Biodata

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10.	**Educational Qualifications**			

Name of the Examination passed	**Name of University/ Institution**	**Year of passing/ acquiring degree**	**Class/ grade/ Rank etc.**	**Subject of specialization**
a. Graduation B. Tech	TKM College of Engineering/ University of Kerala	1988	First Class	Electronics and communication
b. Post Graduation M. Tech	IIT Madras	1996		Integrated Electronic Devices and circuits
b. Ph. D	College of Engineering, Trivandrum	2013		Design and analysis of CMOS based neurons.

Research & Development

- **M. Tech Thesis**
  Effect of Various Mobility and Lifetime Models and Evaluation of Terminal Currents in BIMODES, IIT, Madras, 1996
  Ph. D. Thesis
- Design and Analysis of CMOS based Neurons, University of Kerala, 2013, Nov 2007 to Nov 2013
  Industry
- Developed pelican Traffic controller for the traffic Signals Division of KELTRON during 1990 - 1991.
- Research Guideship
  Research guide under university of Kerala and APJ Abdul Kalam Kerala Technological University.

Ph D Produced

Sl. No	Name of Research Scholar	Title of Thesis	University	Date of award of Ph D	Remarks
1	Smitha P S	Investigations on Solar Energy Harvesting Systems with Nano Capacitors	KTU	**10th October 2020**	
2	Nisha Jose	Investigations on the Application of MEMS Switches for Achieving Tunable Characteristics in Radio Frequency Integrated Circuit	KU	**28th October 2021**	
3	Fatima Rasheed J	Investigations on Graded Band Gap Thin film solar cells	KU	**28th October 2021**	
4	Anju S	Design, Modelling and Simulation of Nano Scale Non planar, nonsilicon FET Devices.	KU	**August 2022**	

Ph D Thesis Submitted

Sl.No	Name of Research Scholar	Title of Thesis	University	Status
1	Aseena S	Investigations on Dye Sensitized Solar Cells	KTU	Reviews completed, Waiting for open defence.

2	Resmi. R	Investigations on Thermo-elastic Damping Effects in RF MEMS Resonators	KU	Thesis Submitted

Ongoing Ph D works

Sl.No	Name of Research Scholar	Title of Thesis	University	Status of work
1	Beena S	Investigations on Solar energy harvesting Using Super Capacitors.	KTU	Registered in Aug 2020
2	Asmin M K	Investigations on thin film capacitors for high density energy storage.	KTU	Registered in Nov2021
3	Anuja A C	Investigations on super capacitors for energy storage applications.	KTU	Registered in Nov2021
4	Vinitha B Elza	Exploring the Performance Factors of Emerging Third Generation Solar Cells.	KTU	Registered in Nov 2021

Publications

International Journals

1. Aseena. S, Nelsa Abraham, **V Suresh Babu** and Beena S**,** "Effect of Carbon nanotube content in ZnO/Carbon Nanotube Based Photoanode for Dye Sensitized Solar Cells", ECS Journal of Solid State Science and Technology, **June 2022**. DOI: 10.1149/2162-8777/ac79cb, SCIE indexed Impact factor 2.07.
2. Resmi R., M. R. Baiju and **V. Suresh Babu, Impacts of length scale parameters on Material dependant thermoelastic damping in micro and nano plates, applying Modified Coupled Stress Theory, ISSN 1392-1207 Mechanika 2022, Volume 28(3): 171-189, SCIE indexed Impact Factor 0.597.**
3. Resmi R., M. R. Baiju and **V. Suresh Babu, Thermoelastic Damping limited quality factor enhancement and energy dissipation analysis of rectangular plate resonators using non classical elasticity theory. Advances in material science and engineering, vol 2022, article ID 6759093, April, 2022, DOI** http://doi.org/10.1155/2022/6759093 **SCI indexed, Impact Factor 1.726.**
4. Resmi R., M. R. Baiju and **V. Suresh Babu**, "Material Dependent Thermoelastic Damping Limited Quality Factor and Critical Length Analysis with Size Effects of Micro/nanobeams" Springer Journal of Material Science and Technology**, Mar 2022** DOI 10.1007/s12206-022-04 -y Indexed in **SCIE** Impact factor 1.734.
5. Aseena. S, Nelsa Abraham, **V Suresh Babu,** Solution synthesized Cu2O as hole transport layer for ZnO based planar heterojunction perovskite solar cell fabricated at room

temperature, Journal of Electronic Materials. **Jan 2022** https://doi.org/10.1007/s11664-022-09442-9 Indexed in **SCIE**, Impact Factor: 1.938.

6. Resmi R., M. R. Baiju and **V. Suresh Babu**, " Analysis of Length Scale Parameter Impacts on Thermoelestic Damping Limited Quality Factor in Micro/Nno Beam Resonators Applying Nonclassical Elasticity Theory", Applied Nanoscience Journal, **Feb 2022**, DOI 10.1007/s13204-021-02259-9 Indexed in **SCIE**, Impact Factor: 3.14.
7. Aseena. S, Nelsa Abraham, **V Suresh Babu, "** Simulation based Investigation on the performance of metal oxide as charge transport layers in Lead/Tin provskite solar cells using Scaps 1D", ECS Journal of Solid State Science and Technology (IOP publishing), **July 2021**, doi: 10.1149/2162-8777/ac12b0, Indexed in **SCIE** Impact Factor 2.07.
8. Anju S, **V Suresh Babu,** Geenu Paul, "Design Optimization of high frequency AlGaN/GaN HEMT on BGO substrates" Applied Physics A(Springer), **May 2021**, doi: 10.1007/s00339-021-04550-5 Indexed in **SCIE,** Impact Factor 2.584
9. Resmi R, V. Suresh Babu, MR Baiju "Analysis of Thermoelastic Damping Limited Quality Factor and Critical Dimensions of Circular Plate Resonators Based on Axisymmetric and Non-axisymmetric Vibrations", AIP Advances, **March 2021**, https://doi.org/10.1063/5.0033087, Indexed in **SCIE**, Impact Factor 1.548.
10. Smitha P S, **V Suresh Babu** and Shiny G, "Investigations on electrical properties of Al_2O_3, ZnO and MgO doped $Ba_{0.7}Sr_{0.3}TiO_3$ ceramics based MIM capacitor for energy storage application", Integrated Ferroelectrics (Taylor & Francis), vol.213, April, 2021 https://doi.org/10.1080/10584587.2020.1860604 Indexed in **SCIE**, Impact Factor 0.836
11. Anju S, Biji Jacob, Geenu Paul**, V Suresh Babu,** "DC Characterization & High frequency performance analysis of a GaN/AlGaN HEMT on a β-Ga2O3 Substrate", IETE Journal of Research Jan 2021. https://doi.org/10.1080/03772063.2020.1869597 Indexed in **SCIE.** Impact Factor 1.24
12. Smitha P S, Jitha S Jayan, Appukuttan Saritha, **V Suresh Babu** and Shiny G, "Synthesis and Performance evaluation of $Ba_xSr_{1-x}TiO_3$ ceramic based MIM capacitor for energy storage application", Integrated Ferroelectrics (Taylor & Francis), vol.212, **Nov 2020**. DOI 10.1080/10584587.2020.1819032 Indexed in **SCIE,** Impact Factor 0.53
13. Aseena S, Nelsa Abraham and **V Suresh Babu**, "Synthesis of CNT based nanocomposites and their application as photoanode material for improved efficiency in DSSC", Ceramics International (Elsevier), **August 2020**. DOI: 10.1016/j.ceramint.2020.07.339 Indexed in **SCIE,** Impact factor 4.527.
14. P. S, Smitha; **Suresh Babu, V**; G, Shiny , 'Effect of TiO2 grain size on performance of $Ba_{0.5}Sr_{0.5}TiO_3$ ceramic based MIM capacitor for energy storage application' IET, Micro & Nano Letters, **April 2020**, **https://doi.org/10.1049/mna2.12038,** Indexed in **SCIE,** . Impact Factor 1.1.
15. Fatima Rasheed J. and **V. Suresh Babu,** "Performance enhancement by the Introduction of Additional Narrow Band Gap Bottom Layer of $aSi_{0.64}Ge_{0.36}$: H on Proposed p^+aSi:H/i-aSi:H/$n^+aSi_{0.73}Ge_{0.27}$:H Thin Film Solar Cells", Journal of Nanoelectronics and Optoelectronics, Vol.15, pp.487-497, **April 2020** DOI: 10.1166/jno.2020.2761. Indexed in **SCIE,** Impact Factor 0.60
16. Fatima Rasheed J.and **V. Suresh Babu**, "Analysis, Optimisation and Experimental Validation of n^+aSi:H/i-aSi:H/p^+aSiGe:H Graded Band Gap Single Junction Solar Cell ", Results in Physics (Elsevier), Vol.16, March 2020 DOI: 10.1016/j.rinp.2020.102940 . Indexed in **SCIE,** Impact Factor 4.019
17. Smitha P S, **V Suresh Babu**, Shiny G, "VCC-α nullification and leakage reduction in Pt/$Ba_{0.5}Sr_{0.5}TiO_3$/Pt thin-film capacitor by MgO barrier and PDA for energy storage application", Semiconductor Science and Technology (IOP publishing) Vol.35, no.4, **February 2020**. DOI https://doi.org/10.1088/1361-6641/ab73f3 Indexed in **SCIE,** Impact Factor 2.361

