

## RESUME

**Dr. Manoj Kumar Shukla**  
**Professor**  
**Department of Electronics Engineering**  
**Harcourt Butler Technological Institute**  
**(An Academically Autonomous Institution under G.B.T.U.,**  
**Lucknow)**  
**Kanpur-208002 India**  
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### Educational Qualifications

- Passed High School and Intermediate in 1982 and 1984 respectively from Govt. Inter College, Fatehpur (U.P.), India securing first division.
- Graduated (**B.E.**) in **Electronics Engineering** from **Amravati University, India** in 1989 securing 73.55 % and post-graduated (**M. Tech.**) from **Motilal Nehru National Institute of Technology (M.N.N.I.T.), Allahabad, India** in 2004 with 8.5 CPI.
- Completed **Ph.D.** in June, 2011 from **M.N.N.I.T., Allahabad, India** in Electronics & Communication Engineering with topic “Performance Evaluation of Interleave Division Multiple Access (IDMA) Scheme in Wireless Communication”.

### Employment/Job Experience

- Current – from Feb 2015  
*Professor, Department of Electronics Engineering, Harcourt Butler Technological Institute (HBTI), Kanpur-208002 India*
  - Teaching UG and PG courses on Basic Electronics, Analog Integrated Circuit, Wireless communication, Solid State Electronics.  
Supervising research in the form of B. Tech., M. Tech and involved in research projects in the area of wireless communication networks
- Feb 2007 - Feb 2015:  
*Assistant/ Associate Professor, Department of Electronics Engineering, Harcourt Butler*

*Technological Institute (HBTI), Kanpur-208002 India*

- Teaching UG and PG courses on Basic Electronics, Analog Integrated Circuit, Wireless communication, Solid State Electronics.
- Supervising research in the form of B. Tech., M. Tech and involved in research projects in the area of wireless communication networks.

**iii.** March 2004-Jan 2007

*Assistant Professor, Department of Electronics & Comm. Engineering, Dehradun Institute of Technology (DIT), Dehradun, India*

- Teaching UG courses on Basic Electronics, Digital Electronics, Switching Logic
- Supervising research for B. Tech. Students.
- Convener of Entrepreneur Development Cell (EDC), a project sponsored by Department of Science & Technology (DST), Govt. of India

**iv.** Jan 2000-July 2002

*Lecturer, Department of Electronics & Comm. Engineering, Babu Banarasi Das National Institute of Technology & Management (BBDNITM), Lucknow, India*

- Taught Graduate courses on Data Communication Networks, Principles of Communications and Transmission Systems, Analog Integrated circuits.
- Supervised Undergraduate students.

**v.** Nov. 1997-Jan 2000

*Assistant Manager, R&D and Production Engineering Department, Stynetics Technological Products, Delhi*

- Responsible for research on Smoke Detector and Microprocessor Based Weighing Machines
- Developed various interface cards for remote and powerful display with weighing machines
- Developed new smoke detector based on ionization principle.

**vi.** July 1989-Nov 1997

*Engineer/ Sr. Engineer, Calcom Electronics Ltd., Delhi, India.*

- Worked in R&D and Production Engg. Department
- Advanced topics in Networking; TCP/IP and Internet Fundamentals at Masters level;
- Supervising research in the form of Masters and Ph.D. thesis, and involved in research projects.

### **Industrial/ Research Experience**

- a. Completed a research project on Design of Low Voltage Operation B/W Television sets using S.M.P.S and Switching Circuit based Triacs in Calcom Electronics Ltd., Delhi.

*The B/W Television was the well known product of Calcom Electronics Ltd., Delhi, for which the company was largest Original Equipment Manufacturer (OEM) in*

*India. The list of well known customer included Phillips, LG, Onida, EC TV, Salora, Videocon, and many more.*

*The oblivious choice for end user is operate the electronic gadget at the lowest voltage to highest voltage. The voltage range provided by Indian Standard Institute (IS) is 10% limit to both side of normal operating voltage.*

*The switched mode power supply (SMPS) was designed for intended low voltage operation of Television sets. An SMPS is usually employed to efficiently provide a regulated output voltage, typically at a level different from the input voltage. Unlike a linear power supply, the pass transistor of a switching mode supply switches very quickly (typically between 50 kHz and 1 MHz) between full-on and full-off states, which minimizes wasted energy. Voltage regulation is provided by varying the ratio of on to off time. In contrast, a linear power supply must dissipate the excess voltage to regulate the output. This higher efficiency is the chief advantage of a switched-mode power supply. Switching regulators are used as replacements for the linear regulators when higher efficiency, smaller size or lighter weight is required. They are, however, more complicated, their switching currents can cause electrical noise problems if not carefully suppressed, and simple designs may have a poor power factor.*

*The project was a success and was released in the market.*

*The designed Triac based low voltage operation circuit works on the principle of switching of multitap power transformer with the help of Triacs followed by linear regulated power supply which helps in low voltage operation of TV set.*

*The project was success however was not released in market due to some market related problems.*

- b. Completed a research project on Design of New B/W TV Chassis in Calcom Electronics Ltd., Delhi.

*In Calcom Electronics Ltd., I was assigned as leader to my team for designing new B/W TV chassis which was based on KA 2917/ AN 5151 IC. This IC contains all the essential operational circuits of television including intermediate frequency amplifiers, video amplifiers and some part of horizontal & vertical oscillator circuits.*

*The project was a success and was released in the market.*

- c. Developed new smoke detector based on ionization principle in Stynetics Technological Products, Delhi.

*A **smoke detector** is a device that detects smoke, typically as an indicator of fire. Commercial, industrial, and mass residential devices issue a signal to a fire alarm system, while household detectors, known as smoke alarms, generally issue a local audible and/or visual alarm from the detector itself.*

*An ionization type smoke detector is generally cheaper to manufacture than an optical smoke detector. It can detect particles of smoke that are too small to be*

visible. It includes about 37 kBq or 1  $\mu$ Ci of radioactive element americium-241 ( $^{241}\text{Am}$ ), corresponding to about 0.3  $\mu\text{g}$  of the isotope. The radiation passes through an ionization chamber, an air-filled space between two electrodes, and permits a small, constant current between the electrodes. Any smoke that enters the chamber absorbs the alpha particles, which reduces the ionization and interrupts this current, setting off the alarm.  $^{241}\text{Am}$ , an alpha emitter, has a half-life of 432 years. Alpha radiation, as opposed to beta and gamma, is used for two additional reasons: Alpha particles have high ionization, so sufficient air particles will be ionized for the current to exist, and they have low penetrative power, meaning they will be stopped by the plastic of the smoke detector and/or the air.

The variation in ionization is sensed as variation in voltage (in  $\mu\text{V}$ ) which is further amplified and employed for activating audio/ video indicators.

- d. Convener of Steering Committee for products in Calcom Electronics Ltd., Delhi.  
In this position, I was enjoying the position of Head of Production Engineering Department and was responsible for following activities.
- Field Called Rate (FCR) meetings on weekly basis for exploration for reasons of failures of TV sets in the field after sales, if any, with time bound correction schedules.
  - Coordination in New Model release starting from its design to field trials and final market release.
  - Incorporation of design changes from R&D to production department.
  - Establishment of new production lines as per requirements.
  - Assembly line balancing for smoothening the component/ production assembly process in assembly floors.

### Courses taught at UG Level

#### *From 2000 to till date:*

Data Communication Networks, Solid State Electronics, Analog Integrated Circuits, Solid State Electronics, Basic Electronics, Radar & Satellite Communication, Mobile Communication, Analog Communication, Digital Electronics, Computer Organization, Digital Hardware Design, Power Electronics, VLSI Technology, Digital Signal Processing, Signals & Systems .

### Courses taught at PG Level

#### *From 2000 to till date:*

Data Communication Networking, Wireless Communication, Digital Communication, Mobile Communication, Advanced Semiconductor Devices, Fuzzy Electronics.

### Laboratory Development Activities/New Experiments Developed

- Developed Communication Lab for UG students of Electrical, Electronics Engineering in D.I.T., Dehradun and B.B.D.N.I.T.M., Lucknow, India.
- Added 10 experiments related to analog, digital communication in H.B.T.I., Kanpur.
- Designed the syllabus of various subjects of A.K. T.U., Lucknow as B.O.S. Member for U.G. and P.G. Students.

### **Membership of Professional Bodies**

- Member, Institution of Electronics & Telecommunication Engineers (I.E.T.E.), India. (Member :LM 42710)
- Member, Indian Society of Technical Education (I.S.T.E.), India (Member :M 150475)
- Member, Institute of Electrical and Electronics Engineers (IEEE), U.S.A. (Member/Account:90747199)
- Member, International Society for Electronics & Electrical Engineers (ISEEE), U.S.A.

### **Other Activities**

- Worked as Observer in DRDO Entry Test 2016 CEPTAM 08 in IIT Kanpur on 15.07.2016.
- Member, Advisory Board, Greater Noida Institute of Technology, Greater Noida
- Engaged as Member in **Board of Studies** (B.O.S.) of Dr. A.P.J. Abdul Kalam Technical University (APJAKTU), Lucknow since 12.01.2016
- Working as Officer In-charge of Communication Systems at H.B.T.I., Kanpur, India. Involved in installation and day-to-day operation of EPABX system and Closed User Group (CUG) MOBILE facility in H.B.T.I., Kanpur, India since 2007 to Dec. 3, 2011.
- Member Purchase Committee C.S.E. Department since 2010.
- Worked as Controller of Examinations from Oct., 29, 2014 to June, 22, 2015.
- Worked as Officer in-charge SPS from June 3, 2012 to Aug. 14, 2013.
- Worked as Hostel Warden in H.B.T.I., Kanpur, India since 2008 to 2012.
- Worked as Assistant Supdt. Examination in H.B.T.I., Kanpur, India since April 2007 to May 2012.
- Member Board of Studies (B.O.S.) Electronics Department, H.B.T.I., Kanpur, India since 2008.
- Member of various other committees of H.B.T.I., Kanpur, India.

