Faculty Profile

Name	Dr.Bhasker Gupta
Designation	Professor
Pay Scale	Pay Band 14
Department	Electronuics and Communication Engineeering
Qualification	Ph.D, M.E, B.E

Date of joining	Institute	Present Post	
23/12/2015	Chandigarh College of Engineering and Technology	Professor	
Experience *(in years)*	Total	Teaching	Industry
	22 years	22	---
Research Interests	Wireless comuncations, IoT, FPGA system Desgin		
Contact Details:	Email bgupta@ccet.ac.in	Mobile/Phone 9855908643	

Research Publications	International Journals	National Journals	International Conferences	National Conferences
	15	Nil	20	08

Books/Chapters Published	02			
Research Guidance	Ph. D.	02	Masters	08
Research Projects	Completed	01	Inprogress	
Consultancy Projects	Completed	Nil	Inprogress	
Seminar/Conference/STTPs	Attended	18	Organized	02

Professional Affiliations	MIEEE, LMISTE
Awards/ Fellowships etc.	1. Awarded Top 100 Engineers 2014 award by International Biographical Centre, Cambridge , England 2. Biography is Listed in Marquis Who's Who Nov. 2013 Edition
List of Publications	Attached
Research Project Detail	Worked on DST (Department of Science and Technology) Sponsored R&D Project Titled, "Speckle Image Based Fiber Optic Perturbation Sensing System" at Central Scientific Instruments Organization (C.S.I.O) Chandigarh Lab of C.S.I.R
Patent Detail	Shilpa Jindal, Krishna Gopal Sharma, Bhasker Gupta and Anil Kumar, "Slotted Wheel Microstrip Patch Antenna Based RF Energy Harvesting System" Patent No:528558, DOI: 01/05/2019, Government of India.
Consultancy	Nil
Ph.D Scholars Name	Mr. Neeraj Kumar, Dr. Khushal Thakur

Institute Responsibility	Joint Inchege Academnics, Nodal Officer (Scholarships), Incharge Propsectus, Nodal Officer e-akadamik
Department Responsibility	Lab Incharge, Department academic incharge,
Any Other Information	

Signature of faculty

LIST OF PUBLICATIONS

Patent Granted/Applied

1. Shilpa Jindal, Krishna Gopal Sharma, **Bhasker Gupta** and Anil Kumar, "Slotted Wheel Microstrip Patch Antenna Based RF Energy Harvesting System" **Patent No:528558,** DOI: 01/05/2019, Government of India.

Book Chapter Publications

2. **Bhasker Gupta**, "Multi-antenna Systems: Large Scale MIMO and Massive MIMO," in Title: Enabling Technologies for Next Generation Wireless Communications, Edition 1, Boca Raton, Florida, United States: CRC Press, 2021, PP. 78-97, ISBN: 978-0-367-42249-3.

Book Publications

1. **Bhasker Gupta** and Davinder Singh Saini, "Space Time/Space Frequency Processing of MIMO-OFDM Systems" Lap Lambert Academic Publishing, Germany, 2017. (ISBN: 978-3-330-02306-2)

International Journals (SCI/Non-SCI)

1. Neeraj Sharma and **Bhasker Gupta**, "Low-complexity non-iterative hybrid precoding scheme for millimeter wave massive MIMO systems" International Journal of Electronics, vol. 109, no. 3, pp. 410-426, Mar 2022.
2. Khushal Thakur, **Bhasker Gupta** and Balwinder Singh Sohi, "Phase equalised Wiener filter-based hybrid precoding for massive MIMO systems", International Journal of Ultra Wideband Communications and Systems, Vol. 4, No. 2, PP. 104-109, Oct 2020.
3. Khushal Thakur, **Bhasker Gupta** and Balwinder Singh Sohi, "Approximating 5G: Almost there or far behind?" International Journal of Advanced Science and Technology, Vol. 29, No. 10, PP. 2816-2826, May 2020.
4. Khushal Thakur, **Bhasker** Gupta and Balwinder Singh Sohi, "BER Analysis of Hybrid Precoded Massive MIMO Systems in Downlink with Receiver Beamforming over mmwave

Channels" International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 8, No. 9, PP. 561-566, July 2019.

