

**Annexure D  
BIODATA**

1. Name and designation : **Dr. V SURESH BABU**

2. Date of Birth : 20-05-1967

3. Designation : Advisor

4. Official Address : MVJ College of Engineering, Near ITPB, Channasandra, Bangalore 560067

5. Permanent Residential address : Sreeragam, Kailas Nagar 2-1, Kazhakuttom PO, Thiruvananthapuram  
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6. Present Position

a)	Designation	Advisor
b)	Organisation	MVJ College of Engineering, Whitefield, Bangalore
c)	Pay Scale	7 <sup>th</sup> Pay Band 14
d)	Date of Appointment to Present Post	01-10-2024
e)	Total Experience	35 Years

7. Educational Qualifications

Sl. No	Qualification	University	Year	Subjects Topics	Percentage Achieved	Distinction etc
1	Ph D	University of Kerala	November, 2013	Design and Analysis of CMOS Based Neurons		
2	M. Tech	IIT, Madras	January 1996	Integrated Electronic Devices and Circuits	72.4	First Class
3.	B. Tech	University of Kerala	December 1988	Electronics and Communication	74.6	First Class

8. Administrative Experience

Sl. No	Post	Organisation/University	Duration		Experience in Years and Months
			From	To	
1	Principal	MVJ College of Engineering	12-06-2023	30-09-2024	1 year 4 months
2	Principal	College of Engineering, Trivandrum	01-04-2022	31-05-2023	1 year 2 months
3	Controller of Examinations	APJ Abdul Kalam Technological University	17-08-2029	16-08-2020	1 year
4	Head of Department	Government Engineering College, Barton Hill	01-06-2016	12-03-2019	2 year 9 months
5	Academic Council Member	University of Kerala	Dec 2012	Dec 2016	4 years

6	Board of Studies Chairman	University of Kerala	2008	2012	4 years
7	Technical Education quality Improvement Program (TEQIP) Coordinator	Government Engineering College, Idukki	Jan 2013	July 2014	6 months
8	IIIC Coordinator	Government Engineering College, Idukki	June 2013	Jan 2014	7 months
9	TEQIP, Procurement Coordinator, ECE Department	College of Engineering, Trivandrum	2005	2012	7 years
9	Member of Professional Bodies	IEEE	Dec 2001	Dec 2012	12 years
		ISTE			Life member
	Others				

### Some of the contributions in the administrative positions

#### 1. Principal MVJ College of Engineering

- Introduced new staff friendly HR policy.
- Promoted academic and co-curricular activities of students, bagging prizes in technical cultural and sports competitions.
- Restructured organizational administrative structure to improve the performance and quality.
- Organized National level Project Expo 2024 with Sri. Sonath S, Chairman ISRO as the chief Guest.
- Strengthened implementation of NEP
- Steps taken to establish nine research centres

#### 2. Principal College of Engineering Trivandrum

- Signed MoU with CSIR, Central Road Research Institute New Delhi
  - National Institute of Speech and Hearing (NISH),
  - Indian Institute of Technology Palakkad, and IIT Madras research Park.
- Organised Graduation day 2019, 2020, 2021 and 2022 pass out batches.
- Extend campus facilities till 9.0 pm, in tune with the hostel timings for the first time in a Kerala state owned Academic Institution
- Survey of campus properties completed, stones fixed at boundaries, prepared proposal for strengthening and completing compound wall, received fund allocation for the same.
- Conducted a faculty empowerment programme to motivate and strengthen the young faculty and to inculcate the need of research.
- More than 10 Faculty Development Programmes and Two International Conferences were organized.
- More than 50 Expert Talks under Visiting Faculty Scheme conducted.
- Strengthened the teaching learning process by adhering to Outcome Based Education and strengthening the assessment and evaluation.
- Physical education facilities were enhanced and extended to 9.pm. Established Fitness centres at hostels, and outdoor Fitness centre in the campus.
- Increased use of library resources by extending the timing and enhancing facilities
- Submitted Project proposal for CET Centre for Advanced Research in Engineering (CET-CARE), Multi level sports complex, CV Raman Centre for Nanoelectronics, Centre for E-mobility, Campus Lighting and Beautification.
- Budget Allocation received for Centre for Nano Electronics and CET Centre for advanced Research in Engineering (CARE)
- Opened Student Amenity Centre Phase I
- Opened a Food court with gazebos associated with Student Amenity Centre.
- Renovated Centre for Training in Software Engineering (CTSE) with 50 i5 desktops by funding from PTA.

- Inaugurated the newly constructed Industrial and Production Engineering Block and Golden Jubilee Research block of Electronics and Communication Engineering.
- New construction proposals initiated for First year hostel, new block for CSE department, new LH block, second phase of Industrial Engineering Block, College Office and Examination Cell
- PG accreditation process initiated (SAR uploaded for all eligible PG programmes)
- Continuous improvement in placement and result.
- Several steps taken to strengthen, research and consultancy
- Institutional News letters (three volumes) released.
- Constituted Best Department award and ever rolling trophy and distributed it for 2022-23 academic year
- Received MeitY project worth Rs. 4.67 Cr. For designing a AI chip in association with the start up Netra Semiconductors.
- Mikavu 2022 to honour patentees, rank holders and other outstanding performers convened with Minister for Higher Education as the chief guest.
- Special funds constituted under PTA to promote UG/PG publications and Skill enhancement training.
- Completed document digitization and tracking in college office
- Steps taken to strengthen research by PG students.
- Purchased two new buses and initiated process to procure two more buses are in pipeline.
- Campus road tarring phase I completed with PWD funds.
- Old Canteen Renovated with PWD Fund
- Set up centre for sustainable development with state government fund.
- Procurement of **High Performance Computing System worth 2.9 Crores** about to complete.
- Received Administrative sanction for CV Raman centre for Nano Electronics 1.6 Cr.
- 750 students placed through campus recruitment with average salary of 5.7LPA and top placement for 11students with annual Salary of 35Lakhs.
- Created PRO position in the institution and appointed PRO.
- Produced 150 Ph Ds during this academic year
- Published More than 200 papers
- 5 patents received, 2patents published and 20patents filed
- Set up centre for sustainable Development using state government fund worth Rs. 1.05 cr
- Library Facilities enhanced with 40 new chairs.
- Two new PG programs started
- **Started additional batch in B. Tech Electronics and Communication Engineering and M. Tech Structural Engineering**
- Campus management software ET lab is in place which simplifies the documentation for ranking, accreditation and other academic activities.
- Proposal for Ramanujan centre for AI/ML under care has been submitted to Government.
- Signed MoU with IIT Chennai Research Park to promote innovation and entrepreneurial skills of students.

