ISSUE JAN - JUNE 2022

EEE'S HALF YEARLY

NEWS LETTER

MAHATMA GANDHI INSTITUTE OF TECHNOLOGY

ABOUT US

MGIT envisions, inspires and motivates its students to imbibe knowledge with which they can excel and serve the nation with great elan. To nurture students into disciplined young citizens of irreproachable character, coupled with hands – on training and to make them readily employable by fostering social, cultural and environmental consciousness.

DEPARTMENTAL ACTIVITIES

1. **TECHNICAL FEST – POTENZIA 2022 (STUDENTS)**

A technical fest titled "Potenzia 2022" was organized on 30.06.2022, in which students actively participated.

2**. WORKSHOP – ARIEL SYSTEMS (STUDENTS)**

A workshop on "Ariel Systems" was conducted on 29.06.2022, and it was attended by students.

3. **WEBINAR – CAREER OPPORTUNITIES AFTER ENGINEERING (STUDENTS)**

A webinar on "Career Opportunities After Engineering" was held on 27.06.2022, with participation from students.

4. **ONLINE FDP – SMART GRIDS AND MICRO GRIDS (STAFF)**

A one-week online FDP on "Smart Grids and Micro Grids in Indian Context" was conducted from 20.06.2022 to 24.06.2022, and it was attended by staff members.

5. **WORKSHOP – ELECTRIC VEHICLES (MODULE-III) (STUDENTS)**

A workshop on "Electric Vehicles – Module III" was held from 08.06.2022 to 11.06.2022, and students participated in the program.

6. **ONLINE FDP – CHALLENGES IN EVOLVING POWER SYSTEMS (STAFF)**

A one-week online FDP on "Challenges and Measures in Evolving Power Systems" was conducted from 06.06.2022 to 11.06.2022, attended by staff members.

7. **WORKSHOP – ELECTRIC VEHICLES (MODULE-II) (STUDENTS)**

A workshop on "Electric Vehicles – Module II" was organized from 02.06.2022 to 04.06.2022, and students attended the session.

8. **GUEST LECTURE – HYBRID POWER PLANTS IN INDIAN CONTEXT (STUDENTS)**

A guest lecture on "Hybrid Power Plants in Indian Context" was delivered on 03.06.2022, with active participation from students.

9. **ONLINE FDP – GREENING THE GRID (STAFF)**

A one-week online FDP on "Greening the Grid" was conducted from 17.05.2022 to 21.05.2022, attended by faculty members.

10. **WORKSHOP – ELECTRIC VEHICLES (MODULE-I) (STUDENTS)**

A workshop on "Electric Vehicles – Module I" was held from 11.05.2022 to 13.05.2022, with participation from students.

Faculty Achievements:

DR. P. RAM KISHORE KUMAR REDDY

Dr. P. Ram Kishore Kumar Reddy attended an FDP on NAAC Assessment and Accreditation – RAF organized by the Innovation Online Training Academy (IOTA) from 21.06.2022 to 28.06.2022. He also participated in an FDP on Smart Grids and Micro Grids in Indian Context at MGIT, Hyderabad from 20.06.2022 to 24.06.2022, and an FDP on Challenges and Measures in Evolving Power Systems held at MGIT, Hyderabad from 06.06.2022 to 11.06.2022. Additionally, he attended an FDP on Greening the Grid at MGIT, Hyderabad from 17.05.2022 to 21.05.2022 and an FDP on Introduction to Artificial Neural Network at Christ the King Engineering College, Coimbatore on 08.02.2022. He also completed an Induction/Refresher Program on The Role of Technical Institutes in Promoting Innovation in Skill Development, Employability and Entrepreneurship at SDM College of Engineering and Technology, Dharwad from 09.03.2022 to 15.03.2022, along with an online Coursera course titled Introduction to Google Workspace Administration on 28.03.2022.

