RESEARCH ACTIVITIES AND ONGOING RESEARCH PROJECTS

ELECTRONICS AND COMMUNICATION
ENGINEERING DEPARTMENT

VISION

To produce manpower in the field of Electronics and Communication Engineering, capable to compete with that elsewhere and to make the department a center of excellence in the field of Signal Processing and Microelectronics.

MISSION

M1: To develop the ability among students and understand concepts of core graduate electronics and communication engineering.

M2: To create center of Excellence to meet global research and development challenges

M3: To build student community with professional and ethical standards in thrust areas so as to meet industry requirements.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates of the programme will have an educational experience that inspires them to exhibit leadership and team building skills and have successful careers in their chosen technical or professional domain.

PEO2: Graduates of the programme will continue to learn and adapt in a constantly evolving society and contribute to the society in a professional and ethical manner.

PEO3: Graduates of the programme will inculcate good technical and professional knowledge according to requirements of industries and higher studies.

PEO4: To inculcate the spirit of innovation / creativity, independent thinking, risk taking ability, entrepreneurship and attitude to approach challenges with confidence.

PROGRAM SPECIFIC OBJECTIVES (PSOs)

PSO1: **An** ability to understand the concepts of basic Electronics & Communication Engineering and to apply them to various areas like Signal processing, VLSI, Embedded systems, Communication Systems, Digital & Analog Devices, etc.

PSO2: **An** ability to solve complex Electronics and Communication Engineering problems, using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions.

PSO3: **Wisdom** of social and environmental awareness along with ethical responsibility to have a successful career and to sustain passion and zeal for real-world applications using optimal resources as an Entrepreneur.

CONTENTS

ONGOING RESEARCH PROJECT UNDER COUNCIL OF SCIENCE AND TECHNOLOGY(CST), UP

S.No.	Name of Faculty	Designation	Associated to program (B.Tech, MBA, MCA, MTech)	Title of the Research Project	PI/ Co-PI	Duration of the Project	Amount (In Lakhs)	Completed / Ongoing
1	Dr. Rajiv Kumar Singh	Assist Professor	B.Tech (EC)	Design and development of RF interaction Structure for High Power High Frequency microwave sources and Amplifier	PI	3 Years	11.64	Ongoing
2	Dr. Rajiv Kumar Singh	Assist Professor	B.Tech (EC)	Beam Wave Interaction in a Multi-Stage Gyro-Travelling Wave Tube Amplifier	PI	3 Years	16	To be sanctioned
3	Dr. Rajiv Kumar Singh	Assist Professor	B.Tech (EC)	Development of Solar & Wind Energy Based Micro-Grid and Analysis of Power Quality Issues in Islanded and Interconnected Mode of Operation	Co-PI	3 Years	16	To be sanctioned

- One JRF Mr. Aishwarya Chandel has been appointed for Design and development of RF interaction Structure for High Power High Frequency microwave sources and Amplifier Project

DESCRIPTION OF ONGOING RESEARCH PROJECTS

DESIGN AND DEVELOPMENT OF RF INTERACTION STRUCTURES FOR HIGH-POWER HIGH-FREQUENCY MICROWAVE SOURCES AND AMPLIFIERS

Major objectives of the Project:

Major objectives of the proposed project work are:

- Identification of various RF interaction structures for their potential application in high-power high-frequency microwave and millimeter wave sources and amplifiers.
- Analysis of RF characteristics of the identified RF structures.
- Design of RF interaction structures using analytical and simulation approaches.
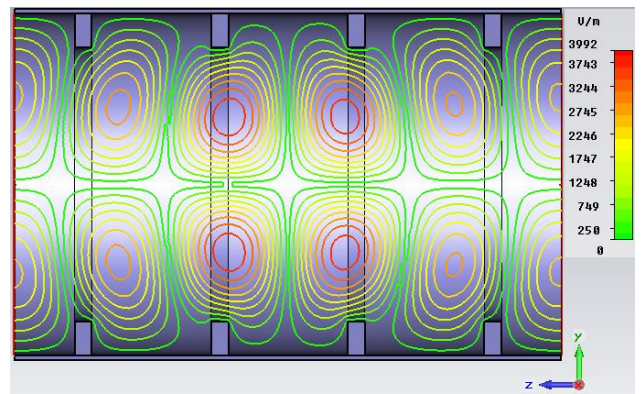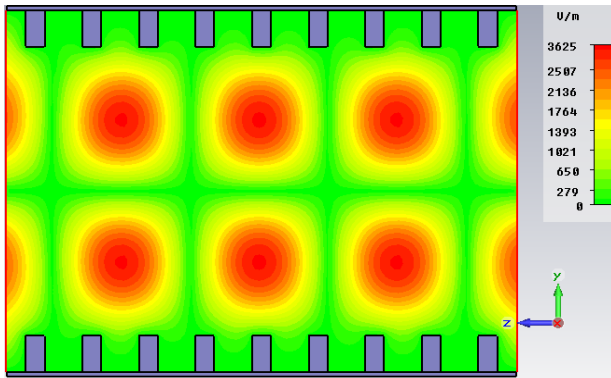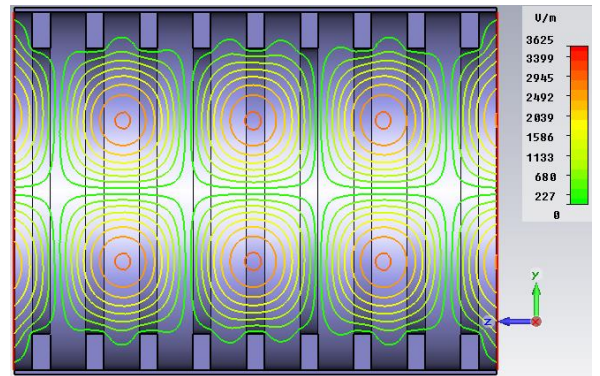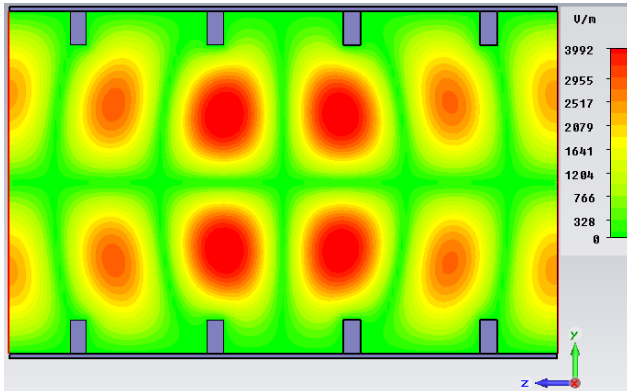
Practical / Scientific utility:

The proposed design and development study of various RF interaction structures will provide the useful design guidelines for the microwave researchers and design engineers working in this field. It is expected that the proposed study will surely save experimental trial cost, manpower and time to develop the optimized RF structures, which can be used in high-power high-frequency microwave sources and amplifiers. The Principal Investigator will consider his self-effacing effort a success if it proves to be useful to the community of microwave engineers/scientists.

Staff Recruitment:

One JRF has been recruited for the project work.

PENETRATION OF E-FIELD IN A DISC-LOADED RF STRUCTURE

IDENTIFICATION OF MODES IN RF STRUCTURE
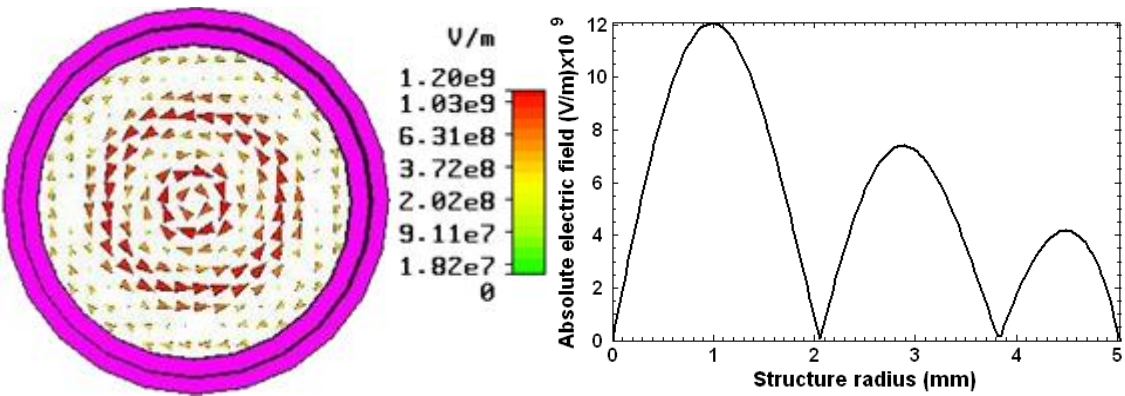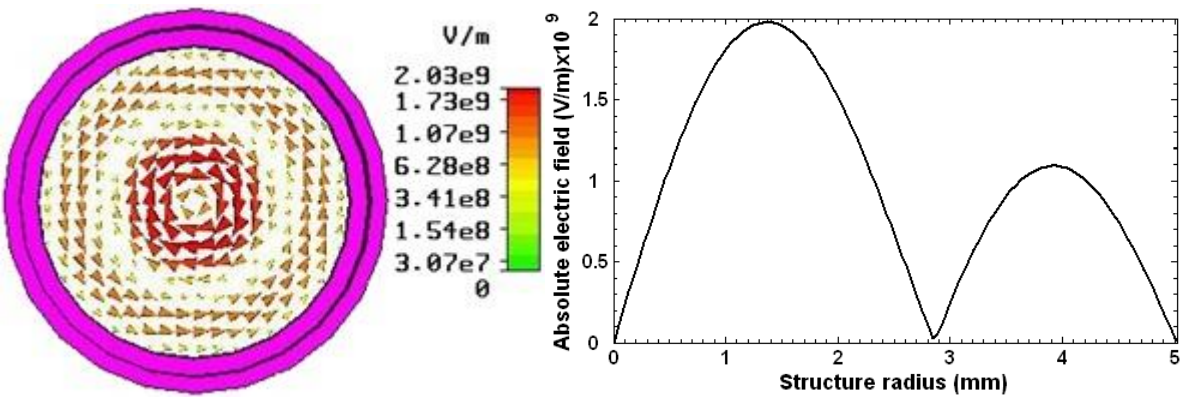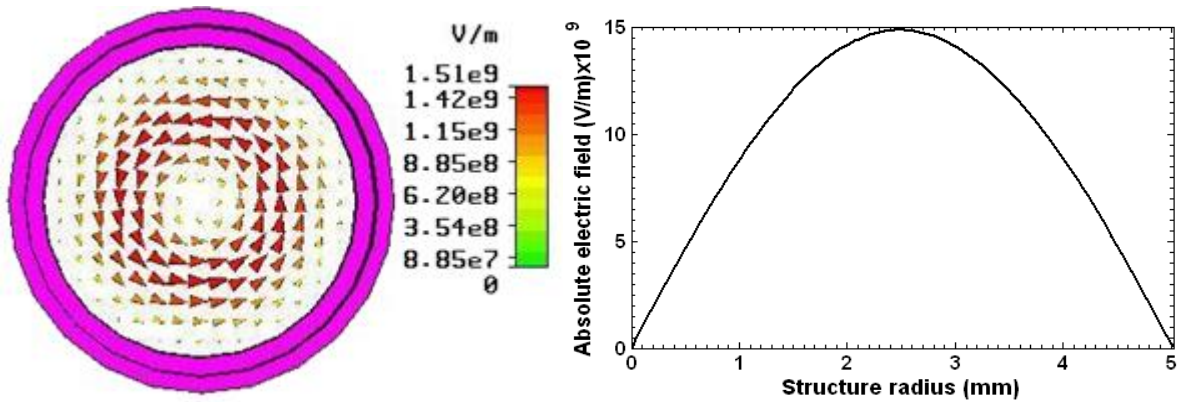
WAVE PROPAGATION IN RF STRUCTURE


```
Type        = E-Field (peak)
Monitor     = e-field (f=45) [1(3)]
Component   = Abs
Plane at x  = 0
Frequency   = 45
Phase       = 0 degrees
Maximum-2d  = 4073.79 V/m at 0 / 2.25 / 4.1
```



```
V/m

13313
11649
9985
8321
6657
4992
3328
1664
0
```

