

FACULTY PROFILE



Name: Dr. M. VINOOTH KUMAR

Designation: Assistant Professor

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Professional Qualification:

Ph. D.	Free-Space Optical Communication	SRM Institute of Science & Technology	2023
M.Tech.	VLSI and Embedded Systems	B.S. Abdur Rahman University	2013
B.E.	Electronics and Instrumentation Engineering	Erode Sengunthar Engineering College (Affiliated with Anna University)	2009

Publications (Journals & Conferences):

Journal Publication

- *M. Vinoth Kumar & Vinod Kumar (2022) Investigation of a coherent dual-polarized 16-QAM 16-channel WDM FSO gamma-gamma fading system under various atmospheric losses, Journal of Modern Optics, 69:12, 665-676, DOI: 10.1080/09500340.2022.2074160. [SCI] IF – 1.464*
- *Vinoth Kumar Mani, Vinod Kumar, "Free-space optical channel performance under atmospheric losses using orthogonal frequency division multiplexing", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 25, No. 3, March 2022, pp. 1571~1579. [SCOPUS] SNIP – 0.513*
- *M Vinoth Kumar & Vinod Kumar. "Mitigation of Atmospheric Attenuations in Hybrid Fiber-optical and Free-space Optical Channel for Last-mile Communication System." IEIE Transactions on Smart Processing & Computing 11.1 (2022): 64-72. [SCOPUS]*

SNIP – 0.215

- *Pharindra Kumar Sharma, Saptarshi Gupta, Aditya Agarwal, Neeraj Sahu, M. Vinothkumar, ManojKumar Vishnoi, Amit, and Anurag Singh , "Eminent method of voice identification by applying pitch, intensity and pulse", AIP Conference Proceedings 2393, 020079 (2022) <https://doi.org/10.1063/5.0074174> [SCOPUS] SNIP – 0.262*
- *M Vinoth Kumar, Vinod Kumar, Rupali Singh "Investigation of PSK/QAM Modulated Hybrid Fiber Optic and Free Space Optic System under Various Atmospheric Losses" ASEAN Engineering Journal. [SCOPUS] SNIP – 0.306*
- *M Vinoth Kumar, Rupali Singh, Marimuthu Karuppiah "Mitigation of Atmospheric Losses using Dual Polarized 16 QAM – MIMO Technique in Free Space Optical System in various Weather Conditions", International Journal of Communication Systems. [SCI – Under Review] IF – 2.1*
- *M.Vinothkumar, Abhishek Chauhan, Saptarshi Gupta "Review of Planar Slow Wave Structures for Travelling Wave Tube", International Journal of Pure and Applied Mathematics ISSN: 1314-3395.Volume 119 & Issue 10, PP 273-277. [SCOPUS]*

Conference Publication / Presentation

- *Vinothkumar, M., Kumar, V. (2021). Simulation and Analysis of 5G Wireless mm-Wave Modulation Technique for High Capacity Communication System. In: Singh, V.K., Sergeev, Y.D., Fischer, A. (eds) Recent Trends in Mathematical Modeling and High Performance Computing. Trends in Mathematics. Birkhäuser, Cham. [SCOPUS]*
- *Vinoth Kumar, M., and Vinod Kumar. "Relative investigation of methods to generate millimeter wave in radio-over-fiber communication." Micro-Electronics and Telecommunication Engineering. Springer, Singapore, 2020. 567-574. [SCOPUS]*
- *Vinothkumar, M., Vinod Kumar, "Investigation of M-ary PSK/ M-ary QAM Modulated Fiber Optic and Free Space Optic (FO-FSO) System under Various Atmospheric Attenuations", 2nd International Conference on Electrical, Electronics and Communication Technology" (ICEECT-2021), Sri Shakthi Institute of Engineering and Technology, Coimbatore, on August 26-27, 2021. **Received best paper presentation award.***
- *Vinothkumar, M., Vinod Kumar, "A comparative analysis of methods to improve capacity for optical fiber communication", 21st Annual Conference of Vijñāna Parishad of India on Modeling, Optimization and Computing for Technological and*

Sustainable Development, SRMIST, Modinagar, on April, 2019.

- *M.Vinoth Kumar, Minakshi Sanadhya "Recent Development in Efficient Adiabatic Logic Circuits and Power Analysis with CMOS Logic", Elsevier procedia, 1877-0509 © 2015 Published by Elsevier, Third International Conference on Recent Trends in Computing (ICRTC-2015), March 2015*
- *M. Vinoth Kumar, "Design of Mixed Signal Integrator for RF Amplifier", International Journal of Computer Applications, ICIIIOES (13):7-11, December 2013. Published by Foundation of Computer Science, New York, USA*
- *M.Vinoth kumar, "Design of Two Stage CMOS Operational Amplifier and Its Analysis for Mixed Signal Integrator", International Conference ICEEET'13, April 2013.*
- *M.Vinoth kumar, "Performance Analysis of High Speed Low Power Multipliers using High Speed Tree Adder", National Conference NCRTICT'13, September 2013.*

Book Chapters

- *Ramesh, S., and M. Vinoth Kumar. "Identification of Paddy Diseases by Various Algorithms—A Review." Artificial Intelligence and Cybersecurity (2022): 141-154.*
- *Ramesh, S., and M. Vinoth Kumar. "A Review of Precision Agriculture Based on Embedded System Applications." Artificial Intelligence and Cybersecurity (2022): 87-106.*

Awards and Achievements

- *Vinothkumar, M., Vinod Kumar, "Investigation of M-ary PSK/ M-ary QAM Modulated Fiber Optic and Free Space Optic (FO-FSO) System under Various Atmospheric Attenuations", 2nd International Conference on Electrical, Electronics and Communication Technology" (ICEECT-2021), Sri Shakthi Institute of Engineering and Technology, Coimbatore, on August 26-27, 2021. **Received best paper presentation award.***

Workshops/Seminars/FDPs

- *AICTE-QIP Sponsored Online STC on Statistical Modelling and Analysis of Advanced Wireless Communication Systems", IIT Indore from 17-03-2022 to 23-03-2022*
- *Short Term Course (STC) funded by TEQIP 3 on "5G and Beyond Wireless Technologies: Modelling and Simulations using MATLAB", IIT Indore from 24-12-2020 to 26-12-2020*

- "Construction Procedures for Optical Fiber Sensors" organized by IE (I), SRM IST, Chennai on 19-05-2020
- Technical Webinar on International Day of Light on 16-05-2020
- "MATLAB Project Course on Design and Performance Analysis of 5G Wireless Systems: mm Wave, Massive MIMO, NOMA, FBMC, Full Duplex and IoT" conducted by IIT Kanpur from 13-11-2019 to 19-11-2019
- Attended Faculty Development Program in "Product Engineering Services – PACE – Automotive Electronics" conducted from 12th – 17th December, 2016 at KPIT Technologies Limited, Pune.
- Attended one week short term course on, "EDA Tools and Design Methodologies in VLSI & Communication Systems (ETVCS - 15)", during June 12-16, under TEQIP-II at NIT Hamirpur.
- Conducted Workshop on "OrCAD Pspice Tool for Analog and Digital Circuits Design" at SRM University – NCR Campus.

Work Experience

- **Assistant Professor**

- SRM Institute of Science and Technology– NCR Campus, Delhi – Meerut Road, Ghaziabad, from July 2013 to Present

- **Service Engineer**

- Statex, Coimbatore, from July 2009 - May 2010

- Teaching / Industry Experience

10 years / 1 year

Professional Memberships:

- Life member - Indian Society for Technical Education