

CURRICULUM VITAE

Dr. ANKUSH KANSAL

B.Tech. (ECE), M.E. (ECE), Ph.D. (ECE)

Designation: - Principal, Thapar Polytechnic College, Patiala

Associate Professor, ECED, TIET, Patiala

INTERNATIONAL / NATIONAL CONFERENCES ATTENDED

- o 2nd National Conference on Electronics Circuits & Communication Systems (ECCS 2006), February 9-10, 2006 at TIET, Patiala.
- o 8th Annual Conference of Indian Society of Information Theory & Applications, March 18-20, 2006 at N.C. College of Engineering, Israna (Panipat).
- o IEEE-1st Global Conference on Communication, Science, Middlesex University, London, U.K., 2011.

PUBLICATIONS

(a) Papers in SCI/Impact Factor Journals

1. Ankush Kansal, S. Partap Singh, Akanksha Gupta, Rajneesh Kumar Singh, and Vineet Kansal, "UER of various Modulation Schemes over SC Diversity with GGD Noise for EMNC," International Journal of Electronics, <https://doi.org/10.1080/00207217.2022.2068667>, April 2022.
2. Ankush Kansal and Sapana Chaudhary, "Compact high gain 28, 38 GHz antenna for 5G communication," International Journal of Electronics, <https://doi.org/10.1080/00207217.2022.2068201>, April 2022.
3. Ankush Kansal, Paras Chawla and Gupta Anupma, "Design of a wideband patch antenna and performance enhancement using an AMC reflector surface for on-body communication at 2.45 GHz," International Journal of Electronics, <https://doi.org/10.1080/00207217.2022.2068664>, April 2022.
4. Ankush Kansal and Sapana Chaudhary, "Triband Millimeter-wave Antenna for 5G Mobile Communications", Iranian Journal of Science and Technology, Transactions of Electrical Engineering, vol. 45, pp.1217–1226, July 2021.

5. Ankush Kansal and Hari Shankar, "Performance analysis of MRC receiver over Fisher Snedecor (F) composite fading channels". *Wireless Personal Communications*, Springer, vol. 117, pp. 1337-1359, <https://doi.org/10.1007/s11277-020-07925-8>, March 2021
6. Ankush Kansal, Kulbir Singh and Amit Kumar, "Digital Image Forensic Approach to Counter the JPEG Anti-Forensic Attacks," *IEEE Access*, vol. 9, pp. 4364-4375, Jan. 2021.
7. Ankush Kansal, Paras Chawla and Gupta Anupma, "A Survey and classification on Applications of the antenna in health care domain: signal transmission, diagnosis, and treatment." *Sadhana Journal*, vol. 46, no. 68 <https://doi.org/10.1007/s12046-021-01586-4>, Jan 2021.
8. Ankush Kansal, Kulbir Singh, Paras Chawla and Gupta Anupma "An Active and Low-Cost Microwave Imaging System design for Detection of Breast Cancer Using Back Scattered Signal" *Current Medical Imaging*, DOI: 10.2174/1573405617666210129114536. ahead of print. PMID: 33511930, Jan 2021.
9. Ankush Kansal, Paras Chawla and Gupta Anupma, "Design of a compact dual band antenna for on-/off body communication." *IETE Journal of Research*, <https://doi.org/10.1080/03772063.2020.1845826>, Nov. 2020.
10. Ankush Kansal and Tanvi Chawla, "Intercarrier interference analysis for massive MIMO fractional Fourier transform-OFDM systems over time-varying channels," *International Journal of Communication Systems*, vol. 10, no. 33(16), pp. 1-12, July, 2020.
11. Ankush Kansal, Paras Chawla and Gupta Anupma, "Design and performance analysis of L-shaped ground and radiator antenna with a metallic reflector for WBAN." *International Journal of Electronics*, <https://doi.org/10.1080/00207217.2020.1793408>, July, 2020.
12. Ankush Kansal, Paras Chawla and Gupta Anupma, "Design of a Wearable MIMO Antenna Deployed with an Inverted U-Shaped Ground Stub for diversity performance enhancement." *International Journal of Microwave and Wireless Technologies*, vol. 13, no.1, pp.76-86, <https://doi.org/10.1017/S1759078720000471>, May 2020.
13. Ankush Kansal and Hari Shankar, "Performance Analysis of uncoded and SFBC OFDM system over composite fading channels". *Physical Communication*, Elsevier, vol. 40, pp. 1 – 10, <https://doi.org/10.1016/j.phycom.2020.101090>, March 2020
14. Ankush Kansal, Kulbir Singh and Amit Kumar, "Anti-forensic approach for JPEG compressed images with enhanced image quality and forensic undetectability," *Multimedia Tools and Applications*, vol. 79, no. 11, pp. 8061-8084, January 2020.
15. Ankush Kansal, Paras Chawla and Gupta Anupma, "Design a patch antenna with square ring-shaped coupled ground for on-/off body communication." *International Journal of Electronics*, vol. 106, no. 12, pp. 1814-1828, doi.org/10.1080/00207217.2019.1625970, June, 2019.

