



CURRICULUM VITAE

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| Name | Mirza Tariq Beg |
| Date of Birth | Jan 22, 1963 |
| Nationality | Indian |
| Mailing address | Deptt. of Electronics and Communication Engineering Jamia Millia Islamia Jamia Nagar New Delhi |
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Educational Qualifications

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| 2003 | Ph.D. QoS Routing for Computer Networks- A Fuzzy Logic Based Approach Jamia Millia University |
| 1987 | M.Tech. Microwave Electronics Delhi University |
| 1985 | B.Sc. Engg. Electrical- Low Current Aligarh Muslim University |

Teaching/Administrative Experience

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|--------------------------------------|---|
| Head of Department (2018- till date) | Department of Electronics & Communication Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi |
| Director (July 2013 – January 2016) | Centre for Distance & Open Learning Jamia Millia Islamia New Delhi |
| Head of Department (2011-2014) | Department of Electronics & Communication Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi |
| Professor (2003-till date) | Department of Electronics & Communication Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi |
| Reader (1995 – 2003) | Department of Electronics & Communication Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia, New Delhi |
| Lecturer (1987–1995) | Department of Electrical Engineering, Faculty of Engineering & Technology, Jamia Millia University New Delhi |

Awards

Best Poster Award for paper presented at 89th National Science Congress, Lucknow, Jan 2002, Lucknow.
*Award presented by **Indian Science Congress Association (ISCA), Kolkata.***

Research and Publications

(a) Scientific Articles in *High Impact-Factor*, Peer Reviewed, International Journals

1. M. Zaidi, **M. T. Beg**, B. K. Kanaujia and K. Rambabu, "Hexa-Band Branch Line Coupler and Wilkinson Power Divider for LTE0.7GHz, LTE1.7GHz, LTE2.6GHz, 3.9GHz, Public Safety Band4.9GHz, and WLAN5.8GHz Frequencies," in *IEEE Transactions on Circuits and Systems II :Express Briefs* .doi: 10.1109/TCSII.2019.2909577.
2. A. M. Zaidi, **M. T. Beg**, B. K. Kanaujia, K. Srivastava and K. Rambabu, "A Dual Band Branch Line Coupler with Wide Frequency Ratio," in *IEEE Access*, vol. 7, pp. 25046-25052, 2019. doi: 10.1109/ACCESS.2019.2896646.
3. A. M. Zaidi, B. K. Kanaujia, **M. T. Beg**, J. Kishor and K. Rambabu, "A Novel Dual Band Branch Line Coupler for Dual Band Butler Matrix," in *IEEE Transactions on Circuits and Systems II: Express Briefs*. doi: 10.1109/TCSII.2019.2911186.
4. Maksud Alam, Mainuddin, B.K. Kanaujia **M.T. Beg**, S Kumar, K Rambabu A hexa-band dual-sense circularly polarized antenna for WLAN/WiMAX/SDARS and C-band applications International Journal of RF and Microwave Computer Aided Engineering 1-12, 2018.
5. Gaurav Singhal, Mainuddin, R. Rajesh, **M. T. Beg**, R.K. Tyagi, A. L. Dawar Overview of Optical Techniques for Characterization of High Power Infrared Gas Lasers IEEE Sensors Journal 15, no.8 pp. 4165- 4173, 2015.
6. M. Balal Siddiqui, **M. T. Beg**, S. N. Ahmad " A Hybrid-Sift Algorithm for BDD Based Area Optimization of MIMO Adder Circuits" International Journal of Modern Electronics and Communication Engineering (IJMECE) ISSN: 2321-2152 Volume No.-6, Issue No.-6, November, 2018.
7. Garima Shukla, **M. T Beg** "Millimetre Wave Band In Cellular Communication – A Review", Publish in the special issue on "Information and Communication Technology" of the "Journal of Engineering, Science & Management Education", Volume -10 issue-1, (ISSN No. : - 0976-0121, UGC Approved Journal no. - 44858), Published by NITTTR Bhopal.
8. Mainuddin, **M.T.Beg**, Moinuddin, R.K.Tyagi, R.Rajesh, Gaurav Singhal and A.L.Dawar, "Real Time Gas Flow and Analysis for High Power Infrared Gas Laser",91 – 105, January, 2005.
9. Mainuddin, **M.T.Beg**, Moinuddin, R.K.Tyagi, R.Rajesh, Gaurav Singhal and A.L.Dawar, "Optical Spectroscopic based in–line Iodine Flow Measurement System–an Application to COIL". *Journal of Sensors and Actuators: B*, 109, pp375-380, 2005.

