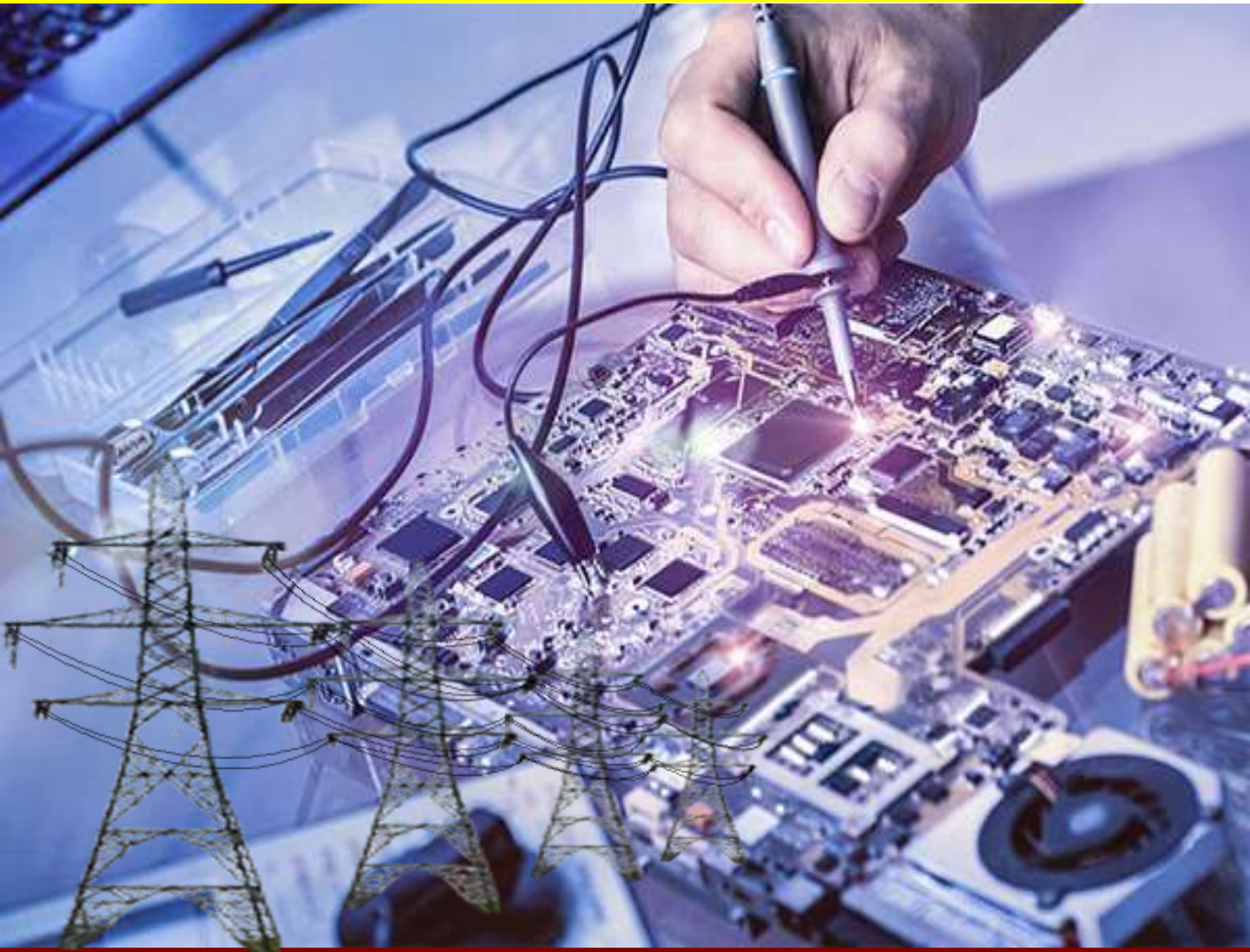**ILLUMINATING IDEAS, POWERING INNOVATION**

