# Dr. Prabu K, M.E., Ph.D.,

## Contact


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## Background

- 10+ years of experience with the wireless channel modeling and performance enhancement of wireless optical communication systems
- Experience in visible light communication, light fidelity, Electro optics concepts for optical modulators
- Experience in project management, project proposals, documentation & report writing, developing and maintaining technological resources for cross-functional teams

## Education

**National Institute of Technology (NIT) Trichy, India - CGPA 9.00/10.00** Feb' 2012 – Apr' 2015
**PhD – Research Scholar** in Electronics and Communication Engineering (ECE)
**Thesis Title:** *Performance analysis of free space optical communication systems over strong atmospheric turbulence channel with pointing errors*
Description: The main objective of this thesis work is to analyse and enhance the performance of free space optical communication systems over strong atmospheric turbulence channel with pointing errors using robust modulation techniques, relay, MIMO and diversity techniques.

**Madras Institute of Technology (MIT) Chennai, India - CGPA 8.44/10.00** Aug'2008 – Apr' 2010
**M.E – Communication & Networking** in Department of Electronics Engineering
**Master's Thesis:** *Analysis of Mach-Zehnder Modulator with one arm loaded with ring resonator for Radio over Fibre (RoF) Applications*
Description: This work identifies the problem that exists in Mach-Zehnder modulator subjected to high frequency input signals, will produce inter modulation distortion and harmonic distortion due to its non-linear nature. This project work introduced the micro ring resonator to linearize the Mach-Zehnder modulator and reduced the nonlinearity effects for radio over fiber applications.

**Anna University Chennai, India – 74 % First Class** Aug'2003 – Apr' 2007
**Bachelor of Engineering** in Electronics and Communication Engineering (ECE)
**Thesis:** *Optical character reorganization using Artificial Neural Network (OCR-ANN)*
Description: The objective of this project work is to recognize the correct characters from the noisy characters in an optical image using artificial neural network.

## Major Areas of Interest

- Wireless Optical Communications
- Optical Communications
- Wireless Communication
- Underwater communication
- Optical sensors
- Photonic crystal fibre
- Optical communication networks
- 5G, Antennas
- IoT
- AI Enabled Wireless Communication

## Professional Experience

**National Informatics Centre (NIC) Pondicherry, India** Nov, 2007- Apr, 2008
- Technical Assistant for Common Integrated Police Application (CIPA) project in SGC Services Pvt. Ltd. – Chennai.
- Provide support and testing for CIPA project.

## Teaching Experience

**National Institute of Technology Karnataka (NITK), Karnataka, India** May, 2018 – Till date

- Working as Assistant Professor
- Subjects handling

  UG — Elements of Electronics and Communication Engineering, RF and Microwave Engineering, Internet of Things, RF Components and Circuits, Optical Communication Systems and Networks, MIMO Communication Systems

  PG — Nano Photonics

**Vellore Institute of Technology (VIT) University, Vellore, India** Jan, 2015 – May, 2018

- Working as Associate Professor
- Positions held

  Project Coordinator, Time Table Coordinator, Course Chair, Research Coordinator, IPT Coordinator, Year coordinator
- Subjects handled

  UG— Optical Communication and Networks, Microwave Engineering, Antennas and wave propagation, Transmission Line Theory and Waveguides

  PG— Fiber Optic Communication and Networks

**Loyola ICAM College of Engineering and Technology (Loyola Institutions Group), Chennai, India** Sep, 2014 – Dec, 2014

- Worked as Assistant Professor
- Positions held

  Project Coordinator, ISO Coordinator
- Subjects handled

  UG—Digital Electronics, RF & Microwave Engineering

**Easwari Engineering College (SRM Institutions Group), Chennai, India** Sep, 2010 – Feb, 2012

- Worked as Assistant Professor
- Positions held

  Placement & Project Coordinator, ISO Coordinator
- Subjects handled

  UG-- Signals and Systems, Electromagnetic Fields, RF & Microwave Engineering, Wireless mobile Communication and Digital Signal Processing

  PG-- Advanced Digital Signal Processing, Solid State Device Modelling and Simulation
- Completed intensive training programs for Mission10X and obtained certification in Teaching and Learning

## Project Proposals

- A research proposal accepted for DST SERB under EEQ entitled **"Performance Analysis and Enhancement of Radio over Free Space Optical Communication System for 5G Applications for Smart Cities"**, (Duration – 2019 - 2021, Budget – Rs. 28.06 Lakhs).

