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# RESEARCH ACTIVITIES AND TECHNICAL EXCHANGES IN ASIAN COUNTRIES

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## Conference Records

### International Conference on Electrical Engineering ( ICEE2008 Okinawa )

Eiji Kaneko  
University of the Ryukyus, Japan

#### 1. Introduction

International Conference on Electrical Engineering 2008 (ICEE2008 Okinawa) was held from the 6<sup>th</sup> to 10<sup>th</sup> of July 2008 at the Okinawa Convention Center in Ginowan City, Okinawa, Japan. ICEE is held annually in Japan, Korea, China and Hong Kong through collaborative work with the related academic institutions from these countries. ICEE2008 Okinawa was the fourteenth annual conference, and the fourth one in Japan, followed by those in Matsue City (1997), Kita-kyushu City (2000), and Sapporo City (2004).

Institute of Electrical Engineers of Japan (IEEJ), being the main organizer, strongly supported this conference as one of its major international activities.

#### 2. Opening ceremony

The conference started in the midst of summer, just after the rainy season, on a sunny day in subtropical Okinawa with 607 participants. Details of these participants are shown in Table 1 and 2 below.

**Table 1 Participants**

Regulars	Students	Accompanies	Total
354	224	26	604

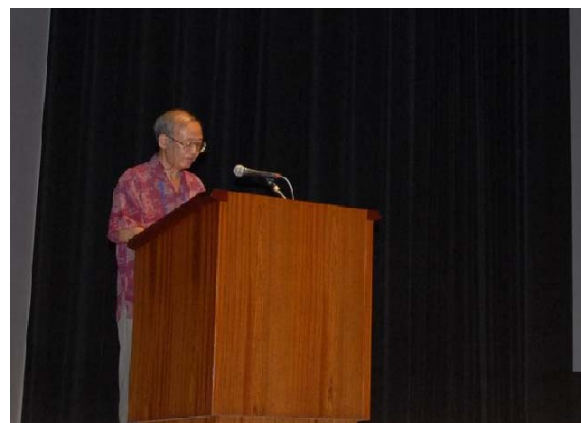
**Table 2 Participants by Country/Region**

Country/Region	Number
Japan	345
Korea	158
China	31
Hong Kong	15
Others (19countries)	55

At the opening ceremony, Professor Tetsuo Yamakawa of University of the Ryukyus, chairperson of the local organizing committee, opened the ceremony, and Dr. Ichiro Tai, President of IEEJ, addressed a welcome speech, followed by addresses by Professor Jianchao Zheng, Vice President of Chinese Society for Electrical Engineering (CSEE); Professor Hai-Won Yang, President of Korean Institute of Electrical Engineers (KIEE); and Professor Peter Y Wong, President of Hong Kong Institute of Engineers (HKIE).



**Fig. 1 Okinawa Convention Center**



**Fig. 2 Prof. T. Yamakawa at the opening ceremony**



**Fig. 3 Dr. I.Tai at the welcome speech**

The following four keynote speeches were presented:

- “Electric Power Circumstances in Okinawa - The Way of Subtropical Island of Japan” by Professor Eiji Kaneko of University of the Ryukyus
- “Challenges and Technological Opportunities for Sustainable Electric Power Supply” by Professor J. Zheng, Vice President of CSEE
- “Philosophy of Engineering and Challenges of Engineering Education” by Professor Chan Ching Chuen, Past-president of HKIE
- “New Energy Efficiency Standards for Three Phase Induction Motors in Korea” by Soo-Hyun Baek, President-Elect of KIEE



**Fig. 4 Prof. E. Kaneko at the key note speech**

### 3. Conference Sessions

The total of 442 papers were presented in 27 oral sessions (232 papers) and 4 poster sessions (210 papers). Details of these papers are shown in Table 3.

**Table 3 Registered Papers by Country and Number**

Country (Region)	Number
Japan	238
Korea	124
Iran	25
China	21
Hong Kong	11
Taiwan	5
Thailand	4
Vietnam	3
India	2
Others (9 countries)	9
Total	442

Followings are the topics of these sessions.

