Sri Sai Ram Engineering College

Department of Electrical and Electronics Engineering

1. Name : Dr.A.Sanjeevi Gandhi	
2. Designation:	Associate Professor
3. Qualification :	Ph.D – Electrical Engineering M.E. – Control and Instrumentation B.E Electronics and Instrumentation
4. Area of Specialization :	Electrical Engineering- (Industrial Automation)
5. Experience :	Teaching: UG: 16 PG: 9 Industry: 2
6. No. of workshop: FDP attended:	Workshop- 12 FDP :6
7. Publication :	Journal National: 2 International: 30

Conference National: 2 International: 36

PG-Coordinator, Mentor.

Received Best Product Award, Two patents filed, Best Paper Award.

8. Research Guidance:

10. Staff Achievements:

9. General:

EXPERIENCE:

Name Of The Employer	Position Held	Period	
		From	То
Sri Sairam Engineering College	Associate Professor	September 2021	Till Date
Karpagam College of Engineering	Associate Professor	June -2017	June- 2021
Karunya University	Assistant Professor	June -2011	June-2017
Sri Ramakrishna Engineering College	Assistant Professor	December- 2008	May-2011
RV College of engineering	Lecturer	January- 2008	November- 2008
RVS college of engineering and technology	Lecturer	July-2006	January-2008

Funded Projects

- 1. Defence India Startup Challenge (Disc 7) SPRINT challenge Defence Innovation Organization, Ministry of Defence, India. **Development of Battery Management Systems for High Power Applications**". Total product Development approved Cost is 90 lakhs.
- 2. International Research Grant From Universiti Teknologi PETRONAS, Malaysia for **Design** and **Development of Intelligent Controller for Regenerative Braking in Electric Vehicle Applications**. Received Grant is Rs 7Lakhs

Faculty Development Program / Workshop / Conference Attended

- **1.** AICTE-ATAL,Faculty development programme on Power Electronics Applications to Renewable Energy Systems, Electric Vehicles and Intelligent Control, from 10-10-2022 to 21-10-2022 at Sri Sairam Institute of Technology
- **2.** Faculty development programme on Inculcating Universal Human Values in Technical Education Organized by All India for Technical Education (AICTE) from 19 -09-2022 to 23-09-2022.
- 3. International workshop on Research and Development of Electric Vehicle Technology which was conducted by Dept of EEE and AIoT Research Club, Amirta Vishwa Vidyapeetham, Chennai campus, held on 22-10-2021 and 23-10-2021
- **4.** Faculty development programme on Fundamentals of RPA which was conducted by ICT academy on 04 -10- 2021 to 08-10-2021.
- 5. Training programme on Electrical and Electronics systems for solar and wind

- which was conducted by National Institute of Technical Teachears Training and Reasearch, Chennai, From 4-10-2021 to08-102021(one week)
- **6.** National Level Workshop on "Matlab/Simulink Based hands on training on power engineering and control aiding topologies" which was conducted by Department of Electrical and Electrical Engineering, Karpagam college of Engineering From 3rd January 2018 to 5th January 2018
- 7. AICTE Sponsored Faculty Development Program on "Industrial Automation" which was organized by the Department of Electronics and Instrumentation Engineering at Sri Ramakrishna Engineering College, Coimbatore from 20th November 2017 to 3rd December 2017.
- **8.** National Level Workshop on "Design and development of feedback controllers for power electronics converters based systems" which was conducted by Department of Electrical and Electrical Engineering, Karpagam college of Engineering From 23rd November 2017 to 25th November 2017
- **9.** One day Awareness Workshop on "Intellectual Property Rights" which was conducted by IPR cell, Karunya University on 15th Sep 2016.
- **10.** One day National Level Workshop on "Effective Teaching Learning Methodology for Engineers" which was conducted by Department of Electrical Technology, Karunya University on 23rd June 2016

