

CURRICULUM VITAE

Dr. Chitra Singh
Assistant Professor,
Electronics & Comm. Engineering,
College of Technology,
SVPUAT, Meerut-250 110
Mob: +91-9622191874
Email: drchitrasingh@svpuat.edu.in



RESEARCH PROFILE

Journal Paper 11
Conference Paper 17
Book Chapter 5

Google Scholar Citations

Citations 304
h-index 7
i10-index 6

Research Gate Score 174.3

EDUCATIONAL QUALIFICATION

Class/Examination	Board/ University	Year	Marks/CGPA
Ph. D. Through GATE 2015	School of Electronics & Comm. Engg., Shri Mata Vaishno Devi Univ., Katra	2019	-
M.Tech. Through GATE 2009	College of Technology, G.B.P.U.A.T., Pantnagar.	2011	80.90 %
B.Tech. Through AIEEE 2005	College of Technology, G.B.P.U.A.T., Pantnagar.	2009	80.65 %
XIIth	C.B.S.E.	2005	80.00 %
Xth	C.B.S.E.	2003	84.80 %

Ph. D. THESIS TOPIC

FREQUENCY SELECTIVE SURFACE: ANALYSIS AND DESIGN

The Doctoral work was partially supported from the research grant provided by **DRDO**, India under Grant Reference No. ERIP/ER/201707004/M/01/1726.

M. Tech. THESIS TOPIC

DESIGN AND SIMULATION OF CIRCULARLY POLARISED, MULTI-BAND PATCH ANTENNA FOR WIRELESS APPLICATIONS

WORK EXPERIENCE

1. Currently Working as Assistant Professor, Dept. of Electronics & Comm. Engg., College of Technology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, Uttar Pradesh.
2. Subject Expert (Guest Faculty), Dept. of Electronics & Comm. Engg., Faculty of Engg. & Technology, University of Lucknow, Lucknow, 08 Dec., 2022–13 Sept., 2023, 03 Oct., 2023 – 06 July, 2024, 03 Sept., 2024 – 26 March, 2025.
3. Assistant Professor (contractual), Centre for Advanced Studies, Dr. APJ AKTU, Lucknow, 19 July, 2019 – 20 July, 2020.
4. Visiting faculty at Dept. of Electronics & Comm. Engg., Motilal Nehru National Institute of Technology-Allahabad, Prayagraj 31 Dec. 2018 – 31 May 2019.
5. Received Teaching assistantship at Dept. of Electronics & Comm. Engg., Shri Mata Vaishno Devi University, Katra, J&K, 5 August 2015 – 5 August 2018.
6. Teaching Personnel at Department of Electronics and Communication Engineering, G.B.P.U.A.T., Pantnagar, Uttarakhand, 17 January 2013 – 30 April 2013.
7. Received Teaching assistantship at Department of Electronics and Communication Engineering, G.B.P.U.A.T., Pantnagar, Uttarakhand under MHRD GATE for two years, July 2009 – May 2011.

COURSES TAUGHT

B.Tech.:

- (i) Electromagnetic Field Theory,
- (ii) Antenna & Wave Propagation
- (iii) Microwave Engineering
- (iv) Basic Electronics

M.Tech.:

- (i) Concepts of Electrical & Electronics Engineering
- (ii) Microcontroller and Embedded Systems
- (iii) Internet of Things and Smart Manufacturing
- (iv) Signal Processing in Mechatronics System

M.TECH. THESIS GUIDANCE AS SOLE SUPERVISOR

S.No.	M.Tech. Thesis Title	Year	Institute
1.	Collision Detection by Use of Frequency Selective Surface (FSS)	2020	Centre for Advanced Studies (Dr. APJ AKTU, Lucknow)
2.	Frequency Selective Surface (FSS) for Electromagnetic Shielding	2021	Centre for Advanced Studies (Dr. APJ AKTU, Lucknow)

AWARDS/PAPERS/SYMPOSIUM

Awards

1. **Best Paper Award** for “An Optically Transparent Antenna for IoT Applications” **IEEE** International Conference on Electrical and Electronics Engineering (ICE3-2020), February 14-15, 2020 organized by MMMUT, Gorakhpur, India and North Dakota State University, Fargo, USA.
2. Shortlisted for the **Best Paper Award for** “Transmission Zero Controlled Wideband Bandpass FSS” **IEEE MTT-S** International Microwave and RF Conference (IMaRC) December 13-15, 2019 at IIT Bombay, Mumbai, India.