- Information, control and sensing systems
- Communication systems and semiconductor technology
- Electrical machines, power electronics and industry
- Electrical traction system and control
- Sensor and micro-machine
- Electro magnetic transient programs



**Fig. 5 Poster session**

- Power generation and sustainable environment
- High voltage, insulation and sensing technology
- Transmission and distribution system, and apparatus
- HVDC and FACTS
- Power system planning and scheduling
- Power system modeling, simulation and analysis
- Power system protection, operation and control
- Power system stability
- Power market and power system economics
- Renewable energy

Two panel sessions - one on “network security technology for infrastructure and industrial systems” and the other on “power system transient simulation” - were conducted for more than 3 hours. Dr Yoshizumi Serizawa of Central Research Institute of Electric Power Industry and Dr. Toshihisa Funabashi of Meidensha Corporation were the conveners of these panel sessions, respectively.



**Fig. 6 Panel session**

### 4. Social programs

The Welcome Reception, the Banquet, and technical tours were conducted.

The Welcome Reception was held at DFS Galleria Okinawa’s “Food Colosseum” in Naha City, where all participants enjoyed Okinawan cuisine and beverages as well as Okinawan classical rural music and dances, specially arranged by Dr. Funabashi who was one of the conveners of the panel sessions.

At the Banquet held at Laguna Garden Hotel, full-course French dinners were served, along with the performance of Okinawan classical palace dances. Before the closing of the Banquet, Professor J. Zheng,



Vice President of CSEE, made an announcement about the next ICEE, which is scheduled to be held in China next year. He announced that ICEE2009 will be held in Shěnyáng and displayed a video showing information about the city.



**Fig. 7 Welcome Reception**



**Fig. 8 Banquet**

The following three technical tours were conducted:

- A) Okinawa pumped-storage plant --- Okinawa Churaumi Aquarium
- B) Counter measure equipment for frequency variation control --- Nuchi-mahsu factory --- Katsuren Castle
- C) Okinawa Subtropical Environment Remote Sensing Center --- Cape Manza --- Okinawa Tracking and Communication Station --- Okinawa Churaumi Aquarium



**Fig. 9 Technical tour at the pumped-storage plant**

## 5. Closing ceremony

Professor Kunihiko Hidaka, chairperson of ICEE2008 International Program Committee, presented a summary and statistical data of the conference. Dr. Tokio Yamagiwa, Vice President of IEEJ, gave a closing address, and the ICEE flag was handed to Professor J. Zheng of CSEE.



**Fig. 10 Prof. Hidaka at the closing ceremony**



**Fig. 11 ICEE flag (Dr. Ymagiwa & Prof. Zheng)**

## 6. Remarks

ICEE2008 was supported by Grant-in-Aid for Publication of Scientific Research Result (No.2062003) provided by the Ministry of Education, Culture, Sports, Science and Technology (MEXT), as well as by many companies and universities, especially of those in Okinawa. Great appreciation should be given to them. I would like to personally and sincerely thank the staff and students for their effort for the conference.

We hope that the next ICEE annual conference, which will be held in Shěnyáng, China, will be a success with your participation.

### Prof. Eiji Kaneko

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# International Conference on Condition Monitoring and Diagnosis (CMD 2008)

**Chairman of CMD 2008**

**Chengrong Li (North China Electric Power University, China)**

The second biennial International Conference on Condition Monitoring and Diagnosis (CMD 2008) organized by North China Electric Power University (NCEPU) was held in Beijing, China, from 21st to 24th of April, 2008. CMD 2008 provides a perfect opportunity and platform for colleagues and experts in the field of CMD to meet each other, to share experience and to discuss the new progress and challenges facing us in the near future.

## **Short Report on CMD 2008**

CMD 2008 was first held in Changwon, Korea (2006) after a joined conference ACEID 2003–ICMEP 2003 in Chongqing, China (2003). It was one of important conferences in the field of high voltage engineering. CMD 2008 has given you a challenging platform to see the latest advances in Condition Monitoring and Diagnosis for industrial application systems.

