



ECHOS

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**DEPARTMENT OF
ELECTRONICS & COMMUNICATION ENGINEERING**

Faculty Team

Behind the Newsletter



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FROM THE DESK OF THE HOD – ECE

It is a matter of great pride to present Volume 2, Edition 3 of the Department of Electronics and Communication Engineering Newsletter. This edition showcases the remarkable achievements and collective efforts of our faculty members, researchers, and students, reflecting the department's unwavering commitment to academic excellence, research innovation, and professional development.

The accomplishments featured in this issue—including prestigious international recognitions, global research rankings, faculty achievements, IEEE initiatives, research grants, and student accomplishments—demonstrate the vibrant academic and research ecosystem that continues to flourish within our department. These milestones exemplify our vision of fostering innovation, excellence, and lifelong learning while preparing students to meet the evolving challenges of science and technology.

I am especially delighted to witness our faculty members receiving global recognition through the SciRank Global Scientist Index, the Asian Book of World Records, and the IEEE Women in Engineering (WIE) community.

Equally commendable are the outstanding achievements of our students in securing prestigious international research grants, contributing to IEEE outreach initiatives, and excelling in both academic and extracurricular pursuits. Such accomplishments reflect the strong culture of mentorship, collaboration, and research excellence that defines our department.

The successful organization of the IEEE AP-S Student Branch Chapter Inauguration, the IEEE AP-S & WAMS International Workshop, and various faculty development programmes further reinforces our commitment to creating an intellectually stimulating environment that encourages innovation, industry engagement, and global collaboration.

I extend my heartfelt congratulations to every faculty member, researcher, and student whose achievements are featured in this edition. My sincere appreciation also goes to the editorial team for their dedication in compiling and presenting these inspiring milestones.

Let us continue to work together with passion and perseverance, striving for greater excellence in education, research, innovation, and service to society.

About department

The Department of Electronics & Communication Engineering (ECE), established in 1983, boasts 120 distinguished faculty members, including 101 with Ph.D. degrees, while others are pursuing their Ph.D. Faculty with rich industry experience cater to both academic and industry needs. State-of-the-art laboratories, Centres of Excellence, and Research Centres support undergraduate, postgraduate, and Ph.D. students, emphasizing R&D activities and innovative exploration beyond the curriculum.

With ₹259 million in sponsored projects from DST, ISRO, and other organizations, the department showcases a strong research culture, having published over 3,300 peer-reviewed articles. The vibrant academic calendar includes advanced certificate courses, seminars, visiting international faculty, and student paper contests. Student development programs, industry collaborations, and active associations further enhance the department's offerings.



Dr. I. Govardhani

Professor & Head

Department of Electronics and
Communication Engineering

K L University

Vision

To become a world-class department in the frontier areas of Electronics & Communication Engineering.

Mission

- To produce graduates with professional excellence
- To conduct quality research with social and industrial applications
- To provide technical support in transforming learners into entrepreneurs

PULSE – The Driving Force of ECE

PULSE, the official student body of the Department of Electronics and Communication Engineering, is more than a club – it is a vibrant platform that nurtures leadership, innovation, and collaboration among students. By transforming classroom knowledge into meaningful real-world experiences, PULSE bridges the gap between theory and practice, strengthening technical expertise along with essential skills such as teamwork, decision-making, and problem-solving.

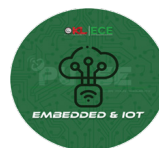
Through a dynamic blend of technical, cultural, and community-driven initiatives, PULSE creates opportunities for students to explore, innovate, and grow – both academically and personally.

Key Initiatives

- **Mock Expo** – A 24-hour problem-solving marathon encouraging creativity, innovation, and collaborative learning.
- **Technical Sessions** – Expert-led workshops focused on electronics and emerging technologies.
- **Circuit Crusade** – A competition designed to strengthen core fundamentals in electronics and circuit design.
- **Idol of ECE** – A circuit-based technical contest recognizing outstanding student talent.
- **100 Days – 50 Projects** – An intensive initiative motivating students to complete 50 innovative projects in domains such as VLSI, Embedded Systems, and Core Electronics within 100 days.

Clubs Under PULSE

- **Embedded & IoT Club** – Advancing smart systems and connected solutions.
- **Always VLSI Club** – Inspiring innovation in semiconductor and chip design.
- **Robotronics Club** – Exploring robotics and automation through teamwork and creativity.
- **Nanotron Club** – Promoting curiosity and research in nanotechnology and advanced materials.



IEEE INITIATIVES & PROFESSIONAL ACTIVITIES

IEEE AP-S Student Branch Chapter Inauguration and International Workshop

The Department of Electronics and Communication Engineering successfully organized the Inauguration of the IEEE Antennas and Propagation Society (AP-S) Student Branch Chapter along with the IEEE AP-S & WAMS International Workshop on 03 June 2026 at Peacock Hall, KLEF Vijayawada.

The event featured distinguished international speakers, IEEE leaders, technical lectures, networking opportunities, and IEEE membership activities. The workshop provided an excellent platform for students and faculty to interact with renowned experts and gain insights into emerging technologies in antennas and wireless communication systems.