- Worked as Hostel Warden in B.B.D.N.I.T.M., Lucknow, India.
- Worked as Officer In-charge of various student activities.
- Paper Setting for HBTI, Integral University, GBTU, any many other institutes.
- As observer in JEE, 2013 held during May 5-7, 2013 at Allahabad Center

### **Details of Research work Supervised/Supervising**

#### **(a) At Ph.D. Thesis Supervision**

- Guided Mr. Kulbhushan Gupta from SHAITTS, Allahabad, India on topic "Performance Analysis of Interleave-Division Multiple-Access Scheme in Ad-Hoc Networks" with Dr. C. Shukla from Sam Higginbottom Institute of Agriculture, Technology and Sciences, formerly Allahabad Agricultural Institute is a government aided deemed university located in Allahabad, India
- Guiding Mr. Surendra Srivas from Bundelkhand Institute of Engineering & Technology, Jhansi in "Optical IDMA Systems" funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Guiding Ms. Prachi Tripathi in "Underwater Wireless Communication using IDMA Schme" from Harcourt Butler Technical University funded from TEQIP II under U.P Technical University (presently known as Dr. A.P.J. Abdul Kalam Technical University) .
- Guiding Ms. Shivani Dixit from Harcourt Butler Technical University in "Performance Evaluation of SC-FDMA-IDMA Scheme in Acoustic Environment " funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Guiding Ms. Roopali Agarwal from Harcourt Butler Technical University in " SC-FDMA-IDMA Scheme in Wireless Communication " funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Guiding Ms. Archana Shukla from Harcourt Butler Technical University in "Performance Analysis of MIMO-OFDM Systems" funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.

#### **(b) At PG Level:**

Supervised various thesis at M.Tech. Level in the area of Digital and Mobile Communication.

1. "Performance Evaluation of IDMA Scheme with Power Control Algorithm for Wireless Communication", 2007-8, Aashish Agarwal, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B.Technical University.
2. "Orthogonal Frequency Division Multiplexing Simulation using MATLAB", 2007-8, Mukesh Pathela (Electronics & Comm. Engg. Dept., Dehradun Institute of Technology, Dehradun), U.P. Technical University.

3. "Simple Diversity for IDMA scheme", 2008-9, Aashish Shukla, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
4. "FPGA Implementation of Orthogonal Interleavers", 2008-9, Amit Rai, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
5. "Wireless Optical IDMA Systems", 2009-10, Aakanksha Dhaka, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
6. "Wired Optical IDMA Systems", 2009-10, Monika Gupta, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
7. "Statistical Analysis of Probability Based Spectrum Sensing in Cognitive Radio", 2010-11, Abhilasha Kumari, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
8. "IDMA Mechanism with QPSK Modulation Scheme in AWGN Environment", 2010-11, Shashi Tiwari, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
9. "Performance Analysis of Power Line Communication with IDMA Systems", 2010-11, Nutan Sharma, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
10. "Underwater Communication with IDMA Scheme", 2011-12, Tanuja Pande (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
11. "Performance Evaluation of IDMA Scheme for Ultra Wideband WPAN", 2011-12, Vishal Shukla (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
12. "M-Ary PSK Modulation Techniques for IDMA Systems", 2011-12, Vivek Kumar (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
13. "Analysis of Square Grid Based Wireless Sensor Networks in Presence of Raleigh Fading", 2011-12, Brishketu Suman Tripathi (Electronics & Comm. Engg. Dept., Maharana Pratap Engg. College, Kanpur), Karnataka State Open University.
14. "Comparative Analysis of RADOME Material used in Air-Crafts and RADAR", 2011-12, Nagendra Kumar Yadav, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.
15. "Performance Evaluation of UWB Based IDMA Scheme for WPAN with RAKE Reception", 2012-13, Abhshek Tripathi
16. "Fuzzy Signal Detection for Ultra Wideband in Multiple Access Communication System" 2012-13, Deepmala Trivedi, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B.

Technical University.

17. "Performance Evaluation Of Single Carrier Frequency Division Multiple Access Interleave Division Multiple Access (Sc-FDMA-IDMA) Scheme Employing BCH Coding" 2012-13, Devendra Tiwari, (Electronics Engg. Dept., H.B.T.I., Kanpur), G.B. Technical University.

18. "OFDM-MIMO and IDMA Scheme for Underwater Communication" 2013-14, Sanjiv Mishra. Electronics Engg. Dept., H.B.T.I., Kanpur, U.P. Technical University.

19. "MRC Diversity Technique with IDMA Scheme for Underwater Communication" 2013-14, Archana. Electronics Engg. Dept., H.B.T.I., Kanpur, U.P. Technical University.

20. "Sc-FDMA-IDMA Scheme For LTE Uplink In Underwater Communication" 2013-14, Manoj Kumar Singh. Electronics Engg. Dept., H.B.T.I., Kanpur, U.P. Technical University.

21. "Performance Evaluation of Prime Number Based Interleaver in Under Water Acoustic Environment" 2014-15, Shaily Gupta, Electronics Engineering Dept., H.B.T.I., Kanpur, U.P. Tech. University.

22. "Performance Analysis of Various Interleaves in Under Water Communication for SC-FDMA IDMA Technique", 2014-15, Ajay Patel, Electronics Engineering Dept., H.B.T.I., Kanpur, U.P. Tech. University.

**(c) At UG Level:**

Supervised about 30 projects at UG level in different areas of Electronics & Communications

**Books**

Authored text book "Wireless and Mobile Communication" with OXFORD University Press along with Prof. Upena Dalal, S.V.N.I.T., Surat, India.

Authored ebook "Performance Evaluation of IDMA Scheme in Wireless Communication" with GRIN Publishing - GRIN Verlag GmbH, Nymphenburger, Germany, 2014.

Authored book chapter in Intelligent Computing, Networking, and Informatics on "M-ARY PSK Modulation Technique for IDMA Scheme" Published by Springer Berlin Heidelberg, Germany, Volume 243, pp 1179-1186 , 2014.

Authored book chapter in Intelligent Computing, Networking, and Informatics on "Underwater Communication with IDMA Scheme" Published by Springer Berlin Heidelberg, Germany, Volume 243, pp 1171-1177, 2014 .



Authored book chapter in *Power Electronics and Instrumentation Engineering* on "A Novel Technique for Indication of Power Frequency Deviations in Electrical Systems" Published by Springer Berlin Heidelberg, Germany , Volume 102, pp 80-82 , 2010.

Authored book chapter in *Distributed Computing and Networking* on "Analysis of Optimum Interleaver for Receivers in IDMA Systems" Published by Springer Berlin Heidelberg ,Germany, Volume 5408, pp 400-407, 2009 .

Co-authored a book on "Computer Workshop", with Nav Bharat Publication, India, 2009.

### **Advisory Committee & Editorial Board Member**

International Journal of Advances in Engineering & Technology "IJAET" (Ethopia)

Bonfring International Journal of Research in Communication Engineering (ID: BIJ-ED-R1178) (India)

International Journal of Scientific and Engineering Research (France)

International Journal of Networks and Communications (Scientific & Academic Publishing, USA)

American Journal of Computation, Communication and Control (AASCIT USA)

### **Reviewer for Journals**

Journal of Organizational and End User Computing (JOEUC) with Special Issue On: Big Data Analytics in Business, Healthcare & Governance (IGI Global Publication, U.S.A.)

Computers & Electrical Engineering (Elsevier Publications, U.S.A.)

IEEE Communications Letters (IEEE Publications, U.S.A.)

Wireless Communications and Mobile Computing (Wiley Publications, U.S.A.)

International Journal of Communication Systems (Wiley Publications, U.S.A.)

Transactions on Emerging Telecommunications Technologies (Wiley Publications, U.S.A.)

International Journal of Electronics (Taylor & Francis, U.S.A.)

International Journal of Computer Applications (Foundation of Computer Science, U.S.A.)

ICTACT Journal on Communication Technology (India)

International Journal of Computer Engineering Research, 5170-00200, Nairobi, 73023 Victoria Island, Lagos, ([www.academicjournals.org/JCER](http://www.academicjournals.org/JCER) )

Advanced Institute of Convergence Information Technology (Korea)

### **Reviewer and Technical Program Committee Member for Conferences**

IEEE 4th International Conference on Signal Processing and Integrated Networks (SPIN-2017), February, 2-3, 2017, Amity University, Noida, India.

International Conference On Recent Trends in Electrical and Electronics & Communication Engineering (RTEECE16), October 15-16, 2016, B.I.E.T., Jhansi, India.

IEEE International conference on "Communication System, Computing and IT Applications 2017" (CSCITA 2017), April 7 - 8 ,St. Francis Institute of Technology (SFIT), Mumbai-103, India.

IEEE International Conference on Electrical, Electronic, Communication and Control Engineering "ICEECC 2016 ", December 18 – 19 December 2016 at the Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Johor Bahru, Malaysia.

Springer 11th International Conference on Mobile Web Information Systems "MobiWIS 2014", Aug. 27-29 Vienna, Austria 2016.

IEEE Industrial Electronics and Applications Conference "IEACon 2016", Nov. 20-22 2016, Kota Kinabalu, Sabah, Malaysia

IEEE The International Conference on Communication, Control and Intellegent Systems "CCIS 2015" Nov. 7-9., 2015, GLA University Mathura, India.

IEEE The 2nd International Workshop on Mobile Applications, 24-26 August 2015, (MobiApps-15), 27-29 August 2015, Barcelona, Spain.

SPRINGER 2nd International Conference on Communication and Computer Engineering (ICOCOE 2015), 9-11 June, 2015, Phuket, Thailand.

IEEE Conference on Energy Conversion (CENCON 2015), 19–21 October 2015, Johor Bahru, Malaysia.

IEEE Fifth International Conference on Communication Systems and Network Technologies

2015 (CSNT 2015), 4-6 April, 2015, Gwalior, India.

IEEE International Conference on Computational Intelligence and Communication Networks (ICCICN 2014), 14-16 Nov., 2014, RCC Institute of Information Technology, Kolkata, India.

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2014), 14-16 Nov., 2014 at Rajasthan Vidhyapeeth University, Udaipur, India.

IEEE Conference on Wireless Sensors (ICWiSE 2014), Subang Jaya, Malaysia from 26 - 28 October 2014.

Conference, Competition and Exhibition 2014 (CCE2014), 24th – 25th June, 2014, Politeknik Seberang Perai, Penang, Malaysia

IEEE Symposium on Wireless Technology and Applications (ISWTA 2014), September 28-October 01, 2014, Kota Kinabalu, Malaysia

SPRINGER 1st International Electromagnetic Systems and Applications Conference (ELECTROMASA 2014) between Nov. 4-6, 2014 at Kuala Lumpur, Malaysia

IEEE International Conference on Computer, Communication, and Control Technology (I4CT'2014), 02 Sep -04th Sep 2014, Langkawi, Malaysia

IEEE International Conference on Machine Intelligence Research and Advancement ,(ICMIRA-2014), 29 Nov -01th Dec 2014, Shri Mata Vaishno Devi University (SMVDU), Jammu, India

IEEE International Workshop on Mobile Applications, Barcelona, Spain (MobiApps 2014) August 27-29 ,2014, Barcelona, Spain

IEEE International Workshop on the Design and Performance of Networks on Chip (DPNoS 2014) t August 17-20, 2014, Niagara Falls, Ontario, Canada

IEEE International Conference on Circuits, Systems, Information and Communication Technology Applications (*CSCITA – 2014*)to be held in Mumbai, India during April 04 – 05, 2014.

