HBNI

ALUMNI WEBINAR

Tuesday,
29th July 2025
at 17.00 hrs.

Venue :- HBNI Council Hall, 2nd Floor, Training School Complex, Anushaktinagar, Mumbai

Link of : -

YouTube:
https://youtube.com/live/f1FLdODpliQ

Webex:
https://hbni.webex.com/hbni/j.php?MTID=m46e152a355f57529ec4d3392d330df6d

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"Very Low Frequency HV Source for with stand test of Power Cables"

Dr. Gyanendra Kumar holds a B.Tech. in Electrical Engineering from KNIT Sultanpur (2012), and M.Tech. in Power Electronics and Drives from MNNIT Allahabad (2015), and a Ph.D. in Engineering Science from HBNI Mumbai in 2024. He has one year of teaching experience as an Assistant Professor at JECRC University, Jaipur, and is currently a Principal Analyst at Motwane Manufacturing Company Pvt. Ltd. He has seven publications in international/national journals and conferences.

Abstract

DC voltage has traditionally been used for cable testing, but it has proven ineffective in detecting hidden defects in XLPE insulation. This ineffectiveness arises because DC voltage can induce trapped space charges, that weaken the cable's dielectric strength in XLPE cables. Very Low Frequency (VLF) testing has emerged as a more effective alternative, functioning as both a withstand and maintenance test. VLF tests utilize frequencies between 0.01 Hz and 0.1 Hz and voltages higher than the operating voltage, to help identify potential failures in cables. VLF withstand tests and diagnostic tests (Tanδ and Partial Discharge) are employed to assess the cable's condition. VLF tests are generally considered safe for non-damaged insulation.

All are cordially invited for in person attendance