

# Dr. K.H. Phani Shree

Ph.D

## **Professor & Head of the Department**

## **MISTE**

Electrical & Electronics Engineering

## **Areas of Interest:**

Control Of Power Converters for Renewable energy systems Drives and Electric VehiclesÂ Control of FACTS Devices

Completed B.Tech (EEE)from Bapatla engineering College Bapatla.M.E(Power systems) from NIT Trichurapalli.Ph.D from JNTU.She has 22 years of teaching and research experience.Received Engineering Impact Award for the year 2016 from National Instruments.She is a Member of ISTE.Developed Research Lab in department of EEE in JNTU.Presented 30 research papers in National and International Conferences in India and Aborad.Published around 12 jounal papers.Guided 40 M.Tech and 30 B.Tech Projects.Presently guiding 2 Ph.D candidates.Serving as Coordinator for Enterprenuer Development Cell in JNTUH UCESTH.

## - Educational & Professional

## - Academic Qualifications

- Ph.D in Doubly Fed induction generator, JNTU (2007-2015)

M.E in Power Systems, N.I.T Trichurapalli (2000-2002)

- 🕨

B.Tech in EEE, Bapatla Engineering College (1996-2000)

Professional Experience

## - Teaching Experience

- Assistant Professor, Bhoji Reddy Engineering College Hyderabad (22-04-2002 - 2003-06-01)

#### - At JNTUH

- Professor, UCESTH (2019 Till Date)
- Associate Professor, CEH (2016 2019)
- Assistant Professor, CEH (2003 2016)

## - Research

## - Research Projects

- Development of Low -Cost Phasor Measurement Unit For WAMS applications, funded by TEQIP-III - 3,00,000 (2019 - 2020)

#### - Books

- K.H.Phani shree, Solution manual for power electronics by moorthi, OXFORD, 2009

