CURRICULUM VITAE

Dr. Kumud Ranjan Jha
Professor

School of Electronics & Commun. Engg.
Shri Mata Vaishno Devi University
Katra, Jammu and Kashmir, 182320, India
Voice: +91-1991-234053-2329(O)/6329(R)
Mob: +919419215338
Email: jhakr@rediffmail.com, kumud.ranjan@smvdu.ac.in

CAREER OBJECTIVE

To serve an organization that gives me an opportunity to prove myself, use my personal and educational skills along with my work experience for the growth of the organization, and the further enhancement of my skills.

AWARDS/FELLOWSHIP/SCHOLARSHIP/ RECOGNITIONS

- **2013: Raman Fellowship (University Grant Commission, India) for the Post-Doctoral Study in USA**
  https://www.ugc.ac.in/pdfnews/5148391_RamanFellowship1314.pdf
- **2017: International Travel Grant from Science and Engineering Research Board, Govt. of India**
- **2019: International Travel Grant from Science and Engineering Research Board, Govt. of India**
- **2019: Performance Linked Award at Shri Mata Vaishno Devi University, J&K, India**
- **2019: Summer Research Fellowship San Diego State University, CA, USA**
- **1986-1988: Merit Scholarship (VIII-Xth, Monthly) by Bihar Government, India**
- **2018: Declared within top 2% of the online certification course conducted by Indian Institute of Technology, Bombay through National Program on Technology Enhanced Learning (NPTEL) in the course "Microwave Theory andTechniques"**
  https://nptel.ac.in/noc/courses/noc18/SEM2/noc18-ee22/
- **2019: Declared within top 1% of the online certification course conducted by Indian Institute of Technology, Bombay through NPTEL in the course "Antennas"**
  https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-ee19/
- **Shortlisted for Best Paper competition in the International Microwave and RF Conference (IMARC) 2019 at Indian Institute of Technology Bombay, Dec. 13-15, 2019**
- **2020: Best Paper Award at IEEE International Conference on Electrical and Electronics Engineering, Gorakhpur, India**
- **2021: Declared NPTEL Star (Ministry of Education, Govt. of India Initiative)**
- **2018: Senior Member Institute of Electrical and Electronics Engineers (IEEE)**
- **2023: Fellow Institution of Engineers (India)**
- **2023: Chartered Engineer Institution of Engineers India**

EDUCATIONAL QUALIFICATIONS

A. Academic Credentials

Institution	Degree	Year	Major Field
San Diego State University, CA, USA	Post-Doctoral Study	2014	Antenna Research
Jaypee University of Information Technology	Ph.D.	2012	Electronics and Communication Engineering
Birla Institute of Technology	Master of Engineering	2007	
The Institution of Engineers (India)	Section A & B	1999	

B. Massive Open Online Certificates (Proctored Examination NPTEL)

Sl. No.	Course	Year	Host Institute
1	Microwave Theory and Technique	2018	I.I.T. Bombay
2	Antennas	2019	I.I.T. Bombay
3	Computation Electromagnetics	2019	I.I.T. Madras
4	Millimeter Wave Technology	2020	I.I.T. Kharagpur
5	Microwave Integrated Circuits	2021	I.I.T. Bombay
6	Basics of Software Defined Radios and Practical Applications	2021	I.I.T. Roorkee
7	Mechatronics	2023	I.I.T. Roorkee
8	Analysis And Design Principles Of Microwave Antennas	2023	I.I.T. Kharagpur

TEACHING & PROFESSIONAL EXPERIENCES

Organization	Designation	Job Profile	From	To
Shri Mata Vaishno Devi University, Katra, J&K, India	Professor	Teaching	10th Apr. 2020	Till Date
Shri Mata Vaishno Devi University, Katra, J&K, India	Associate Professor	Teaching	10th Apr. 2017	09th Apr. 2020
Shri Mata Vaishno Devi University, Katra, J&K, India	Assistant Professor	Teaching	10th Aug. 2007	09th Apr. 2017
San Diego State University CA, USA	Post-Doctoral Fellow	Research	25th Sept. 2013	25th Sept. 2014
Indian Air Force	Senior Non-ommissioned Officer	Technical	22nd March 1991	09th Aug. 2007