## Publications: Books

- **"Microwave Engineering Theory and Techniques" – David M Pozar, Wiley, WILEY** India Adaptation, Content contribution for Indian Adaptation by Prabu K., 2020.
- A chapter author for a book **"Principles and Applications of Free Space Optical Communication"**, **IET Publications**. Title of the chapter is "**Performance analysis and mitigation of turbulence effects using spatial diversity techniques in FSO systems over combined channel**"., 2019.
- A chapter author for a book **"Turbulence and Related Phenomena"**, **IntechOpen**. Title of the chapter is "**Performance analysis of FSO systems over atmospheric turbulence channel for Indian weather conditions**", 2019.

## Publications: Patents

- Sandeep Kumar, Hanjung song, Shyam lal, **Prabu K,** "Reconfigurable Triple-Band On-Chip Nano Antenna for Terahertz Applications" Application No. 202141032871, Indian Patent Filing Date: 7/22/2021 [Filed].

## Publications: Journals

1. L. Bhargava Kumar, Prasad Naik, **Prabu Krishnan**, "High-speed long-range multihop underwater wireless optical communication convergent with free-space optical system for optical internet of underwater things and underwater optical wireless sensor network applications," SPIE – Optical Engineering, vol. 61 (7), pp. 076107-1 to 076107-11, 2022.
2. M Nizar, E Caroline and **Prabu Krishnan**, " 'Photonic Crystal Fiber Sensor for the detection of Hazardous Gases'," Springer - Microsystem Technologies, pp. 1-10, 2022.
3. Ramavath Prasad Naik, **Prabu Krishnan, and** G. D. Goutham Simha, "Reconfigurable intelligent surface-assisted free-space optical communication system under the influence of signal blockage for smart-city applications," Optica – Applied Optics, issue 61, no20, 5957-5964, 2022.