## - Publications

#### - International Journals

- Manikanta Raju Velpula, Hanumath Phani Shree Kona, *Brain Inspired Intelligent Maximum Power Point Tracking Algorithm for Grid connected Photovoltaic System*, Research Square Preprints, March 15th, 2024, 2024
- Mohd Talha Zubair, Dr. K.H.Phani Shree, Comparison of Conventional and Supervised Machine Learning MPPT Algorithm for Grid Connected Bifacial PV System, GRADIVA REVIEW JOURNAL, Vol No.10, Issue No.9, 2024
- Manikanta Raju Velpula, Hanumath Phani shree Kona, *An Emotinal control approach to grid -connected DFIG based -wind turbine*, International Journal of Dynamics and Control, Vol No. https://doi.org/10.1007/s40435-023-01379-z, Springer, Feburary, 2024
- Anusha Nalumasu, Performance Analysis of Grid -Connected DFIG Under Unbalanced Grid Voltage Conditions, GIS SCIENCE JOURNAL, ISBN No.1869-9391, Vol No.10, Issue No.12, pp.109-121, Dec, 2023
- K.H.Phani Shree, Dr. S. V. Jaya Ram Kumar, V. Vijaya Rama Raju, *MEASUREMENT REDUNDANCY CONSTRAINED OPTIMAL PMU LOCATIONS*, IEEE International Conference on Sustainable Energy and Future Electric Transportation, 21-23 January, 2021
- -- K.H.Phani Shree, G. Sai ShreShta,, *MODELLING AND ANALYSIS OF POLARPHOTOVOLTAIC (PV) ENERGY CONVERSION SYSTEM*, The International Journal of analytical and experimental modal analysis , Vol No.13, Issue No.5, May, 2021
- K.H.Phani Shree, Akhil, CONDITION MONITORING AND CONTROL OF AN INDUCTION MOTOR BASED ON IOT, IJSREM, Vol No.4, Issue No.2, February, 2020
- -- K.H.Phani Shree, Ch. Shravani , *SENSORLESS SYNERGETIC CONTROL APPROACH FOR DECOUPLED POWER CONTROL OF DOUBLY-FED INDUCTION GENERATOR*, ijresm, Vol No.3, Issue No.6, June, 2020
- -- K.H.Phani Shree, V. Vijaya Rama Raju, S.V.Jayarama Kumar, *COST EFFECTIVE SYNCHRO PHASOR DATA ACQUISITION SYSTEM FOR WAMS APPLICATIONS*, Vol No.63, Issue No.6, pp.8969-8978, November, 2020
- Dr.K.H.PHANISHREE, A SENSORLESS SPEED ESTIMATION TECHNIQUE FOR PMDC MOTOR USING LABVIEW FPGA, IJRAR, ISBN No.2348-1269, Vol No.6, Issue No.1, pp.978-983, Feb, 2019
- Dr.K.H.PHANISHREE, Parameter Estimation of Three Phase Induction Motor Using
- *MATLAB---Simulinkâ*ۥ, IJMERT, ISBN No.2348-8565, Vol No.6, Issue No.1, pp.189-194, Jan, 2019
- Dr.K.H.Phani shree, Constant voltage and Constant frequency operation of DFIG using Lab view FPGA and cRIO, IOSR Journal of Electrical and Electronics Engineering, ISBN No.2278-1676, Vol No.13, Issue No.Issue 1 Ver. I, pp.73-78, Jan-Feb, 2018
- Dr.K.H.PHANISHREE, Comparative study of Decoupled controls of DFIG, IJMTE, ISBN No.2249-7455, Vol No.8, Issue No.IX, pp.73-78, sept, 2018
- Dr.K.H.PHANISHREE, Shiekferoz ahmed, *SPEED CONTROL OF THREE-PHASE INDUCTION MOTOR USING ARDUINO UNO*, IJMTE, ISBN No.2249-7455, Vol No.8, Issue No.XI, Nov, 2018
- -- K.H.Phani Shree, Raju sah, Dr. M. Surya Kalavathi, *EFFECT OF METTALIC PARTICLE CONTAMINATION IN GAS INSULATED BUSDUCT USING ANALYTICAL AND CHARGE SIMULATION METHODS*, ITPCDA-2016, 2016
- K.H.Phani Shree, Dr. S. V. Jaya Ram Kumar, *SIMULATION STUDIES OF VARIOUS CONVERTER TECHNIQUES TO DFIG BASED WECS*, IJERT, Vol No.3, Issue No.1, January, 2014
- -- K.H.Phani Shree, SMALL SIGNAL STABILITY ANALYSIS OF A WIND PENETRATED ELECTRICITY DISTRIBUTION SYSTEM, international journal of innovative technology and exploring engg, Vol No.4, Issue No.7, December, 2014
- Dr.K.H.PHANISHREE, P.V.Narayana, Penetrated Electricity Distribution systems, IJITEE, Dec, 2014
- K.H.Phani Shree, Dr. S. V. Jaya Ram Kumar, *ACTIVE AND REACTIVE POWER CONTROL OF DFIG USING MULTILEVEL CONVERTERS IN WECS*, IEEMA, pp.116-121, November, 2013
- K.H.Phani Shree, Dr. S. V. Jaya Ram Kumar, *DECOUPLED CONTROL OF ACTIVE AND REACTIVE POWERS OF DFIG WITH CASCADED SPWM CONVERTERS*, IJEST, Vol No.vol.3, Issue No.10, 2011
- K.H.Phani Shree, Eslavath Chandrababu , COMPARISION OF SENSORLESS SPEED TECHNIQUES OF REGULATED POWER INJECTED DFIG BASED WECS
- K.H.Phani Shree, Abdul Rahaman mohammad , *MODELLING AND ANALYSIS OF PV/WIND HYBRID ENERGY SYSTEMS WITH BACKUP BATTERY SYSTEM*

## **National Journals**

- Dakuri Chandana, Dr. K.H.Phani Shree, *Analysis Of field Oriented Control Of Permanent Magnet Synchronous Motor*, GIS SCIENCE JOURNAL, Vol No.10, Issue No.12, December 2023, 2023