10. Rajesh Kumar, Syed A. Imam, **M. T. Beg**, “A Novel Design of Low Power Smart Wireless Gas Sensor”, Journal of Computing, USA, 3, Issue-5,2011Journal of Computing, USA, 3, Issue-5,2011.
11. Imran Ahmed Khan and **Mirza Tariq Beg**, “ A New Area and Power Efficient Single Edge Triggered Flip-Flop Structure for Low Data Activity and High Frequency Applications”, Innovative Systems Design and Engineering (ISDE),Vol. 4, No. 1, pp 1-12, 2013.
12. Imran Ahmed Khan and **Mirza Tariq Beg**, “Clock Gated Power Efficient Single Edge Triggered Flip-Flop Design for Low Data Activity Applications”, International Journal of Electronics and Communication Technology, Vol. 5, No. 3, pp. 9-14, 2014.
13. Imran Ahmed Khan and **Mirza Tariq Beg**, “Comparative Analysis of Low Power Master Slave Single Edge Triggered Flip-Flops”, World Applied Sciences Journal, Vol. 16, pp. 15-21, 2012.
14. M. A. Khan, Tazeem A. Khan, **M. T. Beg**, “Comparative Performance of DES and AES in Wireless Security for Brute Force Attack”, International Journal of Engineering, Science and Metallurgy, Vol. 2, No. 2, ISSN 2249-7366, Pp: 600-605, 2012.
15. Tazeem Ahmad Khan and **Prof. Mirza Tariq Beg**, “Cooperative Medium Access Control Protocol for Mobile Ad-hoc Networks”, I.J. Intelligent Systems and Applications, Vol. 5, No. 11, October 2013.
16. **Prof. Mirza Tariq Beg**, “Design & Modeling of Hidden Nodes WLAN and MAC Layer Protocol Simulated By NS-2”, International Journal of Computer Science Issues, Vol. 11, Issue 2, No 1, March 2014.
17. M. A. Khan, Tazeem A. Khan, **M. T. Beg**, “ Design a Microchip Patch Antenna with Electronic Band gap Structure for Wireless Devices”, International Journal of Engineering, Science and Metallurgy, Vol. 2, No. 2 ISSN 2249-7366 Pp: 648-654, June 2012
18. Imran Ahmed Khan and **Mirza Tariq Beg**, “Design of Semi-Static SET Flip-Flop for Low Power and High Performance Applications” *International Journal of Computer Science and Information Technologies*, ISSN 0975-9646, Vol. 5, No. 1, pp. 284-289, 2014.
19. Imran Ahmed Khan and **Mirza Tariq Beg**, “Design and Analysis of Low Power Master Slave Flip-Flops”, Informacije Midem-Journal of Microelectronics, Electronic Components and Materials, Vol. 43, No. 1, pp 41-49, 2013.
20. Vibhav Kumar Sachan, Syed A. Imam, **M.T. Beg**, “ Design of Energy Efficient Wireless Sensor Networks using Cooperative MIMO Techniques”, International Journal of Electronics Engg, India, Vol. 3, No-2, pp. 3217-321, Dec. 2011.

