Dr. P. SURESH, M.E., Ph.D., drpsuresh@veltech.edu.in
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Organization : Vel Tech Rangarajan Dr Sagunthala R&D Inst of Sci and Tech
Designation : Professor (Department of ECE).

SPECIAL ISSUE EDITED/EDITING:

- Editing a Special Issue titled "**Smart Bio-Signal Acquisition System**" for International Journal of Nanotechnology (IJNT), Inderscience Publisher (Under Process).

- Editor of Springer lecture series in "***Advances in Intelligent Systems and Computing***" of book titled "***Recent trends in Smart System Technologies***" of Springer Publisher (Under Process).

- Editing a Special Issue titled "**Artificial Intelligence enabled Computing System Development**" for International Journal of Engineering Systems Modelling and Simulation (IJESMS), Inderscience Publisher (Under Process).

- Editing a Special Issue titled "**Embedded Autonomous Architecture and Its Connectivity for Automotives**" for International Journal of Vehicle Autonomous Systems (IJVAS), Inderscience Publisher (Under Process, Submission Deadline Over).

- Edited a series in "M***aterials, Science and Engineering***" of book titled "***Frontiers in Materials Smart System Technologies***" of IOP publisher, Vol. 590, 2019..

- Edited a Springer lecture series in "***Advances in Intelligent Systems and Computing***" of book titled "***Advances in Smart System Technologies***" of Springer Publisher, Sep, 2020.

- Advanced Embedded Technologies in Industrial and Environmental Applications (AETIEA) in IIOAB Journal.

- Engineering Theory and Practices for Human Benefits in Indian Journal of Public Health Research and Development.

EVENTS ORGANIZED:

At Vel Tech University

1. Organizing Secretary, **International Conference on Frontiers in Smart Systems Technologies**, 3rd – 5th April 2019. [Proceedings published in Springer].

2. Conference Chair and Editor, **International Conference on Frontiers in Materials Smart Systems Technologies**, 10th April 2019. [Proceedings published in IOP Conference Series:Materials Science and Engineering].

3. Coordinator, **Embedded Design Contest-Technical Events, LAVAZA 19**, 3rd January 2019.

4. Organizing Secretary, **Training Programme on Text Processing using LATEX**, 7th – 8th December 2018.

5. Organizing Secretary, **Three Days Workshop on System on Chip Design Using VIVADO Design Suite and 7-Series FPGAs**, 20th – 22nd June 2018.

6. Organized a one-day program titled "**Patent Searching and Drafting**" on 17th Oct 2019.

7. Organized a one-week workshop on "**IOT Enabled System Development with MCU's and FPGA**", 16th Dec 2019 to 21st Dec 2019.

At National College of Engineering

1. Organized an **International Conference on Current Trends in Engineering Research (ICCTER-2016)**, on 31st January 2016, ISBN: 978-81-930654-5-3.

2. Organized one day workshop on titled "**Soft Computing Techniques and its applications**" on 5th March 2016.

3. Organized a technical symposium titled "**WHIMSICAL 2K'16**" on 10th January 2016.

4. Organized two days workshop on "**Embedded System and its application**" on 23rd and 24th December 2015.

5. Organized a technical symposium titled "**WHIMSICAL 2K'15**" on 21st October 2015.

6. Organized a technical symposium titled "**WHIMSICAL 2K'14**" on 15th July 2014.

7. Organized a technical symposium titled "WHIMSICAL 2K'12" on 12th February 2012.

PUBLICATION/CONFERENCES/SEMINARS/WORKSHOPS/BOOK CHAPTERS:

Books

1. ***Suresh. P.,*** *Vairavel, G. and Saravanakumar, U.*, 2020, Design Methodologies and Tools for 5G Network Development and Application, IGI Global (Under Process).

2. *Saravanakumar, U.,* ***Suresh, P.*** *and Celestine Iwendi,* 2020, Intelligent Network on Chips: Architectures and Applications, Science Publishers, CRC Press (Taylor and Francis Group) (Under Process).