Papers Published in International Journals

1. **Chitra Singh**, K. R. Jha, Satish K. Sharma “A Tripole Type Wideband Bandpass Frequency Selective Surface for X-Band Applications” *IET Microwave, Antennas and Propagation*, vol. 14, issue 13, pp. 1619-1625, September 2020, Print ISSN 1751-8725, Online ISSN 1751-8733 (**SCIE Journal, I.F. 5.1(Scopus) and I.F. 1.7(Clarivate)**).
2. **Chitra Singh**, K. R. Jha, Satish K. Sharma, Z. A. P. Jibrán, G. Singh, “Design of a wideband square slot bandpass frequency-selective surface using phase range analysis” *Engineering Reports, John Wiley and Sons*, vol. 2, issue 1, pp. 1-12, January 2020. 07030-5774, ISSN / eISSN:2577-8196 (**ESCI Journal, I.F. 4(Scopus) and I.F. 2(Clarivate)**)
3. **Chitra Singh**, K. R. Jha, Varinder Singh and G. Singh, “Cross-polarization reduction of microstrip antenna using *microwave absorbers*,” *International J. of RF Microwave Computer Aided Engineering, John Wiley and Sons*, vol. 27, no.5, pp.1-10, June 2017, eISSN:1099-047X. (**SCIE Journal, I.F. 2.29(Clarivate), (Scopus CiteScore 3.8)**).
4. K. R. Jha, Bisma Bukhari, **Chitra Singh**, Ghanshyam Mishra, and Satish K. Sharma, “Compact Planar Multi-Standard MIMO Antenna for *IoT Applications*,” *IEEE Transactions on Antennas & Propagation*, vol. 66, no.7, pp. 3327-3336, July 2018, eISSN:1558-2221. (**SCIE Journal, I.F. 4.824 (Clarivate) (Scopus Citescore 9.8)**);
5. K.R. Jha, Z.A. Pandit Jibrán, **Chitra Singh** and Satish K. Sharma, “4-Port MIMO Antenna Using Common Radiator on a Flexible Substrate for Sub-1GHz, Sub-6GHz 5G NR, and Wi-Fi 6 Applications” *IEEE Open Journal of Antennas and Propagation*, vol. 2, May 2021, pp. 689-701, eISSN: 2637-6431. (**ESCI Journal, (Scopus Cite Score 4)**)
6. **Chitra Singh** and R.P.S. Gangwar, ‘Computer Aided Design and Simulation of a Multiobjective Microstrip Patch Antenna for Wireless Applications’, *International Journal of Advanced Computer Science and Applications*, U.S ISSN: 2156-5570(Online), U.S ISSN: 2158-107X(Print). vol.2, no.3, pp. 110-117, March 2011. (**Emerging Sources Citation Index**)**I.F. 0.9(Clarivate) Scopus CiteScore 2.1(2022)**
7. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Responsible Disposal and Recycling of Hazardous E-Garbage’, Mar28-31, International Conference ICET-2011, Mar28-31, **NIT Durgapur**, Technically Co-Sponsored by IEEE Calcutta and IEEE Kharagpur

Section; *International Journal of Systems Simulation*, ISSN: 0975-2080. vol.5, no.1, pp. 29-36, Jan.-June 2011.

8. **Chitra Singh** and R.P.S. Gangwar, 'Design and Analysis of a Multifunctional Compact Microstrip Antenna', International Conference ICET-2011 Mar28-31, **NIT Durgapur**, Technically Co-Sponsored by IEEE Calcutta and IEEE Kharagpur Section; *International Journal of Electronics and Computers*, vol.3, no.1, pp. 33-38, Jan-June 2011 ISSN: 0975-3796.
9. **Chitra Singh**, R.P.S.Gangwar, 'Design and Simulation of Circularly Polarized Compact Microstrip Patch Antenna for C-Band Applications', *International Journal on Computer Science and Engineering*, ISSN: 0975-3397. vol.3, no.3, pp. 1175-1182, Mar. 2011.
10. Manish K. Rai, **Chitra Singh**, Devansh Mohan Dwivedi, "Home Automation and Security" using Advanced Communication Technologies" *J. of Network Security*, ISSN: 2395-6739, Vol. 7, Issue 1, pp. 7-10, 2019.
11. Alka Singh and **Chitra Singh**, "Quad-Band FSS for Electromagnetic Shielding", *International Journal of Computer Communications and Informatics*, E-ISSN 2582-2713, vol. 1, issue 1, pp. 1-14, Published 30 May, 2021.