### 3. 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 disbursement 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 defined 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/hindrances 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 download 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 software 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.

**4. 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 tenure maintained good relation with faculty, staff, students, other departments and the Principals.

**5. 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.

**6. IIC 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.

**7. Procurement Coordinator/Purchase Coordinator, Dept. of ECE, CET 2005-2012, 7 years**

From Government Engineering College, Kannur, joined back to CET in may 2004 and took charge of Procurement Coordinator of Department of Electronics and Communication Engineering of project Technical Education Quality Improvement Programme (TEQIP) in 2005. 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.

#### 8. 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 duties of Board of Studies.

#### 9. TEACHING EXPERIENCE

Institution	Roll	Period of Service	Duration
College of Engineering, Trivandrum (CET)	Lecturer (provisional)	06-07-1989 to 31-01-1990	7 months
College of Engineering, Trivandrum (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
College of Engineering, Trivandrum (CET)	Associate Professor	20-05-2004 to 13-06-2013	9 years 1 month
Government Engineering College, Idukki	Associate Professor	14-06-2013 to 15-11-2013	5 months
Government Engineering College Idukki	Professor	16-11-2013 to 15-07-2014	8 months
CET	Professor	16-07-2014 to 31-05-2016	1 year 10 months
Government Engineering College, Barton Hill	Professor	01-06-2016 to 22-03-2019	2 years 10 months
Government Engineering College 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	1 year

College of Engineering, Trivandrum (CET)	Professor, Dean Research and QIP Coordinator	03-09-2021 to 31-03-2022	7 months
College of Engineering, Trivandrum (CET)	Principal	1-4-2022 to 31-05-2023	14months
MVJCE	Professor in ECE and Principal	12-06-2023 to 30-09-2024	16 months
<b>Total</b>			<b>33 years 10 months</b>

### 10. Design of new curricula and courses

#### Initiated steps to start New PG Programme in Micro and Nanoelectronics in CET in 2013

Introduced New courses in the Curricula of Kerala University B.Tech Pprogrammes as below .

Sl no:	Name of Course	Class and semester	University
1	VLSI Engineering	S6 B. Tech, 1998 scheme	Kerala
2	Nanoelectronics	S8 B. Tech, 2008 scheme	Kerala

### 11. 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

### 12. 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, 2 <sup>nd</sup> 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 2 <sup>nd</sup> Edition	Sanguine Technical Publishers, Bangalore ISBN: 81 88849 07 3	2006

6.	Solid State Devices and Technology 3 <sup>rd</sup> Edition	Pearson Education ISBN: 978 81 317 3236 6	2010
7.	Solid State Devices and Technology 4 <sup>th</sup> 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

### 13. Positions Held

1. Principal MVJ College of Engineering, Bangalore
2. Member Governing Body, Mar Baselios College of Engineering and Technology, Thiruvananthapuram, (Autonomous) Feb 2021 to Feb 2024.
3. Principal, College of Engineering, Trivandrum, 1-04-2022 to 31-05-2023
4. Dean Research and QIP Coordinator, College of Engineering, Trivandrum, Sept 2021 to Mar 2022
5. Member Board of Directors, TrEST Research Park, CET Trivandrum Sept 2021 to May 2023
6. Member Board of Governors, Kerala State Science and Technology Museum
7. Dean Academics, Government Engineering College, Wayanadu, Jan 2021 to Aug 2021.
8. Chairman IQAC, Government Engineering College, Wayanadu, Jan 2021 to Aug 2021.
9. Member, Academic Committee of Polytechnic colleges in Kerala, Jan 2021 onwards.
10. Member BoG, Government Engineering College, Wayanadu, Jan 2021 to Aug 2021.
11. Member BoG, Government Engineering College, Barton Hill, 2019-20.
12. Member BoG, Government Engineering College, Kozhikod 2019-20.
13. Member BoG, Cooperative Institute of Technology, Trikkaripur, 2019-20.
14. Member BoG, Rajiv Gandhi institute of Technology, Kottayam, 2019-20.
15. **Controller of Examinations**, APJ Abdul Kalam Technological University, Thiruvananthapuram, Kerala, 17-08-2019 to 16-08-2020
16. Head of Department of Electronics and Communication Engineering, Government Engineering College, Barton Hill 01-06-2016 to 22-03-2019.
17. **Member Academic Council, University of Kerala, Dec 2012 to Dec 2016**
18. **Chairman Board of Studies Electronics**, University of Kerala 2008 to 2012
19. Member workload assessment committee, directorate of Technical Education, 2016 to 2018
20. **Coordinator**, Technical Education Quality Improvement Programme (**TEQIP**), Government Engineering College , Idukki, Jan 2014 to June 2014
21. TEQIP Procurement Coordinator and Purchase coordinator, Dept of Electronica and Communication Engineering, College of Engineering, Trivandrum 2005 to 2012
22. Nodal Officer, Industry Institute Interaction Cell (IIIC), TEQIP, GEC, Idukki, June 13 to Jan 2014
23. Convener curriculum committee, APJ Abdul Kalam Technological University, Thiruvananthapuram, Kerala, 2014-15.
24. **IEEE Student Branch Counsellor**, College of Engineering, Trivandrum, from July 2014 to May 2016
25. PG Coordinator, Government Engineering College, Idukki, 2013 to 2014.
26. Secretary, Staff Club, College of Engineering, Trivandrum, 2010-2012.
27. **Organizing Secretary, National Conference on Communication and Signal processing, GEC, Idukki, March 2014**
28. Organizing Secretary, National Conference on Energy Power Electronics and Control, GEC, Idukki, March 2014



