# What's New

## DEPARTMENT OF ELECTRONICS & CPMMUNICATION ENGINEERING

#### Vision

To become a leading Centre of Excellence in higher learning and research, and to facilitate the transformation of students into good human beings and competent professionals recognized nationally and globally.

#### Mission

- · Focus on assimilation, generation and dissemination of knowledge in the field of Electronics and Communication Engineering.
- Practice and inculcate high standards of professional ethics, transparency and accountability.
- Provide an academic environment that fosters leadership, research aptitude and promotes life-long learning.
- Increase the visibility of academic programs globally and attract talent at all levels.

# Pioneering the Future with GaN, SiC, and Smarter, Greener Tech

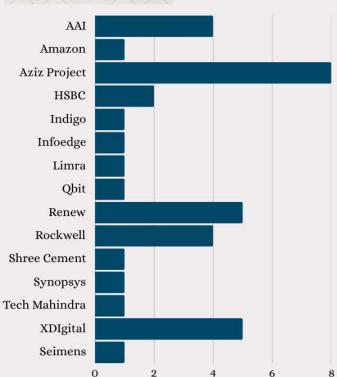
The 2024 Electronica Conference showcased groundbreaking advancements in electronics and autonomous driving technologies, with a strong emphasis on Gallium Nitride (GaN) and Silicon Carbide (SiC). These materials are revolutionizing data centers and electric vehicles (EVs) by improving efficiency, power density, and thermal management. GaN and SiC technologies enable faster switching speeds and higher power handling, contributing to better overall performance in both sectors.

A major highlight was the development of new EV system integration techniques. These innovations aim to streamline designs, reduce production costs, and enhance the performance of EVs, making them more accessible to consumers. Advanced AC measurement systems were also spotlighted, improving efficiency and affordability in electric mobility.

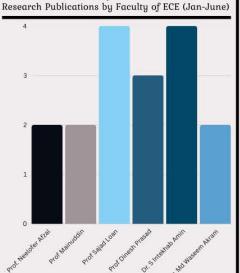


Beyond automotive applications, the advancements presented at Electronica 2024 are transforming industrial and consumer electronics. With growing demand for smarter, more sustainable technologies, the breakthroughs in GaN and SiC are paving the way for a greener, high-performance future. As industries across the board embrace these innovations, they promise to drive the evolution of more efficient, environmentally friendly solutions in the years to come.

# Placement Stats



# International Journals 2024



#### Student Corner

JMI Students Win at MapMyIndia Hackathon



Ansab Amir Khan (Management) and Sheikh Humza (ECE) from Jamia Millia Islamia won ₹50,000, internships, and PPOs at the Mappls Map MyIndia Business Case Study Hackathon. Competing against 550 teams nationwide, they advanced to the finals at BITS Pilani, where their innovative B2C strategies and creative advertisements for the Mappls app and gadgets impressed judges, including CEO Rohan Verma. Their stellar presentation secured them first place, bringing pride and recognition to Jamia Millia Islamia.

#### International conferences 2022

Conferences Attended by Faculty of ECE (Jan-June)

At the IEEE IATMSI 2024, Aadil Anam, S. Intekhab Amin, and Dinesh Prasad presented two key studies on InSb Source-Based Heterojunctionless Nanowire TFETs. Their research explored lowpower applications and biosensing technologies.

In March 2024, they presented "Performance Analysis of InSb Source-Based Heterojunctionless Nanowire TFET for Low-Power Application," which focused on the efficiency and energy savings of these advanced transistors.

(DOI: 10.1109/IATMSI60426.2024.10502440).

They also introduced a study on biosensing with TFETs, aimed at developing sensitive, low-power diagnostic tools ("InSb Source-Based Heterojunctionless Nanowire Tunneling FET for Biosensing Application,

DOI: 10.1109/IATMSI60426.2024.10502773).

These innovations are pushing the boundaries of energy-efficient and high-performance electronics.

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