MY PROFESSIONAL CONTRIBUTIONS

A. Indian Air Force

- **Surveillance Radar**
- **Intelligent Message Terminal**
- **Distributed Message Switching System**
- **VHF/UHF Communication Systems**

B. Research and Development

- **Computational Electromagnetics**
- **Microwave Millimeter Wave Circuits**
- **Antenna Design**
- **THz Electronic Component Analysis and Simulation**
- **Frequency Selective Surface Analysis and Design**

C. Laboratory Development

- **Basic Microwave Engineering Laboratory at SMVD University**
- **Antenna and Microwave Design Laboratory at SMVD University**

D. Courses Developed at SMVDU

- **Microwave Engineering**
- **Microwave Circuit Design**
- **Microwave Antenna Design**
- **Antenna and Wave Propagation**

E. Courses Taught

- **Microwave Engineering**
- **Microwave Circuit Design**
- **Antenna and Wave Propagation**
- **Radar System**
- **Communication Systems**
- **Microwave Antenna Design**
- **Electrical Science and Engineering**
- **Advanced Communication Systems**
- **Research Methodology for Electronics Engineers**
- **Electromagnetic Field Theory**

ADMINISTRATIVE EXPERIENCE

1	**i/c Dean Faculty of Engineering, Shri Mata Vaishno Devi University**	**09th Sep. 2023- Till Date**
2	**Departmental Vigilance Officer, Shri Mata Vaishno Devi University**	**31st Jan. 2023- Till Date**
3	**Dean Students Welfare at Shri Mata Vaishno Devi University**	**15th Nov. 2022 to 08th Sep. 2023.**
4	**Head School of Electronics and Communication Engineering, SMVDU**	**30th March 2017 to 12th Oct. 2020**

5	Head School of Electrical Engineering, SMVDU, India	19th Sept. 2018 to 12th Oct. 2020
6	Faculty In-Charge Antenna and Microwave Design Laboratory,SMVDU	Present
7	Member, BoS SoECE, SMVD University, India	Present
8	Member Purchase Committee at SoECE, SMVDU	Present
9	Member New Education Policy 2020 at SMVDU	Past
10	Member Grievance Cell for Non-Teaching Staff at SMVDU	Past
11	Member, Departmental Purchase Committee, SMVDU	Past
12	Faculty In-Charge Electrical Works and Maintenance, SMVDU, India	Past
13	In-Charge, Center for Embedded Instrumentation & Networked Controls Laboratory, SMVDU	Past
14	Member, IQAC for Finance, SMVDU	Past
15	Member, GSCASH, SMVDU, India	Past
16	Student Mentorship, SMVDU, India	Continuous
17	Ph. D. coordinator DoECE, SMVDU, India	Past
18	In- Charge, Various Laboratories SMVDU, India	Past
19	Lower and Middle Level Management in Indian Air Force	2003-2007

PROFESSIONAL MEMBERSHIPS AND RECOGNITIONS

- **2023: Fellow Institution of Engineers (India)**
- **2018: Senior Member, Institute of Electrical and Electronics Engineers (IEEE)**
- **2017: Member, Institute of Electrical and Electronics Engineers (IEEE)**
- **2013: Associate Member, The Institution of Engineers (India)**
- **2010: Marquis Who's Who Recognition**
- **2009: Member, International Association of Engineers**
- **1999: Associate, The Institution of Engineers (India)**

CO-CURRICULAR ACTIVITY

- **2015: Organized two Days Workshop on "The use of Vector Network Analysis" with the help of Anritsu India Pvt. Ltd.**
- **2018: Organized two Days Workshop on "Microwave Measurement Technique".**
- **Carrier counseling/ Recommendation letters to UG/PG Students to secure admission in Foreign / Reputed Institutions.**

RESEARCH INTEREST

My research interest includes the analysis of passive and active microwave devices, frequency selective surface, directive antennas, and Terahertz Communication systems.