With the fast progress of society and electric power industry, the concern about the application and development of condition monitoring and diagnosis is increasing more and more. 243 people (not including about 60 exhibitors and 40 accompanying person) have registered for CMD 2008, they are from industry, government, research and academic institution of 26 different countries and areas around the world. The total figure is about 350. The number of persons from China is about 61, and Japan 35, Korea 23, the forth is UK 18, and next is Indonesia 15, India 11 and the Netherland and Austria both are 9. Also, others are from Romania, Germany, Canada, USA, etc.

CMD 2008 had very various scopes from Partial Discharge Detection to Condition Monitoring for GIS, Switchgear, Power Transformer, etc. At this

international conference, Over 400 abstracts submitted by prospective authors have been received, at the same time, 320 full papers related to various fields of condition monitoring and diagnosis have been published in the proceeding. In the plenary session, we were so lucky to invite those famous experts and professors to give us some wonderful presentations about their respective fields. All of these proceeded successfully. The content of plenary session is shown in Table 1.

**Table 1 Invited Lecture Program of Plenary Session**

Speaker	Affiliation	Title
Mr. Liu Zehong	State Grid Corporation of China	Recent R&D and Future Perspectives on Ultra High Voltage Transmission in China
Prof. Johan J. Smit	Delft University of Technology, Netherlands	Integration of Condition Monitoring Intelligence in Electrical Infrastructures
Prof. G. C. Montanari	University of Bologna, Italy	Insulation Condition Assessment of Power Equipments in Electrical Assets Based on On-line Monitoring of Partial Discharges
Prof. Chengrong Li	North China Electric Power University, China	Recent Progress and Future Perspective on Condition Monitoring and Diagnostic Techniques for Power Equipment in China
Prof. Hitoshi Okubo	Nagoya University, Japan	Recent Progress and Future Perspective on Condition Monitoring and Diagnostic Techniques for Power Equipment in Japan
Prof. Hyun-Hoo Kim	Doowon Institute of Technology, Korea	Recent Progress and Future Perspective on Condition Monitoring and Diagnostics for Power Equipment in Korea



**Figure 1 All Participants** (continued to the right page)



In the next two day's discussion and communion, conferees fully exchanged their ideas and productions in the form of oral and poster. According to the papers that have been received, the main topics of CMD 2008 were as follows:

1. Fundamentals of Partial Discharge Detection
2. Condition Monitoring for Generator
3. Phenomena and Mechanism of Aging, Degradation and Failure
4. Condition Monitoring and Evaluation for GIS, Switchgear, MOA and Insulator
5. Condition Monitoring for Power Transformer
6. Strategic Planning and Management for Condition Monitoring and Assess Management
7. Evaluation and Condition Monitoring for Electric Systems and other Industrial Fields
8. New Measurement Equipments
9. Advanced PD Detection: UHF Techniques and Noise Suppression Techniques
10. Condition Monitoring for Cable and other Capacitive Apparatus
11. Applications of Artificial Intelligence and Information Technique for Condition Monitoring

The statistics of the contribution for the hot topics on CMD 2008 are: (1) Condition Monitoring for Power Transformer, 49 (2) Phenomena and Mechanism of Aging, Degradation, and Failure, 39 (3) Evaluation and Condition Monitoring for Electric

Systems and other Industrial Fields, 35 (4) Condition Monitoring for Cable and other Capacitive Apparatus, 31 (5) Condition Monitoring and Evaluation for GIS, Switchgear, MOA and Insulator 28, etc.



**Figure 3** Prof. Hitoshi Okubo, Prof. Toshikatsu Tanaka and Prof. Chengrong Li (From left to right) in Welcome Reception



**Figure 4** Plenary Session



**Figure 2** Prof. Hitoshi Okubo, Prof. Michael Muhr and Prof. Chengrong Li (From left to right) in Welcome Reception



**Figure 5** Prof. Chengrong Li and Prof. Johan J. Smit in Plenary Session



**Figure 1** All Participants (continued from the left page)

Furthermore, to have more attention to the key fields, eight invited lectures about hot topics were presented in parallel sessions as shown in Table 2. Most prominent professionals like Prof. Johan J. Smit, Dr. Chen George, Prof. Toshikatsu Tanaka and Dr. Martin D. Judd gave all participants the informative and distinguished lectures as the highlights of the related whole occasions.