DR. P. CHANDRASEKHAR

Dr. P. Chandrasekhar attended an FDP on Technical Trends and Recent Advances in Industrial Robotics and Applications at V. R. Siddhartha Engineering College, Vijayawada from 24.01.2022 to 30.01.2022. He completed another FDP on Recent Trends in Artificial Intelligence, IoT, and Data Analytics at Shri Vishnu Engineering College for Women, Bhimavaram from 09.02.2022 to 13.02.2022. He participated in an FDP on Research Opportunities in Electrical Power Engineering at Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada from 23.03.2022 to 27.03.2022, and an AICTE–NPTEL FDP on Digital Protection of Power Systems from 24.01.2022 to 18.03.2022. He also attended FDPs on Frontiers of Data Science in Trending Technologies, Greening the Grid, Challenges and Measures in Evolving Power Systems, and Smart Grids and Micro Grids in Indian Context at MGIT, Hyderabad during May–June 2022. Additionally, he participated in various webinars conducted by IEEE Virtual Events on 05.02.2022, 08.02.2022, and 09.02.2022, and attended a workshop on Smart Grid: Empowering Smart Cities at NIT Calicut from 18.10.2021 to 22.10.2021.

Faculty Achievements:

Dr. P. Nagasekhar Reddy

Dr. P. Nagasekhar Reddy participated in an FDP on Advanced Concepts of Outcomes-based Education on 07.04.2022, as well as an FDP on Greening the Grid at MGIT, Hyderabad from 17.05.2022 to 21.05.2022. He completed an FDP on Advanced Concepts of Outcome-based Education organized by InPods India Pvt. Ltd. from 04.04.2022 to 08.04.2022, and an FDP on Microgrid Control Dynamics and Stability at NIT Warangal on 20.03.2022. He also attended an Orientation/Refresher Programme on Real-time Aspects of Automation in Industry at G. Pulla Reddy Engineering College, Kurnool from 03.01.2022 to 08.01.2022, along with a Refresher Program at SDM College of Engineering and Technology, Dharwad from 09.03.2022 to 15.03.2022. He further completed a Coursera course Introduction to Programming with MATLAB on 15.04.2022.

N. MADHURI

N. Madhuri attended FDPs on Greening the Grid (17.05.2022–21.05.2022), Challenges and Measures in Evolving Power Systems (06.06.2022–11.06.2022), and Smart Grids and Microgrids in Indian Context (20.06.2022–24.06.2022) at MGIT, Hyderabad. She also completed an Induction/Refresher Program on The Role of Technical Institutes in Promoting Innovation at SDM College of Engineering and Technology, Dharwad from 09.03.2022 to 15.03.2022, and attended a webinar on Gender Equality Today for a Sustainable Tomorrow at MGIT on 08.03.2022.

MR. B. N. REDDY

Mr. B. N. Reddy attended FDPs on Greening the Grid (17.05.2022–21.05.2022), Smart Grids and Micro Grids in Indian Context (20.06.2022–24.06.2022) at MGIT, Hyderabad, and attended an FDP on Introduction to Artificial Neural Network at CKEC, Anna University on 08.02.2022.

MRS. PVB KUMARI

Mrs. PVB Kumari attended FDPs on Greening the Grid (17.05.2022–21.05.2022), Challenges and Measures in Evolving Power Systems (06.06.2022–11.06.2022), and Smart Grids and Micro Grids in Indian Context (20.06.2022–24.06.2022) at MGIT, Hyderabad. She also completed an Induction/Refresher Program at SDM College of Engineering and Technology, Dharwad from 09.03.2022 to 15.03.2022.

Faculty Achievements:

Mr. P. Pradyumna

Mr. P. Pradyumna attended FDPs on Smart Grids and Micro Grids in Indian Context (20.06.2022–24.06.2022), Challenges and Measures in Evolving Power Systems (06.06.2022–11.06.2022), and Recent Advances in Electrical Engineering at GATES Institute, Gooty from 21.03.2022 to 25.03.2022. He also completed Refresher Programs at SDM Dharwad and G. Pulla Reddy Engineering College during January–March 2022, and attended an AICTE Induction Program on Introduction to Electric Vehicles at St. Vincent Pallotti College, Nagpur from 14.03.2022 to 21.03.2022.

