

Name: Dr. Saumya Srivastava

**Designation: Assistant Professor** 

**Department: Electronics & Communication Engineering** 

Phone No(s): 7523883748

Email: srisaumya1088@gmail.com

**Qualifications: PhD** 

**Experience: 3 Year** 

Area of Interest: Optical Communication, Communication

**Technology, Optical Wireless Communication** 

**Publication: 20** 

**Book/Book Chapter: NA** 

Patent: 01

**Sponsored Projects: NA** 

**Consultancy: NA** 

# CV

## Dr. SAUMYA SRIVASTAVA

### Address:

SA 8/112 O.N. Parashurampur Bela Road

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### **OBJECTIVE:**

To become a successful guide for students as they can actively participate in competitive world and also to become a successful teacher and gain exposure and experience in a competitive world where I can actively participate and use my skills for growth of institute.

### PROFESSIONAL QUALIFICATIONS:

Course	Institution	University	Voor	Aggregate %
Ph.D Performance Optimization of Dense Wavelength Division Multiplexed Optical Fiber Communication System	J.K. institute Of Applied Physics & Technology, Allahabad	University Of Allahabad, Allahabad	2019	Ph.D Awarded
M.Tech (Electronics)	J.K. institute Of Applied Physics & Technology, Allahabad	University Of Allahabad, Allahabad	2011-13	73.11
B.Tech (Electronics & communication)	Vivekanand Institute of technology & Science, Ghaziabad	U.P Technical University, Lucknow	2006-10	71.86

### ACADEMIC QUALIFICATION:

Examination	Board	College	Year	Aggregate %
HIGH SCHOOL	U.P Board	Rani Murar Kumari Balika Inter College, Varanasi	2003	63.70
INTERMEDIATE	U.P Board	Rani Murar Kumari Balika Inter College, Varanasi	2005	69.20

### Ph.D DESCRIPTION:

### Thesis Title: Performance Optimization of Dense Wavelength Division Multiplexed Optical Fiber Communication System

Dense wavelength division multiplexing technique in combination with optical amplifiers with has now emerged as a most efficient and powerful means of increasing the capacity of optical fiber communication systems. The objective of the work done s is to develop a system and evaluate the performance of the system by using different modulation techniques. It requires more transport capacity and transmission distance of the DWDM system with reduction in cost per transmitted information bit. The performance of the DWDM systems is improved by using different techniques. Free Space Optics (FSO) systems depend on the atmospheric turbulences.

### **PROJECT DESCRIPTION:**

- Performance Analysis of DWDM Ring Network with OADM Nodes (M.Tech)
- Home security system with auto dial-up. (B.Tech)

### LIST OF RESEARCH PUBLICATIONS

### Conferences

- Saumya Srivastava, Kamal K. Upadhyay and Nar Singh, "Performance Evaluation Of High Speed Dwdm Free Space Optic Communication System Under Different Atmospheric Turbulence", in Proceeding of 88th Annual Session of NASI & Symposium on Science, Technology and Ecosystem for Sustainable Rural Development, 6-8, Dec-2018, MGCGV & DRI, Chitrakoot, Satna, M. P.
- Saumya Srivastava, Kamal K. Upadhyay and Nar Singh, "High Speed Optical Mode Division Multiplexing of Hermite-Gaussian Modes in Multimode Fiber", in Proceeding of Ambient Communications and Computer Systems, Springer, RACCCS-2018, pp. 93-100, Ajmer.

