

Dr P SUKUMAR

Resume

Dr P Sukumar Ph.D.

Professor & Head,

Department of Biomedical Engineering,
Nandha Engineering College (Autonomous),
Erode, Tamilnadu – 638052

Executive Member of IETE for the period 2020 - 2022, Erode Division, C/o Kongu Engineering College,
Perundurai, Erode District, Tamilnadu

Executive Member of The Institution of Engineers (India), Erode Local Centre in Electrical Engineering for
the Session of 2018-19 and 2019-20

Editor-in-chief of Innovare Journal of Engineering and technology, Mandsaur, Madyapradesh, India

Editor-in-chief of Global Scientific and Academic Research, India



NAME: Dr.P.Sukumar

DATE OF BIRTH: December 25th , 1982

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WORK ADDRESS:

Professor & Head, Department of BME,
Nandha Engineering College (Autonomous),
Erode to Perundurai Main Road, Tamilnadu- 638052.

PERMANENT ADDRESS:

No.29, Old Railway Station Road,
Opposite to Anjaneyar temple,
Erode, Tamilnadu- 638001

BRIEF PROFILE:

Dr.P.Sukumar, obtained his **Doctor of Philosophy Degree (Highly Commended) in Information and Communication Engineering, from Anna University, Chennai**. He has a total teaching experience of 15 years at Under Graduate and Post Graduate levels and more than 12 years in Research field. Dr.P.Sukumar is currently working as Professor & Head, Biomedical Engineering Department in Nandha Engineering College, Tamilnadu, India. He has published 46 research papers including Scopus indexed journals in International Journals. He has presented more than 38 Papers in International and National Conferences. Many times he has produced 100% result in the University Examinations. He is actively engaged in teaching, research and academic administration works. He has played a major role in setting up the various laboratories of the Department and prepared the Institution for accreditation by National Board of Accreditation (All India Council of Technical Education) and National Assessment and Accreditation Council (University Grants Commission) for the autonomous status. He has organized three times National Conference on “Advanced Computational Intelligence Systems”. He has played an active role in organizing the Faculty Development programme on “How to write a world class paper for scientific journal” and has attended 24 Workshops / Seminars etc., and has Chaired International & National Level Conferences. He is a member of Institution of Engineers (India), Indian Society for Technical Education and Institution of Electronics and Telecommunication Engineers. He has conducted a 4 National Level Symposium and a Science Exhibition. He is the reviewer in Springer, Elsevier and reputed Journals having **249 Google scholar citations** and has delivered special guest lecturers in many International and National conferences. He is the recognized **Supervisor of Anna University, Chennai** in the stream of ICE, also **Subject expert** and **Doctoral Committee member** for Ph.D Viva Voce Examination and also guiding Full time Ph.D Research Scholar under Anna University, Chennai. He is the **Executive member for Institution of Engineers – Erode Local Centre for the session 2018-19 & 2019-2020 and Institution of Electronics and Telecommunication Engineers for the session of 2020 – 2021 & 2021 - 2022.**

RESEARCH:

AREAS OF RESEARCH

[AR1] *Image Processing*

[AR2] *VLSI Design*

[AR3] *Electronic Devices and Circuits*

Google Scholar: <https://scholar.google.co.in/citations?user=9f8jaTgAAAAJ&hl=en>

Mendeley: <https://www.mendeley.com/profiles/sukumar-ponnusamy/>

Research Gate: https://www.researchgate.net/profile/Sukumar_Ponnusamy2/contributions

Personal Details:

Name in Full:	-	PONNUSAMY SUKUMAR
Sex:	-	Male
Spouse:	-	Ms.S.Sharmila, Assistant Professor, Department of Civil Engineering, Kongu Engineering College Perundurai, Erode
Children:	-	Ms.S.Aathiraa
Date of Birth:	-	December 25, 1982
Place of Birth:	-	Erode, India
Nationality:	-	Indian
Town and State of Origin:	-	Erode, Tamil Nadu, India

COURSES TAUGHT

(a) Postgraduate Courses Taught

[PG1] Image Processing
[PG2] Very Large Scale Integration Design techniques
[PG3] Computer Aided Design for VLSI Circuits
[PG4] Testing of VLSI Circuits

(b) Undergraduate Courses Taught

[UG1] Digital Image Processing
[UG2] VLSI Design
[UG3] Medical Electronics and Instrumentation
[UG4] Microwave Engineering
[UG5] Embedded System
[UG6] Transmission Lines and Wave Guides
[UG7] Signals and Systems
[UG8] Microprocessor and Microcontroller
[UG9] Optical fiber Communication
[UG10] Electronic Circuits
[UG11] Electronics Devices and Circuits

Academic Record:

Academic and professional affiliation

(a)Academic qualification:

[Q1]**B.Eng.** in *Electrical and Electronics Engineering*, , Mahendra Engineering college, Mallasamudram, May. 2004, Periyar University.

[Q2] **M.E.** in *VLSI Design/ Electronics and Communication Engineering*, Kongu Engineering college, Perundurai, June. 2006, Anna University.

[Q3]**PhD (Highly Commended)** in *Information and Communication Engineering*, Anna University, Chennai, December, 2016

(b)Professional Affiliation/ Membership of Professional Bodies

[M1]Member in Institution of Electronics and Telecommunication Engineers (IETE)

[M2]Member in Indian Society of Systems for Science & Engineering (ISSE)

[M3]Member in Institution of Engineers(MIE)

[M4]Member in Indian Society for Technical Education(ISTE)

WORK EXPERIENCE DETAILS:

[W1]Professor, Department of Electronics and Communication Engineering ,Nandha Engineering College, Perundurai, Erode, (December 2016 to Till Now)

[W2]Associate Professor, Department of Electronics and Communication Engineering ,Nandha Engineering College, Perundurai, Erode, (September 2012 to November 2016)

[W3]Assistant Professor, Department of Electronics and Communication Engineering ,Nandha Engineering College, Perundurai, Erode, (January 2011- August 2012)

[W3]Lecturer, Department of Electronics and Communication Engineering ,Nandha Engineering College, Perundurai, Erode,(July 2009-December 2010)

[W3]Senior Lecturer, Department of Electronics and Communication Engineering, Shri Andal Alagar College of Engineering, No.6 GST Road, Mamandur,(July 2008-April 2009)

[W3]Lecturer, Department of Electronics and Communication Engineering, Alpha College of Engineering, Poonamalle, Chennai (September 2007 - May 2008)

[W3]Lecturer, Department of Electronics and Communication Engineering, K.S.Rangasamy College of Technology, Tiruchengode, Namakkal, (June 2006- February 2007)

EVALUATION ACTIVITIES

[EB1]Editor-in-chief of Innovare Journal of Engineering and technology, Mandsaur, Madyapradesh.

[EB2]Editor-in-chief of Global Scientific and Academic Research, India

[EB3]Editorial Board Member in ICTACT Journal on Microelectronics (IJME).

