



Journal Menu

- Abstracting and Indexing
- Aims and Scope
- Article Processing Charges
- Articles in Press
- Author Guidelines
- Bibliographic Information
- Contact Information
- Editorial Board
- Editorial Workflow
- Reviewers Acknowledgment
- Subscription Information

- Open Special Issues
- Published Special Issues
- Special Issue Guidelines

Call for Proposals for Special Issues

Journal of Sensors
Volume 2009 (2009), Article ID 608714, 5 pages
doi:10.1155/2009/608714

Research Article

Ozone Sensor for Application in Medium Voltage Switchboard

Letizia De Maria and Giuseppe Rizzi

Transmission and Distribution Department, ERSE, via Rubattino 54, 20134 Milan, Italy

Received 30 December 2008; Revised 30 April 2009; Accepted 6 May 2009

Academic Editor: Yongxiang Li

Abstract

The application of a new spectroscopic type fiber sensor for ozone detection in electrical components of Medium Voltage (MV) network is evaluated. The sensor layout is based on the use of an optical retroreflector, to improve the detection sensitivity, and it was especially designed for detecting in situ rapid changes of ozone concentration. Preliminary tests were performed in a typical MV switchboard. Artificial defects simulated predischage phenomena arising during real operating conditions. Results are discussed by a comparison with data simultaneously acquired with a standard partial discharge system.

Abstract

Full-Text PDF

Full-Text HTML

Linked References

How to Cite this Article

Complete Special Issue