29. Organizing Secretary, National Conference on Computing and Communication, GEC, Idukki, March 2014
30. Organizing Secretary, National Conference on Information Security and Network Engineering, GEC, Idukki, March 2014
31. Coordinator, Sponsorship Committee, MSO9, AMSE Conference, 2009
32. Coordinator, Publication Committee, International Conference on Control Communication and computing, CCC, 2009
33. Member, Organizing committee, CETEX 2015
34. Department Coordinator, RUSA, 2014
35. Member Organizing Committee of ICTT, 2010
36. Chairman Board of Valuation, University of Kerala, 2013,15,16
37. Coordinator General Arrangement Committee, National Conference on Technological trends NCTT, 2013
38. Technical Programme Committee Co chair ICCC, 2013
39. Nodal Officer Faculty and Staff Development TEQIP III, GEC, Barton Hill.
40. Member inspection committee, Kerala University.
41. Chairman Board of Valuation, KU

#### 14. 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

#### 15. 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

#### 16. Study Tours/Industrial Visits\*

Sl. No	Institution	Batch	Month and Year	Duration
1	College of Engineering Trivandrum	S7 CSE	Sept 2005	11 days
2	College of Engineering Trivandrum	S4ECE	Nov 2006	4 days
3	College of Engineering Trivandrum	S7AEI	Feb 2010	10days
4	College of Engineering Trivandrum	S5ECE	Sept 2014	16 days

\*incomplete

#### 17. EXPERT TALKS /INVITED LECTURES

Sl no	Title of Lecture /Academic Session	Name organizer	Nature of participation (IL/RP/Paper	Whether International/ National/Stat
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			Presentation/Full paper)	e/University level
1	Expert lecture on <b>Organic Semiconductor Devices</b> in the ATAL FDP on “Recent developments in high speed semiconductor devices and next Generation flexible and transparent devices”, October 2023	Department of ECE, MVJ College of Engineering	Resource Person	National
2	Expert lecture on <b>Nanoelectronic Devices</b> in the ATAL FDP on “Recent developments in high speed semiconductor devices and next Generation flexible and transparent devices”, October 2023.	Department of ECE, MVJ College of Engineering	Resource Person	National
3	Webinar on Introduction to Outcome Based Education, Maharajas College, Ernakulam, Feb 2022	Maharajas College, Ernakulam	Invited Lecture	State
4	Outcome Based Accreditation, Central Polytechnic, Vattiyoorkav, Thiruvananthapuram, Dec 2021.	Central Polytechnic, Vattiyoorkav	Invited Lecture	State
5	Introduction to Outcome based Teaching Learning Process, Workshop for Polytechnic Teachers of Engineering Graphics, SITTTTR, Kalamasseri, Dec 2021.	SITTTTR, Kalamasseri,	Resource Person	State
6	Introduction to Outcome based Teaching Learning Process, IT Systems Lab Teachers, SITTTTR, Kalamasseri, Nov 2021	SITTTTR, Kalamasseri,	Invited Lecture	State
7	Outcome Based Accreditation, Rajiv Gandhi Institute of Technology, Kottayam. Nov 2021.	Rajiv Gandhi Institute of Technology, Kottayam.	Invited Lecture	State
8	Introduction to Outcome based Teaching Learning Process,	SITTTTR, Kalamasseri	Invited Lecture	State

	Mathematics Teachers, SITTTR, Kalamasseri, Nov 2021			
9	Introduction to Outcome based Teaching Learning Process, English Teachers, SITTTR, Kalamasseri, Oct 2021	SITTTR, Kalamasseri	Invited Lecture	State
10	Introduction to Outcome based Teaching Learning Process, Chemistry Teachers, SITTTR, Kalamasseri, OCT 2021	SITTTR, Kalamasseri,	Invited Lecture	State
11	Introduction to outcome Base Education and Accreditation, Dept of ECE CET September 2021.	Dept of ECE CET	Invited Lecture	State
12	Introduction to Outcome based Accreditation, Central Polytechnic, Thiruvananthapuram, August 2021.	Central Polytechnic, Thiruvananthapuram	Invited Lecture	State
13	Introduction to Accreditation and Outcome Based Education, online talk for the faculty of Government Engineering College, Wayanad June 2021.	Government Engineering College, Wayanad	Invited Lecture	State
14	Introduction to OBE, Joint Directors and Principals of Polytechnics in Kerala, organised by SITTTR, March 2021	SITTTR, Kalamasseri	Invited Lecture	State
15	Introduction to OBE, HoDs and Curriculum Committee Members of Polytechnics in Kerala, organised by SITTTR, March 2021	SITTTR, Kalamasseri	Invited Lecture	State
16	Advances in Semiconductor Devices, GEC, Idukki, organised as VFS under TEQIP, GEC, Idukki Nov-Dec 2020.	GEC, Idukki	Invited Lecture	State
17	Bipolar Junction Transistors, online Short Term Training Programme at TKM college of	TKM college of Engineering, Kollam	Resource person	State