Articles Presented in International Conferences & Published in Books

12. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, (2012) 'Nanoscience and Nanotechnology: Social, Environmental and Human Health Issues', "Climate Change and New Challenges, Society, Environment and Development", Concept Publishing Company, New Delhi. ISBN-13:978-81-8069-866-8.
13. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh (2012), 'GIS and Remote Sensing for Environmental Management, Food Security and Poverty Alleviation', "Global Climate Change and Indian Economy", SSDN Publishers and Distributors, New Delhi. ISBN No 978-93-8117-661-0.
14. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh (2012), 'Environmental Management of Hazardous E-Waste: The Indian Scenario', "Environmental Management: Meeting the Challenges of Climate Change", SSDN Publishers and Distributors, New Delhi. ISBN No 978-93-8117-656-6.
15. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, 'Eco-Building Concepts of Environmental Protection', 10th ISE and 8th HWWE meet, International Conference on "ERGO 2012: SAFETY FOR ALL" HWWE, 2012, Dec. 6-8, 2012, organized by College of Home Science, G.B. Pant Univ. of Ag. & Tech., Pantnagar. Published in "Humanizing Work and Work Environment, ERGO SAFETY FOR ALL" Published by Daya Publishing House, New Delhi. ISBN 978-93-5131-227-8.
16. R.P.Singh, **Chitra Singh** and U.P.S.Bhardwaj, 'Environmental Management of MSW for Biosafety and Bioenergy', 10th ISE and 8th HWWE meet, International Conference on "ERGO 2012: SAFETY FOR ALL" HWWE, 2012, Dec. 6-8, 2012, organized by College of Home Science, G.B. Pant Univ. of Ag. & Tech., Pantnagar. Published in "Humanizing Work and Work Environment, ERGO SAFETY FOR ALL" Published by Daya Publishing House, New Delhi. ISBN 978-93-5131-227-8.

Papers Presented in International Conferences:

17. S. Jamwal, S. Gupta, Zahoor A. P. Zibran, K. Jha and **Chitra Singh** “An Optically Transparent Antenna for IoT Applications” IEEE International Conference on Electrical and Electronics Engineering (ICE3-2020), February 14-15, MMMUT, Gorakhpur, India. **Available *IEEEExplore*.**
18. **Chitra Singh**, K. Jha and Satish Sharma, “Transmission Zero Controlled Wideband Bandpass FSS,” IEEE International Microwave and RF Conference 2019 (**IMaRC**), Dec. 13-15, 2019, pp. 1-2 **Available *IEEEExplore*.**
19. Javid Ganie, **Chitra Singh**, K. Jha, Satish Sharma “A LTE Band Integrated 5G Antenna Design using Characteristic Mode Analysis” IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting in Atlanta, Georgia, 7-12 July 2019, **Available *IEEEExplore*.**
20. **Chitra Singh** and K. R. Jha, “Bandpass Frequency Selective Surface with Wide Shielding Effectiveness,” 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), Gorakhpur, India, 2-4 Nov. 2018, pp. 1-2, **Available *IEEEExplore*.**
21. **Chitra Singh**, K. R. Jha, and G. Singh, “Analysis and Design of a X-band Wideband Bandpass FSS” IEEE Applied Electromagnetics Conference, Aurangabad, Maharashtra, Dec. 19 -22, 2017, pp. 1-2, **Available *IEEEExplore*.**
22. Bisma Bukhari, **Chitra Singh**, K. R. Jha, and Satish K. Sharma “Planar MIMO Antennas for IoT and CR Applications,” IEEE Applied Electromagnetics Conference (AEMC) Aurangabad, Maharashtra, Dec. 19-22, 2017, pp. 1-2, **Available *IEEEExplore***
23. Ajay Kochar, Abhishek Nargotra, Kshitiza Joshi, Ankit Sharma, **Chitra Singh** and K. R. Jha, “Frequency Agile Bandpass Filter for the Lower LTE Band Applications” **URSI-RCRS-2017**, Tirupati, India, March 1-4, 2017.
24. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Role of Electronics for Tractors and Agricultural Equipments’, 3rd International Conference on Production and Industrial Engineering CPIE-2013, March 29-31, 2013, **NIT Jalandhar**.
25. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Prospects and Challenges of Renewable Energy Production and Utilization’, 3rd International Conference on Production and Industrial Engineering CPIE-2013, March 29-31, 2013, **NIT Jalandhar**.
26. **Chitra Singh** and R.P.S. Gangwar, ‘Design and Analysis of a Compact Low Cost Patch Antenna for Different Wireless Operations’, April 22-24, International Conference ETNCC-2011, Udaipur, organized by IEEE, Institution of Engineers, CSI. **Available *IEEEExplore*.**
27. **Chitra Singh** and R.P.S. Gangwar, ‘Design and Simulation of Slotted Patch Antenna with Improved Radiation Pattern’, April 22-24, International Conference ETNCC-2011, Udaipur, organized by IEEE, Institution of Engineers and CSI. **Available *IEEEExplore*.**

28. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Environmental Implications and Management of Hazardous E-Waste’, 2nd International Conference on Production and Industrial Engineering CPIE-2010, Dec. 3-5, 2010, *NIT Jalandhar*.

