

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(RUTONOMOUS)

STB-62331

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Report on

An Industry Oriented Expert Lecture on "Off-Shore Gas Insulated Substation (GIS)" Under IEEE Student branch and ISTE Chapter On 18th March, 2021.

IEEE Student Chapter, ISTE branch of SVEC and Dept. Of EEE, Sree Vidyanikethan Engineering College was organized an industry expert lecture on **"Off-Shore Gas Insulated Substation (GIS)"** held on 18th March 2021 during 10.30 AM to 1.00 PM at civil Seminar hall. The objective of this industry oriented expert lecture is to facilitate the importance of off-Shore Gas Insulated Substation operation, testing and maintenance for III EEE, M. Tech (EPS & PED) students and faculty. It was an excellent opportunity for students to access the high quality expert lecture and possible Internship opportunities on Gas Insulated substation.





Banners for an Industry Oriented Expert Lecture



Inaugural address by Dr. N M G Kumar fro industry oriented expert lecture



GIS Photo with of participants and Resource persons delivering the session





GIS Photo with participants and Resource persons delivering the session







GIS Photo with participants and Resource persons delivering the session



Profile Expert :

Dr. G. Thulsiram, Principal Electrical Engineer, McDermott, Chennai, India, He is also having 20 years of industrial experience on various conventional substations and Gas Insulated Substations. He published around 10 articles on several of national and international journals. The resource person delivered about his roles and responsibilities at McDermott, Chennai. In his speech, he also mentioned about his experiences on various industries, ethical attitude, roles and responsibility of electrical engineer in advanced industry.



Dr. G. Thulsiram, Principal Electrical Engineer, McDermott, Chennai, India, delivering a lecture on GIS

Dr. G. Thulsiram delivered a expert lecture on Off-Shore Gas Insulated Substation to III EEE and II M.Tech. **(EPS and PED)** students on 18th march 2021 at Civil Seminar hall during the period of 10.30am to 1.0pm. He elaborates, its primary operational aspects at Power Grid system in India and abroad and also the discriminate the traditional and future grid system and the major role and responsibility of Air Insulated Substation (AIS) and Gas Insulated Substation (GIS) in industry.

His presentation mainly focuses on various components of Air Insulated Substation (AIS) and off-shore and on-shore Gas Insulated Substation (GIS), technical clearances among the components, safety precautions, and recommended IEEE and IEC standards for various levels of voltages applicable to cement , Fertilizers, Petroleum, Chemical industry, and power companies in India and abroad. Some of the major merits and demerits of the various advanced insulated materials used in Off-Shore GIS.

He mentioned about the insight of SCADA, Outage management systems and life cycle of GIS. He demonstrated some of visual examples of various substation switching operations and qrc quenching properties at AIS and GIS. He also presented the operator responsibilities and roles at off-shore GIS. Also, visual pictures and videos of various off-shore and on-shore GIS Installations issues, challenges and their solutions, up gradations and design considerations in power industry.

He also explored the key concepts of communication technologies at GIS and handling the latest maintenances issues through helicopter. Finally, he concluded with his real time experiences and the role of modern Engineers in industry must be specific and must be effective function. Around 150 students of UG and PG from Electrical and Electronics Engineering benefitted with this industry expert lecturer. Finally, delivered some insights of carrier opportunities in core area and GIS.



Students & Faculty Practicing in industry oriented expert Lecture



Demonstrating the GIS Substation components



Dr. T. Devaraj,Dept. of EEE interacting the Expert on GIS and carrier opportunities





Felicitation by Dr. Devaraj sr. Professor, Dept. of EEE and faculty members

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IEEE Student Branch Counselor Dr. N M GKUMAR



Department of Electrical and Electronics Engineering

An Industry oriented Expert Lecture on

"Off-Shore Gas Insulated Substation (GIS)"

Under IEEE student chapter

On 18th March, 2021

OUTCOMES:

On successful completion of the expert lecture, students will be able to:

- 1. Understand the operating functions, maintenance, commissioning, testing and installation of "Off-Shore Gas Insulated Substations".
- 2. Discriminate between conventional and Off-Shore Gas Insulated Substation
- 3. Get the practical exposure and assess the condition of Off-Shore Gas Insulated Substation after installation.
- 4. Apply to the internship program for B.Tech EEE Students.

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IEEE Student Branch Counselor Dr. N M GKUMAR