Dr. Gudapati Sambasiva Rao

Professor

Electrical & Electronics Engineering Department

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Date of Birth: 05-06-78

Date of Joining: 22-12-06

Educational Qualifications:

• B.Tech at Andhra University College of Engineering, Visakha Patnam, 2000.

M.Tech at Satyabama Institute of Engineering, Chennai. 2006.

Ph.D at J.N.T.U, Hyderabad. 2014.

Teaching Experience: 18 Years.

Research Interests: Power Electronics, Electrical Drives, FACTS controllers, Power Quality

Improvement.

Grants Received:

S.No.	Scheme	Agency	Name of the Coordinator	Title of the Project	Year	Amount(Rs:)
1	MRP	UGC	1) Dr. K. Chandra Sekhar (Principal Investigator) 2) G. Sambasiva Rao (Co-Investigator)	Control Technique for Duel Inverter Fed Open End Winding Induction Motor	2014	9,22,000/-
2	Internal	Institute	1) Dr. G. Sambasiva Rao (Principal Investigator) 2)Mr.Y.Sumanth (Co- Investigator)	Performance Enhancement of Doubly fed Induction Generator for Renewable Energy Source Applications	2019	70,000/-
3	Industry	M/s Power Plant Engineering Works, Vishakapatnam	1) Dr. G. Sambasiva Rao (Principal Investigator) 2)Mr.Y.Sumanth (Co- Investigator) 3)Mr.G.Veeranjaneyulu (Co-Investigator)	Performance analysis of Doubly-Fed Induction Generator based Wind energy conversion system	2020	4,00,000/-



PhD's Guided:

S.No.	Name of the Research Scholar	Title of the Research Work	Year of Award	Registered University	Supervisor/ Co- Supervisor
1	CH. Naga Sai Kalyan	Optimal load frequency controller for Multiarea multifuel system using soft Computing techniques	March 2021	Acharya Nagarjuna University, Guntur	Supervisor
2	Krishna Chaitanya Marri	An advanced control strategy implementation for an efficient solar inverter to grid connected applications	October 2021	Acharya Nagarjuna University, Guntur	Supervisor
3	V V Nagaraju Goriparthi	Analysis and Performance Evaluation of Multilevel Inverter Fed Induction Motor	Jan 2022	Acharya Nagarjuna University, Guntur	Supervisor
4	Gaddala Jayaraju	Power Quality Improvement of Grid Connected Inverter for Hybrid Distribution Generation Using Power Electronic Converters	Feb 2022	Acharya Nagarjuna University, Guntur	Supervisor
5	L Narayana Gadupudi	Analysis and performance evaluation of voltage Stability in transmission system using FACTS Controller	Aug 2022	Acharya Nagarjuna University, Guntur	Supervisor
6	Sriramulu Naik Mudhavath	Analysis of Multilevel Inverters for Direct Torque Control of 3-Phase Induction Motor	Sep 2022	Acharya Nagarjuna University, Guntur	Supervisor

Patents Published:

S.No.	Title/Name of IP	IP Registration Number of Patent	Date of Patent IP Filed	Date of Patent IP Published
1	Integrated Monitoring and Controlling Device for Distribution Transformer	202041050300 A	19.11.2020	11.12.2020
2	Method for Fabricating Flexible Electronic Devices via Assembly of Inorganic Structures of Varied Dimensions for Nano, Micro, and Chip-Scale Integration	202441004717 A	23.01.2024	09.02.2024