	Engineering, Kollam, August 2020.			
18	Outcome Based Education, APJ Abdul Kalam Technological University (to curriculum committee members), May 2019.	APJ Abdul Kalam Technological University	Invited Lecture	State
19	Outcome Based Education, 3, 5 July 2019, College of Engineering Trivandrum.	College of Engineering, Trivandrum	Invited Lecture	State
20	Outcome Based Education, Department of Electronics and Communication, College of Engineering, Trivandrum, 25-07-2018.	Department of Electronics and Communication, College of Engineering, Trivandrum	Invited Lecture	State
21	Advances in Semiconductor Physics, Sree Chithra Thirunal College of Engineering, Pappanamcode, Sep 2017	Sree Chithra Thirunal College of Engineering, Pappanamcode	Invited Lecture	State
22	Physics of Nanoelectronic Devices, Government Engineering College, Barton Hill, April 2014.	Government Engineering College, Barton Hill	Resource Person	State
23	Fundamentals of Solid State Devices, College of Engineering, Trivandrum, April 2014	College of Engineering, Trivandrum	Resource person	State
24	VLSI Scaling Issues, Saintgits, Pala, Jan 2014.	Saitgits Engineering College, Pala	Invited Lecture	State
25	Semiconductor Devices, 20,21 Nov 2014	Marian Engineering College	Resource Person	State
26	Fundamentals of Semiconductor Devices, 3,4 April 2014	College of Engineering, Trivandrum	3,4 April 2014	State
27	Introduction to VLSI, LBSIT for Women, Poojappura, September 2013.	LBSIT for Women, Poojappu	Invited Lecture	State
28	VLSI to Nanoelectronics, National Conference at SJC, Palai, 2012	SJC, Palai	Invited Lecture	State
29	MOSFET Theory, Government Engineering College, Barton Hill, Oct 2012.	Government Engineering College, Barton Hill	Resource Person	State
30	Nanoelectronic Devices, on Nanoelectronics, ECE Dept, CET, Jan 2012.	ECE Dept, CET	Resource Person	State
31	Single Electron Transistor, STC on Nanotechnology, Marian Engineering College, TVM, Dec 2011.	Marian Engineering College.	Resource Person	State
32	Scaling in VLSI, National Conference on Emerging Trends in Electronics	St. Joseph's College of engineering	Dec 2011	National

33	CMOS Circuit Design, SHM, Kadackal, Sept 2011.	SHM Engineering College, Kadackal,	Invited Lecture	State
34	Basics of Semiconductor Devices, LBT, Thiruvananthapuram, Oct 2009.	LBS Institute for Women, Thiruvananthapuram	Invited Lecture	State
35	Scaling in CMOS VLSI, Government Engineering College, Barton Hill, April 2009.	Government Engineering College, Barton Hill	Resource person	State
36	Introduction to CMOS VLSI design., STT on VLSI Design Feb 2007	Department of Computer Applications, CET	Resource person	State
37	Orientation on Outcome based Education to Faculty of MVJ College of Engineering, Aug 2023	MVJ College of Engineering	Resource person	Institution

### 18. Technical Sessions Chaired in Conferences

1. 4<sup>th</sup> 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 ICC2014, 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 ICC2010, Trivandrum
13. NCTT 2009, College of Engineering, Trivandrum.

### 19. 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.
6. Signed MoU with National institute of Speech and Hearing (NISH) 2022

7. Signed MOU with CSIR Central Road Research Institute (CRRI)
8. Signed MoU with Chariton Research Institute.

## 20. 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 1998, for the first time in Kerala

Introduced Nanoelectronics as a core course in Kerala University, ECE curriculum in 2008

Key role in starting PG programme in Micro and Nano Electronics in CET under Keral University.

Convener of curriculum Committee of Applied Electronics in APJ Abdul Kalam Kerala Technological University 2015

Member of curriculum committee of Polytechnic colleges in Kerala 2007.

Member of Academic Committee of Polytechnic colleges in Kerala 2022.

## 21. 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	10 <sup>th</sup> October 2020	
2	Nisha Jose	Investigations on the Application of MEMS Switches for Achieving Tunable Characteristics in Radio Frequency Integrated Circuit	KU	28 <sup>th</sup> October 2021	
3	Fatima Rasheed J	Investigations on Graded Band Gap Thin film solar cells	KU	28 <sup>th</sup> October 2021	
4	Anju S	Design, Modelling and Simulation of Nano Scale Non planar, nonsilicon FET Devices.	KU	25 <sup>th</sup> August 2022	
5	Aseena S	Investigations on Dye Sensitized Solar Cells	KTU	21 <sup>st</sup> Dec 2022	

6	Resmi. R	Investigations on Thermo-elastic Damping Effects in RF MEMS Resonators	KU	29 <sup>th</sup> Dec 2022	
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#### 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
5	Preethi Elizabeth Iype	Thermal Modelling of semiconductor Devices and validation	University of KeralaKerala	Thesis submitted

#### 22. PG Thesis Guided\*

Sl. No	Name of Student	Title of Thesis	University	Year of Completion
1	Rose Katharine A A	Floating Gate MOSFET based Neuron Activation Function and its Derivative	University of Kerala	2007
2	Salini Devi R	A Novel MOSFET Based Circuit for Neuron Activation Function and Derivative of Neuron Activation Function	University of Kerala	2008
3	Ambika Sekhar	Analysis and Design of Floating Gate MOSFET Based Differential Amplifier and Study of Mismatch	University of Kerala	2008
4	Sambasiva Rao gorrepati	Modelling of FinFET and Design of CMOS Voltage Reference	University of Kerala	2009
5	Haseena P S	A Floating gate MOSFET based Current Reference	University of Kerala	2009
6	Varun P Gopi	Independently driven double Gate FinFET Scalable to 10nm	University of Kerala	2009
7	Remya Gopalakrishnan	Tunable gm_C Filter with FGMOS based Operational Transconductance Amplifier	University of Kerala	2009
8	Aiswariya Raj	Programmable Temperature Insensitive Voltage and Current Reference using Floating Gate MOSFETs	University of Kerala	2010
9	Salini Thankachan	A Novel Programmable Current Reference with Temperature and Supply Voltage Compensation	University of Kerala	2010
10	Arun A Balakrishnan	Analog CMOS Implementation of Fast Fourier Transform Using Current Mirror Circuits	University of Kerala	2011
11	Theresa Mathew	Radar Cross Section Reduction for Microstrip Patch Antennas	University of Kerala	2015

12	Remya P	Microstrip Patch Antenna Design for GPS Applications	University of Kerala	2015
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\*List is incomplete

### 23. Policy document submitted to an International Body/Organization or Central State government

Sl no	Title of the policy Document	Nature of the Body to which submitted with details
1	Extension of campus timing to 9.30PM, 2023-23	Higher Education, Government of Kerala. CET became the first state owned campus regularly open till 9.30am.
2	CET CARE (400 crore project, CET Centre for Advanced Research in Engineering), 2022-23	Higher Education, Government of Kerala. 1 Cr. Token amount allocated in 2023 Kerala Budget

\*International/Central Government/State Government

### 24. Patents

Dr. Resmi R, Dr. V. Suresh Babu, Dr. M. R. Baiju, Design of “Nanotechnology Based Antimicrobial Bandage Dispensing Device”, January 2023.