18. P. S, Smitha; **Suresh Babu, V**; G, Shiny, "Critical Parameters of High Performance Metal-Insulator- Metal Nanocapacitors: A Review" Materials Research Express (IOP publishing) Vol.6, **November 2019**, DOI 10.1088/2053-1591/ab5511 Indexed in **SCIE, Impact Factor 1.41**

19. Smitha P S, **V Suresh Babu**, Shiny G, "Investigation of barrier layer effect on performance parameters of Pt/BST/Pt nanocapacitor", Materials Research Express (IOP publishing) Vol.6, no.9, **July 2019** DOI https://doi.org/10.1088/2053-1591/ab33b2 Indexed in **SCIE,** Impact Factor 1.41.

20. Reshma P.G., Varun P. Gopi,, **V. Suresh Babu**, Khan A. Wahid, "Analog CMOS Implementation of FFT using Cascode Current Mirror", Microelectronics Journal (Elsevier), Vol.60, **Feb 2017**, pp.30-37. DOI: https://doi.org/10.1016/j.mejo.2016.12.002 Indexed in **SCIE,** Impact Factor 1.405.

21. Fatima Rasheed J. and **V. Suresh Babu**, "Impact of Band Gap Graded Intrinsic Layer on Single Junction Band Gap Tailored Solar Cells", Nanoscience &; Nanotechnology-Asia, Sep 2021, DOI 10.2174/2210681211666210908141441, Impact Factor 0.76 (Scopus indexed)
22. Fatima Rasheed J. and **V. Suresh Babu**, "$p^{+}aSi_xC_{1-x}$:H/i-aSi:H/$n^{+}aSi_{1-x}Ge_x$:H Band Gap Tailored Photovoltaic Structure with Composition Graded Amorphous Silicon Carbon Alloy as Window Layer" Elsevier Journal of Materials Today: Proceedings Sept 2019 DOI: 10.1016/j.matpr.2019.08.178, Scopus indexed
23. Beena S, Nelsa Abraham, **V Suresh Babu, "**Facile synthesis and characterization studies of Mn Co-doped ceria nanoparticles: A promising electrode material for supercapacitors", Materials Today: Proceedings https://doi.org/10.1016/j.matpr.2021.06.230, (Scopus indexed) June 2021.
24. Resmi R., M. R. Baiju and **V. Suresh Babu**, "Analysis of Material Dependent Thermoelastic Damping Limited Critical Thickness in Micro/Nanobeams", Sensors & Transducers, Vol. 239, Issue 12, December 2019, pp. 47-55. DOI http//www.sensorportal/HTML/DIGEST/P_3114.htm **Scopus indexed, Impact Factor 0.45**
25. **Aseena. S, Nelsa Abraham, V Suresh Babu, "**Morphological and optical studies of zinc doped cerium oxide nanoparticles prepared by single step co-precipitation method", Materials Today: Proceedings, June 2021 https://doi.org/10.1016/j.matpr.2021.05.636, (Scopus indexed)
26. Aseena S, Nelsa Abraham, **V Suresh Babu**, "Optimization of layer thickness of ZnO based perovskite solar cells using SCAPS 1D", Materials Today : Proceedings September 2020 https://doi.org/10.1016/j.matpr.2020.09.077 Scopus indexed
27. Fatima Rasheed J. and **V. Suresh Babu,** "Investigations on optical, material and electrical properties of aSi:H and aSiGe:H in making proposed n^{+}aSi:H/i-aSi:H/p^{+}aSiGe:H graded band gap single junction solar cell", Nanoscience & Nanotechnology-Asia Vol 10 Issue 5, Nov 2020. DOI: 10.2174/2210681209666190627152852 **Scopus indexed, Impact Factor 0.78**
28. Fatima Rasheed J. and **V. Suresh Babu,** "Performance evaluation of composition graded layer of $aSi_{1-x}Ge_x$: H in n^{+}aSi:H/i-aSi:H/$p^{+}aSi_{1-x}Ge_x$:H Graded Band Gap Single Junction Solar Cell", Materials Today: Proceedings, Vol.27, Part1, pp.26-31, Sept 2019 DOI: 10.1016/j.matpr.2019.08.178, **Scopus indexed**
29. P S Smitha, **V Suresh Babu,** G Shiny, "High performance Pd/ MgO/ $Ba_{0.5}Sr_{0.5}TiO_3$/ MgO/ Pd Metal-Insulator-Metal nanocapacitor for energy storage applications",

Materials Today : Proceedings, Volume 26, issue P1, 2020, pp 64-68. DOI:10.1016/j.matpr.2019.04.214 **Scopus indexed**

