

# **CH.VINAY KUMAR** Assistant Professor

Education Qualifications:M.TechSpecialization:Power Electronics



# Membership of Professional Bodies:

- 1. The Indian Society for Technical Education (ISTE) (LM-129435)
- 2. The Institution of Engineers(India) (M-1685273)
- 3. Life Member Indian Red Cross Society
- 4. Member in International Association of Engineers

## **Responsibilities Held at Institution Level:**

- 1. Anti–Ragging Duties
- 2. Member of various committees in NIRVANA
- 3. Student Bus In-charge for route no.19

## **Responsibilities Held at Department Level:**

- 1. Lab In-charge for Advanced Power Electronic Converters Lab
- 2. Department Time Table In-Charge
- 3. Department Alumni coordinator
- 4. Department TASK coordinator

## **Guest Lecture Delivered:**

1. Delivered Guest Lecturer on "Electrical engineering and an Overview of Power System Scenario" at MALLA REDDY ENGINERERING COLLEGE for 1st and 2nd year B.Tech EEE students on 5th August 2018.

## Courses Handled at Under Graduate /Post Graduate Level:

- 1. UG: Network Theory, Electrical and Electronics Instrumentation, Electrical Engineering, Basic Electrical and Electronics Engineering,Utilization of Electrical Engineering, Power systems-II, Power Electronics, Electrical Circuits, Electrical Machines,Linear System Analysis
- 2. PG: Power Electronics Applications For Renewable Energy Sources

## **Publications:**

- Dr.P.Ram Kishore Kumar Reddy, Mr.Ch.Vinay Kumar, Dr.P.Nagasekhar Reddy, Dr.P.Lakshmi Supriya, Optimization Control Scheme for Electric Vehicles using Cyber Physical Systems, Journal of Information and Computational Science, VOLUME-11, ISSUE-6, June' 2021; 848-856, DOI:10.12733.JICS.2021.V11I6.535569.34097, ISSN: 1548-7741.
- 2. Mr.Gajangi Arun Kumar, Dr.P.Lakshmi Supriya, Mr.Ch.Vinay Kumar, "Power Factor Improvement in PMBLDC Motor Drive using Bridge Less Ultra Luo Converter", International Journal of Advances in Engineering and Management (IJAEM), Volume 3, Issue 5 May 2021, pp: 164-167, ISSN: 2395-5252.
- 3. Ch.Vinay Kumar, G.Arun Kumar, Dr.P.Lakshmi Supriya, "A Literature Review on Hybrid Electric Vehicles", International Journal of Advances in Engineering and Management (IJAEM) , Volume 3, Issue 5 May 2021, pp: 164-167, ISSN: 2395-5252.

# ADDRESS:

• E– Block -Room No .508

## JNTUH ID:

#### 8456-150620-001201

EMAIL:

## chvinaykumar\_eee@mgit.ac.in

DATE OF JOINING:

15-06-2015

## EXPERIENCE - 12 Years

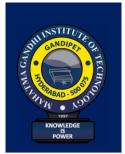
• Teaching - 12

## SUMMARY:

- Publications 16
- Conferences 3

## **EVENTS:**

- Organized 2
- Attended 41



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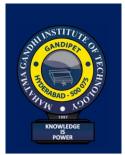
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- 4. Mr.Kasoju Bharath Kumar, Mr.Ch.Vinay Kumar, Dr.P.Lakshmi Supriya, "Vector Control Technique For Permanent Magnet Synchronous Motor Drives Using Pi Controllers", International Journal of Current Engineering And Scientific Research (IJCESR), VOLUME-8, ISSUE-6, May' 2021 1 to 4, ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697.
- 5. Ch.Vinay Kumar, Dr.P.Ram Kishore Kumar Reddy, Dr. P. Lakshmi Supriya, Variable Solar Irradiance And Vi-Harmonics Controlling Usingupqmc Method , Turkish Journal of Physiotherapy and Rehabilitation, Volume-32 & Issue-2 , May'2021 3005-3013, Scopus, ISSN 2651-4451 | e-ISSN 2651-446X.
- 6. G.arun kumar, dr.p.lakshmi supriya, ch.vinay kumar, dr.p.ram kishore kumar reddy, an improved voltage balancing method for grid connected pv system based ON MMC, Turkish Journal of Physiotherapy and Rehabilitation, Volume-32 & Issue-2, May'2021 3014-3027, Scopus, ISSN 2651-4451 | e-ISSN 2651-446X.
- 7. Dr.p.ram kishore kumar reddy, dr.p.lakshmi supriya, ch.vinay kumar, g.arun kumar , the modular multilevel converter for advanced grid balancing systems , Turkish Journal of Physiotherapy and Rehabilitation, Volume-32 & Issue-2 ,May'2021 2866-2873, Scopus, ISSN 2651-4451 | e-ISSN 2651-446X.
- 8. G. Arun Kumar, Ch. Vinay Kumar, Dr. P. Lakshmi Supriya, "IoT in Hybrid Grid Integrated Management System", International Journal of Scientific Research in Science, Engineering and Technology, Volume 9 - Issue 1 -Published : March 25, 2021, Page No : 242-248, Print ISSN: 2395-1990 | Online ISSN : 2394-4099.
- P.Lakshmi Supriya, Dr.P.Ram Kishore Kumar Reddy, Ch.Vinay Kumar, "UPQC Based Solar Grid Maintained System For Variable Power And Voltage Conditions", Vol.12 No.10 April (2021), 4795-4803, Scopus, e-ISSN 1309-4653.
- Devireddy Sathish, Gajangi Arun Kumar, Chowdary Vinay Kumar, Instantaneous Symmetrical Component Theory (ISCT) Controller for Mitigation of Harmonics in Micro-Grid System, International Journal of Innovative Technology and Exploring Engineering, Volume-9, Issue-8, June 2020, Page No.524, ISSN: 2278-3075.
- 11. Gajangi Arun Kumar, Chowdary Vinay Kumar, K Saikumar, Implementation of Electric Vehicles and Its Recent Development, Tathapi, Vol.-19, Issue-34 June'2020, Page No.167, ISSN:2320-0693.
- 12. Chowdary Vinay Kumar, Gajangi Arun Kumar, Effective Cascaded H-Bridge Symmetrical and Asymmetrical Multilevel Inverter for an Industrial Drive, Aegaeum Journal, Volume 8, Issue 6, June-2020, Page No.1672, ISSN: 0776-3808
- Mahesh Chanda, Gajangi Arun Kumar, Chowdary Vinay Kumar, Modeling and Simulation of Control Scheme for Electric Vehicle integrated with Fuel Cell and Supercapacitor, International Research Journal of Engineering and Technology, Volume: 07 Issue: 05 May 2020, Page No.7332, ISSN. 2395-0056
- 14. Chowdary Vinay Kumar, Gajangi Arun Kumar Bapayya Naidu Kommula, K.Madhu, K Saikumar, Fault Detection in IEEE 33kV Distribution and Micro-Grid Networks using Hybrid Fuzzy-GA Approach, International Journal of Advanced Science and Technology, Vol. 29, No.4, May 2020, Page No.631, ISSN: 2005-4238 (Print)ISSN: 2207-6360 (Online).



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- 15. Ch. Vinay Kumar, G.Madhusudhana Rao, *U.Srinivasulu*, "Integration of Zeta Converter Topology in High Gain Single Stage Boosting Inverter for Renewable Applications", International Journal of Advanced Science and Technology, Vol. 29, No.4, May 2020, Page No.631, ISSN: 2005-4238 (Print)ISSN: 2207-6360 (Online).
- G. Arun Kumar, Ch.Vinay Kumar, Power Quality Enhancement by using Multi Converter Unified Power Quality Conditioner, International Journal of Engineering Research & Technology, Volume-09-Issue-03-March-2020, Page No.658, ISSN No.2278-0181

## **Conferences:**

- 1. Ch.Vinay Kumar, G.Madhusudan Rao, U.Srinivasulu, Integration of Zeta converter topology in High Gain Single Stage Boosting Inverter for Renewable Applications, The Springer 2<sup>nd</sup> International Conference on Cognitive Informatics and Soft Computing, 9<sup>th</sup> to 10<sup>th</sup> April'2019
- 2. Dr.P. Ram Kishore Kumar Reddy, Ch.Vinay Kumar, "Study of Seven Level Diode Clamped Multilevel Inverter Topology for Induction Motor Drive" Two Day National Conference on "Recent Trends in Electrical Engineering", ISBN:978-93-88808-57-6, Department of Electrical & Electronics Engineering, MGIT, 28th and 29th February 2020
- 3. Ch.Vinay Kumar, G.Madhusudan Rao "Three Phase Tri State Buck-Boost Integrated Inverteer for Solar Applications" Two Day National Conference on "Recent Trends in Electrical Engineering", ISBN:978-93-88808-57-6, Department of Electrical & Electronics Engineering, MGIT, 28th and 29th February 2020.