4. E Caroline, M Nizar and **Prabu Krishnan**, " A Highly Sensitive Photonic Crystal Fiber Gas Sensor for the Detection of Sulfur Dioxide," Springer - Silicon, pp. 1-10, 2022.
5. L. Bhargava Kumar, Prasad Naik, **Prabu Krishnan**, A. Arockia Bazil Raj, Arun K. Majumdar and Wan-Young Chung "RIS Assisted Triple-Hop RF-FSO Convergent with UWOC System," IEEE – Access, issue 10, 66564-66575, 2022.
6. L. Bhargava Kumar, Prasad Naik, **Prabu Krishnan**, "Performance Analysis of Multi-hop FSO Convergent with UWOC System for Security and Tracking in Navy Applications," Springer – Optical and Quantum Electronics, issue 54, no. 6, 1-26, 2022.
7. L. Bhargava Kumar, Prasad Naik, **Prabu Krishnan**, and Arun K Majumdar "Underwater Wireless Optical Communication based Reconfigurable UOWSN for Monitoring and Discovering the Continental Margin Ore Deposits," Optica – Applied Optics, issue 61, no. 11, 3141-3149, 2022.
8. Ramavath Prasad Naika, Udupi Shripathi Acharya, Shyam Lal, **Prabu Krishnan**, "Performance Investigation of Underwater Wireless Optical System for Image Transmission through the Oceanic Turbulent Optical Medium," Springer – Optical and Quantum Electronics, issue 54, no. 4, 1-16, 2022.
9. Abhishek Kumar, **Prabu Krishnan**, "Performance Analysis of Radio-over-Free-Space Optical Communication System with Spatial Diversity over Combined Channel Model," Springer – Optical and Quantum Electronics, issue 54, no. 211, 1-14, 2022.
10. Lepuri Jathin Sravan Kumar, **Prabu Krishnan**, Biradher Shreya, Sudhakar M S, "Performance Enhancement of FSO Communication System using Machine Learning for 5G/6G and IoT Applications," *Elsevier – Optik*, vol. 242, 168430 2022.
11. Abhishek Kumar, **Prabu Krishnan**, "RoFSO system based on BCH and RS coded BPSK OFDM for 5G applications in smart cities," Springer – Optical and Quantum Electronics, issue 54, no. 18, 1-15, 2022.
12. Vijaya Ratnam Nallagonda, **Prabu Krishnan**, "Bit error rate analysis of ground-to-high altitude platform free-space optical communications using coded polarization shift keying in various weather conditions," Springer – Optical and Quantum Electronics, issue 54, no. 27, 1-15, 2022.
13. Ramavath Prasad Naik, G. D. Goutham Simha, and **Prabu Krishnan,** "Wireless-optical-communication-based cooperative IoT and IoUT system for ocean monitoring applications," Optica – Applied Optics, vol. 60, issue 29, 9067-9073, 2021.
14. L. Bhargava Kumar, Prasad Naik, **Prabu Krishnan**, "Performance enhancement using multiple input multiple output in dual-hop convergent underwater wireless optical communication-free space optical communication system under strong turbulence with pointing errors," SPIE – Optical Engineering, vol. 60 (10), pp. 106106, 2021.
15. Vijaya Ratnam Nallagonda, **Prabu Krishnan**, "Bit error rate analysis of polarization shift keying based free space optical link over different weather conditions for inter unmanned aerial vehicles communications," Springer – Optical and Quantum Electronics, issue 53, no. 9, 1-15, 2021.
16. M Nizar, E Caroline and **Prabu Krishnan**, " Design and investigation of a high-sensitivity PCF sensor for the detection of sulfur dioxide," Springer - Plasmonics, pp. 1-11, 2021.
17. A Berry, N Anand, Sangeetha A and **Prabu Krishnan**, "High-Performance Eight-Channel Photonic Crystal Ring Resonator–Based Optical Demultiplexer for DWDM Applications," Springer - Plasmonics, pp. 1-8, 2021.
18. Revathi Senthil, Utkarsh Anand, and **Prabu Krishnan**, " Hollow Core high Sensitive Photonic Crystal Fiber for Liquid / Gas Sensing Applications," Springer - Applied Physics A, 127, no. 4, 1-8, 2021.
19. Vijaya Ratnam Nallagonda, **Prabu Krishnan**, "Performance Analysis Of FSO Based Inter-UAV communication systems," Springer – Optical and Quantum Electronics, issue 53, no. 4, 1-20, 2021.
20. J Abhishek, **Prabu Krishnan**, S Robinson, "Design of an all-optical ultrafast full-subtractor based on two-dimensional photonic crystals," *Springer – Journal of Computational Electronics*, vol. 20, pp. 433 – 441, 2021.
21. Ajay Uppalapati, PN Ramavath, **Prabu Krishnan**, "Analysis of M-QAM Modulated Underwater Wireless Optical Communication System for Reconfigurable UOWSNs Employed in River Meets Ocean Scenario," IEEE Transactions on Vehicular Technology, vol. 69, issue 12, pp. 15244 – 15252, 2020.
22. L. Bhargava Kumar, **Prabu Krishnan**, "Asymptotic bit error rate analysis of convergent underwater wireless optical communication-free-space optical system over combined channel model for different turbulence and weather conditions with pointing errors," SPIE – Optical Engineering, vol. 59 (11), pp. 116102, 2020.
23. L. Bhargava Kumar, **Prabu Krishnan**, "Multi-hop convergent FSO-UWOC system to establish a reliable communication link between the islands," Elsevier – Optics Communications, vol. 474, pp. 126107, 2020.
24. PN Ramavath, SA Udupi, **Prabu Krishnan**, "Co-operative RF-UWOC link performance over hyperbolic tangent log-normal distribution channel with pointing errors," Elsevier – Optics Communications, vol. 469, pp. 125774, 2020.
25. Abhishek Kumar**, Prabu Krishnan**, "Performance Analysis of RoFSO Links with Spatial Diversity over Combined Channel Model for 5G in Smart City Applications," Elsevier – Optics Communications, vol. 466, pp. 125600, 2020.
26. Divya shree M, Sangeetha A and **Prabu Krishnan**, "Analysis and optimization of uniform FBG structure for sensing and communication applications," *Springer – Photonics Network Communications*, 2020.
27. Ramavath, Prasad Naik, Shripathi Acharya Udupi, and **Prabu Krishnan**, "Experimental demonstration and analysis of underwater wireless optical communication link: Design, BCH coded receiver diversity over the turbid and turbulent seawater channels," *Wiley – Microwave and Optical Technology Letters*, 2020.
28. PN Ramavath, SA Udupi, **Prabu Krishnan,** "High-speed and reliable Underwater Wireless Optical Communication system using Multiple-Input Multiple-Output and channel coding techniques for IoUT applications," *Elsevier – Optics Communications*, vol. 461, pp. 125229, 2020.
29. Divya shree M, Sangeetha A and **Prabu Krishnan**, " Design and Analysis of FBG sensor for explosive detection applications," *Springer - Plasmonics*, pp. 1-7, 2019.
30. **Prabu Krishnan**, S. Gopikrishna, "Enhanced Optical Wireless Communication System for Bio-signal Monitoring Applications," *Springer – Wireless Personal Communications*, pp. 1-13, 2019.