30. Smitha P S, Jitha S Jayan, Appukuttan Saritha, V Suresh Babu and Shiny G, "Investigation on dielectric properties of Al2O3, ZnO and MgO doped Ba0.7Sr0.3TiO3 ceramics", Materials Today : Proceedings, 2020. DOI: 10.1016/j.matpr.2020.09.837 (SCOPUS indexed)
31. Anju S, **V Suresh Babu,** Biji Jacob, Geenu Paul**,** "A nanoscale AlGan/Gan HEMT on BGO substrate with recessed T gate for high frequency applications", Materials today Proceedings, 2021, ISSN 2214-7853. (Scopus indexed)
32. Resmi R.,V. Suresh Babu, M.R Baiju "Energy Dissipation Analysis in Micro/Nanobeam Cantilever Resonators Applying Non-classical Theory" Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 317. Springer, Singapore. https://doi.org/10.1007/978-981-16-5640-8_41,2022 (Scopus Indexed)
33. Resmi R, **V. Suresh Babu** , M. R. Baiju "Impacts of Length-Scale Parameter on Material-Dependent Thermoelastic Damping in Micro- and Nanoplates Applying Modified Couple Stress Theory". Mechanika-25841 R Impact Factor 0.597 (Accepted- SCIE Journal)
34. Resmi R, **V. Suresh Babu** , M. R. Baiju , "Quality Factor Enhancement and Material Dependent Thermoelastic Damping Analysis in Vibrating Micro/Nanobeam Based Sensors Applying Size Effects" International Journal of Acoustics and Vibration-#1743 Impact Factor 0.62 (Revision files completed- SCIE Journal)
35. Resmi R, **V. Suresh Babu** , M. R. Baiju "Quality Factor Enhancement by Material and Critical Length Optimizations and Thermoelastic Damping Analysis in Vibrating Micro/Nanobeam Resonators Applying Size Effects"- AOAM-D-21-00110 (Revision files requested to upload- SCIE Journal)
36. Resmi R., M. R. Baiju and **V. Suresh Babu**, " Thermoelastic Damping Limited Quality Factor Enhancement and Energy Dissipation Analysis of Rectangular Plate Resonators using Non classical Elasticity Theory" Advances in Materials Science and Engineering, Hindawi publishers (accepted for publication) Indexed in **SCI Expanded**, Impact Factor: 1.938

Book Chapters

1. Resmi R., M. R. Baiju and **V. Suresh Babu** Analysis of Temperature Impacts on Material-Dependent Thermoelastic Damping in Simply Supported Rectangular Microplate Resonators Applying Size Effects January 2022 DOI: 10.1007/978-981-19-0898-9_48, In book: Computer Networks, Big Data and IoT
2. Resmi R., M. R. Baiju and **V. Suresh Babu** , Analysis of Temperature impacts on Material Dependant thermoelastic damping in simply supported rectangular microplate resonators applying size effects Lecture Notes on Data Engineering and Communications Technologies (LNDECT, volume 117), Computer Networks, Big Data and IoT Dec 2021 SpringerLink : DOI : 10.1007/978-981-19-0898-9

International Conferences

1. Resmi R.,V. Suresh Babu, M.R Baiju "Energy Dissipation Analysis in Micro/Nanobeam Cantilever Resonators Applying Non-classical Theory" Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 317. Springer, Singapore. https://doi.org/10.1007/978-981-16-5640-8_41,2022 (Scopus Indexed)
2. Resmi R, V. Suresh Babu, M.R. Baiju, Impact of dimensionless length scale parameter on material dependent thermoelastic attenuation and study of frequency shifts of rectangular microplate resonators. IOP Conf. Ser.: Mater. Sci. Eng. 1091 012067 (2021) (Scopus Indexed)

3. Resmi R., Suresh Babu V., M.R Baiju "Analysis of Temperature Impacts on Material Dependent Thermoelastic Damping in Simply Supported Rectangular Microplate Resonators applying Size Effects" 4th International Conference on Computer Networks, Big Data and IoT(ICCBI-Springer, December 9-10; Lecture Notes on Data Engineering and Communication Technologies ISSN:2367-4512,2021 (Scopus Indexed)
4. Resmi R, M. R. Baiju, V. Suresh Babu "Thermoelastic damping dependent quality factor analysis of rectangular plates applying modified couple stress theory", AIP Conference Proceedings 2166, 020029 ;https://doi.org/10.1063/1.5131616 (2019) (Scopus Indexed)
5. Resmi R., M. R. Baiju and V. Suresh Babu, "Material dependent thermoelastic damping limited quality factor analysis of disc resonators," 2017 International conference on Electronics, Communication and Aerospace Technology (ICECA-IEEE), 2017, pp. 675-680, doi: 10.1109/ICECA.2017.8212750.
6. Resmi R., M. R. Baiju and V. Suresh Babu, "Dimensionless bending rigidity ratio and material dependency of microbeams with size effects," 4th International Conference on Trends in Material Science and Inventive Materials, 2022 (ICTMIM 2022) March 24-25, Accepted (Publication in Springer Proceedings in Materials)
7. Resmi R., M. R. Baiju and V. Suresh Babu, "Impacts of Vibration Mode Switching on Energy Dissipation Analysis of Rectangular Microplate Resonator Based Sensors in IoT Applications" 5th International Conference on Computer Networks and Inventive Communication Technologies (ICCNCT 2022) April 1-2,Accepted
8. Anju S, **V Suresh Babu,** Biji Jacob, Geenu Paul**,** "A nanoscale AlGan/Gan HEMT on BGO substrate with recessed T gate for high frequency applications", Proceedings of 2021 IEEE international conference on Nanoelectronics, Nanophotonics, Nanoscience and Nanotechnology(5NANO 2021, IEEE)
9. Fatima Rasheed J. and V. Suresh Babu, "Performance of wide band gap amorphous silicon alloys as passivation layer in graded band gap solar structure",organized by SRM Institute of Science and Technology, Chennai ,1 st -3 rd February, 2021
10. Anju S, **V Suresh Babu**, Geenu Paul**,** "Performance improvement of an AlGan?Gan HEMT on BGO substrate using gate recess technique", proceedings of Kerala State Science Congress 2021.
11. Smitha P S, Jitha S Jayan, Appukuttan Saritha, V Suresh Babu and Shiny G, "Investigation on dielectric properties of Al_2O_3, ZnO and MgO doped $Ba_{0.7}Sr_{0.3}TiO_3$ ceramics", International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NANO2020), Mangalam College of Engineering, Kottayam, Kerala, 23-24 July 2020, pp. 436-440 IEEE. (Best Paper Award)
12. Aseena S, Nelsa Abraham and V Suresh Babu, "Optimization of layer thickness of ZnO based perovskite solar cells using SCAPS 1D" International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NANO2020), Mangalam College of Engineering Kottayam, 23-24 July, 2020
13. Fatima Rasheed J. and V. Suresh Babu, "$p^+aSi_xC_{1-x}$:H/i-aSi:H/n^+aSi_{1-x} Ge_x:H Band Gap Tailored Photovoltaic Structure with Composition Graded Amorphous Silicon Carbon Alloy as Window Layer". in Third International Conference on Solar Energy Photovoltaics held at School of Electronics Engineering, KIIT Bhubaneswar, Odisha 19th-21st December, 2019
14. Resmi R., M. R. Baiju and V. Suresh Babu, "Thermoelastic damping dependent quality factor analysis of rectangular plates applying modified coupled stress theory", AIP Conference Proceedings 2166, 020029, 25 October, 2019
15. Fatima Rasheed J. and V. Suresh Babu, "Performance evaluation of composition graded layer of $aSi_{1-x}Ge_x$: H in n^+aSi:H/i-aSi:H/$p^+aSi_{1-x}Ge_x$:H Graded Band Gap Single Junction Solar Cell ", in First International Conference on Recent Advances in Materials and