### 25. Publications

#### International Journals

1. Impedence Spectroscopy Analysis of Low-Cost mixed halide MAPbI<sub>1-x</sub>Cl<sub>x</sub>, Highly Efficient FAPbI<sub>3</sub> and Non-Toxic Lead-free CsBi<sub>3</sub>I<sub>10</sub> Perovskite Solar Cells: A Comparative Numerical Analysis using SCAPS-1D, Elsevier Journal of Electrochimica Acta. <http://doi.org/10.1016/j.electacta.2024.145559>, Dec 2024, SCI Indexed, Impact factor : 5.5
2. Preethi Elizabeth Iype, V Suresh Babu, Geenu Paul, “Investigation of thermal efficiency of recessed r gate over r gate, T gate and rectangular gate AlGaIn/GaN HEMT on BGO substrate, Elsevier Journal of Microelectronics Reliability, Volume 162, 115522, Nov 2024, SCIE IF : 1.6.
3. Vinitha B Elza, Suresh Babu V, Nelsa abraham, Aseena S, Numerical Analysis for thermal stability evaluation of perovskite solar cell using SCAPS-1D, AIP Journal, June 2024, <https://doi.org/10.1063/5.0215922>
4. Beena Somanath, Manjunatha C, Yash Athreya, Shwetha K P, Nelsa Abraham, Suresh Babu V, Sudha Kamath M K, S. Girish kumar, and Ajit Khosla, “Scalable synthesis of Ni<sub>3</sub>B<sub>2</sub>O<sub>6</sub> nanograins and fabrication of a coin cell supercapacitor for powering temperature sensor devices, ACS Journal of Applied Electronic Materials, Aug 2023, doi: <http://doi.org/10.1021/acsaelm.3c00765>, SCI Indexed, Impact factor : 4.7
5. Vinitha B. Elza, V. Suresh Babu, Nelsa Abraham, “Perspective on machine learning based investigated materials to realize stable-efficient-toxin free(S-E-T) perovskite solar cells”, Materials Today Proceedings, April 2023, <https://doi.org/10.1016/j.matpr.2023.04.640>, Scopus indexed, Impact Factor 1.7
6. S. Beena, Nelsa Abraham, V. Suresh Babu, S. Aseena, “Effect of annealing temperature on on the green synthesis of NiO-CNT nanocomposites”, Materials Today Proceedings, April 2023, <https://doi.org/10.1016/j.matpr.2023.04.226>, Scopus indexed, Impact Factor 1.7
7. 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. Q3
8. 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, May 2022, Volume 28(3): 171-189, 10.5755/j02.mech.25841 SCIE indexed Impact Factor 0.68.**
9. 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 2.098. Q2

10. 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 Mechanical Science and Technology, **Mar 2022** DOI 10.1007/s12206-022-0533-8, ISSN 1738-494X Indexed in **SCIE** Impact factor 1.734. Q1
11. Aseena. S, Nelsa Abraham, **V Suresh Babu**, Solution-synthesized Cu<sub>2</sub>O 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.Q3 Citations 10
12. Resmi R., M. R. Baiju and **V. Suresh Babu**, “ Analysis of Length Scale Parameter Impacts on Thermoelastic Damping Limited Quality Factor in Micro/Nano 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. Q2
13. Aseena. S, Nelsa Abraham, **V Suresh Babu**, “ Simulation based Investigation on the performance of metal oxide as charge transport layers in Lead/Tin perovskite 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. Q3 Citations 14
14. Anju S, **V Suresh Babu**, Geenu Paul, “Design Optimization of high frequency AlGa<sub>N</sub>/Ga<sub>N</sub> HEMT on BGO substrates” Applied Physics A(Springer), **May 2021**, doi: 10.1007/s00339-021-04550-5 Indexed in **SCIE**, Impact Factor 2.983 Citations 11
15. 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 1.697. Q3
16. Smitha P S, **V Suresh Babu** and Shiny G, “Investigations on electrical properties of Al<sub>2</sub>O<sub>3</sub>, ZnO and MgO doped Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> ceramics based MIM capacitor for energy storage application”, Integrated Ferroelectrics (Taylor & Francis), vol.213, April, 2021 Q4 <https://doi.org/10.1080/10584587.2020.1860604> Indexed in **SCIE**, Impact Factor 0.86
17. Anju S, Biji Jacob, Geenu Paul, **V Suresh Babu**, “DC Characterization & High frequency performance analysis of a Ga<sub>N</sub>/AlGa<sub>N</sub> HEMT on a β-Ga<sub>2</sub>O<sub>3</sub> Substrate”, IETE Journal of Research Jan 2021. <https://doi.org/10.1080/03772063.2020.1869597> Indexed in **SCIE**. Impact Factor 1.6 Q3
18. Smitha P S, Jitha S Jayan, Appukuttan Saritha, **V Suresh Babu** and Shiny G, “Synthesis and Performance evaluation of Ba<sub>x</sub>Sr<sub>1-x</sub>TiO<sub>3</sub> 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 0.86, Q4
19. 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 5.16. Q1
20. P. S, Smitha; **Suresh Babu, V**; G, Shiny , 'Effect of TiO<sub>2</sub> grain size on performance of Ba<sub>0.5</sub>Sr<sub>0.5</sub>TiO<sub>3</sub> 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.
21. Fatima Rasheed J. and **V. Suresh Babu**, “Performance enhancement by the Introduction of Additional Narrow Band Gap Bottom Layer of aSi<sub>0.64</sub>Ge<sub>0.36</sub>: H on Proposed p<sup>+</sup>aSi:H/i-aSi:H/n<sup>+</sup>aSi<sub>0.73</sub>Ge<sub>0.27</sub>: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 0.96