SOFTWARE AND HARDWARE SKILLS

- **CST Microwave Studio (Simulation)**
- **Ansys HFSS (Simulation)**
- **CAD FEKO (Simulation)**
- **Ansoft HFSS Designer (Simulation)**
- **Sonnet (Simulation)**
- **RF Sim (Simulation)**
- **IE3D (Simulation)**
- **ADS (Simulation, Introductory)**
- **GRASP TIKRA (Simulation)**
- **MatLab**
- **Latex (Introductory)**
- **Microsoft Office (Working)**
- **Planar structure Dry and Wet Etching (Hardware)**
- **Surface Mount Device Application (Hardware)**
- **Use of Vector Network Analyzer (Measurement)**
- **Anechoic Chamber Measurement (Measurement)**
- **Antenna Measurement (Measurement)**
- **RF Component Measurement (Measurement)**

PATENT

Z.A.P. Jibran and Kumud R. Jha, "RECONFIGURABLE FREQUENCY SELECTIVE SURFACE, Indian Patent (Published) No. 202011008419 A, Issue No. 36/2021. Present Status: Reply to FER Submitted on 31st Dec. 2022.

SPONSORED RESEARCH PROJECTS

Sl. No.	Title	PI /Co-PI	Agency	Amount (Rs. in Lakhs)	Time (Years)	Period	Status
01	Active radar absorber based on frequency selective surfaces: Active Stealth Technology	PI	DRDO	22.87	02.5	2018-21	Completed
02	Design of an ADC with a Sampling Frequency of Hundreds of Mega Samples per Second for 5GTechnology	Co-PI	NPIU	07.7	01	2019-2020	Completed
03	Design and Analysis of Frequency Selective Surface at Ka/Ku Band for Reflection and S Band for Transmission ISRO/RES/4/579/10-11	Co-PI	ISRO	15.96	02 +01year extension.	2011-2013	Completed

Project Outcome of ISRO/RES/4/579/10-11

- **Ph.D. Awarded to Dr. Garima Bharti from Jaypee University of Information Technology, Solan, H.P., and India**
- **Publications: International Journals of Repute: 07**
- **Publication: International Conferences:02**
- **Project Accepted by sponsoring agency**

Project Outcome of DRDO Project

- **Partial support to a Ph.D. Candidate**
- **International Journals: 03 Published, (Each in IEEE Transactions on Electromagnetic Compatibility, IET Microwave and Antennas Propagation, and Wiley) , 01 Communicated)**
- **International Conferences: 04 published**
- **Patent: 01 Indian patent published and reply to FER filed**

OTHER FINANCIAL GRANTS

Sl. No.	Head	Funding Agency	Amount (Rs. in Lakhs)	Status
01	Development of Technology and Business Development Center at SMVDU, Katra, India	NSTEDB, DST, GOI	150	Grant Sanctioned vide 22/17/2014-NEB (C) Dated 22.12.2015

RESEARCH SUPERVISION

Ph. D.

Sl. No.	Name of Scholar	Topic	Period	Outcome
1	Ms. Chitra Singh	Frequency Selective Surface: Analysis and Design	Aug. 2015- Oct. 2019	Awarded
2.	Ms. Antusha Dogra	Power Optimization in Next Generation Network	Aug. 2018-till date*	ongoing*
3.	Mr. A. Suri	Active Frequency Selective Surface for Beam Switching of Reconfigurable and non-Reconfigurable Antennas	Aug. 2019-till date	Ongoing

***Co-Supervisor**

M. Tech.

Sl. No.	Name of Student	Topic	Year	Proto type	Outcome (Publication)
1	Ubaid Basir	RFID Antenna for IOT Application	2014-16	Yes	(A) One Paper in IEEE Transaction on Antenna Propagation
2	Varinder Singh	Cross Polarization Reduction using Microwave Absorber	2014-16	Yes	(A) Int. J. Microwave and RF Computer Added Design, Wiley
3	Ubaid RasoolBhat	Harmonic suppression of Microstrip Low-passFilter	2014-16	Yes	(A) Int. J. Microwave and RF Computer Added Design, Wiley

