Name: Dr. Tripura Pidikiti

Designation: Assistant Professor

Extension number:

Date of Birth: 26.07.1980

Date of Joining:

Educational qualifications:



- o Ph.D. in the faculty of Electrical & Electronics Engineering from JNTUK Kakinada in 2020 with title "Investigations of AC generators for Wind Energy Conversion Systems".
- M.Tech in Power Electronics and Electric Drives from Vignan's Engineering College(Guntur) affiliated to JNTUK, Kakinada in 2009.
- o B.Tech in Electrical & Electronics Engineering from NBKR Institute of Science and technology(Nellore) affiliated to Sri Venkateswara University in 2002.

Experience: 18 years

Industrial Experience: Nil

Teaching Experience: 18 years

Research Interests: Power Electronics and Drives, Wind Energy Conversion Systems, Solar PV

Conversion Systems, Model Predictive control

## Research work / Research papers published:

## Journals:

- 1. Tripura Pidikiti, Tulasi Ram Das G,"Analysis and performance evaluation of DFIG and PMSG based wind energy systems", International Journal of Computing and Digital Systems, 8(6), pp.557-563.
- 2. Tripura Pidikiti, G Tulasi Ram Das,"Predictive Current Control for Zero D-Axis Current Control of PMSG Based Wind Energy Conversion System", i-Manager's Journal on Power Systems Engineering, 6(2), pp. 20-27
- 3. Pidikiti, Tripura, GTR Das, "Modelling and simulation of ZDC controlled PMSG based wind energy conversion system", International Journal of Engineering & Technology(UAE) 7(1.8), 46-50(Scopus Indexed)
- 4. T Pidikiti, GTR Das,"Power Maximization and Control of PMSG Wind Energy System without Wind Speed Sensors", International Journal of Control Theory and Applications 10 (25), 253-260
- 5. Tripura Pidikiti, Tulasi Ram Das G, Anupama K. "Performance Improvement Of PMSG Wind Energy Systems By Using Converters Controlled By Finite Control Set Model Predictive Control", Journal of Electrical Engineering 17 (1), 38-45..(Scopus Indexed)
- 6. K. Rebecca Angeline, Tripura Pidikiti and Srinivasa Kishore Babu Yadlapati. "Modelling and Simulation of ANFIS Controlled Doubly FED Induction Generator Based Wind Energy System for Performance Enhancement", International Journal of control theory and Applications, Volume: No.10 (2017) Issue No.: 5 (2017). Pages: 61-73. (Scopus Indexed)

- 7. Tripura Pidikiti, GTRam Das. "Control of PMSG Based Wind Energy Conversion System With Three-Level Boost And NPC Converters", Journal of Electrical Engineering 16 (4), 401-406. (Scopus Indexed)
- 8. SK Babu Y, T Pidikiti,"A DC-DC Converter with Battery Energy Storage System for Electric Vehicles", International Journal of control theory and applications 9 (33), 61-69.(Scopus Indexed)
- 9. P. Lakshmi Narayana, Srinivasa Kishore Babu Y and Tripura P, "Optimal Torque Control Strategy for A Variable Speed Wind Turbine", International Journal of Control theory and Applications 9 (29), 369-374. (Scopus Indexed)
- 10. Tripura, P., and Y. Srinivasa Kishore Babu. "Intelligent speed control of DC motor using ANFIS." Journal of Intelligent and Fuzzy Systems 26, no. 1 (2014): 223-227.(SCI)
- 11. Tripura, P., and Y. Srinivasa Kishore Babu. "Fuzzy Logic Speed Control of Three Phase Induction Motor Drive." World Academy of Science, Engineering and Technology 60, no. 3 (2011): 1371-1375. (Scopus Indexed)
- 12. Tripura, P., Y. S. Babu, and Y. R. Tagore. "Space Vector Pulse Width Modulation Schemes for Two-Level Voltage Source Inverter." International Journal on Control System & Instrumentation 2, no. 3 (2011) (Full article in EBSCO host).
- 13. Y. S. Babu, Tripura, Pand M. Alekya. "Speed control of Separately excited DC motor using NARMA-L2 Controller." International Journal on Advanced Engineering & Applications, June 2010, pp.51-55.

#### Conferences:

- 1. A. Dahlmann, V. Y, S. Kouro, M. Aguirre and T. Pidikiti, "Modulated Model Predictive Current Control of a Three-Phase Photovoltaic Central Inverter",2020 IEEE International Power and Renewable Energy Conference, Karunagappally, India, 2020, pp. 1-6.
- 2. Y.Srinivasa Kishore Babu, Tripura Pidikiti and P.Sai Prasanna. "Fuzzy Control of Zero Current Switching Resonant Buck Converter" In Proceedings of the IEEE Electrical, Electronics, Signals, Communication and Optimization (EESCO)-2015) January 24-25, 2015, pp. 182-187 India, 2015.
- 3. Y.Srinivasa Kishore Babu, Y.Ravindranath Tagore, P. Tripura. "Sliding Mode Control of ZVS Buck Converter"In Proceedings of the 2013 International Conference on Machine Intelligence Research and Advancement (ICMIRA 2013) December 21-23, 2013, pp. 95-99. IEEE India, 2014
- 4. Tripura, P., and Y. Srinivasa Kishore Babu. "Performance Improvement in Vector Control of Induction Motor Drive Using Fuzzy Logic Controller." In Proceedings of the International Conference on Soft Computing for Problem Solving (SocProS 2011) December 20-22, 2011, pp. 87-97. Springer India, 2012.(Scopus Indexed)
- 5. Y.Srinivasa Kishore Babu, P. Tripura "Intelligent Speed Control of Separately Excited DC Motor" at the International Conference Modeling & Simulation (MS-09) held at College of Engineering, Trivandrum-India during December 1-3, 2009
- 6. Y.Srinivasa Kishore Babu, P. Tripura "Intelligent Controller for Three-phase Induction Motor Drives" at the National Conference held at NIT, Warangal June 28-29, 2008.