- **11.** One day National Level Workshop on "**Optimization Techniques for electrical engineering applications**" which was conducted by Department of Electrical and Electronics Engineering, Karunya University on 3rd november 2015.
- **12.** One day National Level Workshop on "Unmanned aerial systems Recent trends and future prospects" which was conducted by Department of Aerospace Engineering, Karunya University during 9th October 2015.
- **13.** Faculty Development Program on "Corporate information security and policies for chemical and allied industries" which was organized by the Department of Chemical Engineering at Coimbatore Institute of Technology. Coimbatore from 17th to 21st December 2013.
- **14.** Faculty Development Program on "Renewable and Hybrid Energy Technologies" which was organized by the Department of Chemical Engineering at RV College of Engineering, Bangalore-59 from 18th March 2013 to22nd March 2013.
- **15.** Workshop on "Intellectual Property Rights (IPR)" at Karunya University on 18/11/2012
- **16.** National Service Scheme, Special camping programme conducted during 6th to 12th February 2012, at Karunya University.
- **17.** National Programme on Technology Enhanced Learning, conducted on 4th February 2011 at Dr. NGP Institute of Technology. Coimbatore.
- **18.** Five days Workshop on "**High Impact Teaching Skills**" which was conducted by the Wipro Mission10x in Sri Ramakrishna Engineering College, Coimbatore-22 from 5th October 2009 to 9th October 2009.
- **19.** One day Workshop on title "PLC and its Applications" which was conducted by the department of Electronics and Instrumentation engineering in Sri Ramakrishna Engineering College, Coimbatore-22 on 30th September 2009.
- **20.** Five days National Level Workshop on title "LabVIEW Hands on Training and Certification" which was conducted by the department of electronics and communication engineering in Sri Ramakrishna Engineering College, Coimbatore-22 from 15th June 2009 to 19th June 2009.
- 21. One day workshop "LabVIEW and its applications: Engineering and Graphical System Design" which was conducted by National Instruments, Bangalore on 25th February 2009 at Sri Ramakrishna Engineering College, Coimbatore-22.

- **22.** Five days National Level Workshop on title "PIC microcontroller and its Applications" which was conducted by the department of Instrumentation Technology in R.V College of Engineering College, Bangalore-22 from 21 June 2009 to 25th June 2009.
- 23. Five days Workshop on title "Control System Engineering" which was conducted by the department of Electrical and Electronics engineering in R.V.S College of Engineering and Technology, Dindigul from 12th July 2007 to 16th July 2007

Papers Published:

S.No	Title of the Paper	Name of the Journal	Volume/ Pages	Year
1.	Development of empirical model and controller for negative pressure wound therapy system	International journal of biomedical engineering and technology	Vol.34,N0.1	2020
2.	Real Time Control of Dissolved Oxygen for Industry Effluent Water using PID Controller	Test enginerring and Management	Vol.82,No.J an-Feb,	2020
3.	Analysis and Control of Temperature Process Dynamics during Biomass Gasification Process in Downdraft Gasifier	Test enginerring and Management	Vol.82,No.J an-Feb,	2020
4.	Design of handheld device for monitoring of individual spindle speed in spinning machine using wireless technology	Journal of mechanics of continua and mathematical sciences,	Special issue, N0-7	2020
5.	A model free dissolved oxygen controller for industry effluent using hybrid variables measuring technique	International Journal of Advances in Applied Sciences	Vol. 8, No. 2.	2019
6.	Enhancing physical activity based on BCI for Physically disabled	International journal of innovative technology and exploring engineering	Vol.8/no.8s	2019
7.	Enhanced Conventional PID controller for Temperature Control in Woody Gasifier using Searching Algorithms	International journal of innovative technology and exploring engineering	Vol.8/no.4s	2019
8.	Process Optimization of Color Removal From an Industrial Azo Dye	International journal of innovative technology and exploring engineering	vol.8/no.4s	2019
9.	Automatic Temperature Control of Biomass Gasifier System Using Fuzzy Controller	Journal of electrical engineering	Vol.18/editi on 2	2018

10	Online Measurement Method For Colours and Its Concentrations In Textile Effluent Water	Journal of electrical engineering	Vol.18/editi on 4	2018
11	Energy Efficient Clustreing Methods in Wireless Sensor Networks Using Binary Coded Genetic Algorithm	Journal of electrical engineering	Vol.18,editi on 4	2018
12	A comprehensive study on production, control and communication techniques: A key concept for microgrid intelligent operation	International Journal of engineering and technology	Vol.7 /No.2.8, pp.35-41	2018
13	Embedded design consideration for food intake monitoring system: validated using labview software	International Journal of engineering and technology	Vol.7/ No.2.8, pp.47-51	2018
14	Vehicle parking management and reservation system using labview	International Journal of engineering and technology	Vol.7/ No.2.8, pp.120-124	2018
15	Design of Mathematical Modelling and Control of Downdraft Biomass Gasifier	International Journal of Control and Automation	Vol.10/No.1 1, pp.175- 184	2017
16	Industrial effluent water pH Neutralization controller design using LabVIEW &Matlab	International Journal of Pure and Applied Mathametics,	Vol.117/ No.10, pp.19-23	2017
17	Design for Modelingand Control of Temperature Process in Downdraft Gasifier System: Simulation Studies	International Journal of Pure and Applied Mathametics	Vol.117/ No.10, pp.13-17	2017
18	Automated Vehicle Collision Avoidance and Navigation Using Raspberry Pi	International Journal of Engineering and Techniques	Vol. 3/ Issue	2017
19	Optimized model reference adaptive control for an interacting two tank system	International Journal of Engineering Systems Modelling and Simulation	Vol.6 /No.1- 2, pp.80-85	2014