3. ***Suresh. P.,*** *U. Saravanakumar, Celestine Iwendi,* 2020, Communication Infrastructures and Design Methods for Multiprocessor Systems on Chips, IGI Global (Under Process).

4. ***Suresh. P.,*** *Saravanakumar, U. and Mohammed Al Salameh,* 2020, Advances in Smart System Technologies, In Book Series: Advances in Intelligent Systems and Computing, Springer, Sep 2020.

5. ***Suresh. P.*** *and Saravanakumar, U.,* 2020, Frontiers in Materials and Smart System Technologies, In Book Series: Materials, Science and Engineering, IOP Conference series, 590, 2019.

Book Chapters

1. ***Suresh. P.,*** "Novel Beam Shaping" accepted for Book chapter titled "Theoretical Models and Experimental Approaches in Physical Chemistry" published by **Apple Academic Press, Inc jointly with CRC Press (Taylor and Francis Group),** August 2017. **Hard ISBN: 9781771886321, E-Book ISBN: 9781315102634.**

2. *SaravanaKumar, U.,* ***Suresh, P.,*** "Embedded Based Device Activating with Respect to Facial Reaction for Disabilities" In Dr. Ashok G. Matani (Ed.), Engineering & Technology: Latest Progress, Meta Research Press, New Delhi, September 2017. ISBN: 978-81-932850-2-2.

Peer Reviewed International Journals

1. *Wang, C., Chao, K., Sivaperumal, S.,* ***Suresh, P.,*** "Anti-PVT-Variation Low-Power Time To Digital Converter Design Using 90 nm CMOS Process" IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 28, Issue 9, pp. 2069 – 2073. **(Accepted) (Scopus Indexed, Impact factor: 1.9).**

2. ***Suresh, P.,*** *Saravanakumar, U., Celestine Iwendi, Senthilkumar Mohan, Gautam Srivastav* 2020 "Field-programmable gate arrays with low power vision system using dynamic switching" Computers & Electrical Engineering, **Elsevier (Accepted) (Scopus Indexed, Impact factor: 2.189).**

3. ***Suresh, P.,*** *Ravikumar O, Hari Krishna Mahesh K, Sri Aashritha S,* 2020 "Content Extraction Through Chatbots With Artificial Intelligence Techniques," International Journal of Scientific & Technology Research, Vol. 9, Issue 02, pp. 1960-1963. (**Scopus Indexed**). ISSN: 2277-8616

4. ***Suresh, P.,*** *T Venkata Prasad, B Uday kiran Yadav, SV Narayana Reddy, S Yaswanth Reddy, R.Rajkumar, U.Saravanakumar,* 2020 "Dynamic Partial Reconfiguration Performance Analysis In Field Programmable Gate Array For Streaming Applications," International Journal of Scientific & Technology Research, Vol. 9, Issue 02, 2020, pp. 3098-3102. (**Scopus Indexed**). ISSN 2277-8616

5. *Celestine I.,* ***Suresh, P.,*** *Revathi, M., Kathiravan, S. and Chaun Yu Chang,* "An Efficient and Unique TF/IDF Algorithmic Model-Based Data Analysis for Handling Applications with Big Data Streaming," MDPI – Electronics, Vol. 8, Issue 11, November 2019, Article No. 1331. (**Scopus Indexed, Impact Factor: 1.764**). ISSN: 2079-9292 DOI: https://doi.org/10.3390/electronics8111331

6. ***Suresh, P.,*** *Saravanakumar, U., Karthikeyan, V., Vamsi Krishna, G., Sreekanth, K. and Kumar Reddy, G.,* "Design and Implementation of Real Time Data Acquisition System in all Programmable System on Chip," International Journal of Innovative Technology and Exploring Engineering, Vol. 8, Issue 10, 2019, pp. 3680-3684. (**Scopus Indexed**). ISSN: 2278-3075. DOI: 10.35940/ijitee.J9652.0881019

7. *Karthikeyan, V.,* ***Suresh, P.,*** *Saravanakumar, U., Anil Venkata Rama Sekhar, AKM. and Srikanth, S.,* "Wide Band Millimeter Wave Fabric Antenna for 60GHz Applications,"

International Journal of Innovative Technology and Exploring Engineering, Vol. 8, Issue 9, 2019, pp. 1211-1214. (**Scopus Indexed**). ISSN: 2278-3075. DOI:10.35940/ijitee.H7501.078919.