[EB4]Editorial Board Member in Journal of Electrical and Electronic Systems

[EB5]Editorial Board Member in Elixir International Journal

[EB6]Editorial Board Member in Intellectual Advancements and Research in Engineering Computations

[EB7]Editorial Board Member in World Journal of Engineering Research and Technology

[EB8]Editorial Review Member in International Journal for Innovative Research in Multidisciplinary field(IJIRMF)

[EB9]Editorial Review Member in International Journal for Research Cultural Society(IJRCS)

[EB10]Editorial Member of International Journal of Latest technology in Engineering, Management & Applied Science.

[EB11]Editorial Member of International Journal of Research Publications, 9 Quebec Avenue, South end-on-Sea Essex,SS1 2DE, United Kingdom

[EB12]Editorial Member of Journal of Electronic and Sensors, International Gazette Of Research and ePublishers (IGRPS), Sunnysvale, USA

[EB13]Editorial Member of International Institute of Engineers, Scientific Board of Computer, Electrical & Electronic Engineers.

- [EB14] Editorial Member of International Journal of Latest Technology in Engineering, Management & Applied Science, Parkside crossing, Dublin, Ohio, USA.
- [EB15] Editorial Member of International Academy of Arts, Science & Technology.
- [EB16] Editorial Member of International Journal of Computer Science and Information Security
- [EB17] Editorial Member of International Journal of Science Academic Research
- [R1] Reviewer, SN Applied Sciences, Springer. Indexed in Anna University Annexure – I
- [R2] Reviewer, Medical & Biological Engineering & Computing, Springer, Indexed in Anna University Annexure – I
- [R3] Reviewer, Neuro Image, Elsevier. Indexed in Anna University Annexure – I
- [R4] Reviewer, Current Medical Imaging Reviews, Bentham Science.org. Indexed in Anna University Annexure – I
- [R5] Reviewer, International Journal of Imaging Systems and Technology, Wiley. Indexed in Anna University Annexure – I
- [R6] Reviewer, International Journal of Communication Systems, Wiley. Indexed in Anna University Annexure – I
- [R7] Reviewer, IEEE Access. The Multidisciplinary Open Access Journal.
- [R8] Reviewer, ICRAET-2017: IEEE International Conference on Recent Advances in Engineering and Technology, Sri Krishna College of Engineering and Technology, Coimbatore, India, December 28-29, 2017
- [R9] Reviewer, Journal of Network Communications and Emerging Technologies
- [R10] Reviewer, International Journal of Critical Infrastructures (IJICIS), Inder Science Publishers
- [R11] Reviewer, Greener Journal, Ethiopia
- [R12] Reviewer, Journal of Energy in Southern African, Energy Research Centre, University of Capetown.
- [R13] Reviewer, Life Sciences Journal
- [R14] Reviewer, World journal of Nuclear science and technology (WJNST)
- [R15] Reviewer, International Journal of Emerging Technologies in Engineering Research
- [TC1] Technical Committee Chair: Mini project/Dept of ECE/Nandha Engineering College
- [TC2] Technical Committee Chair: Paper presentation/Dept of ECE/Nandha Engineering College
- [TC3] Technical Committee Chair: Inter National Conference(ICRIETM'17)/ Nandha Engineering College
- [TC4] Technical Committee Chair: Inter National Conference(ICRIETM'18)/ Nandha Engineering College
- [TC5] Technical Committee Chair: Inter National Conference(ICRIETM'19)/ Nandha Engineering College

Selected Publications:

REFERRED JOURNAL PUBLICATIONS

PUBLICATIONS: INTERNATIONAL JOURNALS

- [J1] P.Sukumar, S.Ravi, "Computer aided innovation method for detection and classification of cervical cancer using ANFIS classifier", Journal of Ambient Intelligence and Humanized Computing (2020), Springer - Verlag GmbH Germany, part of Springer Nature, Volume No.12, Issue No.06, 6231–6240, June 15th 2020(Indexed in Annexure – I, Anna University) **[Scopus Indexed] [Web of Science Indexed]**
- [J2] P.Sukumar, S.Ravi, "Computer Aided Detection and Classification of Pap smear Cell Images Using Principal Component Analysis" International Journal of BioInspired Computation, Volume 11, No.4,257-266, 2018 (Indexed in Annexure – I, Anna University) **[Scopus Indexed] [Web of Science Indexed]**

- [J3] P.Sukumar And R.K.Gnanamurthy, "Segmentation And Abnormality Detection Of Cervical Cancer Cells Using Fast Elm With Particle Swarm Optimization", The Serbian Genetic Society publishes Journal, Genetika, Vol. 47, No.3, 863 - 876, 2015. (Indexed in Annexure – I, Anna University) **[Scopus Indexed] [Web of Science Indexed]**
- [J4] P.Sukumar And R.K.Gnanamurthy, "Computer Aided Detection of Cervical Cancer Using Pap Smear Images Based on Adaptive Neuro Fuzzy Inference System Classifier", Journal of Medical Imaging and Health Informatics, American Scientific Publishers, Vol. 6, No.2, 312–319, 2016. (Indexed in Annexure – I, Anna University) **[Scopus Indexed] [Web of Science Indexed]**
- [J5] P.Sukumar And R.K.Gnanamurthy, "Computer Aided Detection of Cervical Cancer Using Pap Smear Images Based on Hybrid Classifier", International Journal of Applied Engineering Research, Research India Publications, Volume 10, Number 8 (2015) pp. 21021-21032 (Indexed in Annexure– II, Anna University) **[Scopus Indexed]**
- [J6] P.Sukumar And R.K.Gnanamurthy, "Computer Aided Screening of Cervical Cancer Using Random Forest Classifier", Research Journal of Pharmaceutical, Biological and Chemical Sciences, Volume 7, Issue 1, January – February 2016, pp.1521 – 1529 (Indexed in Annexure – II, Anna University) **[Scopus Indexed]**
- [J7] C.Meganathan And P.Sukumar, "Retinal Lesion Detection By Using Points Of Interest And Visual Dictionaries", International Journal of Advanced Research in Electronics and Communication Engineering (IJARECE), Volume 2, Issue 2, February 2013, pp 175 – 181
- [J8] C.Rubin And P.Sukumar, "Performance Analysis Of Artifact Reduction In Astro Images", International Journal of Innovative Research and Development, Volume 2, Issue 4, April 2013, pp 348 – 358
- [J9] S.Tamilselvi And P.Sukumar, "Power Reduction for Sequential Circuit using Merge Flip-Flop Technique", International Journal of Emerging Technology and Advanced Engineering (IJETA), Volume 4, Issue 2, February 2014, pp 926 – 932.
- [J10] S.Tamilselvi And P.Sukumar, "Clock Power Reduction using Multi-Bit Flip-Flop Technique", IRACST – Engineering Science and Technology: An International Journal, Volume 4, Issue 2, April 2014, pp 46 – 51.
- [J11] V.Yammuna Rani And P.Sukumar, "A Novel approach for severity classification of Retinal lesions using ANN classifier", Unique Journal of Engineering and Advanced Sciences, Volume 2, Issue 2, June 2014 pp 79 – 84
- [J12] T.Maheswari And P.Sukumar, "Error Detection and Correction in SRAM Cell Using Decimal Matrix Code", IOSR Journal of VLSI and Signal Processing (IOSR-JVSP), Volume 5, Issue 1, Ver. II (Jan - Feb. 2015), PP 09-14
- [J13] P.Uma Devi And P.Sukumar, "Low Energy Asynchronous CAM Based On Reordered Overlapped Search Mechanism", The International Journal Of Science & Technoledge, Volume 3, Issue 3, March 2015, pp 74 – 80

