



Faculty Profile.

Name: Dr. Pakkiraiah B. B. Tech, M. Tech, Ph. D, MIEEE, LMISTE, MIAENG, LMInSc & AMIRED.

Associate Professor & R&D and NBA Coordinator,
Best Young Scientist National Awardee,
Research Excellence Awardee,
Best Outstanding Young Researcher National Awardee,
SERB Qualified Unique Identification Document (SQUID) : SQUID-1988-PB-0054
<https://scholar.google.com/citations?user=QYqyjUgAAAAJ>
[https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=57189087274&zone=](https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=57189087274&zone=Web of Science Researcher ID/L-3612-2016)
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<https://publons.com/a/1410999>
<https://www.linkedin.com/in/dr-pakkiraiah-bhupanapati-1450ab97/>
Microsoft Academic ID: DrPakkiraiahBhupanapati

About me:

Dr. Pakkiraiah B., presently working as Associate Professor in the department of EEE at Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous. He is having total 48 international publications out of which 5 are “SCI” indexed and “40” are from “Scopus indexed” papers. He published 4 Patents & applied 1 Patent. He is the recipient of “Best Young Scientist National Award”, “Research Excellence Award” & Best Outstanding Young Researcher National Award. He also received gold medal for being as a topper of the class during his graduation. His citations are “251” with h-index “7” and i10 index “7”. Dr. Pakkiraiah also got “10” outstanding excellent reviewing awards from Elsevier, Springer, COMPEL Emerald & Wiley Publishers. He is the reviewer for “27” reputed peer reviewed international journals. He is the member of IEEE, ISTE, IaEng, InSc and IRED. His research area includes power electronics & drives, neural networks, fuzzy logics and new research eras in renewable energy sources.

Contact Details: 7093040630, 8978029934,

Courses Taught: POWER ELECTRONICS, POWER ELECTRONICS CONTROL OF DRIVES, ELECTRIC DRIVES, FACTS, HVDC, ADVANCED ELECTRICAL DRIVES, NEURAL NETWORKS & FUZZY LOGICS, POWER SEMICONDUCTOR DRIVES, RESEARCH

METHODOLOGY & IPR, ARTIFICIAL INTELLIGENT SYSTEMS, POWER ELECTRONIC CONVERTERS, ANALYSIS OF POWER ELECTRONIC CONVERTERS, POWER SEMICONDUCTOR DEVICES, FIELDS & NETWORKS, BEEE, ELECTRICAL CIRCUIT THEORY, MODERN POWER ELECTRONICS, POWER GENERATION & TRANSMISSION SYSTEMS, WIND & SOLAR ENERGY SYSTEMS, PROGRAMMABLE LOGIC CONTROLLERS AND RENEWABLE ENERGY SOURCES

Sponsored Projects: 01

Ongoing Projects: Nil

Completed Projects: 01

Publications: 48

Journal Publications: 30

Conference Publications: 18

- [1] **B. Pakkiraiah** and G. Durga Sukumar, "A New Modified MPPT Controller for Solar Photovoltaic System," *2015 IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)*, pp. 294-299, 2015. (Scopus-Indexed).
- [2] **B. Pakkiraiah** and G. Durga Sukumar, "A New Modified MPPT Controller for Improved Performance of an Asynchronous Motor Drive under Variable Irradiance and Variable Temperature," *International Journal of Computers and Applications-Taylor & Francis-Publisher*, vol.38, no.2-3, pp.61-74, 2016.(Scopus-Indexed).
- [3] **B. Pakkiraiah** and G. Durga Sukumar, "Enhanced Performance of an Asynchronous Motor Drive with A New Modified Adaptive Neuro Fuzzy Inference System Based MPPT Controller in Interfacing with dSPACE DS-1104," *International Journal of Fuzzy Systems-Springer Publisher*, vol.19, no.6, pp.1950-1965, 2017. (SCI-Indexed).
- [4] M. Srikanth, **B. Pakkiraiah**, Poonam Upadhyay and S. Tara Kalyani, "Dual Mode Photovoltaic Bidirectional Inverter Operation for Seamless Power Transfer to DC and AC Loads with the Grid Interface," *International Journal of Photoenergy-hindawi Publisher*, vol.2019, Article Id: 8498435, pp.1-14, 2019. (SCI-Indexed).
- [5] G. Durga Sukumar, T. Rama Subbareddy and **B. Pakkiraiah**, "PID controller Tuning using Co-efficient diagram method for indirect vector controlled drive," *Journal of Electrical Engineering & Technology-Korean Institute of Electrical Engineers-Springer Publisher*, vol.12, no.5, pp.1821-1834, 2017. (SCI-Indexed).