8. *Hemakumar, V.S.,* ***Suresh, P.*** 2019 "Performance of zinc oxide coated on copper substrate in generating piezoelectric energy", International Journal of Innovative Technology and Exploring Engineering Vol. 8 Issue 7, 2019, pp. 87-90. (**Scopus Indexed**). ISSN: 2278-3075.

9. *Saravanakumar, U.,* ***Suresh, P.,*** *& Karthikeyan, V.,* 2019, Low-Power High-Speed Hybrid Multiplier Architectures for Image Processing Applications, Lecture Notes in Computational Vision and Biomechanics, Springer, vol. 30, pp. 539-550. (Scopus).

10. *Suresh, P., Saravanakumar, U., & Revathi, M.,* 2017, SOA Based All-Optical N-Bit-Binary Data Multiplier Design, J Nanomed Nanosci: JNAN-116.

11. *Saravanakumar, U.,* ***Suresh, P.,*** *& Vimal, SP.,* 2018, 'Low-power, low-latency transceiver design using d-TGMS flip-flop for on-chip Interconnects,' International Journal of Engineering and Technology, Vol. 7, No. 1, pp. 106-109.

12. *Aanandha Saravanan,* ***Suresh, P.,*** Prioritized scheduling scheme for critical and non critical information packets," International Journal of Engineering and Technology, Vol. 7, No. 3, 2018, pp. 1705-1708. ***(Scopus Indexed).***

13. *Vinothkumar, M, Kumar, C &* ***Suresh, P.,*** "Proficient Control Based Load Frequency Controller for Deregulated Hybrid Power Systems with Sensitivity Analysis," Journal of Electrical Engineering, ISSN: 1582-4594, (Accepted) **(Impact factor: 0.284)**.

14. *Saravanakumar, U.,* ***Suresh, P.*** *and Karthikeyan, V., "*Low-Power High-Speed Hybrid Multiplier Architectures for Image Processing Applications", Springer - Lecture Notes in Computational Vision and Biomechanics. ***(Accepted).***

15. *Saravanakumar, U.,* ***Suresh, P.,*** *and Vimal, S.P.,* "Low-power, low-latency transceiver design using d-TGMS flip-flop for on-chip interconnects", International Journal of Engineering and Technology, Vol. 7, No. 1, 2018, pp. 106-109. ***(Scopus Indexed).***

16. ***Suresh. P.,*** "Creation of optical chain in the focal region of high NA lens of tightly focused higher order Gaussian beam", **Springer** – Journal of Optics, Vol. 46, p. 225 – 230, 2017. **(Scopus Indexed, Impact Factor – 0.92).**

17. *Rajendran, E., Kumar, C and* ***Suresh, P.,*** "Intensification of Power Quality Using PMSG and Cascaded MultiCell Trans-Z-Source Inverter" Circuits and Systems, Vol. 7, No. 11, 2016, pp. 3778-3793. (***Scopus Indexed***).

18. *Rathika N,* ***Suresh. P.,*** *and Sakthieswaran, N.,* "Face Recognition Using Zernike Moments with Illumination Variations" Inderscience – International Journal of

Biomedical Engineering and Technology, Vol. 25, Issue 2-4, 2017. (***Scopus Indexed,* Impact Factor – 0.56)**.

