



Circular

Ref. No. AJU/AD/ENGG/043/2024-25

Date: 26.08.2024

This is to inform all students and faculty members that department of Electrical and Electronics Engineering, School of Engineering and IT, ARKA JAIN University Jharkhand is going to organize an "Expert Lecture on Recent Trends in Transformer Design, Testing & Maintenance" on 4th September 2024. We strongly encourage all students and faculty members who are interested to join and take part in this initiative. As such, we kindly request that all interested individuals register for participation by using the provided link below.

Link for registration:

<https://forms.gle/6qbNHiTpUaBG3FHCA>

- Last Date for Registration: 03.09.2024, up to 11:59 p.m.
- Mode: Virtual

Convener:

Dr. Ashwini Kumar (dr.ashwini@arkajainuniversity.ac.in)

Coordinators:

Prof. Adarsha Rana (adarsha.r@arkajainuniversity.ac.in)

AD 26/08/24
Dr. Ashwini Kumar
Assistant Dean
School of Engineering & IT
Arka Jain University, Jharkhand



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2. PS to The Director
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5. In charge Web services for Website
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EXPERT LECTURE ON “EXPERT LECTURE ON RECENT TRENDS IN TRANSFORMER DESIGN, TESTING & MAINTENANCE”

Date of Event	04.09.2024
Name of the Event	Expert Lecture on “Recent Trends in Transformer Design, Testing & Maintenance”
Type of the Event	Technical Skill Development
Conducted by	School of Engineering & IT, ARKA JAIN UNIVERSITY JHARKHAND
Resource Person	Mr. Sanjay Kumar, Lecturer, Department of Electrical Engineering, Gulma Polytechnic, Jharkhand
Convener	Dr. Ashwini Kumar
Co-Ordinator	Prof. Adarsha Rana
No. Of Participants	39

OBJECTIVE: This Expert lecture is specially designed for Engineering College students, and faculty members and it mainly deals with “**Recent Trends in Transformer Design, Testing & Maintenance**” in the fields of Engineering. The objective of the expert lecture on Emerging Trends in Transformer design, testing and their applications is to provide participants with a comprehensive understanding of the latest advancements in transformer design technologies. The lecture aims to highlight improvement of transformer efficiency, innovative materials, and novel methods that are revolutionizing in transformer technology. Additionally, it will explore practical applications across various sectors, such as electricity transmission, distribution, electric vehicles, and smart grids, demonstrating how these emerging trends can enhance the transformer efficiency, sustainability, and system performance.

DETAILS: An Expert Lecture on Recent Trends in Transformer Design, Testing & Maintenance was organized by the school of Engineering & IT, ARKA, JAIN University on September 4th, 2024. The expert lecture on Recent Trends in Transformer Design, Testing & Maintenance will delve into the latest advancements in Transformer design, testing and their applications is to provide participants with a comprehensive understanding of the latest advancements in transformer design technologies. It will cover practical applications in various sectors such as electricity transmission, distribution, electric vehicles, and smart grids, demonstrating how these emerging trends can enhance the transformer efficiency,

sustainability, and system performance. The lecture will be conducted by a leading expert in the field, offering valuable insights and knowledge to participants. The venue for the event was Online mode through Google meet. The resource person of the event was Mr. Sanjay Kumar the Lecturer of Department of Electrical Engineering, Gumla Polytechnic, Jharkhnad. The event was successfully coordinated by Prof. Adarsha Rana, Assistant Professor, Dept. of E.E.E., School of Engg. & I.T.

OUTCOMES: The outcomes of the expert lecture on Recent Trends in Transformer Design, Testing & Maintenance will include a deeper understanding of the latest advancements in Transformer design, testing and their applications is to provide participants with a comprehensive understanding of the latest advancements in transformer design technologies. Participants will gain insights into innovative design of transformer and methods that enhance efficiency, capacity, and sustainability of the transformer. They will also learn about the impact of these trends on various industries, such as electricity transmission, distribution, electric vehicles, and smart grids. Ultimately, attendees will be better equipped to apply this knowledge to improve transformer design, testing and maintenance.