- Saumya Srivastava, Kamal K. Upadhyay, Nikhlesh K. Mishra and Nar Singh, "Analysis of High Speed Free Space Optic Communication System Under Various Weather Conditions", in proceeding of ELECTRON-18, National Conference on Emerging Trends in Electronics, IT & Communication, IILM Greater Noida.
- Saumya Srivastava, K. K. Upadhyay, N. Singh, 2016, "Design and performance analysis of dispersion managed system with RZ and NRZ modulation format" in proceeding of IEEE Xplore Digital Library, *ICCCCM-16*. pp. 1-4. UCER, Naini, Allahabad, U.P.
- Kamal k. Upadhyay, Vanya Arun, Saumya Srivastava, N. K, Shukla "Implementation of half subtractor using 2x1 multiplexer" in proceeding ELECTRON 2018.
- Nikhlesh kumar Mishra, Kamal Kishor Upadhyay, Saumya Srivastava, Vanya Arun, Narendra Kumar Shukla, "Study of FSO (Free Space Optics) network its application merits and Limitations" in proceeding ELECTRON 2018.
- Kamal Kishor Upadhyay, Vanya Arun, Saumya Srivastava, N. K. Shukla, "Design Comparision and performance Evaluation of dispersion managed system with hybrid Optical Amplifier" in proceeding of IEEE sponsored conference ICETEESES-16 held in KNIT Sultanpur.
- Kamal Kishor Upadhyay, Saumya Srivastava, Vanya Arun, Nikhlesh Kumar Mishra, N. K. Shukla, "Design and performance analysis of MZI based 2x2 reversible XOR Logic Gate" In proceeding of IEEE conference RAETCS-2018 held in Feb 2018 at SHUATS ALLAHABAD.
- 9. Kamal Kishor Upadhyay, Saumya Srivastava, Vanya Arun, Nikhlesh Kumar Mishra, N. K. Shukla, "Design and Performance Analysis of Reversible XOR Logic Gate" In proceeding of SPRINGER conference IC3E-2018 held in April 2018 at Department of Electronics and Communication, University of Allahabad, ALLAHABAD.

### **Published Papers**

- Saumya Srivastava, Kamal k. Upadhyay, Nar singh "Optimization of mode division multiplexing – Free space optical transmission system with different encoding Scheme", *Indian Journal of Physics*, vol. 94 (11) pp. 1-7, November 2019. <u>https://doi.org/10.1007/s12648-019-01632-2.
  </u>
- 2. Saumya Srivastava, Kamal Kishore Upadhyay, N.K. Shukla, "Evaluation of Inter-Aircraft Optical Wireless Communication System with Different Modulation Formats" *Journal of Optical Communication, July 2021*.
- Saumya Srivastava, Upendra Chaurasiya, Pradeep Tiwari, Ashish Misal, Kamal K Upadhyay, "All optical frequency-encoded Toffoli gate" *Journal of Optical Communication, November* 2021.

- Saumya Srivastava, Kamal k. Upadhyay, Nar singh "Performance evaluation of DWDM Holmium doped fiber amplifier for optical communication" *IJETAE* Vol 8. Issue 2 February 2018. Pp. 66-70.
- Saumya Srivastava, Kamal k. Upadhyay, Nikhlesh Mishra, Nar Singh "Design of a DWDM system for ground to satellite using RZ/NRZ signaling scheme" *IJCESR* vol.5 issue 1 2018 pp. 89-93.
- Saumya Srivastava "Design and Performance Analysis of Holmium-Doped Fiber Amplifier Operating at 2μm Band" *IJMTER* Vol. 5 Issue 2 February 2018, Pp. 27-36.
- Nikhlesh kumar Mishra, Ashutosh kumar Singh, Kamal Kishor Upadhyay, Saumya Srivastava, Narendra Kumar Shukla, "Survival elastic Optical Network" *IJCESR* Vol 5. Issue 2018 pp.1-4.
- Kamal K. Upadhyay, Saumya Srivastava, N. K. Mishra, N. K Shukla, Design and Performance Analysis of MZI Based 2x2 Reversible Xnor Logic Gate" *Journal of optical Communication feb 2018.*
- Kamal K. Upadhyay, N. K. Shukla, Saumya Srivastava, Sushank Chaudhari, "High Speed 120 Gbps AMI-WDM-PDM Free Space Optical Transmission System" *Journal of optical Communication june 2017.*
- Kamal kishor upadhyay, Vanya arun, Saumya Srivastava, N.K. Shukla, "A NOVEL MODEL OF ALL OPTICAL REVERSIBLE XOR/XNOR LOGIC GATE ON A SINGLE PHOTONIC CIRCUIT," *Indian Journal of physics*, vol. 93 (8), Pp. 1081-1094, Nov. 2018. Springer.
- 11. Kamal kishor upadhyay, Vanya arun, **Saumya Srivastava**, N.K. Mishra, N.K. Shukla, "Design and Performance Analysis of All Optical Reversible Full Adder, As ALU", *Proceedings of the National Academy of Sciences, India Section A: Physical Sciences,* 2019.
- 12. Nikhlesh K Mishra, Upendra Chaurasiya, **Saumya Srivastava**, Shubham Shukla, Kamal K Upadhyay, "Implementation of frequency encoded all optical reversible logic" *Journal of Optical Communication, November 2021.*