19. *Sathya Natarajan, K. Karuppasamy and* ***Suresh. P.,*** "Contourlet Transform and Morphological Reconstruction based Retinal Blood Vessel Segmentation" Inderscience – International Journal of Biomedical Engineering and Technology, Vol. 25, Issue 2-4, 2017. ***(Scopus Indexed,* Impact Factor – 0.56*).***

20. *Vinoth Kumar, M., Kumar, C. and* ***Suresh. P.,*** "A Fuzzy Control based Analysis of Load Frequency Controller for Deregulated Interconnected Power Systems" Asian Journal of Research in Social Sciences and Humanities, Vol. 6, No. 12, 2016, pp. 179-193. **(*Scopus Indexed).***

21. *Kalima Benazir, P. and* ***Suresh, P.,*** "Optimal sensor placement in structures using improved adaptive GA with modified modal assurance criteria for SHM systems" Journal of Multimedia Technology & Recent Advancements, Vol. 3, Issue 1, 2016. **(*Scopus Indexed*)**.

22. *Kalima Benazir, P. and* ***Suresh, P.,*** "Placing Sensors Optimally In Structures By Combining Mse Method With Aga For Structural Health Monitoring" Advances in Natural and Applied Sciences, Vol.10, Issue 4, pp. 285-291, 2016. **(*Scopus Indexed).***

23. *Parveen Banu, S., Sakthieswaran, N.,* ***Suresh, P.*** *& Kanagalakshmi, P.,* 2016, 'SVM Based Lung Tumor Segmentation Using Otsu's Thresholding', International Journal of Pharmacy & Technology, Vol.8, No.3, Pp. 18611-18620. (***Scopus Indexed***)

24. *Muthuraman, U., Sakthieswaran, N. and* ***Suresh, P.,*** "An Approach for Damage Identification with MLP Neural Network and Optimal Sensor Placement by AGA & "Nodes with CAN Protocol', Circuits and Systems, Vol. 7, No. 6, 2016. **(*Scopus Indexed).***

25. ***Suresh, P.,*** *Rajesh, K.B. and Sivasubramonia Pillai, T.V. and Jaroszewicz, Z.,* "Effect of annular obstruction and numerical aperture in the focal region of high NA objective lens," **Elsevier** – Optics Communication, Vol – 318, 2014, pp. 137–141. **(*Scopus Indexed; Impact factor – 1.542*)**.

26. *Arul Teen, YP,* ***Suresh, P.,*** *Nathiya, T., Rajesh, KB and Pillai, TVS,* 'Study on Intensity distributions of a BG beam with effect of tilt and astigmatism aberration in a turbulent atmosphere,' **Elsevier** – Optik, vol. 126, 2015. pp. 3830-3837, **(*Scopus Indexed; Impact factor – 0.769*).**

27. ***Suresh, P.,*** *and Rajesh, KB,* 'Multiple Focal Segment Generation of Tightly Focused Non-Diffracting Transversely Polarized Beam with Diffractive Optical Element,' J. Environ. Nanotechnology vol. 3, issue 4, pp. 73-77, 2014 **(*Scopus Indexed*).**

28. *Arul Teen, YP,* ***Suresh, P.,*** *and Pillai, TVS,* 'Analysis of Pulse Modulation Schemes in Underwater Communication Using Different Laser Sources,' J. Environ. Nanotechnology vol. 4, issue 1, pp. 01-12, 2015 **(*Scopus Indexed*).**

29. *Amala Prathiba Janet, C.,* ***Suresh, P.,*** *Pillai, T.V.S.,* "Effect of pupil beam in the focal region of high numerical aperture objective lens," Journal of Environ. Nanotechnology vol. 4, issue 1, pp. 76-79, 2015 **(*Scopus Indexed).***

30. ***Suresh, P.,*** *Rajesh, K.B., Pillai, T.V.S., Asan Mohideen, K., and Arul Teen, Y.P.,* "Sub wavelength multiple focal spot generation of high NA objective lens using the diffractive optical element," **Elsevier** – Optik, vol. 125. Issue 15, 2014. pp. 3829-3832 **(*Scopus Indexed; Impact factor – 0.769*).**