IEEE International Symposium on Technology Management and Emerging Technologies (ISTMET 2014) Bandung. Indonesia during May 27 – 29, 2014.

IEEE First International Conference on Signal Processing and Integrated Networks, (SPIN-2014) Amity School of Engineering and Technology, Amity University, Noida, on February 20-21, 2014.

4th International Conference on Coastal Engineering (ICCE2014) to be held in K SEOUL HOTEL in June 15th to 20th, 2014, Seoul, Korea

[IEEE Symposium on Computer Applications & Industrial Electronics](#), (ISCAIE 2014), on 7 - 8 April 2014, Penang (Malaysia)

IEEE International RF and Microwave Conference (RFM 2013) , December, 09 – 11, 2013, Bayview Beach Resort Penang, Malaysia

IEEE 3rd PES Innovative Smart Grid Technologies (ISGT) Europe Conference , Copenhagen, Denmark on October 6 to 9, 2013 .

IEEE Conference on Clean Energy and Technology (CEAT 2013), 18 to 20 November 2013, Langkawi (Malaysia)

International Conference on Industrial Electronics and Computer Science (ICIECS-2013), July 28th, 2013, New Delhi, India.

IEEE International Conference on Machine Intelligence Research and Advancement ,(ICMIRA-2013), 21th -23th Dec 2013, Shri Mata Vaishno Devi University (SMVDU), Jammu, India

IEEE Symposium on Wireless Technology and Applications (ISWTA 2013), September 22-25, 2013, Kuching, Malaysia

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2013), September 27- 29, 2013, GLA University, Mathura, India

IEEE International Conference on Communication Systems and Network Technologies (CSNT-2013), April 5-8, 2013, Gwalior, India

IEEE Symposium on Computers & Informatics (ISCI 2013), 7 - 9 April 2013, Langkawi, Malaysia

IEEE Machine Intelligence Research And Advancement (MIRA 2013), 27th -29th Dec 2013, Jammu, India

IEEE Nirma University International Conference on Engineering (NUICONE-2012). December 6-8, 2012, Nirma University, Ahmadabad, India

IEEE International Power and Energy Conference (PECON 2012). December 2-5, 2012, Kota Kinabalu, Malaysia

IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2012). December 11-13, 2012, Melaka, Malaysia

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2012), November 03- 05, 2012, Mathura, India

IEEE Symposium on Wireless Technology & Applications (ISWTA 2012), 23 – 26 September

2012, Hyatt Regency Bandung Hotel, Bandung, Indonesia

IEEE Symposium on Industrial Electronics & Applications (ISIEA 2012), 23 – 26 September 2012, Bandung, Indonesia

[National Conference on Emerging Trends in Electrical, Instrumentation & Communication Engineering \(ETEIC-2012\), 6th & 7th April 2012, Anand Engineering College, Agra, India](#)

IEEE 2nd International Conference on Electronics and Optoelectronics (ICEOE 2012), July 27-29, 2012, Shenyang, Liaoning, China

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2011), October 07- 09, 2012, Gwalior, India

IEEE International Conference on Communication Systems and Network Technologies (CSNT-2012), May 10-14, 2012, Rajkot, India

SPRINGER Seventh International Conference on “Bio-Inspired Computing: Theories and Application, 2012 (BIC-TA 2012), Dec 14-16, 2012, ABV-Indian Institute of Information Technology and Management, Gwalior, India.

IEEE Nirma University International Conference on Engineering (NUICONE 2011), Nirma University, India

IEEE International Conference on Soft Computing for Problem Solving (SoCProS 2011), Roorkee, India.

IEEE Fourth International Conference on Emerging Trends in Engineering & Technology (ICETET-11), Nagpur, India

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2011), Gwalior, India

IEEE International Conference on Communication Systems and Network Technologies (CSNT-2011), J&K, India

IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2010), Bhopal, India

IEEE IEEE International Conference on Computational Intelligence and Computing Research (ICCIC 2010), India

IEEE International Conference on. Current Trends in Technology 2010, Nirma University, India

IEEE Second International Conference on Emerging Trend in Engineering & Technology (ICETET 2009), Nagpur, India

## **Working Research Group**

1. Multiple Access Schemes.
2. Modulation Schemes.
3. Coding Theory.
4. Diversity Schemes.
5. Fuzzy Electronics.

## **Expert Lecture**

1. 15.03.2016 on "Recent Trends in Wireless Communication Systems" at Govt. Women Engineering College, Ajmer.
2. 14.03.2016 on "Wireless Communication" in Shree Ganpati Institute Of Technology, Ghaziabad.
3. 04.03.2016 on "New Trends in Wireless Communication" at J.S.S., Noida in FDP on "Next Generation Wireless Systems & Standards" held during 29 Feb-5 March 2016.
4. 10.10.2015 on "Digital Logic Families" at Allanhouse Institute of Technology, Kanpur.
5. 04.05.2015 on "New Trends in Wireless Communication Systems" at Govt. Women Engineering College, Ajmer.
6. 12.11.2014 on "Wireless Communication Systems" in Ph.D. Workshop at Jaipur National University, Jaipur.
7. 21.04.2014 on "Modulation in Wireless and Mobile Communication" at Corporate Group of Institutes, Bhopal
8. 11.04.2014 on "Wireless and Mobile Communication" at Pranveer Singh Institute of Technology, Kanpur
9. 09.04.2014 on "Cognitive Radio" at IIFTM University, Moradabad
10. 22.04.2012 on "Modulation Scheme" at Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
11. 20.10.2011 on "Application of Electronics in Robotics" at Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
12. 20.10.2011 on "TDM & FDM Techniques" at Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024

13. 05.04.2010 to 07.04.2010 on "Modulation Techniques" (Wireless Comm. TEC 801) at Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
14. 23.01.2010 on "Mobile communication & VLSI Design" at Krishna Institute Engineering & Technology, Ghaziabad, U.P.
15. 28.04.2009 to 04.05.2009 on "Electronic Devices & Circuits" at Kumaon Engineering College, Dwarahat, Uttarakhand
16. 01.04.2009 to 02.04.2009 on "Wireless Communication" at Kanpur Institute of Technology, A-1, UPSIDC Ind. Area, Kanpur-01, U.P.
17. 21.11.2008 on "Multiple Access Schemes" at Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024

### **Session Chair in Conferences**

1. International Conference on Information & Technology 'IICT 2007' at Dehradun Institute of Technology, Dehradun, India during July 26-28, 2007
2. National Conference on Recent Advancements in Communication and Electronics 'RACE 10' at Laxmi Devi Institute of Engineering & Technology, Alwar, India during Nov. 12-13, 2010
3. IEEE International Conference on Computational Intelligence and Communication Networks (*CICN 2011*) at Gwalior, India during Oct. 7-9, 2011
4. IEEE International Conference on Communication Systems and Network Technologies (*CSNT 2012*) at Rajkot, India during May. 11-13, 2012
5. National Conference on Emerging Trends in Electrical, Instrumentation & Communication Engineering (ETEIC - 2012) at Anand Engineering College, Agra, India during April 6-7, 2012
6. IEEE International Conference on Communication Systems and Network Technologies (*CSNT 2012*) at GLA University, Mathura, India during Nov. 2-5, 2012
7. IEEE International Conference on Communication Systems and Network Technologies (*CSNT 2013*) at MIR Lab, Gwalior, India during April. 6-8, 2013.
8. National Seminar on Recent Advances in Communication and Signal Processing (RACSP 2013), in Corporate Institute of Science & Technology, Bhopal, India during 2-3 May 2013.
9. IEEE International *Conference* on Advances in Engineering and Technology Research, ICAETR 2014 in Virendra Swaroop Group of Institutions, Kanpur during Aug. 2, 2014.

10. IEEE International Conference on Computational Intelligence and Communication Networks (CICN 2014), 14-16 Nov., 2014 at Rajasthan Vidhyapeeth University, Udaipur, India.
11. IEEE Fifth International Conference on Communication Systems and Network Technologies 2015 (CSNT 2015), 4-6 April, 2015, Gwalior, India.
12. IEEE Sixth International Conference on Communication Systems and Network Technologies 2016 (CSNT 2016), 5-7 March, 2016, Chitkara University, Chandigarh, India.

### **Short Term Courses and Workshop Attended**

1. Signal Processing and Filter Designing at Harcourt Butler Technological Institute, Kanpur, India during May 9-11, 2007 supported by TEQIP
2. Applications of Mathematics in Engineering and Technology AT Harcourt Butler Technological Institute, Kanpur, India during Sep. 8, 2007 supported by TEQIP
3. Information & Communication Technology & It`s Impact on Education at Dehradun Institute of Technology, Dehradun, India during Oct. 23-25, 2008 supported by TEQIP
4. Restructuring and Financing of Power Sector at Indian Institute of Technology, Kanpur, India during Dec. 26-28, 2001(3 Days) supported by IIT, Kanpur
5. VLSI Design and IC CAD 'VDIC 06' at Motilal Nehru National Institute of Technology, Allahabad, India during Dec. 4-8, 2006 (5 Days) supported by TEQIP I.
6. VLSI Design & DSP at Dehradun Institute of Technology, Dehradun, India during Oct. 28-30, 2004 (3 Days) supported by ISTE
7. National Workshop on "Industry-Academia Interaction for Strengthening Technical Education" 30th August 2013, Friday Jointly Organized by PHD Chamber of Commerce and Industry, Lucknow (U.P.) & Harcourt Butler Technological Institute Kanpur -(U.P.)
8. State Level Faculty Interaction Seminar and Curriculum Review Workshop held during June 8-9, 2015 in Harcourt Butler Technological Institute Kanpur -(U.P.) under TEQIP II
9. National Workshop on Outcome Based Education and NBA Accreditation held during July, 01-03, 2016, organized by SPFU and ESCI, in Lucknow, India under TEQIP II.
10. Workshop on Intellectual Property Rights (IPR) and Patenting held during Aug., 27-29, 2016, organized by HBTI and ESCI, in Kanpur, India under TEQIP II.
11. Workshop on Occupational Health and Safety Management Practices held during Oct., 03-05, 2016, organized by HBTU and ESCI, in Kanpur, India under TEQIP II.