22. 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 4.62
23. Smitha P S, **V Suresh Babu**, Shiny G, “VCC- $\alpha$  nullification and leakage reduction in Pt/Ba<sub>0.5</sub>Sr<sub>0.5</sub>TiO<sub>3</sub>/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 2.048
24. 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](https://doi.org/10.1088/2053-1591/ab5511) Indexed in **SCIE**, **Impact Factor 2.025. Citations 8**
25. 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 2.025.
26. 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 1.605.
27. 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](https://doi.org/10.2174/2210681211666210908141441), Impact Factor 0.76 (Scopus indexed)
28. 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
29. 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.
30. 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](http://www.sensorportal/HTML/DIGEST/P_3114.htm) Scopus indexed, Impact Factor 0.987
31. **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) Citations 13
32. 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 Citations 43
33. 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 0.95**
34. 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**

35. Resmi R, V. Suresh Babu, M R baiju, “Numerical Study of Thermoelastic Damping Effects on Diamond Based Beams with Plane Stress and Plain Strain Conditions Applying Nonclassical Elasticity Theory”, Advances in Dynamical systems and applications, Vol 6, no.2, pp 1371-1379, Scopus indexed, Impact factor
36. Smitha P S, Jitha S Jayan, Appukuttan Saritha, **V Suresh Babu** and Shiny G, “Investigation on dielectric properties of Al<sub>2</sub>O<sub>3</sub>, ZnO and MgO doped Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> ceramics”, Materials Today : Proceedings, 2020. DOI: 10.1016/j.matpr.2020.09.837 (**SCOPUS indexed**)
37. P S Smitha, **V Suresh Babu**, G Shiny, “High performance Pd/ MgO/ Ba<sub>0.5</sub>Sr<sub>0.5</sub>TiO<sub>3</sub>/ 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**
38. 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)
39. Varun P Gopi, V. Suresh babu, Dilna C, “Image Resolution enhancement Using Undecimated double Density Wavelet Transform”, Signal Processing an International Journal(SPIJ), volume 8, Issue 5, 2014
40. V. Suresh babu, Haseena P S, Varun P Gopi, M R Baiju, “A floating gate MOSFET Based Novel Programmable Current Reference”, World Academy of Science, Engineering and TechnologyVol. 8, No. 6, 2014.
41. Resmi R., **V. Suresh Babu** and M. R. Baiju, “ Analysis of Length Scale Parameter Impacts on Thermoelastic Damping Limited Quality Factor in Micro/Nano Beam Resonators Applying Nonclassical Elasticity Theory”, Shock and Vibration, Accepted for publication, Indexed in SCIE, Impact Factor: 1.616.
42. Resmi R, **V. Suresh Babu**, M.R. Baiju, “Damping Analysis in Si Torsional Micromirrors” International Conference on Electronic Circuits and Signaling Technologies (ICECST 2022) 02-03, June 2022 J. Phys.: Conf. Ser. 2325 012023 (Scopus Indexed)
43. Resmi R., **V. Suresh Babu** and Baiju M.R. “Numerical Study of Thermoelastic Damping Effects on Diamond Based Beams with Plane Stress and Plane Strain Conditions Applying Nonclassical Elasticity Theory”. Advances in Dynamical Systems and Applications, 2021 16(2), pp.1371-1379.Dec.2021 (Scopus Indexed )-
44. 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 )- Citations 10
45. 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 )-

### Book Chapters

1. Resmi, R., **Suresh Babu, V.**, Baiju, M.R. (2022). Energy Dissipation Analysis in Micro/Nanobeam Cantilever Resonators Applying Non-classical Theory. In: Ranganathan, G., Bestak, R., Palanisamy, R., Rocha, Á. (eds) Pervasive Computing and Social Networking. Lecture Notes in Networks and Systems, vol 317. Springer, Singapore, Jan 2022. [https://doi.org/10.1007/978-981-16-5640-8\\_41](https://doi.org/10.1007/978-981-16-5640-8_41) (Scopus Indexed ).
2. Resmi, R., **Suresh Babu V.**, Baiju, M.R. (2022). Analysis of Temperature Impacts on Material-Dependent Thermoelastic Damping in Simply Supported Rectangular Microplate Resonators Applying Size Effects. In: Pandian, A.P., Fernando, X., Haoxiang, W. (eds) Computer Networks, Big Data and IoT. Lecture Notes on Data Engineering and Communications Technologies, vol 117, May 2022, Springer, Singapore.