### Patent:

 Title of Invention: A System and a method for high speed multimode data transmission for short haul communication, Dr. Kamal Kishor Upadhyay, Dr. Nikhlesh K Mishra, Dr. Saumya Srivastava, Ritvik Shukla, Dr. N. K. Shukla, Publication Date: 23/10/20.

### Workshop/ Conferences/ Faculty Development Course Attend:

- 1. Two week ISTE workshop on signal and system 2014. Conducted by IIT KHARAGPUR.
- Author Workshop jointly organized by Springer and University of Allahabad, held on 30<sup>th</sup> October, 2015.

- Simulation of Image, Audio and Video with MATLAB, OpenCV and Documentation with Latex (SIMDOC), organized by Dept. of Computer Science and Engineering, MNNIT Allahabad during 14<sup>th</sup> Dec-18<sup>th</sup> Dec, 2015.
- 4. Conference signal processing and integrated networks-16, Amity Noida.
- 5. Workshop on Electromagnetics and Antenna Design (WEAD) using HFSS, held during April 9-10, 2016, at the Dept. of Electronics Engineering, Indian Institute of Technology (BHU), Varanasi, India.
- 6. ICCCCM-16 IEEE Conference UCER, Naini, Allahabad, U.P.
- IEEE Seminar in Internet of Things and Its Applications, organized by the University of Allahabad on 18<sup>th</sup> Feb 2017.
- TEQIP-II Sponsored One Week Workshop on Antenna Design and Signal Processing Techniques for 5G Networks and IoT (ADSPNIT), held during 27<sup>th</sup> Feb-4<sup>th</sup>March 2017.
- 9. Conference IC3E-18, Department of Electronics and Communication, University of Allahabad.
- 10. TEQIP-III Sponsored Faculty Development Programme on VLSI for Signal Processing and Communication, held during July 16<sup>th</sup> to July 20<sup>th</sup>, 2018.
- 11. RACCCS-2018 Springer Conference, Ajmer.
- 12. Conference 88<sup>th</sup>, Annual session of NASI & symposium on science, technology and ecosystem for sustainable rural development 6-8 Dec-18.
- Workshop on Best Practice in Scientific Publishing on 20<sup>th</sup> Dec, 2018, organized by J. K. Institute of Applied Physics and Technology, University of Allahabad.

#### SKILL SET:

- Basic Electronics
- Control System
- Communication System

### PERSONAL SKILLS:

- Good interpersonal and communication skill
- Ability to adapt and collaborate as part of a team
- Extremely positive even in high pressure situation

### **EXPEARINCE:**

Presently working as an Assistant Professor in Ashoka Institute of Technology & Management, Varanasi. (April 2022 to till date)

Worked as Senior Lecturer in Dept. of Electronics & Communication from BBD Northern India Institute of Technology, Lucknow. (2013-2014)

### **HOBBIES/INTEREST:**

- Love to see the nature
- Reading newspapers

### ACHIEVEMENTS:

Qualified GATE 2011 with score card 491.

PERSONAL PROFILE:

Father's Name : Dr. O. N. Srivastava

larhari Prasad

Date of Birth :10 June, 1988

Sex : Female

Marital Status : Married

Nationality : Indian

Language Known : Hindi, English

### **TWO REFERENCES**

1.	Prof. Nar Singh
	Former Head, Department Of Electronics & Communication
	University of Allahabad
2.	PROF. N.K.SHUKLA (Registrar)
	University of Allahabad

I consider myself familiar with Electronics & Communication. I am also confident of my ability to work in a team.

I hereby declare that the above information is true to the best of my knowledge.

Date:

Place:

### (SAUMYA SRIVASTAVA)