20	Development of Decentralized Controller Based on Gain and Phase Margin for Interacting Processes	The International Journal of Engineering and Science	Vol.3/No.2, pp.10-15	2014.
21	LabVIEW based real time implementation of dual controller scheme for robust tuning in level process	International Journal of Engineering Research and Applications	,	2014
22	High Speed Wavelet Based FIR Filter Architecture on FPGA Platform	International Journal of Research in Information Technology,	Vol.2/No.3, pp.349-354	2014
23	Design of cascade control system based on sustained oscillation	International Journal of Engineering Research and Technology	Vol.3/No.1, pp.1566- 1570	2014
24	Optimized Adaptive Controller For An Interacting System	Asian journal of Electrical Sciences.	Vol.2/No.2	2013
25	Development and control of a non linear Magnetic levitation system	International Journal on Theoretical and applied research in Mechanical engineering;	Vol:2 /Issue:1	2013
26	Real time Implementation of Decentralised PI controller for an Interacting Two Tank System	-	Volume 4 Issue 1, pp 24-30	2012
27	Steady state Model and Fuzzy inference System for Bio Mass Down Draft Gasifier	Karunya Journal of Research	Volume 4 Issue 1, pp 63-67	2012
28	Development of Model and Fuzzy Inference System for Biomass Based Power Plant	European Journal of Scientific Research	Vol.80/No.1, pp.20-30	2012

29	Development of Control	Wulfinia Journal	Vol.21/No.1	2012
	Techniques for Downdraft		0, pp.368-	
	Biomass Gasifier System		378	
30	Biomass Downdraft Gasifier	Intech	ISSN	2012
	Controller using Intelligent		0192303X	
	Techniques			

Conference Publications:

- C. Jeeva; GS Chaurasia; T. Porselvi; A.Sanjeevi Gandhi; G. Subiksa; M. Dhivyashri, Atmospheric Air Condensation for Irrigation by the application of Peltier effect using Solar energy, 2023 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), December 8-9, 2022
- 2. K Suresh; A Sanjeevi Gandhi; Soumya M; Dakshina R, Smart Lane Detection Using Open CV And Image Processing, 2023 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), December 8-9, 2022
- 3. A. Sanjeevi Gandhi; K. Porkumaran; C Jeeva; R Kothai; Ramani Kannan, Design and Development of An Estimate Controller for a Fusion Tank System, 2022 International Conference on Future Trends in Smart Communities (ICFTSC), Borneo Conventional Centre Kuching Sarawak, Malaysia, December 1-2, 2022
- 4. A.Sanjeevi Gandhi, K.Ramash Kumar, "A novel measuring device for monitoring a yarn twist and spindle speed in ring spinning machine using wireless technology" International conference on CTEEE Feb 2018
- J.Indirapriyadharshni, T.Sivaranjani, A.Sanjeevi Gandhi, "Implementation of Fuzzy PID for Ivel control of Three tank Interacting system" International conference on CTEEE Feb 2018
- 6. Vijay Daniel, Sanjeevi Gandhi, "Design and standardization of temperature measurement system for biomass downdraft gasifier" IEEE international conference on ICIEEIMT Feb 2017.
- Kingston Stanley P, Sanjeevi Gandhi, "Online color monitoring and control of color removal process in textile waste water" IEEE international conference on ICIEEIMT Feb 2017.
- 8. Surya, Sanjeevi Gandhi, "Raspberry Pi Based Vehicle Collision Avoidance System" IEEE international conference on ICIEEIMT Feb 2017.
- 9. Neha Marisa Noble, Sanjeevi Gandhi A, "Model based fault detection and diagnosis using observer residual generator in a level process" IEEE international

- conference on innovations in information embedded and communication systems , Mar, 2016.
- 10. Mariya shaju I, P.Vijay Daniel ,Sanjeevi Gandhi A, "Palm dorsa subcutaneous vein pattern recognition system" IEEE international conference on innovations in information embedded and communication systems , Mar, 2016.
- 11. Debbie Dahlia I, P.Vijay Daniel ,Sanjeevi Gandhi A, "Human-Object interaction using RFID in ambient assisted living environtment" IEEE international conference on innovations in information embedded and communication systems , Mar, 2016.