Manufacturing(ICRAMM 2019) held at the Department of Mechanical Engineering, KLE Dr.M.S.Sheshgiri College of Engineering and Technology, 12nd-14th September, 2019

16. Smitha P S, V Suresh Babu, Shiny G, "Annealing effects on capacitance density and voltage coefficient of capacitance (VCC) of thin-film capacitor for energy harvesting application", IEEE International Conference on Microwave Integrated Circuits, Photonics and Wireless Networks (IMICPW–2019), National Institute of Technology, Trichy, May 22-24, 2019.
17. Aseena S, Nelsa Abraham and V Suresh Babu, "A Novel Perovskite Solar Cell with ZnO-Cu_2O as Electron Transport Material-Hole Transport Material," IEEE International conference on Microwave Integrated Circuits, Photonics and Wireless Networks- 2019, National Institute of Technology, Trichy, 22-24th May 2019.
18. Aseena S, Nelsa Abraham and V Suresh Babu, "Synthesis of ZnO/CNT Nanocomposite by Microwave and Ultrasound Assisted Two Step Process," IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking 2019 (ViTECoN), Vellore Institute of Technology, Vellore, 30-31st March 2019.
19. Rasheed, J. Fatima, and V. Suresh Babu. "Characterisation and performance evaluation of amorphous silicon nitride as passivation layer in thin film aSi:H solar cells." In 2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), SVS College of Engineering, Coimbatore, 20-22 Feb. 2019
20. Smitha P S, V Suresh Babu, Shiny G, "Investigation of barrier layer effect on performance parameters of Pt/BST/Pt nanocapacitor", 5th International Conference on Nanoscience and Nanotechnology (ICONN–2019), SRM Institute of Science and Technology, 28-30 January 2019, pp.1025-1031, ISBN:978-93-841361-6-1
21. Smitha P S, V Suresh Babu, Shiny G, "High performance Metal-Insulator-Metal nanocapacitor for energy storage applications", 2nd International Conference on Nano Science and Engineering Applications (ICONSEA 2018), Jawaharlal Nehru Technological University Hyderabad, 4-6, October 2018, pp.73-77, ISBN:978-81-924726-4-5
22. Fatima Rasheed, V. Suresh Babu, "Simulation on the performance series and parallel connected tandem solar cells-a comparison study" 2017 IEEE region 10 symposiun,TENSYMP17, Cochin, July 2017.
23. Resmi R., M. R. Baiju and V. Suresh Babu, "Material dependent thermoelastic damping limited quality factor analysis of disc resonators", International conference of Electronics, Communication and Aerospace Technology (ICECA), Coimbatore, India, 20-22 April 2017
24. Beema Akbar, Varun P Gopi, V Suresh Babu, "Colon Cancer Detection Based on Structural and Statistical Pattern Recognition", IEEE sponsored 2nd International Conference on Electronics and Communication System (ICECS), 2015.
25. V. Suresh Babu, Varun P. Gopi, Salini Thankachan, M. R. Baiju, " A Novel programmable Current Reference with FGMOSFETs", proceedings of the 2014 International Conference on Circuits, Systems and Control, Interlaken, Switzerland, Feb 2014.
26. V. Suresh Babu, Salini Thankachan, M. R. Baiju, "A Floating Gate MOSFET based Current reference Circuit", International Conference on Control Systems and Electronics, Interlaken, Switzerland, Feb 2014.
27. Arun. S, V. Suresh Babu, "Implementation of Radix 2 and split Radix FFT Algorithm using Current Mirrors", IEEE International Conference on Power and Computing Technologies ICCPCT 2013.
28. Aiswariya Raj, V. Suresh Babu, "Programmable Temperature insensitive Voltage and Current Reference using Floating Gate MOSFETs", International Conference on Technological Trends, Nov 2010.

29. Varun P. Gopi, V. Suresh Babu, M. R. Baiju, "Scaling Issues in IDDG FinFET at Small Gate Length", 3rd IEEE International Conference on Information Science and Interaction Science, 23-25 June 2010, pp683-687, Chendu, China
30. Haseena P.S, V. Suresh Babu, M.R Baiju. "A Floating gate MOSFET Based Current Reference", Proceedings of International Conference on Control, Communication and Computing, ICCC2010, February 2010.
31. V. Suresh Babu, Haseena P.S, M.R Baiju. "A Floating gate MOSFET Based Current Reference with Subtraction technique", Proceedings of IEEE Computer Society Annual Symposium on VLSI, ISVLSI 2010.
32. V. Suresh Babu, Salini Devi, Ambika Sekhar, M.R Baiju, "FGMOSFET Circuit for Neuron Activation Function and its Derivative", Proceedings of IEEE ICIEA (DATICS) November 2009
33. V. Suresh Babu, Ambika Sekhar, Salini Devi, M.R Baiju, "A Floating Gate MOSFET Based Operational Transconductance Amplifier and Study of Mismatch", Proceedings of IEEE ICIEA(DATICS) November 2009
34. Shihabudeen A, V. Suresh Babu, M. R. Baiju, "A Low Power Sub 1V 3.5 ppm/0C Voltage Reference Featuring sub threshold MOSFETS", Proceedings of International conference ISCES, Malta, Aug 31st to Sept 3rd 2008.
35. V. Suresh Babu, Rose Katherine AA, M.R Baiju, "Floating gate MOSFETs V. Suresh Babu, Divya N. Nadar, M.R Baiju, "Low Power 1 V CMOS Oscillating Neuron", Proceedings of MIPRO, MEET, Croatia May 2008
36. Based Neuron Activation Function and its Derivative with Continuously Programmable Characteristics and Increased linear Range", Proceedings of MIPRO, MEET Croatia, May 2008
37. V. Suresh Babu, Rose Katherine AA, M.R Baiju, "Adaptive Neuron Activation Function with FGMOS Based operational Transconductance Amplifier" Proceedings of IEEE Computer Society, Annual Symposium on VLSI, April 2008.
38. S. Hema, V. Suresh Babu, P. Ramesh, "FPGA implementation of Viterbi decoder", EHAC'07 Proceedings of the 6th WSEAS International Conference on Electronics, Hardware, Wireless and Optical Communication, Pages 162-167, Corfu Island, Greece, 16-19 Feb 2007.

National Conferences

1. Soumya. R, V. Suresh Babu, Realization of Magnitude Comparator using Threshold Logic, NCTT 2016, College of engineering, Thiruvananthapuran, August 2016.
2. Titupriya. V, V. Suresh Babu, Current Reference for Energy Harvesting, NCTT 2016, College of engineering, Thiruvananthapuran, August 2016.
3. Theresa Mathew, V. Suresh Babu, Microstrip patch antenna design for low RCS, National Conference on Technological Trends, September 2015.
4. Remya. P., V. Suresh Babu, nMicrostrip patch antenna design for GPS systems, National Conference on Technological Trends, September 2015.
5. Vandana Ramankutty, V. Suresh Babu, "Carbon Nanotube based Digital VLSI Circuit", National Conference on Communication and Signal Processing, GEC, Idukki, March 2014.
6. Arun. S, V. Sureh Babu, "Analog implementation of FFT Algorithm using Current Mirror Circuits", National Conference on Technological Trends, November 2011
7. Salini Thankachan, V. Suresh Babu, "A Novel Programmable Current Reference with Temperature and Supply Voltage Compensation", National Conference on Technological Trends, November 2010.

