

Zohaib Hasan Khan
Assistant Professor, Department of ECE, Faculty of Engineering,
Integral University, Lucknow
(7752846666, zhkhan@iul.ac.in)

(Google Scholar Citation), (Orcid Id), (Research gate), (Scopus)

#### **PROFILE**

#### **RESEARCH INTEREST:**

Digital Electronics, Electronics Devices & circuits, Radio Frequency Mixers, Renewable energy, Wireless communication, Solar Energy and Entrepreneurship, Data Communication Networks, Artificial Intelligence and Cyber Law.

### **SUMMARY OF RESEARCH ACCOMPLISHMENT:**

- \* "A Low Leakage Down-conversion K-Band MIXER using Current-Reuse Double-Balanced Architecture in 130-nm CMOS Process for Modern RF Applications" International Journal of Computing and Digital Systems (IJCDS), University of Bahrain, Scopus Indexed, (IU/R&D/2021-MCN0001179)
- ❖ "A Comparative analysis of different types of mixer architecture for Modern RF Applications", International Conference on Trends in Electronics and Health Informatics (TEHI), Springer Nature, Singapore, Scopus Indexed, (IU/R&D/2021-MCN0001256).
- \* "A 120 Ghz Down Conversion Mixer Design for Improved Linearity, High Conversion-Gain and Low Noise-Figure in 130 n m CMOS Technology", Journal of Theoretical and applied information technology, Scopus Indexed, (IU/R&D/2023-MCN0001801)
- \* "A down conversion K-Band mixer using current-reuse folded Double-Balanced Architecture in 130-nm CMOS Process with High Conversion Gain and Improved Linearity", Journal of European Chemical Bulletin, Scopus Indexed, (IU/R&D/2023-MCN0001908).
- ❖ "A Next-generation down conversion mixer design using Schottky diode to improve performance for WSN", International Journal of Computing and Digital Systems (IJCDS), Scopus Indexed, (IU/R&D/2023-MCN0001935).
- Presented a paper titled "Work-from-home Security Issues and Risk over Internet" at the Global Multi-Track Conference SEMA held between November 18 and 27, 2022. ISBN 978-93-91303-45-7 DOI: https://doi.org/10.47715/JPC.B.978-93-91303-45-7

- Cybersquatting and its Effectual Position in India, International Journal of Scientific & Engineering Research, Volume 6, Issue 2, February-2015 880 ISSN 2229-5518
- ❖ Increasing the Performance of IEEE 802.11n in Multi-Channel Multi Radio Mobile Ad hoc Networks, International Journal of Applied Science & Technology Research Excellence Vol. 2, Issue 2, Mar – Apr, 2012, ISSN NO. 2250 – 2718 (Print), 2250 – 2726 (Online)
- Design Study and Performance Evaluation of 111kWP Grid Connected SPV System at Integral University, Lucknow, IJIREEICE, ISSN (Online) 2321-2004 ISSN (Print) 2321-5526, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, ISO 3297:2007 Certified, Vol. 6, Issue 6, June 2018
- Design Study and Performance Evaluation of 198kWP Grid Connected SPV System at Academic Block I, Integral University, Lucknow, ISSN (Print) 2321-5526, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, ISO 3297:2007 Certified, Vol. 6, Issue 6, June 2018
- Estimation Of Cost Analysis For 500kw Grid Connected Solar Photovoltaic Power Plant By LCOE Simulation. IOSR Journal of Engineering (IOSRJEN) <a href="https://www.iosrjen.org">www.iosrjen.org</a>, ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 08, Issue 8 (August. 2018), ||V (IV) || 97-100
- Performance Estimation of 111kWp Grid Interactive Solar PV Power Plant at Integral University, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075 (Online), Volume-8 Issue-10, August 2019
- Safe Multicast approach in Wireless MAN, IJSRD International Journal for Scientific Research & Development | Vol. 3, Issue 07, 2015 | ISSN (online): 2321-0613

# PROFESSIONAL MEMBERSHIP:

**IEEE Member** 

# **COURSE TAUGHT:**

Basic Electronics, Digital Electronics, Wireless Communication, Cyber Law, Renewable Energy, Data Communication Network

# ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILTY

- (C0-Conevnor of IUSS)
- [Advisor Sponsorship & Stall Committee, FIESTA from Session 2017-till date]
- ❖ [Assistant Proctor, ECE Department]
- ❖ [Member NAAC Criteria-1]
- ❖ [Program Coordinator- UG ECE]
- ❖ [Guest Lecture Organizing Coordinator]
- ❖ [Co-convenor in Five Week Equivalent Blended Internship Programme ECT23-01 on "Application of MATLAB in Engineering" From 25<sup>th</sup> September to 28<sup>th</sup> October 2023]
- ❖ [Co-convenor in Four Week Blended Internship Workshop going to held on "Application of IOT in Engineering, Science and Management" From 23<sup>rd</sup> September to 19<sup>th</sup> October 2024]