POSTER OF THE EVENT

JGI | **ARKA JAIN University** | **NAAC GRADE A** | **Outlook** | **RANKED 3rd** | **ISO**

Jharkhand | ICARE BANKING 2023 | IN "TOP-15 EMERGING PRIVATE UNIVERSITIES IN INDIA" CATEGORY

School of Engineering and IT

Organizes

EXPERT LECTURE

Recent Trends in Transformer Design, Testing & Maintenance

Date : 4th Sept, 2024

Time : 10:30 AM onwards

Venue : Virtual Mode

Last Date for Registration: 3rd Sept, 2024

Link for registration:
<https://forms.gle/GbxucdZQpiggDYKLA>

Guest Speaker
Mr. Sanjay Kumar
Lecturer Dept. of EE
Gumla Polytechnic, Jharkhand

Convener:
Dr. Ashwini Kumar

Coordinator:
Prof. Adarsha Rana

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Poster of the Expert Lecture: Recent Trends in Transformer Design, Testing & Maintenance

PHOTOS OF THE EVENT

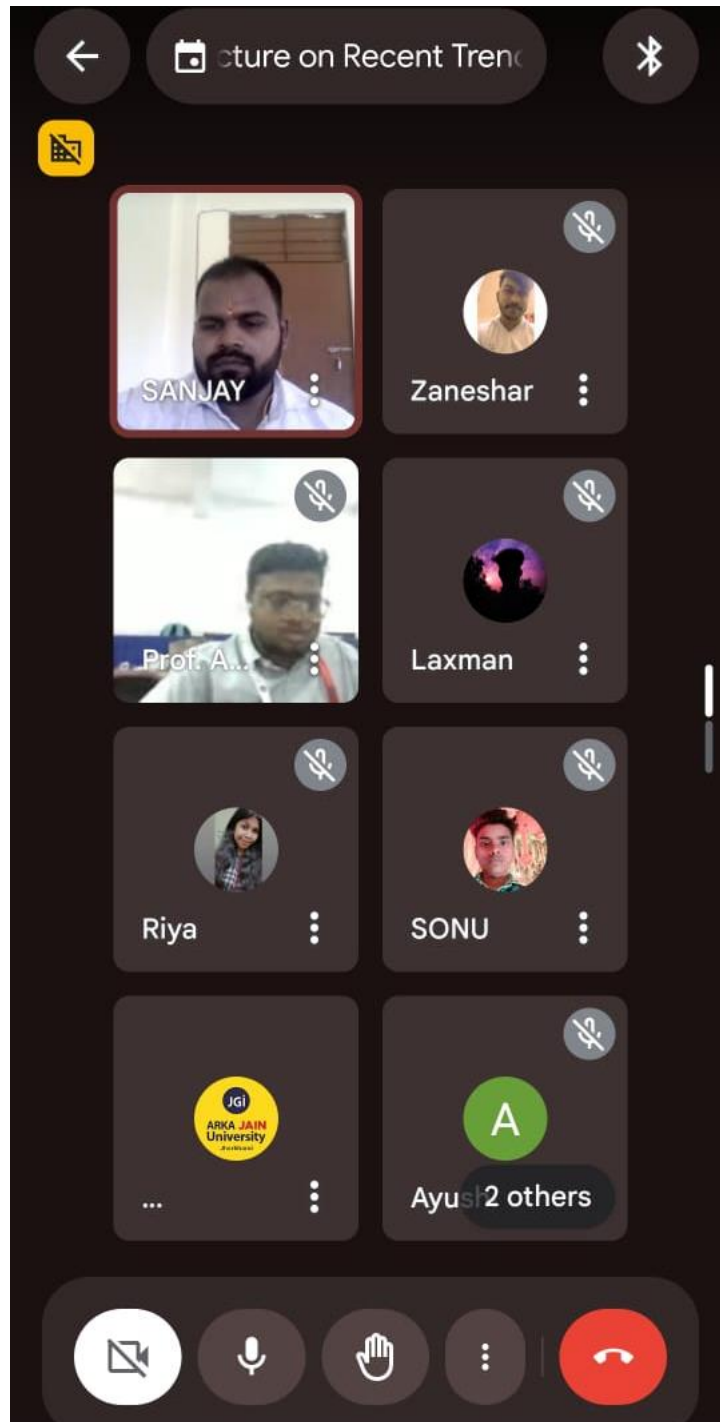


FIGURE 1: PROF. ADARSHA RANA, THE COORDINATOR OF THE EXPERT LECTURE EVENT, HAS INTRODUCED THE RESOURCE PERSON

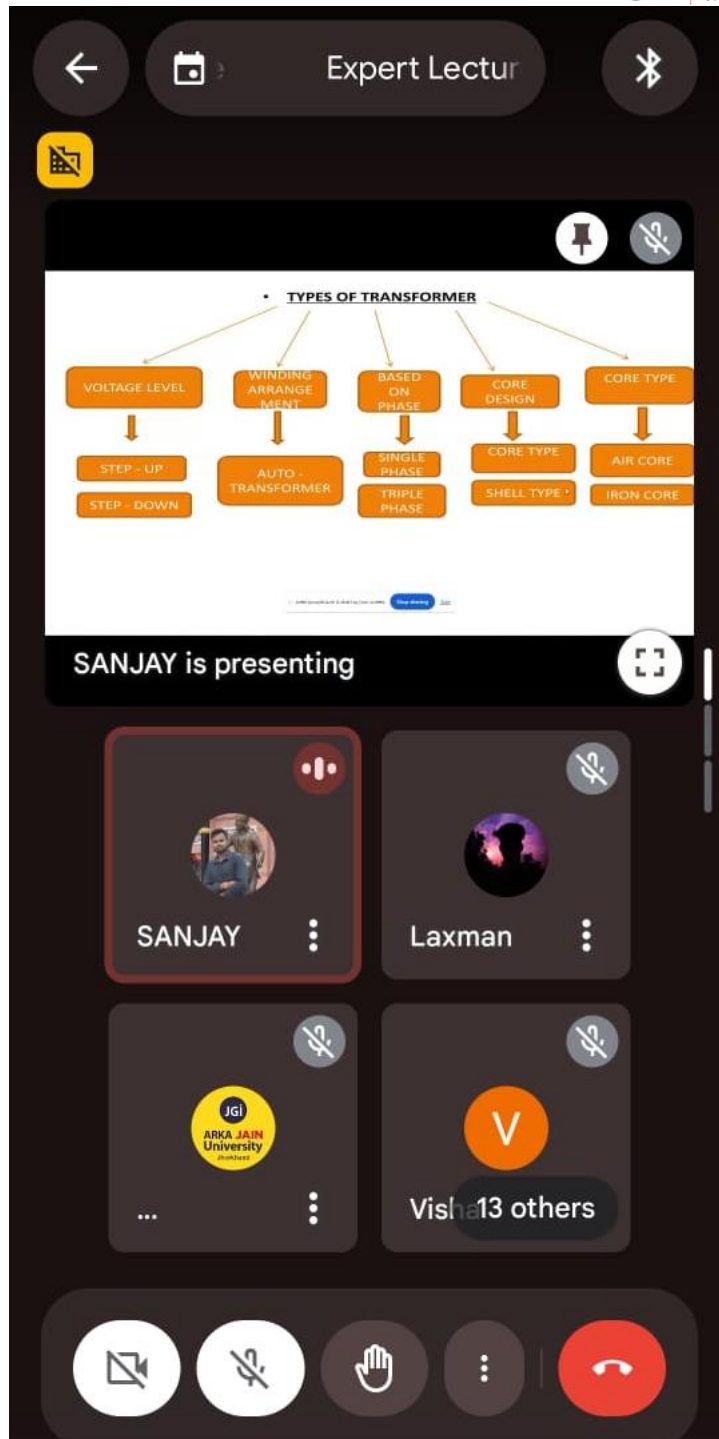


FIGURE 2: RESOURCE PERSON “MR. SANJAY KUMAR” STARTED THE SESSION

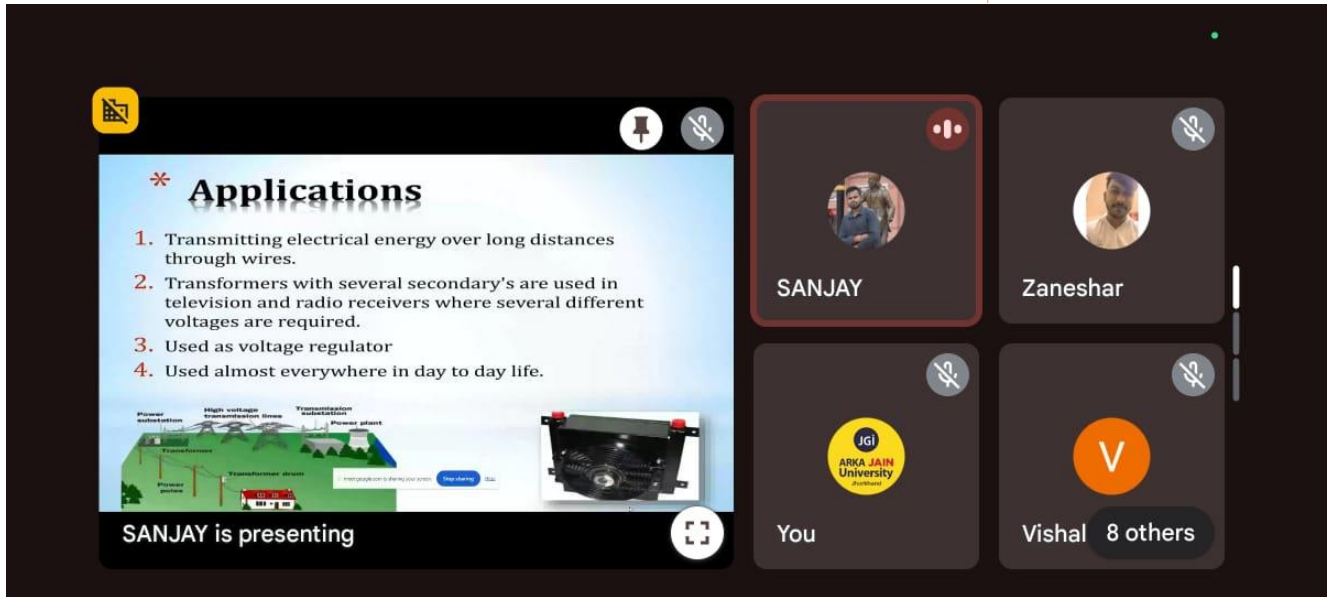


FIGURE 3: RESOURCE PERSON SHARED INSIGHTS ON THE APPLICATIONS OF TRANSFORMER

List of Participants

Name	Email ID	WhatsApp Number	Category	Course	Semester
Deepak das	deepakdas0173@gmail.com	9334937252	Student	Diploma	5th
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Feedback of the students

