

REPORT ON GUEST LECTURE

1	Name of the Activity/Event	“Industrial Applications of Power Electronics”		
2	Date of Activity/Event	17-05-2022		
3	Organized by/Name of the committee	Department of EEE		
4	Place of Activity/event	Narayana Engineering college , Nellore		
5	Resource person/guest/organization	Mr.A.Saravana Kumar, Senior Hardware Engineer Power Electronics P Ltd Hyderabad		
6	Type of activity/Event	GUEST LECTURE		
7	Activity/Event objectives	1. knowledge on Distributed control systems.		
8	Participation	Students	Faculty	Total Participation
9	General remarks	1. Lack of Time 2.Not audible to last row		
10	Suggested Improvements	Need full day session		
11	Enclosures	1.photos 2.attendance report		

On 17/5/2022 Narayana engineering college, Nellore EEE Department Organized a Guest lecture on **“Industrial Applications of Power Electronics”** in Electrical Engineering”. In this session they discussed about, In recent years, power electronics have been intensely contributing to the development and evolution of new structures for the processing of energy. It is becoming very common to generate electrical energy in different ways and convert it into another form in order to be able to use it—for instance, renewable sources, battery banks, and the transmission of electric power in direct current (DC), which makes the voltage of the network available in different levels, in detriment to the supplied voltage from the grid.

The speaker explains the wide range of applications ranging from power systems and electrical machines to electric vehicles and robot arm drives. In conjunction with the evolution of microprocessors and advanced control theories, power electronics are playing

an increasingly essential role in our society. Thus, in order to cope with the obstacles lying ahead, this book presents a collection of original studies and modeling methods which were developed and published in the field of electrical energy conditioning and control by using circuits and electronic devices, with an emphasis on power applications and industrial control. Researchers have contributed 19 selected and peer-reviewed papers covering a wide range of topics by addressing a wide variety of themes, such as motor drives, AC-DC and DC-DC converters, multilevel converters, varistors, and electromagnetic compatibility, among others. The overall result is a book that represents a cohesive collection of inter-/multidisciplinary works regarding the industrial applications of power electronics

After his lecture the students were given time to interact with him. Students felt that the session was more informative and interactive.



Mr.Saravana interacting with students



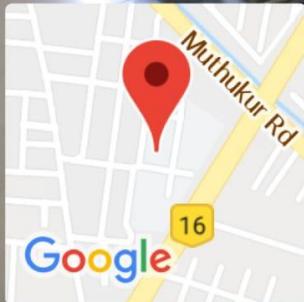
NARAYANA ENGINEERING COLLEGE::NELLORE



AUTONOMOUS



GPS Map Camera



Nellore, Andhra Pradesh, India

CXJV+QJM, Balarama Nagar, Nellore, Andhra Pradesh 524003,
India

Lat 14.432377°

Long 79.994634°

17/05/22 03:26 PM

Listening students

HOD

PRINCIPAL

REPORT ON GUEST LECTURE

1	Name of the Activity/Event	"POWER PLANT ENGINEERING ON BOILERS"		
2	Date of Activity/Event	17-05-2022		
3	Organized by/Name of the committee	Department of EEE		
4	Place of Activity/event	Narayana Engineering college , Nellore		
5	Resource person/guest/organization	Mr.Jagannathan S, Executive Engineer, Thermal Power Plant-I, Chennai		
6	Type of activity/Event	GUEST LECTURE		
7	Activity/Event objectives	1. knowledge on Distributed control systems.		
8	Participation	Students	Faculty	Total Participation
9	General remarks	1. Lack of Time 2. Not audible to last row		
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Guest Lecture was conducted by the department of EEE, NEC Nellore on 17.5.2022 from 3.00 pm to 5.00 pm Chief guest our college Alumni Mr.Jagannathan S, Executive Engineer, Thermal Power Plant-I, Chennai, has taken a lecture on topic "POWER PLANT ENGINEERING ON BOILERS" for second year students.