31. ***Suresh, P.,*** *Mariyal, C., Gokulakrishnan, K., Rajesh, K.B., Pillai, T.V.S. and Jaroszewicz, Z.,* "Investigating the focus shaping of the TEM11* beam with radial varying polarization," **Elsevier** – Optik, vol. 126. Issue 18, 2015. pp. 1691-1694 **(*Scopus Indexed; Impact factor – 0.769*).**

32. ***Suresh, P.,*** *Mariyal, C., Saraswathi, Rajesh, K.B., Pillai, T.V.S. and Jaroszewicz, Z.,* "Tightly focusing of spirally polarized Quadratic Bessel Gaussian beam through a dielectric interface," **Elsevier** – Optik, vol. 125. Issue 21, 2014. pp. 1264-1266 **(*Scopus Indexed; Impact factor – 0.769*)**.

33. ***Suresh, P.,*** *Thilagavathi. R., Gokulakrishnan, K., Rajesh, K.B. and Pillai, T.V.S.,* "Focusing properties of a 4Pi configuration system under the illumination of double ring shaped LG11 beam," **Springer** – Optical and Quantum Electronics, 1-6, 2014 **(*Scopus Indexed; Impact factor – 1.078*).**

34. *Arul Tean, Y.P.,* ***Suresh, P.,*** *Rajesh, K.B. and Pillai, T.V.S.,* "Experimental Phase Jitter and Bandwidth Analysis of Pulse Modulation Schemes under Turbulence Conditions in Free Space Optical Communication," **Elsevier** – Optik **(*IJLEO – Accepted; Scopus Indexed; Impact factor – 0.769*).**

35. *Gokulakrishnan, K.,* ***Suresh, P.,*** *Mariyal, C., Sivasubramonia Pillai, T.V and Rajesh, K.B.,* "Tight focusing effect of annular obstructed incident beam in the focal region of high NA lens," **Elsevier** – Optik, vol. 125. Issue 21, 2014. pp. 4652-4654 **(*Scopus Indexed; Impact factor – 0.769*)**.

36. *Gokulakrishnan, K.,* ***Suresh, P.,*** *Mariyal, K., Sivasubramonia Pillai, T.V and Rajesh, K.B.,* "Tight focusing effect of annular obstructed Bessel-modulated Gaussian beam," **Elsevier** – Optik, vol. 125. Issue 21, 2014. pp. 6599-6601 **(*Scopus Indexed; Impact factor – 0.769*).**

37. *Gokulakrishnan, K.,* ***Suresh, P.,*** *Jeyamurugan, A., Pillai, T.V.S., Rajesh, K.B., Vijayaraj, M.,* "Effect of annular apodization and pupil beam parameter in the focal region of high

NA lens", **Elsevier** – Optik, vol. 125. Issue 21, 2014. pp. 5529-5531 **(*Scopus Indexed; Impact factor – 0.769*).**

38. *Gokulakrishnan, K.,* ***Suresh, P.,*** *Sivasubramonia Pillai, T.V and Rajesh, K.B.,* "To construct a stable and a tunable optical trap in the focal region of high numerical aperture lens," **SPIE** – Optical Engineering 53 (5), 055106-6, 2014. **(*Scopus Indexed; Impact factor – 0.958*)**.

39. *Mariyal, C.,* ***Suresh, P.,*** *Rajesh, K.B., Pillai, T.V.S.* and *Jaroszewicz, Z.,* "Study on propagation properties of a radially polarized partially coherent dark hollow beam through a high numerical aperture lens," **Elsevier** – Optik vol. 125. Issue 21, 2014. pp. 1113-1116 **(*Scopus Indexed; Impact factor – 0.769*).**

40. *Mariyal, C.,* ***Suresh, P.,*** *Rajesh, K.B. and Pillai, T.V.S.,* "Partially coherent radially polarized beam with annular apodization," **Hindawi** – The Scientific World Journal Volume 2014, Article ID 160945, 5 pages **(*Scopus Indexed; Impact factor – 1.730*)**.