Paper Presented in National Symposium

29. **Chitra Singh**, Dr. Vikash Singh, Dr. R. K. Kumawat, Dr. Sushant Kumar, “Electronics for Precision Agriculture”, National Symposium NGA 2025, April 16-17, 2025, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut.

Papers Presented in National Conferences

30. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Environmental Consequences of Renewable Energy’, Green Technologies for Sustainable Environmental Management GTSEM-13, School of Environment & Natural Resources, Doon University, Dehradun, March 22-23, 2013.
31. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Sustainable Development Through Green Building Technologies’, Green Technologies for Sustainable Environmental Management GTSEM-13, School of Environment & Natural Resources, Doon University, Dehradun, March 22-23, 2013.
32. **Chitra Singh**, U.P.S.Bhardwaj and R.P.Singh, ‘Nanotechnology, Providing an Alternate to Current Space Shuttles’, at National Conference on Recent Advances in Mechanical and Production Engineering RAMP 2009, College of Technology, G.B. Pant Univ. of Ag. & Tech., Pantnagar, Feb.12-14, 2009.
33. **Chitra Singh**, Himani Maheshwari and U.P.S.Bhardwaj, ‘Metamaterials’, National Conference STEM 2007, College of Technology, G.B. Pant Univ. of Ag. & Tech., Pantnagar, Oct. 29-31, 2007.

ON THE PANEL OF REVIEWERS OF INTERNATIONAL JOURNALS

1. International Journal of RF & Microwave Computer-Aided Engineering, John Wiley & Sons.
2. Cluster Computing, Springer Nature
3. British Journal of Applied Science and Technology.

COURSES/SYMPOSIUM ATTENDED

1. Attended one-week MHRD sponsored GIAN course at IIT Kharagpur on “Millimeter-Wave Antennas, Circuits and Systems” Nov. 28 – Dec. 2, 2017.
2. Attended an online IEEE International Symposium on Electromagnetic Compatibility, Signal and Power Integrity, Washington DC, Aug. 7 – 11, 2017.
3. TEQIP-III funded one-week short-term course on “Emerging Issues in VLSI Design”, organized by School of Electronics and Comm. Engg., SMVDU, Katra, May 7 – 11, 2018.

4. “Introduction to MATLAB and Research Enhancement Tools” funded by TEQIP-III and technically supported by Mathworks India, organized by School of Electronics and Comm. Engg., SMVDU, Katra, Mar. 16 – 25, 2018

WORKSHOPS ATTENDED

1. “Advanced Embedded Systems and Microelectronics (AESM 2019), TEQIP III sponsored, and organized by Motilal Nehru National Institute of Technology Allahabad, Apr. 1-5, 2019.
2. “Scientific Writing using LaTeX” organized by School of Electronics and Comm. Engg., SMVDU, Katra, Feb. 24, 2017.
3. “Ultra Low Power Biosensors and Implantable Microsystems” organized by School of Electronics and Comm. Engg., SMVDU, Katra, Dec. 2 – 3, 2016.
4. “Patent Drafting and Filing” organized by SMVDU, Katra in association with TIFAC, Dept. of Science and Technology, GoI, Oct. 20, 2016.
5. “Research Methodologies and Data Analysis”, organized by Human Resource and Development Cell, SMVDU, Katra, Sept. 26 – 28, 2016.

SOFTWARE AND HARDWARE SKILLS

1. CST Microwave Studio (Simulation)
2. RF Sim (Simulation)
3. Mat Lab (Introduction)
4. OriginPro (Working)
5. Fabrication of Planar structure by Dry and Wet Etching method (Hardware)
6. Surface Mount Device Application (Hardware)
7. Use of Vector Network Analyzer (Measurement)
8. Anechoic Chamber Measurement (Measurement)
9. Antenna Measurement (Measurement)
10. Frequency Selective Surface Measurement (Measurement)

PROFESSIONAL MEMBERSHIP

Senior Member, IEEE (Institution of Electrical and Electronics Engineers) since Feb., 2021.

OTHER RESPONSIBILITIES

1. **Shri Mata Vaishno Devi University (SMVDU), Katra, J&K:**
 - Ph. D. Student Member in Internal Quality Circle of SMVDU;
2. **Centre for Advanced Studies-Dr. APJAKTU, Lucknow, U.P.:**
 - Co-ordinator, University Research, Award and welfare schemes;
 - Member, Organizing Committee, International Conference IEEE IC3A 2020;
 - Organizing Committee, State Level Tech Fest-2019;
 - Faculty In-Charge, Microcontroller and Embedded Systems Lab
 - M.Tech. Thesis I/C;
 - Seminar Viva-Voice I/C