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# R. R. Institute of Technology

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Raja Reddy Layout, Chikkabanavara, Bengaluru – 560 090

## Department of Electrical and Electronics Engineering

Volume 6-Issue 1

“EnEErgy”

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### PRINCIPAL's DESK

It is a matter of great pride and satisfaction for *R R INSTITUTE OF TECHNOLOGY* to bring out the News Letter “*EnEErgy*” released by the Department of Electrical and Electronics Engineering. The College has made tremendous progress in all areas of academic, non- academics, capacity building relevant to staff and students. The College has achieved another milestone in getting NACC Accreditation. I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to *Dr. Sunitha H D*, HOD under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort.

With Best Wishes



**Dr. Mahendra K V**  
**R R Institute of Technology**  
**Bengaluru**

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### HOD 's DESK



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I am very pleased to unveil Vol 6, Issue 1 of our department newsletter “Energy”. In this issue, we have presented the news related to diverse activities conducted by the department and also contributions.

### Vision

To become nationally recognized department by imparting core values, ethics and promoting excellence for overall development of our graduates

### Mission

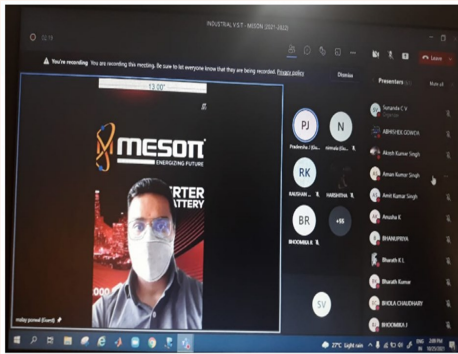
- 1.To create an environment that facilitates learning the fundamentals of Electrical Engineering.
- 2.To impart the knowledge in Electrical Circuits, Power Systems, Electrical Machines, Power Electronics, Electrical Drives and Non-conventional Energy Systems.
- 3.To provide premier education through dedicated teaching, innovation and research
- 4.To cater to practical issues by adapting to technical, economic social trends.

## Events Organized



### 1. An industrial visit to TDPS (T & D Power Systems) was organized by the department on 23/10/2021.

In view of bridging the gap between theoretical and practical concepts and also to provide an insight regarding industry working environment, the department of Electrical & Electronics Engineering organized an industrial visit to a company TDPS nelamangala, dabaspete. TDPS is one of the leading manufacturers of AC Generators in the world with products in the output range of 1 MW to 200 MW for prime movers, such as steam turbines, gas turbines, hydro turbines, diesel engines, gas and wind turbines. They also manufacture special application generators for Geo Thermal and Solar thermal applications.



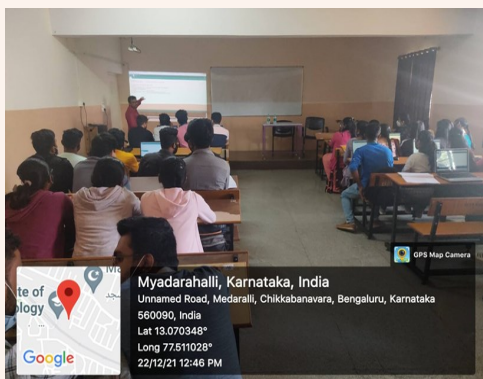
### 2. A virtual industrial visit to “MESON+” (Energizing Future) MFG & MKT PORWAL METALS Surat, Gujarat- 394540, was organized by the EEE department for the 5<sup>th</sup> and 7<sup>th</sup> semester students on 25/10/2021.

Managing director of Meson: Mr. Malay Porwal is an alumni of RRIT. EEE department. Meson is into creating batteries for vehicles. Meson Auto batteries are built to safe starting in any weather condition and resistant to high engine chamber temperatures. 61 Students of EEE & ECE were benefitted by the virtual industrial visit and had a glimpse of actual manufacturing process of lead acid batteries, the materials used, techniques employed and also all the students of EEE department got inspired by the alumni of RRIT college leading such establishment.



### 3. Six days Certificate Programme on “Introduction to Java and its Applications”

ERICA-Association of ECE and the department of Electrical and Electronics Engineering organized a six days certificate Programme on “Introduction to JAVA and its Applications” for final year students. Resource person: Sangeetha C Alumina student. Associate Consultant VLSI at VTU Extension Centre, UTL Technologies, Bengaluru. 17 students of 7th sem EEE department were benefitted from the programme.



### 4. Three days hands on workshop on " IOT & its applications on 22nd , 23rd & 24th December 2021

To train the Students of ECE, EEE, CSE & ISE with hands on IOT & its applications, creation of CLOUD, fundamentals of programming using aurdino IDE, installations and projects on IOT using SENSORS & GPIO using Raspberry Pi. The department organized workshop on " IOT & its applications. The resource person was Prof. Anil Kumar K. BE, M.Tech (Ph.D) Assistant professor, Dept. of ECE, AIeMS, Resource person, Ambient Technologies, Bangalore. Gagan Kumar & Abdulzelani of 7th semester scored highest marks in test conducted as a part of workshop.