### **Short Term Courses Organized**

Faculty Development Program on "Emerging Trends in Wireless Communication" at Harcourt Butler Technological Institute, Kanpur, India during Dec. 3-9, 2008 (7 Days) supported by TEQIP I.

Workshop on "Simulation on Circuit Design and Signal Processing" at Harcourt Butler Technological Institute, Kanpur, India during Oct. 14-15, 2013 (2 Days) supported by TEQIP II

### **Short Term Courses as Resource Person**

1. Short Term Course on Microwave Devices: Theory and Techniques during 4th - 10th July 2016 at Department of Electronics and Communication Engineering of Madan Mohan Malaviya University of Technology, Gorakhpur, on 04-05 July 2016 on "Principles of Microwave Communication in Satellite" and "Multiple Access Schemes".
2. AICTE sponsored Two weeks FDP on "Simulation and Mathematical Tools for Engineering Research" during July 04 to July 15, 2016 at Electronics Engineering Department of Kamla Nehru Institute of Technology Sultanpur, India, on 05-06 July 2016 on "Basics of MATLAB Programming" and "Simulation of Communication Principles".
3. Short Term Course on "Microwave Devices: Theory and Techniques" during 4th - 10th July 2016 at Department of Electronics and Communication Engineering of Madan Mohan Malaviya University of Technology, Gorakhpur, India
4. Faculty Development Programme on "Simulation and Mathematical Tools for Engineering Research" on 06.07.2016 during July 04 to July 15, 2016 at Electronics Engineering Department of Kamla Nehru Institute of Technology, Sultanpur, India .
5. FDP on "IT Tools and Optimization" in Kanpur Institute of Technology, Kanpur, India on 09.06.2016 during program from 06-11 June 2016.
6. Workshop on "Performance Analysis of Interleave Division Multiple Access Scheme" at Chandubhai S Patel Institute of Technology - in Charotar University of Science & Technology, Changa, Gujarat. India from March 20-21, 2014.
7. Workshop on "Mobile Ad Hoc and Vehicular Communication (MAVECOM 2013)" at Motilal Nehru National Institute of Technology, Allahabad, India during Sept. 23, 2013 (1 Days) , India.
8. Workshop on "DSP Applications" at GLA Institute of Technology & Management, Mathura during Sept. 5-6, 2009 supported by TEQIP & GLA Group

9. Workshop on "Wireless and Mobile Communication" at Motilal Nehru National Institute of Technology, Allahabad, India during June 30-July 12, 2008 (13 Days) supported by AICTE/ MHRD, India
10. Workshop on "Emerging Trends in Wireless Communication" at Harcourt Butler Technological Institute, Kanpur, India during Dec. 3-9, 2008 (7 Days) supported by TEQIP
11. Workshop on "Circuit Simulation using SPICE and VHDL" at Motilal Nehru National Institute of Technology, Allahabad, India during April 8-10, 2006 (3 Days) supported by TEQIP, India

### **Faculty Development Program Attended**

1. Ashok Hotel, Nainital, India during Jan. 24-Feb. 04, 2005 (12 Days) at Dept. of Science & Technology (DST), India
2. KIET-ED Cell, Ghaziabad, India during Nov. 29-Dec. 10, 2004 at Dept. of Science & Technology (DST), India
3. "Modelling and Simulation and Analysis of Engineering Systems" at Harcourt Butler Technological Institute, Kanpur, India during Oct. 25-30, 2013

### **Research Interests**

My current research interest include design and analysis of interleavers for multiple access schemes in wireless and mobile networks, channel coding, QOS issues, VHDL coding of communication models, and next generation networks.

### **Citations**

### **Research Project Sanctioned with Reference to My Publication from CSIR**

*VLSI Architecture of MIMO-OFDM-IDMA System for Wireless Communication*

*INVESTIGATOR: S.TAMIL SELVI, Professor /ECE Department National Engineering College, K.R.Nagar, Kovilpatti – 628 503.Email: tamilgopal2004@yahoo.co.inPhone: 04632 –222502 Fax : 04632 - 232749*

### **Research Papers Referring My Publication apart from Self-Citation**

[Sharma, Sonam](#) ; [Sau, Paresh Chandra](#) ; [Shukla, Aasheesh](#), "Performance survey of IDMA with

different Interleavers" in [Proc. International Conference on Signal Processing and Integrated Networks \(SPIN\), 2014](#) , pp. 344-348.

Yadav, Anurag ; [Shukla, Aashish](#) "Performance Analysis of IDMA and CODED IDMA System" in Proc. of IEEE [5th International Conference on Computational Intelligence and Communication Networks](#) [CICN 2013], 2013, pp. 251-256.

A.Mary Juliet, Dr.SJayashri, "Design Analysis of Deterministic Interleaver For OFDM-IDMA System", in Proc. of IEEE International Conference on Signal Processing, Image Processing and Pattern Recognition [ICSIPR], 2013, pp. 1-5.

Mehmet Bilim, Nuri Kapucu, Ibrahim Develi, "A New Approach to Random Interleavers for Traditional IDMA Systems" in Proc. of IEEE Symposium on Computers and Communications (ICC), 2012, pp. 209- 212.

Muhammad Shahin Uddin, Yeong Min Jang, "Location Based Reconfigurable Cell Site Diversity Techniques for LED-ID System", in Proc. IEEE International Conference on ICT Convergence, South Korea, 2011, pp. 523-526.

Maha Slihi, Walid Abdallahy, and Nouredine Boudriga, "LEOCast: An Optical Multicast Protocol for LEO Satellites based on Optical Codewords", International Journal on Advances in Telecommunications, vol 7, no 3 & 4, pp. 56-68, 2014.  
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.671.6862&rep=rep1&type=pdf>

Shu-Ming Tseng, Te-Lun Lee, Yo-Chain Ho, Der-Feng Tseng, "Distributed space-time block codes with embedded adaptive AAF/DAF elements and opportunistic listening for multihop power line communication networks", International Journal of Communication Systems (Wiley Publication), March 2015

Pradeepti Bisht, Saurabh Mishra, "Comparative Study of Interleavers in Communication System: IDMA Overview", IOSR Journal of Electronics and Communication Engineering (IOSR-JECE). Vol 9, Issue 3, Ver. VI, pp 66-72, May -Jun. 2014

Ekra Khan and Danish Khan, "Evolution OF IDMA", International Journal of Engineering Science Invention Research & Development; Vol. I Issue I, pp. 5-9, July 2014

Preeti Tiwari, "Correlation Based Analysis of Interleavers for IDMA Systems", International Journal of Engineering Science Invention Research & Development; Vol. 1 Issue 1, pp 1-6, July 2014

Gongliang Liu, Xinrui Fang, Wenjing Kang, "IDMA-based MAC Protocol for Satellite Networks with Consideration on Channel Quality ", The Scientific World Journal, Volume 2014, Article ID 181734, pp. 1-16, 2014, Hindwai Publishing Corporation.

Neelam Kumari, A.K.Singh, "IDMA Technology and Comparison survey of Interleavers", International Journal of Scientific and Research Publications, Vol 3, Issue 9, pp. 1-6, September 2013.

<http://www.ijserp.org/research-paper-0913/ijserp-p2199.pdf>

Doaa E. El.Matary, Esam A.A.Hagras,Hala MansourAbdel-Kader, "Non-Gaussian Noisy Channel Effect on Multi-user IDMA-UWB Communication System", International Journal of Computer Networks and Wireless Communications (IJCNC), ISSN: 2250-3501Vol.3, No2, pp. 181-188, April 2013

<http://www.ijcnc.org/papers/vol3no22013/20vol3no2.pdf>

Doaa E.,El-Matary, Esam A., A. Hagras, Hala Mansour Abdel-Kader, "Performance Analysis of LDPC-IDMA-UWB Signals in Non-Gaussian Noisy Channel" International Journal of Scientific & Engineering Research, Volume 4, Issue 8, August-2013 , ISSN 2229-5518, pp. 1949-1954, 2013.

<http://www.ijser.org/researchpaper%5CPerformance-Analysis-of-LDPC-IDMA-UWB-Signals-in-Non-Gaussian-Noisy-Channel.pdf>

Aparna Thakur, Himanshu Sharma, "Performance Analysis of Optical Interleave Division Multiple Access System (OIDMA)" International Journal of Advanced Research in Electronics and Communication Engineering (IJARECE), Volume 2, Issue 6, pp. 619-624, June 2013.

P. Hanpinitzak and C. Charoenlarnopparut, "2D Interleaver Design for Image Transmission over Severe Burst-Error Environment", International Journal of Future Computer and Communication, Vol. 2, No. 4, pp. 308, 312, August 2013.

Jayshri Silmana, P.S. Sharma, "A Review of Interleavers for IDMA systems" UACEE International Journal of Advances in Electronics Engineering Volume 2: Issue 3, 2013, pp. 80-85.

Mohamed Fathey Abo Sree, Esam A.A.A Hagras, Mohamed S. El-Mahallawy, Mohamed Aboul El-Dahab, "IDMA System Based on Permutation Polynomial Interleaver over Integer Rings", Electronic Devices Volume 1 Number 2 September 2012, pp. 74-79.

R.K. Singh, Shashi Dwivedi, Dolly Sharma, "IDMA system with Optimal Spreading Mechanism using Random Interleaver", Journal of Computing Technologies ISSN 2278 – 3814, Vol. 1, Issue 2, 2012.

Kuldeep choudhary, P S Sharma, "Interleavers for IDMA Technology: A Comparison Survey" International Journal of Advanced Research in Computer and Communication Engineering (ISSN 2278 – 1021), Vol. 1, Issue 2, April 2012, pp. 55-61.

Ratna Sharma, S. S. Ratan, Pritika Singh, "Coorelation Based Analysis of Master Random Interleaver and Tree Based Interleaver" International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622, Vol. 2, Issue 3, May-Jun 2012, pp.679-682.

Anita Borude, Shobha Krishnan, "Analysis of OOC Code & Their Performance Metrics", International Journal of Engineering Trends and Technology- Volume3, Issue2, 2012, pp. 243-246.

Ajit Singh, Rajan Mishra, "Design of IDMA Scheme Using LDPC Coding", VSRD International Journal of Electrical, Electronics & Comm. Engg. Vol. 1 (7), 2011, pp. 364-373.

Ajit Kumar Singh, Santosh Gupta, Rajan Mishra, "A Comparative Study of IDMA Scheme for BER Performance by Using LDPC Coding", International Journal of Technical Teachers (2231-4474), September '2011, ITT, Vol. 3 Issue 1, pp. 1-10.

Neelam Srivastava, "Diversity Schemes for Wireless Communication: A Short Review", Journal of Theoretical and Applied Information Technology, ISSN: 1817-3195, May 2010. Vol.15. No.2, pp. 134-142.