nge with up/down keys, or "Results->Select Mode
es
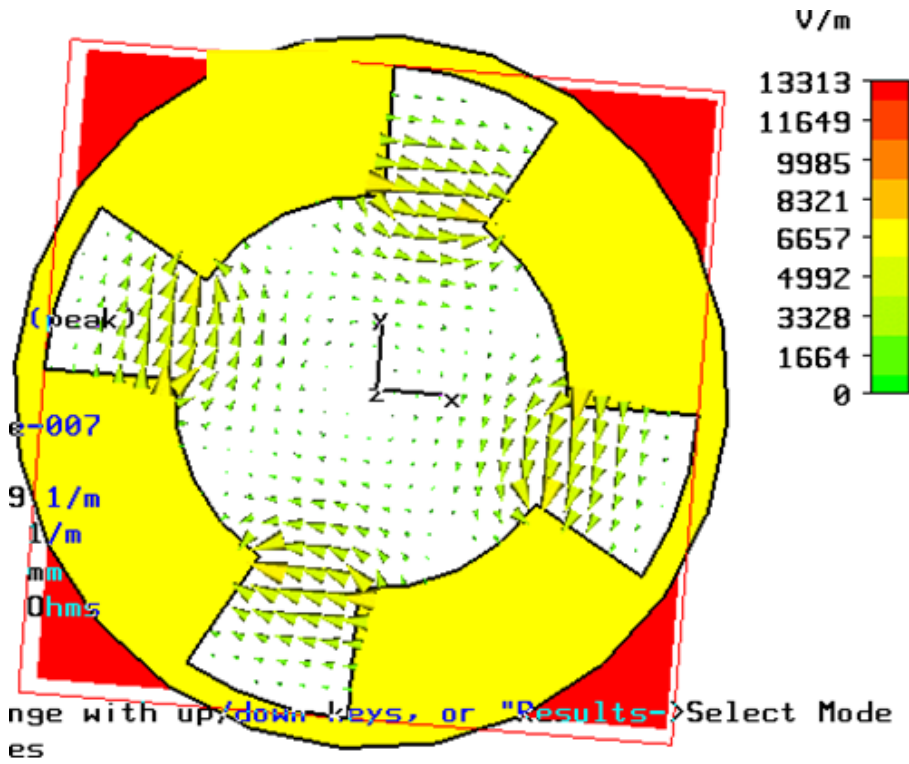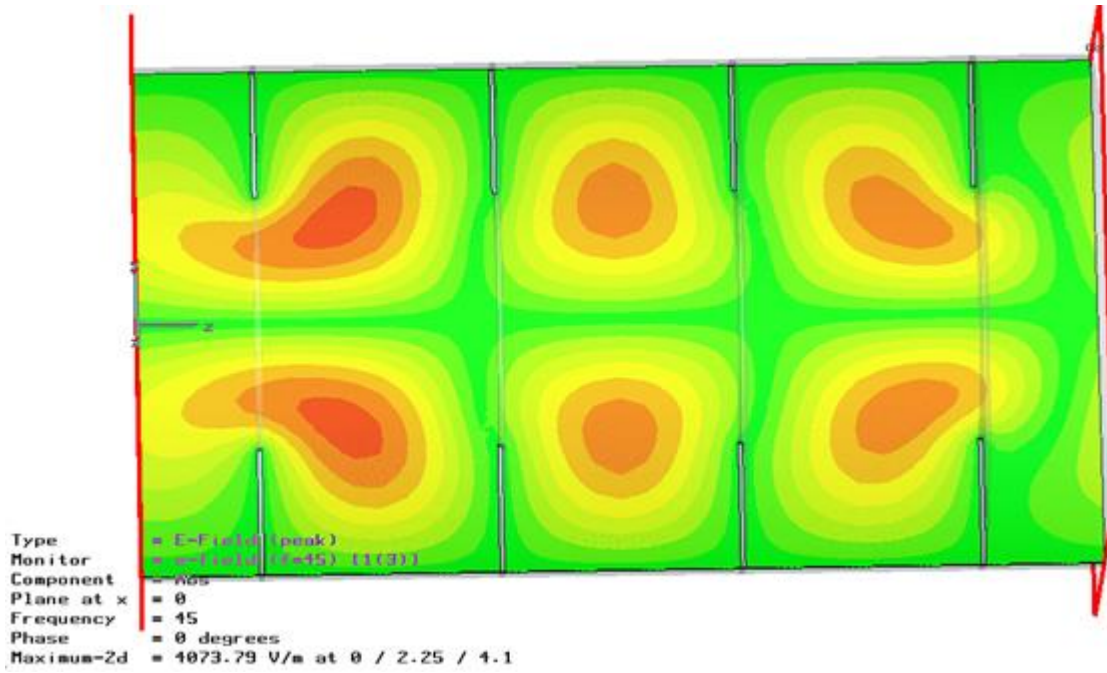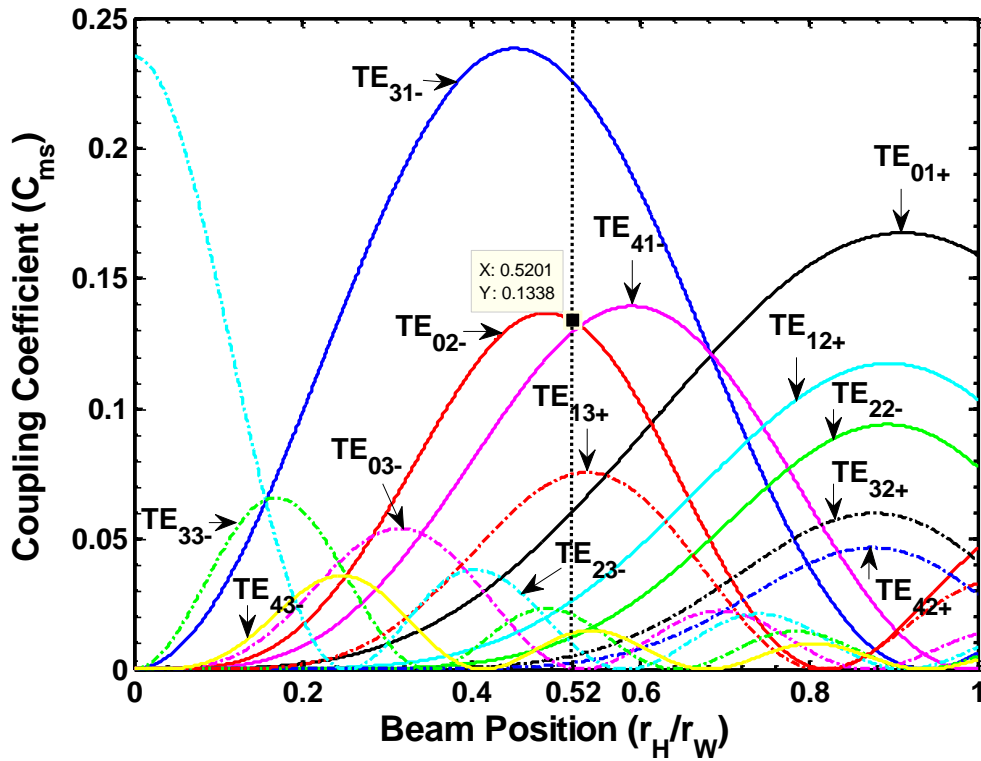
PHASE PLANE PLOTS OF THE ELECTRON BEAM
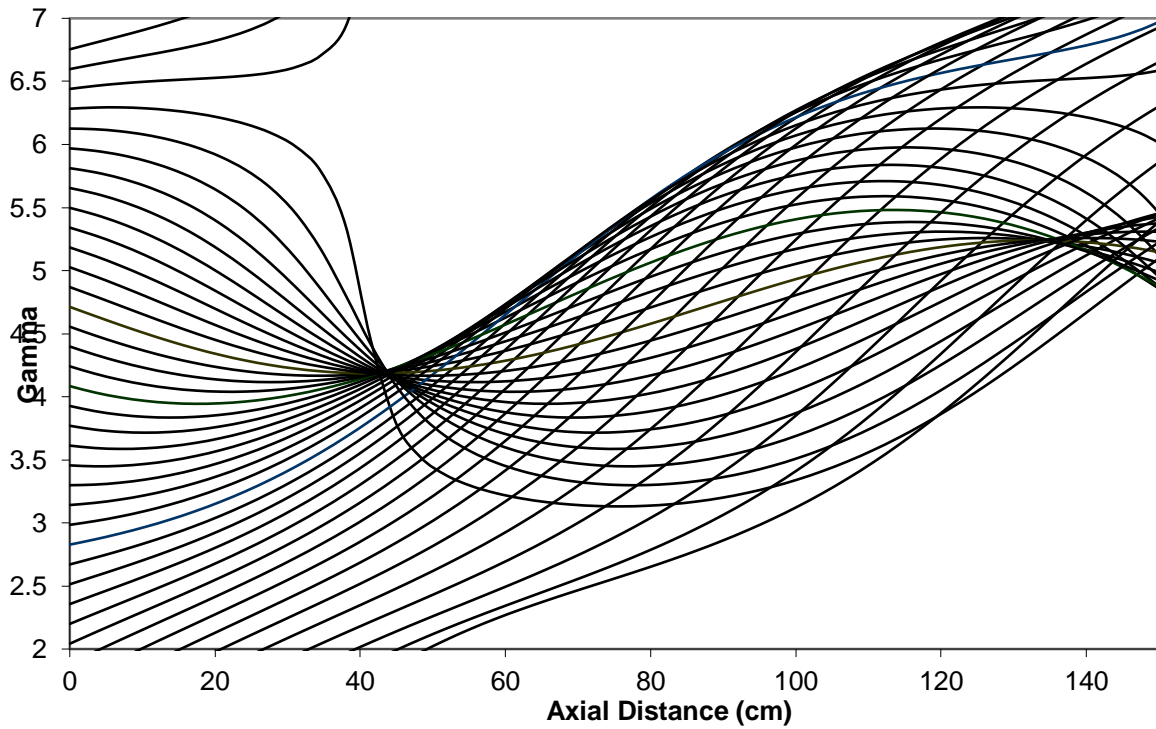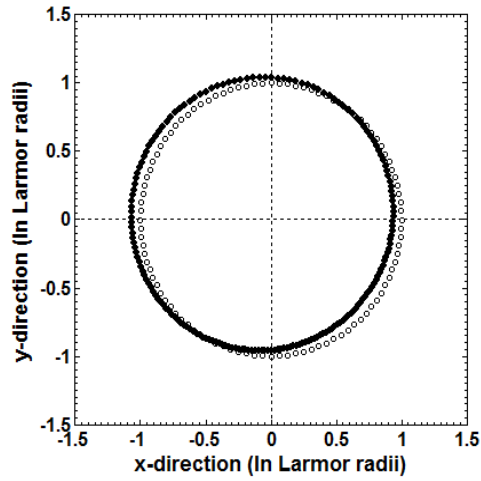
(a)
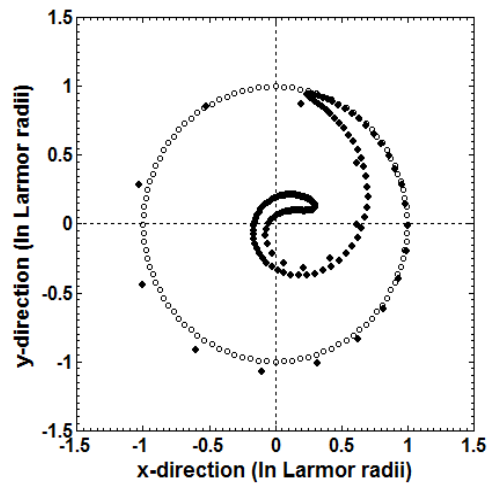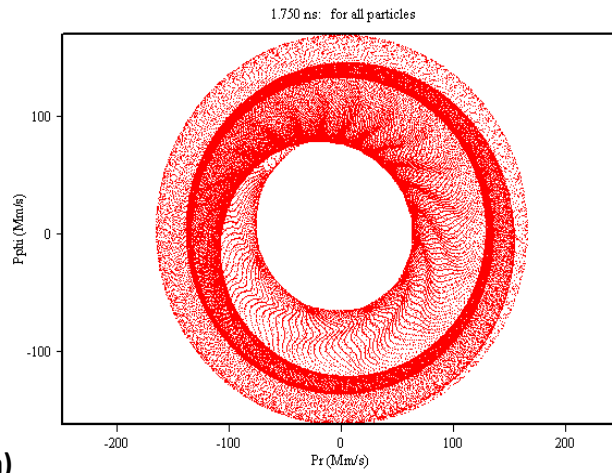
(b)

