

St. Joseph's Institute of Technology

St. Joseph's Group of Institutions OMR, Chennai - 119

Department of Electronics and Communication Engineering (Accredited by NBA)

| Staff Name: | Dr.P.G.V.Ramesh |
|-------------------------------------|--|
| Designation: | Professor |
| Date of Birth: | 18-07-1975 |
| Educational Qualification: | Ph.D |
| Area of Interest: | Optical Networks, Electro Magnetic Interference / Compatibility Optical -Wireless Integration |
| Years of Experience: | 23 Years 03 Months |
| Area of Research: | Elastic Optical Networks |
| Supervisor: | Anna University |
| No. of Students Project Guided | 30 |
| Publications Details: | Journals (SCI- Indexed)- 19 Journals (non-SCI-Indexed)- 04 International Conferences-05 National Conferences-03 |
| FDP & Workshop Attended Details: | FDP-12 (Inclusive of 5 NPTEL) Workshop-04 |
| Professional Membership: | IEEE,ISTE |

Journal Publications:

- 1. Ramesh Venkatesan, PG, Parthasarathy Ramanujam, Manimaran Ponusamy and T. K. Sethuramalingam, "Design of miniaturized dual-band filtering antenna with improved selectivity utilizing square complementary split ring resonator for 5G MM-wave automobile applications", **International Journal of RF and Microwave Computer Aided Engineering**, Vol. 30, Issue 12, pp. e22452, November 2022, Impact Factor: 1.984 (SCI Indexed)
- 2. P.G.V. Ramesh, Venkatesan, K & Chandrasekar, A, "Green channel DWDM design using optimized CFBG", Optoelectronics and Advanced Materials Rapid Communications, Vol.16, 5-6, June 2022, pp.200-208 (2022). Impact Factor: 0.556 (SCI Indexed)
- 3. P.G.V. Ramesh, Venkatesan, K & Chandrasekar, A, "On-demand DWDM design using machine learning", **Soft Computing, Springer**, Vol 26, Issue14, pp.6577-6589, July 2022, Impact Factor: 3.732 (SCI Indexed)
- 4. P.G.V. Ramesh, Venkatesan, K & Chandrasekar, A, "DWDM reconstruction using supervised and unsupervised learning approaches", **Optoelectronics and Advanced Materials Rapid Communications**, 15, 9-10, September-October 2021, pp.459-470 (2021). Impact Factor: 0.556 (SCI Indexed)
- 5. Ramachandra Reddy Konda, Narmadha T V, Ramesh Venkatesan PG, "Performance analysis of coherent free-space optics transmission link using in-phase quadrature modulator-based polarization multiplexed-256-quadrature amplitude modulation", Transactions on Emerging Telecommunications Technologies, Wiley online Library, Volume 32 Issue 9 September 2021 pp e4262, https://doi.org/10.1002/ett.4262 Impact Factor: 3.31 (SCI Indexed)
- Ramachandra Reddy Konda, Narmadha T V, Ramesh Venkatesan PG, "Performance Study of Randomly Coupled Erbium- Doped Fiber Amplifier using Machine Learning", Optical Engineering, SPIE Digital Library 60(7), 076101 (7 July 2021). https://doi.org/10.1117/1.OE.60.7.076101 Impact Factor: 1.084 (SCI Indexed)
- 7. K. Venkatesan, A. Chandrasekar, P. G. V. Ramesh, C. Selvakumar, "Theoretical investigation for optimization of FWM effects for 1Tb/s ultra-band DWDM system", Optoelectronics and Advanced Materials Rapid Communications, 15, 3-4, March-April 2021, pp.148-156 (2021). Impact Factor: 0.556 (SCI Indexed)
- 8. Venkatesan, K & Chandrasekar, A & P.G.V, Ramesh. (2021). "Supervised regression modelling for mitigation of four-wave mixing in dense wavelength-division multiplexing systems", **Ukrainian Journal of Physical Optics.** 22. 12-30. 10.3116/16091833. doi: 10.3116/16091833/22/1/12/2021 Impact Factor: 0.907 (SCI Indexed)
- 9. Ramesh Venkatesan PG, Parthasarathy Ramanujam, Chandrasekar Arumugam, Manimaran Ponusamy, "Design of a compact printed lowpass filtering antenna with wideband harmonic suppression for automotive communication", International Journal of RF and Microwave Computer Aided Engineering", Vol. 30, Issue 12, pp. e22452,