THE CURRENT CHRONICLE

NEWS LETTER

MAY, 2023

Department of Electrical and Electronics Engineering

MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

Autonomous Institution – UGC, Govt. of India

Accredited by NAAC with 'A+' Grade

Programmes Accredited by NBA

National Ranking by NIRF Innovation - Rank band(151-300), MHRD, Govt. of India

Maisammaguda, Dhulapally, Secunderabad – 500 010, Telangana

FOUNDER CHAIRMAN'S MESSAGE

I congratulate the department of EEE MRECW for bringing out the issue of the prestigious yearly department **THE CURRENT CHRONICLE** Newsletter under A.Y: 2022-23, I am sure that the magazine will provide a platform to the students and faculty members to expand their technical knowledge and sharpen their hidden literary talent and will also strengthen the all round development of the students. I am hopeful that this small piece of literary work shall not only develop the taste for reading among students but also develop a sense of belonging to the institution as well. My congratulations to the editorial board who took the responsibility for the arduous task most effectively. I extend best wishes for the success of this endeavor.

Ch. Malla Reddy
Founder Chairman, MRGI
Hon'ble MLA,
Govt of Telangana State

PRINCIPAL'S MESSAGE

I extend my heartfelt congratulations to the Department of EEE, MRECW, for bringing out the esteemed **CURRENT CHRONICLE** Newsletter for the academic year 2022-23. This newsletter serves as an excellent platform for both students and faculty members to enhance their technical knowledge and discover their hidden literary talents. It will undoubtedly contribute to the overall development of our students. I am confident that this initiative will not only foster a love for reading but also cultivate a deeper sense of pride and belonging within our institution. My sincere appreciation goes to the editorial board for their dedication and effective execution of this challenging task. Wishing all the best for the continued success of this valuable endeavor.

Dr. Y. MadhaveeLatha
Principal

HOD'S MESSAGE

It is an occasion of great pride and satisfaction for the department EEE, MRECW to bring out the issue of the yearly department **THE CURRENT CHRONICLE** Newsletter under A.Y:2022-23, it gives me immense pleasure to note that the response to the ewsletter has- been over whelming. The wide spectrum of articles gives us a sense of pride that our students and faculties possess creative potential and original thinking in ample measures. Each article is entertaining interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them.

Dr. S.Vijaya Madhavi
HOD ,EEE

BLOCK - 1

ABOUT THE DEPARTMENT

The Department of Electrical & Electronics Engineering is accredited by NBA, with an intake of 60 students. The Dept. has state of the art laboratories with latest software's like MATLAB, ORCAD, SCI LAB, PSPICE and Multisim. We have well qualified faculty members. Several faculty members have received their best teacher awards from institutions of International repute and have been working on research and development projects and regularly publish their work in international journals and conferences. EEE department faculty teams attained patent rights for their technological innovations. The Dept. established IEEE, ISTE student chapters under which it organizes National Level Technical Symposium -FUTURE SASTRA & State Level Technical Symposium- MEDHA every academic year.

The Dept. organized National conference on "Emerging Trends in Electrical Systems & Engineering" NCETESE, International Conference on "Emerging Trends in Electrical Systems & Engineering"(ICETESE) every year since 2014, The Dept. organizes Faculty Development Programmes, Refresher courses and workshops in different streams and Student Development Programmes like Workshops, intra college conferences, Industrial visits , Guest lectures and our students actively participate in hackathon programmes conduct at state and National level. Our students are actively participated and won prizes in curricular activities organized by other colleges. The Dept. also organizes regular student seminar sessions of two hours per week for I to IV B.Tech student to enhance their all-round performance.

The Dept. also offers value added certification Courses on oxford, Microsoft, CISCO certification through Oxford University, Microsoft Innovation Centre and CISCO Networking Academy respectively. The College Offers Campus Recruitment Training Programmes in collaboration with TIME and FACE Institutions. The Department also publishes the Registered Journal "International Journal of Research in Signal Processing, Computing and Communication-System Design (IJRSCSD) with an ISSN: 2395-3187.

Editorial Board

Dr. Y. Madhavee Latha, Principal, Chairperson.	Dr. S. VIjayamadhavi, HOD
Dr. A.Ganga Dinesh Kumar , Professor	Mr.V.Brahmam Yadav Assistant Professor

Vision

- To develop competitive industry ready electrical engineers by establishing traditions, which will foster creativity and growth of excellence to effectively meet the technological requirements.

Mission

To develop proficiency by imparting application oriented knowledge and inculcate analytical thinking to solve the technological problems associated with analyzing, designing and testing electrical systems.