31. Revathi Senthil, Anamika Soni, Kushagra Bir, Raghavee Senthil and **Prabu Krishnan**, "Circular-Pattern Photonic Crystal Fiber for Different Liquids with High Effective Area and Sensitivity," *Springer - Plasmonics*, pp. 1 - 5, 2019.
32. R. Malavika, **K. Prabu**, "Design Optimization of a Highly Sensitive Spiral Photonic Crystal Fiber for Liquid and Chemical Sensing Applications," *Elsevier – Optical Fiber Technology*, vol. 51, pp. 36 - 40, 2019.
33. Malavika Rajeev, Geethu Anna Mathew and **Prabu Krishnan**, "Analysis of Beam Divergence on FSO Link using PolSK technique," *SPIE – Optical Engineering*, vol. 58, issue 4, pp. 046109, 2019.
34. Preeti Samhita Pati, **Prabu Krishnan**, "Modelling of OFDM based RoFSO system for 5G applications over varying weather conditions : A case study," *Elsevier – Optik*, vol. 184, pp. 313 - 323, 2019.
35. **Prabu Krishnan**, "Analysis of FSO Systems with SISO and MIMO Techniques," *Springer – Wireless Personal Communications*, pp. 1-9, 2019.
36. **Prabu Krishnan**, Gaurav Kumar Jha, Anubhav Walia, "Performance Enhancement of BPSK-SIM and DPSK-SIM based FSO Downlink over Atmospheric Turbulence using Aperture Averaging and Receiver Diversity," *Springer – Photonic Network Communications*, pp. 1-9, 2019.
37. **Prabu Krishnan**, and Dhanashree Nasre, Design and analysis of a novel optical circulator based on photonic crystal for photonic integrated circuit applications, *Springer – Plasmonics*, pp. 1-7, 2019.
38. **Prabu Krishnan,** Malavika R, "Highly birefringent photonic crystal fibre with hybrid cladding," *Elsevier – Optical Fiber Technology*, vol. 47, pp. 21-26, 2019.
39. **Prabu Krishnan**, "Performance Analysis of Hybrid RF/FSO System using BPSK-SIM and DPSK-SIM over Gamma-Gamma Turbulence Channel with Pointing errors for Smart City Applications," *IEEE Access*, 6 : 75025-75032, 2018.
40. **Prabu Krishnan,** "Design of Collision Detection System for Smart Car Using Li-Fi and Ultrasonic Sensor", *IEEE Transactions on Vehicular Technology*, vol. 67, Issue 12, pp. 11420-11426, 2018.
41. **Prabu Krishnan,** Jana Utsav, K. A Balaji, "Asymptotic BER Analysis of QAM and PSK with OFDM RoFSO over M - Turbulence in the presence of Pointing errors," *IET Communications*, vol. 12, Issue 16, pp. 2046 – 2051, 2018.
42. K. A. Balaji, **K. Prabu**, "BER analysis of relay assisted PSK with OFDM ROFSO system over Malaga distribution including pointing errors under various weather conditions," *Elsevier – Optics Communications*, vol. 426, pp. 187-193, 2018.
43. **K. Prabu**, Sanchal Thakkar, "Temporal broadening analysis of FSO Link with pointing error over M-distribution channel model," *Elsevier – Optics Communications,* vol. 421, pp. 115-124, 2018.
44. **K. Prabu**, Saumya Gupta, Satwiki Jaiswal, "Impact of Pointing Errors and Turbulence Effects on POLSK and Coherent OWC based FSO System over Generalized Turbulence Channel Model," *Springer – Photonics Network Communications* pp. 1-10, 2018.
45. K. A. Balaji, K. A., **K. Prabu,** "Performance evaluation of FSO system using wavelength and time diversity over malaga turbulence channel with pointing errors." *Elsevier – Optics Communications* vol. 410, pp. 643-651, 2018.
