



S.R.K.R ENGINEERING COLLEGE

(Autonomous)

EEE CHRONICLE



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Vision & Mission

VISION :

To become a centre of excellence in electrical engineering that fosters learning, research and innovation with social relevance.

MISSION :

1. To build an environment that cultivates employability skills with human values and ethics.
2. To establish a collaborative interaction with industry for laboratory development, research and innovation.
3. To create an ambience that encourages active participation of students and staff in the pursuits towards excellence.

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: Graduates will have domain knowledge and analytical skills for employability and entrepreneurship.

PEO 2: Graduates will have life skills to face the real world challenges with a sense of human values and ethics.

PEO 3: Graduates become responsible citizens and contribute towards the cultural and technological growth of the nation.

Professor & Former HOD's Message



I Dr.P Kantarao happy to note that the Department of EEE of S.R.K.R Engineering college is releasing the second issue of its Newsletter for the academic year 2022-23 enumerating the various activities and achievements of the Department

The department endeavours to produce confident professionals for real-time work environment. For this, the department offers industry-relevant courses with its highly qualified faculty members to help students attain skills in cutting edge technologies. I thank all the faculty members, non-teaching staff, and students for their support and sincere efforts in our journey towards excellence.

On this occasion, I congratulate Ms.Bh.Sudharani, Asst. Professor and all the team members of the editorial board for bringing this second issue effectively projecting the achievements and activities of the department.

Thank you,

With Best wishes,

Dr.P Kantaro,

Professor, Department of EEE.

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Exemplary Moments

e-Yantra



e-Yantra is a robotics outreach program funded by the Ministry of Education and hosted at IIT Bombay. The goal is to harness the talent of young engineers to solve problems using technology across a variety of domains such as: agriculture,

defense, home, smart-city maintenance and service industries. Prof.Kurella Pavan Kumar of Sagi Ramakrishnam Raju Engineering College has mentored the project titled "Cotton ginning machine for small scale farmers" in the e-Yantra Innovation Challenge (eYIC) 2022-23. e-Yantra Innovation Challenge is a competition that trains you in Innovation & Entrepreneurship.

A total of 490 teams participated in the eYIC 2022-23. Prof. Kurella Pavan Kumar is the mentor of the team having the following team members: 1.Pragada Sravan Kumar, 2.Matturthi Sai Brahmendra, 3.Mattaparthi Devi Harika, 4.Yalamarthi Madhavi Ratna Annapurna, who are currently pursuing their B.Tech in SRKR Engineering College. The team has been selected as one of the 10 finalist teams out of 490 teams. This team demonstrated their project at the eYIC National Finals 2022-23 held on 5th & 6th April, 2023.

Research Centres

A research centre is a formally structured unit established with the purpose of advancing scholarly activity primarily through collaborative research, research training, research dissemination, or creative endeavours. Recently, our EEE Department, along with CSE, IT, ECE, CIVIL, and MECHANICAL Departments, has been



recognised as a Research Centre by JNTUK. Our college encourages our students and faculty to explore advanced technologies and enables them to invent and innovate.

Project Expo



Project Expo was organized this year also by continuing our yearly tradition. At this Expo, teams of students from our department displayed various projects. The project display was divided into two distinct categories: curricular projects and non-curricular projects. At the farewell event for the departing cohort, the three winning teams from each category were presented with prizes and certificates. Students demonstrated their skills, knowledge, creativity, teamwork, passion, and a host of other qualities. This expo promoted healthy competition among students and inspired them to perform to the best of their abilities.

Achievement



A student from our department, Vadigina, has contributed and got certified for her research paper in 12th IEEE

International Conference - CSNT-2023 held at Technocrats Institute of Technology, Bhopal, Madhya Pradesh (India).

Department Inspirits

Apoorva 2023



Following the tradition, APOORVA was held on February 25 and 26 of this year too. A number of alumni of our department came to visit us and spoke with the students about how to build a career and gave them advice on crucial fundamentals that could be helpful. In a few sessions, they discussed a variety of fascinating topics such as Electric Vehicles, embedded systems, power system protection, and control systems while using their own experience after graduation as an example. This event inspired students and pushed them to pursue and explore their interests in life.

Sankalp 2k23

A two-day National level Techno Cultural Symposium - SANKALP 2K23, was held by our department of EEE on March 25&26th. SANKALP plays a vital role in the development of leadership, teamwork, and innovation abilities among students, so this fest is celebrated and organized annually.

In front of all our students, this year's fest was officially launched with an unveiling event of its banner. Sankalp's total number of participants in the events and the workshop was close to 500. The workshop focusing on EVs was a great



success. Along with the events, a few food stalls were set by the students offering a variety of delicious food. This fest provided students with an opportunity to showcase their talent, creativity, and innovation. These events attracted students from different colleges and cities to create a sense of community and foster a spirit of collaboration.