## **Events Organized:**

#### FDPs/STTPs:

1. As a Co-Convener of the program organized a One Week Online Faculty Development Programme titled "Real Time Aspects of Power System Scenario" from 6th July to 10th July'2020

#### Refresher Courses/ Workshops/ Webinars/ Seminars/ Guest Lecture:

2. As a Co-Convener of the program organized a One Day Online Webinar on "Magnetic Levitation and High Speed Trains" on 1st July'2020.

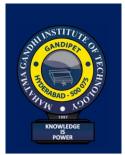
## **EVENTS ATTENDED:**

#### **Conferences:**

1. Two Day National Conference on "Recent Trends in Electrical Engineering", ISBN: 978-93-88808-57-6, Department of Electrical & Electronics Engineering, MGIT, 28th and 29th February 2020.)

#### **FDPS/STTPS**

- 1. Actively participated in AICTE Sponsored Two Week FDP (Online-Phase-I) on " Sustainable Technologies for Electric Transportation Systems" scheduled on 14th June 2021 – 26th June 2021
- 2. Actively participated in Three Days Faculty Development Programme on "Impact of Controllers in Power Electronics Converter for Electric Vehicles" from 01.06.2021 to 03.06.2021 jointly organized by Department of Electrical and Electronics Engineering and Association of Electrical and Electronics Engineers, Dr.N.G.P.Institute of Technology, Coimbatore, Tamilnadu, India.
- 3. Actively Completed successfully a Five Day Online Faculty Development Program on "Software Tools for Electric Power System Analysis – STEPSA 2021" organized by Electrical and Electronics Engineering Department, J.



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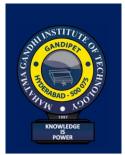
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B. Institute of Engineering and Technology, Hyderabad during 26th to 30th April 2021.

- Completed successfully One Week Online Induction/Refresher Programme (Sttp) On "Electric Hybrid Vehicle(Phase –III)", organized by Department of Electrical & Electronics Engineering, Sree Vidyanikethan Engineering College (Autonomous), Tirupati during 19th – 24th April 2021.
- 5. Completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 15th March to 19thMarch'2021 conducted by Department of Electronics and Communication Engineering, Government College of Engineering, Dharmapuri, Tamilnadu.
- 6. Attended for AICTE sponsored STTP on "Overview of Smart Grid Infrastructure for Demand Side management between 1st to 6th February 2021 organized by Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru.
- 7. AICTE-Sponsored Short Term Training Program on "Trends and Challenges of Hybrid Electric Drive Utilities in Transport Sector "(PHASE-III) conducting online, from 22nd Feb. 2021 to 27th Feb. 2021 organized by Department of Electrical and Electronics Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad
- 8. Attended for AICTE sponsored STTP on "The Role of IoT in Renewable Energy Resources Driving Electric Power Grids" held during 18th to 23rd Jan 2021 organized by Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru.
- 9. Attended for AICTE sponsored STTP on "Smart Grid Technologies for Energy Efficiency and Active Demand Side Management" held during 4th to 9th Jan 2021 organized by Department of Electrical and Electronics Engineering,New Horizon College of Engineering,Bengaluru.
- 10. Registered for STTP on " The Role of IoT in Renewable Energy Resources Driving Electric Power Grids" held during 18th to 23rd Jan 2021 organized by Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru.
- 11. Actively participated in the Three Day Faculty Development Program on "Swachhta Action Plan(SAP)- The Role of Higher Educational Institutions" organized by Mahatma Gandhi Institute of Technology, Hyderabad from 8th to 10th October 2020.
- 12. Actively participated in the One-Week International Webinar/FDP on "Relevance of Mathematics to Core Engineering Sciences" organized by Mahatma Gandhi Institute of Technology, Hyderabad from 12th to 16h October 2020.
- 13. Actively Participated in Five Day Online Workshop on "The Development of the Energy Internet of Things (eIOT) in Green Energy Infrastructure" (01st – 05thSeptember 2020) from 01-09-2020 To 05-09-2020 Organized by Department of Electrical Engineering National Institute of Technology Silchar.
- 14. Actively Participated in a Two-day National level FDP on "Intellectual Property Rights and Patent Filing" from 11.09.2020 and 12.09.2020 organized by Research & Development (R&D) Cell and National Innovation and Start-up policy (NISP) Cell, MGIT