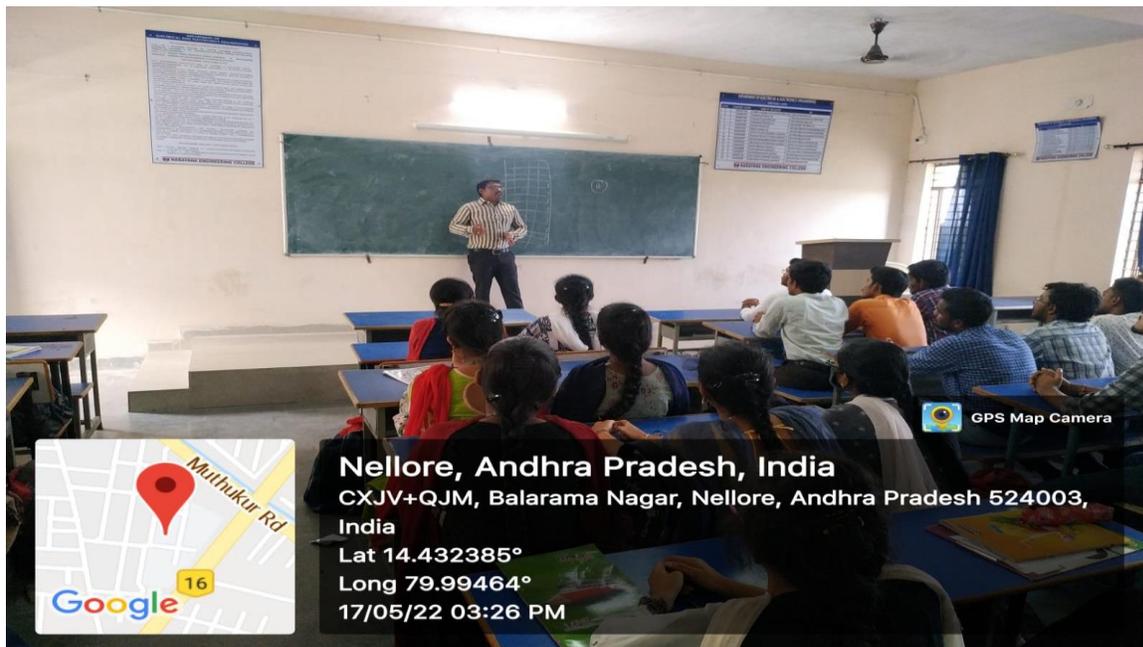
The speaker explains the Basics of Boilers were built as early as the 1st century AD by Hero of Alexandria but were used only as toys. Not until the 17th century was serious consideration given to the potential of steam power for practical work. The first boiler with a safety valve was designed by Denis Papin of France in 1679 boilers were made and used in England by the turn of the 18th century. Early boilers were made of wrought iron as the advantages of high pressure and

temperature were realized, manufacturers turned to steel. Modern boilers are made of alloy steel to withstand high pressures and extremely high temperatures.

They also discussed about Most of the conventional steam boilers are used in present plants. Rise in demand for steam boilers from end-use industries across the globe is a key factor driving the growth of the steam boiler market. In addition, increase in investment toward the power generation sector, owing to rise in electricity demand significantly contributes to the growth of the global steam boiler market. However, increase in investment in renewable energy power generation, stringent governmental regulations toward greenhouse gas emissions from conventional fuel sources, and high initial cost associated with steam boilers hamper the growth of the global market. Conversely, technological advancements in steam boilers for high heating efficiency and upgrading of aging power generation infrastructure are expected to create potential growth opportunities for key players operating in the market.



Mr. Jagannathan addressing the students



Mr.Jagannathan delivering the lecture



listening students

HOD

PRINCIPAL



REPORT ON GUEST LECTURE

1	Name of the Activity/Event	"Machine Learning Applications in Electrical Engineering"		
2	Date of Activity/Event	21-03-2022		
3	Organized by/Name of the committee	Department of EEE		
4	Place of Activity/event	Narayana Engineering college , Nellore		
5	Resource person/guest/organization	Sk.Masumsattar, Data Scientist,HP Bangalore.		
6	Type of activity/Event	GUEST LECTURE		
7	Activity/Event objectives	1. knowledge on Distributed control systems.		
8	Participation	Students	Faculty	Total Participation
9	General remarks	1. Lack of Time 2. Not audible to last row		
10	Suggested Improvements	Need full day session		
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On 22nd of September, 2022 Narayana engineering college ,nellore organized a guest lecture on **"Machine Learning Applications in Electrical Engineering"**. Lecture was conducted by Sk.Masumsattar, Data Scientist,HP Bangalore. He started his lecture Machine learning is a great concept in which the machine will have the ability to learn things without being explicitly programmed.

He explained how machine learning can be used in electrical field. he explained how some domain or field in electrical engineering can apply machine learning concepts. he speaker gave an extremely insightful lecture on the importance of Speed Control Of Motor Using Machine Learning model to control the speed of the motor in both forward and reverse rotation with regenerative braking. smart Grid Using Machine Learning model will be handled automatically whenever fault occurs. Battery Management Using Machine Learning model will

monitor and control the battery state of charge, voltage, temperature, etc.. Home Automation Using Machine Learning model can be used to take decisions smartly when to turn on the heater, when to open the door, when to turn on the TV, etc. Faults in transmission lines and distribution lines are very common, here machine learning algorithms can help to find the spot where the fault has occurred. Also discussed about Autonomous Vehicle Using Machine Learning and Control System Using Machine Learning.



Sk.Masumsattar delivering the lecture



concepts explanation

HOD

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From
Sk.Masumsattar,
Data Scientist,HP
Bangalore.

To
The EEE-HOD,
Electrical & Electronics Engineering,
Narayana Engineering College
Nellore.

Respected sir,

Sub: Tolerant your letter dated 20.03.19-Reg.

Thank you for inviting me to conduct Guest lecturer on “**Machine Learning Applications in Electrical Engineering**”. I am very happy to accept your invitation and this letter is to confirm you for your requisition. I hope the lecture helpful to your students on 21-03-22.

Thanking you.

Yours Sincerely,
Mr. **Sk.Masumsattar**,