



***St. Thomas' College of Engineering & Technology***  
***Kidderpore, Kolkata, West Bengal***

**NEWSLETTER**



**⚡ SPARK ⚡**

**Department of Electrical Engineering**

**-: Apr. to Jun.: -**

**Volume: EE-IX, Issue-IV: July 31, 2024**

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# St. Thomas' College of Engineering and Technology

4, Diamond Harbour Road, Kidderpore, Kolkata- 700023



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## NEWSLETTER

### *Vision*

Department:  
**EE**  
(NBA Accredited)

To create a strong research-based teaching and learning environment that will cater to the needs of modern Electrical Engineering.

### *Mission*

Editors:  
Chirita Dasgupta  
Sampurna Dey  
Pausali Saha  
Saquib Azad  
Surosa Naguri

- To impart knowledge and technology to budding professionals and incite their quest for further enhancement of their learning.
- To produce recognized industry-ready professionals in Electrical Engineering, through educational program incorporating practice and project-based teaching-learning processes.
- To enhance knowledge in Electrical Engineering, through research for sustainable development of the society and the nation as a whole.
- To promote social, environmental and technological responsiveness related to electrical energy through dissemination of knowledge.

Faculty in-charge  
Mr. K. Sarkar Assistant  
Professor,  
EE Dept

For further information  
& feedback please contact:  
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### *Program Educational Objectives (PEO)*

**PEO1-** Have skills, in-depth knowledge and proficiency in the core areas of electrical and other related interdisciplinary engineering domains.

**PEO2-** Become successful practitioners in electrical industries and/or to be ready for entrepreneurship keeping in view of the national and global requirements.

**PEO3-** Have ethical values, social commitment and leadership qualities towards application areas of electrical energy.

## Departmental Milestones

### ❖ Seminar/Webinar/Technical Talk

**Mr. Sajal Kanti Ray**, Distinguished Scientist and Former Director, Research Centre Imarat (RCI), Hyderabad Defence Research and Development Organisation (DRDO) delivered a talk on **Guided Anti Drone System Development** on 15<sup>th</sup> May, 2024 to celebrate National Technology Day. Students from EE Department (1<sup>st</sup> Year to 4<sup>th</sup> Year) took part in the event.





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❖ **Workshop**

**Mr. Debabrata Das**, Corporate Counsel, Legal Department Tata Consultancy Services, Ltd, took a session on “Intellectual Property Rights” dated April 29, 2024. Students of EE Department (1<sup>st</sup> Year to 4<sup>th</sup> Year) took part in the Workshop.



❖ **Publication**

**Prof. (Dr.) Sujit K. Biswas, Mrs Sukanya Dasgupta, Dr. Krishna Sarker & Mr. Koustuv Sarker** has published the following journals:

- D. Maiti and **S. K. Biswas**, “Series connected open-end winding generator for higher voltage DC supply”, IEEE Transactions on Industrial Electronics, vol. IE-71, no. 6, pp 5411 –5419, Jun 2024.
- **S. Dasgupta**, D. Maiti and **S. K. Biswas**, “Single phase sine-wave inverter with high DC bus utilization using natural compensation”, Jordan Journal of Electrical Engineering, vol. 10, no. 2, pp. 185-196, June 2024.
- S. Chakraborty, A. Chakrabarti, D. Maiti and **S. K. Biswas**, “Transformer isolated fault tolerant three phase active front end converter for EV charging”, IEEE Transactions on Transportation Electrification, vol. 10, no. 2, pp. 2332-2341, June 2024.
- Shawanti Roy, Jayanti Sarker, Sayan Paramanik, **Krishna Sarker** (2024). Unified Power Quality Conditioner (UPQC) Research Study on Steady-State Power Flow i-Manager’s Journal on Circuits & Systems, Volume: 12, Issue: 1, Pages: 12–26, Publication Date: 1 June 2024, Publisher: i-Manager Publications, DOI: <https://doi.org/10.26634/jcir.12.1.20676>.
- Debjit Mukherjee, Sayan Mondal, Darothee Deyashi, **Krishna Sarker** (2024). Smart Water Management by Smart Sensors and IoT: Enhancing Efficiency and Sustainability with Automatic Pump Control Systems. I-Manager’s Journal on IoT and Smart Automation, Volume: 2, Issue: 1, Pages: 9–26, Publication Date: 1 June 2024, Publisher: i-Manager Publications, DOI: <https://doi.org/10.26634/jiot.2.1.20870>.



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- S. Das, T. Chakraborty, A. Choudhary, S. Paramanik, **K. Sarker & K. Sarkar**, "Design of Virtual Electrical Laboratories for Performing Steady State and Transient Response of R-L, R-C and R-L-C Circuit", vol. 13, no. 4, July-Sept. 2023, *i-manager's Journal on Electronics Engineering*.

- ***Faculty Development/Training Activities/STTP***

**All the Electrical Engineering Faculty members attended the following Faculty Development Programme**

Five – Day Faculty Development Programme on Quantum Computing: A New Paradigm of Science & Technology, held during May 13 – 17, 2024, organized by Research and Development Cell, St. Thomas' College of Engineering & Technology, Kolkata with Technical Co-Sponsorship of IEEE Kolkata Section.

***“Genius is one percent inspiration and  
ninety-nine percent perspiration.”***

**- Thomas Edison**