4	**Vivek Singh**	**Frequency Agile bandpass Filter for Lower LTE band Applications**	**2014-16**	**Yes**	**NA**
5	**Umhara Rasool**	**Design of Conformal Microwave Absorber**	**2015-17**	**Yes**	**(A) 01 Paper Published in IEEE AEMC 2017**
6	**Bisma Bukhari**	**Reconfigurable and Sensing Antennaas ground plane for Software DefinedRadio**	**2015-17**	**Yes**	**(A) 01 Paper in IEEE Transaction onAntenna Propagation (B) 01 Paper in IEEE AEMC 2017**
7	**Abida Yousuf**	**Use of Harmonic Suppressed LPF in the matching Network of a Microwave Amplifier**	**2015-17**	**Yes**	**(A) 01 Paper Published in IEEE AEMC 2017**
8	**T. N. Yadav**	**Planar Antenna for 4G/5G Communication**	**2016-18**	**Yes**	**(A) 01 Paper Published in International Conference**
9	**Javid A. Ganie**	**LTE Band Integrated 5G Antenna**	**2017-19**	**Yes**	**(A)01Paper Published in APS-2019 (B)01 Paper in Journal of Electromagnetic Waves and Applications**
10	**Sayed Tooba**	**Active FSS Design**	**2017-19**	**Yes**	**01 Paper Published in IMaRC 2019**
11	**Mantisa Gupa**	**Surveillance and Security using Smart UAVs**	**2017-19**	**No**	**NA**
12.	**Zahoor A. Pandit Jibran**	**Dual Band Active Bandpass Frequency Selective Surface**	**2018-20**	**Yes**	**(A) 01 Paper Published in APS-2020, (B) 01 Paper published in IEEE Open Journal of Antennas and Propagation (C)01 Paper Published in IEEE Transaction on Electromagnetic Compatibility (D) 01 Indian Patent Published**
13.	**Nishu Raina**	**MIMO Antennas for Wi-Fi 6 Communications**	**2019-21**	**Yes**	**(A) 01 Paper published in IEEE InCap 2021 (B) 01 Paper Published in IEEE Open Journal of Antennas and Propagation**
14.	**Murtaza Wahid**	**Design and Analysis of Wide Band Antenna for V2X Communication**	**2020-22**	**Yes**	**(A) 01 Paper Submitted to IEEE MAPCON 2022 (B) 01 Journal Paper under consideration**

15.	**Riya Malia**	**Solar-cell integrated optically transparent antenna for aerial vehicle applications**	**2022-23**	**Yes**	**(A) 01 Paper in IEEE MAPCON 2023** **(B) Journal Paper under consideration**

SERVICE TO THE COMMUNITY

- **Session Chair**
  - **2015, IEEE Applied Electromagnetic Conference, Dec. 18-21, IIT Guwahati, India**
- **Keynote Speaker/ Invited Lectures**
  - **2015, International Conference on VLSI Communication and Network, Apr. 18-19, IET Alwar, Raj., India**
  - **Re-configurable antennas for multi-standard services Expert Lecture at JNTUH, Hyderabad 29th Jan., 2018**
  - **Introduction to CAD FEKO Invited Lecture in Two Weeks student and faculty refresher course on Introduction to MatLab and Research Enhancement Tools 23th March 2018, SoECE, SMVDU**
  - **Introduction to CAD FEKO 2nd Two Weeks Student and Faculty Refresher Course on Introduction to MATLAB and Research Enhancement Tools 13th-22nd July 2018, SoECE, SMVDU**
  - **Introduction to CAD FEKO 3rd Two Weeks Student and Faculty Refresher Course on Introduction to MATLAB and research Enhancement Tools 20th - 29thOct. 2018, SoECE , SMVDU**
  - **Reconfiguration Antennas for Multi-Standard Services, Webinar, May 30, 2020,Meerut Institute of Technology, India**
- **Student Research Evaluation**
  - **2014, Judge at Student Research Symposium, March 7-8, San Diego State University, CA, USA**