NAME	DEPARTMENT	DIPLOMA /B.Tech	Enrollment No	E-Mail	What is the function of Transformer?	Applications of Transformer.	How to improve design of transformer explain in your words.
Rajesh Yadav	Diploma EEE	Diploma	AJU/20912	rajeshyadavmnts@gmail.com	Voltage step up or voltage step down	Power generation transmission and distribution	Primary turn, secondary turn, Turns ratio air gap wire size
Sonu Kumar	Poly(EEE)	Diploma	AJU/22250	sonukumar1503200@gmail.com	transfer electrical energy from one circuit to another, while changing the voltage level or providing galvanic isolation	Power generation transmission and distribution	To make a transformer more efficient, you can add loop area insulation, primary and secondary coil resistance, or flux coupling

AYUSHI KUMARI	Diploma in Electrical and electronics engineering	Diploma	AJU/20004	ayushikumari302003@gmail.com	It is used to step up or step down the voltages	It is used in transmission, distribution and power generation	To improve transformer design, use high quality core materials like silicon steel to reduce losses, optimize core geometry and employ efficient winding materials and arrangements to minimize resistive losses and enhance performance.
LAXMAN HEMBROM	ELECTRICAL	Diploma	AJU/20690	laxmanhembrom105@gmail.com	Step up or step down	Inverter power generation	Used for good material for good efficiency