- [6] G. Durga Sukumar, M. Nagaraju and **B. Pakkiraiah**, “Interval Type-2 Fuzzy Space Vector Modulation for Matrix Converter,” *has been Accepted for Publication in SN Applied Sciences-Springer Publisher*, 2022. (SCI-Indexed)
- [7] **B. Pakkiraiah** and G. Durga Sukumar, “Indirect Vector Controlled Induction Motor Drive Better Performance and Analysis with A New Modified MPPT Controller in Interfacing with dSPACE DS 1104,” *Journal of Electrical Engineering (JEE)-Politehnica Publishing House*, vol.17, no.2, pp.190-199, 2017. (Scopus-Indexed).
- [8] **B. Pakkiraiah** and G. Durga Sukumar, “Research Survey on Various MPPT Performance Issues to Improve the Solar PV System Efficiency,” *Journal of Solar Energy-hindawi Publisher*, vol.2016, no.2016, Article ID 8012432, pp.1-20, 2016. doi:10.1155/2016/8012432. (Scopus-Indexed).
- [9] **B. Pakkiraiah** and G. Durga Sukumar, “A Modified MPPT Controller for Indirect Vector Controlled Induction Motor Drive with Variable Irradiance and Variable Temperature in Interfacing with dSPACE DS-1104,” *Journal of Electrical Engineering & Technology-Korean Institute of Electrical Engineers-Springer Publisher*, vol.12, no.5, pp.1921-1934, 2017. (SCI-Indexed).
- [10] **B. Pakkiraiah** and G. Durga Sukumar, “A New Modified Artificial Neural Network Based MPPT Controller for the Improved Performance of an Asynchronous Motor Drive,” *Indian Journal of Science and Technology*, vol.9, no.45, pp.1-10, 2016. (Scopus-Indexed).
- [11] Vanukuru Kranthi Kumar and **Pakkiraiah B.**, “Green Energy Integration to Utility Grid with Power Quality Improvement by Using APF,” *Advances in Electrical and Computer Technologies-Lecture Notes in Electrical Engineering-Springer Publisher Singapore*, vol.672, https://doi.org/10.1007/978-981-15-5558-9_100, pp.1179-1191, 2020. (Scopus-Indexed).
- [12] Krishna Chaitanya Diggavi, Manidhar Thula, **Pakkiraiah B.**, “Solar Tracking System Using IoT,” *Lecture Notes in Electrical Engineering-Springer Publisher*, vol.2020, no.2020, pp.569-578, 2020. (Scopus-Indexed).
- [13] **B. Pakkiraiah** and G. Durga Sukumar, “Performance and Analysis of an Asynchronous Motor Drive with a New Modified Type-2 Neuro Fuzzy Based MPPT Controller Under Variable Irradiance and Variable Temperature,” *Sensors & Transducers-IFSA S.L*, vol.209, no.2, pp.35-44, 2017. (Scopus-Indexed).
- [14] **B. Pakkiraiah**, Pallam Paul Ratnakanth, Ch. Haribabu, O C.handra Sekhar, “Indirect Vector Controlled Asynchronous Motor Drive’s Dynamic Performance and Analysis with A New Modified MPPT Controller,” *International Journal of Engineering & Technology(UAE)*, vol.7, no.2.7, pp.570-576, 2018. (Scopus-Indexed).