IEEE Digital Literacy Initiative

As part of its commitment to community outreach and technical education, IEEE initiated the Digital Literacy and Hands-on Introduction to Digital IC Trainer Programme for Government School students.

Four students from the Department of Electronics and Communication Engineering, KLEF, received specialized training from Efftronics and subsequently obtained Digital IC Trainer Kits through the IEEE Guntur Subsection. These resources are being utilized to conduct Digital Literacy workshops in Government schools, promoting practical learning and technological awareness among young learners.

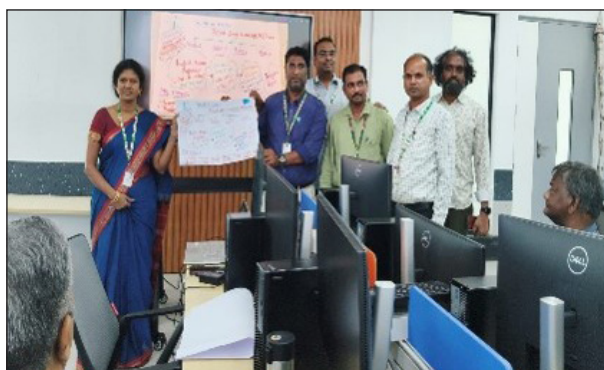


FACULTY ACHIEVEMENTS & RECOGNITIONS

Professional Development Programme on Advanced Teaching Pedagogies

Faculty members of the Department of Electronics and Communication Engineering actively participated in the Professional Development Programme on "Advanced Teaching Pedagogies and Active Learning Methods (ALMs)", organized by the Academic Staff College, KLEF.

The programme focused on modern teaching methodologies and innovative classroom practices aimed at enhancing student engagement and improving the overall learning experience.



IEEE WIE Day Ambassador 2026

The Department of Electronics and Communication Engineering proudly congratulates Dr. K. Ch. Sri Kavya on being selected as an IEEE Women in Engineering (WIE) Day Ambassador 2026.

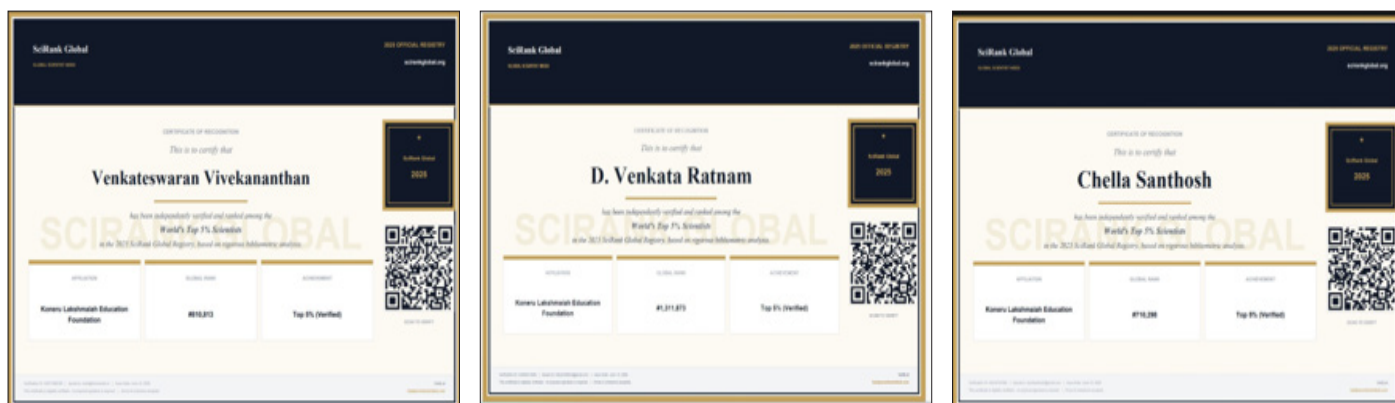
This prestigious recognition acknowledges her dedication towards promoting women in engineering and inspiring future generations of women in STEM through impactful leadership and professional initiatives.

Global Recognition for ECE Faculty in SciRank Global 2025

The Department of Electronics and Communication Engineering proudly congratulates **Prof. D. Venkata Ratnam, Dr. Chella Santhosh, and Dr. Venkateswaran Vivekananthan** on being recognized among the **World's Top 5% Scientists** in the **SciRank Global Scientist Index 2025**.

This prestigious international recognition acknowledges their outstanding research contributions, academic excellence, and sustained impact on the global scientific community. Their inclusion in the SciRank Global Registry reflects the department's strong commitment to high-quality research, innovation, and scholarly excellence.

The Department extends its heartfelt congratulations to the faculty members for this remarkable achievement, which brings immense pride to the institution and serves as an inspiration to students and researchers alike.



Asian Book of World Records – 2026



The Department proudly congratulates **Dr. Fazal Noorbasha, Associate Professor**, Department of ECE and Associate Dean – Academics, on being recognized in the **Asian Book of World Records – 2026** for his outstanding multi-disciplinary achievements.

