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# ACTIVITIES OF THE TECHNICAL COMMITTEE ON DEI IN IEEJ

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## Digest Reports of Investigation Committees in DEI

Digest Reports on activities of investigation committees in the technical committee on DEI are reproduced here from the Proceedings of the 29 th Symposium on Electrical Insulating Materials (Sept. 1997, Osaka Japan).

### Fundamental Process of Treeing Degradation

K. Kudo ( Meiji University )  
N. Shimizu ( Nagoya University )  
H. Muto ( The Furukawa Electric Co. Ltd.)

This committee was established in April, 1994 and terminated in March, 1997. This committee consisted of 21 members. The items of survey were as follows:

- (1) Fundamental process of initiation and propagation of electrical tree under ac, dc or impulse voltage.
- (2) Fundamental process of initiation and propagation of water tree.
- (3) Propagation process of electrical tree originating from water tree.

The three year activity of this committee will be published in Technical Report of IEEJ next year.

### Interfacial Phenomena in Composite Electrical Insulation

T. Tanaka ( Central Research institute of Electric Power Industry )  
M. Nagao ( Toyohashi University of Technology )  
Y. Yamashita ( Furukawa Electric Co. Ltd.)  
F. Honma ( Central Research institute of Electric Power Industry )

The purpose of this committee is to survey and discuss the influence of interfaces on the electrical insulating properties of composite electrical insulating systems. The committee started its three-year term activity in January 1995 by 28 members. We have held 13 committee meetings and 6 secretary meetings up to July 1997. The main subjects of the investigation and survey in the meetings are as follows:

- (1) Electrical insulation properties of external and internal interfaces in composite insulation systems.
- (2) Evaluation method of electrical insulation performance of interface.
- (3) International Round Robin Tests of electrical insulation at external and internal interfaces in composite insulation system and the analysis of the results in collaboration with CIGRE WG15-10 ( Interfaces ).
- (4) Study visit to the research institutes and industries in Japan related to the composite electrical insulation.

More than 130 papers have been presented and discussed in the committee. The three year activity of this committee will result in the Technical Report of IEEJ in early 1998.

### High Temperature Insulation

T. Okamoto (Central Research Institute of the Electric Power Industry)  
M. Ishida (University of Tsukuba)  
H. Mitsui (Toshiba Corporation)  
M. Okashita (Showa Electric Cable & Wire Co. Ltd.)