DR. P. LAKSHMI SUPRIYA

She attended FDPs on Smart Grids and Micro Grids in Indian Context, Challenges and Measures in Evolving Power Systems, Greening the Grid, Microgrid Control, Dynamics and Stability, and Artificial Neural Networks during February–June 2022 at MGIT, NIT Warangal, and Christ the King Engineering College.

She also attended webinars on Gender Equality Today for a Sustainable Tomorrow and Two Wheeler Road Safety, completed an Induction Program at SDM Dharwad, and finished an online Google Workspace course via Coursera.

MRS. M. NALINI DEVI

She attended FDPs on Smart Grids, Greening the Grid, and Recent Advances in Electrical Engineering between March–June 2022 at MGIT and GATES Institute. She also attended webinars on Gender Equality and Harmonic Analysis using ETAP.

MR. A. RAMACHANDRA REDDY

He attended FDPs on Recent Advances in Electrical Engineering, Greening the Grid, and Smart Grids at MGIT and GATES Institute from March–June 2022, and completed an STTP on Introduction to Electric Vehicles at Nagpur from 14.03.2022 to 24.03.2022. He also attended a workshop on Diagnostics and Modeling Techniques in High Voltage Engineering at NIT Warangal on 05.03.2022.

Faculty Achievements:

Mr. G. Gopal

Mr. G. Gopal attended FDPs on Greening the Grid and Smart Grids and Micro Grids at MGIT, Hyderabad from 17.05.2022 to 24.06.2022.

MR. S. ABHISHEK REDDY

He participated in AICTE–ISTE Orientation/Refresher Programs on Real-Time Aspects of Automation in Industry, Technical Institute Roles in Innovation, and Electric Vehicles during January–March 2022, along with FDPs on Recent Advances, Challenges and Measures in Evolving Power Systems, Greening the Grid, and Smart Grids at MGIT.

MR. CH. VINAY KUMAR, MR. G. ARUN KUMAR, MRS. S. SUDHA RANI, MR. C. MAHESH, MR. P. RANJIT KRISHNA, MR. D. VAMSHY, MR. H. GURUNATH

All these faculty members attended multiple FDPs at MGIT on topics including Smart Grids, Micro Grids, Greening the Grid, and Challenges in Evolving Power Systems during May–June 2022, along with several refresher/induction programs and webinars.

MRS. SWATHI PALIWAL

She participated in FDPs on Emerging Techniques in Modern Power Systems, Innovation and Experimental Learning, Management of Business Incubators, Greening the Grid, and Smart Grids during January–June 2022, attended a webinar on gender equality, and delivered a guest lecture at Amity University.

Faculty Publications & Patents

Dr. P. Ram Kishore Kumar Reddy – Professor

Dr. P. Ram Kishore Kumar Reddy, along with G. Arun Kumar, published a paper titled "An HJB Neural Network-HPDF Optimizer for Non-Linear Loads at Solar PV Array System" in the journal Neuro Quantology, Vol. 20, No. 5, 2022, pages 4971–4990. The work is listed in UGC Care and indexed in Scopus, with an impact factor of 1.58 (eISSN 1303-5150).

DR. P. RAM KISHORE KUMAR REDDY – PROFESSOR

Dr. P. Ram Kishore Kumar Reddy, Dr. P. Nagasekhar Reddy, and Dr. P. Lakshmi Supriya published their work titled "Development of PQ with Solar PV Integrated Unified PQ Conditioner" in Neuro Quantology, Volume 20, Issue 5, May 2022, pages 4949–4955. The paper is listed in UGC Care, indexed in Scopus,
and carries a DOI: 10.14704/nq.2022.20.5.NQ22770, with an impact factor of 1.58.