**International Conference** 

- K.H.Phani Shree, P. V. Narayana, *REAL TIME IMPLEMENTATION OF INVERTER CONTROL USING LABVIEW FPGA & cRIO*, IGPTPG, 16th-18th NOV, 2016
- K.H.Phani Shree, P. V. Narayana , *CERTAIN INVESTIGATIONS ON THE DYNAMIC PERFORMANCE OF DOUBLY FED INDUCTION GENERATOR*, IGPTPG-2016, 16th 18th NOV , 2016
- K.H.Phani Shree, *LABVIEW IMPLEMENTATION OF VECTOR CONTROLLED DOUBLY FED INDUCTION GENERATOR*, International conference on Environment and Energy, December 15th-17th, 2014
- K.H.Phani Shree, Dr. S. V. Jaya Ram Kumar, *ENHANCEMENT OF GRID FAULT RIDE THROUGH CAPABILITY OF DFIG WITH Â STATCOM*, IJAS-2012, 2012
- K.H.Phani Shree, Raju Ganapuram , B. A. Ananda Rao, *DECOUPLED CONTROL OF ACTIVE AND REACTIVE POWERS OF DFIG WITH BACKÂ TO BACK PWM CONVERTERS*, ICORET-2011

**National Conference** 

- K.H.Phani Shree, A STUDY ON FAULT ANALYSIS ANDÂ ENHANCEMENT OF FAULT RIDE THROUGH CAPABILITY OF DFIG, 38th National systems conference, 5-7 November, 2014
- Mohd Talha Zubair, Dr. K.H.Phani Shree, *Hybrid MPPT Controller for Photovoltaic System under Partial Shading Condition*, IEEE 4th International Conference on SEFET-2024
- Velpula Manikanta Raju, Dr. K.H.Phani Shree, A novel intelligent controller influenced by cerebellum for decoupled power flow control of DFIG based wind energy conversion system, IEEE 4th International Conference on SEFET-2024
- D L N Sravani, Dr. K.H.Phani Shree, Artificial neural network controller for doubly fed induction generator-based wind energy conversion system, IEEE 4th International Conference on SEFET-2024
- K.H.Phani Shree, T. Nitheesh Reddy, SIMULINK IMPLEMENTATION OF DOUBLE FED INDUCTION GENERATOR (DFIG) MODEL, ITPED-11
- ▶ K.H.Phani Shree, B. A. Ananda Rao , K. Arun Kumar, *MODELING AND ANALYSIS OF DOUBLE-FED INDUCTION MOTOR*, RAPCD'11

## - Events Participated/Organized

## - Organized

- Dorganized a Workshop on "ENTREPRENEURSHIP AWARENESS PROGRAME― (T-Works), JNTUH UCESTH HYD., 08-11-2024 to
- Dorganized a Workshop on "ENTREPRENEURSHIP AWARENESS PROGRAME―, JNTUH UCESTH HYD. 70, 30-08-2024 to
- Dorganized a Workshop on ENTREPRENEURSHIP AND FINANCE QUIZ, JNTUH UCESTH HYD., 24-06-2024 to
- → Organized a Workshop on ONE DAY ENTREPRENEURSHIP AWARENESS PROGRAMME, JNTUH UCESTH HYD., 15-03-2024 to
- Dorganized a Workshop on Work Shop on "ROBOTICS IN ACADEMICS―, JNTUHCEH, Hyd., 06-01-2024 to
- Organized a Workshop on Entrepreneurship Awareness Camp (EAC), JNTUHCEH, Hyd., 04-01-2024 to
- → Organized a Workshop on One Day Training Program for students on "Entrepreneurship In Technology- Metaverse―|, JNTUHCEH, Hyd., 20-01-2023 to
- Dorganized a Workshop on Electric Systems Modeling & Simulation Using MATLAB & Simulink, Dept of EEE, JNT UCESTH, 23-12-2022 to
- Dorganized a Workshop on One Day Training Program On "Basics Of Computers And Ms Word Processing For Women―, JNTUHCEH, Hyd., 09-03-2022 to
- Dorganized a Workshop on Power converters and control Techniques for Renewable Energy Systems, Dept of EEE, JNTUH UCESTH, Hyderabad, Telengana, 18-12-2021 to
- Dorganized a Workshop on Advanced Drive setup with wavect controller: A RCP system in Association with Entuple Technologies Pvt.lted, Dept of EEE, JNTU, UCESTH, 26-11-2021 to
- Organized a Workshop on 4 Week Online Edp, JNTUHCEH, Hyd., 01-01-1970 to 03-05-2022
- → Organized a Workshop on Presents One-Month Internship on "RAPID PROTOTYPING & ROBOTICS, JNTUH UCESTH HYD. Date., 01-01-1970 to 04-07-2024

