PREFACE

A rolling stone gathers no moss. In fact, there are two contrary interpretations of this English proverb. The first, older interpretation would teach us that there is no achievement in constant motion—we should spend enough time on a project to see our work thoroughly completed. Perfection is perpetual work. The second meaning suggests that motion is compulsory if we seek to carve a niche for ourselves in the new scheme of technology in this rapidly changing world. Innovation abhors stagnation. I suggest that the true wisdom of the proverb lies in the thoughtful execution of both strategies.

Since 1968, the Symposium on Electrical Insulating Materials (EIM) has met twenty-one times under the supervision of the EIM Technical Committee formed within the Institute of Electrical Engineering of Japan (IEEJ). The Symposium is organized according to the concepts of its founders, Professor Y. Inuishi (formerly from Osaka University, now at Kinki University), Professor M. Ieda (Nagoya University) and the late Professor K. Yahagi (Waseda University). Every year, scientists and researchers meet to discuss subjects on dieletrics, such as phenomena of electrical conduction and dielectric breakdown and processes of insulation aging in general. Under the auspices of the Symposium, one to three international guest speakers are invited every year. Thus like the stationary stone, our symposium allows us to assimilate knowledge by providing a stable structure for the maturation and exchange of ideas.

Within the discussions of our annual assembly, however, we can detect the forward motions of change. For example, in the 1970's, water trees in polyolefinic polymers were a topical issue. They were targeted for fresh R&D activity and remain under research today. In the early 1980's, the EIM Technical Committee began to target electronics insulation as a new area of R&D activity in order to expand its existing activities. It organized the investigation committee on electronics insulation in 1984. Both these examples illustrate phases of our R&D passage.

Other illustrations of R&D projects over the past twenty years include the Technical Committee's two year study program (1986–87) on electrical insulation with an eye to the impending "Future Shock" which may come due to rapid technological innovation and radical change of human lifestyle. Our committee set up several task forces to assess future problems and locate R&D targets in each of the subfields of electrical insulation. Some of the results obtained thus far are described in the symposium proceedings. After extensive research, our committee is able to envision a completely new world of electrical insulation. Appropriate applications of newly developed materials and the positive utilization of computer technology will make the vision a reality.

At this time I would like to write a few words about the 1988 Symposium. Two days are usually allotted for EIM Symposiums. This year, however, thanks to the pro-

posal of Dr. Eric O. Forster, an international day has been included in our program in order to accommodate participants arriving mainly from the second International Conference on Properties and Applications of Dielectric Materials (IC-PADM) held in Beijing, China, September 12 through 16. Accepting our invitation to deliver guest-speaker review lectures will be Dr. C. Mayoux (France), Dr. E. O. Forster (U.S.A.), and Dr. H. R. Zeller (Switzerland). In addition, 72 papers have been proposed for presentation. The number of papers submitted from overseas are more than we expected. Thus one and a half days have been provided for English sessions including papers from Japan. For this reason, we propose to call our symposium "Japanese International EIM Symposium '88".

Although English abstracts of the proceedings of EIM symposiums have been published as a brochure and distributed to interested people overseas, this is the first time we have ever published an English proceedings. We are very pleased with the results. Our appreciation is especially expressed to Dr. T. Takada, Program Chairman, for his elaborate editorial work, and to the editorial staff of MYU K.K. for their encouraging review and revision of all the English papers submitted by the Japanese contributors.

Change is good. It should go in harmony with perpetuity. We must learn how to roll forward and how to stand still. It is my personal wish that all the participants in this symposium will acquire the twofold characteristics of the English proverb as you continue your work in the field of electrical insulation and dielectric materials.

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