16. Ankush Kansal, Kulbir Singh and Amit Kumar, "An improved anti-forensic technique for JPEG compression," *Multimedia Tools and Applications*, vol. 78, no. 18, pp. 25427-25453, May 2019.
17. Ankush Kansal, Kulbir Singh and Gurinder Singh, "An improved median filtering anti-forensics with better image quality and forensic un-detect ability", *Multidimensional Systems and Signal Processing*, vol. 30, pp. 1951-1974, doi.org/10.1007/s11045-019-00637-8, Feb. 2019.
18. Ankush Kansal and Tanvi Chawla, "Performance evaluation of SFBC-MIMO OFDM using FrFT under TWDP fading channel", *Wireless Personal Communication*, vol. 104, no. 3 pp 1121-1131, February 2019.
19. Ankush Kansal and Hari Shanker, "MGF-based analysis of κ - μ /gamma composite fading model for indoor off body communication", *Transactions on Emerging Telecommunications Technologies*, Wiley, e3566, vol. 30, no. 5, pp. 1-17, January 2019.
20. Ankush Kansal and Hari Shanker, "Performance Analysis of κ - μ /gamma Shadowed fading model over Indoor off body Communication Channel," *International Journal of Electronics and Communications (AEU)*, Elsevier, vol. 93, pp. 283-288, September 2018.
21. Ankush Kansal and Hari Shanker, "CDF and MGF based analysis over Rayleigh TWDP shadowed fading channel for indoor communication," *International Journal of Electronics*, Taylor & Francis, vol. 105, issue 12, pp. 2099-2133, July 2018.
22. Ankush Kansal, Karmjit Singh Sandha and Prakhar Litoria, "Impact of tunneling conductance on the performance of multi walled carbon nanotubes as VLSI interconnects for nano-scaled technology nodes," *Journal of Materials Science: Materials in Electronics*, Volume 28, Issue 6, pp 4818– 4827, March, 2017.
23. Ankush Kansal, Kulbir Singh and Rajiv Saxena, "Performance analysis of $\pi/4$ DQPSK for FrFT and FFT based OFDM system with carrier frequency offset," *International Journal of Applied Mathematics & Information Sciences*, vol. 9, issue 3, pp. 1383-1389, May, 2015.
24. Ankush Kansal, Kulbir Singh and Rajiv Saxena, "Bit Error Rate analysis of FrFT appended OFDM System," *International Journal of Light and Electron Optic*, vol. 126, no. 7-8, pp. 715-718, February 2015.

(b) Papers in Scopus (Non-SCI) Indexed Journals

1. Ankush Kansal, S. P. Singh, P. Jain, M. Lakshmanan and A. Gupta, "Improved BER of Nano Communication over WG Fading Under GGD noise," *Telecommunications and Radio Engineering*, vol. 79, no. 14, pp. :1217-1230, 2020
2. Ankush Kansal and Hari Shankar, "MGF-based analysis of maximum ratio combining receiver over Fisher-Snedecor composite fading channel", *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, vol-8, no. 9s, pp. 1-8, July 2019.

3. Ankush Kansal and Shivangi Atrey, "Performance Analysis of OFDM System with CP-Free STBC by using the Oblique Projection Technique," International Journal of Sensors, Wireless Communications and Control, vol. 7, no. 2, pp. 118-128, 2017
4. Ankush Kansal, Kulbir Singh and Rajiv Saxena, "Performance Analysis of FrFT Based OFDM System with 1024-PSK and 1024-QAM Modulation under various Wireless Fading Channels," International Journal of System Assurance Engineering and Management, Published by Springer, vol. 9, pp. 1-9 (DOI 10.1007/s13198-014-0297-3), 2014.

