## SREEPATHY INSTITUTE OF MANAGEMENT AND TECHNOLOGY (SIMAT) Vavanoor, Palakkad - 679 533





07/02/2018

## **Report - IEEE DISTINGUISHED LECTURE PROGRAM AT NITC**

IEEE PES (Power & Energy Society) Kerala Chapter in association with IEEE PES Student Branch of NIT Calicut had organized a Distinguished Lecture Program in Chanakya Hall, NIT Calicut on 06th Feb 2018. Dr. Hermann Koch, Siemens AG presented the topic - AC and DC Gas Insulated Transmission Lines. The session was attended by 300 people, including industrialists, KSEB Engineers, researchers, academicians and IEEE members. Smitha G, Assistant Professor, EEE Department attended the program from SIMAT.



Speaker:

**Dr. Hermann Koch**, Siemens AG, Energy Management Division, Transmission Solutions, Germany.

Hermann Koch received his academic education at Technical University Darmstadt and New Jersey Institute of Technology in Newark, NJ in 1986 in Electrical Engineering. His research work in the field of high voltages was concluded in 1990 with his doctoral thesis on partial discharge measurements for non-destructive testing. In 1991. He started his career with Siemens in Erlangen Germany at the headquarters of the power transmission division. He was engaged in gas insulated technologies for HV circuit breaker, gas-insulated substations and transmission lines. Responsible for technical support in sales, development of gas-mixture technologies like GIL, business development for GIS and GIL and for coordination of Siemens standardization activities on Energy Transmission Division. He has published 150 technical papers and holds 31 patents in the field of gas insulated technology

Topic : Gas-insulated transmission lines (GIL) are in operation worldwide in AC technology. The AC technology of GIL has been proven as a reliable and high power transmission technology installed in a tunnel, above ground and directly buried. The new DC gas-insulated transmission line technology enters new fields of applications for DC high power transmission lines and DC gas-insulated switchgear (DC GIS). The basic principles, design data, installation details, repair and maintenance, de-commissioning of DC gas-insulated systems were well explained. The lecture gave basic theoretical information on the gas insulated technology for the design and physical layout. The historical development of GIL product design, insulating gases, laying options, testing, system and network requirements, environmental impact, economical aspects and examples of

practical applications were discussed. Mile stones of applications like the first 400 kV GIL in Schluchsee, Germany from 1975, the first gas mixture GIL at Palexpo, Geneva, Swiss in 2001 and the first gas mixture insulated and directly buried 400 kV GIL at Kelsterbach, Germany in 2010 were explained in detail.

The session started at 11:00 AM with the welcome address by Dr.Ashok S, Dean-Academic Research, NITC. Dr. Kumaravel S, Branch Counselor, IEEE PES SB NITC introduced the speaker and his contributions to the area of GIL - Gas Insulated Transmission Lines. Er. Suhair A K, Chair, IEEE PES Kerala Chapter felicitated the event. Dr, Sindhu T K, Assistant Professor, EEE Dept, NITC summarized the talk and Rohit K. Mathew, Branch Chair, IEEE PES Student Chapter, NITC expressed Vote of Thanks. The session ended at 0200 PM.