- [15] Pallam Paul Ratnakanth, **B. Pakkiraiah**, Ch.Haribabu and P.V.Charanteja, "Survey on Various MPPT Techniques with The Interface of Z-Source Isolated Bi-Directional DC-DC Converter to Get The Better Efficiency of The PV System," *Journal of Advanced Research in Dynamical and Control Systems-JARDCS*, vol.10, no.9, pp.1761-1781, 2018. (Scopus-Indexed).
- [16] Krishna Chaitanya Diggavi and **B. Pakkiraiah**, "Comparative Analysis of a 2-Level and 3-Level Constant Current Controller Based MMC for Grid Tied Solar PV System," *Journal of Advanced Research in Dynamical and Control Systems-JARDCS*, vol.10, no.9, pp.1874-1881, 2018. (Scopus-Indexed).
- [17] Kranthi Kumar Vanukuru and **B. Pakkiraiah**, "Development of Control techniques for SAPF for Power Quality Enhancement," *Journal of Advanced Research in Dynamical and Control Systems-JARDCS*, vol.10, no.9, pp.1900-1907, 2018. (Scopus-Indexed).
- [18] M. Venkateswarlu and **B. Pakkiraiah**, "Power-Management Strategy of a Grid- Connected PV-FC Hybrid System Based on Fuzzy Logic Controller," *Journal of Advanced Research in Dynamical and Control Systems-JARDCS*, vol.10, no.9, pp.1829-1840, 2018. (Scopus-Indexed).
- [19] M. Tanuja, B. Jyothi and **B. Pakkiraiah**, "Simulation of Switching Loss of Bus-Clamping PWM Sequences based on SVPWM," *Journal of Advanced Research in Dynamical and Control Systems-JARDCS*, vol.10, no.9, pp.1757-1766, 2018. (Scopus-Indexed).
- [20] Hari Babu. CH, **Pakkiraiah. B**, and Paul Ratnakanth. Pallam, "Enhanced Performance and Analysis of F2DTC of Asynchronous Motor Drive with TDCMLI Adopting SVPWM," *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, vol.8, no.5, pp.652-662, March-2019. (Scopus-Indexed).
- [21] Yeddu, D., Kota, S., **Pakkiraiah, B.**, "Enhanced PV solar power system design with a mppt controller as a function of temperature," *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, vol.8, no.5, pp.456-460, January-2019. (Scopus-Indexed).
- [22] Sudarshan T, Naga Chaitanya M, **Pakkiraiah B**, "Design and Cost Benefit Analysis of a 10KW Standalone Photovoltaic System in Krishna Milk Union," *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, vol.8, no.6, pp.1079-1083, April-2019. (Scopus-Indexed).
- [23] Kranthi Kumar Vanukuru and **B. Pakkiraiah**, "Distributed Generation Integration to Grid Using DG Controlled PQ Theory," *International Journal of Engineering and Advanced Technology (IJEAT)*, ISSN: 2249 – 8958, Volume-8, Issue-6S3, pp.754-760, September 2019. (Scopus-Indexed).

- [24] Seetharamudu Sirasala and **B. Pakkiraiah**, “A New Converter Topology Designed for Cascaded H Bridge Fifteen Level Inverter,” *International Journal of Engineering and Advanced Technology (IJEAT)*, ISSN: 2249 – 8958, Volume-8, Issue-6S3, pp.792-795, September 2019. (Scopus-Indexed).
- [25] Venkateswarlu M and **B. Pakkiraiah**, “Power Quality Improvement of AC Distribution System using 3 Phase PV Integrated UPQC with Advanced Control Strategy,” *International Journal of Engineering and Advanced Technology (IJEAT)*, ISSN: 2249 – 8958, Volume-8, Issue-6S3, pp.819-827, September 2019. (Scopus-Indexed).
- [26] V.Geethika Vidmahe, Rekha Mudundi and **B. Pakkiraiah**, “Closed loop Unity Power Factor Three Phase Induction Motor Drive Using Combined Extinction Angle and PWM Controlled Technique,” *High Technology Letters*, ISSN NO : 1006-6748, vol.27, no.6, pp.563-569, 2021.
- [27] Akhila and **B. Pakkiraiah**, “Z-SOURCE BASED SINGLE-PHASE BUCK-BOOST MATRIX CONVERTER,” *High Technology Letters*, ISSN NO: 1006-6748, <http://www.gjstx-e.cn/>, vol.27, no.9, pp.77-85, 2021.
- [28] G. Sai Kiran, M. Rekha, P. Srividya devi and B. Pakkiraiah, “Fuzzy MPPT based Modified Multilevel Cascaded H-Bridge Inverter for Photovoltaic System,” *High Technology Letters*, ISSN NO: 1006-6748, vol.27, no.12, pp.188-196, 2021.
- [29] K. Pandu Ranga, G. Durga Sukumar, **B. Pakkiraiah** and M. Subba Rao, “Neuro Fuzzy based Ps & Qs Controller for Doubly Fed Induction Generator with Wind Turbine,” *IEEE International Conference on Electrical Power and Energy Systems (ICEPES-2016)*, held at Maulana Azad National Institute of Technology, Bhopal, Madhya Pradesh on 14th-16th December 2016, pp.139-144, 2016. (Scopus-Indexed).
- [30] K. Pandu Ranga, G. Durga Sukumar, **B. Pakkiraiah** and M. Subba Rao, “Neuro Fuzzy Based Indirect Vector Control Doubly Fed Induction Generator,” *IEEE Seventh India International Conference on Power Electronics (IICPE-2016)*, held at Thaper University-Patiala, pp.1-6, 2016. (Scopus-Indexed).
- [31] **B. Pakkiraiah** and G. Durga Sukumar, “A New Modified Adaptive Neuro Fuzzy Inference System Based MPPT Controller for the Enhanced Performance of an Asynchronous Motor Drive,” *Advancement of Computer Communication & Electrical Technology (ACCET-2016) 21st-22nd October 2016-Taylor & Francis CRC Press*, pp.349-356, 2017. (GOT BEST PAPER AWARD). (Scopus-Indexed).
- [32] **B. Pakkiraiah** and G. Durga Sukumar, “Survey on Solar Photovoltaic System Performance with Various MPPT Techniques to Improve the Efficiency,” *Advancement of Computer*