21. Tazeem Ahmad Khan, **Prof. Mirza Tariq Beg** and M. A. Khan, “ Evaluation of Back-off Algorithm Performance of MAC Layer IEEE 802.11 WLAN”, International Journal of Engineering and Management Sciences, Vol.4[3], April 2013, India.
22. Vaibhav Kumar Sachan, Syed A. Imam and **M.T. Beg**, “Energy Efficient Communication Methods in Wireless Sensor Networks: A Critical Review”, International Journal of Computer Applications Vol. 39, No.-17, pp. 35-48, Feb. 2012.
23. M. A. Khan, Tazeem A. Khan, **M. T. Beg**, “Evaluating the Performance of IEEE 802.11a WLAN using DCF with RTS/CTS Mechanism”, VSRD Intl. Journal of Electrical, Electronics & Communication Engineering, Vol. 2 (5), May ISSN 2231-3346, Pp-264-271,2012
24. **Prof. M.T Beg**, “Multiband Dielectric Resonator Filter (MBDRF) with Defected Ground Structure (DGS) for Wireless Application”, I.J. Intelligent Systems and Applications, Vol-9, 2014, page no 40-46.
25. Imran Ahmed Khan, **Mirza Tariq Beg** and Owais Ahmad Shah, “Novel Low Power and Low Transistor Count Flip-Flop Design with High Performance”, Innovative Systems Design and Engineering Vol. 3, No.11, pp 50-60, 2012
26. Imran Ahmed Khan and **Mirza Tariq Beg**, “ New Single Edge Triggered Flip- Flop Design with improved Power and Power Delay Product for Low Data Activity Applications”, World Applied Sciences Journal Volume 22, No. 10, pp. 1520-1526, 2013
27. Tazeem Ahmad Khan, **Prof. Mirza Tariq Beg**, Mumtaz A Khan, “ Performance Enhancement of MAC Layer Protocol of WLAN using TDMA”, International Journal of Computer Science and Telecommunications , Volume 4, Issue 6, June 2013,
28. Tazeem Ahmad Khan, **M. T. Beg** , M A Khan, “ Performance Analysis of WLAN using OPNET”, International Journal of Innovative Technology and Exploring Engineering Volume-2, Issue-5, April 2013, India.
29. Md. Rashid Mahmood, **Prof. Mirza Tariq Beg**, “TDMA based Approach on MAC Layer for IEEE Wireless LAN Standards”, International Journal of Computer Applications Volume 81 – No.8, November 2013, USA.
30. Imran Ahmed Khan, **Mirza Tariq Beg**, S. Gaurav and Mohit Prasad Mamgain “Design of High Performance and Low Power Double Edge Triggered Clocked Storage Element” *World Applied Sciences Journal (WASJ)*, ISSN 1818-4952, Vol. 31, No. 10, pp. 1783-1790, 2014.
31. Imran Ahmed Khan and **Mirza Tariq Beg**, “Low Power Clock Gated Master Slave Single Edge Triggered Flip-Flop” *International Journal of Electronics and Communication Technology*, ISSN 2230-9543, Vol. 5, No. 3, pp. 143-149, 2014.
32. Imran Ahmed Khan and **Mirza Tariq Beg**, “Clock Gated Single Edge Triggered Flip-Flop Design with Improved Power for Low Data Activity Applications”

International Journal on Electrical Engineering and Informatics, Vol. 6, No. 3, pp. 562-576, 2014.

33. Aijaz M. Zaidi Syed A.Imam , Binod K.Kanaujia, Karumudi Rambabu, Kunal Srivastava, **Mirza Tariq Beg** “A new dual band 4×4 butler matrix with dual band 3 dB quadrature branch line coupler and dual band 45° phase shifter” *AEU-International Journal of Electronics Communications*, Volume 99, February 2019, Pages 215-225, <https://doi.org/10.1016/j.aeue.2018.11.040>.
34. Neeta Singh, Binod K. Kanaujia, **Mirza Tariq Beg**, Mainuddin, Sachin Kumar, Mukesh K. Khandelwal, A dual band rectifying antenna for RF energy harvesting, *J Comput. Electron* (2018) 17: 1748. <https://doi.org/10.1007/s10825-018-1241-6>.
35. Neeta Singh, Binod K. Kanaujia, **Mirza Tariq Beg**, Mainuddin, Taimoor Khan, Sachin Kumar, “A Dual Polarized Multiband Rectenna for RF Energy Harvesting,” *AEU-International Journal of Electronics and Communications*, vol. 93, pp. 123–131, 2018.
36. A. Ahmad, **M. T. Beg** and S. N. Ahmad, “Measuring inter-class fairness in wireless networks using a fuzzy approach”, *Journal of Engineering Technology*, vol. 6, issue 1, pp. 119-128, Jan. 2018.
37. Siddiqui, M. Balal, **M. T. Beg**, and S. Naseem Ahmad. "Area and Power Improvement with New Initial Ordering Method Combined with Sift Algorithm for BDD Mapped Circuits." *Journal of VLSI Design Tools & Technology* 8.2 (2018): 67-71.
38. A. Ahmad, **M. T. Beg** and S. N. Ahmad, “Framework for Quality of Service Analysis in LTE Networks”, *Journal of Engineering, Science and Management*, vol. 10, issue 2, NITTTR Bhopal, 2017.
39. M. B. Siddiqui, S. N. Ahmad and **M. T. Beg**, "Variable ordering of BDD mapped multi-input multi-output adders using modified genetic algorithm," *2017 International Conference on Multimedia, Signal Processing and Communication Technologies (IMPACT)*, Aligarh, 2017, pp. 218-221.
40. A. Ahmad, **M. T. Beg** and S. N. Ahmad, Fairness Issues and Measures in Wireless Networks: A Survey, *IOSR Journal of Electronics and Communication Engineering*, vol. 11, no. 6, pp. 20-24, 2016.
41. M. B. Siddiqui, S. N. Ahmad and **M. T. Beg**, "Modified GA method for variable ordering in BDD for MIMO digital circuits," *2016 IEEE International Conference on Advances in Electronics, Communication and Computer Technology (ICAECCT)*, Pune, 2016, pp. 378-382

