Dr. Kavitha Balamurugan

Head

Department of Electronics and Communication Engineering

Teaching Experience: 18 Years

Specialization: Optical Communication, Antennas

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Dr. Kavitha Balamurugan is Head of Electronics and Communication Engineering Department, KCG College of Technology, Chennai, India. She received her Bachelor's degree in Electronics and Communication from Hindustan College of Engineering, Chennai under Madras University and Master's in Applied Electronics under Anna University. Awarded Doctorate for the topic Optical Wireless from Anna University.

Dr. Kavitha Balamurugan has been in the field of teaching for the past 18 years. She has received best teacher award twice and also teachers' day award. She has received a MODROB project grant from AICTE for an amount of Rs.11,44,000/- for modernization of Microprocessor and Internet of Things lab in 2019.

LIST OF SIGNIFICANT PUBLICATIONS:

International Journals:

- **1.** "Bidirectional Video Transmission Using Li-Fi", **International Journal of Innovative Research in Technology,** Volume 5, Issue 11, ISSN: 2349-6002, 2019.
- 2. "Reconfigurable Routing Protocol with Optical Sphere in FSO MANET", Concurrency and Computation-Practice & Experience, Wiley Publishers, 2018; e4874, pp. 1-11. (ISSN online: 1532-0634 ISSN print: 1532-0626) IF.1.114, Annexure 1
- 3. "Performance Evaluation of Hierarchical Routing Protocol with Multiple Transceivers and Cluster Based Routing Protocol in FSO MANET", Taga Journal of Graphic Technology, Vol. 14,pp. 1169-1178 , 2018, ANNEXURE 1
- 4. "Integrated Adaptive Headlight & Speed Limiting Systems with Parking Assistance", International Journal of Recent Innovation in Engineering & Research, Vol. 3, pp. 34-40, Mar 2018

- 5. "Enhanced Hierarchical Cluster Based Routing Protocol with Optical Sphere in FSO MANET", **Springer** (LNEE, volume 468), pp.1-8, 25 Nov 2017
- "Cooperative Relay Based Communication over MultiUser Mobile Networks", International Journal of Applied Science & Engineering Technology, Volume 5 Issue VI, June 2017 IC Value: 45.98 ISSN: 2321-9653 dated 17.07.2017
- 7. "Multi Application Antenna for Wi-Fi, Wi-Max and Bluetoooth for better Radiation Efficiency" in International Journal of Scientific Engineering and Applied Science (IJSEAS), Vol 1, Issue 4, ISSN:2395-3470, Impact factor: 0.217, July 2015
- 8. "Distributed Game Theory Approach for Enriched Security Enhancement in MANET" in **International Journal of Applied Engg. Research**, ISSN:0973-4562 Vol.10, Number9, pp 7129-7133, Feb 2015, (Annexure 2 Journal)
- 9. Data Transmission using Multiple Transcievers in Indoor Optical Wireless Communication in International Journal of Power Control and Computation (IJPCSC), Vol.7, No.2 (2015) pp. 123-126, Impact factor : 2.01, 2015
- 10. "Brain Tumor Detection using Fuzzy C Means Segmentation" in **International Journal of Power Control and Computation (IJPCSC),** Vol.7, No.2 (2015) pp. 123-126, Impact factor: 2.01, 2015
- 11. "Achieving Higher Network Security by Preventing DDos Attacks Using HONEYPOT" in International Journal of Computer Network & Security (IJCNS) Vol.6, No.1 (2015) pp.40-45, Impact factor: 2.561, Jan-Mar 14

Conferences

- Paper titled "Adaptive Headlight, Speed Limiting & Parking Assistance" in IETE National Conference on Computing and Communication 2018 on 17.03.2018
- 2. Paper titled "Multi Application Microstrip Patch Antenna" in IETE National Conference on Computing and Communication 2018 on 17.03.2018
- Optical and Microwave Technologies, Proceedings of International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2), Vol. IV, "Enhanced Hierarchical Cluster Based Routing Protocol with Optical Sphere in FSO MANET", Mar 23-25, 2017, VIT, Chennai.

- Paper titled "Outage Analysis of Hybrid RF & FSO of MIMO Transmission Communication Systems" in National Level Conference on Contemporary Approaches of Industrial IOT in Real Time Environment in KCG College of Technology, 05.12.2017
- 5. Paper titled "Recontenna" in National Level Conference on Contemporary Approaches of Industrial IOT in Real Time Environment in KCG College of Technology, 05.12.2017
- 6. Paper titled "Survey on Cooperative Relay Based Data Transmission", International Conference on Advances in Engineering and Technology (ICAET-2016)
- 7. Paper titled "Multi-application Antenna for Indoor Distribution Antenna System like Wi-Fi, Wi-max and Bluetooth", <u>2nd International Conference on Intelligent</u> Computing and Applications", 2016
- 8. Paper titled "Data Transmission using Multiple Transceivers in Indoor Optical Wireless Communication", National Conference on Recent Trends in Power, Control & Networking, Embedded & Communication Engg. RTPCNEC-2015
- Paper titled "Brain Tumor Detection using Fuzzy C Means Segmentation", National Conference on Recent Trends in Power, Control & Networking, Embedded & Communication, 2015
- 10. Paper titled "Distributed Game Theory Approach for Enriched Security Enhancement in MANET", International Conference on Engineering Technology & Science, 2015
- 11. Proceedings of the International Conference on Engineering and Applied Sciences (ICEAS 2014), Vol.5, "Efficient Routing Protocol for Smooth Routing in FSO MANET, Mar 5-7, 2014, S.R.I. College of Engineering and Technology, Vandavasi.
- 12. Proceedings of International Conference on Engineering and Applied Sciences (ICEAS 2014), "Achieving Higher Network Security by Preventing DDOS Attacks Using HONEYPOT"

PATENT PUBLISHED:

Patent titled "Life Vehicle Communication Using LIFI" Application Number 201741022947 published on 30/06/2017

INVITED LECTURES:

Details	Activity	Period
Reviewer	Journal Optical Engineering SPIE Anna University Annexure 1	2016-2017
Reviewer	Journal Photonic Communications Springer Publishers Anna University Annexure 1	2018- Till date
Optical Ground Wire Communication (OPGW)	GE training to Maharashtra Electricity Board Engineers	29.8.17 - 31.8.17 (3 Days) 1.9.17,4.9.17 & 5.9.17 for 3 batches .

NOTABLE CONTRIBUTION:

- Student team consisting of Joshua, Gowtham and Manoj Kumar for the project titled "Integrated Adaptive Headlight and Speed Limiting Systems with Parking Assistance " qualified in top 25 in HW Hackathon.18.1 conducted by Forge Accelerator, Coimbatore held on -Feb 7 - 9, 2018
- Funding of Rs.11,44,000/- for MODROB from AICTE for an amount of Rs.11,44,000/- for modernization of Microprocessor and Internet of Things lab in 2019.

Events conducted in the department in 2019-20 EVEN

S.NO	DATE	EVENTS
1	Jul 19	Green Campus-EWB Activity
2	Aug 3	FDP on Analog Discovery Kit
3	Aug 9	EWB-Blood Donation Camp
4	Aug 14	TVASTRA 2k19 Symposium
5	Aug 24	3rd Workshop on Telemedicine
6	Aug 30	Alumni Mock Interview
7	Sep 20	Department Paper presentation