Communication & Electrical Technology (ACCET-2016) 21st - 22nd October 2016-Taylor & Francis CRC Press, pp.295-306, 2017. (Scopus-Indexed).

- [33] **B. Pakkiraiah** and G. Durga Sukumar, "Isolated Bi-directional DC-DC Converter's Performance and Analysis with Z-Source by Using PWM Control Strategy," *IEEE 4th International Conference on Electronics and Communication Systems (ICECS-2017)*, pp.179-183, 2017. (Scopus-Indexed).
- [34] **B. Pakkiraiah**, P. Dharani, V. Jaswanth, N. S. S. Durga Prasad, Anmol Agarwal and K. Ravikiran, "Dynamic Performance and Analysis of an Asynchronous Motor Drive with the Interface of Z-Source Isolated Bi-directional DC-DC Converter," *2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT-2018)*, 18th -19th May 2018, pp.1403-1408, 2018. (Scopus-Indexed).
- [35] CH.Haribabu, **B. Pakkiraiah**, Member IEEE, ISTE, Pallam Paul Ratnakanth, O. Chandra Sekhar, Akula Anudeep and Thota Sudarshan, "Peak Power Generation in Power Grid Connected PV System," *International Conference on Innovations in Engineering, Technology and Sciences (ICIETS) 20th & 21st September 2018, NIE Institute of Technology, Mysore-Karnataka*, 2018. (Scopus-Indexed).
- [36] **Pakkiraiah Bhupanapati**, Member IEEE, ISTE, IAENG, Paul Ratnakanth Pallam, Ch Haribabu, Hemanth Kumar V., Sriviswanadh Gubba, Manoj Arisetti, Venkat Ramana Sunkireddy and Edara Sreelatha, "Asynchronous Motor Drive's Improved Performance and Analysis with a New Modified Artificial Neural Network Based MPPT Controller," *Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019) to be held at Sikkim Manipal Institute of Technology Deemed to be University-Sikkim from February 25th -28th*, pp.1-6, 2019. (Scopus-Indexed).
- [37] M. Rama narayan reddy, A. R. Somala, S. Jarupula and **B. Pakkiraiah**, "Design of Optimal Integrator Control Algorithm for Single-Stage Grid Connected Solar Array System," *2021 International Conference on Sustainable Energy and Future Electric Transportation (SEFET)*, Hyderabad, India, doi: 10.1109/SeFet48154.2021.9375774, pp. 1-6, March 16, 2021. (Scopus-Indexed).
- [38] C. R. Reddy, K. H. Reddy, B. S. Goud and **B. Pakkiraiah**, "A Deep learning approach for Islanding Detection of Integrated DG with CWT and CNN," *2021 International Conference on Sustainable Energy and Future Electric Transportation (SEFET)*, Hyderabad, India, doi: 10.1109/SeFet48154.2021.9375798, pp. 1-7, March 16, 2021. (Scopus-Indexed).
- [39] Jadav Pravalika, **Dr Pakkiraiah B** and Rekha Mudundi "Improved Performance of an Asynchronous Motor Drive with a New Modified Incremental Conductance based MPPT

Controller”, E3S Web of Conferences 309, 01183 (2021), ICMED 2021, <https://doi.org/10.1051/e3sconf/202130901183>, pp.1-8, 2021.