(c) Papers in Non-SCI/Non-Impact Journals

1. Ankush Kansal and Jaspreet Kaur, "Sierpinski Gasket Fractal Array Antenna", International Journal of Computer Science and Communication, vol-I, Issue-2, pp 133-136, 2010.
2. Ankush Kansal, Lavish Kansal and Kulbir Singh, "Performance of Alamouti Space Time Coding in Fading Channels for IEEE 802.16e Protocol", International Journal of Scientific & Engineering Research, vol-2, Issue-5, pp 1-9, 2011.
3. Ankush Kansal, Komal Arora and Kulbir Singh, "Comparison of Energy Detection Based Spectrum Sensing Methods over Fading Channels in Cognitive Radio", Signal Processing: An International Journal (SPIJ), vol- 5, issue-2, pp 44-51, 2011.
4. Ankush Kansal, Lavish Kansal and Kulbir Singh, "Performance Analysis of MIMO-OFDM System Using QOSTBC Code Structure for M-PSK", Signal Processing: An International Journal (SPIJ), vol- 5, issue-2, pp 19-32, 2011.
5. Ankush Kansal, Lavish Kansal and Kulbir Singh, "Analysis of Different High Level Modulation Techniques for OFDM System", International Journal of VLSI and Signal Processing Applications, vol- 1, issue-2, pp 101-107, 2011.
6. Ankush Kansal, Lavish Kansal and Kulbir Singh, "Performance Analysis of MIMO-OFDM System Using QOSTBC Code Structure for M-QAM", Canadian Journal on Signal Processing, vol- 2, issue-2, pp 4-15, 2011.
7. Ankush Kansal, Lavish Kansal, Kulbir Singh, "BER Analysis of MIMO-OFDM System Using OSTBC Code Structure for M-PSK under Different Fading Channels," International Journal of Scientific & Engineering Research, vol. 2, Issue 11, pp 1-12, 2011.
8. Ankush Kansal And Anurag Sharma, "Performance Analysis of 8x8 MIMO OFDM System for Various Modulation Techniques Using Different Fading Channels and PAPR Reduction Using SLM Technique", International Journal of Scientific & Engineering Research, Volume 4, Issue 7, pp. 2033-2047, July 2013.

9. Ankush Kansal and Anuj Attri, "Improved performance of Sierpinski Carpet Based Fractal Antenna using Stacked Configuration", International Journal of Scientific & Engineering Research, volume 4, issue 8 pp. 220-224, 2013.
10. Ankush Kansal and Vivek Mankotia, "Rician Channel Capacity Comparison Between (8X8) and (4x4) MIMO systems," International Journal of Engineering Trends and Technology, Volume 4, Issue 6, pp. 2589-2593, June 2013.
11. Ankush Kansal and Anurag Sharma, "PAPR Analysis of 8X8 MIMO OFDM and OFDM system," International Journal of Advance Research in Computer and Communication Engineering, Volume 2, Issue 8, pp. August 2013.
12. Karanpreet Kaur and Ankush Kansal, "Performance analysis of Convolutional interleaved DWT based OFDM system," International Journal of Advanced Research in Computer and Communication Engineering, vol. 3, issue 5, 2014.
13. Ankush Kansal, Kulbir Singh and Rajiv Saxena, "FrFT based OFDM system for Wireless Communication," Research Cell: International Journal of Engineering Sciences, vol. 10, pp. 43-48, 2014.
14. Nikhil Bhardwaj and Ankush Kansal, "Improvement of BER for OFDM using Equalization and Windowing for AWGN and Rayleigh Fading Channels", International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering, ISSN No.: 2321 2004 (Online), 2321 5526 (print), vol. 2, no. 8, August 2014.
15. Nikhil Bhardwaj and Ankush Kansal, "BER Analysis of OFDM with Raised Cosine Window and Equalization using Rician Channel", International Journal of Engineering Sciences and Research Technology, ISSN No.: 2277 9655, vol. 3, no. 8, August 2014.
16. Satinder Kaur and Ankush Kansal, "BER Improvement of linear orthogonal dispersion coded 8x8 MIMO System using Convolution encoder and bit interleaving," International Journal of Innovations in Engineering and Management (IJEM), ISSN No: 2319-3344.
17. Tazeen and Ankush Kansal, "Low-Complexity Equalization of OFDM Systems using Krylov subspace methods over Doubly Selective Channels," International Journal of Emerging Research in Management and Technology, ISSN No.: 2278 9359, vol. 3, no. 7, July 2014.
18. Tazeen and Ankush Kansal, "Low-Complexity Equalization of OFDM Systems using Krylov subspace methods over Doubly Selective Channels," International Journal of Emerging Research in Management and Technology, ISSN No.: 2278 9359, vol. 3, no. 7, July 2014.
19. Ankush Kansal and Nishant Kush, "Comparative Analysis of Edge detection technique based on MSR and PSNR," International Journal of Advanced Research in Computer Science and Software Engineering, vol. 5, no. 6, pp. 845-848, 2015.