DR. P. RAM KISHORE KUMAR REDDY – PROFESSOR

Dr. P. Ram Kishore Kumar Reddy and Dr. P. Nagasekhar Reddy published a paper titled "Accurate Modeling of Hybrid Renewable Energy Technique for Future Multi-purpose Microgrid with GWO" in the International Journal of Mechanical Engineering, Vol. 7, No. 2, Feb 2022, pages 4440–4451. The journal is UGC Care-listed, indexed in Scopus, and has an impact factor of 2.1
(ISSN 0974-5823).

DR. P. RAM KISHORE KUMAR REDDY – PROFESSOR

Dr. P. Chandra Sekhar and Kasoju Bharath Kumar also published "The Closed Loop Sinusoidal PWM Technique for Surface Mounted PMSM with Current PI Regulators" in the International Journal of Multidisciplinary Educational Research, Volume 11, Issue 6(1), June 2022, pages 142–148. The journal is Scopus indexed, with an impact factor of 7.816 (ISSN 2277-7881).

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. P. Ram Kishore Kumar Reddy, Dr. P. Nagasekhar Reddy, and Dr. P. Lakshmi Supriya jointly published "Development of PQ with Solar PV Integrated Unified PQ Conditioner" in Neuro Quantology, May 2022, Volume 20 Issue 5, pages 4949–4955. The journal is Scopus indexed with DOI 10.14704/nq.2022.20.5.NQ22770 and an impact factor of 1.58.

Faculty Publications & Patents

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. P. Nagasekhar Reddy and Dr. P. Lakshmi Supriya authored "An Effective Renewable X-Boosting Detection using Super Hybrid Energy Microgrid Application" published in the International Journal of Mechanical Engineering, Vol. 7, No. 4, 2022, pages 18889–19001. The journal is Scopus indexed with an impact factor of 2.1.

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. Ram Kishore and Dr. Nagasekhar Reddy published "Accurate Modeling of Hybrid Renewable Energy Technique for Future Multi-purpose Microgrid with GWO" in the International Journal of Mechanical Engineering, Vol. 7, No. 2, Feb 2022, pages 4440–4451 (Scopus indexed, IF 2.1).

MRS. N. MADHURI – ASSISTANT PROFESSOR

P. Sagarika and Mrs. N. Madhuri published "Energy Storage Systems Based Closed Loop Control of Bidirectional Buck Boost Converter in a Smart Grid" in GIS Science Journal, Volume 9, Issue 3, March 2022, pages 759–766. The journal is UGC Care, Scopus indexed, with DOI 20.18001.GSJ.2022.V9I3.22.38842 and an impact factor of 6.1.

MRS. N. MADHURI – ASSISTANT PROFESSOR

N. Madhuri and P. Veerabhadra Kumari published "Comparative Analysis of PI and PID Controller Based Flyback Converter" in the International Journal of Research and Analytical Reviews, Volume 9, Issue 2, June 2022, pages 689–696. The journal is Peer Reviewed with impact factor 7.17.

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. P. Ram Kishore Kumar Reddy, Dr. P. Nagasekhar Reddy, and Dr. P. Lakshmi Supriya jointly published the paper titled "Development of PQ with Solar PV Integrated Unified PQ Conditioner" in Neuro Quantology, Volume 20, Issue 5, May 2022, pages 4949–4955. The journal is UGC Care-listed, indexed in Scopus, with DOI 10.14704/nq.2022.20.5.NQ22770 and an impact factor of 1.58.

Faculty Publications & Patents

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. P. Nagasekhar Reddy and Dr. P. Lakshmi Supriya published "An Effective Renewable X-Boosting Detection Using Super Hybrid Energy Microgrid Application" in the International Journal of Mechanical Engineering, Vol. 7, No. 4, 2022, pages 18889–19001. This journal is UGC Care-listed, Scopus indexed, and has an impact factor of 2.1.