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5. 3 days orientation program for the 1st year students was organized on 30/09/2021, 01/10/2021 & 04/10/2021

The knowledge on basic concepts of electrical and electronics engineering were introduced and also demonstrated practically. As a part of orientation program, a session on “Resistance colour Coding” was delivered by Prof. Sunanda C V, Assistant Professor, Department of EEE, RRIT. The next session “Experiments based on magnets” which was handled by Prof. Ramachandra C, Assistant Professor, Department of EEE, RRIT. A session on “Power Network” was delivered by Prof. Pradeesha J, Assistant Professor, Department of EEE, RRIT.

### Paper Publications

1. Sunanda CV, Ramachandra C & Gowtham G published paper titled “Monitoring and controlling of unmanned aerial vehicle by Electrical actuators” Journal of Interdisciplinary cycle Research ISSN NO:0022-1945
2. Gowtham G, Sunanda C.V & Ramachandra C published paper titled “Low frequency sub-band image compression using JSS algorithm”. Journal of Interdisciplinary cycle Research ISSN No:0022-1945
3. Ramachandra C, Gowtham G & Sunanda C V published paper titled “Hybrid renewable power system design using solar, piezo electric and wind energy” Journal of Interdisciplinary cycle Research ISSN No:022-1945.
4. Bidya chetri, Hemanjali R, Ruichitha S, Rishig N & sunanda C V published paper titled “wireless charging of Electric vehicle in Smart Cities ”Research trends in engineering & management. ICRTEM
5. Shifnaaz A, Misbah falak M, Anil Kumar T & Gowtham G published paper titled “conversion of waste heat into electricity using TEG” Research trends in Engineering & management. ICRTEM
6. Varun K, Bharath K.L, Prarthan S B, Tashi W B & Sunanda C V published paper titled “Radar system using Arduino and ultrasonic sensor” Research trends in Engineering & management ICRTEM
7. Akash kumar singh, Emdorka syiem, Amith kumar singh & Ramachandra C published paper titled “3-Phase power failure detection and voltage measurement using Arduino.” Research trends in Engineering & management, ICRTEM
8. Bharath kumar K, Gagan kumar, dr Mangala gowri S.G & vaibhav S biradar published paper titled “Light fidelity (Li-Fi): Transmission of data through light of future technology. Research trends in Engineering & management ICRTEM

9.Mangala Gowri S .G, Sunitha H.D & Sneha josphine published paper titled “EEG data processing for Emotion detection using DTCWT & FFNN Architecture design”Research trends in Engineering & management, ICRTEM.

10.Pradeesha J,Vyshnav B & Akshatha R Hegde published paper titled “performance Analysis of distributed system by the placement of DG considering load growth”Research trends in Engineering & management ICRTEM.

11.Prathik chowdary,sikindrakumar Thakur,Vikash kumar sah,Arun prasad yadav & Dr.Mongala gowri S.G published paper titled “Smart solar power management system for domestic purpose”Research trends in Engineering & management ICR-TEM.

12.Ramachandra C,Sandeep pondey & Deepthi thapa published paper titled “Iot based flood management and alerting sytem.”Research trends in Engineering & management ICRTEM.

13.Sunanda C V,Gautham G & Ramachandra C published paper titled “Design of Hybrid Electric Vehicle with solar energy and wireless charging.”Research trends in Engineering & management ICRTEM.

14.Vaishnav B,Akshatha R Hegde & Pradeesha J published paper titled “A new cascaded two level inverter based multilevel STATCOM forhigh power applications.”Research trends in Engineering & management ICRTEM.

15.Akshatha R Hegde& pradeesha J published paper titled “Improved output from Buck-Boost converter for commercial loads”Research trends in Engineering & management ICRTEM.

16.Dr.Mangalagowri S. G,Sunitha H.D & Sneha Joesphine published paper titled “EEG data processing for emotion detection using DTCWT & FFNN Architecture Design. Research trends in Engineering & management ICRTEM.

### Faulty achievements

1.Prof.Sunanda C .V was awarded as “Result oriented teacher” on teachers day celebration conducted in September 2021 at R R Institute of Technology.

2.Prof.Sunanda C V, Prof. Gautham G & Prof. Ramachandra C were awarded with Best research paper presentation in ICR-TEM-2021 for the paper titled “Design of Hybrid Electric Vehicle with solar energy and wireless charging.”

### Student achievements

1.Bhanupriya of 7th semester won Bronze medal in Asian sikh games held in Delhi on 29th-31st Dec 2021.

2.Bhanupriya of 7th semester won Gold medal in 38th state Taekwondo championship held in Kanteerava indoor stadium on 27th-30th Aug 2021.

3.Dheeraj K of 5th semester secured 71% in subject: Electric vehicle & renewable energy exam conducted by NPTEL.