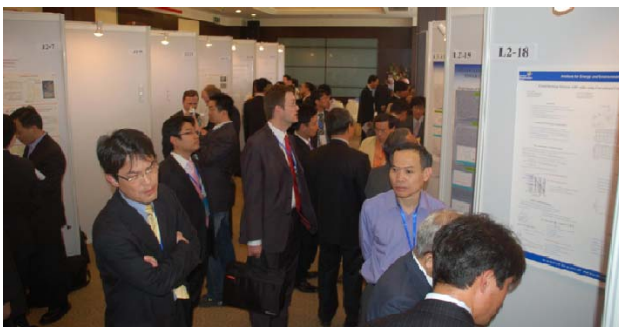
CMD 2008 was sponsored by Chinese Society for Electrical Engineering, National Natural Science Foundation of China, State Grid Corporation of China, China Electric Power Research Institute, Wuhan High Voltage Research Institute of SGCC and North China Electric Power Research Institute Co., Ltd.. The conference gained essential sponsor from many manufacturers and exhibitors (the total number is 31). These days, they showed us quantities of advanced productions and new ideas in condition monitoring and diagnosis for industry application systems. The exhibition attracted attentions of all participants as shown in Fig. 9.



**Figure 6 Raising Questions**  
(Prof. Harry E. Orton)



**Figure 7 Oral Session**



**Figure 8 Poster Session**

**Table 2 Invited Lectures in Parallel Sessions**

Speaker	Affiliation	Title
Johan J. Smit	Delft University of Technology, Netherlands	Investigation of Water Treeing – Electrical Treeing Transition in Power Cables
Guanjun Zhang	Xi'an Jiaotong University, China	Lifetime Monitoring and Estimation Strategy for Large Power Transformer
Chen George	University of Southampton, UK	Apparent Mobility and its Relationship with Ageing in Polymeric Insulation Materials
Hung T. Dang	Luxtron/Lumasense Technologies Inc., USA	Finally Fiber Optic Sensing of Power Transformer "Hotspots" Is Paying Off
Zhongdong Wang	University of Manchester, UK	FRA Low Frequency Characteristic Study using Duality Transformer Core Modeling
Chengke Zhou	Glasgow Caledonian University, UK	Partial Discharge Monitoring in Medium Voltage Cables
Martin D. Judd	University of Strathclyde, UK	Radiometric Partial Discharge Detection
Su Q	Petroleum Institute, Abu Dhabi, UAE	Insulation Condition Assessment of HV Cables



**Figure 9 Exhibition**

What is more, to share experiences in UHF PD monitoring, FRA Measurement and Diagnosis for Power Transformers, two panel discussions about the area were arranged specially. Some questions to prompt contributions to these sessions were given. The organizers particularly welcome the contributions and experts from related fields.





**Figure 10 Panel Discussion**

During the conference, we had an International Board Meeting with the representatives of CMD 2008 International Steering Committee to summarize the status of this conference, preparations of CMD 2010 and decide the hosting country of CMD 2012. After a successful conversation and discussion we decided eventually that CMD 2012 will be held in Indonesia.

In addition, a technical tour to the UHV DC Test Base of State Grid Corporation of China, the Beijing Key Laboratory of High Voltage & EMC (NCEPU) and the Key Laboratory of Power System Protection and Dynamic Security Monitoring under the Ministry of Education (NCEPU) is arranged specially.