Program Outcomes

PO1 - Engineering knowledge
An ability to apply knowledge of Mathematics (including Probability & Statistics and Mathematical Foundation of Computer Science), Science, and Engineering.

PO2 - Problem analysis
An ability to design and conduct experiments, as well as to analyse and interpret data including hardware and software components **PO3 - Design / development of solutions**
An ability to design a complex computing system or process to meet desired specifications and needs.

PO4 -Conduct investigations of complex problems
Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO5 - Modern tool usage
An ability to use the techniques, skills, and modern engineering tools necessary for engineeringpractice

PO6 - The engineer and society
An ability to understanding of professional, health, safety, legal, cultural and social responsibilities.

PO7 - Environment and sustainability
The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and demonstrate the knowledge need for sustainable development.

PO8 - Ethics
Apply ethical principles, responsibility and norms of the engineering practice.

PO9 - Individual and team work
An ability to function on multi-disciplinary teams.

PO10 - Communication
An ability to function on multi-disciplinary teams.

PO11 - Project management and finance
An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multi-disciplinary environments

PO12 - Life-long learning
A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning

Program Specific Outcomes – PSOs

- **PSO1:** Analyze, Design and Implement application specific electrical system for complex engineering problems, Electrical And Electronics Circuits, Power Electronics and Power Systems by applying the knowledge of basic science, Engineering mathematics and engineering fundamentals

- **PSO2:** Apply modern software tools for design, simulation and analysis of electrical systems to engage in life- long learning and to successfully adapt in multi disciplinary environments

- **PSO3:** Solve ethically and professionally various Electrical Engineering problems in societal and environmental context and communicate effectively

Student chapter events organized for the A.Y 2022-23

- ❑ **CSI** organized the "FutureSastra-2K23 (Technical Symposium)" on April 20, 2023. The activities included Run time Py Warrior, Java Guru, Web Hunter, C-Cracker, Appify, Speed Math Magic,AI war data dustup,Master of English,Infographics,Crack interview and Cyber Siege. The event had 384 participants and was held at the national level.

- ❑ **IEEE** organized the "FutureSastra-2K23 (Technical Symposium)" on April 20, 2023. The activities included Young Engineer, Trailblazer ,Young Innovator, Young Manager. The event had 245 participants and was held at the national level.

- ❑ **IEEE** organized the "Medha-2K22 (Technical Symposium)" on October 22nd, 2022. The activities included Young Engineer, Idea Presentation, Project Expo. The event had 232 participants and was held at the state level.

- ❑ **ISTE** organized the "Medha-2K23 (Technical Symposium)" on October 22nd, 2022. The activities included Mock Interview, Best Spouter, Logic Mantra, General Quiz, and Master of English. The event had 214 participants and was held at the state level.

- ❑ **CSI** organized the "Medha-2K23 (Technical Symposium)" on October 22nd, 2022. The activities included Py Warrior, JAVA Guru, Empiric of Data, and C-Quiz. The event had 60 participants and was held at the state level.

MEDHA STATE LEVEL TECHNICAL SYMPOSIUM-2022

Coding Contests and Hackathons conducted for A.Y 2022-23

- ❑ **IEEE** organized the " Kavach-Intra College Hackathon (II B.Tech)" on March 20, 2023. The event had 12 teams and was

   held at the institute level.
- ❑ **IEEE** organized the "MSME Hackathon 3.0 (Internal)" on Jan 27 and 28, 2023. The event had 18 teams and was held at the institute level.
- ❑ **IEEE** organized the "MSME 2.0 Smart India Hackathon - 2022 (Internal)" on November 12, 2022. The event had 16 teams and was held at the institute level.
- ❑ **IEEE** organized the "Hackathon programme" on August 3-6, 2022. The event had 20 teams and was held at the state level.
- ❑ **ISTE** organized the "Idea Presentation – III Year" on April 29 , 2023. The event had 54 teams and was held at the institute level.
- ❑ **ISTE** organized the " Idea Presentation – II Year on Dec 3 2022. The event had 51 teams and was held at the institute level.

