

FEATURE ARTICLES

6 *Nanodielectrics – How Much Do We Really Understand?*

Christopher Green and Alun Vaughan

We have sought to introduce some of the salient features of nanocomposite research that relate to the development and application of useful dielectrics.

17 *Insulation Failure Mechanisms of Power Generators*

Rudolf Brüttsch, Makoto Tari, Klaus Froehlich, Tilman Weiers, and Ruben Vogelsang

Aging is not dominated by electrical stress but rather by the combination of different stress factors, of which thermal and mechanical wear are the most important.

26 *Asset-Management of Transformers Based on Condition Monitoring and Standard Diagnosis*

Xiang Zhang and Ernst Gockenbach

The important aim of the standardization is to develop the multiple diagnostic models that combine results from the different tests and give an overall assessment of reliability and maintenance for transformers..

41 *Interaction between Insulating Paper and Transformer Oil: Bacterial Content and Transport of Sulfur and Nitrogen Compounds*

Martina Levin

The paper insulation may influence the condition of the insulation oil in transformers.

Cover Photo:

Prof. Masoud Farzaneh, Charles Biddle Prize Awardee

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