
PREFACE

Dr. M. Kosaki

Long Live EINA

I have recently seen my 61st birthday come round which has special meaning in the Chinese calendar of coming back to the name of the year one was born. 1999 is the year of earth & rabbit as 1939 was. Sixty years have past since I was born of which I spent more than thirty years deeply involved in the research and education of electrical insulation materials and technology. In retrospect the electrical engineering developed monstrously into electronics, communication engineering, computer science and technology during my career years.



Imagine an international conference thirty years ago. Announcements, registration, program brochure and hotel reservations for the conference were all done through postal mailings or telephone callings. They have all been replaced by the Internet home page system. If you are not familiarized with a computer approach, you will miss the conference. If you are, you can update your conference information by browsing on your PC panel. This is the outcome of the computer and communication technology, and we could hold 1998 International Symposium on Electrical Insulating Materials (ISEIM'98) in Toyohashi, Japan in September 1998.

I understand that although the electrical insulation plays seemingly very passive role of sustaining voltage, it performs the role of power or signal transportation just as current carrying conductors. Since electricity is the sole and unique source of energy in the electronic, communication and computerized world, it is satisfying to know electrical insulation is indispensable wherever electricity is working. Therefore, "Long live EINA!" Human beings depend more and more on electricity in the coming new century and millennium if we can successfully clear the Y2K hurdle originated from the lack of our imagination at the birth of computer age.

Even in the field of electrical insulating materials and technology the application of computer is the main concern. The fingerprinting of partial discharge is only possible by computers. The monitoring a performance of apparatus and the insulation diagnosis can be effectively carried out by computers. At the same time the reliability of versatile computers is guaranteed by the electronic insulation technology. The computer technology is changing the world in unpredictable pace. Whether it contributes to our prosperity and amenity heavily depends on the imagination and cleverness of human beings.

Dr. Masamitsu Kosaki
(President, Gifu National College of Technology)

Society Activity in Transition

After world war II, Japan has achieved miraculous economic progress. Especially, during this last ten years and over, we saw a remarkable growth in the Japanese economy, bringing it to a size comparable with that of Western countries and even dragging the world economy along with it. What laid the foundation for all these economic progress are the gigantic semiconductor industry and the information, electric and electronics industries including the computer industry which are basically supported by the highly reliable electric power system. However, for the past few years with the future of the Japanese economy becoming more unpredictable, the high level of economic growth has reached its end and the Japanese economic environment has become really tough. Moreover, the neighboring Southeast Asian countries have been gradually developing and are now competing with Japan in the areas of hardware industries as steel, raw materials, machine parts, and so on. Considering the advent of Japan's advanced info-tech society and its aging population together with various environmental problems such as global warming, as far as our country's industrial structure is concerned, a shift from the material-intensive type of industry to a knowledge-intensive type of industry is inevitable.



As for the electric power industry which serves as the cornerstone of all industries, while ensuring system reliability there is also the requirement to cut on cost at the same time that from the viewpoint of the planet earth being likened to spaceship, consideration towards the earth's environment has become a matter of topmost concern. This has already started a kind of new quickening, calling for structural reform in the industrial field and a change of direction of scientific societies' various committee activities and also of academic institutions' educational and research activities. These reforms take the deregulation in the electric power industry and the various reforms adopted by universities aimed at achieving Center of Excellence status. In both the industrial field and the academe, the idea of competition has been introduced for the purpose of revitalizing both industry and academe.

The Japan Institute of Electrical Engineering has five Societies A to E. The Technical Committee of Dielectrics and Electrical Engineering that publishes this newsletter belongs to Society A (Fundamentals and Material Society) which is composed of 8 technical committees, namely Research and Education, Electrical Discharges, Light Application and Visual Science, Instrumentation and Measurement, Dielectric and Insulation, Metal and Ceramics, Magnetism, and History of Electrical Engineering. In order to catch up with changes in these fields, four new technical committees designed to actively contribute to the Society's future were inaugurated. These are the Technical Committee on Electromagnetic Theory, Technical Committee on Plasma Science and Technology, Technical Committee on Electromagnetic Compatibility, Technical Committee on Pulsed Electromagnetic Energy. Of the four newly inaugurated committees three are closely related to Electrical Insulation and Discharges, namely Plasma Science, Electromagnetic Compatibility, and Pulsed Electromagnetic Energy. The respective chairmen of these committees will do us a favor of writing about their committee on this issue.

Dr. Masanori Hara (Professor, Kyushu University)
(Vice-president of Fundamentals and Material Society, IEEJ)

MEMORIAL ADDRESS

Prof. T. Mizutani

Great Contributions of Late Prof. M. IEDA

It is very sad to report that Professor Masayuki Ieda suddenly passed away on March 3, 1999 by pneumonia at the age of 73. He was a great worldwide leader in the field of Electrical Insulation and he made great contributions to bridge between Japan and International world (Asia, Europe and America) and also between Material Sciences and Technologies.

His main research achievements were many pioneering works in the development of polymeric insulating materials and their applications to high voltage power apparatus and cables, especially in 275 kV and 500 kV crosslinked polyethylene power cables. As early as 1950, he realized the potential applications of synthetic polymers as new insulating materials for electric power apparatus and cables. He has authored more than 400 papers and about 15 books. Many students who received their training in Prof. Ieda's laboratory became researchers and leaders in Japanese industries or university professors. Prof. Ieda's scientific accomplishments earned him a worldwide reputation. He delivered the Whitehead Memorial Lecture at CEIDP in 1986 and received IEEE Lamme Medal in 1993. He received many other awards such as the Electric Power Award of IEE Japan in 1980, the Outstanding Contributions Award of IEE Japan in 1993 and the CIGRE Distinguished Member Award in 1995.

Prof. Ieda had served as Board Member of many international conferences (such as CEIDP, ICPADM, ICSD, ICDL, ISE, ISH and so on), chairing sessions and serving as a spokesman from Asia and Japan. He was General Chairman of the 3rd International Conference on Properties and Applications of Dielectric Materials (ICPADM) in 1991 in Tokyo. He was also the Japanese representative to CIGRE SC-15 (Materials for Electrotechnology) from 1985 to 1990.

He was Chairman of IEEJ Technical Committee of Electrical Insulating Materials from 1976 to 1983, Vice President of IEE Japan from 1985 to 1987 and President from 1991 to 1992. He was also Member of the Science Council of Japan from 1985 to 1994. He devoted himself to the development of electrical insulation technologies and electrical engineering and also to the development of Science and Technology in Japan..

Prof. Ieda was born on Oct. 8, 1925 in Tokyo, Japan. He received the Bachelor's Degree in Electrical Engineering in 1949 and the Ph. D in Engineering in 1964 from Nagoya University, where he joined the faculty as Research Associate, later becoming Associate Professor and Professor of Electrical Engineering. He spent two years, 1964-66, as a postdoctoral fellow at Cornell University with Prof. P. Debye (a Nobel prize winner). From 1986 to 1989 he was Dean of the School of Engineering, Nagoya University, and he retired from Nagoya University in 1989. He was Professor Emeritus at Nagoya and Professor at Aichi Institute of Technology since 1989

Prof. Ieda's Farewell party was held at Nagoya Garden Palace Hotel on May 7, 1999, and about 500 persons gathered there to remember and thank him. Professor Ieda will be remembered by the scientific and engineering community not only as an eminent scholar but also as a great leader.

Prof. Teruyoshi Mizutani
(Nagoya University)



Late Prof. M. Ieda (1925-1999)