Research Work/Research Papers Published: <u>JOURNALS:</u>

- Yeluri Naresh, G.Sambasiva Rao "Multi Objective Control Technique For Unification of DG Units to the electrical network Using Fuzzy Logic Controller", International Journal of Science, Engineering and Technology Research (IJSETR), Volume 4, Issue 7, July 2015, Pg.2563-2567, ISSN: 2278 - 7798.
- 2. G.Satish & **G. Sambasiva Rao** "Fuzzy Logic Based Dstatcom for the Reduction of Thd In Case Of Non-Linear Loads" Imperial Journal of Interdisciplinary Research (IJIR), Vol-2, Issue-11, 2016, Pg.1061-1066, ISSN: 2454-1362.
- 3. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Novel Six-Level Inverter System for Dual- Fed Induction Motor Drive" Journal of Electrical Engineering, Vol. 11/2011, Edition:3, pp: 173-180. ISSN: 1582-4594, **SCOPUS** indexed.
- G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Refined Space Vector PWM Signal Generation for Ten-Level Inverter" Praise Worthy Prize International review of modeling and simulation (IREMOS), Vol.4, N.6, Dec.2011, pp:2944-2953. Print ISSN:1974-9821; Cd-Rom ISSN:1974-983X, SCOPUS indexed.
- G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Ten-Level Inverter System for Dual- Fed Induction Motor Drive" Praise Worthy Prize International review of modeling and simulation (IREMOS) Vol.4, N.4, August2011, pp: 1417-1425. Print ISSN:1974-9821; Cd-Rom ISSN:1974-983X,SCOPUS indexed.
- 6. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Refined Space Vector PWM Signal Generation for Seven-Level Inverter" Asian power electronic journal, Vol. 6, No. 1, Oct 2012, pp.25-34 ISSN: 1995-1051.
- G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Sophisticated Space Vector Pulse Width Modulation Signal Generation for Nine-Level Inverter system for Dual-Fed Induction Motor Drive" ICGST-ACSE Journal, Volume 12, Issue 2, October 2012, pp:31-38. ISSN: Print 1687-4811, Online 1687-482X & CD-ROM 1687-4838.
- 8. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "Space Vector PWM Signal Generation For Twelve-Level Inverter Using Reference Signals" RECENT Journal, Vol. 14, No. 1(37), pp.40-50. ISSN: printed edition 1582-0246, ISSN: online edition 2065-4529.
- G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Novel Nine-Level Inverter System for Dual-Fed Induction Motor Drive" Ascent-journals International Journal of Engineering Research & Industrial Applications, Vol. 4, No. III, August 2011, pp: 159-176. ISSN: 0974-1518.
- 10. G.Sambasiva Rao and Dr.K.Chandra Sekhar "Seven-Level Inverter System for Dual- Fed Induction Motor Drive" Research India Publications International journal of Electrical engineering and technology, Vol.1, No.1, 2011, pp.9-22. ISSN: 2249-3085.
- 11. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Refined Space Vector PWM Signal Generation for Multilevel Inverters" ACEEE Int. J. on Electrical and Power Engineering, Vol. 02, No. 02, August 2011, pp: 47-55. ISSN 2158-7574 (Online); ISSN 2158-7566 (Print).
- 12. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Twelve-Level Inverter System for Dual-Fed Induction Motor Drive" International journal of advanced engineering sciences and technologies, Vol.6, issue no.2, 2011, pp.157-167. ISSN: 2230-7818.
- 13. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Refined Space Vector PWM Signal Generation for Eleven-Level Inverter" IACSIT Press International journal of computer and electrical engineering, vol. 3, no.6, 2011, pp. 830-839. ISSN: 1793-8198(online version); 1793-8163(print version).