5. **Bhasker Gupta**, Vipin Balyan and Davinder Singh Saini, "QOSTBC coded MIMO system with reduced complexity and optimised decoding for rank deficient channels", IET Communications, Vol, 14, No. 4, PP. 646-654, Mar. 2020.
6. Vipin Balyan, **Bhasker Gupta** and Davinder Singh Saini, "Service Time-Based Region Division in OVSF-Based Wireless Networks with Adaptive LTE-M Network for Machine to Machine Communications", Journal of Electrical and Computer Engineering, Vol, 2019, |Article ID 3623712), 2019.
7. **Bhasker Gupta**, Shivani Gupta, Ashutosh Kumar Singh and Hem Dutt Joshi, "Optimised periodic precoder-based blind channel estimation in MIMO-OFDM system," International journal of Electronics letters (Taylor and Francis), Vol. 6, No.3, pp.347-363, 2018.
8. Yashpreet Kaushal, Hem Dutt Joshi, Ashutosh Kumar Singh, Amit Mishra and **Bhasker Gupta**, "Zadoff–Chu Sequence Based Timing Offset Estimation for OFDM Systems," Wireless Personal Communications(Springer), Vol. 98, No.3, pp.2657-2671, 2018.
9. **Bhasker Gupta** and Davinder Singh Saini, "Moment Generating Function-Based Pairwise Error Probability Analysis of Concatenated Low Density Parity Check Codes with Alamouti Coded Multiple Input Multiple Output-Orthogonal Frequency Division Multiplexing Systems", IET Communications, Vol, 8, No. 3, PP. 399-412, Feb. 2014.
10. **Bhasker Gupta** and Davinder Singh Saini, "A Rate M_t Full Diversity STF Block Coded 4×4 MIMO-OFDM System with Reduced Complexity", Springer Wireless Personal Communication, Vol. 72, No. 2, PP. 1489-1512, Sep. 2013.
11. **Bhasker Gupta** and Davinder Singh Saini, "Space–Time/Space–Frequency/Space–Time–Frequency Block Coded MIMO-OFDM System with Equalizers in Quasi Static Mobile Radio Channels using Higher Tap Order", Springer Wireless Personal Communication, Vol. 69, No. 4, PP. 1947-1968, Apr.2013.
12. **Bhasker Gupta** and Davinder Singh Saini, "Performance of Concatenated Optimized Irregular LDPC Code with Alamouti Coded MIMO-OFDM Systems", WSEAS Transactions on Communications, Vol. 12, No. 5, PP. 208-213, May. 2013.
13. **Bhasker Gupta** and Davinder Singh Saini, "BER Performance Improvement in Coded-OFDM Systems using Equalization Algorithms", Advanced Materials Research, Vols. 403-408, PP. 1028-1034, 2012.

14. **Bhasker Gupta** and Davinder Singh Saini, “Performance Improvement in OFDM System with Near Shannon Turbo Codes”, International Journal of Systems Simulation, Vol. 5, No. 1, PP. 79-83, Mar. 2011.
15. **Bhasker Gupta,** HN Bhargaw and H.K Sardana,” Qualifying Fibre Optic Temperature Sensor Using Speckle Metrology” International Journal of Information Technology & Knowledge Management, Vol. 1, No. 2, PP. 337-350, Dec 2008.

International Conferences

1. N. Sharma and B. Gupta, " Performance Analysis of Hybrid Precoding in Massive MIMO Systems with Quantized Phase Shifters," International Conference on Emerging Technology and Sustainable Solutions (ICESS), Chtkara University, Punjab, India, Nov 24-25, 2023.
2. N. Sharma and B. Gupta, "Energy Efficiency Performance of Millimeter Wave Massive MIMO Systems with Hybrid Precoding," International Conference on Disruptive Technologies (ICDT), Greater Noida, India, pp. 148-153, 2023.
3. N. Sharma and B. Gupta, "Performance Evaluation of Multi-user Massive MIMO Systems with Hybrid Precoding," *International Conference on Disruptive Technologies (ICDT), Greater Noida, India*, pp. 185-190, 11-12 May 2023,
4. Daljeet Sigh, Hem dutt Joshi and **Bhasker Gupta**, “Performance of SFBC-OFDM Systems in Fading MIMO Channels,” Proc. 4th International Conference on Computing for Sustainable Global Development, pp. 819-821, March, 2017.
5. **Bhasker Gupta**, “Precoder based blind channel estimation in MIMO-OFDM systems,” Proc. 4th International Conference on Advancements in Engineering and Technology (ICAET-15), March 18-19, 2016.
6. **Bhasker Gupta**, “A STBC coded MIMO-OFDM system with optimized sphere decoder,” Proc. 4th International Conference on Advancements in Engineering and Technology (ICAET-15), March 18-19, 2016.
7. Aditi Agnihotri and **Bhasker Gupta**, “Performance evaluation of linear/non-linear precoding schemes for downlink multi-user MIMO systems,” Proc. International Conference on *Industrial Instrumentation and Control (ICIC), 2015*, pp. 484-489, May 28-30, 2015.
8. Pallavi Gupta and **Bhasker Gupta**, "LLR based analysis of LDPC codes concatenated with orthogonal STBC coded MIMO systems," Proc. International Conference on Signal Propagation and Computer Technology (ICSPCT), 2014 , pp.680-684, 12-13 July 2014

