

SETGOI CRYSTAL NEWS EE

THE NEWSLETTER

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SANAKA EDUCATIONAL TRUST'S GROUP OF INSTITUTIONS

(A UNIT OF SANAKA EDUCATIONAL TRUST)

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Approved By AICTE, Affiliated to MAKAUT, West Bengal



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1. From the Desk of the HOD, EE

Welcome to the latest edition of our department's newsletter!

As we embrace the new semester, I am thrilled to share exciting updates, noteworthy achievements that showcase our collective dedication and hard work. This issue highlights recent tech events, research breakthroughs, and student projects. Let us continue to strive for excellence and innovation in all our endeavors.

2. Vision – Mission Institutional

Vision:

To emerge as a Centre of higher learning fostering a mutually beneficial relationship between professional competency and human values.

Mission:

- To imbibe the outcome-based education system for continuous development of professional, social and ethical skills.
- To engage in research and innovation pertaining to the environmental concerns and societal needs.
- To forge collaborations with industries, academia of repute, research Centre's, and professional bodies to stay relevant and contemporary.

3. Vision – Mission Departmental

Vision:

To envisage developing into and sustaining as a center of excellence by pioneering good quality education and research while producing competent and socially motivated Electrical Engineers.

scientific and technological advancements and make them industry ready.

- To foster employability, entrepreneurship, leadership capabilities with ethics, and a research mindset.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

- Contribute to the industry as a professional engineer providing solutions for practical problems and develop new techniques.
- Become entrepreneur and establish industry with leadership and professionalism involving team work and ethical practices.
- Pursue higher education and contribute in advanced research and development providing solutions to the emerging needs of the society.

PROGRAM SPECIFIC OUTCOMES (PSOs):

Students of Electrical Engineering will be able to –

- implement technical knowledge and skill to analyze electrical machines, power electronics components, and electrical system applications.
- explore the design of power system networks, the concept of renewable sources, and basics of automation.

PROGRAM OUTCOMES (POs):

- | | |
|--|---|
| PO 1:
Engineering Knowledge | PO 7:
Environment and Sustainability |
| PO 2:
Problem Analysis | PO 8:
Ethics |
| PO 3:
Design / Development of Solutions | PO 9:
Individual and Team Work |
| PO 4:
Conduct investigations of Complex Problems | PO 10:
Communication |
| PO 5:
Modern Tool Usage | PO 11:
Project Management and Finance |
| PO 6:
The Engineer and Society | PO 12:
Life-long Learning |



4. Departmental Activities

NAME OF THE EVENT: Tech-X-Plore

DATE: 15/09/2023

Outcome: The TECH-X-PLORE a circuit design contest enhances the innovative practices among students of the institution. Moreover, it was conducted by Department of Electrical Engineering and Department of Electronics & Communication Engineering of Sanaka Educational Trusts Group of Institutions on 15th SEPTEMBER, 2023 in collaboration with ED cell SETGOI.



NAME OF THE EVENT: ENGINEER'S DAY CELEBRATION

DATE: 15/09/2023

Outcome: The hand holding session with ED cell NIT Durgapur enhances the innovative practices among students of the institution. Moreover, it was conducted by Department of Electrical Engineering and Department of Electronics & Communication Engineering of Sanaka Educational Trust's Group of Institutions on 15TH September, 2023 in collaboration with ED cell SETGOI.



NAME OF THE EVENT: WORKSHOP ON IOT USING ARDUINO

DATE: 30/11/2023

Outcome: This Workshop is designed to provide students with a hands-on introduction to IOT. Students will learn about the different components of IOT systems including sensors, actuators, microcontrollers and cloud platforms. They will also learn how to develop and deploy IOT systems.



DEMONSTRATION BY EXPERTS

NAME OF THE EVENT: PLASTIC WASTE MANAGEMENT AWARENESS CAMPAIGN

DATE: 08/12/2023

Outcome: Continuing with its tradition of preserving the environment and having ecofriendly activities, the "Plastic Waste Management Awareness" was conducted on and off the campus of Sanaka Educational Trust's on 8th December 2023 to understand the importance of nature for our existence and conserve the nature in all manners.



5. Research Publication

Journal Publication:

Dr. Ranadip Roy et. al.: Wireless Charging Device Using Microcontroller with Android Applications.

Journal of Emerging Technologies and Innovative Research (JETIR)

Dr. Ranadip Roy et. al.: Modelling of Synchronous Generator with DQ0 Transformation Technique or Power Plant.

Moenia Journal

Dr. Ranadip Roy et. al.: Techno-Economic Feasibility Study for Electric Vehicle Charging Station at Capital City.

Moenia Journal

Dr. Nirmalya Mallick et. al.: Intelligent Monitoring System for Plants.

Journal of Emerging Technologies and Innovative Research (JETIR)

Ms. Priti Gupta et. al.: PV Integrated Water Purifier.

Journal of Emerging Technologies and Innovative Research (JETIR)

6. Electrical Facts

1. **Electricity and Exercise:** Did you know that an electric eel can produce up to 600 volts of electricity? That's more than enough to power a standard home blender, just in case you need a smoothie in the Amazon River!

2. **Static Shock Surprise:** On a dry day, the static electricity you generate by shuffling across a carpet can be around 25,000 volts. It's a shocking way to wake up if you're still half asleep!

3. **Lightning Bolts and Calories:** A single bolt of lightning contains enough energy to toast 100,000 slices of bread. Talk about a power breakfast!

4. **Benjamin Franklin's Kite:** Legend has it that Ben Franklin discovered electricity with a kite. Today, he'd probably be reminded

that flying kites in thunderstorms is not a recommended safety practice.



5. **Hair-Raising Experience:** Rubbing a balloon on your head creates static electricity, making your hair stand on end. It's like giving your hair a bad case of the Mondays, without any coffee!

6. **Electric Fish:** The aptly named electric catfish can generate up to 350 volts. Thankfully, they're not trying to plug into our grid!

7. **Human Battery:** The human body can conduct electricity, albeit very poorly. But, we wouldn't suggest trying to charge your phone with your finger anytime soon!



Editorial Member (Newsletter)

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