20. Ankush Kansal and Rajni, "BER Analysis of STBC MIMO-OFDM with ICI Cancellation," Journal of Communication Engineering & Systems, vol. 5, no. 3, pp. 16, 2015.
21. Ankush Kansal and Jashan Preet Singh, "A Novel Micro Strip Patch Antenna Using Square Shapes Ground Defects for WI-MAX/WLAN Applications," imanager Journal on Communication Engineering and Systems, vol. 4 1, no. 2, pp. 28-33, 2015.
22. Ankush Kansal and Grima Jain, "Performance Improvement of SER in Linear Dispersive Coded 4x4 MIMO Systems using Pre-coding and Channel Encoding," Recent Trends in Electronics & Communication Systems, vol. 2, no. 3, pp. 18-31, 2015.
23. Ankush Kansal and Vivek Mankotia, "Capacity Analysis of MIMO (8x8) System with or without CSI under Different Wireless Fading Channels", International Journal of Electronics Communications and Electrical Engineering, Volume 3 Issue 5, pp 32-54, May, 2013.
24. Ankush Kansal, Komal Arora and Kulbir Singh, "Spectrum Sensing Using Cyclic Prefix Over Fading Channels and Performance Analysis of Cooperative Detection", Journal of Information and Communication Technologies, vol- 1, issue-2, pp 25-29, 2011.
25. Ankush Kansal, Jaspreet Kaur and Surjeet Singh, "Multiband Behavior of Sierpinski Fractal Antenna", Research Journal of Information Technology, vol- 2, Issue- 4, 2010.

(d) International Conferences held outside India

1. Ankush Kansal, Kulbir Singh and Rajiv Saxena, "Improvement in Bit Error Rate in OFDM system by using FrFT", IEEE-1st Global Conference on Communication, Science, Middlesex University, London, U.K., 2011.
2. Ankush Kansal and Prateek Bhanot, "Performance Analysis of DSR and FSR Routing Protocols for Ad-hoc Network", IEEE-1st Global Conference on Communication, Science, Middlesex University , London, U.K., 2011.

(e) International Conferences

1. Ankush Kansal, "Data Mining", ECCS, Thapar University, Patiala, pp. 87-94, 2006.
2. Ankush Kansal and Alka Kalra, "High Speed Wireless OFDM Communication Systems", ECCS, Thapar University, Patiala, pp. 399-402, 2006.
3. Ankush Kansal and Amisha, "Sharpening of Image with the Combined Roll of Discrete Wavelet Transform and Unsharp Masking", IEEE International Conference on Signal Processing, Guru Nanak Engineering College, Ibrahimpatnam, AP, 2010
4. Ankush Kansal and Vikas Shivran, "Amplifying-forward MIMO based mutual information analysis for correlated fading channel", 2013 3rd IEEE International Advance Computing Conference, Department of Computer Science and Engineering, Ajay Kumar Garg Engineering College, Ghaziabad, pp. 351-355, 2013.

5. Ankush Kansal, Satinder Kaur, "Capacity Analysis of 8X8 MIMO System with Traditional MIMO Systems" International Conference on Electronics, Communication and Information Technology (ICECIT), October 2013.
6. Ankush Kansal, Ramandeep Gill, "Techniques for Cognitive Radios: A Survey" International Conference on Electronics, Communication and Information Technology (ICECIT), October 2013.
7. Ankush Kansal, Karanpreet Kaur, "Vertical Handover in Bluetooth, WIFI and WIMAX" International Conference on Electronics, Communication and Information Technology (ICECIT), October 2013.
8. Ankush Kansal, Shaifali, "Advanced Communication through Redtacton: A Review" International Conference on Electronics, Communication and Information Technology (ICECIT), October 2013.
9. Tazeen, Ankush Kansal, "BER of OFDM over Doubly Selective Channels" International Conference on Electronics, Communication and Information Technology (ICECIT), October 2013.
10. Ankush Kansal, Paras Chawla and Gupta Anupma, "A review of antennas for wireless body area network devices.' IEEE conference on computing for sustainable global development, BVICAM 2018, India, 2211–2219.
11. Ankush Kansal, Akanksha Gupta and S.P. Singh, "Probability Density Function of Weibull-Gamma Fading under Dual Selection Combining Scheme". In Proceedings of 2019 International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN), VIT Vellore, India (March 30th -31st, 2019), IEEE. Scopus Indexed.