# A Yearly Newsletter THE BIDYUT ISSUE-2

COEB

College Of Engineering Bhubaneswa

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Education breeds confidence. Confidence breeds hope. Hope breeds peace. -Confucius



College of Engineering Bhubaneswar (COEB)

**Department of Electrical Engineering** 



**College of Engineering Bhubaneswar (COEB)** 

(Approved by the AICTE, Affiliated to BPUT of Odisha and Accredited by NAAC)

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### **Electrical Engineering Campus Update**



# About The Department

The department of Electrical Engineering of College of Engineering Bhubaneswar was established in the year of 2001. Currently the department runs about 6 laboratories for both undergraduate and R&D activities. Faculties qualified from different IITs and NITs with more than 10 years of teaching and research experience are working here.





#### Vision

To impart Technical knowledge in Electrical Engineering theoretically and practically to meet the International Standards and to make our students technologically superior & ethically strong enough to meet the challenges for the wellbeing of our country in forthcoming years.



**Thomas Edison** 

### Mission

To provide a approach to the student's careers as professional engineers, Researchers or Teachers and to develop the department as a center of excellence in Power Sector, Industrial Sector and also to provide dynamic and scholarly environment by which the students can learn independently to develop a disciplined as well as innovative knowledge based consultancy services to the Rural and Tribal community around us for their upliftment and wellbeing of our Nation.

## **MESSAGE FROM CHAIRMAN**

The electrical industry is in the midst of profound and comprehensive change. In the twenty-first century, almost everyone, in general, and industrial countries, in particular, had access to electricity. Electricity, now enables a vast range of social functions, from the most mundane to the most sophisticated. So a technical newsletter of this kind will eventually serve as a catalyst for change in the minds of budding electrical engineers.

I am looking forward to the positive aspects that "THE BIDYUT" is going to provide knowledge and also hope that it will be informative for the readers.



ER. PRABHAT RANJAN MALLICK (Chairman)



MRS. NAMITA MALLICK Vice-Chairman

## **MESSAGE FROM VICE CHAIRMAN**

Engineering instruction is multifaceted because students need a solid understanding of the theoretical foundation that guides the application of technical expertise and promotes problem-solving skills. This may be achieved through classroom teaching and laboratory learning environments, but engaging students in the learning process may be more effective if we adopt nontraditional instruction processes like hands-on training and corporate learning. I think the release of this Newsletter by the department of electrical engineering will supplement to passive lecture-based learning where both students and members of the faculty fraternity are involved in its making.

I hope that "THE BIDYUT" fosters critical thinking in all of its readers, not just the contributors.



Prof. Dr. Ashok Kumar Panda (Principal, CoEB)

#### **Message from Principal**

I am glad to know that, the EE Department of the College of Engineering Bhubaneswar is publishing a newsletter "THE BIDYUT" for the year 2023-2024. I would like to congratulate the H.O.D., staff and students of the department for the same. I wish the Newsletter a grand success.

#### Message from H.O.D

It gives me immense pleasure to congratulate students, faculties and staff of Electrical Engineering department, College of Engineering Bhubaneswar for the publication of newsletter "THE BIDYUT". It is believed that the department's newsletter focuses on internal activities such as academics, faculties and student accomplishments, as well as innovation in the department.



Dr. Sibasish Panda (H.O.D E.E., CoEB)

Finally, I send my best wishes to the entire team for the publication of the newsletter.

# Students Corner



Mr. Rakesh Pradhan of BTech EEE branch was selected by L K Mechinery India Pvt. Ltd.





Mr. Suvendu Rout of B. Tech EE branch was selected by Aditi Solar Pvt. Ltd.





Mr. Satyabrata Kodamsingh of B.Tech EE branch was selected by Surya International.





Mr. Yashobanta Padhy of B.Tech EEE branch was selected by L K Mechinery India Pvt. Ltd. & Aditi Solar Pvt. Ltd.





Mr. Abhisek Samal of B.Tech EEE branch was selected by Aditi Solar Pvt. Ltd.





Mr. Teli Srinu of B.Tech EE branch was selected by Surya International.



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Mr. Manas Kumar Majhi of B.Tech EEE branch was selected by Aditi Solar Pvt. Ltd & Jindal Steel & Power.





Mr. Harsh Roy of B.Tech EE branch was selected by Surya International.





Mr. Subhajyoti Behera of B.Tech EE branch was selected by Surya International.