(b) Scientific Articles in peer reviewed, National Journals

1. S.Selvam, Moinuddin, Ibraheem and **M.T.Beg**, “ Estimation of Maximum Values of Communication Overhead and Delay for Distribution Computing Systems”, *IETE Journal of Research*, Vol 48, No.2, March April 2002, pp 105-111.

(c) Scientific Articles in International Conferences/Symposium

1. A. M. Zaidi, B. K. Kanaujia, M. T. Beg, K. Srivastava and Sandeep Sharma, “A Dual Band Wilkinson Power Divider with Extended Band Ratio” Accepted in IEEE European Microwave Conference in Central Europe 2019.
2. Ammar Abdul Hamed khader, Ahmad Hameed Reja, Arkan Ahmed Hussein, M. T. Beg, Mainuddin, Cooperative Spectrum Sensing Improvement Based on Fuzzy Logic System”, Second International Symposium on Computer Vision and the Internet (VisionNet'15), 58, pp 34-41, 2015 (ISBN No. 1877-0509, Procedia Computer Science, Elsevier' 2015.
3. Garima Shukla, M. T Beg, Brijesh Lal "Mmwave networks for Smart Cities" International Conference on Smart Cities-Opportunities and Challenges held at Jamia Millia Islamia from March 14th to 16th, 2019.
4. Garima Shukla, M. T Beg "Analysing effect on network parameters using Mmwaves in wireless communication" accepted in National Conference on Innovative and Emerging Trends in Engineering & Technology (IETET-2019) in ADGITM, New Delhi.
5. Mainuddin, **M.T.Beg**, Moinuddin, R.K.Tyagi, R.Rajesh, Gaurav Singhal and A.L.Dawar, “Optical Measurement System for Iodine Concentration relevant to Chemical Oxy-Iodine Laser”, *Seventh International Conference on Opto-electronics, Fiber optics and Photonics*(PHOTONICS 2004) Cochin University of Science and Technology, Cochin, pp-55, December 9-11, 2004.
6. B.B. Reddy, **M.T. Beg**, M.A. Khan and Moinuddin, “An Analysis on Suitability of Satellite Medium for Group Communications”, *Proceedings of Sixth national Conference on Communications, NCC 2000*, pp 29-32, 29-30 Jan, 2000, IIT, Delhi.
7. Mainuddin, **M.T. Beg**, Moinuddin, R.K. Tyagi, R. Rajesh, Gaurav Singhal and A.L. Dawar, “Real Time control, Acquisition and Analysis System for High Power Gas Lasers”, *International conference on sub millimeter science and Technology (ICSST-2004)*, PRL, Ahmadabad, pp-45, October 13-15, 2004.
8. **M.T. Beg**, Moinuddin and A.S. Siddiqui, “ Information Infrastructure in Developing Countries”, *Proceedings of 49th FID Conference and Congress*, 11-17, Oct, 1998, New Delhi & Jaipur, pp 32-39.

9. T.M. Mohan, **M.T. Beg**, M.A. Khan and Moinuddin, "Identification of Flaws and Additional Security Mechanisms for IEEE 802.11b Standard", *Proc. International Symposium on Information Technology: Emerging Trends*, 19-21 September 2003, pp 124-131, Indian Institute for Information Technology, Allahabad.
10. M.A. Khan, **M.T. Beg** and Moinuddin, "An Introduction of Computer Animation Technique in Learning Motion of a Legged Robot-Effective for Teaching", *Proceedings of International Conference on Computer Applications in Electrical Engineering-Recent Advances, CERA-01*, 21-23 Feb'2002, IIT Roorkee.
11. S. Gelvi, **M.T. Beg** and M.A. Khan, "New Boolean Function for Cryptographic Applications", *Proc. International Symposium on Information Technology Emerging Trends*, 19-21 September, 2003, pp 28-34, Indian Institute of Information Technology, Allahabad.
12. Imran Ahmed Khan, Owais Ahmad Shah and **Mirza Tariq Beg**, "Analysis of different Techniques for Low Power Single Edge Triggered Flip Flops" *World Congress on Information and Communication Technologies (WICT), IEEE International Conference*, pp 1363 – 1367, 11-14 Dec., 2011.
13. Imran Ahmed Khan, Danish Shaikh and **Mirza Tariq Beg**, "Analysis of Double Edge Triggered Clocked Storage Elements" *In the proceedings of International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pp 1100-1103, 3-5 Aug., 2012.
14. Imran Ahmed Khan, Danish Shaikh and **Mirza Tariq Beg**, "2 GHz Low Power Double Edge Triggered flip-flop in 65nm CMOS Technology" *IEEE International Conference on Signal Processing, Computing and Control (IEEE ISPC)*, pp 1-5, Mar 15-17, 2012.