(c)
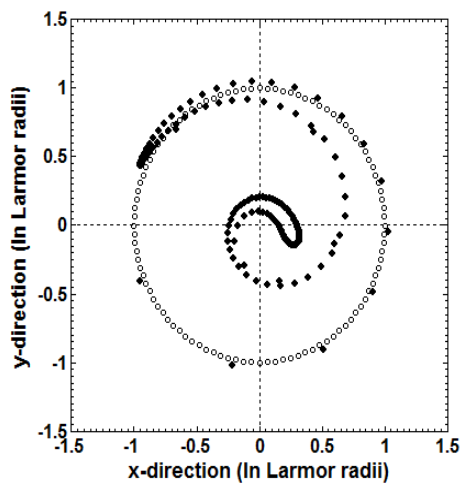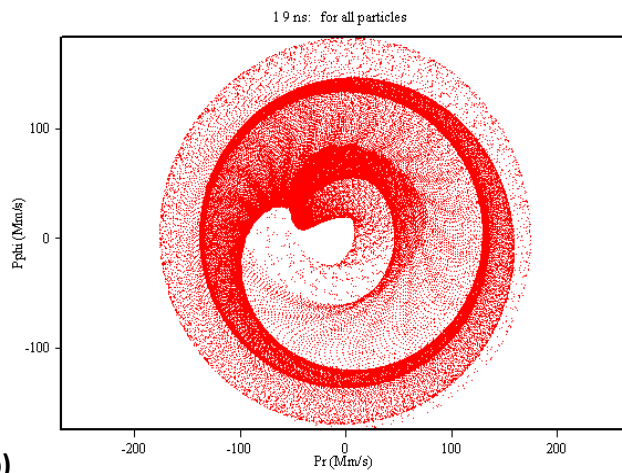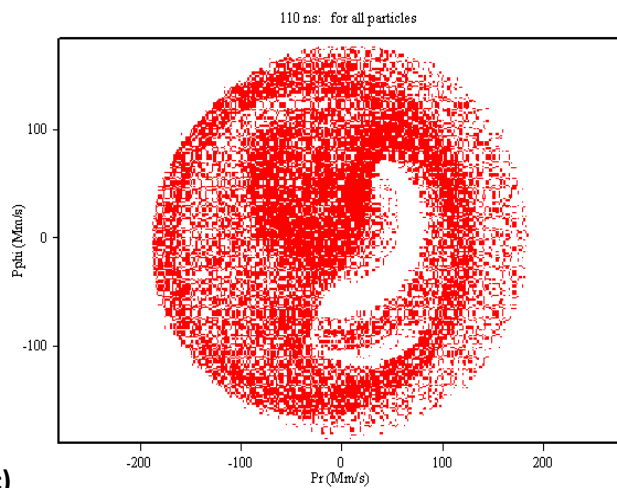
BEAM-WAVE INTERACTION IN A MULTI-STAGE GYRO-TRAVELLING WAVE TUBE AMPLIFIER

Major objectives of the project:

Major objectives of the proposed project work are:

➢ To study beam-wave interaction in a gyro-TWT amplifier and to observe individual the behavior of electrons in the interaction process.

➢ To study the effect of background magnetic field, and also the effect of electron beam velocity spread.

➢ To enhance the output power, gain, and efficiency of the gyro-TWT amplifier by using multiple stages of interaction structures.

Practical / Scientific utility:

Several applications such as high-resolution high-information density communication systems, coherent-on receive radars, etc., demand high-power, wide-band, efficient and reliable gyro-devices in the millimeter and sub-millimeters wave range. Gyro-TWTs hold a lot of promise in amplifying millimeter waves to very high power levels at good efficiencies. But a single stage gyro-TWT amplifier is not able to deliver very high peak powers at elevated frequencies. So, the need of multi-stage gyro-TWT has been felt.

DEVELOPMENT OF SOLAR & WIND ENERGY BASED MICRO-GRID AND ANALYSIS OF POWER QUALITY ISSUES IN ISLANDED AND INTERCONNECTED MODE OF OPERATION

Major objectives of the project:

Major objectives of the proposed project work are:

➢ Development of Solar and Wind based Micro-Gird.
➢ Analysis of starting characteristics of different type of connected loads and its effect on Micro-grid.
➢ Identification of power quality issues in interconnected and islanded mode of operation.
➢ To propose corrective measures to be adopted to improve power quality.

Practical / Scientific utility:

With the help of Micro-grid technology, we can find the possibilities to solve the problems related to energy security, reach of electricity, and increasing level of Green-house gas emission. Micro-grid technology is still in evolution phase and due to this there are many technical challenges yet to be overcome in the implementation of this technology. One of the major technical challenges is the power quality issues in Micro-grid. The work proposed under this project will help to provide in-depth analysis of the power quality issues in the actual Solar and Wind energy based Micro-grid and this in-turn will lead to a more feasible solution.