- 14. G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Comprehensive Analysis of Space Vector PWM Technique Based on Placement of Zero-Space Vector" International Journal of Engineering Science and Technology, Vol. 3, No.4, Apr 2011, pp. 2728-2739. ISSN: 0975-5462.
- 15. Sateesh Kumar.V, Chandra Sekhar.O and **G.Sambasiva Rao** "Implementation of PWM soft single switched DC-DC converters with coupled inverters" RECENT Journal, Vol. 15, No. 1(41), pp.42-52. ISSN: printed edition 1582-0246, ISSN: online edition 2065-4529.
- 16. G.Sambasiva Rao and Dr.K.Chandra Sekhar "Comparison of SPWM and SVPWM Based Inverter Fed Induction Motor Drives" ANU Journal of Engineering & Technology. Vol.2, No.2, 2010, pp.33-41. ISSN: 0976-3414.
- 17. V. Yesu Raja and **G.Sambasiva Rao** "Comparison of Multilevel Inverter Topologies for STATCOM Applications" Int. Journal of Engineering Research and Applications, Vol. 4, Issue 8(Version 7), August 2014, pp.113-117, ISSN: 2248-9622.
- 18. Yeluri Naresh, **Dr.Sambasiva Rao Gudapati** "A Control Technique for Unification of DG Units to the Electrical Network using Fuzzy Logic Controller", International Journal of Engineering and Technical Research (IJETR), Volume-3, Issue-8, August 2015, ISSN: 2321-0869 (O) 2454-4698 (P).
- 19.G. Lakshminarayana and **G. Sambasiva Rao** "A Case Study of Energy Conservation", International Journal of Circuit Theory and Applications, Volume 10, Number 5, 2017, pp. 283-288, ISSN: 0974-5572.
- 20. B. Veda Sri and **G. Sambasiva Rao** "Analysis of STATCOM Using Symmetrical Multilevel Inverter", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 6, Issue 9, September 2017, PP.19055-19070, ISSN: 2319-8753.
- 21. A.Pravallika and **G. Sambasiva Rao** "Energy Management of Distributed Generation Inverters in a Micro Grid by Using a Novel Control Strategy" International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 7, Issue 5, May 2018, PP.2749-2759, ISSN: 2278 8875.
- 22. Jaya Raju G, **Sambasiva Rao Gudapati**, "Unified Power Flow Controller for Non-Linear Loads Using Adaptive Power Quality Theory" International Journal of Electrical and Computer Engineering Systems, Volume 9, Number 2, Nov. 2018, Page:61-67, ISSN:1847-6996, e-ISSN:1847-7003, **WEB OF SCIENCE and SCOPUS** indexed.
- 23. Jaya Raju G, **Sambasiva Rao Gudapati**, "Intelligent controller based power quality improvement of microgrid integration of photovoltaic power system using new cascade multilevel inverter", International Journal of Electrical and Computer Engineering (IJECE) Vol. 9, No. 3, June 2019, pp. 1514-1523 ISSN: 2088-8708, **SCOPUS** indexed.
- 24. Jaya Raju G, **Sambasiva Rao Gudapati**, "Intelligent Controller based Micro-grid Integration of Hybrid PV/Wind and Battery Management System", Journal of Advanced Research in Dynamical & Control Systems, Vol. 10, 15-Special Issue, Nov. 2018, Page: 192-201, ISSN 1943-023X, **SCOPUS** indexed.
- 25. K.Sirisha, **G.Sambasiva Rao Gudapati**, "modeling and simulation of a novel solar pv/battery Hybrid energy system with a single phase nine level Inverter", International Journal of Management, Technology And Engineering, Volume IX, Issue VI, JUNE/2019, Page:3451-3457, ISSN NO: 2249-7455, UGC approved journal.
- 26. Krishna Chaitanya Marri, **Sambasivarao Gudapati**, Amarendra Matsa and M. A. Chaudhari, "Design of an Effective Control Structure to Grid-Interfaced Solar Inverter with Fault Stability Performance", Applications of Computing, Automation and Wireless Systems in Electrical Engineering, Lecture Notes in Electrical Engineering (**SPRINGER** Nature Singapore) Vol-553, page: 59-66, Print ISBN:978-981-13-6771-7, Online ISBN: 978-981-13-6772-4, **SCOPUS** indexed.