8. Haseena P. S, V. Suresh Babu, "A Floating Gate MOSFET Based Current Reference", 10th National Conference on Technological Trends, November 2009.
9. Sambasiva Rao V, V. Suresh Babu, "FinFET based Voltage Reference", 10th National Conference on Technological Trends, November 2009.
10. Varun P. Gopi, V. Suresh Babu, "Independently driven Double Gate FinFET Scalable to 10 nm", National Conference on Technological Trends, November 2009.
11. Remya. G, V. Suresh Babu, "Tunable gm –C Filter using Linearised Cross Coupled FGMOS OTA", 9th National Conference on Technological Trends, November 2008.
12. Salini Devi, V. Suresh Babu, "A novel FGMOSFET circuit for neuron activation function and its derivative", 9th National Conference on Technological Trends, November 2008.
13. Ambika Sekhar, V. Suresh Babu, "Floating gate MOSFET based operational transconductance amplifier and study of mimatch", 9th National Conference on Technological Trends, November 2008
14. Divya N. Nadar, V. Suresh Babu, "OTA based Low Voltage Oscillating Neuron", 8th National Conference on Technological Trends, November 2007.
15. Rose Katherine A.A, V. Suresh Babu, M.R Baiju, "FGMOS Based Transconductance Amplifier with Programmable Characteristics", 8th National Conference on Technological Trends, November 2007.
16. Shiju. P. P., V Suresh Babu, "Single transistor synapse for neural networks", 7th National Conference on Technological Trends, November 2006.
17. Hema.S, V. Suresh Babu, "FPGA Implementation of Viterbi decoder", National Conference on Technological Trends, November 2006.

International Conferences Attended and Papers Presented

1. IEEE Computer society Annual Symposium on VLSI, ISVLSI, Montpellier France, April 7 – 9, 2008.
2. International conference on Circuits systems and control, Interlaken, Switzerland, February 22-24, 2014.
3. Third IEEE International Conference on Electrical Computer and communication Technologies, S V college of engineering, 20-22 February 2019
4. IEEE international Conference on Vision Towards Emerging Trends in Communication and Networking 2019, Vellore Institute of Technology, March 30-31, 2019.
5. First International Conference on Recent advances in Materials and Manufacturing, Balagavi, India, September 12-14 2019.
6. Second International conference on Inventive Material Science Applications (AIP), PPG Institute of Technology,Coimbatore 25-26 Sept 2019.
7. Third International Conference on Inventive Research in Material Science and Technology(IOP Publishing), Inventive Research Organisation, 22-23 Jan 2021.
8. International Conference on Pervasive Computing and Social Networking(Springer), Narasus Sarathy Institute, Salem, 19,20 March 2021.
9. Fourth International Conference on Big Data and IoT (Springer), CARE College of Engineering, Trichy, 9-10 Dec 2021.
10. Inventive Research Third international conference on Inventive Research in Material science and technology (ICIRMCT 2021), Coimbatore India, Jan 2021.

Best paper awards

1. National Conference on Technology Trends NCTT 2007,
2. National Conference on Technology Trends NCTT 2008
3. International Conference on Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience & Nanotechnology (5NANO2020), 23-24 July 2020

Teaching Experience

Institution	**Roll**	**Period of Service**	**Duration**
CET	Lecturer (provisional)	06-07-1989 to 31-01-1990	7 months
CET	Assistant Professor	20-06-1991 to 29-11-2000	9 years 5 months
GEC, Kannur	Associate professor	30-11-2000 to 19-05-2004	3 years 6 months
CET	Associate Professor	20-05-2004 to 13-06-2013	9 years 1 month
GEC, Idukki	Associate Professor	14-06-2013 to 15-11-2013	5 months
GEC Idukki	Professor	16-11-2013 to 15-07-2014	8 months
CET	Professor	16-07-2014 to 31-05-2016	1 year 10 months
GEC, Barton Hill	Professor	01-06-2016 to 22-03-2019	2 years 10 months
GEC Wayanad	Professor	23-03-2019 to 16-08-2019	5 months
APJ Abdul Kalam Technological University	Controller of Examinations on Deputation	17-08-2019 to 16-08-2020	1 year
GEC Wayanad	Professor	17-08-2020 to 2-09-2021	12.5 months
CET	Professor Dean Research and QIP Coordinator	03-09-2021 to 31-03-2022	7 months
CET	Principal	1-4-2022 onwards	
Total			**31 years 3months**

Courses Taught

1. GATE Coaching Class, (SSD), CET, ECE 2010-2014
2. Solid State Devices
3. VLSI Engineering
4. Digital Electronics
5. Signals and Systems
6. Nanoelectronics
7. VLSI Circuit Design (UG)
8. VLSI Circuit Design (PG)
9. Nanomaterials and Characterization (PG)
10. CAD for VLSI (PG)
11. CMOS Circuit Design (PG)
12. Electronic Devices Lab, Electronic Circuits Lab, Digital Electronics Lab, AIC Lab

13. Research Methodology

Administrative Experience

Institution	Roll	Period	Duration
College of Engineering, Trivandrum	Principal	1-4-2022 onwards	
College of Engineering, Trivandrum	Dean Research and QIP Coordinator	03-09-2021 to 31-03-2022	7 months
Government engineering College, Wayanad	Dean Academics and IQAC Coordinator	1-01-2021 to 2-09-2021	8 months
APJ Abdul Kalam Technological University	Controller of Examinations	17-08-2019 to 16-08-2020	1 year
Government engineering College, Barton Hill	Head of Department of ECE	01-06-2016 to 12-03-2019	2 years 9 months
Government engineering College, Idukki	IIIC Coordinator	June 2013 to Jan 2014	7 months
Government engineering College, Idukki	TEQIP Coordinator	Jan 2014 to July 2014	6 months
CET	Procurement Coordinator /Purchase Coordinator, Department of ECE, CET	2005 to 2012	7 years
University of Kerala	Chairman Board of Studies	2008-2012	4 years
Total:			**17 Years**

1. **Controller of Examinations, APJ abdul Kalam technological University 17-08-2019 to 16-08-2020, 1 year**

Joined as Controller of Examinations, APJ Abdul Kalam Technological University on Deputation basis on 17-08-2020 and relieved with effect from forenoon of 17-08-2020. The contribution during the tenure includes:

- Intensive efforts were taken to clear pending payments, many of which were pending from 2015 onwards.
- Cleared pending audit objections including the one regarding payment given to Controller of Technical Examinations under Director of Technical Education.
- Streamlined the work flow in examination department by assigning work to each and every officer and staff.