REVIEWER OF REFEREED JOURNALS

- **IEEE Transactions on Antennas and Wave Propagation**
- **IEEE Antennas and Wireless Propagation Letters**
- **IEEE Transactions on Microwave Theory and Techniques**
- **IEEE Access**
- **IEEE Internet of Things Journal**
- **Microwave and Optical Technology Letters-Wiley**
- **AEUE- International Journal of Electronics and Communication –Elsevier**
- **International Journal of Microwave and Wireless Technologies-Camb. Univ. Press**
- **International Journal of Microwave and RF Computer Added Design-Wiley**
- **International Journal of Infrared Milli and Terahertz Wave-Springer**
- **Optika-International Journal for Light and Electron Optic-Elsevier**
- **Microelectronics Journal – Elsevier**

- **Journal of Computational Electronics-Springer**

ON THE PANEL OF THE BOOK REVIEWERS (PAST)

- **Tata McGraw Hill Publication, India**
- **Bentham Science Publishers, London, U.K.**
- **Elsevier, India**
- **Ph.D. Thesis Examiner, University of Kwazulu-Natal, Durban, South Africa**

TECHNICAL PROGRAM COMMITTEE (TPC) MEMBER

- **IEEE Int.Conf. on *Communication Systems* and Network Technology, Katra, India, 2011.**
- **IEEE Int. Conf. on Machine Intelligence and Research Advancement, Katra, 2013.**
- **Int.*Conf.* on Technological Innovations through Modern Engineering Sciences, Alwar, India, 2013.**
- **Int. Conf. on VLSI Communication and Network, Alwar, India, 2015.**
- **IEEE Int. Conf. on Signal Processing and Communication, Noida, India, 2016.**

REVIEWED PAPERS for INTERNATIONAL CONFERENCES

- **IEEE Int. Conf. Communication Systems and Network Technology, 2011.**
- **IEEE Int. Conf. Machine Intelligence and Research Advancement, Katra, 2013.**
- **IEEE Applied Electromagnetics Conference, 2015.**
- **IEEE Int. Conf. Signal Processing and Communication, Noida, India, 2016.**
- **IEEE Asia Pacific Microwave Conference, Kualalumpur, 2017**
- **IEEE MAPCON 2023**

MY PUBLICATIONS

BOOK CHAPTERS

Sl. No.	Authors	Chapter Name	Book Name	Editors	Publisher	Year
1.	Kumud R. Jha and S. K. Sharma	Reconfigurable MIMO Antennas	Multifunctional antennas and arrays for adaptive communication systems	Satish K. Sharma and Jia-Chi-Chieh	IEEE Wiley Press	2021
2.	Kumud R. Jha and S. K. Sharma	Multifunctional Antennas for 4G/5G Communications and MIMO Applications	Multifunctional antennas and arrays for adaptive communication systems	Satish K. Sharma and Jia-Chi-Chieh	IEEE Wiley Press	2021

BOOK

Sl. No.	Authors	Title	Type	ISBN	Publisher	Edition	Visibility
1.	Kumud R. Jha and G. Singh	Terahertz Planar Antennas for Future Communication	Reference	13:978-3319023403	Springer International, Switzerland	2014	Downloads:≥17K http://www.springer.com/in/book/9783319023403

THESIS

T1. Ph. D. Thesis "Analysis and design of highly directive microstrip terahertz antennas for wireless communication systems" Jaypee University of Information Technology, India, 2012.

T2. M. E. Thesis: Some applications of microstrip transmission line, Birla Institute of Technology, Ranchi, 2006.