It is expected that the proposed study will surely help to save experimental trial cost, manpower and time during implementation/adoption of Micro-grid technology at larger scale.

DEPARTMENTAL LABORATORY FACILITIES

❖ **Improved Existing Laboratories**

First and foremost 2 existing laboratories in Electronics and Communication Engineering Department were improved .Improvement was strengthened under industry involvement and Center of Excellence(Texas Instruments). The laboratories which were strengthened are listed below:

SR.NO.	LABORATORY NAME	FACILITIES
1.	Microcontroller Design Laboratory	lab setup for microcontroller lab featuring Advance 8051 microcontroller Educational Practice Board for C8051F340 (Model - EPB_F340) All-in-one General Purpose Board (Model - ASK25) Eclipse based Integrated Development Environment (IDE) Tool
2.	Analog Electronics Laboratory (Linear Integrated Circuits Lab)	ASLK Pro kits

❖ **New Laboratories**

4 New laboratories with state of the art facilities were incorporated in Electronics and Communication Engineering department under TEQIP.

Sr No	Laboratory Name	Facilities
1.	Digital Signal Processing Laboratory	All-in -One Educational Practice Board for DSP lab • Model - EPB_C6748 • Model - EPB_C6713
2.	Analog Signal Processing Laboratory	Hardware component implementation and analysis with Agilent Analog Electronic Lab Solution with Trainer Kit including Oscilloscope, Power supply, Multimeter, GPIB & Kit
3.	VLSI Design Laboratory	TEQIP II • Software Xilinx ISE System Edition 16.4 • Microwind 3.5 package • System Crafter SC Version • Advance VLSI Proto Board • Xilinx Spartan ® 6FPGA • Xilinx Virtex ® Board with aerial Ethernet cable of 5 V Power supply • CPLD(Xilinx Xc 95108PC84) Development Board TEQIP III • Cadence Virtuoso 6.1.7 (10 user)
4.	IoT laboratory	Following modules are available: • IOT Node - EPB_1768 • IOT Node - EPB_M4 • All-in- one General Purpose Board • IOT Gateway • Sensor Modules

FACULTY RESEARCH CONTRIBUTION

Name Of Faculty	Qualification	Area of specialization	Areas of Research Interest
Dr. V.K. Singh	PhD	Analog Signal Processing and Signal generation	Analog Signal Processing and Signal generation VLSI, CAD Testing
Dr. Neelam Srivastava	PhD	Microwave Engineering	Microwave Circuits, Optical Communication, Wireless & Mobile Communication
Dr. S.R.P. Sinha	PhD	Microelectronics, VLSI Technology.	VLSI Technology and Device Modeling
Dr. Subodh Wairya	PhD	VLSI Design & High Speed Network	VLSI, CAD Testing, Nano Technology, High Speed Networks
Dr. RCS Chauhan	PhD	Optical and Digital Communication	Computer networks, Bio-signal Processing,
Dr. R K Singh	PhD	Microwave Engineering	Microwave Circuits, RF Communication, Antenna Design

FULL TIME FACULTY CUM RESEARCH FELLOW PURSUING/ AWARDED PH.D

File Name	Guide Name	Research Scholar	Topic	University	Date of Registration	PhD Status
Ph.D/ECE/13	Dr. Subodh Wairya	Neeraj Kumar Mishra	"Design and Testability of Diverse Reversible Logic Circuits for Low cost Nanoelectronics Application"	AKTU	14/07/2013	PhD awarded 2017
Ph.D/ECE/14/1380	Dr. Neelam Srivastava	Suchita Shukla	"Performance evaluation and Optimization of Cooperative Spectrum sensing with energy detector in cognitive Radios"	AKTU	14/07/2014	PhD awarded 2019
Ph.D/ECE/16/2047	Dr. S.R.P Sinha	Anand Kumar Singh	"Optimization of Fin FET for low power and Robust memory cells"	AKTU	10/03/2016	PhD ongoing
Ph.D/ECE/16/2051	Dr. Neelam Srivastava Dr. Rajiv Kr Singh	Ashish Kumar Rao	"Through put Optimization of energy efficient cooperative system sensing in cognitive radio networks"	AKTU	10/03/2016	PhD ongoing
Ph.D/ECE/17/2211	Dr. Subodh Wairya	Anum Khan	"Performance evaluation of new design methodologies for low power high speed VLSI circuits in nano technology Applications"	AKTU	12/11/2017	PhD ongoing
Ph.D/ECE/17/2212	Dr. Ram Chandra Singh Chauhan	Gayatri Tiwari	"Studies of optical CDMA system"	AKTU	12/11/2017	PhD ongoing
Ph.D/ECE/18/2211	Dr. Rajiv Kr Singh Dr. Subodh Wairya	Vinay Kumar	"Beam Wave Interaction in a multi-stage Gyro-Travelling Wave Tube Amplifier"	AKTU	12/09/2018	PhD ongoing
Ph.D/ECE/19/2389	Dr. Rajiv Kr Singh Dr. Subodh Wairya	Jitendra Shukla	"EM analysis and Simulation of High Gain Wideband Gyro TWT Amplifier"	AKTU	23/03/2019	PhD ongoing
Ph.D/ECE/19/2290	Dr. Rajiv Kr Singh	Sonmati Verma	"Compact and Wideband Microstrip Patch Antenna for Wireless Application"	AKTU	23/03/2019	PhD ongoing
	Dr. Subodh Wairya Dr. RCS Chauhan	Anurag Yadav	" Performance evaluation of low power high speed VLSI Design and application with data converter architecture"	AKTU	22/08/2019	PhD ongoing

FACULTY PUBLICATIONS

Dr. V. K. Singh

Name of Faculty	Type of Publication	Publication details	Publication Year	SCI/ Scopous /UGC
V. K Singh	Papers published in refereed International/ National Journals	D. K. Srivastava, V. K. Singhand R. Senani, 2015, 'New Very Low Frequency Oscillator Using only a Single CFOA', *American Journal of Electrical and Electronic Engineering,* vol. 3, no.1, pp. 1-3.	2015	No
		D. K. Srivastava, V. K. Singh and R. Senani, 2015, 'Novel single-CFOA-based sinusoidal oscillator capable of absorbing all parasitic impedances', *American Journal of Electrical and Electronic Engineering,* vol. 3, no. 3, pp. 71-74.	2015	No
		Manoj Kumar Jain, V. K. Singh and R. Senani, 2015, 'A bibliography of the work done on Externally-linear-internally-nonlinear circuits during 1979-2014, *American Journal of Electrical and Electronic Engineering,* vol. 3, no. 3, pp. 64-71.	2015	No
		Neeraj Kumar Misra, Subodh Wairya and Vinod Kumar Singh, 2015 'Approaches to Design Feasible Error Control Scheme Based on Reversible Series Gates', *European Journal of Scientific Research*, vol. 129, no. 3, pp 224-240.	2015	No
		Neeraj Kumar Misra, Subodh Wairya and Vinod Kumar Singh, 2015, 'Frame of Reversible BCD Adder and Carry Skip BCD Adder and Optimization Using New Reversible Logic Gates for Quantum-Dot Cellular Automata', *Australian Journal of Basic and Applied Sciences*, vol. 9, no. 31, pp. 286-298.	2015	No
		Neeraj Kumar Misra, SubodhWairya and Vinod Kumar Singh, 2016 "Approach to Design a High Performance fault-Tolerant Reversible ALU", *International Journal of Circuits and Architecture design*, vol. 2, no. 1, pp. 83-103. https://doi.org/10.1504/IJCAD.2016.075913	2016	No
		D. R. Bhaskar, D. Prasad, R. Senani, M. K. Jain, V. K. Singh and D. K. Srivastava, 2016, 'New fully-uncoupled current controlled sinusoidal oscillator employing grounded capacitors',*American Journal of Electrical and Electronic Engineering,* vol. 4, no. 3, pp. 81-84.	2016	No
		M. K. Jain and V. K. Singh, 2016, 'New Log-domain first order multifunction filter using MOSFET in weak inverson', *Circuits and systems,* vol. 7, pp. 3522-3530.	2016	No
		Neeraj Kumar Misra, Subodh Wairya, and Vinod Kumar Singh, 2015, 'Optimized Approach for Reversible Code Converters Using Quantum Dot Cellular Automat', Proc 4th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA), Springer India, pp. 367-378.	2015	No
		Raj Senani, D. R. Bhaskar, V. K. Singh and R. K. Sharma, 'Sinusoidal Oscillators and Waveform Generators using Modern Electronics Circuit Building Blocks', 2016, ISBN 978-3-319-23711-4, 978-3-319-23712-1.	2016	No

Dr. S.R.P. Sinha

Name of Faculty	Type of Publication	Publication details	Publication	SCI/ Scopous /UGC
Dr. SRP Sinha	Papers published in refereed International Journal	Vijendra Pratap Singh, S.R.P.Sinha, , Design and Implementation of Adiabetic Logic for Low Power Application, IJSR, Vol 4,Issue 8, August 2015., 2015,	2015	No
		S.R.P. Sinha, Namita Tiwari,, Design and Analysis of Dynamic Current Mode Full Adder with Reduced Power and Delay, IJSR, Vol 4,Issue 11, November 2015, 2015,	2015	No
		Shashank Shekhar, S.R.P.Sinha, Design and Analysis of Dynamic Comparator with Reduced Power and Delay, IJSR, Vol 4,Issue 11, November 2015., 2015,	2015	No
		Daya Nand Gupta, S.R.P.Sinha,, Design and Simulation of NOT and NAND Gate Using Hybrid SET-MOS Technology, IJSR, Vol 4,Issue 12, December 2015., 2015,	2015	No
		Daya Nand Gupta, S.R.P.Sinha,, Design and Simulation of 2:4 Decoder Using Hybrid SET-MOS Technology, IJCA, Vol 133 – No.1, January 2016., 2016,	2016	No