- Settled long pending issue of missing answer books which was a main hindrance to disbursal of old answer books which also is at the implementation stage.
- Taken several steps to improve the quality of assessment and evaluation. Revised guidelines issued for question paper setters with specific instructions to set answer keys. Enhanced remuneration for question paper setting and Scrutiny. During scrutiny it has been made mandatory to scrutinize the answer key also. Instructed that the faculty who scrutinizes the question paper shall also ensure that it is not replica of previous question papers.
- Detailed guidelines for ensuring quality of valuation were issued, which also defines the roles of additional examiner, chief examiner, chairperson, and all camp staff.
- Steps were also taken to speed up valuation and introduced fine for not reporting for valuation.
- A coding system for QP and Scheme was introduced to effective handling of QPs and schemes by the confidential section.
- A new software development has been done for uploading QP which enhances the confidentiality of QP, at the same time avoid loss of QP due to password mismatch and other reasons. The used questions were made available to the confidential section directly from the portal after completion of examination.
- Procedure for disposal of old answer books has been finalized, after resolving all pending issues/hindrance related to the disposal.
- Rationalized remuneration for all works related to valuation, revaluation, and payment to the camp officials.
- Camp coordinators were replaced by camp assistants for effective functioning of valuation camps.
- Introduced system of scanning answer books for transit from camp to camp or faculty in the same camp itself (during lock down only) when the scripts to be moved is less than or equal to 25 to speed up valuation/revaluation process.
- Introduced a system of examination vigilance squad. (to be implemented)
- Proposed scheme to remove position of observers and to introduce CCTV surveillance system.
- In connection with the conduct of examinations, a provision for centre change has been introduced.
- Introduced system of imposing fine and super fine on late registrations by students. (to be implemented)
- Introduced Fast track system of issuing degree certificates.
- Introduced the system of direct down load of provisional certificate and Consolidated grade cards by students (to be implemented)
- Introduced review system to students who are in failed status after publication of revaluation results (UG) or after publication of results (PG).
- Revised malpractice related procedure in consultation with psychologist, especially in the context of centre change. (the final approval pending)
- A development activity initiated for the exam related online inventory register.
- MoU signed with Department of Posts for dispatch of certificates.

- Corrective actions initiated with reference to valuation/revaluation related errors.
- Initiated steps to revise examination manual.

2. Head of Department of Electronics and Communication, GEC Barton Hill
01-06-2016 to 12-03-2019, 2 years 9 months

Joined GEC Barton Hill on 01-06-2016 and was the head of the Department of Electronics and Communication. As head of the department

- Started a new research lab in Nanoelectronics with facilities for thin film solar cell fabrication.
- Introduced scheme of awarding incentive to class toppers in each semester on publication of results. Improving trends were seen in the student performances.
- Coordinated NBA accreditation activities of the department.
- Attended workshop/training on OBE at ESCI and similar programmes were organized for all faculties of the department.
- Got NBA accreditation to the Department with good marks.
- Throughout my tenure maintained good relation with faculty, staff, students, other departments and the Principals.

3. TEQIP Coordinator, GEC Idukki

Jan 2014 to July 2014, 6 months

Was the Coordinator of TEQIP Phase II at GEC Idukki from Jan 2014 to July 2014 during which

- Streamlined all TEQIP activities and cleared all pending files.
- Funds under all heads were spent as scheduled.
- Settled all advances drawn by faculty for various purposes.
- Performance and statutory audits were done during the tenure.
- All reports were presented in time and BoG meetings were convened.
- International conference has been organized with TEQIP funds.

4. IIIC Coordinator, GEC Idukki

June 2013 to Jan 2014, 7 months

Transferred to GEC Idukki on 15-06-2013. Have been the coordinator of Industry Institute Interaction cell for about six months during which

- Visited National Institute of Speech and Hearing, Trivandrum and Keltron and Signed MOU with Keltron.
- Organized Talk on Solar Energy systems, workshop on Robotics.
- Organized four parallel international Conferences which was first of its kind in Government Engineering College Idukki which was a grand success in terms of its participation and coordination.

5. Procurement Coordinator/Purchase Coordinator, Dept. of ECE, CET

2005-2012, 7 years

Joined back CET in may 2004 and was given the charge of Procurement Coordinator of Department of Electronics and Communication Engineering of project Technical Education Quality Improvement Programme (TEQIP). Department of ECE has had a share of around five crores out of the thirty crores allotted to CET under TEQIP phase I. Effectively and successfully coordinated the planning and implementation of the project at Department level. In addition to being the procurement coordinator, was the coordinator of purchase in the department.

6. Chairman Board of Studies Electronics, University of Kerala

Done the curriculum revision of B Sc Electronics and M Sc Electronics under CBCSS of Kerala University in addition to other routine doties of Board of Studies.

Employment Details

Institution	Roll	Period of Service	Scale of pay	Duration
College of Engineering, Trivandrum (CET)	Lecturer (provisional)	06-07-1989 to 31-01-1990		7 months
Keltron	Engineer Trainee	01-02-1990 to 17-05-1991		1 year 3 months
CET	Assistant Professor	20-06-1991 to 29-11-2000		9 years 5 months
Government Engineering College, Kannur	Associate professor	30-11-2000 to 19-05-2004		3 years 6 months
CET	Associate Professor	20-05-2004 to 13-06-2013	37400-67000	9 years 1month
Government Engineering College, Idukki	Associate Professor	14-06-2013 to 16-11-2013	37400-67000, AGP 9000	5 months
Government engineering College Idukki	Professor	17-11-2013 to 15-07-2014	37400-67000, AGP 10000	8 months
College of engineering,	Professor	16-17-2014 to 31-05-2016	37400-67000, AGP 10000	1 year 10 months

Trivandrum, CET				
Government Engineering College, Barton Hill	Professor and Head of Department	01-06-2016 to 12-03-2019	37400-67000, AGP 10000	2 years 10 months
Government Engineering College Wayanad	Professor	23-03-2019 to 16-08-2019	37400-67000, AGP 10000	5 months
APJ Abdul Kalam Technological University	Controller of Examinations on Deputation	17-08-2019 to 16-08-2020	37400-67000, AGP 10000	1 year
Government Engineering College Wayanad	Professor	17-08-2020 to 2-09-2021	37400-67000, AGP 10000	1 year 17 days
College of engineering, Trivandrum, CET	Professor and Dean Research	03-09-2021 onwards	218200, Level 14 7th CPC	3 months
Total				**31 years**

Books Published

Sl.No.	Title of Book	Name of Publisher, ISBN Number	Year
1.	Introduction to Principles of Electronics	Dharmapuri Publications, Trivandrum	2000
2.	Introduction to Principles of Electronics, 2nd Edition	Dharmapuri Publications, Trivandrum	2001
3.	Solid State Devices and Technology	Sanguine Technical Publishers, Bangalore ISBN: 81 88849 11 1	2005
4.	Solid State Devices and Technology Concise Edition	Sanguine Technical Publishers, Bangalore ISBN: 81 88849 14 6	2005
5.	Solid State Devices and Technology 2nd Edition	Sanguine Technical Publishers, Bangalore ISBN: 81 88849 07 3	2006
6.	Solid State Devices and Technology 3rd	Pearson Education	2010

	Edition	ISBN: 978 81 317 3236 6	
7.	Solid State Devices and Technology 4th Edition	Owl Publishers ISBN: 978 81 928633 9 9	2013
8	Basics of Electronics Engineering	Owl Publishers ISBN: 978 93 8566 606 3	2015
9	Introduction to electronics Engineering	Owl Publishers ISBN: 978 93 8566 607 0	2015

Positions Held

Dean Research, College of Engineering, Trivandrum.