- 12. Sanjeevi Gandhi, Suresh "Fabrication and standardization of a standalone feedback optical quantification system for continuous flow reactor used in decolorization of dye solutions" International Conference on converging biotechnology innovations for Health, food and environmental welfare at Karunya university, Dec 2-4 2015.
- 13. N Gayathri, Sanjeevi Gandhi A, "Design and development of an adaptive controller for a hybrid tank system" IEEE 2nd international conference on Knowledge collaboration In engineering, Mar 27-28, 2015.
- 14. Jannaniy S, Sanjeevi Gandhi A, "Detection of stiction behavior in pneumatic control valve" IEEE 2nd international conference on Knowledge collaboration In engineering, Mar 27-28, 2015.
- 15. Jeffrey Samraj, Sanjeevi Gandhi, "Performance improvement and control strategies for supersonic wind tunnel" IEEE 2nd international conference on Knowledge collaboration In engineering, Mar 27-28, 2015.
- 16. Nice cyriac, Sanjeevi Gandhi A, "Model based compensator for control valve" IEEE sponsored 2nd international conference on innovations in information embedded and communication systems, IIIECS 2015
- 17. Sam Justus, Sanjeevi Gandhi A, "Real time implementation of pH neutralization in waste water treatment process", international conference on current innovations in engineering and technology, 19th April 2015
- 18. Karthick Raja. Sanjeevi Gandhi A., "Modeling and control of thermal desalination pilot control" International Conference on Natural resources restoration technologies, April 17-18 2015.
- 19. Parvathy S, Sanjeevi Gandhi A, "Stabilization of an inverted pendulum using robust controller", IEEE sponsored 9th international conference on intelligent systems and control, (ISCO) 2015.
- 20. N Gayathri, Sanjeevi Gandhi A, "Real time implementations of modified MRAC for a hybrid tank systems" international conference on recent innovations in engineering, ICRIE 2015
- 21. Jannaniy S, Sanjeevi Gandhi A, "Identification of stiction behavior in pneumatic control valve" international conference on recent innovations in engineering, ICRIE 2015

- 22. S Venkateshgowtham, Sanjeevi Gandhi. A, Thought based control for robotic arm", International conference on electrical instrumentation & communication engineering recent trends and research issues. ICE RTRI 2015
- 23. Madhu.V, Sanjeevi Gandhi, A., "Implementation of a double controller scheme for a autonomous tuning in level process", IEEE International Conference on Green Computing, Communication and Electrical Engineering, Organized by Dr.NGP Institute of Tech, Coimbatore, March 6-8,2014
- 24. Koshy, L.C. Sanjeevi Gandhi, A., "Real Time Wavelet based denoising Technique for liquid level system on FPGA platform", IEEE International Conference on Green Computing, Communication and Electrical Engineering, Organized by Dr.NGP Institute of Tech, Coimbatore, March 6-8,2014
- 25. Reshma Angelene Jose, Mr. A.Sanjeevi Gandhi," Development and control of a Non Linear Magnetic Levitation System" in the International Conference on Advance engineering and technology venue IRD INDIA, Cochin 27 Jan 2013
- 26. B.Rene priya, A.Sanjeevi Gandhi "Modelling and Implementation of fuzzy PI Controller for Liquid flow control" in the International conference on Innovations in Intelligent Instrumentation, Optimization & Signal Processing organized by KITS, Coimbatore, 1st-2nd March 2013
- 27. Sanjeevi Gandhi A., "Fractional Order Controller for a spherical Tank" in the International conference on Global Challenges and Strategies in Engineering management and Disaster Management organized by Noorul Islam University, Kumarakoil, Tamil Nadu, 8th and 9th March, 2013
- 28. Sanjeevi Gandhi A "Modeling and analysis of PI and Grey prediction Controller" in the International conference on Advanced computing machines and embedded technology (ICACT 2013) organized by J.K.K.Natraja College of Engineering and Technology Tamil Nadu, 8th and 9th March, 2013
- 29. Rakhi Gopinath, Sanjeevi Gandhi A., "Design of Fractional Order Controllers for First Order plus Time Delay System", in the International conference on Innovations in Intelligent Instrumentation, Optimization & Signal Processing organized by KITS, Coimbatore, 1st -2nd March 2013.
- 30. Sanjeevi Gandhi A., "Fractional Order Controller for a spherical Tank", in the International Conference on Global Challenges and Strategies in Engineering management and Disaster Management by Noorul Islam University, Kumarakoil, Tamil Nadu, 8th and 9th March, 2013