		Neha Yadav, S.R.P.Sinha, Performance Evaluation of Binary to Gray Code Converters Using Quantum Dot Cellular Automata, IJSR, Vol 6,Issue 7,July 2017, 2017,	2017	No
		Deepika Shukla, S.R.P.Sinha,, Efficient Design of 1- bit Low Power Full Adder Using GDI Technique, IJSR, Vol 6,Issue 7,July 2017, 2017,	2017	No
		Aayushi Vijh, S.R.P. Sinha,, Design of a CMOS Bandgap Voltage Reference Circuit with High PSRR and Low Temperature Coefficient using 180 nm Technology, JETIR,Vol. 5, Issue 11, pp. 261-270,November 2018. , 2018,	2018	No
		Neha Tiwari, S.R.P.Sinha, , Design of High Gain and Large Voltage Swing Two Stage Miller Compensated CMOS Operational Amplifier, JETIR,Vol. 5, Issue 11, pp. 724-732, November 2018. , 2018,	2018	No
	National Conference paper	Anand Kumar Singh, S.R.P.Sinha, Design and Performance Issues of Memory Cell using FinFET : A Review, National Conference on Emerging Trends in Electrical and Electronics Engineering NCETEEE-16, at IET Lucknow,19-20, August 2016., 2016,	2016	No
		Durgesh Patel, S.R.P.Sinha,, Analysis of Energy Efficient Adiabatic Logic Circuits, National Conference on Emerging Trends in Electrical and Electronics Engineering NCETEEE-16, at IET Lucknow,19-20, August 2016., 2016,	2016	No
		Prateek Agrawal, S.R.P.Sinha, Improvement over the Limitations of CMOS Technology Using Quantum-dot Cellular Automata, National Conference on Emerging Trends in Electrical and Electronics Engineering NCETEEE-16, at IET Lucknow,19-20, August 2016., 2016,	2016	No

Dr. Neelam Srivastava

Name of Faculty	Type of Publication	Publication details	Publication	SCI/ Scopous /UGC
Dr. Neelam Srivastava	Papers published in refereed International Journal	Rana Vikram Pratap Singh Yadav, Neelam Srivastava, "Design of High Speed Flash Analog to Digital Converter Using Multiplexer and Comparator", International Journal of Science and Research, Vol. 5, Issue 6, pp2170-2173, June 2015.	2015	No
		Nitin Jain & Dr. Neelam Srivastava," Comparison of TCP I-Vegas with TCP Vegas in Wired-cum-Wireless Network", International Journal of Scientific & Engineering Research, Volume 6, Issue 7, pp 1169-1177,July-2015.	2015	UGC
		Deepak Mehra, Dr. Neelam Srivastava, "RSA Cryptosystem Using Verilog", International Journal of Science and Research(IJSR),Vol. 4,Issue 8,pp639-642, August 2015.	2015	No
		Atul Chaturvedi, Neelam Srivastava ,Varun Shukla, "A Secure Wireless Communication Protocol using Diffie-Hellman Key Exchange", International Journal of Computer Applications, Vol. 126,no. 5, pp33-36 September 2015.	2015	No
		Atul Chaturvedi, Neelam Srivastava, Varun Shukla, S.P. Tripathi, Manoj Kumar Mishra, "A Secure Zero Knowledge Authentication Protocol For Wireless (Mobile) Ad-Hoc Networks", International Journal of Computer Application, Vol. 128, No.2, pp36-39, October 2015.	2015	No
		Varun Shukla, Atul Chaturvedi, Neelam Srivastava, " A New Secure Authenticated Key Agreement Scheme for Wireless (Mobile) Communication in an EHR System using Cryptography", Communications on Applied Electronics (CAE), Foundation of Computer Science FCS, New York, USA Volume 3– No.3,pp16-21, October 2015.	2015	No
		Suchita Shukla and Neelam Srivastava, 'An overview on cooperative spectrum sensing in cognitive radios', Int. J. Wireless and Mobile Computing, Vol. 11, No. 4,pp.267-276, 2016	2016	Scopus
		Rupali Agarwal, Neelam Srivastav, Himanshu Katiyar, "Analysis of Switch and Examine Combining with Post Examining Selection in Cognitive Radio" in International Journal of Electronics (Taylor & Francis), Vol. 105, No. 6, pp. 941-950 oct-nov' 2017.	2017	No
		Varun Shukla, Neelam Srivastava, et.al, Secure Wireless Communication Protocol: To Avoid Vulnerabilities in Shared Authentication, Communications on Applied Electronics (ISSN: 2394-4714), USA, Volume 7 – number 6, 2017	2017	No
		Varun Shukla, Neelam Srivastava, et.al, A Secure Wireless Peer to peer Authentication Protocol using Triple Decomposition Problem, Asian Journal of Mathematics and Computer Research,volume 22, issue 2, 2017.	2017	UGC
		Varun Shukla, Neelam Srivastava, et.al, On Post Quantum Cryptographic Methods for Wireless Communication (Paper accepted), International Journal of Engg.& Technology, UAE, 2018.	2018	No
		Alka Verma, Neelam srivastava, "Polarizationed dependent Electromagnetic Band Gap (PDEBG) Structures with Circularly Polarized Antenna: A Review", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 14, No. 2, 2019	2019	Scopus
		Vinod Kumar, Neelam srivastava, "Chinese Remainder Theorem based fully Homomorphic Encryption over Intergers", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 14, No. 2, 2019.	2019	Scopus

		Ashish Kumar Rao, Rajiv Kumar Singh, Neelam srivastava, "In-band full duplex radio- A Survey", International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 14, No. 2, 2019.	2019	Scopus
	National Journal paper	Suchita Shukla, Abhishek Singh, Atul Singh, Neelam Srimastava, ' Optimization of Cognitive Engine Design Using Cultural Algorithm', Indian Journal of Science and Technology, Vol 10(21),2017.	2017	No
	International Conference paper	Ashish Kumar Rao, Suchita Shukla and Neelam Srivastava "Spectrum Assignment in Cognitive Radio Network: A Survey" (ICETEESES) March 11-12 2016 organized by KNIT Sultanpur, technically sponsored by IEEE UP Section (India) Under the Aegis of World Bank TEQIP-II Project.	2016	No
		Suchita Shukla, Ashish Kumar Rao and Neelam Srivastava "A Survey on Energy Detection Schemes in Cognitive Radios" (ICETEESES) March 11-12 2016 organized by KNIT Sultanpur, technically sponsored by IEEE UP Section (India) Under the Aegis of World Bank TEQIP-II Project.	2016	No
		Rupali Agarwal, Neelam Srivastava and Himanshu Katiyar "Energy Detection of Unknown Signals over Rayleigh Fading Channel for EGC and SSC Diversity Combining Techniques" (ICETEESES) March 11-12 2016 organized by KNIT Sultanpur, technically sponsored by IEEE UP Section (India) Under the Aegis of World Bank TEQIP-II Project.	2016	No
		Ashish Kumar Rao, Suchita Shukla, Neelam Srivastava, "Spectrum Sensing Schemes in Cognitive Radio Networks: A Survey", National Conference on Emerging Trends in Electrical & Electronics Engineering NCETEEE'16, 19-20 August 2016.	2016	No
		Varun Shukla, Neelam Srivastava, et.al, A bit commitment signcryption protocol for wireless transport layer security (WTLS), 2016 IEEE Uttar Pradesh Section International Conference on Electrical, Computer and Electronics Engineering (UPCON)[IIT-BHU],	2016	No
		Varun Shukla, Neelam Srivastava, et.al, A Cryptographic Key Agreement Communication Protocol for Data Management System, IEEE International conference on advanced computing and software engineering (ICACSE)[KNIT, Sultanpur], 2016	2016	No
		Varun Shukla, Neelam Srivastava, Atul Chaturvedi, "A Two Party Communication Protocol for Financial Transactions Using Discrete Logarithm Problem", National Conference on Emerging Trends in Electrical & Electronics Engineering NCETEEE'16, 19-20 August 2016.	2016	No
		Varun Shukla, Atul Chaturvedi , Neelam Srivastava, "An Authenticated Key Agreement Protocol for Wireless Communication Using Cryptography", National Conference on Emerging Trends in Electrical & Electronics Engineering NCETEEE'16, 19-20 August 2016.	2016	No
		Arun Kumar Singh, Neelam Srivastava, Piyush Singh, "Review on Various Filters to Suppress Impulsive Noise from Speech Signal", National Conference on Emerging Trends in Electrical & Electronics Engineering NCETEEE'16, 19-20 August 2016.	2016	No
		Alka Verma, Manish Singh, Neelam Srivastava, "Bandwidth Enhancement methods of Rectangular Microstrip Antenna", National Conference on Emerging Trends in Electrical & Electronics Engineering NCETEEE'16, 19-20 August 2016.	2016	No
		Rupali Agarwal, Neelam Srivastava, Himanshu Katiyar, "On the Energy Detection of Unknown Signals over Fading Channel for Different Diversity Combining Techniques" in proc. of conf. "IEOM-2016" held in Quala Lampur, Malaysia.	2016	No
		Suchita Shukla, Abhishek Singh, Ashish Kumar Rao, Neelam Srivastava, ' A Survey on Optimization Techniques For Cognitive Engine Design in Cognitive Radio Networks, Proc. International Conference on Advance Computational Techniques in Information and Communication Technology (ICACTICT) , KNIT Sultanpur , 23-24 September 2016.	2016	No
		Atul Chaturvedi, Manoj Kumar Misra, A New Key Agreement Protocol Using BDP and CSP in Non Commutative Groups		No
		Varun Shukla, Neelam Srivastava, et.al, Peer to Peer Authentication Method for Wireless Communication Using RSA Cryptosystem, IEEE international conference, ESAR-18, Rama university, Kanpur, 2018.	2018	No
		Varun Shukla, Neelam Srivastava, et.al, A secure entity authentication procedure for data communication, International conference on science technology and social humanities, ICSTSH, Dr.BRA University, Agra, 2018	2018	No
		Arun Kumar Singh, Neelam Srivastava and Saurabh Dixit," Optimizing Resource Allocation of MIMO OFDM in 4G and Beyond Systems," International Conference on VLSI, Communication and Signal Processing, MNIT Allahabad, 2018.	2018	No
		Ashish Kmar Rao, Rajiv Kumar Singh, Neelam Srivasatava, "Full-Duplex Wireless Communication in Cognitive Radio Networks: A Survey, International Conference on VLSI, Communication and Signal Processing, MNIT Allahabad, 2018.	2018	No
		Varun Shukla, Neelam Srivastava and Atul Chaturvedi, "On Security of Routing Protocols" International Conference on Emerging Trends in Technology and	2019	No