V. K. Dwivedi, S. Tripathi, V. S. Tripathi, R. Tripathi, S. Tiwari, "Use of Tree-based Interleaver in RS Turbo Code for PAPR", Journal of Telecommunications, Volume 3, Issue 1, June 2010, pp. 50-54.

## **Details of Research work Supervised/Supervising**

### **Ph.D. Thesis Supervision**

1. Guided Mr. Kulbhushan Gupta from SHAITs, Allahabad, India on topic "Performance Analysis of Interleave-Division Multiple-Access Scheme in Ad-Hoc Networks" with Dr. C. Shukla from Sam Higginbottom Institute of Agriculture, Technology and Sciences, formerly Allahabad Agricultural Institute is a government aided deemed university located in Allahabad, India
2. Guiding Mr. Surendra Srivas from Bundelkhand Institute of Engineering & Technology, Jhansi in "Optical IDMA Systems" funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
3. Guiding Ms. Prachi Tripathi in "Underwater Wireless Communication using IDMA Schme" from Harcourt Butler Technical University funded from TEQIP II under U.P Technical University (presently known as Dr. A.P.J. Abdul Kalam Technical University)
4. Guiding Ms. Shivani Dixit from Harcourt Butler Technical University in "Performance Evaluation of SC-FDMA-IDMA Scheme in Acoustic Environment " funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.

5. Guiding Ms. Roopali Agarwal from Harcourt Butler Technical University in " SC-FDMA-IDMA Scheme in Wireless Communication " funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
6. Guiding Ms. Archana Shukla from Harcourt Butler Technical University in "Performance Analysis of MIMO-OFDM Systems" funded from TEQIP II under Dr. A.P.J. Abdul Kalam Technical University, Lucknow.

**Expert in Selection Committee in Engineering Institutes**

<b>S. No.</b>	<b>Date of Interview</b>	<b>Letter No.</b>	<b>Institute</b>
1.	20.12.2013	RAC/ CAMPUS (1827)/2013 dated 18.12.2013	Indian Institute of Technology, Kanpur
2.	20.01.2013	-	Rama Institute of Technology, G.T. Road, Kanpur
3.	19.09.2012	519/Camp/AITH/2012 dated 12.09.2012	Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
4.	25.02.2012	-	Kanpur Institute of Technology, A-1, UPSIDC Ind. Area, Kanpur-01, U.P.
5.	21.08.2011	-	Maharana Pratap Engineering College, Mandhana, Kanpur
6.	30.07.2011	RIET/Adm/Inter./10-11/1181	Rama Institute of Technology, G.T. Road, Kanpur
7.	23.06.2011	1657/AITH/2011	Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
8.	08.12.2010	KIT/Estt 063/2010/3177	Kanpur Institute of Technology, A-1, UPSIDC Ind. Area, Kanpur-01, U.P.
9.	24.05.2009	RES/Interview/2009/804	Rama Institute of Technology, G.T. Road, Kanpur
10.	21.02.2009	Selection/AITH/2009	Dr. Ambedkar Institute of Technology for Handicapped, Awadhपुरi, Kanpur, U.P. 208024
11.	24.11.2008	101/ST/COE/1871	Govt. Industrial Training Institute, Kanpur.
12.	06.12.2008	-	Kanpur Institute of Technology, A-1, UPSIDC Ind. Area, Kanpur-01, U.P.

**# International Journals**

1. M. Shukla, V.K. Srivastava, Sudarshan Tiwari, "Analysis and Design of Optimum Interleaver for Iterative Receivers in IDMA Scheme" Wiley Journal of Wireless Communications and Mobile Computing (WCM) Vol. 9, Issue 10, pp. 1312-1317, 2009. (Indexed in Thomson Reuters Master Journal List)

**DOI:** 10.1002/wcm.710

<http://onlinelibrary.wiley.com/doi/10.1002/wcm.710/abstract>

2. M. Shukla, Aasheesh Shukla, Rohit Kumar, V.K. Srivastava, Sudarshan Tiwari, "Simple Diversity Scheme for IDMA Communication System", International Journal of Applied Engineering Research (IJAER) Vol. 6, 2009/ pp. 877-883

**Print ISSN 0973-4562, Online ISSN 1087--1090** (Indexed in SCOPUS)

[http://www.ripublication.com/ijaerv4/ijaerv4n6\\_4.pdf](http://www.ripublication.com/ijaerv4/ijaerv4n6_4.pdf)

3. M. Shukla, V.K. Srivastava, Sudarshan Tiwari, "A VHDL Implementation of Orthogonal Interleavers for the IDMA Scheme", The IUP Journal of Telecommunications, Vol. 1, 2009, pp. 63-71, 2009. (Indexed in SCOPUS)

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1521407](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1521407)

[http://www.iupindia.in/1109/IJTC\\_VHDL%20Implementation\\_63.html](http://www.iupindia.in/1109/IJTC_VHDL%20Implementation_63.html)

4.M. Shukla, Ruchir Gupta, "Performance Analysis of Optimum Interleaver based on Prime Numbers for Multiuser Iterative IDMA Systems" International Journal of Interdisciplinary Telecommunications and Networking (IJITN), U.S.A., Vol.2, pp. 51-65, 2010. (Indexed in Thomson Reuters Master Journal List)

**DOI:** 10.4018/jitn.2010070103

<http://www.igi-global.com/article/international-journal-interdisciplinary-telecommunications-networking/46966>

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1962646](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1962646)

5. M. Shukla, V.K. Srivastava, Sudarshan Tiwari, "Performance Analysis of Tree Based Interleaver with Iterative IDMA Receivers Using Unequal Power Allocation Algorithm", International Journal of Electronics & Telecommunication and Instrumentation Engineering (IJETIE), U.S.A., Vol. 2, pp. 15-25, 2010.

[www.serc.org.in/admin/pdf/files/3-VOL-2-IJETIE.pdf](http://www.serc.org.in/admin/pdf/files/3-VOL-2-IJETIE.pdf)

6.M. Shukla, V.K. Srivastava, S. Tiwari, "Implementation of Interleavers for Iterative IDMA Receivers", Journal of Information Technology, pp. 1-10, 2011. (Indexed in SCOPUS) Academy Publishers, U.S.A., ISSN 1815-4472,

**DOI:** 10.3923/rjit.2012.12.21

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1968068](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1968068)

<http://scialert.net/qredirect.php?doi=rjit.0000.37770.37770&linkid=pdf>

7.M. Shukla, Akanksha Gupta, Rinkoo Bhatia, "Performance Evaluation of Maximal Ratio Receiver Combining Diversity with Prime Interleaver for Iterative IDMA Receiver", International Journal of Information Engineering and Applications, Vol 1, No.3, pp. 29-39, 2011. (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

International Institute for Science, Technology and Education (IISTE), U.S.A., ISSN 2224-5758

(print) ISSN 2224-896X (online)

<http://www.iiste.org/Journals/index.php/JIEA/article/view/802>

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1967880](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1967880)

8. Kulbhushan Gupta, C.K. Shukla, M. Shukla, "Iterative IDMA Receivers with Random and Tree Based Interleavers", International Journal of Information Engineering and Applications, Vol 1, No.3, pp. 13-24, 2011.

International Institute for Science, Technology and Education (IISTE), U.S.A., ISSN 2224-5758

(print) ISSN 2224-896X (online) (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://www.iiste.org/Journals/index.php/JIEA/article/view/800>

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1967883](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1967883)

9. Kulbhushan Gupta, C.K. Shukla, Shashi Tiwari and M. Shukla, "Performance Evaluation of Iterative IDMA Receivers on Modulation Schemes for Relay and Ad-Hoc Networks", International Journal of Recent Trends in Engineering (IJRTE) Vol. 5, pp. 130-133, 2011.

ACEEE, USA, ISSN 2158-5563

DOI: 01.IJRTET.5.2.162

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955822](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955822)

<http://searchdl.org/index.php/journals/view/569>

10. Somendra Shukla, Sanjiv Mishra, Vijay Shankar Tripathi, and M. Shukla, "Orthogonal Interleavers with Iterative IDMA Scheme for Multipath Environment", International Journal of Recent Trends in Engineering (IJRTE) Vol. 5, pp. 92-94, 2011.

ACEEE, USA, ISSN 2158-5563

DOI: 01.IJRTET.5.2.168

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955865](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955865)

<http://searchdl.org/index.php/journals/view/560>

11. Shashi Tiwari Dolly Sharma Kulbhushan Gupta C.K. Shukla M. Shukla, "Performance Analysis of Various Modulation Techniques in Multipath Ad-Hoc Network using Tree Based Interleaver for Iterative IDMA Systems", International Journal of Computer Application (IJCA) Special Issue on Wireless Communication and Mobile Networks, pp. 37-42, Vol. 1, 2012.

Foundation of Computer Science, USA (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://research.ijcaonline.org/wcmn/number1/wcmn1008.pdf>

12. V.S. Tripathi, Sanjiv Mishra, M. Shukla, "BPSK and QPSK Modulation Techniques with Optimum Tree Based Interleaver in Iterative IDMA Systems", International Journal of Communication Systems and Networks (IJCSN) , Vol 1, 2012, MIR Lab

<http://ijcsn.com/data/IJCSN-2.pdf>

13. Vishal Shukla, Manoj Kumar Shukla and Tanuja Pande, "Multiuser Detection using IDMA Scheme in UWB Home Environment", International Journal of Computer Applications (IJCA), pp. 24-29, Vol 55, No. 13, Oct. 2012.

Foundation of Computer Science, New York, NY 10001, USA (Indexed in EBSCO (U.S.), Google Scholar)



DOI: 10.5120/8816-2728

<http://www.ijcaonline.org/archives/volume55/number13/8816-2728>

14. M. Shukla, Ashutosh Kumar Singh, Rneez Kabeer, "Performance Analysis of First Iteration Fractal Log Periodic Antenna of Varying Angles", Central European Journal of engineering (Springer), pp. 51-57, Volume 3, Issue 1, 2013. (Indexed in Thomson Reuters Master Journal List)

<http://link.springer.com/article/10.2478%2Fs13531-012-0040-2>

15. Sugandha Sharma, Poonam Ahirwar, Shikha Chauhan, Subhra Upadhyay, M. Shukla, "Power Rotational Interleaver on an IDMA System", Journal of Innovative Systems Design and Engineering pp. 33-38, Vol.4, No.7, 2013.