MEDHA STATE LEVEL TECHNICAL SYMPOSIUM-2022

Webinars conducted for Academic Year 2022-23

- ❑ **ISTE** organized a webinar on "Effective Communication Skills"on August 22, 2022. The event had 55 participants and was held at the institute level.
- ❑ **ISTE** organized a webinar on "Secrets of Super interviewer" on August 27, 2022. The event had 60 participants and was held at the institute level.
- ❑ **ISTE** organized a webinar on " Effective Resume Writing" on September 24, 2022. The event had 60 participants and was held at the institute level.

Guest Lectures conducted for Academic Year 2022-23

- ❏ **IEEE** organized a guest lecture on "IOT and Deep Learning Network Concepts, Architectures and Applications " on February 23, 2023. The event had 55 participants and was held at the institute level.

- ❏ **IEEE** organized a guest lecture on "Modern Power Electronics and Applications in Electrical Drive system" on February 17, 2023. The event had 60 participants and was held at the institute level.

- ❏ **ISTE** organized a tech talk on "Growing demand for cybersecurity and necessity Upskilling" on January 10, 2023. The event had 55 participants and was held at the institute level.

- ❏ **ISTE** organized a Guest Lecture on "Swarm Intelligence and its applications" on December 16, 2023. The event had 55 participants and was held at the institute level.

- ❏ **IEEE** organized a guest lecture on "IOT and Block chain Technology" on June 11, 2022. The event had 60 participants and was held at the institute level.

- ❏ **ISTE** organized a guest lecture on "AI Applications for Power Electronics-Challenges and Opportunities" on September 30, 2023. The event had 70 participants and was held at the institute level.

- ❏ **IIEEE** organized a guest lecture on "AI and ML" on June 10, 2022.The event had 55 participants and was held at the institute level.

- ❏ **ISTE** organized a guest lecture on "Cyber Security and Ethical Hacking " on June 9, 2022.The event had 60 participants and was held at the institute level.

- ❏ **ISTE** organized a guest lecture on "Design Technology on Cast Resin Transformers " on June 7, 2022.The event had 55 participants and was held at the institute level.

Workshops conducted for Academic Year 2022-23

❑ **IEEE** organized a two-day workshop on "Web Designing" on February 3 and 4, 2023.The event had 62 participants and was held at the institute level.

❑ **IEEE** organized a one day workshop on "Machine Learning for IOT" from September 26, 2022. The event had 56 participantsand was held at the institute level.

❑ **ISTE** organized a two-day workshop on "Solar and Smart Energy Systems" from October 18-19, 2022. The event had 60 participants and was held at the institute level.

❑ **ISTE** organized a two-day workshop on "Advance Data structures" from August 26-27, 2022. The event had 55 participants and was held at the institute level.

Industrial Visits for Academic Year 2022-23

❑NRSC, Hyderabad on 28 March 2023

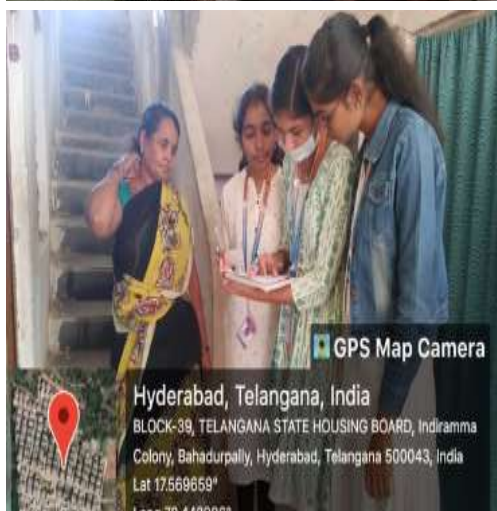❑220/132/33/11KV,substation Shapurnagar, Hyderabad on October 10 2022

NSS Activities organized for the year A.Y 2022-2023

- ❑ **11th March 2023":**Anti Plastic Campaign
- ❑ **11th February 2023**: Village Survey in Gundlapochampally
- ❑ **26th January 2023**: Republic day celebrations

  Essay writin competitions

  Elocution

  PPT presentation
- ❑ **6th January 2023:** Dental Camp Organized
- ❑ **4th January 2023:** Dental Camp (II years and I years)
- ❑ **10th December 2022:** Family Survey in Gnanapur village
- ❑ **19th November 2022:** Awareness camp on ANTI PLASTIC AND CLEANLINESS
- ❑ **3rd August 2022:** GO Green 2K23 Plantation Programme in Gundlapochampally Vilage.
- ❑ **2nd August 2022**: GO Green 2K23 Plantation Programme in campus