		Applications, Rajkiya Engineering College, Kannauj, 2019.		
		Varun Shukla, Neelam Srivastava and Atul Chaturvedi, "A Lightweight Authentication Mechanism" International Conference on Emerging Trends in Technology and Applications, Rajkiya Engineering College, Kannauj, 2019.	2019	No

Dr. Subodh Wairya

Name of Faculty	Type of publication	Publication details	Year of	SCI/ Scopous /UGC
Subodh Wairya	Conference Paper	Prashasti, Shivangi Jaiswal, Anum Khan, Subodh Wairya, "High Performance and Low Power D Flip-Flop using Pulsed Latch Technique", International Journal of Applied Engineering Research ISSN 0973-4562 vol. 14, no. 2, pp. 301-305, 2019 (Special Issue), URL: http://www.ripublication.com/ijaerspl2019/ijaerv14n2spl_34.pdf (Scopus).	2019	No
	Journal Paper	Divya Tripathi and Subodh Wairya, "Performance Evaluation of Low Power Carry Save Adder for VLSI Applications" International Journal of VLSI design & Communication Systems (VLSICS) vol. , no. , pp. 29-48, June 2018.	2018	No
	Journal Paper	A Singh, MK Jain, S Wairya,Novel Lossless Grounded and Floating Inductance Simulators Employing a Grounded Capacitor Based on CC-CFA,Journal of Circuits, Systems and Computers, 1950093	2018	Scopus
	Conference Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, Bandan Boi., 2017, Novel parity preserving reversible Binary-to-BCD code converter with testability of building blocks in quantum circuit, In: Proceedings of the 2nd International Conference on Computational Intelligence & Informatics (ICCII-2017). Advances in Intelligent Systems and Computing, Springer (AISC), Index No. 1375. *Lecture Notes in Computer Science LNCS, Springer*.	2018	No
	Conference Paper	Ritesh Singh, Neeraj Kumar Misra, Subodh Wairya, BandanBoi., Implementation of Non-Restoring Reversible Divider Using a Quantum Dot Cellular Automata, In J. Nayak, et al., (eds) Proceedings of the 4th International Conference on Computational Intelligence in Data Mining (ICCIDM-2017). Advances in Intelligent Systems & Computing, Springer (AISC), (In Press) https://doi.org/10.1007/978-981-10-8055-5_41	2017	No
	Book/Book Chapters Published In Springer	Neeraj Kumar Misra, Subodh Wairya, Bibhash Sen., Design and Testability of Diverse Reversible Error Control Circuits, LAP Lambert Academic Publishing German, Pages 107, DOI: 978-620-2-01508-0.	2017	Springer
	Book/Book Chapters Published In Springer	Neeraj Kumar Misra, Subodh Wairya, V. K. Singh., 2016, Optimized Approach for Reversible Code Converters Using Quantum Dot Cellular Automata. In: Das S., Pal T., Kar S., Satapathy S., Mandal J. (eds) Proceedings of the 4th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA),Advances in Intelligent Systems and Computing, Springer, Vol 404. pp 367-378.	2016	Springer
	Journal Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, "Novel Tree Structure Based Conservative, Reversible BCD Adder With Added Testability In Quantum Circuits", *Quantum Matter, American Scientific Publisher* (Valencia, California, USA),	2017	No
	Journal Paper	Neeraj Kumar Misra, Subodh Wairya, Bibhash Sen, "Design of conservative, reversible sequential logic for cost efficient emerging nano circuits with enhanced testability", *Ain Shams Engineering Journal, Elsevier (*Amsterdam*, Netherlands)*, 11 pages, pp. 1-11, DOI: 10.1016/j.asej.2017.02.005.	2017	ESCI
	Journal Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, Towards designing efficient reversible binary code converters and a dual-rail checker for emerging nanocircuits. *Journal of Computational Electronics, Springer (New York, USA)*, 17 pages, pp. 1-17, DOI: 10.1007/s10825-017-0960-4.	2017	No
	Journal Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, Bandan Boi, "Testable Novel Parity-Preserving Reversible Gate and Low-Cost Quantum Decoder Design in 1D Molecular-QCA", *Journal of Circuits, Systems and Computers, World Scientific (Singapore)*, 26 pages, pp. 1-26, DOI: 10.1142/S0218126617501456.	2017	No
	Journal Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, Novel Conservative Reversible Error Control Circuits Based On Molecular-QCA', *International Journal of Computer Applications in Technology, Inderscience Publishers* (Switzerland), Vol. 56, No. 1, 2017.	2017	Scopus
	Journal Paper	Neeraj Kumar Misra, Bibhash Sen, Subodh Wairya, "Designing Conservative Reversible N-Bit Binary Comparator for Emerging Quantum-Dot Cellular Automata Nano Circuits", Journal of Nano-engineering and Nano-manufacturing *American Scientific Publisher (Valencia, California, USA)*, 16 pages, Vol. 6, No. 3, pp. 201-216, DOI:10.1166/jnan.2016.1286	2016	No
	Conference Paper	Shraddha Pandey, Sonali Singh and Subodh Wairya, "QCA IMPLEMENATATION OF XOR BASED FULL ADDER CIRCUIT USING CLOCK-ZONE BASED CROSSOVER" in National Conference Emerging Trends in Electrical & Electronics Engineering (NCETEEE'16) ,organized by Department of Electrical Engineering &Department of Electronics & Communication Engineering Institute of Engineering & Technology, Lucknow, 19-20 August, 2016.	2016	No

Conference Paper	Shashank Gupta and Subodh Wairya," Gate Diffusion Input (GDI): A Technique for Enhancing Performance of the Arithmetic Circuit" National Conference Emerging Trends in Electrical & Electronics Engineering (NCETEEE'16) ,organized by Department of Electrical Engineering &Department of Electronics & Communication Engineering Institute of Engineering & Technology, Lucknow, 19-20 August, 2016.	2016	No
Journal Paper	Prateek Agrawal, S.R.P. Sinha, Neeraj Kumar Misra, and Subodh Wairya "Design of Quantum Dot Cellular Automata Based Parity Generator and Checker with Minimum Clocks and Latency" International Journal of Modern Education and Computer Science (IJMECS) vol. 8, no. 8, pp 11-20, August 2016.	2016	No
Journal Paper	Sonali Singh, Shraddha Pandey and Subodh Wairya, "Modular Design of 2^n:1 Quantum Dot Automata Multiplexers and its Application via Clock zone based Crossover" International Journal of Modern Education and Computer Science (IJMECS) vol. 8, no. 7, PP 41-52, July 2016,	2016	No
Journal Paper	Shraddha Pandey, Sonali Singh and Subodh Wairya, "Designing an Efficient Approach for JK and T flip-flop with Power Dissipation Analysis using QCA" International Journal of VLSI design & Communication Systems (VLSICS) vol.7, no.3, pp. 29-48, June 2016.	2016	No
Journal Paper	Shashank Gupta and Subodh Wairya, "Hybrid Code Converters using Modified GDI Technique" International Journal of Computer Applications, vol. 143, no.7, pp. 12-19, June 2016.	2016	No
Journal Paper	Shashank Gupta and Subodh Wairya, "A GDI Approach to Various Combinational Logic Circuits in CMOS Nano Technology" International Journal of Engineering and Computer Science ISSN: 2319-7242 vol. 5, Issue 4 April 2016, pp. 16243-16247.	2016	No
Journal Paper	Prateek Agrawal, S.R.P. Sinha, Subodh Wairya, "Quantum Dot Cellular Automata Based Parity Generator And Detector: A Review", International Journal of Electronics and Communication Engineering (IJECE), vol. 5, Issue 3, pp. 41-50.	2016	No
Journal Paper	Neeraj Kumar Misra, Subodh Wairya, Vinod Kumar Singh "Approaches to Design a High Performance Fault-Tolerant Reversible ALU," International Journal of Circuits and Architecture Design, vol. 2, Issue 1, pp. 83-103, Inderscience Publishers (IEL), 2016.	2016	No
Book/Book Chapters Published In Springer	Neeraj Kumar Misra, Subodh Wairya, and V. K. Singh. "Optimized Approach for Reversible Code Converters Using Quantum Dot Cellular Automata." Advances in Intelligent Systems and Computing (AISC), pp. 367-378, 2015 Springer India.	2015	Springer
Journal Paper	Neeraj Kumar Misra, Subodh Wairya, and V. K. Singh."Frame of Reversible BCD Adder and Carry Skip BCD Adder and Optimization Using New Reversible Logic Gates for Quantum-Dot Cellular Automata" Australian Journal of Basic and Applied Sciences, vol. 9, issue 31, 2015, pp. 286-298.	2015	No
Journal Paper	Vijata, Subodh Wairya, "A Study of Two Stage Operational Transconductance Amplifier using Floating gate MOSFET", International Journal Of Engineering And Computer Science, vol 4, issue 10, Oct 2015, pp. 14643-14648.	2015	No
Journal Paper	Neeraj Kumar Misra, Mukesh Kumar Kushwaha, SubodhWairya and Amit Kumar," Feasible methodology for optimization of a novel reversible binary compressor" International Journal of VLSI design & Communication Systems (VLSICS) vol. 6, no.4, August 2015.	2015	No
Journal Paper	Neeraj Kumar Misra, Mukesh Kumar Kushwaha, SubodhWairya and Amit Kumar," Cost Efficient Design of Reversible Adder Circuits for Low Power Applications" International Journal of Computer Applications vol. 117, no.19, May 2015.	2015	No
Journal Paper	Avinash Singh, Subodh Wairya, " A 16-Bit Ripple Carry Adder Design Using High Speed Modified Feedthrough Logic", International Journal of Engineering And Computer Application (IJECS), vol. 4, issue 5, pp. 12058-12061, May 2015.	2015	No
Journal Paper	P Sharma, Subodh Wairya, " A Feasible Approach to Design a CMOS Domino Circuit at Low Power VLSI Application", International Journal Of Engineering And Computer Science, vol 4, issue 7, pp. 13055-13060, July 2015.	2015	No
Journal Paper	Avinash Singh, Subodh Wairya, "An Improved Feedthrough Logic for Low Power and High Speed Arithmetic Circuits", International Journal of Science and Research (IJSR), vol. 4, issue 5, pp-2277-2280, 2015.	2015	No
Journal Paper	AnkitaAgarwal &Subodh Wairya "Cross layer Optimization of Optical Node in High Speed Network" International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181 vol. 4, issue 11, pp 599-603, November-2015.	2015	No
Journal Paper	Neeraj Kumar Misra, Subodh Wairya, Vinod Kumar Singh "Approaches to Design Feasible Error Control Scheme Based on Reversible Series Gates," European Journal of Scientific Research, vol. 129, no. 3 February, 2015, pp.224 – 240.	2015	No
Conference Paper	Neeraj Kumar Misra, Subodh Wairya, and V. K. Singh. "Optimized Approach for Reversible Code Converters Using Quantum Dot Cellular Automata." In Proceedings of the 4th International Conference on Frontiers in Intelligent Computing: Theory and Applications (FICTA) 2015, National Institute of Technology (NIT), Durgapur, India pp. 367-378, Oct. 2015.	2015	No