IISTE, USA (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://www.iiste.org/Journals/index.php/ISDE/article/view/6033/6072>

16. Aasheesh Shukla, Rajat Sapra, Vishal Goyal, M. Shukla, "Application of Diversity Techniques for Multi User IDMA Communication System" Journal of Network and Complex Systems, pp. 26-32, Vol.3, No.3, 2013.

IISTE, USA (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://www.iiste.org/Journals/index.php/NCS/article/view/6070/6024>

17. M. Shukla, Nutan Sharma, Shashi Tiwari, "Performance Analysis of Iterative IDMA Scheme in Power Line Communication Using Random Interleaver", Journal of Network and Complex Systems, pp. 33-37, Vol.3, No.3, 2013. IISTE, USA (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://www.iiste.org/Journals/index.php/NCS/article/view/6071/6027>

18. Sanjiv Mishra, Somendra Shukla, M. Shukla, "Analysis of Maximal Ratio Combining Scheme with IDMA Systems Using Prime Interleaver with Zigzag Coding", Multimedia Technology (MT), pp. 7-13, Vol 3, Issue 1, 2014.

SEP, USA

<http://www.seipub.org/mt/paperInfo.aspx?ID=13733>

19. Prachi Tripathi, Manoj Kumar Shukla, "Performance Evaluation of Diversity Techniques in IDMA Scheme for Next Generation (4G) in Underwater Wireless Communication", Wireless Engineering and Technology (WET), Vol 5, No.3 pp. 88-98, 2014.

<http://www.scirp.org/journal/PaperInformation.aspx?PaperID=48319#.U9omhUDBrIU>

20. Prachi Tripathi, Shivani Dixit, M. Shukla, "Performance Evaluation of Rotational Interleaver for IDMA Scheme in Acoustic Environment", Journal of Open Access Library (OALib), Volume 1, e761, pp. 1-7, August 2014 .

<http://www.oalib.com/articles/3099398>

21. Somendra Shukla, Shikha Pandey, Vipul Dixit, M. Shukla, "Analysis and Design of

Optimum Interleaver for Iterative Receivers in Indoor Wireless Optical IDMA Scheme", Global Journal of Enterprise Information System [GJEIS], Volume 6, Issue 2, pp. 61-66, April-June 2014. (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

<http://www.gjeis.org/index.php/gjeis/article/view/51847>

DOI: <http://dx.doi.org/10.15595/gjeis%2F2014%2Fv6i2%2F51847>

22. Pradeepti Bisht, M. Shukla, Saurabh Mishra, "M-ARY PSK Scheme in Cellular Environment", International Journal of Computer Applications (IJCA), pp. 20-24, Vol 99, No. 12, Aug. 2014. (Indexed in EBSCO (U.S.), Google Scholar)

<http://www.ijcaonline.org/archives/volume99/number12/17426-8279>

23. Prachi Tripathi , M. Shukla, " Performance Analysis of Channel Estimation Based Rake Receiver with IDMA For Underwater Acoustic Channel", Wulfenia: Mitteilungen des Kärntner, Volume 22, No. 3, pp. 352-360, March 2015 , Austria. (Indexed in Thomson Reuters Master Journal List)

<http://www.multidisciplinarywulfenia.org/archive.php/?volume=22&issue=3>

24. P.S. Sharma, Sandeep Vijay, M. Shukla, "UWB Based IDMA System with RAKE Reception", Wulfenia: [Mitteilungen des Kärntner](#), Volume 22, No. 4, pp. 168-183, April 2015, Austria. (Indexed in Thomson Reuters Master Journal List)

<http://www.multidisciplinarywulfenia.org/archive.php/?volume=22&issue=4>

25. Ajay Patel, Ruchi Gupta and M. Shukla, "Performance Analysis of OFDM-IDMA and SC-FDMA-IDMA Scheme in Underwater Communication", Global Journal of Enterprise Information System [GJEIS], Vol 7, Issue 2, pp. 11-17, April-June 2015. (Indexed in EBSCO (U.S.), Index Copernicus (Poland))

[https://www.academia.edu/16418504/GJEIS\\_-\\_Volume\\_-\\_7\\_Issue-2\\_Apr-June\\_2015](https://www.academia.edu/16418504/GJEIS_-_Volume_-_7_Issue-2_Apr-June_2015)

Print ISSN: 0975-153X | Online ISSN: 0975-1432

26. Surendra Kr Sriwas, M K Shukla, R Asthana, J P Saini, "Performance Analysis of Optical Interleave Division Multiple Access Using Solitons", Journal of Computing Technologies, Volume 5, Issue 1, pp. 90-95, Jan 2016.

<http://www.advanceresearchlibrary.com/temp/downloads/jct/January2016/v15.pdf>

27. S. K. Sriwas, M. Shukla, R. Asthana and J. P. Saini, "Fix the Nonlinear Effect and Dispersion in Optical-interleave Division Multiple Access System for Long Distance", Indian Journal of Science and Technology, Vol 9(35), September 2016. (Indexed in Thomson Reuters Master Journal List)

<http://www.indjst.org/index.php/indjst/article/viewFile/97888/73496>

DOI: 10.17485/ijst/2016/v9i35/97888, September 2016, ISSN (Print) : 0974-6846, ISSN (Online) : 0974-5645

28. S. K. Sriwas, M. Shukla, R. Asthana and J. P. Saini, "High-Speed Detection with Avalanche Photo diode in Optical Interleave Division Multiple Access Scheme", Indian Journal of Science and Technology, Vol 9(38), Oct. 2016. (Indexed in Thomson Reuters Master Journal List)

<http://www.indjst.org/index.php/indjst/article/view/101632/74249>

DOI: 10.17485/ijst/2016/v9i38/101632, Oct. 2016, ISSN (Print) : 0974-6846, ISSN (Online) : 0974-5645

29. Prachi Tripathi, M. Shukla, "An Approach to Mitigate Fading issues for Underwater Communication using MIMO-OFDM-IDMA Scheme", accepted for publication in Indian Journal of Science and Technology, 2016. (Indexed in Thomson Reuters Master Journal List)

ISSN (Print) : 0974-6846, ISSN (Online) : 0974-5645

### **# National Journal**

Sl. No.	Name of Journal	Volume No.	Month/Year/ Page No.	Title of the paper
1.	The IUP Journal of Telecommunications	1	2009/ pp. 63-71	"A VHDL Implementation of Orthogonal Interleavers for the IDMA Scheme" M. Shukla, V.K. Srivastava, S. Tiwari <a href="http://www.iupindia.in/1109/IJTC_VHDL%20Implementation_63.html">http://www.iupindia.in/1109/IJTC_VHDL%20Implementation_63.html</a>

### **# Conference/ Seminar participated**

#### **# International Conferences**

1. Vineeta Agarwal, M. Shukla, D. Sheshchalam, "A Novel Technique for Indication of Power Frequency Deviation" , in Proc. of 4th IASTED International Conference on Modeling, Simulation, and Optimization 'MSO 2004' "ACTAPRESS", pp. 186-191, August 17 – 19, 2004, Kauai, Hawaii, USA.  
[www.actapress.com/Abstract.aspx?paperId=17182](http://www.actapress.com/Abstract.aspx?paperId=17182)

2.M. Shukla, V.K. Srivastava, S. Tiwari, "Interleave Division Multiple Access for Wireless Communication" in Proc. of International Conference on Next Generation Communication Systems: A Perspective' "ICONGENCOM 06 ", pp. 150-154, Dec. 9-11, 2006, J.K. Institute, Allahabad, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955815](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955815)

3. M. Shukla, V.K. Srivastava, S. Tiwari, "A Novel Interleaver for Interleave Division Multiple Access Scheme", in Proc. of International Conference on Information and Communication Techniques' "ICCT 07 " , Dec. 2007, D.I.T., Dehradun, India  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955930](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955930)

4. M. Shukla, V.K. Dwivedi, "Performance Comparison of different Error Correction Codes", in Proc. of International Conference on Information and Communication Techniques' "ICCT 07" , Dec./ 2007, D.I.T., Dehradun, India.

5. M. Shukla, V.K. Srivastava, S. Tiwari, "Analysis and Design of Tree Based Interleaver for Multiuser Receivers in IDMA Scheme", in Proc. of 16th IEEE International Conference on Networks "ICON 2008" (IEEE), pp. 1-4, Dec.12-14/ 2008, Delhi, India (Organized by IIT, Roorkee).

**Digital Object Identifier :** [10.1109/ICON.2008.4772593](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4772593)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4772593>

6. M. Shukla, A. Shukla, V.K. Srivastava, S. Tiwari, "Performance Evaluation of MRC Diversity Scheme for Iterative IDMA Receivers ", in Proc. of Annual IEEE India Conference "INDICON 2009", pp. 1-4, Dec. 18-20, 2009, Ahamdabad, India.

**Digital Object Identifier :** [10.1109/INDCON.2009.5409463](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5409463)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5409463>

7.M. Shukla, S. Sriwas, V.K. Srivastava, S. Tiwari, "Performance Evaluation of Maximal Ratio Combining Diversity Technique for IDMA Systems", in Proc. of International Conference on Wireless Communication and Sensor Networks "WCSN 09" (IEEE), pp. Dec. 16-18/ 2009, IIIT, Allahabad, India.

8. M. Shukla, R.C.S. Chauhan, V.K. Srivastava, S. Tiwari, "Performance Analysis of Tree Based Interleaver with IDMA Systems using Optimum Power Allocation Algorithm", in Proc. of IEEE International Conference on Internet Multimedia Systems Architecture and Application "IMSAA 09" (IEEE), pp. 1-5, Dec.9-11/ 2009, IISc, Bangalore, India.

**Digital Object Identifier:** [10.1109/IMSAA.2009.5439488](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5439488)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5439488>

9. Shukla, M.; Srivastava, V.K.; Tiwari, S., "Performance Analysis of Tree Based Interleaver with IDMA Systems using Optimum Power Allocation Algorithm", in Proc. of 2nd International Conference on Emerging Trends in Engineering & Technology "ICETET-09" (IEEE), pp. 1173-1177, Dec. 16-18, 2009, G.H.Raisoni College of Engineering, Nagpur, India.