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- 28. Sriramulu Naik Mudhavath, **Gudapati Sambasiva Rao**, "Control of Modular Multilevel Converter Fed 3-Phase Induction Motor using DTC with PI Controller", International Journal of Innovative Technology and Exploring Engineering, DOI: 10.35940/ijitee.C8591.019320, ISSN: 2278-3075, Volume-9 Issue-3, January 2020, Page No. 3451-3456, **SCOPUS** indexed.
- 29.G. V. V. Nagaraju, **Sambasivarao Gudapati** "Three phase PUC5 inverter fed induction motor for renewable energy applications" International Journal of Power Electronics and Drive System (IJPEDS), Vol. 11, No. 1, March 2020, pp. 1-9, ISSN: 2088-8694, **SCOPUS** indexed.
- 30. Sriramulu Naik Mudhavath, Dr. **Gudapati Sambasiva Rao**, "Speed and Flux Control of 3-Phase Induction Motor with MMC Topology by Using DTC Technique", Journal of Advanced Research in Dynamical & Control Systems, Vol. 11, 07-Special Issue, July 2019, ISSN 1943-023X, Pages: 757-765, **SCOPUS** indexed.
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- 32.Mr.Sriramulu Naik Mudhavath, Dr.**Gudapati Sambasiva Rao**, "Direct Torque Control of MMC fed 3-Phase Induction Motor Using Fuzzy Logic Controller", International Journal of Advanced Science and Technology, ISSN: 2005-4238, Vol. 29, No. 6, May 2020, pp. 2113–2121, **SCOPUS** indexed.
- 33. Sriramulu Naik Mudhavath, **Gudapati Sambasiva Rao**, " DTC of 3-Level NPC Inverter and MMC Fed 3-Phase Induction Motor", International Journal of Innovative Technology and Exploring Engineering, DOI: 10.35940/ijitee.G4977.059720 , ISSN: 2278-3075, Volume-9 Issue-7, May 2020, Page No. 1156-1160, **SCOPUS** indexed.
- 34. CH.Naga Sai Kalyan, **Gudapati Sambasiva Rao**, "Automatic Generation Control of Multi-Area Hybrid System Considering Communication Time Delays" Journal of Advanced Research in Dynamical & Control Systems, DOI: 10.5373/JARDCS/V12I2/S202012553, Vol. 12, Issue-02, May 2020, ISSN 1943-023X, Pages: 2071-2083, **SCOPUS** indexed.
- 35.G. V. V. Nagaraju, **Sambasivarao Gudapati**, "Comparative Analysis of Three Phase Induction Motor Fed From Three-Phase CHB and PUC Inverter With Different Voltage Levels" Journal of Advanced Research in Dynamical & Control Systems, DOI:10.5373/JARDCS/V12I2/S20201251, Vol. 12, Issue-02, May 2020, ISSN 1943-023X, Pages: 2049-2057, **SCOPUS** indexed.
- 36. Sriramulu Naik Mudhavath, **Gudapati Sambasiva Rao**, "Performance Comparision Between MLI and MMC Topology of Direct Torque Control Induction Machine Drive With APOD-PWM Technique", Advanced Science Letters, Vol-26, Number-6, June-2020, Page: 1513-1520, E-ISSN: 1936-7317. (UGC approved Journal).
- 37. Sriramulu Naik Mudhavath, **Gudapati Sambasiva Rao**, "Fuzzy Based Three-Level MMC Topology for Direct Torque Control of Three Phase Induction Motor Drive With APOD-PWM Technique ", JOURNAL OF ENGINEERING, COMPUTING & ARCHITECTURE, Volume 10, Issue 7, July-2020, Page No: 89-95, ISSN NO: 1934-7197, DOI:17.0002.JECA.2020.V10I7.200786.5101 (UGC approved Journal).

- 38.CH.Naga sai kalyan, **G.Sambasiva Rao**, "Performance comparison of various energy storage devices in combined LFC and AVR of multi area system with renewable energy integration", International Journal of Renewable Energy Research (IJRER), June-2020, Vol.10, No.02, pp.933-944, ISSN: 1309-0127, **Web of Science, ESCI and SCOPUS** Indexed.
- 39.CH.Naga sai kalyan, **G.Sambasiva Rao**, "Frequency and voltage stabilization in combined load frequency control and automatic voltage regulation of multi area system with hybrid generation utilities by AC/DC links", International journal of sustainable Energy (Taylor and Francis). https://doi.org/10.1080/14786451.2020.1797740, 30 Jul 2020, Pages 1009-1029, ISSN: 1478-646X, **Web of Science, ESCI and SCOPUS** Indexed.
- 40. CH.Naga sai kalyan, **G.Sambasiva Rao**, "Performance index based coordinated control startegy for simultaneous frequency and voltage stabilization of multi-area interconnected system", Lecture Notes in Electrical Engineering, **SPRINGER** Nature Singapore, (Control application in modern power system: select proceedings of EPREC 2020), Nov-2020, Vol-710, pp. 45–55, ISSN 1876-1100, ISSN 1876-1119 (electronic), ISBN 978-981-15-8814-3 ISBN 978-981-15-8815-0 (eBook), https://doi.org/10.1007/978-981-15-8815-0_4, **SCOPUS** Indexed.
- 41.CH.Naga sai kalyan, **G.Sambasiva Rao**, "Stabilizing frequency and voltage in combined LFC and AVR system with coordinated performance of SMES and TCSC", Lecture Notes in Electrical Engineering, **SPRINGER** Nature Singapore, (Control application in modern power system: select proceedings of EPREC 2020), 2021, Vol-710, pp. 65–76, ISSN 1876-1100, ISSN 1876-1119 (electronic), ISBN 978-981-15-8814-3 ISBN 978-981-15-8815-0 (eBook), . https://doi.org/10.1007/978-981-15-8815-0_6, **SCOPUS** Indexed.
- 42. Krishna Chaitanya Marri, **Sambasiva Rao Gudapati**, "Smart Solar Grid integrated PV System with Faulty Performance Enhancement: For Better Rural Electrification in India" International Journal of Advanced Trends in Computer Sciences and Engineering, Vol.9, No.4, Aug. 2020, Page:4383-4388, ISSN 2278-3091, **SCOPUS** Indexed.
- 43.G. Lakshminarayana and **G. Sambasiva Rao**, "9-Level VSC based STATCOM for Reactive Power Management and Voltage Stability Improvement" Journal of Green Engineering (JGE), Volume-10, Issue-11, November 2020, Page: 10275-10287, ISSN: 2245-4586, **SCOPUS** Indexed.
- 44. CH.Naga sai kalyan, **G.Sambasiva Rao**"Combined frequency and voltage stabilisation of multi-area multisource system by DE-AEFA optimised PID controller with coordinated performance of IPFC and RFBs" International Journal of Ambient Energy **(Taylor and Francis)**, Vol-41, Dec-2020, https://doi.org/10.1080/01430750.2020.1860130, Print ISSN: 0143-0750 Online ISSN: 2162-8246, **ESCI and SCOPUS** Indexed.
- 45. G. Lakshminarayana and **G. Sambasiva Rao**, "7-Level Transformers Integrated Voltage Source Converter Based STATCOM for Voltage Profile Enhancement", Solid State Technology, Volume: 63 Issue: 5, 2020, Page: 3134-3141, ISSN 0038-111X (online), **SCOPUS** Indexed.
- 46.Ch.Naga sai Kalyan, **G.Sambasiva Rao**, "Coordinated SMES and TCSC Damping controller for load frequency control of multi area power system with diverse sources", International Journal of Electrical Engineering and Informatics, Vol.12, No.04, Dec-2020, pp.747-769, ISSN:2087-5886, **SCOPUS** Indexed.
- 47.CH.Naga sai kalyan, **G.Sambasiva Rao**, "Impact of communication time delays on combined LFC and AVR of multi-area hybrid system with IPFC-RFBs coordinated control strategy", Protection & Control of Modern Power Systems(**Springer**), https://doi.org/10.1186/s41601-021-00185-z , 6, Article number: 7, March 2021, ISSN:2367-0983, **ESCI and Scopus** Indexed)