Dr Rajiv Kumar Singh

Name of faculty	Type of publication	Publication details	Year of publication	SCI/ Scopous /UGC
Dr. Rajiv Kumar Singh	International Journal Publications	R.K.Singh, "Large-signal analytical approach to disc-loaded gyro-TWT amplifier," IET Microw. Antennas Propagation., vol. 9, no. 11, pp. 1-7, July 2015, ISSN 1751-8725, DOI: 10.1049/iet-map.2015.0067. (Impact factor: 0.817).	2015	Scopus
		R.K.Singh and Ekta Singh, "Effects of 2.4GHz electromagnetic radiation on morphological and physiological characteristics in Cicer Areitinum" J. Chem. Pharmaceutical Res., vol. 7(10), pp. 61-64, Nov. 2015, ISSN: 0975-7384 (SJR 0.32).	2015	Scopus
		R. K. Singh, "Electron beam positioning in a disc-loaded gyro-TWT amplifier", J. Computational Electronics, 2017, Accepted (In production).	2017	SCI
		Raj Vikram Singh, Subodh Waria, R.K. Singh, Harsh Vikram Singh, "Robust Watermarking using Genetic Algorithm in DCT Domain", Int. J. of Engg. & Tech., 7, 3.12, 1202 -1204, 2018 (Scopus).	2018	No
		Rashid Jamal, Indra Kumar Singh, and Rajiv Kumar Singh, "Development of 2.45 GHz Patch antenna and measurement of SAR over Human head model," International Journal of Applied Engineering Research ISSN 0973-4562 vol. 14, no. 2, pp. 221-226, 2019 (Special Issue), URL: http://www.ripublication.com/ijaerspl2019/ijaerv14n2spl_41.pdf (Scopus).	2019	Scopus
		Rashid Jamal, Rajiv Kumar Singh, and Indra Kumar Singh, "A basic concept to anechoic chamber and determination of highly selective absorber material with respect to insertion loss and refection coefficient," International Journal of Applied Engineering Research ISSN 0973-4562 vol.4, no. 2, pp. 196-199, 2019 (Special Issue), URL: http://www.ripublication.com/ ijaerspl2019/ ijaerv14n2spl_36.pdf (Scopus).	2019	Scopus
		Ashish Kumar Rao, Rajiv Kumar Singh, and Neelam Srivastava, "In-band Full Duplex Radio: A survey," International Journal of Applied Engineering Research ISSN 0973-4562 vol. 14, no. 2, pp. 183-189, 2019 (Special Issue), URL: http://www.ripublication.com/ijaerspl2019/ijaerv14n2spl_34.pdf (Scopus).	2019	Scopus
		Prabal Gupta, Rajiv Kumar Singh, H.Pal Thethi, Balpreet Singh, and Santosh Kumar Nanda, "Discrete Cosine Transform Matrix based SLM Algorithm for OFDM with Diminished PAPR for M-PSK over Different Sub-Carriers" Journal of Computer Networks and Communications. Hindawi, Egypt, Volume 2019, Article ID: 2893207, 10 pages, ISSN: 2090715X, 20907141, https://doi.org/10.1155/2019/2893207 (Impact factor: 0.21). (SCI).	2019	SCI
	National Journal Publications	R.K. Singh, "Internet traffic management using multi-protocol label switching," Electronics for you, vol. 47, no. 10, pp. 36-39, Oct. 2015, ISSN 0013-516X.	2015	Scopus
		Maniraguha Fidele, Munish Singh, R.K. Singh, and Prabal Gupta, "Peak to average power ratio reduction for OFDM system using different peak windowing and modulation techniques," Far East Journal of Electronics and Communications, 100 Proceedings of SHANNON - 3rd Int. Conf. Comp. Sci. 2016, special vol. 3, part I, 2016, pp. 33-45, ISSN: 0973-7006, DOI: http://dx.doi.org/10.17654/ECSV3PI16033 , SJR (0.43).	2016	No
		Prabal Gupta, R.K. Singh, Maniraguha Fidele, and Balpreet Singh, "Hadamard matrix based selected mapping hybridized with clipping technique for peak to average power ratio reduction in OFDM system using several sub-carriers," Indian J. Sci. Tech., Proceedings of Shannon-100, 3rd Int. Conf. on Computing Sciences (ICCS), Lovely Professional University, Punjab, 8-9 April, 2016, vol. 9(45), pp. 1-5, Dec 2016, ISSN 0974-6846, DOI: 10.17485/ijst/2016/v9i45/106349, SJR (0.27).	2016	Scopus
		Prabal Gupta, R.K. Singh, Maniraguha Fidele, Balpreet Singh and B.Arun Kumar, "Performance improvement of orthogonal frequency division multiplexing system by reducing peak to average power ratio using FDCSS (Frequency Domain Cyclic Shift Sequence) combined with SLM and clipping technique," Indian J. Sci. Tech., Proceedings of ICICS 2016 – Int. Conf. on Intelligent Circuits and Systems, Lovely Professional University, Punjab, 18-19 Nov. 2016, vol. 9(48), pp. 1-6, Dec. 2016, ISSN 0974-6846, DOI: 10.17485/ijst/2016/v9i48/106866, SJR (0.27).	2016	Scopus
		R.K. Singh, "WiMAX security," J. of Telecommunications, vol. 61, pp. 21-27, July 2017, ISSN 0497-1388.	2017	No
		R.K. Singh, "How to assess EM radiation from mobile phone tower," Electronics for you, vol. 6, pp. 77-81, June 2018, ISSN 0013-516X.	2018	No
		R.K. Singh,Vivek Kumar Singh "Brain Gate: assistive technology for productive living," Electronics for you, vol. 7, pp. 36-37, July 2018, ISSN 0013-516X.	2018	No
		R.K. Singh "A look at IPv6", J. of Telecommunications,	2018	Scopus
		R.K. Singh, Chandan Kumar Maurya, "Ambient backscatter," Electronics for you, vol. 9, pp. 36-38, Sept. 2018, ISSN 0013-516X.	2018	