**Digital Object Identifier:** [10.1109/ICETET.2009.170](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5395048)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5395048>

10. Shukla, M.; Chauhan, R.C.S.; Gupta, R.; Srivastava, V.K.; Tiwari, S., "Performance Analysis of Tree Based Interleaver with Iterative IDMA Receivers using Optimum Power Allocation Algorithm", in Proc. of First UK-India International Workshop on Cognitive Wireless Systems

“UKIWCWS 09” (IEEE), pp. 1-4, Dec.29-29, 2009, IIT, Delhi, India.  
Digital Object Identifier: [10.1109/UKIWCWS.2009.5749419](https://doi.org/10.1109/UKIWCWS.2009.5749419)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5749419>

11. M. Shukla, A. Shukla, V.K. Srivastava, S. Tiwari, "Different Designing Factors for IDMA Systems", in Proc. of 1ST International Conference on Computer, Communication, and Control and Information Technology “C3 IT 2009” pp. 750-758, Feb. 2009, Academy of Technology, Calcutta, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955900](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955900)

12. M. Shukla, V.K. Srivastava, S. Tiwari, "Analysis of Optimum Interleaver for Receivers in IDMA Systems", in Proc. of 10TH International Conference on Computing and Networking “ICDCN 2009”, Lecture Notes in Computer Science, 2009, Volume 5408/2009, pp. 400-407, Jan./ 2009, IIIT, Hyderabad, India (SPRINGERLINK).  
DOI: 10.1007/978-3-540-92295-7\_48,  
<http://www.springerlink.com/content/76627727k26v7p23/>

13. M. Shukla, P.S. Sharma, Ashutosh Singh, V.K. Srivastava, S. Tiwari, "Performance Analysis of Iterative IDMA Systems with MRC Diversity in Multipath Fading Environment using Optimum Tree Based Interleaver", in Proc. of International Conference On Computational Intelligence And Computing Research “ICCICR 10” (IEEE), pp. 1-4, Dec. 28-29 2010, Tamilnadu College of Engineering, Coimbatore, India.  
Digital Object Identifier: [10.1109/ICCIC.2010.5705812](https://doi.org/10.1109/ICCIC.2010.5705812)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5705812>

14. Shukla, M. ; Gupta, M.; Tiwari, S.; Sharma, P.S.; Shukla, S., "Optical Interleave-Division Multiple-Access Scheme for Long Distance Optical Fiber Communication", in Proc. of International Conference on Computational Intelligence and Computing Research “ICCIC 2010” (IEEE), pp. 1-5, Dec. 28-29/ 2010, Tamilnadu College of Engineering, Coimbatore, India.  
Digital Object Identifier: [10.1109/ICCIC.2010.5705771](https://doi.org/10.1109/ICCIC.2010.5705771)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5705771&tag=1](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5705771&tag=1)

15. M.K. Shukla, Monika Gupta, "A System Proposal for Optical Interleave Division Multiple Access", in Proc. of First International Conference in Signal Processing and VLSI Design, pp. 932-637, June 11-13, 2010, Guru Nanak Engineering College, Hyderabad, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1957931](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1957931)

16. Gupta, R.; Kanaujia, B.K.; Chauhan, R.C.S.; Shukla, M., "Prime Number Based Interleaver for Multiuser Iterative IDMA Systems", in Proc. of International conference on computational intelligence and communication networks “CICN 2010” (IEEE), pp. 603-607,

Nov. 26-28 2010, Bhopal, India.  
Digital Object Identifier: [10.1109/CICN.2010.119](https://doi.org/10.1109/CICN.2010.119)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5702042](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5702042)

17. [Jitendra Dwivedi](#), [M. Shukla](#), [K. S. Verma](#) and [R. K. Singh](#), "A Novel Technique for Indication of Power Frequency Deviations in Electrical Systems", in Proc. of International Conference on Power Electronics & Instrumentation Engineering "PEIE 2010", pp. 80-82, Sept. 7-9 2010, Kochchi, Kerala, India (SPRINGERLINK)  
DOI: 10.1007/978-3-642-15739-4\_14  
[www.springerlink.com/index/V68VU70P1086783K.pdf](http://www.springerlink.com/index/V68VU70P1086783K.pdf)

18. Abhilasha Kumari, Nutan Sharma, R.C.S. Chauhan, M. Shukla, "Feasibility of Cooperative Wireless Communication Systems", in Proc. of International Conference on Future trends in Information & Communication Technologies "FTICT 11", pp. 111-114, Feb. 11 2011, Raj Kumar Goel Institute of Technology, Ghaziabad, India

19. M. Shukla, Monika Gupta, Pradeep Kumar, "Performance Evolution of Optical Interleave Division Multiple Access in coded environment", in Proc. of International Conference on Emerging Trends in Electrical and Computer Technology "ICETECT 11", pp. 644-649, March, 23-24 2011, St. Xaviers Catholic College of Engineering Nagercoil, India (IEEE).  
Digital Object Identifier: [10.1109/ICETECT.2011.5760197](https://doi.org/10.1109/ICETECT.2011.5760197)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5760197](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5760197)

20. M. Shukla, Nutan Sharma, J.K. Dwivedi and Surendra Kr. Sriwas, "Power Line Communication: A Survey", in Proc. of International Conference On Recent Trends in Engineering, Technology & Management, pp. 498-502, Feb 26-27 2011, B.I.E.T., Jhansi, India  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1956311](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1956311)

21. Surendra Kumar Sriwas, Kavita, D.C. Dhubkarya and Manoj Kr. Shukla, "Performance Analysis of Microstrip Ring Hybrid Power Divider", in Proc. of International Conference On Recent Trends in Engineering, Technology & Management, pp. 676-680, Feb 26-27 2011, B.I.E.T., Jhansi, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1958216](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1958216)

22. R.C.S. Chauhan, R. Asthana, M. Shukla, "Representation and Calculation of Correlation Constraints of One Dimensional Unipolar Orthogonal Codes", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2011" (IEEE), pp. 483 – 489, June, 3-5 2011, Shri Mata Vaishno Devi University, Katra, Jammu, India.  
Digital Object Identifier: [10.1109/CSNT.2011.104](https://doi.org/10.1109/CSNT.2011.104)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5966494](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5966494)

23. Kulbhushan Gupta, C.K. Shukla, Shashi Tiwari, M. Shukla, "Performance Evaluation of Modulation Techniques with Iterative IDMA Receivers using Optimum Tree Based Interleaver", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2011" (IEEE), pp. 510-513, June3-5 2011, Shri Mata Vaishno Devi University, Katra, Jammu, India.

Digital Object Identifier: [10.1109/CSNT.2011.109](https://doi.org/10.1109/CSNT.2011.109)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5966499](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5966499)

24. R.C.S.Chauhan, M. Shukla, Ratenesh Kumar, G.P. Bagaria, "Proposal for One Dimensional Optical Orthogonal Codes: Design, Analysis, & Algorithm", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2011" (IEEE), pp. 514-519, June 3-5 2011, Shri Mata Vaishno Devi University, Katra, Jammu, India.

Digital Object Identifier: [10.1109/CSNT.2011.110](https://doi.org/10.1109/CSNT.2011.110)  
[http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=5966500](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5966500)

25. Aakanksha Gupta, Rinkoo Bhatia, M.Shukla, "A Survey on Various Interleavers in Iterative IDMA Communication System", in Proc. of International Conference on Special Functions and their Applications in Science and Engineering "ICSFA-2011", pp. 30-34, Dec. 8-10 2011, Rustamji Institute of Technology, Gwalior, India.

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1980199](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1980199)

26. Singh, Ashutosh Kumar; Purohit, N.; Singh, Kaushal P.; Shukla, M., "A novel approach for lifetime analysis of sensor network using fuzzy logic", in Proc. of Annual IEEE India Conference "INDICON 2011" (IEEE), pp. 1-6, Dec. 16-18, 2011, BITS Pilani Hyderabad Campus, India.

Digital Object Identifier: [10.1109/INDCON.2011.6139429](https://doi.org/10.1109/INDCON.2011.6139429)  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6139429>

27. Nutan Sharma, Tanuja Pande, M. Shukla, "Survey of Power Line Communication", in Proc. of International Conference on Computer Communications & Networks "COMNET 2011", pp. 1-5, Dec. 4-6 2011, College of Technology and Engineering, MPUAT, Udaipur, India. COMNET (ISBN: 973-93-80864-61-7)/Number 1 (ISBN: 973-93-80864-61-7)

<http://research.ijcaonline.org/comnet/number1/comnet1001.pdf>

28. Sugandha Sharma, Akshay Kumar, M. Shukla, Kulbhushan Gupta, C.K. Shukla, "Rotational Interleaver for Iterative Interleave-Division Multiple-Access Scheme", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT-2012" (IEEE), pp. 635-638, Rajkot, India.

Digital Object Identifier: [10.1109/CSNT.2012.142](https://doi.org/10.1109/CSNT.2012.142)



[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2061522](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2061522)

29. Aashish Shukla, Rajat Sapra, Vishal Goel, M. Shukla, "Performance Analysis of PAPR Reduction in Helical Interleaved OFDM System" in Proc. of International Conference on Communication Systems and Network Technologies "CSNT-2012" (**IEEE**), pp. 639-642, May 11-13 2013, Rajkot, India.  
Digital Object Identifier: [10.1109/CSNT.2012.143](https://doi.org/10.1109/CSNT.2012.143)

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2061516](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2061516)

30. Akanksha Gupta, Vipul Dixit and Sanjiv Mishra, M. Shukla, "Maximal Ratio Receiver Combining Diversity with Iterative IDMA Systems using Prime Interleavers", in Proc. of IEEE Students' Conference on Engineering and Systems "SCES-2012" (**IEEE**), pp. 1-6, March 15-16 2012, Motilal Nehru National Institute of Technology, Allahabad, India.  
Digital Object Identifier : [10.1109/SCES.2012.6199041](https://doi.org/10.1109/SCES.2012.6199041)

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2034069](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2034069)

31. Monika Gupta, Divya shakti, M.Shukla, Pradeep Kumar, "Interleaver design for IDMA in optical environment", in Proc. of First International Conference on Communications and Electronics (ICCE 2012), pp. 214-219, Oct. 19-20 2012, Krishna Institute of Engineering Technology, Ghaziabad, India.

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2209702](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2209702)

32. Vipul Dixit, Somendra Shukla and M. Shukla, "Performance Analysis of Optical IDMA System for Indoor Wireless Channel Model", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2012" (**IEEE**), pp. 382-386, Nov 03-05 2012, G.L.A. University, Mathura, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2172631](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2172631)

33. Monika Gupta, Pradeep Kumar, Sanjiv Mishra and M. Shukla, "Comparative study of Random and Tree Base Interleaver for Optical IDMA", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2012" (**IEEE**), pp. 271-275, Nov 03-05 2012, G.L.A. University, Mathura, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2172251](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2172251)

34. Shashi Dwivedi, Radha Singh, Nitin, Sarita Yadav, M. Shukla, "Optimal Spreading Mechanism with different modulation techniques using Random Interleaver in IDMA system ", in Proc. of International Conference on Communication Systems and Network Technologies



“CSNT 2013” (IEEE), pp. 224-229, April 06-08 2013, MIR Lab, Gwalior, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2248411](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2248411)

35. Sheelesh Bharti, Surendra Kumar Sriwas, M.K. Shukla, Rachana Asthana, "Performance of IDMA through Optical Channel", in Proc. of International Conference on Technological Innovations through Modern Engineering Sciences "TIMES-2013", at Institute of Engineering & Technology, Alwar & IET Group, February 23-24, 2013.