Tarilochan mahato	Diploma EEE	Diploma	AJU/2 20613	mahatotarilochan@gmail.com	Step up voltage and step down	Inverter , power generation etc	Used for good material for good efficiency
Gulshan kumar	DIPLOMA A EEE	Diploma	AJU/2 20642	gulshanthakur52jsr@gmail.com	Step up and down the voltage	Power generation, inverter , locomotive etc.	By using magnetic circuit, insulation.
Suhani Kumari	Electrical and Electronics Engineering	Diploma	AJU/2 20697	kumarijhasuhani@gmail.com	To step up or step down the voltage	Power generation	To improve design of transformer we have to choose core material the core material of a transformer affect its performance and losses
Aashutosh Mishra	EEE	B.Tech	Aju/22 2109	asumisra101@gmail.com	Transfer power from one ckt to another without change	Industrial purpose	By the help of electrical machine design

					in frequency		
Ranjeet Kumar	EEE	B.Tech	AJU22137	ranjeetkumar29909@gmail.com	The function of the transformer is the step up voltage and step down voltage	For industrial and domestic used	By electrical machine design
Shibu Lohra	EEE	B.Tech	AJU/222112	krishnalohra9973961752@gmail.com	Transfer the energies	Domestic and industrial purpose	Low cost and more efficiency
Mani Shankar Mishra	Diploma in EEE	Diploma	AJU/231516	mk3465047@gmail.com	transfers electrical energy from one circuit to another	power generation, distribution, and transmission	add loop area insulation, primary and secondary coil resistance, or flux coupling.