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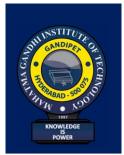
## EVENTS:

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- 15. Attended a Five day Online Faculty Development Program on "Recent Trends in Electrical Engineering ", 08-06-2020 to 12-06-2020, Department of Electrical and Electronics Engineering, Vishnu Institute of Technology, Bhimavaram.
- 16. Attended a Two Day Online Faculty Development Program on "Effective Technical Report Writing Using LaTeX", 08-06-2020 to 09-06-2020, Department of Electronics & Communication Engineering, MGIT, Hyderabad.
- 17. One week online faculty development program on "power electronics applications in smart grid and electric vehicles", 26-05-2020 to 31-05-2020, Department of Electrical and Electronics Engineering, IEEE STUDENT'S CHAPTER-STB 17901, Shantiram engineering College
- 18. One Week FDP on "Art of Writing Papers and Research Methodologies", 7-05-2020 to 13-05-2020, AICTE Margadharshan, Gokaraju Rangaraju Institute of Engineering and Technology.
- 19. Attended Online Course Faculty Development Program on "Digital Image processing using MATLAB" 24-04-2020 to 27-04-2020, Skilltohire.

## Refresher Courses/ Workshops/ Webinars/ Seminars/Guest Lecture

- 1. Attended a Webinar talk on "Teaching with Matlab in Modern Classroom", 16-04-2020, IEEE education Society, IEEE Hyderabad Section and Mathworks.
- 2. Attended a webinar on "Enhance Rersearch Visibility to Improve Ranking" by Tahseen Khanday", 16-04-2020, ELSEVIER
- 3. Attended a webinar organized by ELSEVIER on "Integrating Scopus APIs into your everyday workflow", Martin Edling Anderson, Principal Product Manager and Aileen Christensen, Scopus Marketing Manager, Elsevier
- 4. Attended a webinar on "SSCS & PELS Joint Webinar "Integrated Power Delivery and Management for High-Performance Digital Systems", 22-04-2020, IEEE Education Society
- 5. Actively participated in Webinar on "Magnetic Levitation and High Speed Trains" held on 01-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 6. Actively participated in Webinar on "Magnetic Levitation and High Speed Trains" held on 01-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 7. Actively participated in Webinar on "Superconductivity and its Applications" held on 04-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 8. Actively participated in Webinar on "Modeling of Correlated Uncertainties in Optimal Operation of Islanded Microgrids" held on 13-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 9. Actively participated in Webinar on "Best Practices in Design and Installation of Solar PV Systems" held on 15-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.



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- 10. Actively participated in Webinar on "Electrical Maintenance in Heavy Manufacturing Industries" held on 17-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 11. Actively participated in Webinar on "Hands-on working with E-Tap. Modules: Draw SLD, Load Flow and Fault Current Study" held on 26-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 12. Actively participated in Webinar on "Recent trends in Power Management Strategies for Optimal Operation of Distributed Energy Resources in Microgrids" held on 28-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.
- 13. Actively participated in Webinar on "Power System Scenario" held on 29-07-2020 Organized by Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Hyderabad.

## **ONLINE CERTIFICATIONS::**

- 1. MATLAB Online Course on "MATLAB onramp".
- 2. Coursera course on "Electric Power System", University at Buffalo and The State University of New York
- 3. Coursera course on "Electric Power System", University at Buffalo and The State University of New York
- 4. Coursera course on "Motor and Motor Control Circuits", University of Colorado Boulder and offered
- 5. Coursera course on "Wind energy", Technical University of Denmark (DTU)
- 6. TATA Steels e-learning program on PLCs
- 7. TATA Steels e-learning program on Power system protection
- 8. TATA Steels e-learning program on power systems generation TATA Steels e-learning program on Transformer