **Journal** of Beijing Institute of Technology, Vol. 22, Suppl. 1. 2013.
6. **Hanif Ullah**, Bernabé Marí, O. Skhouni, and A. El Manouni, "A numerical simulation study of ZnTe-based solar cells. In Renewable and Sustainable Energy Conference (IRSEC), 2014 International (pp. 686-690), IEEE, October 2014.
7. Faisal Baig, Yousaf Hameed Khattak, Bernabé Marí, Shafi Ullah, **Hanif Ullah** "Efficiency Enhancement of SnS Solar Cell using Back Surface Field" IEEE International Conference on Power, Energy and Smart Grid (ICPESG-2018) 09th – 10th April, 2018
8. Shafi Ullah, **Hanif Ullah**, Miguel Mollar, Bernabé Marí, Fabrication of Cd_{1-x}Zn_xS Buffer layer Deposited by Chemical Bath Deposition for Photovoltaic Applications 4th

- International Renewable and Sustainable Energy Conference (IRSEC) Marrakech, MOROCCO, November 14 - 17, 2016.
9. Thierno Sall, Bernabé Marí Soucase, Miguel Mollar, Mounir Fahoume, and **Hanif Ullah** “Influence of Alcohol Percentage on the β -In₂S₃ Thin Films Properties Deposited by Chemical Spray Pyrolysis Technique for Photovoltaic Applications,” 3rd International Conference on Environment and Sustainable Development (EESD) Oct 22-24, 2014.
 10. **Hanif Ullah**, and Bernabé Marí, “Baseline of numerical simulations for ZnTe based thin-film solar cells,” International Conference on Energy Systems and Policies (ICESP 14), Nov 24 – 26, Islamabad Pakistan 2014.
 11. Inmaculada Guaita-Pradas, **Hanif Ullah**, Shafi Ullah and Bernabé Marí “Engineering Education in Third Countries through International EU Cooperation Programmes,” 4TH VALENCIA GLOBAL 2014, 19-20 June 2014, Valencia, Spain.
 12. **Hanif Ullah**, Shafi Ullah and Bernabé Marí “Photovoltaic Solar cells a technological review,” The 2nd Abasyn International Conference on the Technology and Business Management (AiCTM-2014), Peshawar, Pakistan 2014 (Oral)
 13. **Hanif Ullah**, Inmaculada Guaita-Pradas and Bernabé Marí “Emerging of photovoltaic technology in Energy deficient market of Pakistan,” 2nd International Conference on Business Innovation and Management (ICBIM-2014), Islamabad Pakistan 26-27 April 2014.
 14. **Hanif Ullah**, Bernabé Marí, and Luis M. Sánchez Ruiz, “Comparative analysis of CIGS thin film and Multilayer Solar cells,” ICEE/ICIT 2014, Riga, Latvia 2-6 June 2014.
 15. **Hanif Ullah**, Shafi Ullah and Bernabé Marí “Numerical Analysis of Photovoltaic Solar Cells based on low cost thin film sulfides,” E-MRS SPRING MEETING, Congress Center - Lille, France 26-30 May, 2014 (Poster).
 16. **Hanif Ullah**, Bernabé Marí and Luis M. Sánchez Ruiz, “Modelling and Analysing CIGS Thin-film Solar Cell by SCAPS” 2013 international conference on engineering education and research iceer-2013 Marrakesh, Morocco July 1 -5, 2013 (Poster).
 17. **Hanif Ullah** and Bernabé Marí “Understanding the behaviour of thin film solar cells by using dedicated software,” 21st University Conference on Educational Innovation in Technical Education (xx1cuieet 2013) Valencia, Spain July 10 - 12, 2013.
 18. **Hanif Ullah**, Bernabé Marí “Effect of Gallium (Ga) on the Parameters of CIGS Solar Cell through dedicated Software SCAPS,” FEIIC 5th World Engineering Congress 2013 NUST Islamabad Pakistan 23-25 September 2013.
 19. **Hanif Ullah**, Bernabé Marí “Modelling and Analysing CdTe Thin-film Solar Cell by SCAPS,” International Congress on Energy Efficiency and Energy Related Materials (ENEFM 2013) Antalya, Turkey, 9 -12 October 2013.

20. **Hanif Ullah**, Bernabé Marí “Numerical Analysis of SnS based (SnS/ZnS/ZnO) Polycrystalline Solar Cell,” 12th International Conference on Condensed Matter and Statistical Physics (ICCMSP) Errachidia-Morocco October 30 - November 01, 2013.
21. **Hanif Ullah**, Bernabe Mari Soucase “Numerical Analysis of SnS based (SnS/CdS/ZnO) Polycrystalline Solar Cell,” EMRS 2013 Fall Meeting Warsaw University of Technology Poland 16 -20 September 2013.
22. O. Skhouni, A. El Manouni , Bernabé Marí, and **Hanif Ullah**, “Preparation of ZnTe thin films and numerical simulation of znte based solar cell,” ICOME’15, Tetouan, Morocco, May 19-22, 2015.
23. **Hanif Ullah**, Bernabe Mari Soucase, “CuInSe₂, CuGaSe₂ and CuInGaSe₂ based thin film solar cells: Theoretical vs experimental analysis,” International Conference Power Generation Systems and Renewable Energy Technologies (PGSRET 2015), Islamabad, Pakistan, 10-11 June, 2015.
24. **Hanif Ullah**, Bernabe Mari Soucase and Luis M. Sánchez Ruiz “Effect of defects on the performance of some photovoltaic solar cells: an introduction to research methods to engineering students,” International Conference on Engineering Education (ICEE 2015), Zagreb Zadar (Croatia), 20-24 July 2015.
25. **Hanif Ullah**, Bernabe Mari Soucase, “Numerical analysis of CIGS thin film and multilayer CIS/CGS solar cells,” E-MRS 2015 SPRING MEETING, Grand Palais, Lille, France, May 11 – 15, 2015
26. **Hanif Ullah**, and Bernabé Marí, “Numerical Analysis of CuInS₂ Based Solar cell by SCAPS,” 2nd ENEFM 2014, Lykia, Oludeniz Turkey.

Member of Organising Committee, “7th International Image Processing and wavelet on Real-world Applications Conference” IWW 2013, Valencia.