### **STUDENTS SUPERVISION**

- Mohd Ayazul Haq(1701014010)
- Faizullah Ahmad Khan(1701014008)
- **t** Eram Kaynat (1601116006)
- ❖ Wamique Azmat (1601116007)
- Arshia Fatima (1300114009)
- **Afshan Naaz (1300114002)**

### **PUBLISHED/GRANT PATENTS**

- Implementation of artificial intelligence techniques through machine learning algorithms for cybercrime detection. Patent Number 202311020458. Intellectual Property India.
- Wearable Health Monitoring Jacket. Patent Number 6287661. Certificate of Registration for a UK Design.

# PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- "A Low Leakage Down-conversion K-Band MIXER using Current-Reuse Double-Balanced Architecture in 130-nm CMOS Process for Modern RF Applications" International Journal of Computing and Digital Systems (IJCDS), University of Bahrain, Scopus Indexed, (IU/R&D/2021-MCN0001179)
- \* "A 120 Ghz Down Conversion Mixer Design for Improved Linearity, High Conversion-Gain and Low Noise-Figure in 130 n m CMOS Technology", Journal of Theoretical and applied information technology, Scopus Indexed, (IU/R&D/2023-MCN0001801)
- "A Next-generation down conversion mixer design using Schottky diode to improve performance for WSN", International Journal of Computing and Digital Systems (IJCDS), Scopus Indexed, (IU/R&D/2023-MCN0001935).
- Mittal, N., Khan, I. U., & Khan, Z. H. (2024). Design a low-power low-pass nano dimension based filter with high linearity for next-generation WSN. *International Journal of Nano Dimension*, 15(4), 1-10.

# PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

❖ "A Comparative analysis of different types of mixer architecture for Modern RF Applications", International Conference on Trends in Electronics and Health Informatics (TEHI), Springer Nature, Singapore, Scopus Indexed, (IU/R&D/2021-MCN0001256).

# PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

Cybersquatting and its Effectual Position in India, International Journal of Scientific & Engineering Research, Volume 6, Issue 2, February-2015 880 ISSN 2229-5518

- ❖ Increasing the Performance of IEEE 802.11n in Multi-Channel Multi Radio Mobile Ad hoc Networks, International Journal of Applied Science & Technology Research Excellence Vol. 2, Issue 2, Mar – Apr, 2012, ISSN NO. 2250 – 2718 (Print), 2250 – 2726 (Online)
- Design Study and Performance Evaluation of 111kWP Grid Connected SPV System at Integral University, Lucknow, IJIREEICE, ISSN (Online) 2321-2004 ISSN (Print) 2321-5526, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, ISO 3297:2007 Certified, Vol. 6, Issue 6, June 2018
- Design Study and Performance Evaluation of 198kWP Grid Connected SPV System at Academic Block I, Integral University, Lucknow, ISSN (Print) 2321-5526, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, ISO 3297:2007 Certified, Vol. 6, Issue 6, June 2018
- Estimation Of Cost Analysis For 500kw Grid Connected Solar Photovoltaic Power Plant By LCOE Simulation. IOSR Journal of Engineering (IOSRJEN) <a href="https://www.iosrjen.org">www.iosrjen.org</a>, ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 08, Issue 8 (August. 2018), ||V (IV) || 97-100
- ❖ Performance Estimation of 111kWp Grid Interactive Solar PV Power Plant at Integral University, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075 (Online), Volume-8 Issue-10, August 2019
- ❖ Safe Multicast approach in Wireless MAN, IJSRD International Journal for Scientific Research & Development | Vol. 3, Issue 07, 2015 | ISSN (online): 2321-0613
- Charan, P., Benjamin, R., & Khan, Z. H. (2017). Goods and Services Tax (GST) Bill'2016: Gearing up for the next big wave in the Indian Economy. *International Journal of Scientific & Engineering Research*, 8(1), 1454-1461.
- Charan, P., Siddiqui, M., Mittal, N., & Khan, Z. (2016). Solar Power Scavenging for Wireless Sensor Networks. *Journal of Mobile Computing, Communications & Mobile Networks*, 3(3), 33-41.

# **BOOK CHAPTERS**

❖ Presented a paper titled "Work-from-home Security Issues and Risk over Internet" at the Global Multi-Track Conference SEMA held between November 18 and 27, 2022. ISBN 978-93-91303-45-7 DOI: https://doi.org/10.47715/JPC.B.978-93-91303-45-7