### **Workshops / Seminars / Courses Participated:**

- 1. Five day Online Faculty development program on "Recent Trends in Electrical Engineering" during 8<sup>th</sup> June to 12<sup>th</sup> June 2020, organised by Vishnu Institute of Technology, Bhimavaram.
- 2. Webinar on "A Review of Advanced Power Module Packaging and Thermal Management in WBG Era" on 16 June 2020 organised by IEEE.

- 3. one week National Level Online Faculty Development Program on "Online Teaching-Learning Processes using ICT Tools for Education 4.0" organized by Department of Information Technology, SVPCET Nagpur, in association with Computer Society of India from 8th to 13th June, 2020.
- 4. AICTE Training And Learning (ATAL) Academy Online FDP on "Energy Engineering" from 2020-12-7 to 2020-12-11 at GLOBAL ACADEMY OF TECHNOLOGY
- 5. Advanced Safety Architecture for Automotive Systems, 4 September 2019, organised by IEEE
- 6. IEEE Xplore Digital Library: Delivering Research Better Than Ever, 5 April 2020, organised by IEEE Education Society Chapter of IEEE Hyderabad Section
- 7. Managing Technical career- HRLeader's perspective, 08 September 2019, organised by IEEE TEMS
- 8. "Advanced control design for power electronic converters", 2-4 May 2020, organised by Mahendra Engineering College.
- 9. IEEE COLLABRATEC community and it's benefits to members, Operations, 9 April 2020, organised by IEEE Computer Society Chapter, IEEE Hyderabad section
- 10. Three-Day Webinar Series on "Design of Power switched converters for Renewable Energy Applications", on 9th to 11th May,2020organised by Koneru Lakshmaiah Education Foundation, Vaddeswaram, Guntur, A.P.,
- 11. Webinar on Security and privacy in the v2g network on 11 October 2019, organised by IEEE.
- 12. 5 Days online FDP on Universal Human Values and Professional Ethics from 13th-17th May 2020, organised by Chebrolu Engineering college, Chebrolu.
- 13. Online FDP on Role of IOT, Embedded, Electric Vehicle & Power Electronic Converters for Smart world from 18th-22nd May 2020 organised by St. Joseph's College of Engineering in Association with IEEE Student Branch Chapter
- 14. Webinar on Solar PV Microinverters- Technology-Are they Replacing the Conventional Central Inverter?, 20 December 2019 organised by IEEE
- 15. Webinar on "The Cascaded Resonant Converter: A Hybrid Switched-Capacitor Topology with High Power Density and Efficiency, 30 October 2019 organised by IEEE.
- 16. Webinar on Power-Dense High-Efficiency Engine-Coolant-Capable 200 kW Silicon Carbide Inverter for Heavy-Duty Vehicles on 19 September 2019, organised by IEEE
- 17. Three day Faculty Development program on "Real Time Hardware-in—the-Loop(HIL) Simulation for power Electronics & Power Systems" from 27th to 29th May 2020 organised by Anurag University, Hyderabad.
- 18. Webinar on "Introduction to writing research articles" On April 15, 2020 by Bright Talk.
- 19. Webinar on "Podcast Electric Vehicles in Emerging Markets", On April 15, 2020 by Bright Talk.
- 20. Webinar on "Understanding Harmonics and Power Flow in Easy Power" on 10 Dec 2019 by Easy Power.
- 21. "One day Workshop on eSim, a First Course in the IoT Series for Teachers" on 21 September 2019, organised by the Teaching Learning Centre ICT at IIT Bombay,
- 22. FDP on "Teaching, Learning, and Assessment Strategies" during 18 23 May 2020 Organized by IEEE Education Society Chapter of IEEE HyderabadSection.
- 23. Webinar on Electric Vehicles: Can Legislation Keep up with Technology, 15 January 2020 organised by IEEE.
- 24. LaTeX101x: LaTeX for Students, Engineers, and Scientists an online course conducted from 24 September 2019 to 2 December 2019 offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay.
- 25. "One day Workshop on Linux' held at R.V.R. & J. C. College of Engineering, Chowdavaram on 23 August 2019, organised by the Teaching Learning Centre, ICT at IIT Bombay.
- 26. A Review of Advanced Power Module Packaging and Thermal Management in WBG Era, 13 May 2020, organised by IEEE.

27. 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 organised by Bapatla Engineering College, Bapatla.

# **Membership of Professional Bodies:**

- •Senior Member IEEE Power Electronics Society and Industrial Applications, Young Professional; (International)
- Member, Solar Energy Society of India (SESI)

## **Reviewer for**

- 1. Journal of Circuits, Systems and Computers
- 2. IEEE Transactions on Industrial Electronics
- 3. Indonesian Journal of Electrical Engineering and Computer Science
- 4. TELKOMNIKA (Telecommunication Computing Electronics and Control)
- 5. International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)
- 6. International Journal of Electrical and Computer Engineering (IJECE)
- 7. Bulletin of Electrical Engineering and Informatics
- 8. International Journal of Computing and Digital Systems (IJCDS)
- 9. International Conference on Computational Intelligence and Communication Networks (CICN)
- 10. Journal of Testing and Evaluation

## **Other Duties:**

- 1. Student Branch Counselor- IEEE Student Branch
- 2. Member Girls Hostel Committee
- 3. Member- L&CC
- 4. Class In-charge for Y18 Batch