



Industry Guest-Lecture Report

on

"Thermal Power Plant Engineering"

Organised by

Department of Electrical & Electronics Engineering

Date: 14.12.2022

Time: 3.00 PM to 4.00 PM

Venue: Seminar Hall A

Organized in association with: Institution Innovation Council & ISTE Student Chapter

Submitted by: Ms. Revathy Gopinath, Assistant Professor, Dept. of EEE

Attendance: 61 participants

The programme is started at 3:00 PM with a welcome address to all the audience by the Dr. A V Pavan Kumar, H.O.D, EEE, MITS, Madanapalle and shared his view on **National Energy Conservation Day**. Vice Principal Academics Dr. P. Ramanathan has shared the importance of Energy conservation day and motivated students towards learning and utilization of knowledge to build better technology for future. The resource person **Mr. D. Anbarasu, Assistant Director(Technical) – National Power Training Institute, Bangalore, INDIA** was introduced by Dr. A. V Pavan Kumar, H.O.D, EEE.

The resource person started the session by extending his hearty thanks to the participants, organising members, HoD, Principal and Management of MITS Madanapalle for giving him opportunity to share his knowledge and experience in "Thermal Power Plant Engineering".

The topic the resource person covered is Thermal power plant Generation, Power plant Equipment's, Power Plant Schemes, Power Plant Layout, Generator and Electrical system. The audience was made aware of the following through his presentation.

- Coal to electricity process
- Inputs & Outputs for 1000MW Power Station
- Coal transportation & coal handling plant
- Raw water processing
- Air & flew gas flow
- Feed water & steam flow
- Power station equipment's – Turbine auxiliaries, generator auxiliaries
- Plant layout of 210 MW

The session was concluded followed by a vote of thanks, given by Dr. A V Pavan Kumar, H.O.D, Electrical and Electronics Engineering Department, MITS, Madanapalle.



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Photos:

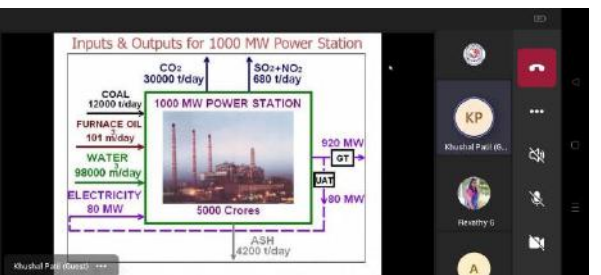
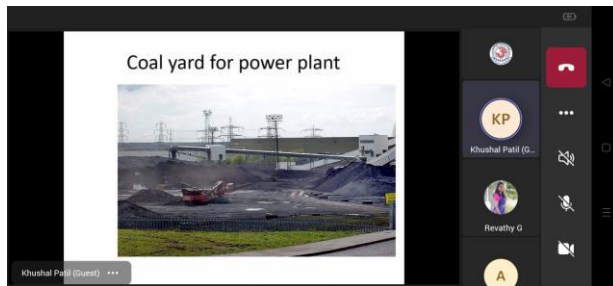
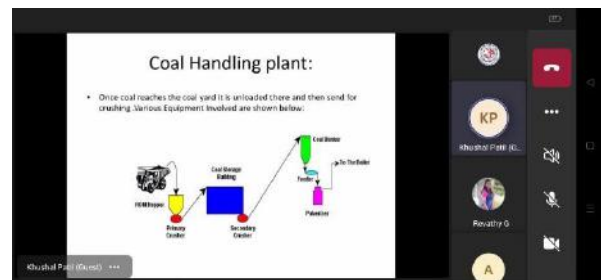
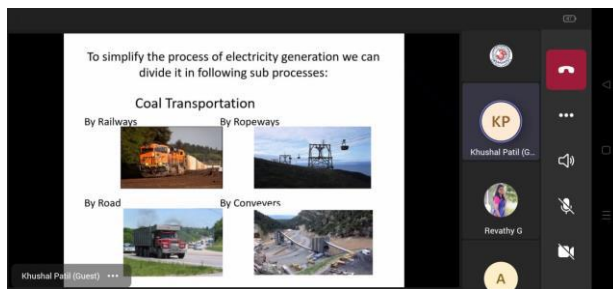
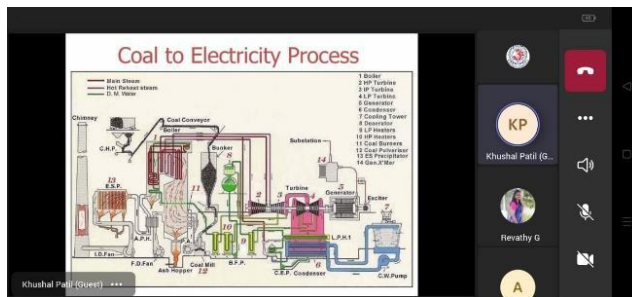
Guest Lecture on
"Thermal Power Plant Engineering"
In association with IIC and ISTE
Organized by Department of Electrical & Electronics Engineering