- [https://doi.org/10.1007/978-981-19-0898-9\\_48](https://doi.org/10.1007/978-981-19-0898-9_48) (Scopus Indexed ).
3. Resmi, R., **Suresh Babu, V.**, Baiju, M.R. (2022). Dimensionless Bending Rigidity Ratio and Material Dependency of Microbeams with Size Effects. In: Geetha, K., Gonzalez-Longatt, F.M., Wee, HM. (eds) Recent Trends in Materials. Springer Proceedings in Materials, vol 18, Nov 2022, Springer, Singapore. [https://doi.org/10.1007/978-981-19-5395-8\\_16](https://doi.org/10.1007/978-981-19-5395-8_16), (Scopus Indexed )
  4. Resmi, R., **Suresh Babu, V.**, Baiju, M.R. (2023). Impacts of Vibration Mode Switching on Energy Dissipation Analysis of Rectangular Microplate Resonator-based Sensors in IoT Applications. In: Smys, S., Lafata, P., Palanisamy, R., Kamel, K.A. (eds) Computer Networks and Inventive Communication Technologies. Lecture Notes on Data Engineering and Communications Technologies, vol 141, Oct 2022 Springer, Singapore. [https://doi.org/10.1007/978-981-19-3035-5\\_59](https://doi.org/10.1007/978-981-19-3035-5_59) (Scopus Indexed )

### International Conferences

1. Aswathy K M, V. Suresh Babu, “Design and simulation of CZTSSe based solar cell using the ZnS as a novel buffer layer by SCAPS 1-D simulator, ICCC 2023, May 2023, Trivandrum, India.
2. Vinitha B. Elza, Dr. V.Suresh Babu and Dr.Nelsa Abraham, “Perspective on Machine Learning Based Investigated Materials to realize Stable-Efficient-Toxin free (S-E-T) Perovskite Solar Cells”, International Conference on Materials Innovation and Sustainable Manufacturing, ( I C M I S M - 2022 ) during 16th & 17th December 2022, VIT, Andhrapradesh. (**most distinguished paper**).
3. Resmi R, **V. Suresh Babu**, M.R. Baiju, (ICECST 2022) “Damping Analysis in Si Torsional Micromirrors” International Conference on Electronic Circuits and Signaling Technologies (ICECST 2022) 02-03, June 2022
4. Resmi R., **V. Suresh Babu** and M. R. Baiju, “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 1-2,2022.
5. Resmi R., **V. Suresh Babu** and M. R. Baiju “Dimensionless bending rigidity ratio and material dependency of microbeams with size effects,” 4<sup>th</sup> International Conference on Trends in Material Science and Inventive Materials, 2022 (ICTMIM 2022) March 24-25,2022.
6. Resmi R., **Suresh Babu V.**, M.R Baiju, “Thermoelastic damping dependent quality factor analysis of rectangular plates applying modified coupled stress theory”, Third International Conference on Inventive Research in Material Science and Technology(ICTRMCT 2021), Inventive Research Organisation, 22-23 Jan 2021. Citations 12
7. 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), December 9-10,2021.
8. 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, International Conference on Pervasive Computing and Social Networking (ICPCSN 2021) ,March 19-20 ,2021.
9. 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. “International Conference on Inventive Research in Material Science and Technology (ICIRMCT 2021)”, January 22-23,2021.
10. 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
11. 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.

12. 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)
13. Smitha P S, Jitha S Jayan, Appukuttan Saritha, **V Suresh Babu** and Shiny G, "Investigation on dielectric properties of Al<sub>2</sub>O<sub>3</sub>, ZnO and MgO doped Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> 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)
14. 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
15. Resmi R, M. R. Baiju, **V. Suresh Babu** "Thermoelastic damping dependent quality factor analysis of rectangular plates applying modified couple stress theory", International Conference On Inventive Material Science Applications (ICIMA 2019), September 25-26.
16. Fatima Rasheed J. and **V. Suresh Babu**, "p<sup>+</sup>aSi<sub>x</sub>C<sub>1-x</sub>:H/i-aSi:H/n<sup>+</sup>aSi<sub>1-x</sub>Ge<sub>x</sub>: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 19<sup>th</sup>-21<sup>st</sup> December, 2019
17. Fatima Rasheed J. and **V. Suresh Babu**, "Performance evaluation of composition graded layer of aSi<sub>1-x</sub>Ge<sub>x</sub>: H in n<sup>+</sup>aSi:H/i-aSi:H/p<sup>+</sup>aSi<sub>1-x</sub>Ge<sub>x</sub>: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, 12<sup>nd</sup>-14<sup>th</sup> September, 2019
18. 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.
19. Aseena S, Nelsa Abraham and **V Suresh Babu**, "A Novel Perovskite Solar Cell with ZnO-Cu<sub>2</sub>O 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.
20. 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.
21. 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
22. Smitha P S, **V Suresh Babu**, Shiny G, "Investigation of barrier layer effect on performance parameters of Pt/BST/Pt nanocapacitor", 5<sup>th</sup> 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
23. Smitha P S, **V Suresh Babu**, Shiny G, "High performance Metal-Insulator-Metal nanocapacitor for energy storage applications", 2<sup>nd</sup> 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

24. Fatima Rasheed, **V. Suresh Babu**, "Simulation on the performance series and parallel connected tandem solar cells-a comparison study" 2017 IEEE region 10 symposium, TENSYP17, Cochin, July 2017.
25. 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-IEEE), Coimbatore, India, 20-22 April 2017. [ pp. 675-680, doi: 10.1109/ICECA.2017.8212750 ]
26. 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. **Citations 26**
27. **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.
28. 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.
29. Aiswariya Raj, **V. Suresh Babu**, "Programmable Temperature insensitive Voltage and Current Reference using Floating Gate MOSFETs", International Conference on Technological Trends, Nov 2010.
30. 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
31. 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, ICC2010, February 2010.
32. **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. **Citations 11**
33. **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
34. **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
35. Shihabudeen A, **V. Suresh Babu**, M. R. Baiju, "A Low Power Sub 1V 3.5 ppm/°C Voltage Reference Featuring sub threshold MOSFETS", Proceedings of International conference ISCES, Malta, Aug 31st to Sept 3rd 2008. **Citations 12**
36. **V. Suresh Babu**, Rose Katherine AA, M.R Baiju, , "Low Power 1 V CMOS Oscillating Neuron", Proceedings of MIPRO, MEET, Croatia May 2008.
37. **V. Suresh Babu**, Divya N. Nadar, M.R Baiju "Floating gate MOSFETs Based Neuron Activation Function and its Derivative with Continuously Programmable Characteristics and Increased linear Range", Proceedings of MIPRO, MEET Croatia, May 2008.
38. **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. **Citations 17**
39. 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. **Citations 20**