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- 49. Krishna Chaitanya M , **Sambasiva Rao G** and Amarendra Matsa, "A Generalized SVPWM Scheme for Multilevel Inverters with Fixed Computational Time", International Journal of Advanced Trends in Computer Science and Engineering, Volume 9, No.5, September October 2020, https://doi.org/10.30534/ijatcse/2020/03952020, page: 6888-68891, ISSN 2278-3091, **SCOPUS** Indexed.
- 50. Krishna Chaitanya M, **Sambasiva Rao G** and Amarendra Matsa, "An Advanced Control Strategy Implementation for an Efficient Solar Inverter to Grid connected Applications", International Journal of Emerging Trends in Engineering Research, Volume-8, No-9, September -2020, https://doi.org/10.30534/ijeter/2020/168892020, ISSN 2347 3983, **SCOPUS** Indexed.
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- 53. GADDALA JAYARAJU and **GUDAPATI SAMBASIVA RAO**," 31-Level Asymmetrical Cascaded Multilevel Inverter with DC-DC Flyback converter for hybrid power distribution" Journal of Information and Computational Science, pp: 115-125, ISSN 1548–741, volume no13, 09-2020. DOI:16.10090.JOICS.2020.V13I09.287391.4119 (UGC approved group A Journal).
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- 55.L. Narayana Gadupudi, **Gudapati Sambasiva Rao**, Ramesh Devarapalli and Fausto Pedro García Márquez "Seven Level Voltage Source Converter Based Static Synchronous Compensator with a Constant DC-Link Voltage", Applied Sciences, Vol. 11, Issue No.16, August-2021, ISSN: 2076-3417, https://doi.org/10.3390/app11167330, **Scopus, SCIE (Web of Science)**
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- 57. Sumanth Yamparala, L.Lakshminarasimman and **G.Sambasiva Rao** "Optimal Design of FoPID Controller for DFIG Based Wind Energy Conversion System Using Grey-Wolf Optimization Algorithm" INTERNATIONAL JOURNAL of RENEWABLE ENERGY RESEARCH, Vol.12, No.4, December 2022, Page: 2110-2119, Online ISSN: 1309-0127, **Scopus, SCIE (Web of Science).**
- 58. Sumanth Yamparala, L.Lakshminarasimman and **G.Sambasiva Rao** "Improvement of LVRT Capability for DFIG based WECS by Optimal Design of FoPID Controller using SLnO + GWO Algorithm" International Journal of Intelligent