- December 2020, Impact Factor: 1.984 (SCI Indexed), https://doi.org/10.1002/mmce.23378
- 10. Ramesh Venkatesan, PG, Parthasarathy Ramanujam, Chandrasekar Arumugam, Manimaran Ponusamy, "Design of compact UWB filter using parallel-coupled line and circular open-circuited stubs", **IETE Journal of Research**, August 2020 Impact Factor: 1.877 (SCI Indexed) https://doi.org/10.1080/03772063.2020.1803772.
- **11.** Ramesh Venkatesan, PG, Parthasarathy Ramanujam, Chandrasekar Arumugam, Manimaran Ponusamy, "Design of Compact Patch Antenna with Enhanced Gain and Bandwidth for 5G MM-Wave Applications", **IET-Microwaves, Antennas and Propagation**, Vol. 14, Issue 12, pp.1455-1461, June 2020, *Impact Factor:* 1.824 (SCI Indexed)
- 12. P G V Ramesh, K Venkatesan and M.K.Srilekha, "Analysis of EDFA Parameters Amenable for Ultra High Bit rate Based DWDM System", International Journal of Innovative Technology and Exploring Engineering, 96433-442, 2020, Blue Eyes Intelligence Engineering & Sciences Publication
- 13. PG. Ramesh Venkatesan, Ramanujam, Parthasarathy, Chandrasekar; Ponusamy Manimaran, "Design of miniaturized super wideband printed monopole antenna operating from 0.7 to 18.5 GHz", International Journal Electronics and Communications (AEU), Elseveir, 123 (2020),153273 https://doi.org/10.1016/j.aeue.2020.153273
- 14. PG, Ramesh Venkatesan, Ramanujam, Parthasarathy, Arumugam, Chandrasekar; Ponusamy, Manimaran, "Design of Compact Highpass Filter for 5G mmwave Applications Using Complementary Split Ring Resonator", Frequenz, (74), Issue 5-6, Pg.177-181, 2020, De Gruyter
- 15. Ramesh, PGV, Ramanuajam, Parthasarathy, Arumugam, Chandrasekar, Ponusamy, Manimaran, "Design of Compact patch Antenna with Enhanced Gain and Bandwidth for 5G mm-Wave Applications", **IET Microwaves, Antennas & Propagation**, 2020, IET Digital Library
- 16. P G V Ramesh, Partha sarathy R, Chandrasekar A, "Miniaturized low-pass filter design with wide stopband using complementary split-ring resonator", **Microwave Optical Technology Letters**, **(Wiley)** 2019, 43983 2019, Wiley online Library
- 17. P G V Ramesh, Partha sarathy R, Chandrasekar A, "Electromagnetic interference suppression in stacked patch antenna using complementary split ring resonator" **Microwave Optical Technology Letters**, **(Wiley)**, 44013, 2019, Wiley online Library
- 18. P.G.V.Ramesh, M.H.Gayathri, "Secure and Efficient Handover Root Key Management in 4G LTE/SAE Networks", *International Journal of Applied Engineering Research*, 1065364-5367,2015, RIP Publication

- 19. Ramesh, PGV, Prita Nair, "Evaluation of hidden Markov model based adaptive provisioning of optical burst switching networks amenable for upgradation to green flexigrid networks", *Journal of Computer Science*, 105821-827, 2014, Science Publication
- 20. Ramesh, PGV, Prita Nair, "Hybrid approach for loss recovery mechanism in OBS networks", **CHINESE OPTICS LETTERS (IEEE-OSA)**,1240 40602(5), 2014, Chinese Linear Press (CLP)
- 21. Ramesh, PGV, Prita Nair, "A multi-layer approach for load balancing in optical burst switching networks", Optik-International Journal for Light and Electron Optics, (ELSEVIER) 124172602-2607, 2012, Urban & Fischer
- 22. P G V Ramesh, Kamalesh S, Rajarajan R, "Autonomous Surveillance Aerial System", International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211, Volume 11, Issue 3, March-2023.

