
RESEARCH ACTIVITIES AND TECHNICAL EXCHANGES IN ASIAN COUNTRIES

Conference Records

The 5th Korea-Japan Joint Symposium on Electrical Discharge and High Voltage Engineering (2000 K-J Symposium on ED & HVE)

The 5th Korea-Japan Joint Symposium on Electrical Discharge and High Voltage Engineering was held on Oct. 5-6, 2000, in Ulsan University, Ulsan, Korea. The first symposium was held in Kumi, Korea, in 1996, and since then it has been held every year in Japan and Korea by turns, organized by Electrical Discharge and High Voltage Society of KIEE and the Technical Committee on Electrical Discharge of IEEE, Japan. The chairperson of the symposium was served by Prof. Kyu-Chol Lee. The symposium has been planned to provide the opportunity for scientists and engineers, especially for the Master and Doctor course students as well as younger researchers in each countries, to mutually exchange and discuss the scientific and technological ideas, information, practical experiences on electrical discharge and high voltage engineering research field they are involved.

Ninety three researchers (Japan: 41, Korea: 50, others: 2) attended the symposium, and 80% of them are younger researchers. Sixty papers (Japan: 30, Korea: 30) are finally accepted and published in *the proceedings of 2000 korea-japan Joint Symposium on Electrical Discharge and High Voltage Engineering*.

A total of ten sessions involved papers covering the wide variety of topics such as the surge analysis, environmental and industrial application, fundamental of electrical discharge, detection of PD and AE, field measurement, lightning discharge, electrical breakdown in gas/liquid/solid insulators, polymer insulators, EMC, bio-electromagnetism, distribution technology, and so on. In particular many papers from both countries deal with the application of the plasma technology to the environmental treatment and thin film production, and diagnostics of the electrical insulation by using the PD detection technology. Some of the papers presented by Japanese researchers propose the introduction of functionally graded materials (FGM) as an insulation material, which lead to the new concept of solid insulation. This symposium is the first international conference for many Japanese students to attend, and provides the first and valuable experience to communicate with each other in English, which is exactly what this symposium aims at.

The next J-K Joint Symposium on ED & HVE will be held at Miyazaki Municipal University, Miyazaki, Japan, in 2001. It will be chaired by Prof. C. Honda, Miyazaki University, Japan.



Fig. 1 Photograph of all participants in 2000 K-J Joint Symposium on ED & HVE



Fig. 2 Snap shot of Banquet at 2000 K-J Joint Symposium on ED & HVE

By Dr. Noriyuki Hayashi (Kyushu University)

The 10th Asian Conference on Electrical Discharge (ACED-2000)

The 10th Asian Conference on Electrical Discharge (ACED-2000) was held on Nov. 6-7, 2000, in Kyoto University, Kyoto, Japan, followed by one-day technical tour. ACED started in 1988 in order to provide the opportunity for Asian scientists and engineers to present and discuss the latest progress in the research field of electrical discharges and their applications. The chairperson of the commemorative 10th ACED was served by Prof. Tadasu Takuma.

A total of 149 participants from seven countries attended the conference, and more than one third of them were Master and Doctor course students, which means that many students in Asian countries are still interested in the future of electrical discharge technology, high voltage engineering, and plasma application technology.

One hundred and eight papers including the six invited papers from Japan, China, Korea,

Indonesia, Thailand, and Canada were presented in either oral or poster sessions. Topics of the conference and the numbers of papers related with each topic are shown in the following table. It is no doubt that many papers are related to the electric power engineering. However it is

Topics	Num. of Papers
Review	6
Discharge in Gases	21
Discharges in Liquid and Solid	10
Discharge along Interface	15
Plasma and Its Applications	23
Lightning and Overvoltages	6
High Voltage Equipment and Test Technology	21
EMF-Related Issues and Technology	6



Fig. 1 Photograph of all participants in ACED-2000

notable that there are many papers concerning with the applications of electrical discharge and plasma such as plasma processing, ozonizer, exhausted gas treatment, PDP, and so on.

The conference started with the keynote speech by Prof. Akazaki, the chairperson of International Steering Committee, in which the whole history of ACED from the first conference

in 1988 was introduced. The oral sessions started with the invited papers which introduced the recent topics in electrical discharge field in the authors' countries. The oral and poster sessions had 39 and 69 papers, respectively, in total.