**Figure 11 International Board Meeting**



**Figure 12 The UHV DC Test Base**



**Figure 13 In the Beijing Key Laboratory of High Voltage & EMC (NCEPU)**



**Figure 14 In the Key Laboratory of Power System Protection and Dynamic Security Monitoring under the Ministry of Education (NCEPU)**

As the chairman of CMD 2008, I really hope that conference was a beneficial and enjoyable experience for all participants and you have had a nice stay in Beijing. Further, I would like to give my most heartfelt thanks to all delegates from all over the world and the member societies for the efforts they have given to assist in this scientifically successful conference.

**Prof. Chengrong Li**  
**Chairman of CMD 2008**  
**lcr@ncepu.edu.cn**

# 2007 Japan-Korea Joint Symposium on Electrical Discharge and High Voltage Engineering

**Toshiki Nakano**

National Defense Academy

The 2007 Japan-Korea Joint Symposium on Electrical Discharge and High Voltage Engineering (JK2007) was held at the Toyosu Campus, Shibaura Institute of Technology, in Tokyo on November 15-17. This symposium was organized by the Fundamentals and Materials Society of The Institute of Electrical Engineers of Japan (IEEJ) and the Technical Committee on Electrical Discharge of IEEJ and co-organized by Study Committee on Electrical Discharge and High Voltage of The Korean Institute of Electrical Engineers (KIEE), Shibaura Institute of Technology, The Institute of Electrical Installation of Engineers in Japan, and The Institute of Engineers on Electrical Discharges of Japan. The JK symposium was originally organized to deepen the friendship between Japanese and Korean researchers in electrical discharges and high voltage engineering, particularly by encouraging the presentation of young students and researchers. This principle has continued to date, throughout the past JK symposiums. The JK symposium had been held alternatively in Japan and in Korea. The JK2007 is the very first symposium that was held outside Kyusyu in the history of the JK symposium organized in Japan as the past JK symposiums were held only inside Kyusyu area.

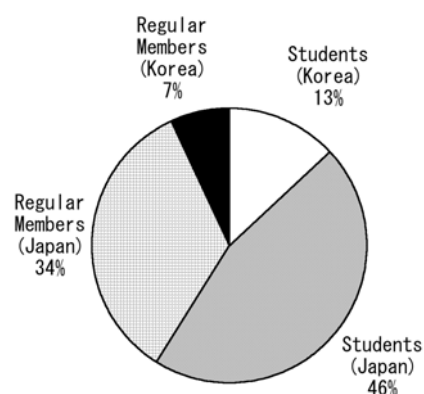
The JK2007 started with the opening remarks where three speeches were given by Dr. T. Okamoto, JK2007 Chairperson, Prof. Ja-Yoon Koo, JK2007 Co-chairperson and Prof. M. Hirata, President of Shibaura Institute of Technology as shown in the photo. Following the opening remarks, two oral sessions were held in parallel. In the first half of the afternoon program, the poster session was opened. In this session, we had very active discussion between poster presenters and symposium participants. This atmosphere continued to the second half of the afternoon program that was scheduled for oral sessions. At the end of the first day of JK2007, the symposium banquet was held to deepen the friendship between Japanese and Korean participants. Oral sessions were

held throughout the second day of JK2007. The themes of the oral sessions are indicated below.

- Partial Discharge and Its Diagnostics (I)-(III)
- Electrical Breakdown in Vacuum, Gases and Liquids
- Lightning and Surge Protection
- EMF, EMC and others
- Plasma Application
- Environmental and Biological Applications
- Electrical Insulation and Dielectric Materials (I)-(III)
- Fundamental Processes of Electrical Discharges
- Testing and Measuring Techniques (I)-(II)

Many papers were submitted to the themes to which roman figures are attached, indicating that many participants were interested very much in partial discharges and insulation materials that increasingly become important in the applications of high voltage engineering.

There were 136 participants in JK2007. This figure was more than expected by the international steering committee. A main reason for the large number of participants to JK2007 is that the symposium was held in Tokyo. In particular, this makes it easy for Japanese participants to attend JK2007. The constituent analysis of JK 2007 participants is shown in the circle chart. As mentioned earlier, the JK symposium has laid much emphasis on the encouragement of the presentation by young students and researchers. This point is found to be evident from the chart.



