

PROFILE

Name : Dr.S.Brindha
Designation : Professor



Education Qualifications: B.E., M.E., Ph. D.
B.E(ECE)-1994- **Bharathidasan University, Trichy**
M.E(Communication &Networking):2008- **MIT Campus,**
Anna University Chennai
Ph.D. (Radio Over fiber Networks): 2018-**CEG Campus,**
Anna University Chennai

Address for Communication: Department of ECE,
Sri Sairam Engineering College,
Chennai-44

Work Experience

❖ Teaching : 21.9 Years
❖ Research : 10 years

Area of Specialization : Communication Systems
(Radio over Fiber)

Professional Body Membership: IEEE, IETE, OSI, ISTE, OSA

Research guidance

Ph.D. : 02 (ongoing)
ME Projects : 20
DC Member for Ph.D.: 02

Research Publications

- ❖ No. of papers published in National/ International Conferences : **26**
- ❖ No. of papers published in National/ International Journals : **11**
Patents: **1(published)**
- ❖ International conference, FDPs and Workshops attended: **40**

Journal Reviewer:

Journal of Optical Communications (DE Gruyter), Journal of Optics (Springer), Optical Engineering (SPIE), International Journal of Electronics (Taylor & Francis).

Achievements:

➤ **AICTE MODROB Fund Received:**

Establishment of **Optical Communication Systems** design and development laboratory – **Rs 15,00000 /-(Rupees Fifteen lakhs only)** fund sanctioned by **AICTE** Grant aid no and date: **8024** and 21.12.2009.

➤ **Autonomous Syllabus Co-Ordinator:**

Member of the syllabus framing committee.

➤ **IEEE SB Counselor:**

Co-ordinating as an IEEE SEC Student Branch counselor since 2008 onwards (12 years) -Organized various events for the benefit of student community and society and received various prizes and awards from IEEE USA HQ as well as from IEEE madras section.

- Received Top recruiter award 2013 with prize amount of \$1000 from IEEE HQ USA for IEEE Madras section.

- **International Conference Organizing Chair:**
Organized an AICTE sponsored an 2nd International Conference on Communication, Computing and Internet of Things (IC³IOT-2020) on 20th – 22nd Feb 2020.
- **Employability Skill training Project Co-Ordinator:**
Involved as a Project Co-Ordinator for Employability Skill training Project to Conduct training session on Optical Communication Hardware and Networking for final year students supported by CSR Initiative of Tejas Network in association with ICT Academy from 08.07.2020 onwards (ongoing programme).
- **ATAL FDP Co-Ordinator:**
Online mode AICTE ATAL FDP 2020-21 sanctioned for the topic “**Artificial Intelligence for Robotics**” to be scheduled from Dec 7th - 11th 2020.
- **Session chair (Paper presentation):** IEEE Virtual Conference on Smart Structures and Systems, 23-24th July 2020 organised by Saveetha Engineering College, Chennai (Online mode).
- **Lectures delivered**
 1. A special lecture on “**Optical amplifiers**” in **FDP on Optical Communication** conducted by Dept of ECE (CEG), Anna University Chennai during 15th to 23rd June '09.
 2. A special lecture on “**Optical Receivers**” in Anna University sponsored **FDTP on Optical Communication** conducted by Dept of ECE, SAVEETHA Engineering College, Chennai on 23rd June '14.
 3. Delivered an IEEE Webinar talk on “**Electromagnetic Pollution Hazards of Cell phone Base Station on Environment**” 13th May 2020 organised by Panimalar Institute of Technology, Chennai.

Research Publications:

- ❖ Dr.S.Brindha, Dr.T.Ilavarasan, T.Sivasakthi, “*Radio over fiber based signal transport schemes for emerging mobile fronthaul networks – a review*” in Journal of Optical Communications -1(ahead-of-print), July 2020.
- ❖ Dr.S.Brindha, Dr.T.Ilavarasan, Dr.M.Meenakshi “*Fiber impairments mitigation in OFDM based cognitive optical networks*” in Optical and Quantum Electronics, May 2020.
- ❖ Dr.S. Brindha, Dr.T. Ilavarasan, “*Analysis of Laser Linewidth on the Performance of Direct Detection OFDM Based Backhaul and Backbone Networks*”, in the in Journal of Optical Communications, November 2019.
- ❖ Dr.S.Brindha,V.Kaarthick Raja, “*Simulation Study on Performance Analysis of All Optical Comparator* - Conference: IONS Exeter,OSA Conference,University of Exeter,UK- July 2019.
- ❖ Dr.S.Brindha,V.Kaarthick Raja, “*Performance analysis of all-optical reversible combinational circuits using SOA-MZI-A Simulation Study* - Conference: IONS Exeter,OSA Conference,University of Exeter,UK- July 2019
- ❖ Dr.S.Brindha,Sneha Merin, “*Raspberry Pi Based Object Detection And Reading For Blind Person* “Journal of Emerging Technologies and Innovative Research (JETIR) ,ISSN-2349-5162
- ❖ Dr.S.Brindha ,*Design of Conformal Antenna for Wireless Capsule*,IC3IOT 2018,Chennai
- ❖ Dr.S.Brindha, S.Priyanka “**A Compact Design of multiband antenna for wireless application**”, International Journal of Pure and Applied Mathematics Volume 119 No. 7 2018(Special)
- ❖ Dr.S.Brindha, Dr.T.Ilavarasan, Dr.M.Meenakshi “*Energy and electromagnetic pollution considerations in ARoF-based multi-operator multi-service systems*”, Photonic Network Communications, (2017) – 34,221-240, Springer USA Publisher.
- ❖ Dr.S.Brindha, Dr.T.Ilavarasan, Dr.M.Meenakshi “**Improved fiber nonlinearity mitigation in dispersion managed optical OFDM links**” Optics Communications, Elsevier.
- ❖ Dr.S.Brindha, Dr.T.Ilavarasan, Dr.M.Meenakshi “**Impairment assessment of orthogonal frequency division multiplexing over dispersion-managed**

links in backbone and backhaul networks” , Optical Engineering, SPIE-55(4) · April 2016 (DOI: 10.1117/1.OE.55.4.046105).

- ❖ Dr.S.Brindha, Dr.M.Meenakshi ,” **Radio over Fiber System Architecture: A boon to meet future energy and pollution challenges”** , Optoelectronics and Advanced Materials –Rapid Communications, INOE - 9(5-6):855-864 · June 2015.
- ❖ Dr.S.Brindha,” **Design of cost-optimal passive optical networks for small cell backhaul using installed fibers”** , International Journal of Applied Engineering Research - 10(20):18020-18023 · January 2015.
- ❖ Dr.S.Brindha , Dr.M.Meenakshi ,”**Optimization model for the design of cost effective pollution free green cellular network”** , CIIT International Journal – Vol-7,2013.
- ❖ Dr.S.Brindha , Dr.M.Ganesh madhan, “**Analysis of dispersion compensation in fiber optic link using SOA and FDTD technique”**, SSEC TECH Journal National Journal, Vol-7, 2008

❖ **National/International /Conference Publications:**

Sl. No.	Title	Venue	Month/Year
1.	Performance analysis of all optical reversible combinational circuits using SOA-MZI –A simulation study	OSA IONS, University of Exeter, UK	9 to 12 th July 2019
2.	Simulation study on performance analysis of all Optical comparator (Poster Presentation)	OSA IONS, University of Exeter, UK	9 to 12 th July 2019
3	Published a paper titled “Design Of Conformal Antenna For Wireless Capsule” Conference: International Conference on Communication, Computing and Internet of Things (IC3IoT),	Sri Sai Ram Engineering. College, Chennai.	February 2018
4	Published a paper titled “Analysis of power consumption in Macro and Micro cellular base stations” Conference: 2nd World Congress on	Pattaya, Thailand	December 2017