JOURNALS/MAGAZINES

2023

UNDER Review/Consideration

1. **Z. A. P. Jibran, Kumud R. Jha, S. K. Sharma and A. Shukla," Ultra wideband active FSS based absorber for stealth technology," (Under Review), 2023.**
2. **Z. A. P. Jibran, Kumud R. Jha, and S. K. Sharma, "Design of a dual polarized dual band Active FSS," (Under measurement), 2022.**
3. **M. Waheed, Kumud R. Jha, and S. K. Sharma, "Design of low-cost wideband antenna including Vehicular communication band in MIMO Implementation using Additive Manufacturing Technique," (To be Communicated), 2023.**

PUBLISHED/ACCEPTED

2023

4. **Kumud R. Jha, N. Rana,** and Satish K. Sharma, "Design of Compact Antenna Array for MIMO Implementation Using Characteristic Mode Analysis for 5G NR and Wi-Fi 6 Applications, ***IEEE Open Journal of Antennas and Propagation,*** vol. 4, pp. 262-277, 2023.
5. A. Suri, and **Kumud R. Jha, "**Active Frequency Surfaces: A Systematic Review," ***Int. J. Microwave and Wireless Technologies***, DOI: 10.1017/S175907872301332, 2023.

2022

6. **Kumud R. Jha**, Z.A.P. Jibran, and S. K. Sharma, "Ultrathin FSS absorber for planar and conformal applications," ***IEEE Transactions on Electromagnetic Compatibility, DOI:* 10.1109/TEMC.2022.3159746, 2022**.
7. J. A. Ganie, **Kumud R. Jha,** and S. K. Sharma, "Sub-1 GHz and sub-6 GHz reconfigurable MIMO antenna with 28 GHz array on shared chassis for user equipment's

(UEs), ***Journal of Electromagnetic Waves and Applications*** , DOI: 10.1080/09205071.2022.2089916 June 2022.

2021

8. **Kumud R. Jha**, Z. A. P. Jibran, C. Singh, and S. K. Sharma, "4-Port MIMO Antenna using Common Radiator on a Flexible Substrate for Sub-1GHz and Sub-7GHz Band Applications," ***IEEE Open Journal of Antennas and Propagation***, vol.2, pp. 689-701, 2021.
9. D. Singh, **Kumud R. Jha**, and S. K. Sharma, "Nearly omni-directional compressed multiband flexible and conformal dipole antenna," ***International Journal of RF and Microwave Computer Aided Engineering*** , vol. 31, no. 8, pp. e22732, 2021.

2020

10. C. Singh, **Kumud R. Jha,** and Satish K. Sharma, "Tripole type wideband bandpass frequency selective surface for X-Band applications," ***IET Microwave Antennas and Propagation***, vol. 14, no. 13, pp. 16191625, 2020.
11. C. Singh, **Kumud R. Jha**, S. K. Sharma, G. Singh, and Z. A. P. Jibran, "Design of a wideband square slot bandpass frequency selective surface using phase range analysis," ***Engineering Reports***, vol. 2, no. 1, pp. e12085, 2020.

2019

12. I. Malhotra, **Kumud R. Jha**, and G. Singh, "Beam steering characteristics of highly directive photoconductive dipole phased array antenna for terahertz imaging application," ***Optical and Quantum Electronics***, vol. 51, no. 1, pp. 1-19, 2019.

2018

13. **Kumud R. Jha,** B. Bukhari, C. Singh, G. Mishra, and S. K. Sharma, "Compact Planar Multi-Standard MIMO Antenna for IoT Applications," ***IEEE Transactions on Antennas and Propagation***, vol.66,no. 7, pp. 3327-3336, 2018.
14. **Kumud R. Jha** and S. K. Sharma, "Combination of frequency agile and quasi-elliptical planar monopole antennas in MIMO implementations for handheld devices," ***IEEE Antenna Propagation Magazine***, vol. 60., no. 1, pp. 118-131, 2018.
15. **Kumud R. Jha,** G. Mishra, and S. K. Sharma, "Analysis and design of a microwave absorber using non-resonance constituent parameter retrieval method for wireless communication applications," ***IET Microwave Antennas and Propagation***, vol. 1 no. 6, pp. 977-98, 2018.
16. U. R. Bhat and **Kumud R. Jha**, and G. Singh, "Wide stopband harmonic suppressed low-pass filter with novel DGS" ***International Journal of RF and Microwave Computer Aided Design***, vol. 28, no. 5, pp. e21235, 2018.
17. I. Malhotra, **Kumud R. Jha**, and G. Singh,"Design of highly directive terahertz photoconductive dipole antenna using frequency-selective surface for sensing and imaging applications," ***Journal of Computational Electronics***, vol.17, no. 4, pp. 1721-1740,2018.
18. I. Malhotra, **Kumud R. Jha**, and G. Singh, "Design of highly directive lens-less photoconductive dipole antenna array with frequency selective surface for terahertz imaging applications," ***Optik***, vol.173, pp. 206-219, 2018.
19. I. Malhotra, **Kumud R. Jha**, and G. Singh, Terahertz Technology for Imaging and Sensing