### National Conferences

1. Smitha P S, V. Suresh Babu, "Synthesis and high frequency Equivalent circuit analysis of Barium Strontium Titanate based MIM Capacitor, 35<sup>th</sup> Kerala Science congress, Thiruvananthapuram, Feb 2023.
2. Soumya. R, **V. Suresh Babu**, Realization of Magnitude Comparator using Threshold Logic, NCTT 2016, College of engineering, Thiruvananthapuram, August 2016.
3. Titupriya. V, **V. Suresh Babu**, Current Reference for Energy Harvesting, NCTT 2016, College of engineering, Thiruvananthapuram, August 2016.
4. Theresa Mathew, **V. Suresh Babu**, Microstrip patch antenna design for low RCS, National Conference on Technological Trends, September 2015.
5. Remya. P., **V. Suresh Babu**, nMicrostrip patch antenna design for GPS systems, National Conference on Technological Trends, September 2015.
6. Vandana Ramankutty, **V. Suresh Babu**, "Carbon Nanotube based Digital VLSI Circuit", National Conference on Communication and Signal Processing, GEC, Idukki, March 2014.
7. Arun. S, **V. Suresh Babu**, "Analog implementation of FFT Algorithm using Current Mirror Circuits", National Conference on Technological Trends, November 2011
8. Salini Thankachan, **V. Suresh Babu**, "A Novel Programmable Current Reference with Temperature and Supply Voltage Compensation", National Conference on Technological Trends, November 2010.
9. Haseena P. S, **V. Suresh Babu**, "A Floating Gate MOSFET Based Current Reference", 10th National Conference on Technological Trends, November 2009.
10. Sambasiva Rao V, **V. Suresh Babu**, "FinFET based Voltage Reference", 10th National Conference on Technological Trends, November 2009.
11. Varun P. Gopi, **V. Suresh Babu**, "Independently driven Double Gate FinFET Scalable to 10 nm", National Conference on Technological Trends, November 2009.
12. Remya. G, **V. Suresh Babu**, "Tunable gm –C Filter using Linearised Cross Coupled FGMOS OTA", 9th National Conference on Technological Trends, November 2008.
13. Salini Devi, **V. Suresh Babu**, "A novel FGMOSFET circuit for neuron activation function and its derivative", 9th National Conference on Technological Trends, November 2008.
14. Ambika Sekhar, **V. Suresh Babu**, "Floating gate MOSFET based operational transconductance amplifier and study of mismatch", 9th National Conference on Technological Trends, November 2008
15. Divya N. Nadar, **V. Suresh Babu**, "OTA based Low Voltage Oscillating Neuron", 8th National Conference on Technological Trends, November 2007.
16. 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.
17. Shiju. P. P., **V Suresh Babu**, "Single transistor synapse for neural networks", 7th National Conference on Technological Trends, November 2006.
18. Hema.S, **V. Suresh Babu**, "FPGA Implementation of Viterbi decoder", National Conference on Technological Trends, November 2006.

### International Conferences Attended and Papers Presented

1. "A Floating gate MOSFET Based Current Reference with Subtraction technique", IEEE Computer society Annual Symposium on VLSI, ISVLSI, Montpellier France, April 7 – 9, 2008.
2. "A Floating Gate MOSFET based Current reference Circuit" International conference on Circuits systems and control, Interlaken, Switzerland, February 22-24, 2014.
3. "Characterisation and performance evaluation of amorphous Silicon Nitride as passivation layer in thin film aSi:H solar cells", Third IEEE International Conference on Electrical Computer and communication Technologies, S V college of Engineering, 20-22 February 2019
4. "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, Vellore Institute of Technology, March 30-31, 2019.
5. "Performance Evaluation of Composition graded Layer of aSi<sub>1-x</sub>Ge<sub>x</sub>:aSi:H/i-aSiH/p<sup>+</sup>aSi<sub>1-x</sub>Ge<sub>x</sub>:H graded band gap single junction solar cells", First International Conference on Recent Advances in Materials and Manufacturing, Balagavi, India, September 12-14 2019.
6. "Impact of dimensionless length scale parameters on material dependent thermoelastic attenuation and study of frequency shifts of rectangular plates applying modified couple stress theory", Second International conference on Inventive Material Science Applications (AIP), PPG Institute of Technology, Coimbatore 25-26 Sept 2019.
7. "Thermoelastic damping dependent quality factor analysis of rectangular plates applying modified coupled stress theory", Third International Conference on Inventive Research in Material Science and Technology(ICTRMCT 2021), Inventive Research Organisation, 22-23 Jan 2021. Citations 12
8. "Energy dissipation analysis in Micro/Nanobeam cantilever resonators applying non classical theory", International Conference on Pervasive Computing and Social Networking(Springer), Narasu's Sarathy Institute, Salem, 19,20 March 2021.
9. "Analysis of temperature impacts on material Dependent thermoelastic damping in simply supported rectangular microplate resonators applying size effects", Fourth International Conference on Big Data and IoT (Springer), CARE College of Engineering, Trichy, 9-10 Dec 2021.
10. "Dimensionless bending rigidity ratio and material dependency of microbeams with size effects", 4<sup>th</sup> International conference on Trends in material Science and Inventive Materials(ICTMIM 2022), JCT college of Engineering, Coimbatore, 24,25 March 2022.
11. "Impacts of vibration mode switching on energy dissipation analysis of rectangular microplate resonator based sensors in IoT applications", 5<sup>th</sup> International Conference on Computer Networks and Inventive Communication Technologies(ICCNET 2022) April 1-2, 2022.
12. "Damping analysis in Si Torsional Micromirrors", International Conference on electronic Circuits and Signaling Technologies (ICECST-2022), PDG Institute of Technology, Coimbatore, 2-3, June 2022.

#### **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



## 1. 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	1 <sup>st</sup> 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
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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)	15 <sup>th</sup> 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	25 <sup>th</sup> May 1992	8 weeks

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