- [40] Venkateswarlu M and **Pakkiraiah B**, “Enhancement of Power Quality in Weak Grid Fed Wind Energy System by using ANFIS Controller, *Third International Conference on Intelligent Computing, Instrumentation and Control Technologies, ICICICT-2022, IEEE*, 11-12th August-2022. (Scopus-Indexed).
- [41] M. Venkateswarlu and **B. Pakkiraiah**, "Pv Integrated Cuk Converter For UPQC Applications With Power Quality Improvement Using Intelligent Control Techniques," *2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric Transportation(SeFeT)*, 4-6th August-2022, pp.1-9, doi: 10.1109/SeFeT55524.2022.9909223 (Scopus-Indexed).
- [42] **B. Pakkiraiah**, G. Durgasukumar, P. S. Devi, E. Satyanarayana, M. Rekha and P. P. Kumar, "Development of Hut Shaped Solar Photo Voltaic System with Rotating Convex Lens And Concave Mirror Mechanism," *2023 Third International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT)*, 05th-06th, January 2023 Bhilai, India, 2023, pp. 1-8, doi: 10.1109/ICAECT57570.2023.10117700, (Scopus-Indexed).
- [43] **B. Pakkiraiah**, P. Madhav, R. Vishnu, O. Nitish Kumar, E. Nithish and P. Ravikanth, “Grid-Interfaced Solar PV Powered System for Electric Vehicle Battery Application,” *5th International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED 2023) organized by Department of Mechanical Engineering & Department of Electrical and Electronics Engineering at Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad, Telangana during 19-20 May 2023* (Scopus-Indexed).
- [44] Moshina Begum, D. Raveendhra and **B. Pakkiraiah**, “Power Electronic converter with Improved Power Quality for EV Charger Application,” *5th International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED 2023) organized by Department of Mechanical Engineering & Department of Electrical and Electronics Engineering at Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad, Telangana during 19-20 May 2023* (Scopus-Indexed).
- [45] Moshina Begum, D. Raveendhra and **B. Pakkiraiah**, “Power factor Enhancement in EV Charger fed by a New Modified BL Converter,” *5th International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED 2023) organized by Department of Mechanical Engineering & Department of Electrical and Electronics Engineering at Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad, Telangana during 19-20 May 2023* (Scopus-Indexed).

- [46] Prasad B, **B. Pakkiraiah**, Santosh Bejuga and Ch. Subba Reddy, "A NEW ADAPTIVE HYBRID NEURAL NETWORK AND FUZZY LOGIC BASED FAULT CLASSIFICATION APPROACH FOR TRANSMISSION LINES PROTECTION," *International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering*, vol.1 no.1, pp.10-13, 2013.
- [47] **B. Pakkiraiah** and Ms. Dasari Sudha, "Performance and Analysis of Z-Source Isolated Bidirectional DC- DC Converter by Using PWM Control Strategy," *Int. Journal of Engineering Research and Applications*, vol.3, no.6, pp.79-84, 2013.
- [48] **B. Pakkiraiah** and L. Raja, "Negative Sequence and Harmonic Currents Compensation in High-Speed Electric Railway," *Journal of Environmental Science, Computer Science and Engineering & Technology-JECET*, vol.3, no.1, pp.251-260, 2013.

Research Interests: Power Electronics & Drives, Neural Networks & Fuzzy Logics and new Research Eras in Renewable Energy Sources.