36. Vivek Verma, Pratibha Verma, M. Shukla, Ashutosh Singh, “M-ARY PSK Modulation Scheme for IDMA Technique”, International Conference on Advanced Computing, Networking, and Informatics "ICACNI-2013" (SPRINGER), pp. 1179-1186, Central Institute of Technology, Raipur, June 12-14, 2013.

published in "Advances in Intelligent Systems and Computing" Volume 243, ISSN 2194-5357  
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in SPRINGER  
[http://link.springer.com/chapter/10.1007/978-81-322-1665-0\\_121](http://link.springer.com/chapter/10.1007/978-81-322-1665-0_121)

37. Tanuja Pande, M. Shukla, Prachi Tripathi, Ashutosh Singh, “Underwater Communication with IDMA Scheme”, in Proc. of International Conference on Advanced Computing, Networking, and Informatics "ICACNI-2013" (SPRINGER), pp. 1171-1178, Central Institute of Technology, Raipur, June 12-14, 2013.

published in "Advances in Intelligent Systems and Computing" Volume 243, ISSN 2194-5357  
ISSN 2194-5365 (electronic)  
ISBN 978-81-322-1664-3 ISBN 978-81-322-1665-0 (eBook) DOI 10.1007/978-81-322-1665-0  
in SPRINGER  
[http://link.springer.com/chapter/10.1007%2F978-81-322-1665-0\\_120](http://link.springer.com/chapter/10.1007%2F978-81-322-1665-0_120)

38. Tripathi, Shweta ; Dwivedi, J.K. ; Shukla, M., "Power Line Communication with Tree Based Interleaver in Iterative IDMA Systems", in Proc. of International Conference on Computational Intelligence and Communication Networks "CICN 2013" pp. 286 - 290, GLA University, Mathura, Indi, 27-29 Sept. 2013.  
DOI: [10.1109/CICN.2013.145](https://doi.org/10.1109/CICN.2013.145)  
[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6658001&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D6658001](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6658001&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D6658001)

39. Rohini Rai, Prachi Tripathi, M. Shukla, "A Survey on Simulators for Wireless Sensor Networks", in Proc. of International Conference on Advances in Computing and Communication Engineering (ICACCE-14), BCTKEC, Dwarhat, India during Feb. 22-23 2014.

40. Rohini Rai, Prachi Tripathi, M. Shukla, "Novel Proposal for Intelligent Energy Billing and Security System", in Proc. of International Conference on Advances in Computing and Communication Engineering (ICACCE-14), BCTKEC, Dwarhat, India during Feb. 22-23 2014.
41. Monika Gupta, M. Shukla, Pradeep Kumar, "Interleaver Design Consideration for IDMA in Optical Environment", in Proc. of International Conference on Advanced Computing & Communication Technologies (ACCT-14), pp. 138-143, Feb. 8-9 2014 (**IEEE**), Rohtak, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2395095](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2395095)
42. Prachi tripathi, Shivani Dixit, Roopali Agarwal and M. Shukla, "MRRC Diversity in Multipath Fading Acoustic Environment for Iterative IDMA Receivers", in Proc. of International Conference on Computational Intelligence and Communication Networks "CICN 2014" (**IEEE**), pp. 219-222, Nov 14-16 2014, Udaipur, India.  
DOI: [10.1109/CICN.2014.58](https://doi.org/10.1109/CICN.2014.58)  
[http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=7065477&refinements%3D4258762275%26ranges%3D2014\\_2014\\_p\\_Publication\\_Year%26queryText%3Didma](http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=7065477&refinements%3D4258762275%26ranges%3D2014_2014_p_Publication_Year%26queryText%3Didma)
43. Prachi tripathi, Shivani Dixit, Roopali Agarwal and M. Shukla, "Maximal Ratio Combining Diversity Technique for IDMA Systems", in Proc. of International Conference on Communication Systems and Network Technologies "CSNT 2015" (**IEEE**), April 04-06 2015, Gwalior, India.
44. Prachi tripathi, M. Shukla, "Performance Analysis of Power Rotational Interleaver in Acoustic Environment", in Proc. of International Conference on Green Computing and Internet on Things (**IEEE**), pp. 1266-1271, Oct. 8-10, 2015, Delhi, India.
45. Brishketu Suman Tripathi, M. Shukla, Mohit Srivastava, " Performance Enhancement in Wireless Sensor Network using Hexagonal Topology", in Proc. of International Conference on Communication, Control and Intellegent Systems "CCIS 2015" (**IEEE**), pp. 117-123, Nov. 7-8, 2015, Mathura, India.
46. Shivani Dixit, Priachi Tripathi, M.Shukla, "SC-FDM-IDMA scheme for Underwater Acoustic Communications", in Proc. of International Conference on Communication, Control and Intellegent Systems "CCIS 2015" (**IEEE**), pp. 222-225, Nov. 7-8, 2015, Mathura, India.

## **National**

## **Conferences/**

## **Seminars**

1. M. Shukla, Satyendra Pandey, "Qualitative and speedy Development of Hydro-power Projects: Present Status and Future Strategy", in Proc. of National Seminar on Safety and Quality

Management of Development of Uttranchal, pp. 138-143, June, 24 2005, Dehradun, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1963518](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1963518)

2. M. Shukla, Vidyakant Dwivedi, "Code Division Multiple Access (CDMA) System in Multipath Environment", in Proc. of National Conference on Communication & Computational Techniques: Current and Future Trends, "NCCT 06" Dehradun, India, pp. 559-560, Nov.10-11 2006, D.I.T., Dehradun, India.  
[http://www.researchgate.net/publication/200783159\\_Code\\_Division\\_Multiple\\_Access\\_\(CDMA\)\\_System\\_in\\_Multipath\\_Environment](http://www.researchgate.net/publication/200783159_Code_Division_Multiple_Access_(CDMA)_System_in_Multipath_Environment)

3. M. Shukla, V.K. Srivastava, S. Tiwari, "Adaptive Equalization , A Review", in Proc. of National Conference on Communication & Computational Techniques: Current and Future Trends, "NCCT 06", pp. 431-434, Nov.10-11 2006, D.I.T., Dehradun, India.

4. M. Shukla, Aasheesh Shukla, V.K. Srivastava, S. Tiwari, "Interleave Division Multiple Access Scheme: An Overview", in Proc. of 3rd National Conference on Currents Trends in Technology, "NuiCone 08", pp. 350-355. Nov. 27-29/ 2008, Nirma University, Ahmadabad, Gujrat, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955897](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955897)  
[https://www.researchgate.net/publication/200783148\\_Interleave\\_Division\\_Multiple\\_Access\\_Scheme\\_An\\_Overview](https://www.researchgate.net/publication/200783148_Interleave_Division_Multiple_Access_Scheme_An_Overview)

5. M. Shukla, Rohit Kumar, Aasheesh Shukla, "CDMA 2000, W-CDMA, and IDMA : An Overview", in Proc. of National Seminar on Recent Advances on Information Technology "RAIT 2009" , pp. 45-42, Feb.6-7/ 2009, I.S.M. Dhanbad, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955967](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955967)

6. M. Shukla, Aasheesh Shukla, RohitKumar, V.K. Srivastava, S. Tiwari, "Simple study of two Multiple Access Scheme: W-CDMA and IDMA", in Proc. of IEEE National Conference on Advances in Computer Applications "NCACA-09", pp.276-280, May 13-14 2009, Geetanjali Institute of Technical Studies, Udaipur, Rajasthan, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955929](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955929)

7. M. Shukla, Aakanksha and Srivastava, V. K. and Tiwari, S., "Analysis of Orthogonal Interleavers with Iterative IDMA Scheme", in Proc. of 4TH National Conference on Currents Trends in Technology, Nirma University, pp. 24-28, Nov. 25-27 2009, Ahmadabad, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955889](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955889)

8. "Integration of Cluster based routing and Mobile Service Discovery Protocol for MANETs: A

Novel Approach”, in Proc. of 4TH National Conference on Currents Trends in Technology, Nirma University, "NUiCONE 09", pp. 18-23, Nov. 25-27/ 2009, Ahmadabad, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955892](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955892)

9. Archana Singh, M. Shukla, “A Procurement Market Model for Reactive Power in the Electricity Sector”, in Proc. of National Seminar Non Conventional Energy Resources & Its Utilization, pp. 94-102, Feb.27-28 2009, K.N.I.T., Sultanpur, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955886](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955886)

10. M. Shukla, J.K. Dwivedi, “Hydrogen and Fuel Cells in India- Present Status and Future strategy for Speedy Development”, in Proc. of National Seminar Non Conventional Energy Resources & Its Utilization, Feb. 27-28 2009, pp. 103-117, Feb. 27-28/ 2009 , K.N.I.T., Sultanpur, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1955888](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955888)

11. M. Shukla, Aasheesh Shukla, Rohit, Sankalp, "Performance comparison of RI & TBI based system in fading environment using MRC scheme", in Proc. of National Conference on Signal Processing and Real Time Operating System "SPRTOS 2011", H.B.T.I., Kanpur, pp. COMO203-1 to COMO 203-4, March, 26-27 2011.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2041135](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2041135)

12. Manoj Kumar Shukla, Ompal Singh, Binod Soni, "Gain Enhancement of Micro-strip Patch Antenna using Circular Split Ring Resonator ", in Proc. of National Seminar on Recent Advances in Communication and Signal Processing, May 2-3 2013, pp. 1-3, Corporate Institute of Science & Technology, Bhopal, India.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2261622](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2261622)

13. Sanjiv Mishra, Prachi Tripathi, M. Shukla, Somendra Shukla, "A Rectangular Patch Antenna for a RFID Tag Designed for Metallic Objects with reduced losses", in Proc. of National Seminar on Recent Advances in Communication and Signal Processing, May 2-3 2013, pp. 17-19, Corporate Institute of Science & Technology, Bhopal, India .  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2261625](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2261625)

14. Ajay Patel, Shivani Dixit, M. Shukla, "Interleavers and SC-FDMA-IDMA Scheme ", in Proc. of 2nd Conference on Advances in Electrical & Information Communication Technology (AEICT-2015), April 11-12, 2015, pp. 25-31, PSIT Group of Institutions, Kanpur.

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