



INTERNATIONAL COUNCIL  
ON LARGE ELECTRIC SYSTEMS  
NEW ZEALAND NATIONAL COMMITTEE INC.



New Zealand North Section

## **Inorganic and Organic Dielectrics for outdoor high voltage insulators**

This talk will address porcelain, glass and polymeric materials for use in high voltage insulators for power transmission and distribution. Important characteristics of these materials will be discussed with a view to explain behaviour under high electrical and mechanical stresses in a variety of outdoor conditions. Interfacial aspects, both microscopic and macroscopic will be discussed. Accelerated laboratory tests to characterize material performance will be presented. Future requirements of very high ac and dc voltages (> 600 kV) will be presented. Activities in the IEEE and CIGRE committees on this subject will be reviewed.



**Biography:** Ravi Gorur is a Professor and Director of Undergraduate Studies in the Department of Electrical Engineering at Arizona State University. He has authored a textbook and over 150 papers in IEEE Transactions and Conferences on the subject of insulators. He directs research projects for utility, industry and government agencies. He has graduated over 50 students with MS and Ph. D degrees at ASU. He is the US representative of CIGRE study committee D1. He was elected to IEEE Fellow in 1998 for contributions to aging of polymer materials for outdoor high voltage applications. He offers short courses on outdoor insulators. He served as the chair of the IEEE committees on insulator contamination and aging, polymeric cable terminations and was responsible for the IEEE standard 1523 on RTV silicone rubber coatings for HV Ceramic insulators. He works as a consultant to various companies in the area of electrical insulation.

**Date:** Tuesday, June 3 2008

**Location:** Room 401- 401(Eng1.401), School of Engineering, 20 Symonds Street, University of Auckland, Auckland

**Time:** 6:30 to 7:30pm (Refreshments & get together before starting at 6pm)

**RSVP:** Dr. Nirmal Nair at [N.Nair@auckland.ac.nz](mailto:N.Nair@auckland.ac.nz)