46. **K. Prabu,** S. Charanya, Mehul Jain, Debapriya Guha, "BER Analysis of SS-WDM based FSO system for Vellore weather conditions," Elsevier – Optics Communications, vol. 403, pp. 73-80, 2017.
47. G. Aarthi, **K. Prabu**, G. Ramachandra Reddy, "Aperture averaging effects on the average spectral efficiency of FSO links over turbulence channel with pointing errors," *Elsevier – Optics Communications*, vol. 385, pp. 136-142, 2017.
48. **K. Prabu**, D. Sriram Kumar, "Polarization shift keying based relay-assisted free space optical communication over strong turbulence with misalignment," *Elsevier – Optics & Laser Technology,* vol. 76, pp. 58-63, 2016.
49. **K. Prabu**, D. Sriram Kumar, "MIMO free-space optical communication employing coherent BPOLSK modulation in strong atmospheric turbulence channels with pointing errors," *Elsevier – Optics Communications,* vol. 343, pp. 188-194, 2015.
50. **K. Prabu**, Rajeswar Rajendran, D. Sriram Kumar, "Spectrum analysis of Radio over Free Space Optical Communications Systems through different Channel Models," *Elsevier – Optik,* vol. 126, pp. 1142-1145, 2015.
51. **K. Prabu**, D. Sriram Kumar, "BER analysis of DPSK-SIM over MIMO Free Space Optical Systems with Misalignment," *Elsevier – Optik,* vol. 125, pp. 5176-5180, 2014.
52. **K. Prabu**, D. Sriram Kumar, "Performance analysis of free space optical systems employing with binary polarization shift keying signalling over gamma-gamma channel with pointing errors," *SPIE – Optical Engineering,* vol. 53, pp. 076105, 2014.
53. **K. Prabu**, Shashidhar Cheepalli, D. Sriram Kumar, "Analysis of PolSK based FSO system using wavelength and time diversity over strong atmospheric turbulence with pointing errors," *Elsevier – Optics Communications,* vol. 324, pp. 318-323, 2014.
54. **K. Prabu**, D. Sriram Kumar, T Srinivas, "Performance analysis of FSO systems under strong atmospheric turbulence conditions using various modulation schemes," *Elsevier – Optik,* vol. 125, pp. 5573-5581, 2014.
55. **K. Prabu**, D. Sriram Kumar and Reza Malekian, "BER Analysis of BPSK-SIM based SISO and MIMO FSO systems in strong turbulence with pointing errors," *Elsevier – Optik,* vol. 125, pp. 6413-6417, 2014.
56. **K. Prabu**, D. Sriram Kumar, "BER analysis for BPSK based SIM-FSO Communication System over Strong Atmospheric Turbulence with Spatial Diversity and Pointing errors," *Springer – Wireless Personal Communications,* pp. 1-15, 2014.
57. **K. Prabu**, D. Sriram Kumar, "Bit error rate analysis of free-space optical system with spatial diversity over strong atmospheric turbulence channel with pointing error," *SPIE – Optical Engineering,* vol. 53, pp. 126108, 2014.
58. **Prabu K**, D. Sriram Kumar, "Outage Analysis of Relay-Assisted BPSK-SIM Based FSO Systems Over Strong Atmospheric Turbulence with Pointing Errors," International Journal of Computer and Communication Engineering, vol. 3, pp. 317-320, 2014.
59. **K. Prabu**, Sumanta Bose, D. S. Kumar, "BPSK based Subcarrier Intensity Modulated Free Space Optical System in Combined Strong Atmospheric Turbulence," *Elsevier – Optics Communications,* vol. 305, pp. 185-189, Sep 2013.