Mr. Niranjan Garanayak of B.Tech EE branch was selected by Jindal Steel & Power





Mr. Smruti Ranjan Biswal of B.Tech EEE was selected by Jindal Steel & Power.



# Awards and Prizes won by students

Mr. Harsh Roy 5th sem. B.Tech EE branch secured 1st position in Paper Presentation, Quiz Competition and Fault Analyzer held on 16th March 2023 by Electrical engineering department, COEB, Bhubaneswar on the occasion of AUDACITY-13.0



Mr. Doleswar Mirdha 8th sem. B.Tech EE branch secured 1st position in Quiz Competition held on 16th March 2023 by Electrical engineering department, COEB, Bhubaneswar on the occasion of AUDACITY-13.0.



Mr. Jeevanram Hansdah 8th sem. B.Tech EE branch secured 2nd position in Paper Presentation held on 16th March 2023 by Electrical engineering department, COEB, Bhubaneswar on the occasion of AUDACITY-13.0.





Mr. Devesh Kumar 3rd sem. B.Tech EE branch secured 2nd position in Quiz Competition and Fault Analyzer held on 16th March 2023 by Electrical engineering department, COEB, Bhubaneswar on the occasion of AUDACITY-13.0.

# Awards and Prizes won by students

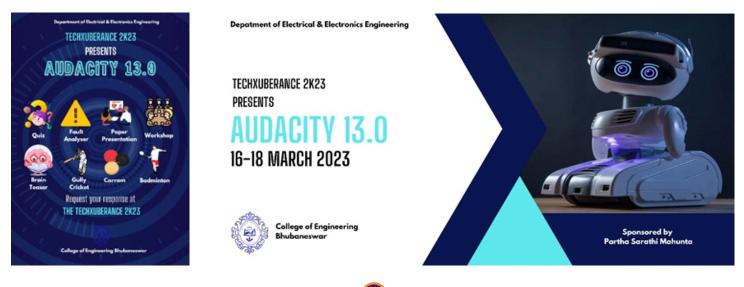


Team Electrical was the winner in Gully Cricket held on 18th March 2023 by Electrical engineering department, COEB, Bhubaneswar on the occasion of AUDACITY-13.0.



#### **Departmental Activities**

A three days Techfest "AUDACITY-13.0" was organized by students and staff of electrical engineering department from 16th March 2023 to 18th March 2023. There were different competitions like Paper Presentation, Fault Analyzer, Quiz Competition, etc. and non-technical competitions like Cricket, Football, carrom etc. The Techfest was concluded with a cultural night on 18th March 2023. All students of all batches from both EE and EEE branch actively participated in the events. This 3 days program was completely coordinated by student volunteers and faculty coordinators.



## **Activities**









## Activities

A four days training program on "Hands-on Learning of Power Electronics Converter Development" was organized by department of Electrical Engineering from 17th – 20th April 2023. Dr. Rajan Vinodray Vamja, R&D Head, National Infotech was the chief Guest cum Speaker of the program. He discussed about "Frequency control Inverters used for renewable energy and smart grid". Prof. (Dr.) M. A. Mulla, Associate Professor, NIT Surat was the key note speaker of the program. He discussed about implementation of space vector PWM for control drives. Total number of participants for this event was more than 140 including participants from various universities and industries. Dr. Sibasish Panda was the convener of this program. Prof. Eepsita Sridevi.





## **DEPARTMENTAL** Activities



A Technical Talk on

## "Recent Trends in Electric Vehicle and Systems"

by

Dr. Ritesh Kumar Keshri Associate Professor, Dept. of Electrical Engineering, V.N.I.T. Nagpur

> ON 7<sup>th</sup> November, 2023 Time: 2pm to 4pm

Organized by: Department of Electrical Engineering, College of Engineering Bhubaneswar a Unit of Koustuv Group of Institutions



COLLEGE OF ENGINEERING BHUBANESWAR (COEB) Plot No.1, Koustuv Square, Infocity Road, Patia, Bhubaneswar - 751024 Odisha

A Technical Talk on Recent Trends in Electric Vehicle and Systems was organized by Electrical Engineering department on 7th November 2023. The resource person for this program was Dr. Ritesh Kumar Keshri, Associate Professor, VNIT Nagpur. He discussed about the challenges and opportunities for the charging infrastructure of electric vehicles. The welcome address and program briefing was done by Dr. Sibasish Panda, Assistant Professor & Head EED. It was followed by the speech of Dr. Subhakanta Nayak, Dean R&D, COEB and Shri Koustuv Mallick. Executive Director, KGI. Around 75 participants (including staff and students of various branch and batch) were present in this technical talk. Vote of Thanks was proposed by Prof. Anjan Kumar Sahoo, Assistant Professor, EED and the complete program was anchored by Prof. Eepsita Sridevi, Assistant Professor, EED.

















