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# PREFACE

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Dr. T. Tanaka

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## Frequency Matching of Signals in Asia among Transmitters and Receivers

We have transmitted some information on dielectrics from Japan to your Asian countries via this brief article named "Electrical Insulation News in Asia" every year to cooperate in the field of science and technology of dielectrics and electrical insulation. I might think that we use a specific frequency spectrum to disseminate information. Do you think our frequency spectrum under which you have received our signals is matched to yours? Mismatch, if any, seems to be a big problem.



We, Asian dielectric people, have certainly a forum through which we see each other regularly to exchange views on the matters of our common interest and grow our friendship to foster mutual cultural and technological understanding. The forum is given by Asian international conferences we organize together, as you know well. In reality, we got together at the International Conference on Properties and Applications of Dielectric Materials in China, Japan, Korea and Australia, and at some other Asian conferences such as the Asian International Conference on Dielectrics and Electrical Insulation, the Korea-Japan Conference on Electrical and Electronic Materials, and the Japan-China Conference on Electrical Insulation Diagnosis. We tried to make frequency tuning in appropriate manner in these occasions. But it is not sufficient.

Our interest might be divided roughly into the following three categories:

- (1) Existing electrical insulating materials and systems
- (2) Advanced electrical insulation systems, and
- (3) Simple and reliable dielectric diagnostic methods.

Electrical insulation seems to be stabilized in developed countries and then to be difficult to expand rapidly from now on. We can expand it from electrical insulation to electronics insulation that is subjected to very high electric field under low voltage. Several advanced materials emerge and are expected to work intelligently in certain cases. Existing established insulation technology should be transferred to other countries. Diagnostic methods have been established in some cases, and should be improved and/or endowed with rapidly developing intelligence technologies. I personally think the subjects I stated above are shared by all of you as your interest.

In all the activities we can devote together to our societies, we need frequency tuning among ourselves with high Q value in order to work as effectively as possible. For that purpose, we have to devise some mechanisms such as an internet home page and some other stronger interactive tools, but for the time being we will continue to send EINA. You would kindly tell us on the frequency matching and mismatching of the signals we will transmit, so that our activity might be more or less interactive and multilateral and will be certainly so in the future to minimize frequency mismatching.

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