- [J14] M.Kangavalli And P.Sukumar, "Asynchronous Transfer Mode Implementation Using Z-T CAM", International Journal of Engineering Research-Online, Volume 3, Issue 2, March 2015, pp 155 – 162
- [J15] S.Prabhakher And P.Sukumar, "Performance Analysis of Rotation Invariant parts Based Object Detection in High-Resolution Images", International Journal of Engineering Science Invention, Volume 4 Issue 5, May 2015, pp.01-06
- [J16] K.Sabeha And P.Sukumar, "Highly Secured Indoor Outdoor Localization for E- Hostel Management", Journal of Network Communications and Emerging Technologies (JNCET), Volume 5, Issue 1, November (2015), pp 30-34. **[Indexed in Google Scholar]**.
- [J17] K.Sabeha And P.Sukumar, "Highly Secured System to Find the Improper Impression of Fingerprints in Hostel", IJSRD - International Journal for Scientific Research & Development, Volume 3, Issue 11, 2016, pp.545-549. **[Indexed in Google Scholar]**.
- [J18] Ravi. S, Kumarakrishnan.V, Rohini, R, And Sukumar.P, "MATLAB/SIMULINK Based Intelligent Power Quality Conditioner Using Fuzzy Logic Controller", Middle-East Journal of Scientific Research (MEJSR), 24 (Special Issue on Innovations in Information, Embedded and Communication Systems), 2016, pp.26-31. **[Scopus Indexed]**
- [J19] S. Ravi, Vitaliy Mezhuyev , K. Iyswarya Annapoorani , P. Sukumar, "Design and Implementation of a Microcontroller Based Buck Boost Converter as a Smooth Starter for Permanent Magnet Motor", Indonesian Journal of Electrical Engineering and Computer Science, Volume 1, Issue 03, March 2016, pp.566-574 **[Scopus Indexed]**
- [J20] P.Sukumar And Dr.S.Ravi, "Weed Detection Using Image Processing By Clustering Analysis", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.14-18. **[Indexed in Google Scholar]**.
- [J21] P.Sukumar And Dr.S.Ravi, "IOT Based Efficient Vehicle Location Help Line System Using NFC", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.10-13. **[Indexed in Google Scholar]**.
- [J22] P.Sukumar And Dr.S.Ravi, "Cropping OF Weeds in the Farm Field by Image Acquisition and Processing Methods", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.5-9. **[Indexed in Google Scholar]**.
- [J23] P.Sukumar And Dr.S.Ravi, "Crime Recognition in Skin Images Using Vein Patterns", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.1-4. **[Indexed in Google Scholar]**.
- [J24] P.Sukumar, Dr.S.Ravi And K.Tamilselvan, "Wearable Bio-Sensor System Using ZigBee Network for Patients and Health Monitoring", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.142-146. **[Indexed in Google Scholar]**.
- [J25] P.Sukumar, Dr.S.Ravi And K.Tamilselvan, "Secured Wearable Bio-Sensor System Using ZigBee for Monitoring Sick Patients", International Journal of Emerging Technologies in Engineering Research (IJETER), Volume 4, Issue 5, May 2016, pp.147-153. **[Indexed in Google Scholar]**.

- [J26] K.Tamilselvan, R.Krishnaraj, Dr.P.Thangaraj And P.Sukumar, "A Survey of Educational Portal Using Raspberry PI", International Journal of Emerging Technologies in Engineering Research(IJETER), Volume 4, Issue 5, May 2016,pp.1-4. **[Indexed in Google Scholar]**.
- [J27] K.Tamilselvan, R.Krishnaraj, P.Sukumar And T.Jayakumar, "Security Method for Human Finger and Palm Images Identification", International Journal of Emerging Technologies in Engineering Research(IJETER), Volume 4, Issue 5, May 2016,pp.1-4. **[Indexed in Google Scholar]**.
- [J28] M.Jeyachandran, P.Sukumar, "A Novel Approach to Detect & Prevent Hardware Trojan Attacks for Trusted Integrated Circuits", Journal of Network Communications and Emerging Technologies (JNCET), Volume 6, Issue 11, November 2016, pp.1-6
- [J29] M.Jeyachandran, P.Sukumar, " A Novel approach to detect & prevent hardware Trojan attacks for trusted integrated circuits", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 5, Issue 1, March 2017, pp.407-412
- [J30] Dr.P.Sukumar, C.M.Theepshika, B.Nathiya, Sharika Sasikumar, S.Vinothini, " Adaptive Cruise control with ultrasonic and alcohol sensor", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 5, Issue 1, March 2017, pp.134-138
- [J31] P.Sukumar, S.Gowtham, R.Kavin, S.Nagarjun, S.Prakash, " Autonomous Robot for Roadside drainage cleaning", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 5, Issue 1, March 2017, pp.242-245
- [J32] S. Ravi, C. Sujitha, Bakary Diarra and P. Sukumar, "Design and Development of Fuzzy System Based Unified Power Quality Conditioner for Harmonic Elimination", Indian Journal of Science and Technology, Volume 10, Issue 6, February 2017, pp.01-05
- [J33] Dr.P.Sukumar.Ph.D, S.Akshaya, G.Chandraleka, D.Chandrika, R.Dhilip kumar, "Agriculture Irrigation Improvement In The Crop Field Using Internet Of Things", South Asian Journal of Engineering and Technology, Volume 07, Issue 1, February 2018, pp.01-07
- [J34] Dr.P.Sukumar,K.Mothiram,N.Narmatha,B.Pavithra,V.A.Velgnana Venkatesh, "Power transformer protection by using Microcontroller in Embedded System", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 6, Issue 1, March 2018, pp.209-213.
- [J35] Dr.P.Sukumar, S.Akshaya, G.Chandraleka, D.Chandrika, R.Dhilip kumar, "IOT Based Crop-Field Monitoring system and Irrigation Automation", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 6, Issue 1, March 2018, pp.220-240.
- [J36] Dr.P.Sukumar, P. Raghupathi,, "Wide Voltage Range SRAM Cell For Low-Energy Using Operation Low Power (Ota) Low Pass Filter For ECG Detection", International Journal of Intellectual Advancements and Research in Engineering Computations (IJIAREC), Volume 6, Issue 1, March 2018, pp.274-279.
- [J37] Dr.P.Sukumar, G.Prabhakaran, "Investigation on One Bit Full adder Architecture using T-SPICE",

Journal of Advanced Research in Dynamical and Control Systems (JARDCS)", Volume 11, Issue 4, 2019, pp.67-74. **[Scopus Indexed]**

[J38] Dr.P.Sukumar, V.Deepak, "Cascade Network Based Multitask Perspective Designing AgriBot", Journal of Critical Reviews, Volume 06, Issue 06, 2019, pp.350-356. **[Scopus Indexed]**

[J39] Dr.P.Sukumar, S.Mounika, "Wireless Electricity Theft detection using Zigbee", International Research Journal of Engineering and Technology (IRJET), Volume 06, Issue 06, March 2019, pp.1441-1446

[J40] Dr.P.Sukumar, K.Darani, "Feed Forward Pipelined Accumulate Unit for the Machine Learning Accelerator", International Journal of Scientific Research and Engineering Development, Volume 2, Issue 5, Sep-Oct 2019, pp.474-480.