– A Review," ***International Journal of Microwave and Wireless Technology***, vol. 10, no. 3, pp. 271-290, 2018.

2017

20. U. Baseer, **Kumud R. Jha**, G. Mishra, G. Singh, and S. K. Sharma, "Octahedron Shaped Linearly Polarized Antenna for Multi-Standard Services including RFID for IoT," ***IEEE Transaction on Antenna Propagation***, vol. 65, no. 7, pp. 3364 – 3373, 2017.
21. C. Singh, **Kumud R. Jha**, V. Singh, and G. Singh, "Cross polarization reduction of microstrip antennas using microwave absorber," ***International Journal of RF and MicrowaveComputer Aided Design***, vol. 27, no. 5, e21088, 2017.
22. I. Malhotra, **Kumud R. Jha**, and G. Singh, "Analysis of highly directive photoconductive dipoleantenna at THz frequency", ***Optics Communications***, vol. 397, pp. 129-139, 2017.
23. P. Thakur, I. Malhotra**, Kumud R. Jha,** and G. Singh, "Analytical Framework of Small-Gap Photoconductive Dipole Antenna using Equivalent Circuit Model," ***Optical and Quantum Electronics***, vol. 49, no. 10, pp. 1-23, 2017.

2016

24. G. Bharti, **Kumud R. Jha**, G. Singh, and R. Jyoti, "Design of dual-polarized angular stable new bandpass frequency selective surface structure in X-Band," ***Telecommunication Systems***, vol. 61, no. 3, pp. 559-565, 2016.
25. G. Bharti, **Kumud R. Jha**, G. Singh and R. Jyoti, "Design of angular and polarization stable modified circular ring frequency selective surface for satellite communication system," ***International Journal of Microwave and Wireless Technology***, vol. 8, no. 1, pp. 899-907, 2016.

2015

26. G. Bharti, **Kumud R. Jha**, G. Singh and R. Jyoti, "Angular stable dual polarized and multiband modified circular ring frequency selective surface," ***Frequenz***, vol. 69, no. 5-6, pp. 199- 206, 2015.
27. G. Bharti, **Kumud R. Jha**, G. Singh, and R. Jyoti, "Design of azimuthally periodic wedge-shaped circular ring bandpass frequency selective surface using transmission-line method'' ***Wireless Personal Communications***, vol. 85, no. 3, pp. 1411-1428, 2015.
28. G. Bharti, **Kumud R. Jha**, G. Singh, and R. Jyoti, "Planar Tri-band frequency selective surface with transmission in S-band and reflection in Ka-Ku-band," ***Radioelectronics and Communication Systems***, vol. 58, no. 11, pp. 479-486, 2015.
29. G. Bharti, **Kumud R. Jha**, G. Singh, "Terahertz frequency selective surface for future wireless communication systems," ***Optik***, vol. 126, no. 24, pp. 5909-5917, 2015.
30. G. Bharti, **Kumud R. Jha**, G. Singh, and R. Jyoti, "Azimuthally periodic wedge-shaped metal vane loaded circular ring frequency selective surface" ***International Journal of Microwave and Wireless Technology***, vol. 7, no. 1, pp. 95-106, 2015.