9. Pallvi Chawla and **Bhasker Gupta**, “BER Analysis of Single/Multi-User LTE and LTE- A Systems”, Proc. 4th IEEE International Advance Computing Conference (IACC-14), ITM University Gurgaon, India, pp. 262-266 , Feb 21-22, 2014.
10. Pallvi Chawla and **Bhasker Gupta**, "SINR, MGF and PEP based BER performance analysis of multi-user MIMO systems," Proc. Recent Advances in Engineering and Computational Sciences (RAECS-14), pp.1-6, 6-8 March 2014.
11. **Bhasker Gupta** and Davinder Singh Saini, “BER Performance Improvement in MIMO Systems using Various Equalization Techniques”, Proc. Parallel Distributed and Grid Computing (PDGC-2012), Waknaghat, India, PP. 190-194, Dec 06-08. 2012.
12. **Bhasker Gupta** and Davinder Singh Saini, “BER Analysis of Quasi and Rotated Quasi STBC MIMO Systems under Effects of Doppler Shifts”, Proc. Parallel Distributed and Grid Computing (PDGC-2012), Waknaghat, India, PP. 185-189, Dec 06-08, 2012.
13. **Bhasker Gupta** and Davinder Singh Saini, “A Low Complexity Decoding Scheme of STFBC MIMO-OFDM System”, Proc. Wireless Advanced (Wiad-2012), King’s College, London, UK, PP. 176-180, 25-27 June. 2012.
14. **Bhasker Gupta** and Davinder Singh Saini, “BER Analysis of ST-Block Coded MIMO-OFDM Systems with Frequency Domain Equalization in Quasi-Static Mobile Channels”, Proc. India Conference (INDICON), 2011 Annual IEEE, Hyderabad, India, PP. 1-4, Dec 16-18. 2011.
15. **Bhasker Gupta** and Davinder Singh Saini, “BER Analysis of Space-Frequency Block Coded MIMO-OFDM Systems using Different Equalizers in Quasi-Static Mobile Radio Channel”, Proc. Communication Systems and Network Technologies (CSNT-11), Katra, India, PP.520-524, June 03-05. 2011.
16. **Bhasker Gupta**, Gagan Gupta and Davinder Singh Saini, “BER performance improvement in OFDM system with ZFE and MMSE equalizers," Proc. 3rd International Conference on Electronics Computer Technology (ICECT), , Vol. 6, PP.193,197, 8-10 April 2011
17. **Bhasker Gupta** and Davinder Singh Saini, **“**BER Performance Improvement in OFDM Systems using Equalization Algorithms”, Proc. Parallel Distributed and Grid Computing (PDGC-2010), Waknaghat, India, PP. 49-54, Oct. 2010.
18. **Bhasker Gupta** and Dr.Jasvir Singh,” Performance Evaluation of WCDMA Systems on FPGA and Digital Signal Processor Boards” Proc. International Conference WECON -08, PP 201-206, 18-19 Oct 2008, C.I.E.T, Rajpura. Punjab, India
19. Amanpreet Sandhu, RS Uppal and **Bhasker Gupta**, “Heuristic Analysis of Different Wireless Generations” Proc. International Conference WECON-08, PP 215-217, 18-19 Oct 2008, C.I.E.T Rajpura, Punjab, India

20. **Bhasker Gupta,** HN Bhargaw, HK Sardana, "Characterising Speckle Image Based Fibre Optic Temperature Sensor", Proc of IEEE Sponsored International Conference on Sensors, Signal Processing, Communication, Control and Instrumentation (SSPCCIN), PP 101-107, 3-5 January 2008, V.I.T Pune. Maharastra, India.

National Conference

1. **Bhasker Gupta** and Dr.Jasvir Singh, "Digital Filtering in Wireless Scenario" Proc. of IEEE Sponsored National Conference on Wireless and Optical Communication, PP 76-80, 18-19 December 2008, Punjab Engineering College (P.E.C), Chandigarh
2. **Bhasker Gupta** and Dr.Jasvir Singh, "Recent Trends-Signal Processing Application in Communication" Proc of National Conference on Optical and Wireless Communication, PP 281-284, 27-28 Nov 2008, D.A.V.I.E.T, Jalandhar, Punjab, India
3. **Bhasker Gupta** and Suresh Kumar, "Neural Network Approach Towards Telecommunication Systems**"**, Proc of National Conference on High Performance Computing, PP 157-160, 27 Sep 2007, S.U.S.C.E.T Tangori (Mohali), Punjab, India
4. Suresh Kumar, **Bhasker Gupta** and Jitendera Virmani, **"**Learning Paradigms in Artifical Neural Networks", Proc of National Conference on High Performance Computing, PP 149-152, 27 Sep 2007, S.U.S.C.E.T Tangori (Mohali), India
5. Suresh Kumar, **Bhasker Gupta** and Jitendera Virmani, "Pet-A Medical Imaging Technique", Proc, of National Conference NCIET-2007, PP 192-196, 7-8 September 2007, IET, Bhaddal (PB) India
6. **Bhasker Gupta** and Rupinder Kaur, "A Heuristic Approach to Motion Segmentation Techniques" Proc of National Conference RAFIT-2007 16-17 Feb 2007 Punjabi University Campus, Patiala, India
7. **Bhasker Gupta**, HN Bhargaw and HK Sardana, **"**Speckle Image Based Multi-Zone Fiber Optic Temparature Sensing System". Proc, of National Conference NCSA-2006, PP-67, 21-22 December 2006, CGCRI, Kolkata, India
8. **Bhasker Gupta** and Rupinder Kaur, **'**Technical Survey of Motion Segmentation Techniques" Proc, of National Conference WNES-2006, PP 167-171, 28 July 2006 C.I.E.T, Rajpura, India