The next ACED will be held in 2002 at Soongsil University, Seoul, Korea, and be chaired by Prof. Hoo-Re. Kwak.



Fig. 2 Snap shot of Opening Ceremony at ACED-2000.

By Dr. Noriyuki HAYASHI
(Secretary of ACED, Kyushu University)

2001 International Discussion and Conference on Nano Interface Controlled Electronic Devices (IDC-NICE 2001)

The 1st International Discussion & Conference on Nano-Interface Electronic Devices (IDC-NICE) was successfully held during 16-20 July 2001 at KyongJu Chosun Hotel in KyongJu, Korea. It was mainly organized by the Center for Intelligent & Integrated Port Management Systems in Korea and Dong-A University and supported by the Technical Committee on Dielectric and Electrical Insulation Materials, Japan and the Korean Institute of Electrical Engineers.

This conference was planned to provide opportunities for the researchers, engineers both Japan and Korea, especially young scientists being concerned with organic electronics, to present and discuss on the interfacial electronic phenomena and functional properties of organic thin films. More than 70 high-ranked and distinguished experts participated from 2 countries.

The main topics of this Symposium are;

- ☐ Novel techniques and characterization of nano-interface phenomena
- ☐ Devices fabrications using organized molecular films
- ☐ Fabrication and molecular dynamics of nano-interface
- ☐ related aspects and phenomena

Only 18 papers which incorporate sufficient results were presented discussed during the conference and they had much sense in holding the conference. The papers presented there will be published on November 2001 as a special issue of Journal of Korean Institute of Electrical Engineers.

The second IDC-NICE will be held in Japan. We hope that this conference will continue to grow both in attendance and in the number of high quality papers presented



By Prof. Mitsumasa Iwamoto (Tokyo Institute of Technology) and
Prof. Mitsuyoshi Onoda (Himeji Institute of Technology)

2001 International Symposium on Electrical Insulating Materials (ISEIM 2001) and 2001 Asian Conference on Electrical Insulation Diagnosis (ACEID 2001)

A Brief Report of the symposium and conference just before the opening is described here. A detailed report will appear in the next EINA magazine to be published in November 2002.

ISEIM 2001 and ACEID 2001 is to be held at Hotel Sungarden in Himeji, Japan on November 19-22, 2001, sponsored by IEE-Japan Technical Committee on Dielectrics and Electrical Insulation and technically co-sponsored by IEEE DEIS.

The outline is as follows:

(1) Conference Organization

General Chair Y. Ohki (Waseda University)

Steering Committee

Chair: Y. Ohki (Waseda University)

Members: T. Ito (Musashi Institute of Technology), M. Iwamoto (Tokyo Institute of Technology), K. Kimura (Kyushu Institute of Technology), M. Kosaki (Gifu National Technical College), K. Matsu-ura (Osaka University), M. Miyamoto (Fuji Electric), T. Mizutani (Nagoya University), M. Nagao (Toyohashi University of Technology), H.

Nishikawa (Shibaura Institute of Technology), T. Okamoto (CRIEPI), M. Okashita (Showa Electric Wire and Cable), M. Onoda (Himeji Institute of Technology), Shimizu (Meijo University), Y. Suzuoki (Nagoya University), T. Takada (Musashi Institute of Technology), T. Tanaka (Waseda University)

Technical Program Committee

Chair: T. Okamoto (CRIEPI).

International Advisory Committee

Chair: A. Bulinski (Canada)

Members: T. Blackburn (Australia), D. K. Das-Gupta (UK), U. Gäfvert (Sweden), R. Gorur (USA), M. Iwamoto (Japan), Ho-Gi Kim (Korea), M. Kosaki (Japan), C. Laurent (France), J-U. Lee (Korea), Y. H. Lee (Korea), T. Mizutani (Japan), G. C. Montanari (Italy), M. Nagao (Japan), Y. Ohki (Japan), M. Onoda (Japan), R. Patsch (Germany), J. C. Paul (India), S. Sangkasaad (Thailand), K. T. Sirait (Indonesia), J. Smit (Netherlands), G. Stone (Canada), M. Taylor (UK), H. Xie (China), Z. Yan (China)