[J41] Dr.P.Sukumar, K.Darani, "Feed Forward Pipelined Accumulate Unit for the Machine Learning", International Journal of Scientific Research and Engineering Development, Volume 3, Issue 1, Jan-Feb 2020, pp.721-726.

[J42] Dr.P.Sukumar, M.Gandhi, "Turbine protection system using Microcontroller in 210mw generator", International Journal for Science and Advance Research In Technology, Volume 6, Issue 4, April 2020, pp.327-329.

[J43] Dr.P.Sukumar, R.Monisha, "IoT enabled Perishable Cold Storage System for Stock Management", International Journal of Intellectual Advancements and Research in Engineering Computations, Volume 8, Issue 4, December 2020, pp.750-758.

[J44] Dr.P.Sukumar, Ravi Samikannu, "Design and Development of Microcontroller based temperature monitoring and control system for Power Plant generators", IOP Conference Series: Material Science and Engineering, Volume 1055, Issue 4, February 2021, pp.01-09. **[Scopus Indexed]**

[J45] Dr.P.Sukumar, R.Monisha, "IoT Based Smart Cold Storage Monitoring and Fruits Maturity Prediction using Convolution Neural Network", International Journal of Innovative Research in Computer and Communication Engineering, Volume 9, Issue 3, March 2021, pp.320-327.

[J46] Dr.P.Sukumar, R.Vishnukumar, "IOT Based Cattle Feed and Health Monitoring System", International Journal of Research in Applied Science & Engineering Technology, Volume 9, Issue 3, March 2021, pp.1015-1021.

[J47] Dr.P.Sukumar, R.Gobinath, "IOT Based Social Distancing and Monitoring Robot For Queue", International Journal of Research in Applied Science & Engineering Technology, Volume 9, Issue 3, March 2021, pp.670-675.

NATIONAL CONFERENCES

[NC1]P.Sukumar, "Implementation of Half Bridge Cell Based Multiphase DC-DC Boost Converter", National Conference on Electronik and Communicare-2012, held in Erode Sengunthar Engineering College, Erode on 3rd March, 2012

- [NC2]P.Sukumar, "Implementation of Half Bridge Cell based DC-DC Boost Converter", National Conference on Emerging Technologies in Advanced Communication Systems(NCETACS'12), held in Sasurie College of Engineering, Tirupur on 12th April, 2012
- [NC3]P.Sukumar, "Performance Analysis of Error Containment Capabilities of a Bus and Star topology in CAN Network", National Conference on Electronik and Communicare -2012, held in Erode Sengunthar Engineering College, Erode on 3rd March, 2012
- [NC4]P.Sukumar, "Performance Analysis of Error Containment Capability In CAN Network", National Level Conference on Emerging Technologies in Advanced Communication Systems(NCETACS'12), held in Sasurie College of Engineering, Tirupur on 12th April, 2012.
- [NC5]P.Sukumar, "Advanced Adder for Low Power Consumption with Reduced Delay", Seventh National Level Conference on Optimization Techniques in Engineering Sciences and Technologies(OPTEST'12), held in Bannari Amman Institute of Technology, Sathyamangalam on 20-21 April, 2012
- [NC6]P.Sukumar, "Heterogeneous Data Transmission Over ZigBee Networks", Seventh National Level Conference on Optimization Techniques in Engineering Sciences and Technologies(OPTEST'12), held in Bannari Amman Institute of Technology, Sathyamangalam on 20-21 April, 2012
- [NC7]P.Sukumar, "Retinal Lesion Detection by using points of Interest and Visual Dictionaries", National Conference on Advanced Computational Intelligence Systems(NCACIS'13), held in Nandha Engineering College, Erode on 2nd March, 2013
- [NC8]P.Sukumar, "Performance Analysis of Artifact Reduction in Astro Images", National Conference on Advanced Computational Intelligence Systems(NCACIS'13), held in Nandha Engineering College, Erode on 2nd March,2013
- [NC9]P.Sukumar, "Automatic Cell Nucleus Detection in Microscopy Images", Second National Level Conference on Advanced Computational Intelligence Systems(NCACIS'14), held in Nandha Engineering College, Erode on 1st March, 2014
- [NC10]P.Sukumar, "Minimizing Multiple Cell Upsets in SRAM Cell to Enhance Memory Reliability using Decimal Matrix Code" 2nd National Conference on (RACIS'14), held in JCT College of Engineering and Technology, Coimbatore on 4th September, 2014
- [NC11]P.Sukumar, "Weed Detection using Image processing", National Conference on Advancement in Management Engineering and Technology(NCAMET'15), held in Jay Shriram Group of Institutions, Tirupur on 6th March,2015.
- [NC12]P.Sukumar, "Performance Analysis of Rotation Invariant Parts based Object Detection in HRI", Third National Level Conference on Advanced Computational Intelligence Systems(NCACIS'15), held in Nandha Engineering College, Erode on 7th March, 2015
- [NC13]P.Sukumar, "Reduction of MCU to Enhance Memory Reliability Using PMC",Third National Level Conference on Advanced Computational Intelligence Systems (NCACIS'15), held in Nandha Engineering College, Erode on March 7th March, 2015

[NC14]P.Sukumar, "Nuclei Segmentation of Skin Cells Using Seed Detection Algorithm", Third National Conference on IRVEN'2015, held in Jay Shriram Group of Institutions, Tirupur on 20th March, 2015

[NC15]P.Sukumar, "Weed Detection using Image processing", Third National Level one day Conference on Emerging trends in Information & Computer Science(ETICS'15), held in M.P.Nachimuthu M.Jaganathan Engineering college, Erode on 24th March, 2015.

[NC16]P.Sukumar, "Secured System to find the Improper Impression", Fourth National Conference on Advanced Computational Intelligence Systems, held in Nandha Engineering College, Erode on 19th March, 2016.

[NC17]P.Sukumar, "IOT Based Bus Location Help Line System for Public Transportation using NFC", Fourth National Conference on Recent trends in Engineering and Technology, held in KSR Institute of Engineering and Technology, KSR Kalvi Nagar, Tiruchengode on 24th March, 2016.

[NC18]Dr.P.Sukumar, "Overview of Atomic Layer Etching in the Semiconductor Industry", participated and presented paper in BRNS Sponsored Two Day National Conference on Vacuum Science & Technology and its Application in Material Science and Instrumentation, held in Hindusthan Institute of Technology, Erode – 32 on 8th & 9th March 2018

[NC19]Dr.P.Sukumar, "Power transformer protection by using Microcontroller in Embedded System", participated and presented paper in National Conference on Emerging Trends in Engineering and Technology, held in Nandha College of Technology, Erode – 52 on 17th March 2018

[NC20]Dr.P.Sukumar, "Agriculture Irrigation Improvement in the Crop field using Internet of Things", participated and presented paper in National Conference on Emerging Trends in Engineering and Technology, held in Nandha College of Technology, Erode – 52 on 17th March 2018

[NC21]Dr.P.Sukumar, "Smart Agriculture Using Internet Of Things (Iot)", participated and presented paper in National Level Conference on Modern Developments with Keen & Renovation Techniques (NCMDR'18), held in Hindusthan Institute of Technology, Coimbatore on 23rd March 2018.