2014

31. **Kumud R. Jha** and G. Singh, "Relationship between Number of Unit-Cells and the Directivity of a Cavity type Patch Antenna," ***Journal of Computational Electronics***, vol. 13, no. 2, pp. 496-502, 2014.
32. G. Bharti, **Kumud R. Jha**, and G. Singh, "A synthesis technique of single square loop

frequency selective surface at terahertz frequency," ***Optik***, vol. 125, no. 21, pp. 6428-6435, 2014.

2013

33. **Kumud R. Jha** and G. Singh, "Effect of low dielectric permittivity substrate material on microstrip antenna at terahertz frequency," ***Optik***, vol. 124. no. 22, pp. 5777-5780, 2013.
34. **Kumud R. Jha** and G. Singh, "Terahertz source and antenna: A technical review," ***InfraredPhysics and Technology***, vol. 60, pp. 71-80, 2013.
35. **Kumud R. Jha** and G. Singh, "Analysis of the effect of ground plane size on the performance of a probe-fed cavity resonator microstrip antenna," ***Wireless Personal Communication***, vol. 71, no. 2, pp. 1511-1521, 2013.

2012

36. **Kumud R. Jha** ,G. Singh, and R. Jyoti, "A simple synthesis technique of single –square-loop- frequency selective surface," ***Progress in Electromagnetics Research B***, vol. 45, pp.165-185, 2012.
37. **Kumud R. Jha** and G. Singh, "Ring resonator integrated hemi-elliptical lens antenna at terahertz frequency," ***Optics Communications***, vol. 285, no. 16, pp. 3445-3452, 2012.
38. **Kumud R. Jha** and G. Singh "Microstrip patch array antenna on photonic crystal substrate at terahertz frequency," ***Infrared Physics and Technology***, vol. 55, no. 1, pp. 32-39, 2012.
39. **Kumud R. Jha** and G. Singh, "Prediction of highly directivity probe-fed microstrip antenna at terahertz frequency," ***International Journal of Numerical modeling: Electronic Network, Devices and Fields***, 25, no. 2, pp. 175-191, 2012.
40. **Kumud R. Jha** and G. Singh, "Analysis and design of terahertz microstrip antenna on photonic bandgap material," ***Journal of Computational Electronics***, vol. 11, no. 4, pp. 364- 373, 2012.

2011

41. **Kumud R. Jha** and G. Singh," Analysis and design of enhanced directivity microstrip antenna at terahertz frequency by using electromagnetic bandgap material," ***International Journal of Numerical Modeling: Electronic Networks, Devices and Fields***, vol. 24, no. 5, pp. 410-424, 2011.
42. **Kumud R. Jha** and G. Singh "Design of highly directive cavity type terahertz antenna for wireless communication," ***Optics Communications***, vol. 284, no. 20, 4996-5002, 2011.
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PERSONAL INFORMATION

Fathers Name : Late Shri Ram Chandra Jha
Date of Birth : 05th January 1973
Passport No: K3927683
Married Status : Married

Address: Permanent Address	Native Place/Address
Kumud Ranjan Jha	Vill: Galimpur
A-159, Phase –I	P.O: Bhurkurwa
Ayanagar, New Delhi	Via:Rajepur
PIN:110047	Distt.: E. Champaran
	Bihar, India, 845406

REFERENCES

(1) Prof. (Dr.) Satish Kumar Sharma
Department of Electrical and Computer Engg.
San Diego State University
5500 Campanile Drive, San Diego, CA, USA, ZIP-92182-1323
E- Mail: ssharma@mail.sdsu.edu

(2)Prof. (Dr.) G. Singh
Professor,
Department of Electrical and Electronic Engineering
University of Johannesburg,
Johannesburg
South Africa
E- Mail: drghanshyam.singh@yahoo.com

(3) Prof. (Dr.)Viranjay Mohan Srivastava
Department of Electronic Engineering, Birmingham University, UK
E- Mail: viranjaymohan@gmail.com