Induced Discharge in Optical Cables

The paper presents investigations in the area of optical partial discharge measurement technique. In an overview, PD measurement systems were presented, advantages and disadvantages of the optical ...

In this paper, we demonstrate a ber-optic fi sensor system that can successfully detect the partial discharge acoustic emis-sion from power cable joint defect.

This is based on the detection of light produced as a result of various chemical processes like ionization, excitation, recombination during partial discharge process.

The focus of this Technical Brochure is on how to calculate induced voltages on the cable to be worked on, how to plan the works in case of induced voltages and how to proceed with the work in situations ...

It proposes to solve the problems of polarization attenuation and phase drift in distributed optical fiber sensing system, and improve the positioning accuracy of partial discharge signal in high ...

ble to be measured towards the goal of detecting partial discharge. This method could present numerous advantages over conventional Partial Discharge measurement techniques including ...

Here, we propose and demonstrate an efficient approach for triggering, trapping and guiding electrical discharges in air. It is based on the use of a low-power continuous-wave vortex beam that traps and ...

In this study, to improve the sensitivity and accuracy of the detection of surface partial discharge (PD) in gas insulation switchgears (GISs), a combination of ultra-high frequency (UHF) ...

To improve the long-term reliability and sensitivity of the sensing system, a novel method for cable joint monitoring based on implanting optical fibers within the joint structure is proposed.

Abstract: High-voltage power electronic equipment usually uses optical fiber to communicate with the secondary control system to meet the needs of high-speed communication ...

Partial discharge (PD) detection is an effective method for evaluating the insulation status of power cables. In this paper, a disturbed acoustic sensing (DAS) system based on phase ...

Analysis of cable discharge events (CDE) starts with the basic wire-to-ground pulse and continues, for shielded cables, with induced currents on the ...

To improve the safety and efficiency performance of partial discharge detection in a high-voltage direct

current (HVDC) cable system, an optical fiber ultrasonic detection system for partial ...

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