**Constituents of JK2007 participants**

In the board meeting during JK2007, the board members of the JK symposium agreed to hold the next JK symposium in Korea, in the November of 2009. JK2009 might be held in conjunction with the KIEE annual meeting. Please contact the Technical Committee on Electrical Discharge of IEEJ

**Prof. Toshiki Nakano**

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National Defense Academy

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**Opening Remarks of JK2007**



# 2008 International Symposium on Electrical Insulating Materials (ISEIM2008)

## General Chair of ISEIM2008

Naohiro Hozumi (Aichi Institute of Technology, Japan)

The Dielectric and Electrical Insulation (DEI) Committee of IEEJ is holding a domestic symposium every year. The ISEIM (International Symposium on Electrical Insulation Materials) is positioned as to be the international version of the domestic symposium. Researchers outside Japan can participate and make discussions in international circumstances. The ISEIM was established in 1995, and this year's ISEIM was the fifth.

The ISEIM2008 was held on September 7 - 11 in Yokkaichi, Japan, which is located in the suburb of Nagoya. We had a successful symposium with 193 participants from 20 countries and areas. The executive committee of the ISEIM2008 has started its activity about two years ago. Due to liberalization of the electricity market in Japan, investment into development of high voltage power equipment has been decreased. The mission of researchers in the field of electrical insulating materials was forced to change according to the trend of circumstance. Such movement has affected to the academic side as well. As we recognize that our field is facing such a turning point, the executive committee had a long time discussion to renovate the symposium.

The ISEIM2008 covers the nanotechnology, the asset management, and the phenomena under the inverter surge to catch up with the above trend. As for the special lectures, we invited two excellent speakers. The first speaker was Prof. M. Hara, who has awarded the Inuishi Memorial Lecture Award and gave us a lecture on the cryogenic insulating systems. The second speaker was Dr. M. Jeroense, who gave us a plenary lecture on the insulation technology for the HVDC system. These two speakers gave us deep and advanced research meanings.



**Dr. Marc J.P. Jeroense (ABB, Sweden) in his invited talk: "HVDC, the Next Generation of Transmission Highlights with Focus on Extruded Cable Systems."**



**Emeritus Prof. Masanori Hara (Kyushu Univ. & Kyushu Electric Power Co., Inc., Japan) in the awarding ceremony. Emeritus Prof. Hara gave the Inuishi memorial talk: "Bubble-Triggered Breakdown of Cryogenic Liquids in Pool-Cooled Superconducting Apparatus."**

In the sessions, 164 presentations, including 57 oral and 107 poster presentations, were done. These were categorized as aging (23), space charge and interfacial phenomena (29), dielectric phenomena and applications (19), nano-dielectrics (21), insulation for apparatus and outdoor use (27), test and measurement (22), insulation subjected to inverter surges (4), and conduction and breakdown (19).

One of our important missions was to encourage young researchers who will succeed and expand our activities. From this point of view, we planned a session of "Mutual Visiting type Poster session", named as an "MVP session". This session aims to encourage and improve the presentation and discussion abilities of young researchers. Including MVP sessions, we had sufficient time and space for poster sessions. This is aiming that all participants can make deep and fruitful discussion by overcoming language barriers.

The other important mission was to provide chances for encounter with various researchers to open up a path to the future. Especially in recent days, linkages among researchers in industry and academia (including students) are becoming more and more important. From this point of view, we planned another special session, named as the "Sun-Shine session", to introduce R&D topics in industry to the academic people. The first trial was successfully held in a domestic symposium last year. It is believed that the Sun-Shine session was helpful for mutual understanding among researchers in industry and academia in the field of electrical insulating materials.

### Number of papers by country.

Country	attendees	Country	attendees
Algiers	1	Japan	67
Australia	2	Korea	5
Austria	3	Malaysia	2
Brazil	1	Mexico	2
Canada	2	Norway	3
China	47	Poland	3
Czech Republic	2	Sweden	3
France	3	Taiwan	1
Germany	4	Thailand	1
India	6	UK	1
Indonesia	1	USA	1
Italy	2	Vietnam	2
		Total	74

In addition, it was quite impressive that young students were attracted by enthusiasm of presenters from the industry side.