Cultural and Sports Events of A.Y 2022-23

- **AALAD 2K23** – 21 April 2023
- **Teaser Release Event (Samajavaragamana)** - 20th April 2023
- **SUCCESS MEET(Passing out students)** – 25th March 2023
- **Guru Pranam & Sayonara-2k23 (Farewell)** - 18th March 2023
- **Holi Celebrations** - 7th March 2023
- **Women's Day Celebrations** - 7th March 2023
- **Techtrophy 2K23** – 24th and 25th February 2023
- **Alumni Meet-2K23** – 21st January 2023
- **Sankranthi Celebrations** - 12th January 2023
- **Musical Show & New Year Celebrations**– 31st December 2022
- **Sportech 2k23 (Intra College Sports Meet)** - 17th Dec 2022
- **Musical Show (Arun Kaundinya & swathi)** - 13th Dec 2022
- **Saarang 2K22(Cultural Fest)**- 3rd December 2022
- **Bathukamma Celebrations**- 30th September 2022
- **ESPERENZA-2K22(INTERACTION DAY)**- 5th November 2022
- **Teachers Day Celebrations** – 5th September 2022
- **independence day Celebrations** - 15th Augusr 2022
- **Musical Show (By Singer Arun Koundinya)** - 25th Aug 2023

Students Achievements for A.Y 2022-23

✧ **36 teams got paper publications in various Conferences and Journal's.**

✧ **55 of 2019-23 batch students got successfully placed in various reputed companies.**

Company Name	No. of Students Placed	Package (in Lakhs)
Mentor Graphics	01	18.5
Accenture	20	6.5
Cognozant	01	4.25
DXC/cognizant	16+1	4
Genysoft	01	4.5
HCL/Genysoft	05+1	4
Prolifics/TCS	1+6	4
Total Students Placed: 55		

Summary of Student Participations

Event Name	No. of Participations
Student Publications	36
Outside the State - Participations	5
Outside the State - Winners	2
With in the State - Participations	15
With in the State - Winners	4
Hackathons Participations	23
Coding Challenges Participations	207
Workshops Participations	42
Webinars Participations	81
Total Awards / Merits / Appreciations /Participations	415

Internships

Name of the Company	No. of Students
CISCO NETWORK ACADEMY	45
COGNIZANT	1
MENTOR GRAPHICS	1

Faculty Development Programmes for A.Y 2022-23

❑ One Week FDP on Human Values and Professional Ethics for from 27th March to 31st April 2023.
❑ One Week FDP on Modern Power Converters and optimization Techniques for Electric Vehicles from 6th to 10th February 2023.
❑ Faculty Development Program on Effective teaching Strategies and methods organized by MRECW on 27th and 28th December 2022.
❑ Faculty Development Program on Research methodologies organized by MRECW on 21st July 2022
❑ Faculty Development Program on Effective teaching strategies and Methodologies on 12th July 2022

Faculty Achievements for A.Y 2022-23

✧ In the academic year 2023-24, faculty members achieved notable success with a total of 45 research publications, including 35 in UGC journals and 3 in prestigious conferences.

✧ In addition to their journal publications, faculty members also contributed significantly to academic literature, publishing 3 books and book chapters in the academic year 2022-23.

✧ Furthermore, faculty members demonstrated innovation by securing 2 patents in the academic year 2022-23, highlighting their contributions to research and development.

   o **Dr. A.Ganga Dinesh Kumar on IOT ENABLED HOME MONITORING SYSTEM BASED ON PIEZO ELECTRIC SENSORS.**

   o **Dr,N.Vengadachalam on IOT ENABLED HOME MONITORING SYSTEM BASED ON PIEZO ELECTRIC SENSORS.**

✧ Faculty has achieved NPTEL certifications on different courses

THE CURRENT CHRONICLE

MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

Autonomous Institution – UGC, Govt. of India

Accredited by NAAC with 'A+' Grade

Maisammaguda, Dhulapally, Secunderabad – 500 010, Telangana