Farewell Meet

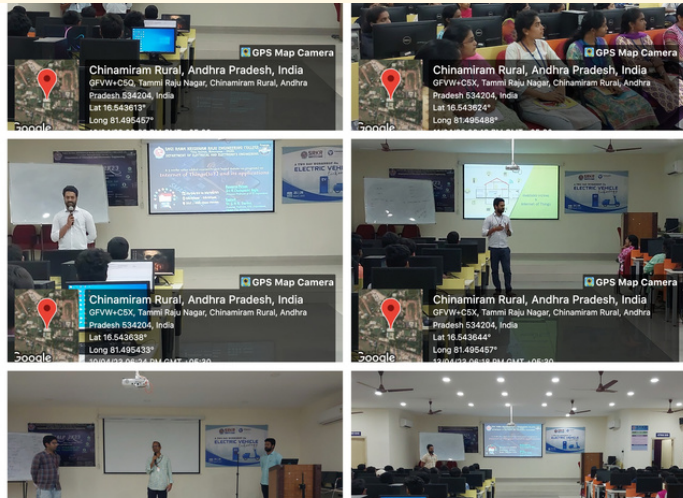


Farewell is usually organized by the faculty of department of EEE as their students hold a close place in their heart. As a token of love, every year the department organizes farewell for the outgoing batches. This year's farewell party was hosted on April 29th for the graduating class of 2019–2023.

It was a chance to give thanks and to say goodbye and celebrate their college journey. In addition to congratulating them on completing their B.Tech, a few events celebrating their time in the college were organized. It's also crucial to congratulate them because this marks a significant turning point in their lives.

The farewell ceremony was a unique opportunity to mark the conclusion of one journey before the start of another. The HOD and the professors of our department congratulated the students on the start of a new chapter in their life. The students had time to consider their past, enjoy their present, and gaze hopefully into the future.

Iot & its Applications



Department of EEE never misses its chances to help students explore the industry more than ever. So as a part of that, a value-added course was included this year on IOT and its applications for students of all academic years. In the realm of technology, demand for IoT developers is high. With the possibility of students obtaining an IoT certification, there will be a lot more quick and simple learning opportunities.

The Internet of Things workshop gave the attendees information on a variety of IoT applications, including those for smart homes, industrial automation, healthcare, and transportation. They gained knowledge about the advantages and difficulties of adopting IoT applications across various sectors.

They can pursue a career in the IoT industry and acquire the skills and expertise needed to design, develop, and implement IoT solutions.

Guest Lecture

On April 25, Dr. Rishi Alluri gave a guest lecture on "Thinking in RC" in our department of EEE. This specific guest lecture stood out among the others that took place in the department in a surprising way. The guest speaker is a former student of our institution and the EEE department as well. He is now employed with the University of Utah's School of Biological Sciences as a post-doctoral research associate. He discussed how a straightforward classic RC circuit could be viewed as biological. He mentioned to the students that there are many ways in which the subjects we study in college might be used in the real world.



The students were able to reflect on what they are learning and how to use it.

Industrial Tour



The department of EEE is always first in helping and supporting its students' learning. Now, students have the chance to network with professionals in the industry, ask questions, and learn through industrial trips. The students gain useful skills that they may use in the workplace thanks to an industrial visit. The students of department of EEE went to the 220/132 KV substation in Undi, where they learned about various topics and gained insights in how to maintain tools, fix problems, and troubleshoot electrical systems.

The students had the opportunity to see many systems and pieces of equipment used in the transmission and distribution of electrical power while visiting the substation. They gained knowledge of the substation's transformers, circuit breakers, switchgear, protective relays, and other parts.

It gave them a better understanding of how real-world electrical power systems operate and how the fundamentals of electricity are put to use.

Ph.D's Received by our Faculty



Dr.Md AZAHAR AHMED
ASSISTANT PROFESSOR
EEE DEPARTMENT
Ph.D in Electrical Engineering
Anna University, Chennai.
Topic:
Applications Of Intelligent
Controller Schemes for power
Generation



MUZEEB KHAN PATAN
ASSISTANT PROFESSOR
EEE DEPARTMENT
Ph.D in Electrical Engineering
Anna University, Chennai.
Topic:
Investigation on Microgrid
Control.



Dr. KUMARRAJA ANDANAPALLI
ASSISTANT PROFESSOR
EEE DEPARTMENT
Ph.D in Electrical Engineering
Topic: Supervisory First Zone
Distance Protection Scheme
During Power Swing.

The Doctoral degree allows one to contribute to one's chosen field of knowledge by research or by aiding others. And the faculty of our department will step ahead in every possible way to improve themselves so that they could help the students reach new heights. Recently, three of our faculty members have been awarded with the doctoral degrees from reputed institutions.