- Engineering and Systems, Vol.16, No.1, Feb-2023, Page: 202-213, ISSN:2185-310X, DOI: 10.22266/ijies2023.0228.18, **SCOPUS** indexed
- 59. Lakshminarayana Gadupudi, **Gudapati Sambasiva Rao**, Rachakonda Venkata Lakshmi Narayana Divakar, Hasmat Malik, Faisal Alsaif, Sager Alsulamy and Taha Selim Ustun "Fuzzy-Based Fifteen-Level VSC for STATCOM Operations with Single DC-Link Voltage" Sustainability, April-2023, Volume 15(7), Page: 1-15, ISSN: 2071-1050, https://doi.org/10.3390/su15076188, **SCOPUS**, **SCIE and SSCI (Web of Science)**
- 60.D. Uma Maheswara Rao, Dr. G. Sambasiva Rao and Dr. K. Swarnasri "L-M Based ANN for Predicting the Location of DG under Contingency Condition" FOREX Publication, International Journal of Electrical and Electronics Research, Dec-2023, Volume 11, Issue 4, Page:1204-1208, e-ISSN: 2347-470X, SCOPUS indexed.
- 61. Ankineedu Prasad Padamata, **Dr. Gudapati Sambasiva Rao**, "Modelling of Variable Speed Wind Turbine Connected DFIG:250KW" WSEAS Transactions on Power Systems, Volume 18, 2023(Feb-2024), Print ISSN: 1790-5060, E-ISSN: 2224-350X, Pages: 426-435, DOI: 10.37394/232016.2023.18.42, **SCOPUS** indexed.
- 62. CH. Naga Sai Kalyan, **G. Sambasiva Rao**, Mohit Bajaj, Baseem Khan & Majeed Rashid Zaidan," Frequency regulation of geothermal power plant-integrated realistic power system with 3DOFPID controller" Cogent Engineering(Taylor and Francis), VOL. 11, NO. 1, March 2024, Page:1-18, Online ISSN: 2331-1916, https://doi.org/10.1080/23311916.2024.2322820 **Scopus, ESCI (Web of Science)**

CONFERENCES:

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- G.Sambasiva Rao and Dr.K.Chandra Sekhar "A Novel Five-Level SPWM Inverter System for Dual- Fed Induction Motor Drive" 2012 IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT) at Syed Ammal Engineering college, Ramanathapuram, August 23-25,2012 in Proceeding of IEEE-ICACCCT, 2012, pp.375-379, Web of science and SCOPUS indexed.
- 3. G.Sambasiva Rao and Dr.K.Chandra Sekhar "An Eleven-Level Inverter System for Dual-Fed Induction Motor Drive" 2012 IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012) at Indian Institute of Science (IISc), Bengaluru organized by Central Power Research Institute (CPRI), Bengaluru December 16-19, 2012, Bengaluru, in Proceeding of IEEE-PEDES 2012, Web of science and SCOPUS indexed.
- 4. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Refined Space Vector PWM Signal Generation for Eight-Level Inverter" International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-informatics (AEEICB 12) at Prathyusha institute of technology and management, Thiruvallure, Tamil Nadu, Jan.2012 in Proceeding of AEEICB 12, PP.227-232.
- 5. **G.Sambasiva Rao** and Dr.K.Chandra Sekhar "A Five-Level Inverter System for an Open-End Winding Induction Motor Drive" IEEE International Conference on Advanced