Advanced e-Mobility Research Laboratory was inaugurated by Honorable Vice-Chairman, KGI Smt. Namita Mallick. This Lab is equipped with IGBT based bridge inverters with STM-32 microcontroller KIT to explore the possibility of Induction motor and BLDC motor drive for e-mobility solutions. Dr. Sibasish Panda, HOD EE, Dr. Subrat Mohanty Principal COEB and Dr. Sujit Kumar Khuntia Dean R&D witnessed this auspicious occasion on 20th April 2023.



#### **Faculty Publications**

Total 6 numbers of publications are there in the year 2022-23 in our department. Out of which there are 2 book chapters (1 accepted, 1 published), 1 book, 2 IEEE international conference and 1 Scopus indexed journal. The publication details are as follows:

Anjan Kumar Sahoo, "Online fault detection and classification of 3-phase long transmission line using machine learning model". Multiscale and Multidiscip. Model. Exp. and Des. 6, 135–146 (2023). Scopus Indexed.

**Anjan Kumar Sahoo,** "An adaptive energy monitoring system for a hybrid power plant using renewable energy". International Conference on Advances in Renewable and Green Energy Technology. IEEE, 2023.

**Anjan Kumar Sahoo,** "A Critical Analysis of Green Hydrogen Innovation at the Cutting Edge Application for Fuel Cell Battery-Powered Vehicles". International Conference on Advances in Renewable and Green Energy Technology. IEEE, 2023.

A Technical book chapter on "IOT Contribution in construct of Green Energy" was published by **Prof. Anjan Kumar Sahoo,** Publisher: CRC Press,Taylor & Francis Group, ISBN:978-1032362823, YoP:2023. Scopus Indexed.

A Technical book chapter on "DIGITAL CITIES: NEXT-GEN APPLICATIONS" was authored by **Prof. Anjan Kumar Sahoo**, Publisher: Wiley Scrivener Publishing. YoA: 2023 Scopus Indexed. (Accepted).

A Technical book on "Pulse Width Modulated Bridgeless DC-DC Converters" was published by **Prof. Anjan Kumar Sahoo**, Publisher: Notion Press, ISBN:979-8889594932, YoP:2023.

#### **Faculty Achievements**

**Prof. Gopal Krishna Mohanty** had participated and successfully completed a 5 days STTP on "Air, Water Pollution & Health" organized by NITTTR Kolkata Extension Centre from 13th Nov. 2023 to 17th Nov. 2023 at College of Engineering Bhubaneswar.

**Prof. Jagatjyoti Ranjan Das** had participated and successfully completed a 5 days STTP on "Air, Water Pollution & Health" organized by NITTTR Kolkata Extension Centre from 13th Nov. 2023 to 17th Nov. 2023 at College of Engineering Bhubaneswar.

**Prof. Anjan Kumar Sahoo** had participated and successfully completed a 5 days STTP on "Air, Water Pollution & Health" organized by NITTTR Kolkata Extension Centre from 13th Nov. 2023 to 17th Nov. 2023 at College of Engineering Bhubaneswar.

**Prof. Ranjan Kishore Mohanty** had participated and successfully completed a 5 days STTP on "Air, Water Pollution & Health" organized by NITTTR Kolkata Extension Centre from 13th Nov. 2023 to 17th Nov. 2023 at College of Engineering Bhubaneswar.

**Dr. Sibasish Panda** had participated and successfully completed a 5 days STTP on "Air, Water Pollution & Health" organized by NITTTR Kolkata Extension Centre from 13th Nov. 2023 to 17th Nov. 2023 at College of Engineering Bhubaneswar.











**Dr. Sibasish Panda** had participated and successfully completed AICTE sponsored Advanced ATAL FDP on "Artificial Intelligence in E-Automobile Technology and its Integration with Sustainable Energy" from 6th Nov. 2023 to 11th Nov. 2023 at Silicon Institute of Technology, Bhubaneswar.

**Prof. Anjan Kumar Sahoo** had participated and successfully completed AICTE sponsored Advanced ATAL FDP on "Artificial Intelligence in E-Automobile Technology and its Integration with Sustainable Energy" from 6th Nov. 2023 to 11th Nov. 2023 at Silicon Institute of Technology, Bhubaneswar.

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