		Rashid Jamal, Indra Kumar Singh, Vinay Kumar, Aishwarya Chandel, Rajiv Kumar Singh, "Introduction to Multiphysics Simulation for Integrated PCB Design," J. Mechatronics & Automation, vol. 6, Issue 1, pp. 31-36, 2019. ISSN: 2455-1988.	2019	Scopus
	International Conference Publications	Prabal Gupta and R.K. Singh, "Highly optimized selected mapping based peak to average power ratio reduction OFDM system using different modulation schemes," IEEE Conference, 2015 Third International Conference on Image Information Processing (ICIIP-2015), Jaypee University of Information Technology, Waknaghat-173234, 21-24 Dec. 2015, pp. 261-264, ISBN: 978-1-5090-0147-7, DOI: 10.1109/ICIIP.2015.7414777.	2015	No
		R.K. Singh and Maniragua Fidele, "An efficient PAPR reduction scheme for OFDM system using peak windowing and clipping," IEEE Conference, 2015 Third International Conference on Image Information Processing (ICIIP-2015), Jaypee University of Information Technology, Waknaghat-173234, 21-24 Dec. 2015, pp. 491-495, ISBN 978-1-5090-0147-7, DOI: 10.1109/ICIIP.2015.7414822.	2015	No
		Prabal Gupta and R.K. Singh, "A hybridized discrete cosine transform based peak to average power ratio reduction in OFDM system using suboptimal Qth circular shifting phase sequence generated matrix(QSCPM) for selected mapping," IEEE Conference, 2016 International Conference on Computer Communication and Computing (ICCCI-2016), Sri Shakti Inst. of Engg. and Technology, Chennai, 7-9 Jan. 2016, pp. 1-5, Print ISBN: 978-1-4673-6679-3, DOI: 10.1109/ICCCI.2016.7480003.	2016	No
		R.K. Singh, Chahat Jain, "Eigenvalue and Transmission Characteristics of a Disc-Loaded Interaction Structure for a Gyro-TWT Amplifier," 2016 IEEE 11th International Conference on Industrial and Information Systems (ICIIS), IIT Roorkee, India, 3-4 Dec., 2016, pp. 895-900, DOI: 10.1109/ICIINFS.2016.8263065.	2016	No
		R.K. Singh, Chahat Jain, "EM analysis of vane-loaded RF interaction structure for its potential application in gyrotrons," International Conference on Soft Computing Applications in Wireless Communication (SCAWC), GNDEC, Ludhiana, India, 9-11 March, 2017, pp. 1-7.	2017	No
		Prabal Gupta, R.K. Singh, Balpreet Singh, B. Arun Kumar, "PAPR Performance Analysis of SLM with Hadamard Matrix based Phase Sequence under M-PSK Modulation for Diminishing PAPR of OFDM System", 2018 International Conference on Intelligent Circuits and Systems (ICICS), LPU, Punjab, 19-20 April, 2018, pp. 46-51, DOI: 10.1109/ICICS.2018.00022.	2018	No
		Raj Vikram Singh, Subodh Waria, R.K. Singh and Harsh Vikram Singh, "Robust Watermarking using Genetic Algorithm in DCT Domain," International Conference on New Technological Opportunities in Networking and Sciences, SIT Pithoragarh, 8-10 June 2018.	2018	No
		R.K. Singh, "EM Analysis of Wideband Disc-Loaded Gyro-TWT," 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), MMMUT Gorakhpur, UP (IEEE Conference Record Number: 43684), 2-4 Nov 2018, pp. 1-6, URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8597042&isnumber=8596758, DOI: 10.1109/UPCON.2018.8597042.	2018	No
		R.K. Singh, "Large Signal Analysis of a Tapered Disc-Loaded Gyro-TWT," 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), MMMUT Gorakhpur, UP (IEEE Conference Record Number: 43684), 2-4 Nov 2018, pp. 1-6, URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8596922&isnumber=8596758 DOI: 10.1109/UPCON.2018.8596922.	2018	No
		Ashish Kumar Rao, R.K. Singh and Neelam Srivastava, "Full-Duplex Wireless Communication in Cognitive Radio Networks: A Survey," VCAS 2018 Int. Conference on VLSI, Communication and Signal Processing, MNNIT Allahabad, Nov. 29 – Dec. 01, 2018.	2018	No
		Indra Kumar Singh, R.K. Singh and Radhey Lal, "Design and Development of 2.1 GHz Horn Antenna," VCAS 2018 Int. Conference on VLSI, Communication and Signal Processing, MNNIT Allahabad, Nov. 29 – Dec. 01, 2018.	2018	No
		Rashid Jamal, R.K. Singh, and Ekta Singh, "Interaction of Electromagnetic Fields (100 kHz–300 GHz) exposure with Respect to Human body model and methods for SAR measurement," VCAS 2018 Int. Conference on VLSI, Communication and Signal Processing, MNNIT Allahabad, Nov. 29 – Dec. 01, 2018.	2018	No
		R.K. Singh, "EM Analysis of RF Interaction Structures for Gyrotron Devices", VCAS 2018 Int. Conference on VLSI, Communication and Signal Processing, MNNIT Allahabad, Nov. 29 – Dec. 01, 2018.	2018	No
		Rajiv Kumar Singh, Radhey Lal and Ekta Singh, "Assessment of Electromagnetic Radiation from Base Station Antenna", International Conference on Advances in Electronics, Electrical & Computational Intelligence (ICAEEC-2019) 31st May-1st June, 2019 Venue: Indian Institute of Information Technology Allahabad, India.	2019	No
		Rajiv Kumar Singh, "Mode Competition and Control in a Vane-Loaded RF Interaction Structure," 6th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2019), 8th -	2019	No

		10th November 2019, (IEEE Conference Record Number:47278), Jointly organized by Aligarh Muslim University, Ohio State University and National Power Training Institute		
		Rashid Jamal, Indra Kumar Singh, and Rajiv Kumar Singh, "Effect of Rise Time in High Speed Interconnects," 6th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2019), 8th - 10th November 2019, (IEEE Conference Record Number:47278), Jointly organized by Aligarh Muslim University, Ohio State University and National Power Training Institute.	2019	No
	National Conference Publications	Prabal Gupta, G.C Manna, R. K. Singh, Maniraguha Fidele, Kartik Pant, "Peak to average power ratio reduction of OFDM system using discrete cosine transform based phase sequence for selected mapping," 4th National Conference on Advance Research in Engineering and Sciences (ARES-2016), Dev Bhoomi Group of Institutes, Dehradun, 9th April 2016, pp. 1-4.	2016	No

Dr. RCS Chauhan

Name of faculty	Type of publication	Publication details	year	SCI/ Scopous /UGC
		R.C.S. Chauhan, Y.N. Singh, Rachna Asthana, Unipola (Optical) Orthogodes and Their Maximal Clque Sets,Book Vol 1 PP 140, LAP Lambert Academic Publishing.	2016	
		R.C.S. Chauhan, Y.N. Singh, Rachna Asthana , A Survey to the Optical CDMA Systems - Part I: Optical Orthogonal Encoding, Journal of Computing Technologies	2016	
		R.C.S. Chauhan, Y.N. Singh, Rachna Asthana ,A Survey to the Optical CDMA Systems - Part II: Performance Improvement Schemes, Journal of Computing Technologies	2016	
		R.C.S. Chauhan, Y.N. Singh, Rachna Asthana ,Design of Minimum Correlated Maximal Clique Sets of One Dimensional Unipolar (Optical) Orthogonal Codes, IEEE Transactions on Information Theory	2017	SCI

Er. Amit Kumar

Amit Kumar	International Journal Paper	Neeraj Kumar Mishra, Mukesh Kumar Kushwaha, Subodh Wairya and Amit Kumar, "Cost Efficient Design of Reversible Adder Circuits for Low Power Applications". International Journal of Computer Applications, 117(19), pp. 37-45, 2015.	2015	SCI/ Scopous /UGC
		Neeraj Kumar Mishra, Mukesh Kumar Kushwaha, Subodh Wairya and Amit Kumar, "Feasible Methodology for optimization of a Novel Reversible Binary Compressor". International Journal of VLSI Design & Communication Systems, vol. 6, no. 4, pp. 1-13, 2015.	2015	No
		Ashish Kumar Saxena, Amit Kumar, "Review of Different Types of Over- Current Protection Circuits used in Various Applications," International Journal of Science and Research (IJSR) Vol. 4, pp. 1164 – 1149, May 2015.	2015	No
		Mukesh Kumar Kushwaha, Amit Kumar, "Delay Optimization of Low Power Reversible Gate using MOS Transistor Level Design". International Journal of Engineering and Research and Application, vol.5, pp. 1-6, 2015.	2015	No
		Agrawal, Gaurav, and Amit Kumar, "Performance Evaluation of CNTFET based Ternary Basic Gates and Half Adder". International Journal of Science and Research (IJSR) Vol. 5, Issue 5, May 2016, 787-791.	2016	No
		Agrawal, Gaurav, and Amit Kumar, "Design and Performance Analysis of TFA Cell Using CNTFET". International Journal of Science and Research (IJSR) Vol. 5, Issue 7, July 2016, 1694-1697.	2016	No
		Sumit Kumar Srivastava, Amit Kumar, "Minimization of Leakage Current of 6T SRAM using Optimal Technology", International Journal of Science and Research (IJSR) Vol. 6, Issue 6, June 2017.	2017	No
		Sumit Kumar Srivastava, Amit Kumar, " Characterization of 6T CMOS SRAM in 65nm and 120nm Technology using low power techniques", International Research Journal of Engineering and Technology (IRJET), Vol. 4, Issue 7, July 2017.	2017	No
		Chandra Kishor and Amit Kumar, "Latch-Type Sense Amplifier Modification for Coupling Suppression," International Journal of Engineering Trends and Technology (IJETT) – Vol. 64, no. 1, pp. 36-39, October 2018	2018	No
	Conference Paper	Mukesh Kumar Kushwaha, Amit Kumar, "Designing Fault Tolerant Reversible Nano Circuits Using New Reversible Gate of Protection," International Conference on Emerging Trends in Electrical, Electronics and Sustainable Energy Systems (ICETEESE-16), Vol. 2, pp. 251- 254, March 2016.	2016	No
		Ashish Kumar Saxena, Amit Kumar, " Design of Over – Current Protection for Digital Power Amplifier," International Conference on Emerging Trends in Electrical, Electronics and Sustainable Energy Systems (ICETEESE-16), Vol. 2, pp. 126- 128, March 2016.	2016	No

Er. Abhishek Shrivastava

Name of faculty	Type of publication	Publication details	year	SCI/ Scopous /UGC
Er. Abhishek Shrivastava	International Journal paper	Prakhar Shrivastava, Sagar Surendra, Rajeev Kumar Ranjan, Abhishek Shrivastav Bindu Priyadarshini1 PI, PD and PID Controllers Using Single DVCCTA, , Iranian Journal of Science and Technology, Transactions of Electrical Engineering, Volume 43, Issue 3, pp 673–685, 2019	2019	Springer

Er. Harshita Tiwari

Name of faculty	Type of publication	Publication details	year	SCI/ Scopous /UGC
Er. Harshita Tiwari	International Journal paper	Harshita tiwari, Rakesh Roshan, Rajat Kumar Singh, "PAPR Reduction in MIMO-OFDM using Combind Methodology of Mapping (SLM) and Partial Transmit Sequence (PTS)," 9th International Conference on Industrial and Information Systems (ICIIS), 10.1109/ICIINFS.2014.7036495	2015	No

Er. Piyush Singh

Name of faculty	Type of publication	Publication details	year	SCI/ Scopous /UGC
Er. Piyush Singh	International Journal paper	'Enhancement of Speech Signal Corrupted by Impulsive Noise Using Rank OrderMean' under International Journal of Science and Research (IJSR) Volume 5 Issue 6, June 2016	2016	No

Er. Pooja Gupta

Name of faculty	Type of publication	Publication details	year	SCI/ Scopous /UGC
Er. Pooja Gupta	International Journal paper	Pooja Gupta, ashutosh Kumar, "Design of Microwave Filter using Coupled line Technique ", i-manager Journal on Wireless Communication Networks, Vol.5 no. 6, 2017	2017	No