- Research in Engineering and Technology, ICARET 2013, conducted at K L University, Vijayawada, February 8th to 9th, 2013, in Proceeding of IEEE-ICARET2013, SCOPUS indexed.
- 6. **G.Sambasiva Rao,** V.Sarayu, Y.Suribabu and P.Anjalee kumari "Shunt Active Power Filter for Current Harmonic Cancelation", Proc. Of International Conference on Control, Communication & Power Engineering, July 2010, PP.274-276.
- 7. K. Swarnasri, **G. Sambasiva Rao**, P. Anjalee Kumari, "Power converter for PV and wind connected utility systems", All India seminar on power systems control operation & maintenance (PSCOM) 2010, 4th to 5th December 2010.
- 8. G.V.V. Naga Raju, **G. Sambasiva Rao** "sensor less voltage controller of CHB multilevel inverter fed three phase induction motor with one dc source per each phase" International Conference on Mobile Cloud Computing, Communication and Engineering (ICMCCCE-18), held on 22nd & 23rd June 2018, at Nasaraopeta engineering college, Narasaraopet.
- Attended and published a international conference paper "Intelligent Controller based Micro-grid Integration of Hybrid PV/Wind and Battery Management System" held at LBS college of engineering, Kasagod, Kerala during 18, 19 December-2018.
- 10. Jayaraju, Gaddala; Gudapati Sambasiva Rao, "31-Level Asymmetrical Cascaded Multilevel Inverter with DC-DC Flyback converter for hybrid power distribution", Online Conference on Recent Innovations in Science, Engineering, Humanities and Management(SEHM-2020), Tirumala Engineering College, Andhra Pradesh, during 25-26 September-2020, ISBN: 978-93-90103-08-9.
- 11.G. Lakshminarayana and G. Sambasiva Rao, "Recent Advances of STATCOM in Power Transmission Lines A Review" International Conference on Modern Research & Computations in Electrical Technology (ICMRCET–2020), organised by CMR College of Engineering and Technology and Internal Quality Assurance Cell (IQAC) during 7th& 8th January-2021, ISBN NO: 978-93-5437-153-0.
- 12.CH.Naga sai kalyan, **G.Sambasiva Rao**, "Demonstrating the effect of excitation cross coupling and communication time delays on automatic generation control", 4th Biennial Conference on Nascent Technologies in Engineering (ICNTE), organised by Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, during 15th to 16th January 2021, DOI: 10.1109/ICNTE51185.2021.9487779, **SCOPUS** indexed
- 13. Ch. Naga sai Kalyan, A. N. Venkateswarlu, A. Gopalakrushna, B. Srikanth Goud, M. Kiran Kumar, G.Sambasiva Rao, have Presented paper entitled "Super capacitor and TCSC based territorial control strategy for frequency regulation of multi area interconnected power system" in IEEE NKCon-2022 Flagship International Conference of IEEE North Karnataka Subsection in association with IEEE Bangalore Section and IEEE ITS hosted BLDEA's V.P. Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, Karnataka, India, during 20th, 21st November 2022, **SCOPUS** indexed.
- 14. Ch Naga sai Kalyan, B Nagi Reddy, Mohit Bajaj, Kiran Malligunta, and Gudapati Sambasiva Rao "Perfomance Comparison of SSSC and TCSC Devices on Load Frequency control of interconnected Power System with Geothermal Power Plant Integration" in the 4th International Conference on Technology and Policy in Energy & Electric Power (ICT-PEP 2022) that was held in Jakarta International Expo, Indonesia, 18-20 October 2022, SCOPUS indexed.

Workshops / Seminars / Courses Participated:

- 1. "One day Seminar on "MATLAB & Simulink" by Mathworks India, Vijayawada on 05th Feb.2016.
- 2. Participated in Two-Week ISTE STTP on "CMOS, Mixed Signal and Radio Frequency VLSI Design" conducted by IIT Kharagpur during 30th January to 4th February 2017.
- 3. Participated in Two day national workshop on "Recent innovative trends in Electrical motors and its application", Department of Electrical Engineering, P.V.P.Siddhartha institute of technology, Vijayawada on 20th & 21st feb 2014.
- 4. Participated in AICTE Sponsored Three day national workshop on "Signal and Image Processing using LabVIEW" 11th to 13th November 2013 organized by Department of ECE at RVRJC College of Engineering, Guntur.
- 5. Participated in five day national level work shop on "Inexorable march of electrical drives in industrial arena" at CBIT, Hyderabad during June-2012.
- 6. "Computer applications of power system using Mi power" at R.V.R.&J.C.Engg.college,Guntur.
- 7. One day national level work shop on "Multi-level inverters" at LBR engg.college, Mylavaram during Oct-2010.
- 8. Three day national level work shop on "Simulation of electrical systems using MATLAB" at GPR Engg.college, Kurnool during Dec-2010.
- 9. Two day national level work shop on "DSP controlled power electronic systems and applications" at S.V.Engg.college, Chittor during July-2009.
- 10. Two day national level work shop on "Advances in power electronics and Drives" at GPR Engg. college, Kurnool during Dec-2008.
- 11. One day national workshop on "IPR & Patents" at Malineni Perumallu Educational Society's Group of Institutions, Guntur on 17th July,2015
- 12. Participated in Two-Week ISTE STTP on "Electric Power System" conducted by IIT Kharagpur during 12th June to 15th July 2017.
- 13. Participated in AICTE sponsored Two-Week FDP on "Innovations in Renewable Energy Harvesting and Environment Friendly Process Technologies for Sustainable Developement" conducted by R.V.R.&J.C.Engg.college,Guntur during 23rd October to 4th November 2017.
- 14. Faculty development program(FDP101X) on "Foundation Program in ICT for Education" conducted by IIT Bombay from March 8, 2018 to April 12, 2018.
- 15. Faculty development program(FDP201X) on "Foundation Program in ICT for Education" conducted by IIT Bombay.
- 16. Attended a short term training programme through ICT mode on 'Outcome based education and accreditation' organised by NITTTR, Kolkata from 24.09.2019 to 28.09.2019.
- 17. Participated in "One Day Workshop on Arduino" held at R.V.R. & J. C. College of Engineering, Chowdavaram, Guntur on 8 February 2020, organised by the Teaching Learning Centre, ICT at IIT Bombay, funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), MHRD, Govt. of India.
- 18. Participated in the 4-days Online Course on "Examination Reforms" conducted during 22-25 April, 2020 organized by AICTE.
- 19. Participated five days online FDP on "Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles" During 01-06-2020 to 05-06-2020, Organized by Department of Electrical & Electronics Engineering, Bapatla Engineering College, Bapatla.