## Publications: Conferences

1. Ansal, V., V. K. Remya, V. K. Jagadeesh, and K. Prabu. "Remote Triggered Laboratory for Boost Converter Using LabVIEW." In Advances in Automation, Signal Processing, Instrumentation, and Control, pp. 2027-2035. Springer, Singapore, 2021.
2. Palliyembil, Vineeth, K. Prabu, V. K. Jagadeesh, P. Muthuchidamdaranathan, and Sunday Ekpo. "Performance analysis of FSOC system over generalized turbulence channel with pointing errors using Po1SK signalling technique." In 2021 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), pp. 1-5. IEEE, 2021.
3. Malavika R, **K. Prabu**, "Computational study of nanostructured Photonic crystal fiber," *Third International Conference on Nanomaterials: Synthesis, Characterization and Applications (ICN 2018),* International and Interuniversity Centre for Nanoscience and Nanotechnology (IIUCNN), Mahatma Gandhi University, Kottayam, Kerala, India (Accepted)
4. G.Aarthi, G.Ramachandra Reddy, **Prabu K**, Performance Analysis of Alamouti Scheme in Turbulence induced fading with Pointing Errors, IEEE Innovations in Power and Advanced Computing Technologies (i-PACT2017), VIT University, Vellore, 2017.
5. **Prabu K**, D. Sriram Kumar, Outage Analysis of Relay-Assisted BPSK-SIM Based FSO Systems Over Strong Atmospheric Turbulence with Pointing Errors, ICWOC 2014, NTU, Singapore.
6. **Prabu K**, P. Paridhi Bharati, D. S. Kumar, "Performance Analysis of DPSK-SIM based FSO System over Strong Atmospheric Turbulence Channel," *IEEE India Annual Conference 2013, INDICON 2013*, IIT Bombay, India.
7. **Prabu K**, Sumanta Bose, D. S. Kumar, "Analysis of optical modulators for Radio over Free Space Optical communication Systems and Radio over Fiber Systems," *IEEE India Annual Conference 2012, INDICON 2012*, Kochi, India, Dec 2012
8. Sumanta Bose, **Prabu K**, D. S. Kumar, "Real-Time Breath Rate Monitor based Health Security System using Non-invasive Biosensor," *IEEE* $3^{rd}$ *Intl. Conf. on Computing, Communication and Networking Tech. (ICCCNT 2012),* Coimbatore, July 2012
9. Sumanta Bose, **Prabu K**, D. Sriram Kumar, "Array Signal Processing and Optimization using Algorithms in Nature", *International Proceedings of Computer Science and Information Technology (IPCSIT)*, Chennai, Volume. 37, April 2012
10. **Prabu K**, Naga Krishnan R, Chockkalingam J, Nivethan V, "Analysis of Mach-Zehnder Modulator with one arm loaded with Ring Resonator for Radio over Fibre Applications," *The 8th WSEAS International Conference on Applied Electromagnetics,Wireless and Optical Communications (ELECTRO '10),* Malaysia, 55-57, 2010.
11. **Prabu K**, S. Piramasubramanian, "Analysis of Mach-Zehnder Modulator for Radio over Fibre Applications," *National Conference on Microwave and Optical Communication (NCMOC '10),* Karaikudi, April, 2010.