We also planned some technical and social events including tours and parties. As for technical tours, we visited the Toshiba Mie operations and the site of Superconducting Magnetic Energy Storage System. As for social events, we invited all participants the banquet with the Ninja show.



The great idea of "Mutual Visiting type Poster session" for young researchers was proposed by Dr. K. Uchida of Chubu Electric Power Co. It was held in a wide room, taking a long time enough for deep discussion.

We hope that all the participants and accompanying families enjoyed delightful time flooded with friendship and kindness. The executive and local committees are proud of providing these events and entertainments.

Finally, we would like to deeply thank all of the participants from all over the world, and members of the organizing committee and the sub-committees for their effort to realize this symposium. We also express sincere appreciation to all the supporting members of this symposium for their tremendous contributions.

The next ISEIM will be held again in Japan in 2011. We wish all participants would come back Japan with the harvest of coming three years.

### Prof. Naohiro Hozumi

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Banquet with the Ninja show made all participants happy and friendly.



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## INTERNATIONAL TECHNICAL EXCHANGE SESSION IN ISEIM 2008

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### 2008 International Symposium on Electrical Insulating Materials

2008 International Symposium on Electrical Insulating Materials (ISEIM 2008) was held at the Yokkaichi Cultural Hall in Yokkaichi City, Mie, Japan, from September 7 to 11, 2008. The International Technical Exchange Session was held

for information exchange and human contact among researchers of Pan-pacific regions in the field of electrical insulation at Sept. 10th, 2008, 19:00-21:00 at Hall #2.

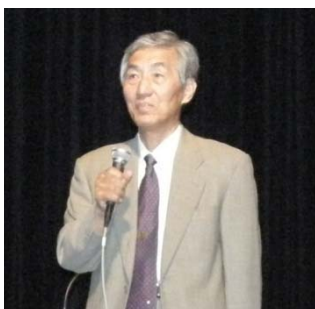


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### Digest Report on International Technical Exchange in or near Asia

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#### Opening Address:



**Prof. Toshikatsu Tanaka**

(Chair of EINA Committee, Waseda Univ. )

#### Introduction of EINA activities:



**Prof. Masayuki Nagao**

(Toyohashi Univ. of Technology)

#### **“Introduction of EINA (Electrical Insulation News in Asia) Activities”**

*It was aimed at “The exchange of information among Asian countries in the field of the electrical insulation research for developing together”, which was proposed by Prof. Ieda, the EINA Magazine Committee was founded in 1994 and started to publish EINA magazine.*

*At the beginning, first chairman of the EINA magazine committee, Prof. Y. Yamashita and present chairman, Prof. T. Tanaka were introduced. Also it was introduced the past issues of EINA magazine with the cover pages. Furthermore, the present activities, such as EINA website, International EINA Meeting, EINA session in ISEIM, Financial Support, and Postal Distribution of EINA magazine to Abroad in 2008, were mentioned.*

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## Introduction of Research and Development in laboratories and in Asian countries:

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**Dr. Yi Yin**

Shanghai Jiao Tong University (China)

**“Research and Development of High Voltage Engineering and Electrical Insulation Technology in Shanghai Jiao Tong University”**

*“The Dept. of HV Eng. and EI consist of two Laboratories. These two laboratories are leading research and teaching laboratories in the field of Insulation, Monitoring on-line, Nanodielectrics, Pulse Power Applications, Power Electronics and High Voltage Measurement in East of China.”*



**Dr. June-Ho Lee**

Hoseo University (Korea)

**“Launching a New Research Center for Electric Power Technology in Korea”**

*EFT (Electro-Fusion Technology) Center has been built in March 2007. It was talked from the background of EFT Center to the future vision around the electric power technology. Photos of the inside of HV Test Hall, High Performance Shield Room, PD Diagnostic System, Power Plant, Synthetic Test Circuit, and so on were introduced.*