DR. P. NAGASEKHAR REDDY – ASSOCIATE PROFESSOR

Dr. Ram Kishore and Dr. Nagasekhar Reddy published "Accurate Modeling of Hybrid Renewable Energy Technique for Future Multi-purpose Microgrid with GWO" in the International Journal of Mechanical Engineering, Vol. 7, No. 2, Feb 2022, pages 4440–4451 (Scopus indexed, IF 2.1).

MRS. N. MADHURI – ASSISTANT PROFESSOR

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MR. B. NARSIMHA REDDY – ASSISTANT PROFESSOR

B. Narsimha Reddy and G. Gopal published "Improving the Power Quality of a Grid-Connected Solar PV-BESS System with Adaptive Control Technology" in The International Journal of Analytical and Experimental Modal Analysis, Volume XIV, Issue V, May 2022. The journal is Peer Reviewed with an impact factor of 6.3.

MR. B. NARSIMHA REDDY – ASSISTANT PROFESSOR

G. Gopal and B. Narsimha Reddy authored the paper "AC Chopper FED In Drive System Using HBCC Technique with PF Correction" in The International Journal of Analytical and Experimental Modal Analysis, Volume XIV, Issue IV, May 2022, pages 2869–2879. It is a Peer Reviewed journal with an impact factor of 6.3, and includes DOI 18.0002.IJAEMA.2022.V14I05.200001.0.

Faculty Publications & Patents

MRS. P. VEERA BHADRA KUMARI – ASSISTANT PROFESSOR

P. Veerabhadra Kumari and D. Sharath Reddy published "Solar PV Panel Fed Three Phase Multilevel Inverter with Output Voltage Boost" in Strad Research, Volume 9, Issue 5, May 2022, pages 105–114. The journal is UGC Care-listed, with DOI 10.37896/sr9.5/012 and an impact factor of 6.1.

MRS. P. VEERA BHADRA KUMARI – ASSISTANT PROFESSOR

PN. Madhuri and P. Veerabhadra Kumari jointly presented their work titled "Comparative Analysis of PI and PID Controller Based Flyback Converter" in the International Journal of Research and Analytical Reviews, Volume 9, Issue 2, June 2022, pages 689–696. The journal is peer reviewed with an impressive impact factor of 7.17, affirming the technical quality of the study.

MR. P. PRADYUMNA – ASSISTANT PROFESSOR

K. Surya Vamshi and P. Pradyumna authored a paper titled "A Hybrid Electric Vehicle Powered by SRM Drive and Featuring a Reduced Switch Converter", published in the Journal of Engineering Sciences, Volume 13, Issue 3, March 2022, pages 34–44. This work appears in a peer-reviewed journal with an impact factor of 6.54.

DR. P. LAKSHMI SUPRIYA – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya, Mr. Ch. Vinay Kumar, and Mr. G. Arun Kumar published "Recent Development on Electric Vehicles" in the International Journal of Mechanical Engineering, Volume 7, No. 6, June 2022, pages 614–623. The journal is UGC Care listed and Scopus indexed, with an impact factor of 2.1.

DR. P. LAKSHMI SUPRIYA – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya, Dr. P. Ram Kishore Kumar Reddy, and Dr. P. Nagasekhar Reddy co-authored the paper "Development of PQ with Solar PV Integrated Unified PQ Conditioner", published in Neuro Quantology, Volume 20, Issue 5, May 2022. This Scopus-indexed paper (DOI: 10.14704/nq.2022.20.5.NQ22770) carries an impact factor of 1.58.

Faculty Publications & Patents

DR. P. LAKSHMI SUPRIYA – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya and Ch. Vinay Kumar published "Design and Optimization of PID Controller Using Genetic Algorithm" in Neuro Quantology, April 2022, Volume 20, Issue 4, pages 705–714. This UGC Care-listed and Scopus-indexed journal features the work with DOI 10.14704/nq.2022.20.6.NQ22294 and an impact factor of 1.58.