## Foreign visit

- Lab visit at **Nanyang Technological University (NTU), Singapore** during May 2014, had a technical discussion with Prof. Dr. A. Alphonse, Prof. Dr. N. Sundararajan, School of Electrical and Electronics Engineering and Dr. Murukeshan Vadakke Matham, School of Mechanical & Aerospace Engineering.
- A research paper presentation in an International Conference on Wireless and Optical Communications **(ICWOC-2014)** held at **Nanyang Technological University (NTU), Singapore** during May, 2014.

## Professional Training Course

- ***"Mission10X"*** *– short term course to enhance the employability skills of fresh engineering graduates in India organized by Wipro Ltd.,*
- ***"Sansbound knowledge enrichment program for college lecturers"*** *– short term course to enhance the knowledge of lecturers in India organized by Sansbound.,*

## Skill Set

- *Programming/HDL Languages*: C, C++.
- *EM, Antennas & Photonics Simulation Tools:* COMSOL Multi physics, OptSim, OptiSystem.
- *Engineering Tools:* MATLAB, MuPAD, Mathematica.
- *Operating Systems:* Windows, Linux.

## Honours, awards, and accomplishments

- **One among the Top 2% of the scientist's worldwide list prepared by Elsevier and Stanford University US for the consecutive years 2019 and 2020. His world rank is 398 in the field of optoelectronics and telecommunication in 2020.**
- Invited speaker for **SERB Funded KARYASHALA Workshop on Vehicular Communications – IIT Indore, July, 2022.**
- Invited speaker for Inauguration of One-day Lectures on **Optical Wireless Communications (WOC), sponsored by IEEE Photonics Chapter – Bangalore chapter, IISc, Bangalure, Dec., 2018.**
- Recipient of **"Good Researcher"** awards at VIT University Vellore for the last two consecutive years 2017 and 2016.
- Invited speaker for Inauguration of **IEEE Photonics Chapter – Chennai Section, VIT University, Chennai, 2017**.

- Invited speaker and Session chair for an **International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2), VIT University, Chennai, 2017**.
- Recipient of **"Good Reviewer"** award from Elsevier during 2015.
- Awarded **"TEQIP International Foreign Travel Grant"** for visiting Laboratory facilities at NTU Singapore, attending an International Conference ICWOC 2014, NTU Singapore.
- Recipient of **"Technical Education Quality Improvement Programme (TEQIP)"** Scholarship [2012-2015] for Ph.D.
- Awarded Government of **"India's University Grant Commission (UGC)"** Fellowship during my Master of Engineering [2008-10]

## REVIEWED FOR THE JOURNALS

- IEEE Transactions on Vehicular Technology
- IEEE Transactions on Wireless Communication
- IEEE / OSA Journal of Lightwave Technology
- IEEE Sensors
- IET Communications
- IET Electronics Letters
- Elsevier Optics Communications
- Elsevier Optik
- Springer Wireless Personal Communications,
- SPIE Optical Engineering