Sports

క్రీడల్లో సత్తా చాటిన 'ఎస్ఆర్కేఆర్' అధ్యాపకులు



విజేతలను అభినందిస్తున్న కళాశాల
సెక్రటరీ, కరస్పాండెంట్ ఎస్ఆర్కే నిశాంత్ వర్మ

భీమవరం, మార్చి 01 (పశ్చిమబె) : దుబుల్స్ డీమో మొదటి స్థానంలో నిలిచి రాష్ట్రస్థాయి కాలేజ్ డీమో ప్లయింట్ కళాశాల ప్రతినిధి దాక్టర్ బాబ్బింట్ పోటీల్లో ఎస్ఆర్కేఆర్ ఎం.జనపతిరాజు చెప్పారు. గుంటూరు జంజీరింగ్ కళాశాల అధ్యాపకుల లోని ఆర్ఎంఆర్కే జంజీరింగ్ కళా

శాలలో అంద్రప్రదేశ్ కాలేజ్ డీమో ప్లయింట్ బాబ్బింట్ జరిగింది. లోర్లో 45 వస దుబుల్స్ విభాగంలో కళాశాల ఎలక్ట్రికల్ అండ్ ఎలక్ట్రానిక్స్ విభాగం హెడ్ టీఆర్కే వర్మ, హ్యాండు నిటీస్ విభాగం ప్రొఫెసర్ దాక్టర్ కె. కిరణ్కుమార్ వర్మలు ప్రథమ స్థానం సాధించారని తెలిపారు. విజేతలను కళాశాల సెక్రటరీ, కరస్పాండెంట్ ఎస్ ఆర్కే నిశాంత్ వర్మ సత్కరించారు. ఇదే లోర్లో దాక్టర్ కె.కిరణ్ కుమార్ వర్మ బెస్ట్ ప్లేయర్ అవార్డు దక్కించుకున్నారు చెప్పారు. పోటీల్లో కళాశాల అధ్యాపకుల క్రికెట్ బృందం కూడా రాష్ట్ర స్థాయిలో రిజియల్ స్థానంలో నిలిచారని ప్రతినిధి దాక్టర్ ఎం.జనపతిరాజు చెప్పారు.

A state level shuttle badminton tournament for Andhra Pradesh College Teachers was organized at RVRJC Engineering College. In that tournament, the doubles team from SRKR Engineering College

won the first place. Dr.B.R.K Varma, Professor & Head Department of EEE and Professor Dr.K.Kiran Kumar Varma, Department of Humanities, got the first place and won the trophy. S.R.K Nishant Varma, College Secretary & Correspondent felicitated the tournament winners,



In addition to this, the College Faculty Cricket team got second place in the state level tournament.

Kung-Fu Gold Medalist S. Sohel is a second-year student pursuing his Bachelor's degree in Electrical and Electronics Engineering (EEE) at S.R.K.R Engineering College.



Apart from his academic achievements, he is a highly skilled martial artist and has earned a Black Belt in Kung Fu. Throughout his ten-year career in martial arts, he has secured an impressive tally of 17 gold medals, 6 silver

medals, and 4 bronze medals, as well as three championships and six prizes.

On April 2, 2023, S. Sohel participated in the All India Open JKD Kung Fu tournament, where he displayed his exceptional skills and dedication to the sport. The tournament was officiated by the renowned cine hero, Mr. Bhanu Chander, who was invited by S. Sohel's Master, Mr. G. Damodar. S. Sohel not only secured a gold medal for his performance in the tournament but was also recognized as the Best Referee by Mr. Bhanu Chander.



Our Department Student "Nadakuditi Leelanath" has secured the Winner's trophy in the "FOOTBALL CHAMPIONSHIP-2K23". The championship was organized by SRKR Engineering College Bhimavar -m on 30th April 2023, 1st & 2nd May 2023.

Faculty Publications

LIST OF PUBLICATIONS (2023)

SCIE listed publications (Journals)

1. Bh. Sudha Rani, M. Sundararajan, P. Kanta Rao, Ch. Durga Prasad, "Frequency Control of Electric Vehicles Integrated Isolated Renewable Microgrid Using a Magnetotactic Bacteria Optimized Cascade Controller", *IETE Journal of Research (Taylor and Francis)*, pp. 1-10, 2023.
2. K. Raja, M. Azaharahmed, M. K. Patan, Ch. Durga Prasad, "Application of Centralized Cascade Controller Schemes for Interconnected Power System Frequency Control", *Iran J Sci Technol Trans Electr Eng (Springer)*, pp. 1-20, 2023.
3. Satpathy, Priya Ranjan, Belqasem Aljafari, Sudhakar Babu T, and Siva Rama Krishna Madeti. "Electrical fault tolerance of photovoltaic array configurations: Experimental investigation, performance analysis, monitoring and detection." *Renewable Energy (Elsevier)* 206, pp. 960-981, 2023.
4. B. Venkata Krishna, E. R. Biju, M. Sai Veerraju and Ch. Durga Prasad, "Optimal Setting of Drift Parameters Using Differential Evolution for Performance Enhancement of Fault Detection Scheme," *IETE Journal of Research*, pp. 1-9, 2023.
5. G. Kusuma, Ch. Das Prakash, I. Kranthi Kumar, G. Pavan Kumar, N. Srinivasu, and Ch. Durga Prasad "Load Frequency Control of Interconnected Power System with Renewables using Improved Fractional Integral Controller." *International Journal of Renewable Energy Research*, 13(1), pp. 392-400, 2023.
6. B. S. S. Santosh, M. Mohamed Thameem Ansari, and P. Kantarao. "Analysis of Hybrid PV Configurations to Mitigate Partial Shading Losses." *International Journal of Renewable Energy Research*, 13(1), pp. 359-375, 2023.



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