Resource Person
Mr. D. Anbarasu
Asst. Director(Technical),
National Power Training Institute,
Bangalore

Date
14/12/22
Time
3.00-4.00 PM

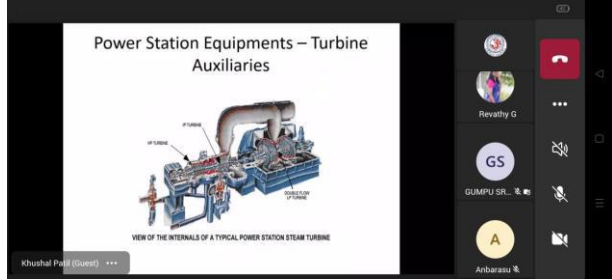
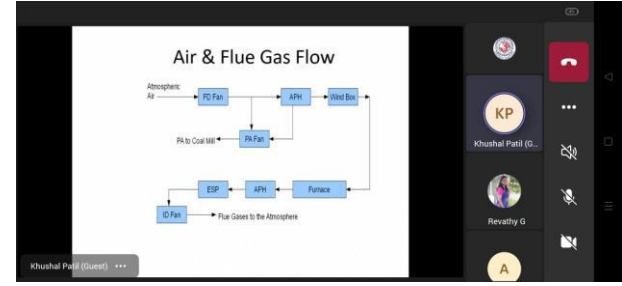
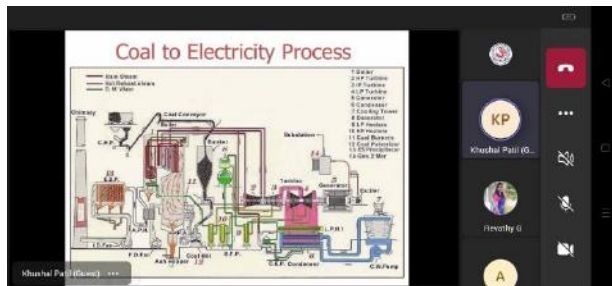
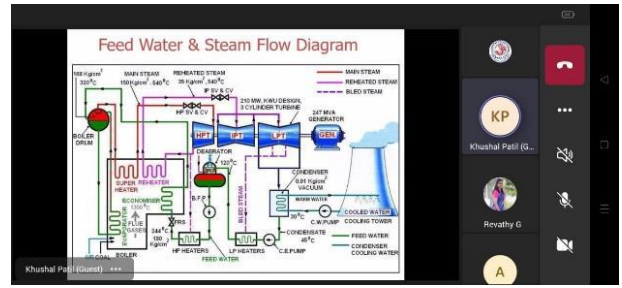
Chief Patron Dr. N. Vijaya Bhaskar Choudary Secretary & Correspondent	Patron Mrs. N. Keerthi Executive Director	Co-Patron Dr. C. Yuvaraj Principal
Convener Dr. A.V Pavan Kumar Professor, Hod EEE	Co-ordinator Revathy Gopinath (Assistant Professor, Department of EEE)	

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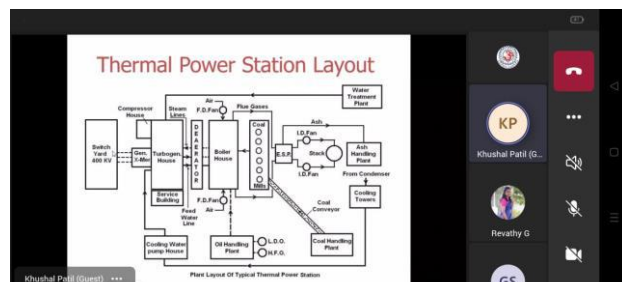


210 MW Generator Parameter

- Rated Power = 210 MW/247MVA P.f = 0.85
- Rated Voltage = 15.75Kv
- Full load current = 9050 Amp
- Rated Frequency = 50Hz
- Field Voltage Rated = 310 Volts DC
- Rated Excitation Current = 2600Amp DC