Seminars/Workshops Attended: 13

- [49] **B. Pakkiraiah**, Three day National Work Shop on, "Advancements in Green Energy and Automation Control of Electrical Power (AGEACEP)," at VFSTRU, Vadlamudi-Andhra Pradesh, held on 16th – 18th October 2014.
- [50] **B. Pakkiraiah**, Two day National Workshop on, "Solar Technologies," at VFSTRU, Vadlamudi-Andhra Pradesh, held on 20th -21st August 2015.
- [51] **B. Pakkiraiah**, Three day International Pre Conference Tutorial on, "Programming Simulation and Optimization using MATLAB/SIMULINK," at RCCIT, Kolkata-West Bengal, held on 20th -22nd November 2015.
- [52] **B. Pakkiraiah**, Two day International Workshop on "Power Control, Communication and Computational Technologies for Sustainable Growth (PCCCTSG)," at G. Pulla Reddy Engineering College (Autonomous), Kurnool-Andhra Pradesh, held on 11th -12th December 2015.
- [53] **B. Pakkiraiah**, Five day Faculty National Workshop on, "Real Time Control of Electrical Machine Drives with dSPACE and FPGA, at VFSTRU, Vadlamudi-Andhra Pradesh, held on 1st -5th June 2016.
- [54] **B. Pakkiraiah**, International Conference/Workshop on, "Allied Electrical and Communication Systems (ICA ECS), at VFSTRU, Vadlamudi-Andhra Pradesh, held on 8th - 10th December 2016.
- [55] **B. Pakkiraiah**, One day workshop on "Cascading Failures and Sub-synchronous Oscillation Detection using Synchrophasors," at KLEF Deemed to be University on 06th November 2017.

- [56] **B. Pakkiraiah**, One day faculty development programme, “Emotional intelligence-the other side of smart,” at KLEF Deemed to be University on 07th November 2017.
- [57] **B. Pakkiraiah**, A two day national workshop on “ Smart & Green Technologies for Sustainable Energy (NWSGTSE-2k17)” at KLEF Deemed to be University on 19th & 20th December 2017.
- [58] **B. Pakkiraiah**, One day national workshop on “Team building and stress management,” at KLEF Deemed to be University on 26th December 2017.
- [59] **B. Pakkiraiah**, One day workshop on “leadership essentials,” at KLEF Deemed to be University on 23rd January 2018.
- [60] **B. Pakkiraiah** has organized the one day workshop on “Recent trends of drone technology and its applications” on 14th March 2019 in Samyak-2K19 at KLEF Deemed to be University.
- [61] **B. Pakkiraiah** has attended One day workshop on “Effective conversation practice in English,” at KLEF Deemed to be University on 26th March 2019.

Patents:

- [1] Patent Published on 21/02/2020 with the topic of “**TRIANGULAR PAIR OF SOLAR PHOTO-VOLTAIC PANELS WITH ROTATING GEAR MECHANISM**” with vide application no:**202041006598**
- [2] Patent Published on 25/09/2020 with the topic of “**DUAL-MODE PHOTOVOLTAIC BIDIRECTIONAL INVERTER OPERATION FOR SEAMLESS POWER TRANSFER TO DC AND AC LOADS WITH THE GRID INTERFACE**” with vide application no: **202041039813**
- [3] Patent Published on 04/03/2022 with the topic of “**SYSTEM AND METHOD TO ROTATE LENS OF PHOTOVOLTAIC PANEL FOR TRACKING POWER**” with vide application no: **202241009237**
- [4] Patent filed on 10/06/2022 and Granted on 16/05/2023 with the topic of “**Motor Cycle**” with vide application no: **365861-001**
- [5] Patent applied on the topic of “**Performance Analysis of PI, T1NFC and T2NFC of an Indirect Vector Control based Induction Motor using dSPACE RTI-2812**”

Funded Projects:

- 1) “**Design and Development of Back to Back Photo-voltaic Solar Panels with Rotating Convex Lens and Concave Mirror Using Type-2 Fuzzy/Neuro-Fuzzy based Controller for Industrial Drive to get Better Output in Lesser Area,**” with No. SERB/ET-069/2013 with the worth of **Rs. 27,97,800/-** completed as JRF

Consultancy Projects: 1

- [1] **“Solar based Battery Charging and Discharging Unit”** from **“Mr Yuvaraja Ahmy Technologies,”** Chennai with the worth of **Rs. 10,000/-** from 13/02/2018 to 15/03/2018

No. of Citations: “251”; h-index: “7” and i10-index: “7”

Book Chapters: 02

- [1] **“Green Energy Integration to Utility Grid with Power Quality Improvement by Using APF,”** *Advances in Electrical and Computer Technologies-Lecture Notes in Electrical Engineering-Springer Publisher*, 2020.
- [2] **“Solar Tracking System Using IoT,”** *Innovations in Electrical and Electronics Engineering- Lecture Notes in Electrical Engineering-Springer Publisher*, 2020.