1. Dean Research and QIP Coordinator, CET, Trivandrum Sept 2021 to Mar 2022
2. Member Board of Directors, TrEST Research Park, CET Trivandrum Sept 2021 onwards
3. Member Board of Governors, Kerala State Science and Technology Museum
4. **Dean Academics**, Government Engineering College, Wayanadu, Jan 2021 to Aug 2021.
5. Chairman IQAC, Government Engineering College, Wayanadu, Jan 2021 to Aug 2021.
6. Member Governing Body, Mar Baselios College of Engineering and Technology, Thiruvananthapuram, (Autonomous) Feb 2021 onwards.
7. Member, Academic Committee of Polytechnic colleges in Kerala, Jan 2021 onwards.
8. **Member BoG, Government Engineering College, Wayanadu**, Jan 2021 to Aug 2021.
9. Member BoG, Government Engineering College, Barton Hill, 2019-20.
10. Member BoG, Government Engineering College, Kozhikod 2019-20.
11. Member BoG, Cooperative Institute of Technology, Trikkaripur, 2019-20.
12. Member BoG, Rajiv Gandhi institute of Technology, Kottayam, 2019-20.
13. **Controller of Examinations**, APJ Abdul Kalam Technological University, Thiruvananthapuram, Kerala, 17-08-2019 to 16-08-2020
14. **Head of Department of Electronics and Communication Engineering, Government Engineering College, Barton Hill** 01-06-2016 to 22-03-2019.
15. **Member Academic Council, University of Kerala, Dec 2012 to Dec 2016**
16. **Chairman Board of Studies Electronics**, University of Kerala 2008 to 2012
17. Member workload assessment committee, directorate of Technical Education, 2016 to 2018
18. **Coordinator,** Technical Education Quality Improvement Programme **(TEQIP),** Government Engineering College , Idukki, Jan 2014 to June 2014
19. TEQIP Procurement Coordinator and Purchase coordinator, Dept of Electronica and Communication Engineering, College of Engineering, Trivandrum 2005 to 2012
20. Nodal Officer, Industry Institute Interaction Cell (IIIC), TEQIP, GEC, Idukki, June 13 to Jan 2014
21. Convener curriculum committee, APJ Abdul Kalam Technological University, Thiruvananthapuram, Kerala, 2014-15.
22. **IEEE Student Branch Counselor**, College of Engineering, Trivandrum, from July 2014 to May 2016

23. PG Coordinator, Government Engineering College, Idukki, 2013 to 2014.
24. Secretary, Staff Club, College of Engineering, Trivandrum, 2010-2012.
25. **Organizing Secretary, National Conference on Communication and Signal processing, GEC, Idukki, March 2014**
26. Organizing Secretary, National Conference on Energy Power Electronics and Control, GEC, Idukki, March 2014
27. Organizing Secretary, National Conference on Computing and Communication, GEC, Idukki, March 2014
28. Organizing Secretary, National Conference on Information Security and Network Engineering, GEC, Idukki, March 2014
29. Coordinator, Sponsorship Committee, MSO9, AMSE Conference, 2009
30. Coordinator, Publication Committee, International Conference on Control Communication and computing, CCC, 2009
31. Member, Organizing committee, CETEX 2015
32. Department Coordinator, RUSA, 2014
33. Member Organizing Committee of ICTT, 2010
34. Chairman Board of Valuation, University of Kerala, 2013,15,16
35. Coordinator General Arrangement Committee, National Conference on Technological trends NCTT, 2013
36. Technical Programme Committee Co chair ICCC, 2013
37. Nodal Officer Faculty and Staff Development TEQIP III, GEC, Barton Hill.
38. Member inspection committee, Kerala University.
39. Chairman Board of Valuation, KU

FDP/Seminars/Workshops Organized:

Sl. No.	Title/Topic	Month and Year	Sponsors
1.	Solid State Devices	Dec 2005	CET
2.	DSP Concepts & Applications	Dec 2007	TEQIP,CET
3	Training Program on Electronic Devices Lab, Services to Community	Dec 2008	TEQIP, CET
4	Workshop on Nanoelectronics	Jan 2012	CET
5	IIIC Workshop on Robotics and Energy Systems	Sept 2013	TEQIP, GEC, IDUKKI

Visiting Faculty Programmes Organized

1. Dr. Santhanu Mahapatra, Associate Professor, IISc, Bangalore, Talk on Single Electron Transistor, Jan 2013.
2. Dr. Y. Srinivasa Rao, Professor, Andhra University , talk on Nanoplastics, Jan 2013.
3. Dr. Deepak Garg, Associate Professor, Thapar university, Patiala, talk on Machine Learning, Sept 2014.

Expert Talks Delivered

1. Webinar on Introduction to Outcome Based Education, Maharajas College, Ernakulam, Feb 2022
2. Outcome Based Accreditation, Central Polytechnic, Vattiyoorkav, Thiruvananthapuram, Dec 2021.
3. Introduction to Outcome based Teaching Learning Process, Workshop Teachers, SITTTR, Kalamasseri, Dec 2021.
4. Introduction to Outcome based Teaching Learning Process, IT Systems Lab Teachers, SITTTR, Kalamasseri, Nov 2021
5. Outcome Based Accreditation, Rajiv Gandhi Institute of Technology, Kottayam.
6. Introduction to Outcome based Teaching Learning Process, Mathematics Teachers, SITTTR, Kalamasseri, OCT 2021
7. Introduction to Outcome based Teaching Learning Process, Chemistry Teachers, SITTTR, Kalamasseri, OCT 2021
8. Introduction to outcome Base Education and Accreditation, Dept of ECE CET September 2021.
9. Introduction to Outcome based Accreditation, Central Polytechnic, Thiruvananthapuram, August 2021.
10. Introduction to Accreditation and Outcome Based Education, online talk for the faculty of Government Engineering College, Wayanad June 2021.
11. Introduction to OBE, Joint Directors and Principals of Polytechnics in Kerala, organised by SITTTR, March 2021
12. Introduction to OBE, HoDs and curriculum committee members of Polytechnics in Kerala, organised by SITTTR, March 2021
13. Advances in Semiconductor Devices, GEC, Idukki, organised as VFS under TEQIP, GEC, Idukki Nov-Dec 2020..
14. Bipolar Junction Transistors, online Short Term Training Programme at TKM college of Engineering, Kollam, August 2020.
15. Outcome Based Education, APJ Abdul Kalam Technological University (to curriculum committee members), May 2019.
16. Outcome Based Education, 3, 5 July 2019, College of Engineering Trivandrum
17. Outcome Based Education, Department of electronics and Communication, College of Engineering, Trivandrum, 25-07-2018
18. Advances in Semiconductor Physics, Sree Chithra Thirunal College of Engineering, Pappanamcode, Sep 2017
19. Physics of Nanoelectronic Devices, Government Engineering College, Barton Hill, April 2014
20. Fundamentals of Solid State Devices, College of Engineering, Trivandrum, March 2014
21. VLSI Scaling Issues, Saintgits, Pala, Jan 2014
22. Introduction to VLSI, LBSIT for Women, Poojappura, September 2013
23. VLSI to Nanoelectronics, National Conference at SJC, Palai, 2012
24. MOSFET Theory, Government Engineering College, Barton Hill, Oct, 2012
25. Nanoelectronic Devices, STC on Nanoelectronics, ECE Dept, CET, Jan 2012
26. Single Electron Transistor, STC on Nanotechnology, Marian Engineering College, TVM, Dec 2011
27. CMOS Circuit Design, SHM, Kadackal, Sept 2011
28. Basics of Semiconductor Devices, LBT, Thiruvananthapuram, Oct 2009