[NC22]Dr.P.Sukumar, "Detection Of Current Transformer for Protection", participated and presented paper in National Level Conference on Modern Developments with Keen & Renovation Techniques (NCMDR'18), held in Hindusthan Institute of Technology, Coimbatore on 23rd March 2018.

INTERNATIONAL CONFERENCES

[INC1]P.Sukumar, "Analysis of GLS Based Artifact Reduction in Astrophysical Images", International Conference on EMICS'13, held in Maria College of Engineering and Technology, Marthandam on 15th and 16th February, 2013.

[INC2]P.Sukumar, Dr.R.K.Gnanamurthy," Abnormality Detection And Segmentation Of Cervical Cancer Cells", 2nd International Conference On Electrical, Control And Computer Engineering (InECCE 2013), held in Pahang, Malaysia, 27th and 28th August 2013

- [INC3]P.Sukumar, " Retinal Hemorrhage Detection in Diabetic Retinopathy using FNN Classifier", International Conference on Frontiers of Computational Intelligence, held in K.S.Rangasamy College of Technology, Namakkal on 6 – 7th March,2014
- [INC4]P.Sukumar, "Criminal Identification using Skin Cancer And Fusion with Infrared Vein Patterns", International Conference on Synergistic Evolutions in Engineering, held in Surya Engineering College, Perundurai Road, Erode on 24th March, 2016.
- [INC5]P.Sukumar, "Autonomous Robot for Roadside Drainage Cleaning", 1st International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 25th March 2017
- [INC6]P.Sukumar, "A Novel Approach to Detect & Prevent Hardware Trojan Attacks for trusted Integrated Circuits", 1st International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 25th March 2017
- [INC7]Dr.P.Sukumar, "Adaptive Cruise control with ultrasonic and Alcohol Sensor", 1st International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 25th March 2017
- [INC8]Dr.P.Sukumar, "Wide Voltage Range SRAM Cell for Low Energy Using Operation Low Power(OTA) Low Pass Filter for ECG Detection", 2nd International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 23rd March 2018
- [INC9]Dr.P.Sukumar, "IOT Based Agriculture Crop-Field Monitoring System And Irrigation Automation", 2nd International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 23rd March 2018
- [INC10]Dr.P.Sukumar, "Power Transformer Protection By Using Microcontroller In Embedded System", 2nd International Conference on Recent Innovations in Engineering Technology and Management, held in Nandha Engineering College(Autonomous), Erode – 52 on 23rd March 2018
- [INC11] Dr.P.Sukumar, "Advancement in Farming Irrigation in the Harvest Field Using IOT", DST – SERB Sponsored International Conference on Innovation in Science, Engineering and Technology for Sustainable Development(ISETSD-2018), held in Muthayammal Engineering College (Autonomous), Rasipuram – 08 on 23rd March 2018.
- [INC12] Dr.P.Sukumar, "Advanced Power Transformer Fortification by Using Microcontroller in Embedded System", DST – SERB Sponsored International Conference on Innovation in Science, Engineering and Technology for Sustainable Development (ISETSD - 2018), held in Muthayammal Engineering College (Autonomous), Rasipuram – 08 on 23rd March 2018.
- [INC13]Dr.P.Sukumar, "Fake Voter Identification System", International Conference on Recent Innovations in Engineering Technology and Management (ICRIETM-2019), held in Nandha Engineering College(Autonomous), Erode – 52 on 22nd March 2019

[INC14]Dr.P.Sukumar, "Wireless Electricity Theft detection using Zigbee", International Conference on Recent Innovations in Engineering Technology and Management (ICRIETM-2019), held in Nandha Engineering College(Autonomous), Erode – 52 on 22nd March 2019

[INC15]Dr.P.Sukumar, "Implementation of fast binary counters using symmetric stacking", International Conference on Recent Innovations in Engineering Technology and Management (ICRIETM-2019), held in Nandha Engineering College(Autonomous), Erode – 52 on 22nd March 2019

[INC16]Dr.P.Sukumar, ""Design and development of microcontroller-based temperature monitoring and control system for power plant generators"", International Virtual conference on Robotics, Automation, Intelligent Systems and Energy (IVC-RAISE 2020), held in Department of Mechatronic Engineering, Kongu Engineering College (Autonomous), Erode – 52 on 15th December 2020

PUBLICATION:

Published Book chapters in **Energy Sources & Environment Protection (An International Edition) ISBN: 978-93-87388-19-2**

Chapter title:

[CH1]Various Renewable Energy Sources and Importance

[CH2]Wind, Geothermal, Small hydro & Water energy, Ocean energy

[CH3]Need for implementing renewable energy sources

[CH4]Conventional energy sources and their limitations

Six chapters published in Shodhganga: A Reservoir of Indian Theses

[CH5]Introduction to Cervical Cancer.

[CH6]Cervical Cancer – Literature survey

[CH7]Proposed ANFIS based Cervical Cancer Screening System

[CH8]Classification of PAP Smear Images using PCA

[CH9]Classification of Cervical Cancer using ANFIS

[CH10]Conclusion and Future work

PARTICIPATED

Faculty Development Programme

[FDP1]P.Sukumar, "AICTE Sponsored Faculty Development Program on **Embedded Control Applications in Drives**", Organized by the Department of Electrical and Electronics Engineering, **Nandha Engineering College, Erode**, held during 13th June to 26th June 2011

[FDP2]P.Sukumar, "Faculty Development Program", Organized by the **ISTE Chapter of Nandha Engineering College in union with Ru-Education (P) Ltd, Coimbatore**, held during 14th & 15th

December 2012.

