# 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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### 1. From the Desk of the HOD

The Department of Electrical Engineering at SETGOI is renowned for its student-focused teaching and education. The department focuses on providing high-quality education research experiences and to prepare students for the future. The department's research activities cover power and renewable power energy systems, electronics. drives, instrumentation, control. Graduates often secure positions in corporate, government, and educational institutions. The department is dedicated to education and research bringing its programs to higher recognition.

# 2. Vision - Mission (INSTITUTION)

#### Vision:

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

#### Mission:

o->To imbibe the outcome-based education system for continuous development of professional, social and ethical skills.

o->To engage in research and innovation pertaining to the environmental concerns and societal needs.

o->To forge collaborations with industries, academia of repute, research Centre's, and professional bodies to stay relevant and contemporary.

# 3. Vision - Mission (DEPARTMENT)

#### 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.

#### Mission:

- Have a learning environment and infrastructure that provide quality education, training, and research.
- To bring the learners on par with the most recent scientific and technological advancements and make them industry ready.
- To foster employability, entrepreneurship, leadership capabilities with ethics, and a research mindset.

# 4. PEO, PO, PSO

# 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: PO 7:

Engineering Knowledge Environment and

Sustainability

PO 2: PO 8:

Problem Analysis Ethics

PO 3: PO 9:

Design / Development of Individual and Team Solutions Work

PO 4: PO 10:

Conduct investigations of Communication Complex Problems

PO 5: PO 11:

Modern Tool Usage Project Management and Finance

PO 6: PO 12:

The Engineer and Society Life-long Learning

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# 5. Departmental Activities

**TECHSTER:** Techster is basically a combination term of Technical & Poster. This technical poster competition was organised by Sanaka Educational Trust's Group of Institutions, IIC and NDLI Club to give opportunities to the students to showcase their technical posters to the others in the college





**IDEA CANVAS 2022**: Idea Canvas is a program for all engineering students to demonstrate their technical projects to everyone, this program was organized by Institution Innovation Council (IIC), National Digital Library of India (NDLI Club)

Ministry of Education and SETGOI at Seminar Hall on 24th November, 2022.





- Dipankar Sarkar of 4<sup>th</sup> Year, EE and his team develop "Solar integrated floating panel power generation" under the guidance of Dr. Ranadip Roy as their project that further sent for publication/patent etc.
- Shuvrajeet Chaudhuri of 4<sup>th</sup> Year, EE developed project as "Plant moisture device using melody" under the guidance of Dr. Nirmalya Mallick that further sent for publication at reputed journal.

# 6. Faculty Achievements

**Dr. Ayani Nandi and Dr. Ranadip Roy**, "Hybrid Metaheuristics Search Technique for Profit-based unit commitment with Plug-in Electric Vehicle Charging", International Journal of Current Science (IJCSPUB), ISSN: 2250-1770.

Dr. Ranadip Roy, Dr. Nirmalya Mallick, Dr. Ayani Nandi and Sambaran Mondal, "Investigation and analysis of electric vehicles for stable operating conditions", 2022 IJCRT Volume 10, Issue 10 October 2022, ISSN: 2320-2882.

Available at: <a href="http://www.ijcrt.org/papers/IJCRT2210275.pdf">http://www.ijcrt.org/papers/IJCRT2210275.pdf</a>

**Mr. Ranadip Roy** recognized by MoE, GOI as Evaluator for SMART INDIA HACKATHON-2022 and selected in Judge Panel for the year 2022.

Dr. Ranadip Roy, Ayani Nandi, Indranil Arupam Sarkar and Mishra, "Recent developments in the production of inexpensive quality monitoring indoor air device". International Journal of Science and Research Archive, 2022, 07(02), 357-363 (2022).DOI:

https://doi.org/10.30574/ijsra.2022.7.2.0288.

**Dr. Ranadip Roy** acted as Reviewer of IEEE (ICDSIS) 2022.

**Dr. Ranadip Roy** acted as Reviewer of IEEE (ICECET'22), CZECH REPUBLIC, 2022.

Mr. Amit Mondal attended FDP at AICTE for the duration 05 days online on "Inculcating Universal Human Values in Technical Education".

Mr. Brahma Swarup Laha attended FDP at AICTE for the duration 05 days online on "Inculcating Universal Human Values in Technical Education".

**Mr. Mainak Mukherjee** attended FDP at AICTE for the duration 05 days online on "Inculcating Universal Human Values in Technical Education".

**Ms. Priti Gupta** attended FDP at AICTE for the duration 05 days online on "Inculcating Universal Human Values in Technical Education".

#### 7. ELECTRICAL FACTS

Electric eels can produce up to a 600-volt shock!

While this fact may seem a little peculiar, it was too interesting not to include in our article! Despite the name, electric eels are actually a type of fish, but this doesn't change the fact that they can be incredibly dangerous. Each eel is born with around 6,000 specialised cells known as electrocytes; these are capable of producing an enormous electrical charge of up to 600 volts. Luckily, the eels only release this charge when they are either hunting or spot a predator.

#### Source:

www.nationalgeographic.com/animals/fish/facts/e lectri c-eel