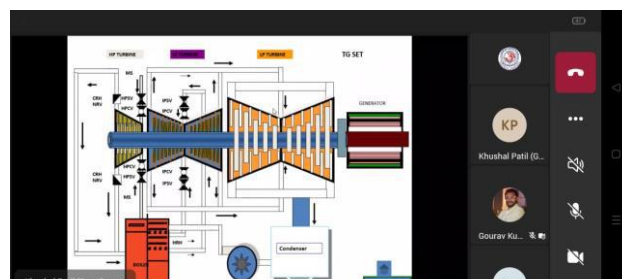


- ### Main Areas in Power Station
- Boiler Plant House
 - Turbine Generator House
 - Switch Yard
 - Coal Handling Plant
 - Oil Handling Plant
 - Water Handling Plant
 - Cooling Towers & Cooling Water Pump House
 - Ash Handling Plant



History of AC Generators

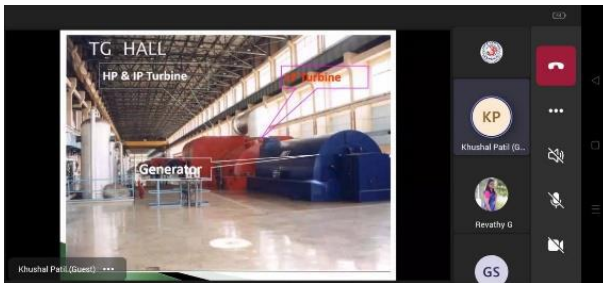
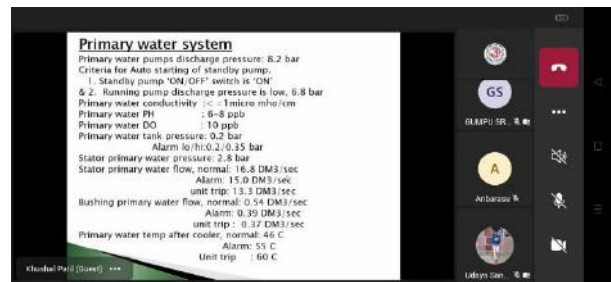
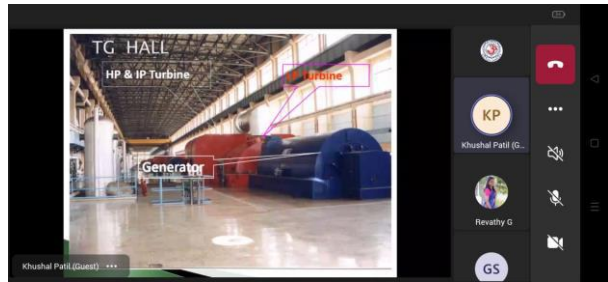
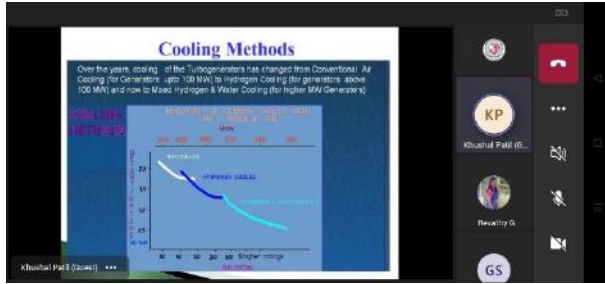
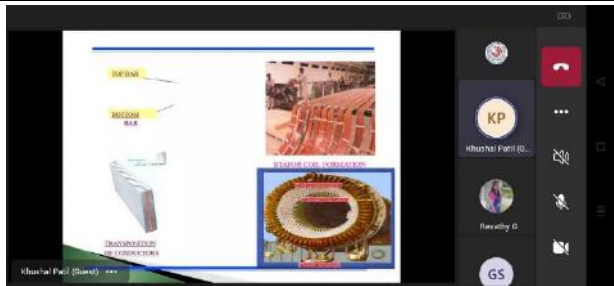
- Year 1831: Galvani writes on Principles of FARAADAY'S ELECTROMAGNETIC INDUCTION, by Michael Faraday
- Year 1832: Michael Faraday invents the first dynamo
- Year 1839 and 1840: Hippolyte Pixii invents the first AC generator
- Year 1870: Nikola Tesla invents the first AC generator





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Revathy

Signature of the Coordinator

Pavani

Signature of HoD, EEE