- [FDP3]P.Sukumar, “Anna University approved Faculty Development training Programme on **EC 6403 – Electromagnetic Fields**”, Conducted by the Department of Electronics and Communication Engineering, **M.P.Nachimuthu M.Jaganathan Engineering College, Erode** held during 8th December to 15th December 2014.
- [FDP4]P.Sukumar, “Faculty Development Program on **Embedded Systems with ARM-7 Microcontrollers**”, Organized by **Pantech ProEd Private Limited** in Coordination with Department of Electrical and Communication Engineering, **Nandha Engineering College, Erode** held during 27th & 28th May 2015.
- [FDP5]P.Sukumar, “Faculty Development Program on **How to Write A World Class Paper for Scientific Journals**”, Organized by the Department of Electrical and Electronics Engineering, Nandha Engineering College in association with **The Institution of Electronics and Telecommunication Engineers(IETE), Erode** held during 13th May 2016.
- [FDP6]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "**Telemedicine**" from 15-2-2021 to 19-2-2021 at **Department of Biomedical Engineering, Govt.Model Engineering College, Thrikkakara Kochi, Kerala.**
- [FDP7]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "**Energy Storage**" from 22-2-2021 to 26-2-2021 at **KPR Institute of Engineering and Technology, Coimbatore.**
- [FDP8]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Power Quality Issues and Energy Management in a Grid Integrated with Renewable Sources**" from 24-02-2021 to 28-02-2021 at Technical Education Quality Improvement Programme, **TEQIP – III, BPUT Odisha(ATU), Department of Electrical Engineering, Einstein Academy of Technology and Management, Bhubaneswar, Odisha.**
- [FDP9]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Modern Techniques for Wireless Communication**" from 17-05-2021 to 21-05-2021 at **Madhav Institute of Technology & Science, Gwalior.**
- [FDP10]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**VLSI Design, Verification and Testing**" from 7-6-2021 to 11-6-2021 at **Government Engineering College, Rajkot.**
- [FDP11]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Mobile Robotics**" from 16-6-2021to 20-6-2021 at **Indian Institute of Technology, Patna.**
- [FDP12]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Novel Materials**" from 05-07-2021 to 09-07-2021 at **Indian Institute of Technology, Bhilai.**
- [FDP13]P.Sukumar, “participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Life Skills Management**" from 12-7-2021 to 16-7-2021 at **Indian Institute of Space Science and Technology, IIST, Thiruvananthapuram.** Declared as Deemed to be University under Section 3 of the UGC Act, 1956, an autonomous institute under

Department of Space, Govt. of India.

[FDP14] P.Sukumar, "participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on **"IoT Applications with Blockchain Techniques"** from 17-7-2021 to 21-7-2021 at **National Institute of Technology, Meghalaya.**

[FDP15] P.Sukumar, "participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on **"Artificial Intelligence for Computer Vision"** from 26-7-2021 to 30-07-2021 at **Indian Institute of Technology, Roorkee.**

[FDP16] P.Sukumar, "participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on **"AI in Health Economics Outcome Research"** from 2-8-2021 to 6-8-2021 at **National Institute of Pharmaceutical Education and Research (NIPER), Department of Pharmaceuticals, Ministry of Chemical and Fertilizers, Govt. of India, Kolkata.**

[FDP17] P.Sukumar, "participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Telemedicine**" from 09/08/2021 to 13/08/2021 at **National Institute of Technology, Jamshedpur.**

[FDP18] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on Instrumentation, Signals and Images for the Evaluation of Physiological Systems Precision Health Technology Engineering" from 16/08/2021 to 20/08/2021 at **National Institute of Technology, Tiruchirappalli.**

[FDP19] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Industry Oriented FDP on Artificial Intelligence**" from 23/08/2021 to 27/08/2021 at **Micro, Small & Medium Enterprises (MSME) – Technology Development Centre (PPDC), A Government of India Non-profit Autonomous organization under Ministry of MSME, Meerut.**

[FDP20] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Intelligent and Collaborative Robotics**" from 13/09/2021 to 17/09/2021 at **Birla Institute of Technology & Science, Pilani, Pilani Campus.**

[FDP21] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Artificial Intelligence for Speech and Bio-Signal Processing Artificial Intelligence Thrust Areas**" from 20/09/2021 to 24/09/2021 at **Indian Institute of Information Technology Dharwad.**

[FDP22] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Artificial Intelligence for Speech and Bio-Signal Processing Artificial Intelligence Thrust Areas**" from 27/09/2021 to 01/10/2021 at **National Institute of Technology, Sikkim.**

[FDP23] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **Machine Learning Algorithms for 5G Mobile Networks Artificial Intelligence Thrust Areas**" From 04/10/2021 to 08/10/2021 at **Indian Institute of Information Technology Design and Manufacturing Kancheepuram.**

[FDP24] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Faculty Development Program on **High Speed Optical Links and Photonic Devices for Next Generation Data Transmission Photonics Engineering**" From 11/10/2021 to 15/10/2021 at **Indian Institute of Information Technology, Kota**

[FDP25] P.Sukumar, participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "**Faculty Development Program Digital Forensic Trends Cyber Security Thrust Areas**" From 18/10/2021 to 22/10/2021 at **National Forensic Sciences University (Gujarat Campus) Gandhi nagar, Gujarat– Institution of National Importance, Ministry of Home Affairs, Government of India.**

PARTICIPATED

[PC1] P.Sukumar, "National Conference on Information Technology for Instrumentation Technology (IT for IT), Organised by the Kongu Engineering College (Electrical & Electronics and Instrumentation Engineering Departments) on 26th November 2004

[PC2] Dr.P.Sukumar, (F.No.VIF/CAM/2017] has attended and participated in the Contemporary Academic Meet-CAM 2017(Agenda: Issues and policy considerations to build and sustain excellent systems of higher education & Award Ceremony – VIFA 2017) organized by the Centre for Advanced Research and Design – CARD of Venus International Foundation on July 8, 2017 at Green Park Chennai.

Centre for Learning and Development (CLD)

[CLD1] P.Sukumar, "Blooms Taxonomy", Organized by Centre for Learning and Development (CLD), Nandha Engineering College, Erode, held on 5th March 2015

[CLD2] P.Sukumar, "Train the Trainer Communication Skills", Organized by Centre for Learning and Development (CLD), Nandha Engineering College, Erode, held during 24 to 27th November 2015.

Quality Improvement Programme(QIP)

[QIP] P.Sukumar, "Ministry of Human Resource Development - Quality Improvement Programme", Conducted by National Institute of technical teachers training & Research in union with K.S.R College of Engineering, Tiruchengode, held during 19th to 24th June 2006.

Workshop

- [WS1]P.Sukumar, "Two day Workshop on – Mathematical Methods in Image Processing", Organized by the Department of Biomedical Engineering, PSG College of Technology, Coimbatore & IETE Knowledge Solutions, Bangalore during 23rd & 24th October, 2009
- [WS2]P.Sukumar, "International Workshop on – A Quest for Journal and Thesis Writing", Conducted by Higher Education – Academy London in union with Nandha Engineering College, Erode, held on 6th July 2012
- [WS3]P.Sukumar, "National Level Workshop on – Matlab Applications in Engineering – Hands on Training", Organized by Department of Electrical and Electronics Engineering, Sasurie College of Engineering, Vijayamangalam, held on 15th March 2012
- [WS4]P.Sukumar, "CSIR Sponsored - National Level Workshop on – Recent Trends in Solar Photovoltaic Electric Conversion Systems", Organized by Department of Electrical and Electronics Engineering, Nandha Engineering College(Autonomous), Erode, held during 19th & 20th April 2013
- [WS5]P.Sukumar, "National Level Workshop on – Network Simulator(NS2) For Wireless Networks", Organized by Department of Electronics and Communication Engineering, Nandha Engineering College, Erode, held during 10th & 11th October 2013.
- [WS6]P.Sukumar, "CSIR Sponsored - National Level Workshop on – Recent Trends in Nano Technology and its Applications to Energy Sector", Organized by Department of Electrical and Electronics Engineering, Nandha Engineering College(Autonomous), Erode, held during 18th & 19th October 2013

Seminar

- [S1]P.Sukumar, "**CSIR Sponsored** – Two Day National Seminar on Computational Intelligence (An Academic, Industrial, Social & Research Perspective)", Organized by Sona College of Technology (Autonomous), Salem, Tamilnadu, held during 25th & 26th November 2011.
- [S2]P.Sukumar, "**CSIR Sponsored** – Two Day National Level Seminar on Recent trends in Production and Effective Utilization Techniques of Bio-Fuels in Energy Sector", Conducted by Department of Electrical and Electronics Engineering, Nandha Engineering College(Autonomous), Erode, held during 4th and 5th April 2014.
- [S3]P.Sukumar, "**DBT Sponsored** Seminar on Fusion Techniques for Improved Analysis, Detection and Diagnosis of Abnormalities in Bio-Medical Images", Kongu Engineering College, Erode, held on 26th June 2015
- [S4]P.Sukumar, "National Seminar on Design of Small Satellites", Organised by IETE Erode Center c/o Kongu Engineering College, Erode, held on 27th August 2015.