- 31. Sanjeevi Gandhi A., T.Kannadasan, R.Suresh 'Development of Static Model and Control Schemes for Biomass Gasifier', International Conference on Emerging Technological Trends in Advanced Engineering Research (ICETT-2012), Baselios Mathews II College of Engineering, kollam, Kerala, from 20/02/2012 to 21/02/2012
- 32. Sanjeevi Gandhi A., 'Model Reference Adaptive control for a decoupled Multi Input Multi output System' International Conference on Emerging Technological Trends in Advanced Engineering Research (ICETT-2012), Baselios Mathews II College of Engineering, kollam, Kerala, from 20/02/2012 to 21/02/2012
- 33. , Sanjeevi Gandhi A., T.Kannadasan 'Neural Network Predictive Control of Heat Exchanger System' , International Conference on Futuristic Trends in Electronics Engineering (ICFTEE 2012), Thiruvalluar College of Engineering, Vadavasi, from 28/01/2012 to 29/01/2012.
- 34. Sanjeevi Gandhi A., 'ANFIS Based control of a flow process station', International Conference on Futuristic Trends in Electronics Engineering (ICFTEE 2012), (ICFTEE 2012), Thiruvalluar College of Engineering, Vadavasi, from 28/01/2012 to 29/01/2012
- 35. Sanjeevi Gandhi A., T. Kannadasan and R. Suresh 'Development of Static Model and Control Schemes for Biomass Gasifier', International Conference on Emerging Technological Trends in Advanced Engineering Research (ICETT-2012), Baselios Mathews II College of Engineering, kollam, Kerala, from 20/02/2012 to 21/02/2012
- 36. Sanjeevi Gandhi.A., ,'Model Reference Adaptive control for a decoupled Multi Input Multi output System' International Conference on Emerging Technological Trends in Advanced Engineering Research (ICETT-2012), Baselios Mathews II College of Engineering, kollam, Kerala, from 20/02/2012 to 21/02/2012
- 37. Sanjeevi Gandhi.A., T. Kannadasan and R. Suresh., "Automatic Control of Ash Extraction for a Wood Gasifier using Fuzzy Controller", IEEE International Conference, on Process Automation, Control and Computing proceeding, 2011. ISBN: 978-1-61284-765-8.
- 38. Sanjeevi Gandhi.A., T. Kannadasan and R. Suresh A., "Hardware design of fuzzy controller for biomass downdraft gasifier with labVIEW", IEEE Region 10 Annual International Conference, Proceeding/TENCON, pp.2096-2101, 2010. SJR:0.071.

Invited Technical Talks

- 1. AICTE Sponsored 2 weeks Faculty Development Programme (FDP) on "Machine Learning Techniques for Imaging and Healthcare with PYTHON" from 28.01.2021 to 10.02.2021. At Sri Sairam Engineering college, Chennai.
- AICTE Sponsored Seminar on PLC Based Industrial Automation by department of Electronics and Communication engineering, Karpagam college of Engineering , Coimbatore on September 2019.
- ICMR Sponsored Seminar on Wearable sensor for healthcare organized by department of Electronics and Communication engineering, Karpagam college of Engineering , Coimbatore on July 2018.
- 4. 'Virtual Instrumentation systems and Labview Design' workshop organized by department of Electrical and electronics engineering, Mount zion College of Engineering and Technology, Pudukottai on 21 July 2017.
- 'A practical approach on Labview Design' workshop organized by department of Electronics and Instrumentation engineering, Karpagam college of Engineering Engineering, Coimbatore From 22 September 2017 to 23 September 2017
- 6. 'Virtual Instrumentation systems and wireless instrumentation' UGC sponsored seminar organized by department of Instrumentation, NSS College, Kerala on 4th December 2014.
- 7. 'Industrial PID Controller' a seminar held at Karunya University EIE department on 7th February 2014
- 8. 'Wireless Instrumentation and its Applications' a seminar held at Kathir College of Engineering Coimbatore. 1st February 2014
- 9. 'Introduction to PID and Fuzzy Controller' a seminar held at Sri Ramakrishna Engineering College, Coimbatore on 29th October 2013
- 10. 'PID Controller Design challenges and issues' a seminar held at Karpagam College of Engineering, Coimbatore on 19th October 2013
- 11. 'Power Generation by Gasification technology using expert Controller' a seminar held at Coimbatore Institute of Technology. Coimbatore on 24th January 2012
- 12. 'Automation and controls of Downdraft biomass gasifier systems' a seminar held at Coimbatore Institute of Technology. Coimbatore on 9th November 2012