41. *Mariyal, C.,* ***Suresh, P.,*** *Rajesh, K.B., Sivasubramonia Pillai, T.V., Lavanya, M.,* "Effect of annular obstruction on tight focusing of partially coherent radially polarized Vortex beam", **Elsevier** – Optik vol. 125. Issue 12, 2014. pp. 2934-2937. ***(Scopus Indexed; Impact factor – 0.769*).**

42. ***Suresh, P.,*** *Mariyal, C., Rajesh, K.B., Pillai, T.V.S. and Jaroszewicz, Z.,* "Generation of a strong uniform transversely polarized non-diffracting beam using a high-numerical-aperture lens axicon with a binary phase mask," **OSA** - Applied Optics, Vol. 52, 2013. pp. 849-853 (***Scopus Indexed; Impact factor – 1.75***).

43. ***Suresh, P.,*** *Mariyal, C., Rajesh, K.B. and Pillai, T.V.S.,* "Polarization effect of cylindrical vector beam in high numerical aperture lens Axicon systems," **Elsevier** – Optik, Vol. 124, 2013. pp. 1632-1636 (***Scopus Indexed; Impact factor – 0.524*).**

44. ***Suresh, P.,*** *Mariyal, C., Gokulakrishnan, K., Rajesh, K.B. and Pillai, T.V.S.,* "Tight Focusing of Circularly Polarized Beam over high NA Lens Axicon with a Diffractive Optical Element," **Elsevier** – Optik, vol. 124. Issue 20, 2013. pp. 4389-4392 (***Scopus Indexed; Impact factor – 0.524*)**.

45. ***Suresh, P.,*** *Mariyal, C., Sivasubramonia Pillai, T.V., Rajesh, K.B. and Jaroszewicz, Z.,* "Study on polarization effect of azimuthally polarized LG beam in high NA Lens system," **Elsevier** – Optik, vol. 124. Issue 21, 2013. pp. 5099-5102 (***Scopus Indexed; Impact factor – 0.524*).**

46. *Mariyal, C.,* ***Suresh, P.,*** *Rajesh, K.B. and Pillai, T.V.S.,* "Tight focusing of partially coherent radially polarized beam with high NA lens axicon," **Elsevier** – Optik, vol. 124. Issue 21, 2013. pp. 4956-4959 (***Scopus Indexed; Impact factor – 0.524*)**.

47. ***Suresh, P.,*** *Gokulakrishnan, K., Mariyal, C., Rajesh, K.B. and Sivasubramonia Pillai, T.V.,* "Effect of binary phase plate on incident radially polarized hollow Gaussian beam," **Elsevier** – Optik, vol. 124, 2013. pp. 5350-5352 (***Scopus Indexed; Impact factor – 0.524*****).**

48. *Lalithambigai, K.,* ***Suresh, P.,*** *Ravi, V., Prabakaran, K., Jaroszewicz, Z., Rajesh, K.B., Anbarasan, P.M. and Pillai, T.V.S.,* "Generation of Sub Wavelength Super-Long Dark Channel Using High NA Lens Axicon," **OSA** - Optics Letters, Vol.37, 2012. pp.999 – 1001 (***Scopus Indexed; Impact factor – 3.385*****)**.

49. *Ravi, V.,* ***Suresh, P.,*** *Rajesh, K.B., Jaroszewicz, Z., Anbarasan, P.M., Pillai, T.V.S.,* "Generation of Sub wavelength longitudinal Magnetic probe using high Numerical Aperture Lens Axicon and Binary phase plate", **IOP** –Journal of Optics, Vol. 14, pp.055704-055710, 2012 (***Scopus Indexed; Impact factor – 1.990*****)**.