	Engineering and Applications (WCEA-2017).		
5	Published a paper titled "Performance analysis of NG WDM-PON for Optical access Networks" Conference: 5th International conference on Computation of Power Energy, Information and Communication-ICCPEIC-2016	Indexed in IEEE Explorer Volume: Vol.1 Issue : 1 ,978-1-5090-0901-5/16/\$31.00@2016 IEEE	April 2016
6	Published a paper titled "Power optimization in mobiles stations using heterogeneous small cells for green cellular networks" - 2014 International conference on Computer communication and Informatics	Sri Shakthi Institute of Engineering and Technology-	3.1.14 to 5.1.14
7	International Conference on Innovative Computing, Information and Communication Technology	Sri Sai Ram Engineering. College	16 th to 18 th Dec'09
8	Published a paper titled "Self-Organization in Femtocells: A game theoretic approach to mitigate the interference and enhance the macrocell performance- International Conference on Communication and Signal Processing	Indexed in IEEE Explorer 978-1-4799-3357-0	3.4.14 to 5.4.14
9	Published a paper titled "Green Small Cell networks – The way to reach the ecological and economical cellular networks"- International Conference on " Computing, Communication and Advanced network" – ICCCAN 2013	CIT- Indexed in IEEE Explorer	15.3.13 to 17.3.13
10	Published a paper titled "Energy efficient and Interface free small cell networks- International Conference on "Advanced computing, machines and embedded technology"(ICACT2013)	J.K.K Nattraja college of Engineering & tech	19 th Apr'13
11	Published a paper titled "Interference Management over Green Small cell networks-4 th National Conference on "Research issues in Computer science and engineering-NCRICSE 2013	R.M.K Engineering College	1.3.13 & 2.3.13
12	Published a paper titled "Implementation and Analysis of Electronically Tunable Diplexer for WiMAX Front –End Modules-	Adhiparasakthi Engineering College	4.4.12 &5.4.12

	International Conference-2012		
13	Published a paper titled "Implementation of an Electronically Tunable Diplexer Integrated with a Dual band microstrip Antenna for WiMax Transceivers-2012 National Conference on Digital Convergence	RMK Engineering College	21.4.2012
14	Published a paper titled "Electronically Tunable Diplexer with C-slot Microstrip Antenna for WiMax Front-end Modules- National Conference on Networking and Communication (NETCOM'12)	R.M.D Engineering College	17.3.2012
15	Published a paper titled "An approach to wireless service system using WDM-ROF-PON technology- An approach to wireless service system using WDM-ROF-PON technology	Velammal Engineering.college, Chennai	March 2011
16	Published a paper titled "A novel WDM-ROF-PON architecture for wireless service - Recent advances in Communication,Electrical and Electronics and Information technology-2011	IETE Chennai centre	March 2011
17	Performance analysis of OFDM Radio over Fiber for Wireless LAN system-Recent advances in Communication,Electrical and Electronics and Information technology-2011	IETE Chennai centre	March 2011
18	Published a paper titled "Design of a novel WDM-ROF-PON architecture for wireless service"-.	Anna university of Technology, Trichy	March 2011
19	Published a paper titled "An approach to bidirectional transmission system using WDM-ROF-PON technology- National conference on advanced communication & computing techniques -2011	Sri SaiRam Engineering college, Chennai	29.4.11
20	Published a paper titled Implementation of an optical fiber link with EDFA as a pre amplifier in FI-WI networks- National conference on advanced communication & computing	Sri SaiRam Engineering college, Chennai	29.4.11
21	Published a paper titled Optical	Venkateswara Engineering	30.3.10

	Vector Signal Generation with SSB technique using Duo-binary modulation- National Conference on Signal Processing, communications and Networking (NCSCN 2010)	college & IEEE madras section	&31.3.10
22	Published a paper titled Optical Vector Signal Generation with SSB technique using EDFA-2 nd National conference on VLSI, Communication and Networks	Easwari Engineering college	12.3.10 &13.3.10
23	Published a paper titled Comparison of optical vector signal generation with OSSB technique using duo-binary modulation- TELE-INFO'10 9th WSEAS International conference on Telecommunications and informatics	Italy ACM DIGITAL library,2010, ISBN:978-954-2600-2-1 and indexed in IEEE Explorer	May 2010
24	Published a paper titled Optical Vector Signal Generation by Means of Self Phase modulation- International Conference on Innovative Computing,Information and CommunicationTechnologies-2009	Sri Sairam Engineering.College	16.12.2009
25	Published a paper titled Analysis of dispersion compensation in fiber optic link using FDTD technique- Fourth National Conference on Signals,Systems &Communication	College of Engineering, Anna University Chennai	May 8th & 9th '08
26	Published a paper titled Analysis of dispersion compensation in fiber optic link using semiconductor optical amplifier-39th IETE Mid Term symposium on Recent advances in broadband systems	IETE headquarter and IETE Jaipur centre	April '08