Guided:

B. Tech: 11

M. Tech: 5

Ph. D: 6 (ongoing)

Experience: 10.11 Years

- ❖ **1.5 Years** i.e. (from 25/06/2010 to 28/11/2011) as a **R&D Assistant and Testing Engineer** at **SERVOMAX India Ltd**, cherlapalli, Hyderabad.
- ❖ **3.5 Years** i.e. (from 06/02/2014 to 15/06/2017) as a **JRF for the SERB-DST UGC Government of India-funded project** at **VFSTR University**, Vadlamudi, Guntur, Andhra Pradesh.
- ❖ **2.1 Years** i.e. from 15/06/2017 to 22/01/2018 as **Assistant Professor & Associate Professor** from 23/01/2018 to 01/07/2019 in the **EEE Dept., KL University (NAAC A++ Accreditation in category-I University and NIRF-49th Rank)**, Vaddeswaram, Guntur, Andhra Pradesh.
- ❖ **Associate Professor** from 08/07/2019 to till date in the **EEE Dept., Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous (NAAC “A++” grade, NBA Accreditation and NIRF-165rd Rank)**, Bachupally, Hyderabad, Telangana State.
- ❖ **Worked as Convener for IEEE/ISTE professional society activity committee** for both faculty and students from 01/ 09/2017 to 01/07/2019 and also the faculty in-charge for the same **NAAC file at KL University (NAAC A++ Accreditation in category-I University and NIRF-49th Rank)**, Vaddeswaram.

- ❖ **Worked as M. Tech Coordinator** from 14/09/2018 to 01/07/2019 at **KL University** (NAAC A++ Accreditation in category-I University and NIRF-49th Rank, Vaddeswaram.
- ❖ **Worked as Faculty in-charge** for faculty & staff affairs NAAC file from 01/ 09/2017 to 01/07/2019 at **KL University** (NAAC A++ Accreditation in category-I University and NIRF-49th Rank, Vaddeswaram.
- ❖ **Worked as Faculty in-charge** for Alumni higher studies progression NAAC file from 01/09/2017 to 01/07/2019 at **KL University** (NAAC A++ Accreditation in category-I University and NIRF-49th Rank, Vaddeswaram.
- ❖ **Worked as Faculty coordinator for both B. Tech and M. Tech Active Learning Methods** NAAC file from 14/09/2018 to 01/07/2019 at **KL University** (NAAC A++ Accreditation in category-I University and NIRF-49th Rank, Vaddeswaram.
- ❖ **Power Electronics Lab in-charge** from 12/07/2019 to till date at **Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous**, NAAC “A++” grade, NBA Accreditation and NIRF-173rd Rank, Bachupally.
- ❖ **M. Tech Power Electronics Student Mentor** 12/07/2019 to till date at **Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous**, NAAC “A++” grade, NBA Accreditation and NIRF-173rd Rank, Bachupally.
- ❖ **NAAC R&D File coordinator for EEE Department** from 26/02/2021 to till date at **Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous**, NAAC “A++” grade, NBA Accreditation and NIRF-173rd Rank, Bachupally

Awards:

- ❖ Got gold medal in B. Tech for being as a topper.
- ❖ Got Best Young Scientist National Award.
- ❖ Research Excellence Award.
- ❖ Best Outstanding Young Researcher National Award.
- ❖ Got 2 best paper awards.
- ❖ Got 10 outstanding excellent reviewing awards from Elsevier, Springer, COMPEL Emerald & Wiley Publishers.
- ❖ Got few prizes in national level ppt's, technical quiz and group discussions from various colleges.

Invited Talks:

