# LECTRICAL INSULATION

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#### FEATURE ARTICLES

### Partial Discharge Measurements on Hydro Generator Stator Windings Case Studies

Shunyuan Li and Jennifer M.Y. Chow

The use of PD analysis to identify insulation problems allows for the planning of corrective measures when it is most cost efficient for the power system.

## 16 Thermoluminescence — An Optical Technique for In-situ Measurement of Cross-linking By-products **During Degassing of Power Cables**

S. S. Bamji and A. T. Bulinski

A novel optical technique has been developed to determine the concentration of by-products in chemically cross-linked polymeric materials.

# 23 Evaluation of Dielectric Properties of Printed Wiring Board Materials by Using a Microstrip-ring and Strip-line Ring Resonator Methods

J.-M. Heinola and J.-P. Ström

It is important to remember that the effects of moisture absorption and temperature changes on the dielectric properties of PWB materials cannot be generalized. Each material has to be tested individually to find out the effects of temperature dependence and possible moisture absorption

#### Cover Photo:

DC arc testing at new laboratory at Kinectrics (Photo Courtesy of Kinectrics Inc. High Current Lab)

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