Conference Publications:

- 1. P G V Ramesh, Anirudh, Dhanush V, "Reconfigurable Physical Unclonable Function using Linear Regression", Recent Advancements in Science, Engineering & Technologies (RASET 2023),2023
- 2. P G V Ramesh, Jenifer M, Kamatchi B, "Green Agriculture Monitoring System", International Conference on Recent Developments in Engineering Management Sciences & Technology, 2020
- 3. P G V Ramesh, Shiva Karthika.D, Varsha.R, "VoIP USING Wi-Fi NETWORK", International Conference on Computer Communication & Power Systems ICCCPS, 2020.
- Venkatesan.K, Chandrasekar.A, Ramesh.P.G.V, "Performance Analysis of Fiber-Optic DWDM System" Virtual International Conference on Futuristic Communication And Network Technologies, (VICFCNT-2021) | December 10-11, 2021, Lecture Notes in Electrical Engineering, Springer, Singapore (Scopus Indexed)
- 5. Venkatesan.K, Chandrasekar.A, Ramesh.P.G.V, "Parametric Optimization and FWM Mitigations in 64-Channel DWDM System" Virtual International Conference on Futuristic Communication And Network Technologies, (VICFCNT-2020) November vol 792. 06-07, 2020, Lecture Notes in Electrical Engineering, Springer, Singapore. https://doi.org/10.1007/978-981-16-4625-6_14 (Scopus Indexed)
- 6. P G V Ramesh, Parthasarathy R, Chandrasekar A, "A Compact wide band Multi-Stacked patch antenna for UWB Applications", **IEEE International Conference**

- on Microwave Integrated Circuits, Photonics and Wireless Networks, 77-80, 2019 doi:10.1109/IMICPW.2019.8933207
- 7. P G V Ramesh, Parthasarathy R, Chandrasekar A, "Design of Linear 2 × 2 Array Using Substrate- Integrated-Waveguide Patch Antenna for 28GHz mm- Wave Applications," IEEE International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks, 44-49 2019, DOI: 10.1109/IMICPW.2019.8933228
- 8. P G V Ramesh, Monica, Michael Sobista, "Implementation of fast binary counter", International Conference on Recent's in Development Engineering Management Science and Technology ,2019
- 9. P G V Ramesh, Shiney Lavanya, Sivaranjani, "FSO based High Bit Rate Data Transmission for 5G+", International Conference on Recent's in Development Engineering Management Science and Technology, 2019
- 10. Ramesh, P G V, "Performance Analysis of Low Power and High speed 16 bit CRC Generation using GDI Technique", National Conference on Innovative Computing Techniques, 2018
- 11. Ramesh, P G V, "Embedded based Fire extinguishing Robot", National Conference on INNOVATIVE COMPUTING TECHNIQUES, 2018
- 12. P G V Ramesh, Padma Priyadharshini, "Fault Tolerance in CMOS VLSI Circuits", International Conference on Informatics, Robotics, Construction & Communication, 2018
- 13. Raj, V Christy Reena, Ramesh, PGV, Prita Nair, "Performance Evaluation of Efficient Assembly of TCP Traffic for Optical Burst Switching Networks", National Conference on System Design and Information Processing 173, 2013

Patent:

- 1. Ramesh PGV, Parthasarathy Ramanujam, "Design of Penta-Band Bandpass Filter With Enhanced Selectivity Employing Square Complementary Split ring resonator", **IN** Patent App. No. 202241001410,11/01/2022. Status: Waiting for Examination
- 2. Dr.C.Saravanakumar, Dr.P.G.V.Ramesh, Dr.T.Kalyani, Dr.Samayaraj Murali Kishan Lal, Mr.D.Suresh, "Dynamic Model for Rainfall Prediction and Crops Cultivation Using Convolution Neural Network", **IN** Patent App.No. 202241006887, 10/11/2020. Status: Waiting for Examination
- 3. Ramesh PGV, "IoT based smart wearable child and women™s safety device", **IN** Patent App.No.202041049152, 10/11/2020. Status: Waiting for Examination

4. Dr. N. Sri Madhava Raja, K. Revanth, P.G.V.Ramesh, " INDICATIVE PHONOLOGICAL AND VISUAL RECOGNITION SYSTEM", 2019, IN Patent App. 201941023060 A (Awaiting Examination process) (Published in The Patent Office Journal No. 27/2019 Dated 05/07/2019 Page no 27506)