(d) Scientific Articles in National Conferences/Symposium

1. Mainuddin, **M.T. Beg**, Moinuddin, R.K. Tyagi, R. Rajesh, Gaurav Singhal and A.L. Dawar, "**Mach Number Diagnostics for COIL**", *National Laser Symposium (NLS-4), BARC, Mumbai*, pp-813-814, January 10-13, 2005.
2. Mainuddin, **M.T. Beg**, Moinuddin, R.K. Tyagi, R. Rajesh, Gaurav Singhal and A.L. Dawar, "Real Time Operational Control and Data Acquisition of Gas Feed System for COIL", *National Laser Symposium (NLS-2003), IIT, Khagarpur*, pp- 813-814, December 22-24, 2004.

3. **M.T. Beg**, M.A. Khan and Moinuddin, “ QoS Routing for Computer Networks A Fuzzy Logic Based Approach”, *Proceedings of 89th National Science Congress, NSC, 03-07 Jan’2001*, University of Lucknow.

Government Projects

1. Modernization of **Microprocessor laboratory**. Funded by Ministry of Human Resource Development (MHRD), Govt. of India, Rs. One million, 1993 – 1995
2. Modernization of **Faculty Library**. Funded by Ministry of Human Resource Development (MHRD), Govt. of India, Rs. Ten million, 1993 – 1995

Contributions towards Developmental and other Activities

1. Director, Centre for Distance and Open Learning (CDOL), JMI
2. Member of Board of Governors RIET, Jaipur
3. Member of Expert Teams for grant of NBA Accreditation
4. Member of Doctoral committee, Faculty of management and Information Technology, Jamia Hamdarad University
5. Member, UGC Expert Committee to assess autonomous status to CBIT, Hyderabad
6. Member, Court and Academic Council, Jamia Millia Islamia
7. Member of Research Advisory committee NIT Jalandhar
8. Member, Board of Studies (BOS), AMU, Aligarh, Al-Falah University, Haryana .
9. Member, Joint assessment committee for affiliated institutes/Colleges of GGSIP University, Delhi.
10. Member of UGC expert Committee for spot assessment of Bangalore of f-campus of GITAM, Vishakhapatnam.
11. Member, Judges Committee Shiksha Puruskar Yojana, Ministry of HRD
12. Member of Selection Board on various occasion at UPSC and Staff Selection

13. Member, Selection committee for appointing Professors/Associate Prof./Asst. Prof. and Various Non-Teaching Posts for JMI, AMU, MANNU, DTU, GITAM, Jamia Hamdard, Galgotia University, KIET etc.
14. Chairman of Committee constituted by VC for purchase of smart class rooms JMI
15. **27 years** professional, academic and research experience
16. Authored and co-authored **Forty research** papers in refereed International journals including Elsevier, Science Direct, Springer etc.
17. Articles/Chapters Published in Book(s): Two
18. **Ph. D. Guidance:** 08 Awarded and 06 in progress
19. Served as Member of EPABX Technical Committee, constitute by the Hon'ble Vice Chancellor. I was instrumental in helping Administration in formulation of tender documents, evaluation of technical bids, product evaluation and advice.
20. Represented Engineering Faculty in the committee constituted by the Hon'ble Vice Chancellor to prepare a proposal for declaration of Jamia as "Center with Potential for Excellence".
21. Served as Member of committee formed by the Dean, Faculty of Engineering & Technology, to finalize the Course Structure for the Semester System to be adopted by the faculty.
22. Served as Member of committee formed by the Dean, Faculty of Engineering & Technology to finalize the Grading Structure proposed to be adopted by the faculty.
23. Has been Coordinator B.E. (Evening Course), Department of Electronics & Communication Engineering several times.
24. Served as Superintendent of Examinations on various occasions including for Entrance Examinations.
25. Served as President, Jamia Cricket Club.