- [1] Attended as session chair/judge at St. Samuel George Institute of Engineering & Technology, Markapur-523316, Prakasam Dist. Andhra Pradesh on 17th & 18th March 2023 on the event of “EMER’GE’-2K23, 17th National Level Techno Cultural Fest”.
- [2] Attended as session chair at Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous on 4-6th August 2022 for 2022 IEEE 2nd International Conference on Sustainable Energy and Future Electric transportation (SEFET), IEEE, 2022.
- [3] Attended as session chair at Avanthi Institute of Engineering & Technology in association with CITY University, Malaysia at 1st International Conference on Advances in Communications, Computing & Electronic Systems (ACCES-2022) on 6th & 7th May 2022.
- [4] Attended as session chair/judge at St. Samuel George Institute of Engineering & Technology, Markapur-523316, Prakasam Dist. Andhra Pradesh on 11th & 12th March 2022 on the event of “EMER’GE’-2K22, 16th National Level Techno Cultural Fest”.
- [5] Attended as session chair at Gokaraju Rangaraju Institute of Engineering and Technology-Autonomous on 24-26th September 2021 for 3rd International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED)-2021.
- [6] Attended as session chair/judge at St. Samuel George Institute of Engineering & Technology, Markapur-523316, Prakasam Dist. Andhra Pradesh on 15th & 16th March 2020 on the event of “EMER’GE’-2K20, 14th National Level Techno Cultural Fest”.
- [7] Attended as session chair/judge at St. Samuel George Institute of Engineering & Technology, Markapur-523316, Prakasam Dist. Andhra Pradesh on 24th & 25th February 2019 on the event of “EMER’GE’-2019, 13th National Level Techno Cultural Fest”.
- [8] Attended as session chair/judge at St. Samuel George Institute of Engineering & Technology, Markapur-523316, Prakasam Dist. Andhra Pradesh on 14th & 15th March 2018 on the event of “EMER’GE’-2K18, 12th National Level Techno Cultural Fest”.

Reviewer for the following journals:

- [1] **IEEE-Transactions on Industrial Informatics-IEEE-Publisher (SCI-Indexed).**
- [2] **IEEE-IAS Sustainable Energy Conversion Systems Committee-IEEE-Publisher (SCI-Indexed).**
- [3] **IEEE-Transactions on Industry Applications or IEEE Industry Applications Magazine-IEEE-Publisher (SCI-Indexed).**
- [4] **IEEE-IAS Publications-IEEE-Publisher (SCI-Indexed).**
- [5] **IEEE-IAS Industrial Automation and Control Committee-IEEE-Publisher (SCI-Indexed).**
- [6] **IEEE-IAS Building Automation, Metering and Microgrids for Energy Efficiency in Industrial and Commercial Power Systems-IEEE-Publisher (SCI-Indexed).**
- [7] **IEEE-IAS Industrial Power Converter Committee-IEEE-Publisher (SCI-Indexed).**
- [8] **IEEE-IAS Power Systems Engineering Committee-IEEE-Publisher (SCI-Indexed).**
- [9] **IEEE-IAS Renewable and Sustainable Energy Conversion Systems Committee (SCI-Indexed).**
- [10] **IEEE-IAS Industrial Drives Committee-IEEE-Publisher (SCI-Indexed).**
- [11] **IEEE Access Publishes-IEEE-Publisher (SCI-Indexed).**
- [12] **IETE Journal of Research-IETE-Publisher (SCI-Indexed).**

- [13] Renewable & Sustainable Energy Reviews, United States Journal, **Elsevier Publisher (SCI-Indexed).**
- [14] International Journal of Adaptive Control and Signal Processing-**Wiley Publisher (SCI-Indexed).**
- [15] International Journal of Fuzzy Systems, Taiwan Journal, **Springer Publisher (SCI-Indexed).**
- [16] COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, **COMPEL Emerald Publisher (SCI-Indexed).**
- [17] Energy Journal, **Elsevier Publisher (SCI-Indexed).**
- [18] Renewable Energy and Focus, **Elsevier Publisher. (SCI-Indexed).**
- [19] Digital Signal Processing, **Elsevier Publisher (SCI-Indexed).**
- [20] Electrical Engineering, **Springer Publisher (SCI-Indexed).**
- [21] Journal of Electrical Engineering & Technology, **Springer Publisher (SCI-Indexed).**
- [22] International Journal of Green Energy, **Taylor & Francis Publisher (SCI-Indexed).**
- [23] Journal of The Institution of Engineers (India): Series B (IEIB), **Springer Publisher (SCI-Indexed).**
- [24] International Transactions on Electrical Energy Systems, **Wiley Publisher (SCI-Indexed).**
- [25] International Journal of Power Electronics and Drive Systems (**IJPEDS**) (**Scopus- Indexed**).
- [26] InSc-International Journal of Electronics, Electrical and Communication Engineering (**IJECE**)
- [27] British Journal of Applied Science & Technology, **SCIENCEDOMAIN International Publisher.**

Memberships: 05

Member of **IEEE, ISTE, IaEng, InSc and IRED**