DR. P. LAKSHMI SUPRIYA – ASSISTANT PROFESSOR

Dr. P. Nagasekhar Reddy and Dr. P. Lakshmi Supriya published "An Effective Renewable X-Boosting Detection Using Super Hybrid Energy Microgrid Application" in the International Journal of Mechanical Engineering, Vol. 7, No. 4, 2022, pages 18889–19001. This Scopus-indexed journal carries an impact factor of 2.1.

M. NALINI DEVI – ASSISTANT PROFESSOR

M. Nalini Devi and R. Srinu Naik authored "Design and Analysis of Fuzzy Logic-Based Sliding Mode Controller for Induction Motor", published in IASET, Volume 11, Issue 01, June 2022, pages 1–14. The journal is UGC Care-listed and indexed in Scopus, with an impact factor of 7.0125.

MR. A. RAMCHANDRA REDDY – ASSISTANT PROFESSOR

A. Ramchandra Reddy and Sheri Abhishek Reddy published the paper "Estimation of Switching Surge Flashover Rate of a 765 kV UHV AC Transmission Line due to Switching Surges" in Strad Research, Volume 9, Issue 6, 2022. The journal is UGC Care-listed and indexed in the Web of Science, carrying an impact factor of 6.1.

MR. A. RAMCHANDRA REDDY – ASSISTANT PROFESSOR

Sheri Abhishek Reddy and A. Ramchandra Reddy co-authored "Optimal Load Frequency Control of Two Area Interconnected Power Systems with Parallel AC/DC Links", published in Dickensian Journal, Volume 22, Issue 6, 2022. The journal is Scopus indexed with an impact factor of 6.1.

Faculty Publications & Patents

MR. G. GOPAL – ASSISTANT PROFESSOR

B. Narsimha Reddy and G. Gopal authored "Improving the Power Quality of a Grid-Connected Solar PV-BESS System with Adaptive Control Technology" in The International Journal of Analytical and Experimental Modal Analysis, Volume XIV, Issue V, May 2022. The journal is Peer Reviewed with a strong impact factor of 6.3.

MR. S. ABHISHEK REDDY – ASSISTANT PROFESSOR

Sheri Abhishek Reddy and A. Ramchandra Reddy published "Optimal Load Frequency Control of Two Area Interconnected Power Systems with Parallel AC/DC Links" in Dickensian Journal, Volume 22, Issue 6, 2022. This Scopus-indexed paper holds an impact factor of 6.1.

MR. S. ABHISHEK REDDY – ASSISTANT PROFESSOR

A. Ramchandra Reddy and Sheri Abhishek Reddy co-authored "Estimation of Switching Surge Flashover Rate of a 765 kV UHV AC Transmission Line due to Switching Surges", published in Strad Research, Volume 9, Issue 6, 2022. This journal is indexed in Web of Science with an impact factor of 6.1.

MR. CH. VINAY KUMAR – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya, Ch. Vinay Kumar, and G. Arun Kumar published "Recent Development on Electric Vehicles" in the International Journal of Mechanical Engineering, Volume 7, No. 6, June 2022, pages 614–623. The journal is Scopus indexed with an impact factor of 2.1.

MR. CH. VINAY KUMAR – ASSISTANT PROFESSOR

Ch. Vinay Kumar and G. Arun Kumar published "Fault Detection in IEEE 33kV Distribution and Micro-Grid Networks Using Random Forest Algorithm Approach" in the International Journal of Mechanical Engineering, Vol. 7, No. 4, 2022, pages 1902–1915. The journal is Scopus indexed with an impact factor of 2.1.

Faculty Publications & Patents

MR. CH. VINAY KUMAR – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya and Ch. Vinay Kumar published "Design and Optimization of PID Controller Using Genetic Algorithm" in Neuro Quantology, April 2022, Volume 20, Issue 4, pages 705–714. This Scopus-indexed work has an impact factor of 1.58.