- [S5]P.Sukumar, "**ICMR Sponsored** Seminar on "Cardio Vascular Disease-Symptoms and Remedial features", Nandha Engineering College, Erode, held on 07th October 2017
- [S6]P.Sukumar, "**BRNS Sponsored** Two Day Seminar on "Radiation Exposure – Effects and Protection for Comprehensive Health Promotion", Kongu Engineering College, Erode, held on 19th&20th January 2018
- [S7]P.Sukumar, "**ICMR Sponsored** Two Day Seminar on "Technological Evolution in Sensor Equipment for Medical Application", Nandha Engineering College, Erode, held on 08th & 09th February 2018
- [S8]Dr.P.Sukumar, "**CSIR Sponsored** Seminar on "Recent Advancements in Bio-Fuel and Bio-Energy-Future and Challenges", Hindusthan Institute of Technology, Coimbatore, held on 06th July 2018
- [S9]Dr.P.Sukumar, "Institution of Engineers (india) Erode Local Center Sponsored National Seminar on "Wavelet Video Processing Technology", Organized by Department of ECE, Nandha College of Technology, Erode, held on 14th August 2018.
- [S10]Dr.P.Sukumar, "**ICMR Sponsored** National Seminar on "Impact of Bio-Materials and Bio-Engineering in advanced Clinical Diagnostic Devices on the progress and Improvement of Human Health Care", Organized by Department of ECE, Hindusthan Institute of Technology, Coimbatore, held on 24th August 2018.
- [S11]Dr.P.Sukumar, "**CSIR Sponsored** Seminar on "E-Waste Handling and Recycling Techniques", Nandha Engineering College, Erode, held on 06th September 2018
- [S12]Dr.P.Sukumar, "**IEEE Sponsored** National Seminar on "Artificial Intelligence and its applications for Power Electronics and Renewable Energy Systems", Organized by School of Electrical Sciences, Kongu Engineering College, Erode, held on 05th Oct 2018.
- [S13]Dr.P.Sukumar, "**CSIR Sponsored** Three Day National Seminar on "Challenges in Charging of Electrical Vehicle for Green Environment", Organized by Department of Electronics and Communication Engineering, Paavi Engineering College, Namakkal, held on 20th Dec 2018 to 22nd Dec 2018.
- [S14]Dr.P.Sukumar, "**AERB Sponsored** Two Day National Seminar on "Nuclear Energy and Societal Development for a Sustainable Universal Society", Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 03rd Jan 2019 to 04th Jan 2019
- [S15]Dr.P.Sukumar, "**CSIR Sponsored** National Seminar on "Renewable technologies for On-Grid Electricity Generation", Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 22nd Jan 2019.
- [S16]Dr.P.Sukumar, "**AERB Sponsored** National Seminar on "Protection against Ionizing Radiation: Health Hazards and their Potential Effects on Biological Agents", Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 15th Feb 2019.

[S17]Dr.P.Sukumar, “**DRDO-ARMREB** Sponsored National Seminar on “The Operational Environment and the Changing Character for Future Warfare”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 8th March 2019.

[S18]Dr.P.Sukumar, “**DRDO-NRB** Sponsored National Seminar on “Underwater Optical/Acoustic Communication System for Swarm Unmanned Vehicle Network”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 22nd March 2019.

[S19]Dr.P.Sukumar, “**ISRO Sponsored** National Seminar on “Recent Developments in Smart Farming based on Internet of Things and Robotics”, Organized by Department of Electronics and Communication Engineering, Nandha Engineering College, Erode, held on 05th April 2019.

[S20]Dr.P.Sukumar, “**CSIR Sponsored** National Seminar on “Impact of Power Electronic Converters in Distributed Generation & Micro Grid”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 05th July 2019.

[S21]Dr.P.Sukumar, “**CSIR Sponsored** National Seminar on “Impact of Power Electronic Converters in Distributed Generation & Micro Grid”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 05th July 2019.

[S22]Dr.P.Sukumar, “**CSIR Sponsored** National Seminar on “Smart IOT Solutions for Preventive Health Care in India”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 12th July 2019.

[S23]Dr.P.Sukumar, “**CSIR Sponsored** National Seminar on “Energy Storage Systems: Roles and Impacts on Future Power Systems”, Organized by Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore, held on 19th July 2019.

[S24] Dr P Sukumar, Participated in the seminar on "Recent Pedagogy to Advance Education Equity", Conducted by Hindusthan School of Computer Applications on 28.08.2021.

[S25] Dr P Sukumar, Participated in the **Department of Bio-Technology, Ministry of Science and Technology, Government of India Sponsored National Seminar on "Artificial Intelligence in Diabetes and Heart Diseases: A Technology driven Progress in Health Care", Conducted by Sri Shakthi Institute of Engineering and technology on 22.09.2021 and 23.09.2021**

Short term training programme

[ST1]P.Sukumar, “Black Fin 533 Digital Signal Processor”, Organized by Technology Business Incubator – A Joint Venture of Kongu Engineering College and Department of Science and Technology / Government of India @ KEC in association with Department of ECE – PG and ECE – UG from 16th July to 17th October(50 Hrs) with “A” grade.

[ST2]P.Sukumar, "Two week ISTE STTP on CMOS, Mixed Signal and Radio Frequency VLSI Design- Online activity", Conducted by Indian Institute of Technology Kharagpur – Under the National Mission on education through ICT (MHRD), Remote center Kongu Engineering College, Erode, held during 30th January to 4th February, 2017

[ST3]Dr.P.Sukumar, "One week AICTE Sponsored STTP on Professional Development of Educators in Teaching Pedagogy- A Learning & Research Design", Conducted by Nandha Engineering College, Erode, held during 20th May to 25th May, 2019

[ST4] Dr.P.Sukumar, "AICTE Sponsored Short term training programme Six days online Short Term Training Programme – Phase III on "Electric Vehicle Evolution - Impact on Power Grid" , Organised by Department of Electrical and Electronics Engineering, Sri Venkateswara College of Engineering during April 19th - 24th, 2021

[ST5] Dr.P.Sukumar, "AICTE Sponsored Short term training programme on "Artificial Intelligence and Deep Learning using Python for Industrial applications" , Organized by Department of Electronics and Communication Engineering, K.S.R College of Engineering (Autonomous), Tiruchengode, Feb 15th - 20th, 2021