- 20. Participated five days online FDP on "IoT and smart Device Applications in green Technology and Electric vehicles" during 24Th -28Th August 2020, organized by Department of Electrical and Electronics Engineering, Bapatla.
- 21. Participated five days online FDP on "Energy Storage" during 7Th -11Th September 2020, organized AICTE Training and Learning (ATAL) Academy at Kallam Haranadhareddy Institute of Technology, Andhra Pradesh.
- 22. Participated one week online FDP on" "Simulation Tools for Electrical Engineering & its real time applications" organized by Department of Electrical and Electronics Engineering, KALLAM HARANADHAREDDY INSTITUTE OF TECHNOLOGY, Guntur from 17th May 2021 to 22nd May 2021.
- 23. Participated five days online FDP on "Recent Trends and Developments in Electrical Power Engineering" organised by Department of Electrical and Electronics Engineering, Chadalawada Ramanamma Engineering College (Autonomous), Tirupati from 21st 25th June 2021.
- 24. Participated Two Week STTP on "Emerging Technologies in Electric Vehicles" organised by Department of Electrical and Electronics Engineering, Bapatla Engineering College, Bapatla from 2nd to 14th, August-2021.
- 25. Participated five days AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Control Techniques in Electric Vehicles and Battery Management" from 04th to 08th October-2021 at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad.
- 26. Participated One week National level Intercollegiate Online Faculty Development Program on Outcome Based Education & Bloom's Taxonomy organised by the Internal Quality Assurance Cell of Ramakrishna Mission Vivekananda Centenary College (Autonomous), Kolkata in association with IPSR solutions limited during 08th to 15th November 2021.
- 27. Participated in the "Women Professional Meetup Face Challenges of Future Technologies" Organized by IEEE Hyderabad Section WIE AG in Association with IEEE Guntur Subsection at RVR&JC College of Engineering on 23rd Dec-2022.
- 28. Participated the One Week Short Term Training Program on "Design, Implementation and Control of Electrical Systems using MATLAB" held during 3rd 7th January 2023 at Bapatla Engineering College, Bapatla.
- 29. Participated and contributed to the "World Environment Day 2023" by implementing the activities of Mission LiFE, Hyderabad in the month of June 2023.
- 30. Participated one Week STTP on "Electrical CAD Design" organised by Department of Electrical and Electronics Engineering, Bapatla Engineering College, Bapatla from 26th June 2023 to 1st July 2023.
- 31. Participated national seminar on "Recent Advances in Mathematical and Statistical Methods for Science and Technology" December 22, 2023, organized by Department of Mathematics & Humanities, R.V.R. & J.C. College Of Engineering, Guntur.

Membership of Professional Bodies:

- 1. Member of IAENG
- 2. Member of ISTE
- 3. Senior Member of Institute of Research Engineers and Doctors (IRED).

Workshops / Conferences Organized:

- 1. Convener for Electric Tarang 2015
- 2. Convener of ELECTRIC TARANG 2018

Other Duties:

- 1. Convener, N.E.S. Girls Hostel.
- 2. Assistant Controller of Examinations(Marh2019 to Dec2023)
- 3. Member Board of Studies EEE Department
- 4. Convener-Innovation and start-up policy
- 5. Coordinator-Start-up Activity
- 6. Incharge- Power Electronics Laboratory