His accomplishments span diverse fields including education, research, sports, administration, literature, and social service. With multiple academic degrees, over 125 research publications, numerous faculty awards, and significant contributions to teaching and research, this recognition reflects his dedication to excellence across multiple domains.

RESEARCH & INNOVATION

Student Secures Prestigious Research Grant in Advanced Antenna Systems

The Department of Electronics and Communication Engineering proudly congratulates Dhanush (III Year ECE) on receiving a prestigious research grant under the guidance of Dr. Y. Ushadesvi for the research project titled "Metasurface Reconfigurable Intelligent Surface Assisted Antenna for Beam Steering Applications." This achievement reflects the department's growing contribution to advanced wireless communication research and highlights the commitment of both faculty and students towards innovative research in next-generation antenna technologies.

A promotional graphic for the IEEE AP-S Undergraduate Research Scholarship Award – 2026. It features the KL IEEE Student Branch logo and the Department of Electronics and Communication Engineering. The project title is "Metasurface Based Reconfigurable Intelligent Surface Assisted Antenna Design for Beam Steering Applications". The student is Mr. Avula Venkata Dhanush (III B.Tech ECE, 2300040343) and the mentor is Dr. Usha Devi Yalavarthi (Associate Professor & Head CSRO, ECE). The achievement is awarded \$3000 USD under the IEEE Antennas and Propagation Society (AP-S).

IEEE AP-S Undergraduate Research Grant 2026



The Department of Electronics and Communication Engineering proudly congratulates Mr. Bala Satya Phaneendra Billa, Chair, IEEE AP-S Student Branch Chapter, KLEF (Registration No. 2300040402, III Year ECE), on receiving the IEEE AP-S Undergraduate Research Grant 2026.

He has been awarded a research grant of USD 3,000, recognizing his research potential and outstanding contribution to the field of Antennas and Propagation. This prestigious international recognition further strengthens the department's research excellence and global academic presence.

FACULTY RESEARCH ARTICLES

Brief Research Report on Photonic Integrated Circuit: Recycle Carrier Modulator (RCM)

Author: Dr. Ashish Kumar, ECE Department, KLEF Green Field Vaddeswaram



Photonic Integrated Circuits (PICs) are transforming optical communication by enabling compact, high-speed, and energy-efficient photonic devices. This report presents the design and fabrication of a Thin-Film Lithium Niobate (TFLN)-based Recycle Carrier Modulator (RCM), an innovative optical modulator that improves modulation efficiency by recycling the optical carrier through a feedback loop. The proposed architecture is expected to achieve the same modulation index with significantly lower power consumption than conventional single-pass modulators, making it suitable for next-generation optical interconnects & communication systems. The fabrication process involved waveguide patterning

using electron beam lithography, ion milling, hydrofluoric acid treatment, SiO₂ cladding deposition by PECVD, and the fabrication of Ni/Cr heaters and gold electrodes through lift-off techniques. Scanning electron microscopy and optical microscopy confirmed the successful formation of high-quality waveguides, heaters, and electrodes with minimal defects. Optical Backscatter Reflectometry (OBR) measurements demonstrated a low propagation loss of approximately 0.19 dB/cm over a device length of 23.5 mm, indicating excellent optical performance and fabrication quality. Overall, the developed RCM demonstrates the feasibility of realizing low-loss, low-power photonic integrated devices and represents a promising platform for future high-speed optical communication, microwave photonics, quantum photonics, and other integrated photonic applications.

Dr. Ashish Kumar
Assistant Professor

My Nights Are Abright

Soft stars glow above tonight,
Loved ones stay within my sight,
Hope still fills my heart with light,
My Nights Are Abright.



Though the world feels cold and wide,
Love still walks here by my side,
Faith still keeps my soul alight,
My Nights Are Abright.



Every prayer becomes my guide,
Family stays by me inside,
Dreams still shine through every night,
My Nights Are Abright.



— Syam Sundar Pillalamarri
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STUDENT ACHIEVEMENTS

Silver Medal at the Andhra Pradesh State Equipped Powerlifting Championship

The Department of Electronics and Communication Engineering proudly congratulates **Y. Phaneeth (2400040287)** for securing the **Silver Medal in the Junior 120 kg Category at the 13th Andhra Pradesh State Equipped Powerlifting Championship**, held at Jaggaiahpet, NTR District, Andhra Pradesh.

This accomplishment reflects the student's dedication, perseverance, and excellence in sports, bringing pride to the department and the institution.



Students Behind this newsletter

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RESEARCH & FACULTY WING

Wing Advisors: Ramana (2300040248)

“Together, we continue to innovate, inspire, & lead the future of technology”

nirf NATIONAL INSTITUTIONAL
2025 RANKING FRAMEWORK
(Ministry of Human Resource Development, Govt. of India)



Includes IIT's, IIM's, IIIT's, IISc, NIT, State & Central Govt. Institutions

nirf-Innovation
National Institutional Ranking Framework For Innovation
Ministry of Education, Government of India

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