MR. G. ARUN KUMAR – ASSISTANT PROFESSOR

Dr. P. Lakshmi Supriya, Ch. Vinay Kumar, and G. Arun Kumar authored "Recent Development on Electric Vehicles" in the International Journal of Mechanical Engineering, Volume 7, No. 6, June 2022. The journal is Scopus indexed with an impact factor of 2.1.

MR. G. ARUN KUMAR – ASSISTANT PROFESSOR

Ch. Vinay Kumar and G. Arun Kumar published "Fault Detection in IEEE 33kV Distribution and Micro-Grid Networks using Random Forest Algorithm Approach" in the International Journal of Mechanical Engineering, Volume 7, No. 4, 2022, pages 1902–1915. The journal is Scopus indexed with an impact factor of 2.1.

MR. G. ARUN KUMAR – ASSISTANT PROFESSOR

Dr. P. Ram Kishore Kumar Reddy and G. Arun Kumar co-authored "An HJB Neural Network-HPDF Optimizer for Non-Linear Loads at Solar PV Array System", published in Neuro Quantology, Vol. 20, No. 5, 2022, pages 4971–4990. The journal is Scopus indexed, with an impact factor of 1.58.

MRS. S. SUDHARANI – ASSISTANT PROFESSOR

M. Nalini Devi and S. Sudharani authored "Enhancement of Power Quality of Grid-Connected Wind Energy System Using STATCOM" published in the Journal of Huazhong University of Science and Technology, Vol. 50, Issue 7, March 2022. The journal is Scopus indexed.

MR. D. VAMSHY – ASSISTANT PROFESSOR

D. Vamshy, K. Bharath Kumar, and A. Bhanu Chandar authored "A Unipolar Phase Disposition Pulse Width Modulation Technique for an Asymmetrical Multi-Level Inverter Topology", published in IEEE Xplore on 02.03.2022. The paper is Scopus indexed with DOI 10.1109/ICISSGT52025.2021.00041.

Faculty Publications & Patents

PATENT BY DR. P. RAM KISHORE KUMAR REDDY, DR. P. NAGA SEKHAR REDDY, DR. P. LAKSHMI SUPRIYA, CH. VINAY KUMAR, AND G. ARUN KUMAR

Dr. P. Ram Kishore Kumar Reddy, Dr. P. Naga Sekhar Reddy, Dr. P. Lakshmi Supriya, Ch. Vinay Kumar, and G. Arun Kumar jointly published a patent titled "Development of Android Based Online Monitoring and Control System for Renewable Energy Sources." The patent, filed under the number 202141058938, was published on 04-02-2022. This innovation presents a real-time Android application-based platform designed to remotely monitor and control renewable energy systems, enhancing efficiency, accessibility, and automation in the clean energy domain.

PATENT BY DR. M. NALINI DEVI (GRANTED)

Dr. M. Nalini Devi received a granted patent for her invention titled "Electric Vehicle Charging Estimation Device Using Machine Learning." The patent, registered under 2021102771, was granted on 20-04-2022. This device applies machine learning algorithms to accurately predict electric vehicle charging requirements, thereby optimizing charging time, improving energy management, and supporting smarter EV infrastructure development.

PATENT BY DR. M. NALINI DEVI (PUBLISHED)

Dr. M. Nalini Devi also published a patent titled "Generalized Approach for DCPWM Based Dual Inverter Fed OEWIM-DTC Drive." This patent, filed under 202241003751, was published on 04-02-2022. Her work proposes an advanced control strategy integrating Discontinuous PWM for dual-inverter-fed open-end winding induction motor drives, contributing to increased efficiency, reduced switching losses, and enhanced torque performance in industrial motor applications.

STUDENT ACHIEVEMENTS

THOTAKURA GOWTHAM – IDEA EXPLORE (FIRST PRIZE)

Thotakura Gowtham (Roll No. 18261A0244) secured the First Prize in the event "Idea Explore" conducted on 30 June 2022. The event was organized by Mahatma Gandhi Institute of Technology, where Gowtham showcased outstanding innovative thinking and problem-solving skills.