## - Co-ordinated

- Coordinated for a Conference on *International Conference on Innovations in Engineering and Technology*(*ICIET-2022*), JNTUH Hyderabad Telengana, 15-09-2022 to 17-09-2022
- Coordinated for a Tutorial on *Electric Vehicle-Control strategies*, Dept of EEE,JNTUH,UCESTH, 14-09-2022 to

## - Presented

- -- Presented a paper in *GREEN POWER TECHNOLOGY IN POWER GRID:ISSSUES*, *CHALLENGES AND CONTROL*, Tirupati, 16-11-2016 to 18-11-2016
- Presented a paper in *INNOVATION TECHNOLOGIES IN POWER, CONTROL, DRIVES AND AUTOMATION*, ONGOLE, 26-08-2016 to 27-08-2016
- Presented a paper in ENVIRONMENT AND ENERGY, HYDERABAD, 15-12-2014 to 17-12-2014
- Presented a paper in NATIONAL SYSTEMS CONFERENCE, HYDERABAD, 05-11-2014 to 07-11-2014
- Presented a paper in *RECENT ADVANCES IN INTEGRATED ENERGY AND ENERGY CONSERVATION*, HYDERABAD, 19-12-2012 to 30-12-2012
- Presented a paper in *RECENT ADVANCES IN INTEGRATED ENERGY AND ENERGY CONSERVATION*, HYDERABAD, 19-12-2012 to 30-12-2012
- Presented a paper in *RENEWABLE ENERGY TECHNOLOGIES*, COIMBATORE, 16-12-2011 to 17-12-2011
- Presented a paper in *RECENT ADVANCEMENTS IN POWER*, *CONTROL AND DRIVES*, TIRUNELVELI, 25-03-2011 to 26-03-2011
- Presented a paper in *INNOVATIVE TECHNIQUES IN POWER ENGINEERING AND DRIVES*, CHENNAI, 24-03-2011 to 25-03-2011

# - Participated

- Participated in a Workshop on *CAPACITY DEVELOPMENT PROGRAM FOR VICE-CHANCELLORS*, JNTUH, 15-05-2025 to 17-05-2025
- Participated in a Workshop on *REAL TIME SIMULATIONS OF ELECTRICAL SYSTEMS*, JNTUH UCESTH HYDERABAD., 27-02-2025 to 28-02-2025
- Participated in a Workshop on *Capacity Building Program on "Reforms in Higher Education and NEP 2020"*, JNTUH, Hyderabad, 11-06-2024 to 15-06-2024
- Participated in a Workshop on *SMART HOMES MEASUREMENTS GRIDS USING IoT*, HYDERABAD, 10-10-2017 to 12-10-2017
- Participated in a Refresher Course on *soft skills for professional excellence*, HYDERABAD, 30-11-2015 to 19-12-2015
- Participated in a Training on *powerelectronics and drives for vehicular systems-Technology status* & Future trends, HYDERABAD, 23-11-2015 to 28-11-2015
- Participated in a Workshop on *solar PV certificate Training programme*, HYDERABAD, 21-01-2015 to 23-01-2015

- Honors & Professional Activities
- Professional Activities

-

Contributed as a Reviewer in 1st IEEE international Conference on "Smart Power Control and Renewable Energy (ICSPCRE-2024)" organised by Department of Electrical Engineering from 19-21 July 2024.

- Adminstrative Positions Held
- Coordinator Enterprenuership Development Cell, JNTUH UCEH, 21 Sep 2022 Present
- Officer Incharge of Examinations, JNTUH CEH, 13 Oct 2017 20 Jan 2021
- Project Engineer(Electrical), JNTUH CEH, 30 Mar 2015 30 Jan 2020
- Downloads
- Webinar

**Contact:** 

## Dr. K.H. Phani Shree

Electrical & Electronics Engineering

Official Email: <a href="mailto:phanikona@jntuh.ac.in">phanikona@jntuh.ac.in</a>
Alternate Email: <a href="mailto:phanikona@yahoo.com">phanikona@yahoo.com</a>