29. Scaling in CMOS VLSI, Government Engineering College, Barton Hill, April 2009.

Technical Sessions Chaired in Conferences

1. 4th International conference on Control Communication and Computing, Thiruvananthapuram July 5 2018.
2. NCCCSP, GEC, Wayanad, May 2016
3. International Conference on Circuits, Systems and Control, Interlaken, Switzerland, Feb, 2014
4. International conference on Control Communication and Computing ICCC2014, Trivandrum
5. NCET 2014, GEC, Barton Hill
6. VESTA 2012 Sree Buddha College of Engineering, Pattoor
7. International Conference on Technology Trends, ICTT 2012, Basaleos Mathews II college of Engineering.
8. NCTT 2011, College of Engineering, Trivandrum.
9. International Conference, AMSE 2010, Thiruvananthapuram.
10. International Conference on Technology Trends 2010, Trivandrum
11. NCTT 2010, College of Engineering, Trivandrum.
12. International conference on Control Communication and Computing ICCC2010, Trivandrum
13. NCTT 2009, College of Engineering, Trivandrum.

Industry Institute Interaction Activities

1. Visited Sahasra Sambhav, PCB Manufacturing and Assembly Industry, Noida New Delhi in Sept 2014
2. Arranged Workshop by Dimitry Solutions Cochin, in GEC Idukki, Jan 2014
3. Brought Dr. Santhanu Mahapatra, Professor from IISc Bangalore to deliver talk on Nanoelectronics under visiting faculty scheme on Single Electron Transistor in the workshop held in CET in January 2013.

4. As the IIIC Coordinator of GEC Idukki, brought experts in Solar Energy Systems and Robotics from KELTRON to the workshop on Energy Systems and Robotics in Sept 2013.
5. Signed MOU with KELTRON and GEC Idukki, as the IIIC coordinator.

Curriculum Development

Revised syllabus of Solid state Devices in 1993 (Kerala University ECE), based on semiconductor device books, replacing circuits books
Introduced the core course VLSI Engineering in KU - ECE curriculum in 1991, for the first time in Kerala

Introduced Nanoelectronics as a core course in Kerala University, ECE curriculum in 2009
Key role in starting PG programme in Micro and Nano Electronics in CET under Keral University.
Member of curriculum committee of Polytechnic colleges in Kerala.
Member of Academic Committee of Polytechnic colleges in Kerala

4. Faculty Development Programmes Attended

a. Management

Sl. No.	Name of Programme	Institute	Date/Duration	
1	Outcome Based Education with Assessment and Evaluation	Sahrdaya College of Engineering and Technology	23-28 Nov 2020	One week
2	Outcome Based Education and Accreditation, post Covid	Centre for Education Growth and Research (CEGR)	10-14 August 2020	4 day
3	National Examinations Transformation 2020	Council of Examiners India	1st July 2020	1 day
4	Outcome Based Education	Engineering Staff College of India	10-11 June 2019	2 days
5	Outcome based accreditation	CET School of Management, DTE	25-29 June 2018	5 days
6	Training on e-Governance Programme on Change management	Institute of Management in Government (IMG)	21-23 Feb 2018	3 days
7	Workshop of Principals and Head of Departments of Government Engineering Colleges for Strategic Planning	Directorate of Technical Education (DTE)	20-22 Oct 2017	3 days
8	Inspirational Leadership for Performance Excellence	Directorate of Technical Education (DTE)	13-17 Feb 2017	5 days
9	Quality Initiatives in Technical and Higher Educational Institutions	Engineering Staff College of India (ESCI), Hyderabad	6-8 Dec 2016	3 days
10	Residential Training Programme on e-Gov: Transforming Government Sector	National Productivity Council (NPC), Port Blair	21-25 Nov 2016	5days
11	Work life balance and stress management	National Productivity Council (NPC), Gangtok	17-21 Oct 2016	5 days
12	Management Capacity Enhancement Programme	IIM, Indore	23-29 Aug 2016	7days
13	Preparation of Institutional Development Plan for Quality Technical Education in the State	Directorate of Technical Education (DTE), Government Engineering College Barton Hill	10-12 Feb 2016	3 days

14	Accreditation Awareness Programme and National Skill Qualification Framework	College of Engineering, Trivandrum (CET)	27-28 Nov 2014	2 days
15	Academic Leadership Programme for TEQIP Institutions	IIM, Kozhikode	23-28 June 2014	6 days
16	Strategic Planning and Good Governance	College of Engineering, Trivandrum	17-18 March 2014	2days
17	Effective Office Administration and Management	National Productivity Council, Goa	9-13 Dec 2013	5 days
18	Seminar on Motivation & Interpersonal Relations	College of Engineering, Trivandrum (CET)	1st October 1998	2 days

b. Engineering/Technology

Sl. No.	Name of Programme	Institute	Date/Duration	
1	Advanced Nanomaterials, nanotechnology and applications	GEC, Barton Hill	24 to 26 Feb 2021	3 days
1	Microelectronics : Fundamentals to Devices	IIT, Madras	11 to 16 July 2016	6 days
2	Workshop on Advanced Research for High-tech Industry	Govt. Engineering College, Kozhikode	5to 7 Oct 2013	3 Days
3	Short Term Course on Nanoelectronics	College of Engineering, Trivandrum (CET)	30Jan - 3 Feb 2012	5 days
4	STC on Nanotechnology	Marian Engineering College, TVM	20-22 Dec 2011	3 Days
5	Staff Development Programme on VLSI Design and System on Chip	Adhiyamaan College of Engineering, Hosur	8-22 August 2011	15 days
6	Nanotechnology; Opportunity and Challenges	NITTTR, Chandigarh	4-8 May 2009	5 days
7	Workshop on Research Project Proposal	College of Engineering, Trivandrum (CET)	28 to 29 Nov 2007	2 days
8	Seminar on Stochastic Process	College of Engineering, Trivandrum (CET)	15th Nov 2007	1 day
9	Advances in Optical Communication	College of Engineering, Trivandrum (CET)	23-30 April 2007	8days
10	VLSI: Design, Technology, Architecture	College of Engineering, Trivandrum (CET)	30 Nov - 3 Dec 2005	4 days
11	Research Orientation	College of Engineering, Trivandrum (CET)	15-19 Dec-2004	5 days
12	Advances in Electronic Communication & Systems	TKMCE, Kollam	15-27 March 2004	2 weeks
13	The Applications of Transform Theory to Optics and Optical Communication	University of Kerala, Kariavattom.	10-19 April 2002	10 days
14	Image Processing	IIT Delhi	May 2000	2 weeks
15	VLSI Design & VHDL	IIT Delhi	December 1998	3 weeks
16	Simulation & Design of Electronic Devices	IIT Delhi	February 1997	2 weeks

17	Programming in C	College of Engineering, Trivandrum (CET)	Feb -March 1993	1 Month
18	Instruction Enhancement Programme in Electronics Devices	IIT Delhi	25th May 1992	8 weeks

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Google Scholar Link
https://scholar.google.com/citations?user=McF3RJ4AAAAJ&hl=en

Dr. V. Suresh Babu