SATHWIK SHETTY – CIRCUIT AMENDING (FIRST PRIZE)

Sathwik Shetty (Roll No. 19261A0248) won the First Prize in the "Circuit Amending" competition held on 30 June 2022 at Mahatma Gandhi Institute of Technology. His strong technical ability and accuracy in circuit debugging earned him the top position.

K. SAI KIRAN – CODE STROME (FIRST PRIZE)

K. Sai Kiran (Roll No. 19261A0223) secured the First Prize in the "Code Strome" event conducted on 30 June 2022, organized by Mahatma Gandhi Institute of Technology. His coding efficiency and logical skills helped him achieve this recognition.

NIKITA VEDANTH M – CATCH THE SPARK (FIRST PRIZE)

Nikita Vedanth M (Roll No. 18261A0233) achieved the First Prize in the "Catch The Spark" event held on 30 June 2022 at Mahatma Gandhi Institute of Technology. The student excelled with impressive analytical and creative capabilities.

M. PRASAD REDDY – BRAINZEE (FIRST PRIZE)

M. Prasad Reddy (Roll No. 18261A0224) won the First Prize in "Brainzee" on 30 June 2022, organized by Mahatma Gandhi Institute of Technology. His sharp reasoning and quick decision-making set him apart from other participants.

KARRI RESHMA – INQUISITION (FIRST PRIZE)

Karri Reshma (Roll No. 18261A0219) secured the First Prize in the "Inquisition" competition conducted on 30 June 2022 at Mahatma Gandhi Institute of Technology. Her logical skills and subject knowledge were key to her achievement.

STUDENT ACHIEVEMENTS

M. PRASAD REDDY – TECPIC (FIRST PRIZE)

M. Prasad Reddy (Roll No. 18261A0224) also won the First Prize in "Tecpic" held on 30 June 2022 by Mahatma Gandhi Institute of Technology. This second achievement on the same day demonstrates his consistent performance across multiple technical domains.

THOTLA AISHWARYA – ELECTRO CACHE (FIRST PRIZE)

Thotla Aishwarya (Roll No. 20261A0250) secured the First Prize in the "Electro Cache" event conducted on 30 June 2022 at Mahatma Gandhi Institute of Technology. Her technical aptitude and analytical abilities contributed to her winning the event.

P. Sai Ram Rohit – Technochim (First Prize)

P. Sai Ram Rohit (Roll No. 18261A0279) achieved the First Prize in the "Technochim" competition held on 30 June 2022, organized by Mahatma Gandhi Institute of Technology. His innovative approach and subject expertise were highly appreciated.

K. VENKATA RAMANA – PAPER PRESENTATION (FIRST PRIZE)

K. Venkata Ramana (Roll No. 18261A0269) secured the First Prize in the "Paper Presentation" event conducted on 30 June 2022 at Mahatma Gandhi Institute of Technology. His research skills and clarity in presentation helped him stand out.

M. PRASAD REDDY – BRAINZEE (FIRST PRIZE)

M. Prasad Reddy (Roll No. 18261A0224) won the First Prize in "Brainzee" on 30 June 2022, organized by Mahatma Gandhi Institute of Technology. His sharp reasoning and quick decision-making set him apart from other participants.

MART INDIA HACKATHON TEAM – FIRST PLACE (HARDWARE EDITION)

A team comprising Kulkarni Manjunath (19261A0229), Koyalkar Sowmya (19261A0228), K. Aishwarya (19261A0226), Ch. Anusha (19261A0210), M. Indracharan Bhagawathy (19261A0236), and Gorantala Nagaraju (19261A0220) secured the First Place in the Smart India Hackathon 2022 – Hardware Edition. The competition, held on 08 March 2022 and organized by Mahatma Gandhi Institute of Technology, recognized their exceptional innovation, teamwork, and problem-solving abilities in developing a real-time hardware solution.