ONLINE CERTIFICATION COURSES

[OC1]Diploma in Electrical studies

[OC2]Diploma in Human Resources

[OC3]Basics of Electrical Technology

[OC4]Introduction to E-Learning Theory and Practice

[OC5]Understanding the Ebola Virus and How You Can Avoid It

[OC6] Startup India Learning Program

[OC7] Participated in sports quiz conducted by MyGov and Ministry of Youth Affairs & Sports

[OC8] Participated in Incredible India Quiz- 2018 conducted by MyGov and Ministry of Tourism

[OC9] Participated in Babu @ 150 Quiz conducted by MyGov and Gandhi Smriti and Darshan Samiti

[OC10] Online course of Maya 2017

[OC11] Online course on Basics of HTML

[OC12] Online course on Keyshot for digital 3d rendering

[OC13] Online course on Apache Cordova/ Phone Gap App

[OC14] Scilab for beginners online Course

- [OC15] Online Course on starting with OrCAD and Cadence Allegro PCB
- [OC16] Online Course on Artificial Intelligence Level 1 : Cogito online course
- [OC17] Graphic Design : Designing 4 advertisements in series
- [OC18] Online course on Arduino Workshop 2018 - A Step by step Arduino how to guide
- [OC19] Online Motivation course - How to End Procrastination Once
- [OC20] Online Course on Community Service Engineering
- [OC21] Online Course on Permeiere Pro 101
- [OC22] Arrhythmia - AFIB and Palpitations- electricity of the heart
- [OC23] Learn AutoCAD Electrical Video Tutorial Training
- [OC24] AC DC Analysis of Diode Electronics Engineering
- [OC25] Online Course on Raspberry Pi Workshop 2018
- [OC26] Participated in Swachh Bharat Mission Quiz- 2018 Conducted by MyGov and National Academy of Customs, Indirect taxes and Narcotics
- [OC27] Participated in Scale of Transformation Quiz- 2018 conducted by MyGov.
- [OC28] NPTEL Online course on Introduction to Artificial Intelligence
- [OC29] NPTEL Online course on Biometrics
- [OC30] NPTEL Online course on Computer Networks
- [OC31] NPTEL Online course on Database Design
- [OC32] NPTEL Online course on Graph theory
- [OC33] NPTEL Online Certification on Ethics in Engineering Practice

INDUSTRIAL TRAINING

- [IT1] Electric Locomotive Shed, Erode, India.
- [IT2] Diesel Locomotive Shed, Erode, India.

APPRECIATION

- [A1] The Management of Shri Andal Alagar College of Engineering places on record its appreciation of The excellent academic work performed by **Mr.P.Sukumar** and Producing 90 percentage of pass in the subject EC1402 – Optical Communication handled by him at the Nov – Dec – 2008 University Examinations.
- [A2] The Management of Shri Andal Alagar College of Engineering places on record its appreciation of The excellent academic work performed by **Mr.P.Sukumar** and Producing 91.4 percentage of pass in the subject EC1402 – Optical Communication handled by him at the Nov – Dec – 2008 University Examinations.
- [A3] The Management of Nandha Engineering College appreciate **Mr.P.Sukumar** and Producing 100 percentage Result in Digital Image Processing in the academic year of 2013 – 2014 Even semester.
- [A4] The Management of Nandha Engineering College appreciate **Mr.P.Sukumar** and Producing 100 percentage Result in VLSI Design Techniques in the academic year of 2013 – 2014 Even semester.

Annual Appraisal 2014 – 2015

- [AP1] The Management of Nandha Engineering College Congratulates **Mr.P.Sukumar**, Associate Professor, Department of Electronics and Communication Engineering, for his sincere efforts and Contribution in academic activities during the academic year 2014 – 2015

Awards

- [A1]Received Young Faculty In Engineering for exceptional academic records and research excellence in the area of Electronics and Communication Engineering from Venus International Faculty Awards – 2017
- [A2]Received Best Outstanding Researcher Award from Top Engineers Students & Faculty Awards- 2017 on 26th March, 2017. Headed by Honourable Chief Minister of Pondicherry- Thiru V.Naryanasamy
- [A3]Received "Dr. A.P.J Abdul Kalam Award for Innovative Research" from Society for Engineering Education Enrichment, Regal Building, New Delhi on 16th March,2018
- [A4]Received "GRABS Teaching and Research Excellence 2018" from GRABS Educational Charitable Trust, Nanganallur, Chennai on 8th April,2018
- [A5]Selected for "Best Young Researcher" from South Indian Association of Scientist, Developers and Faculties - International awards, Perungudi, Chennai.
- [A6]Selected for "Best Young Scientist" from South Indian Association of Scientist, Developers and Faculties - International awards, Perungudi, Chennai.
- [A7] Received "Best Proctor Award of the Department during Academic Year 2018-19" from Nandha Engineering College(Autonomous),Erode

Editor-in-Chief



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We are very happy to announce that from 4th February 2017, Dr. Ponnusamy Sukumar has joined the team of Elixir Editorial Advisory Board. He/She will carry a special responsibility for dealing with manuscripts based on Electronics and Communication Engineering. Dr. Ponnusamy Sukumar working as Associate Professor, Department of Electronics and Communication Engineering, Nandha Engineering College, Perundurai, Erode, TamilNadu, India. The appointment of Dr. Ponnusamy Sukumar as member Editorial Advisory Board strengthens the links and will make it easier for prospective authors to establish contact with the journal.

Please send any expressions of interest to elixirpublishers@gmail.com.

Sincerely
Editor-in-Chief

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This is to certify that **Dr. P. Sukumar**, Professor, Department of Electronics and Communication Engineering, Nandha Engineering College, Erode - Perundurai Main Road, Tamilnadu, India - 638052, has been selected as a **Editorial Board Member** of World Journal of Engineering Research and Technology.

I wish him great success in further research activity.



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NANDHA ENGINEERING COLLEGE
NO. 29,OLD RAILWAY STATION ROAD,OPPOSITE TO ANJANEYAR
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Dear Sir/Madam,

Sub: - Elected as Member to the IEI Erode Local Centre Committee for the session 2018-19 & 2019-20.

On behalf of the Institution of Engineers (India), Erode Local Centre, I am happy to inform you that you have been selected as Member to represent **Electrical Engineering Division** for the executive Committee for the session 2018-19& 2019-20.

I extend my heartiest congratulations for the same.

Thanking you,

Yours faithfully,

Dr.S.Gopalakrishnan
Convener-Board of Scrutinizers
Election to the Committee of ELC for the Session 2018-19 & 2019-20.

Google Scholar Citations



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- [OR8] Tutor (Class advisor)
- [OR9] Jury overall Coordinator – Innovation Day Tirupur and Erode 2018 & 2019
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- [OR11] Organizing team member for International conference(ICRIETM 17,18 and 19)
- [OR12] International conference(ICRIETM 17,18 and 2019), Co-Chair person for Electronics and Communication Engineering session.
- [OR11] Guided UG and PG projects
- [OR12] Committee members in various functions like Annual day, sports day, Innovation day, etc
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Declaration

I hereby declare that the above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place: Erode

Date: 11/11/2022



(Dr.P.Sukumar)