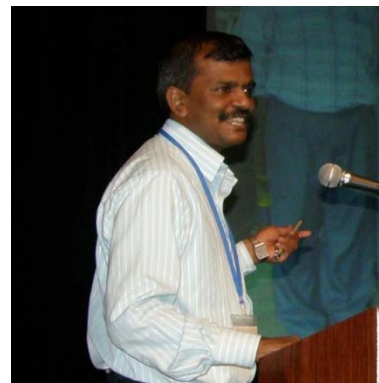


**Dr. Pham Hong Thinh**

Hanoi University of Technology (Vietnam)

**“Overview of the development in diagnostic tools in Vietnam”**

*Present projects in HUT have been introduced, such as "Dielectric behavior of auto-cooling transformer oil using magnetic nano-particles", "Conception and realization of electromagnetic shielding material with multilayered structure", and so on.*



**Dr. Sarathi Ramanujam**

Indian Institute of Technology (India)

**“Research Activities at Indian Institute of Technology Madras”**

*In major facilities in high voltage laboratory, 800 kV test transformer, 1.5 MV LI voltage generator and 780 kV ns pulse generator were introduced with photos. Also main works in IIT Madras were introduced, such as “Treeing in underground cables”, and so on.*





**Prof. Suwarno**

Bandung Institute of Technology (Indonesia)

**“High Voltage Engineering in Indonesia”**

*First of all, he showed the world map and explained the location of Indonesia, the number of islands (~6,000 islands), 13 local languages, and so on. Then it has started to report about the outlines of electric power system, primary energy for electric power generation, industrial pollutions in Indonesia, research activities in HV, and so on.*



**Prof. Guan-Jun Zhang**

Xi'anJiaotong University (China)

**“Research Progress in State Key Laboratory of Electrical Insulation & Power Equipment”**

*It happened that this presentation has been started from world map. In the presentation, quite many kinds of studies and topics around the electrical insulation materials, such as polymer, inorganic ceramics, and composite dielectrics were introduced with some examples and proposed “Environment friendly insulation”.*



**Prof. Naohiro Hozumi**

Aichi Institute of Technology (Japan)  
(Chairman of DEI Society in IEEJ)

**“Dielectric & Electrical Insulation Technology in Japan”**

*He has suggested the “Fundamental research for understanding phenomena expand our territory”. His main topics with full of his humor were “Space charge in the space”, “Eco-friendly insulating materials”, “Long term test for HTSC cable”, “Self healing insulation”, “Go with nano-composite”, and so on.*

**Chair:**



**Mr. Yoshiyuki Inoue**

(Task Force, Toshiba Corporation)

**Closing:**



**“Fruitful Talk”**

**Thank you for all presenters and participants in “EINA Session”.**

### 1. Do you have any requests for EINA magazine activity?

- \* *If possible mention about equipment of different working group and details of working groups.*
- \* *Instead of one magazine a year two magazines be better mentioning all DEIS/Pawn Engineering Congresses.*
- \* *Introducing more outstanding young researchers, introducing there research activity.*
- \* *No.*
- \* *Had better to supply in free, if anyone is interesting on it.*
- \* *Open EINA editorial committee to expert in Asian countries.*
- \* *It's very necessary to increase the awareness of EINA to colleagues in Asian countries effectively.*
- \* *EINA project is doing very well.*
- \* *The activity is highly appreciated.*
- \* *It is of course helpful to understand what is going on in Asian countries, however, we may need more information from other countries than Japan.*

### 2. EINA magazine introduces activity of Japan committee, research activity in Asia, new technologies of Japan and so on. What kind of news do you hope (need) for EINA magazine?

- \* *Near feature technology mentioning the need.*
- \* *New technologies for future using.*
- \* *Research of resent researcher in Asia and the International researcher activity.*
- \* *UHV in China should be introduced in this magazine.*
- \* *So far, so good!!*

- \* *R & D reports in each country. What is going on relevant to domestic activities in each country?*
- \* *If possible, some import news even from all over the world.*

### 3. Now EINA committee has two kinds of activities, EINA magazine in a year and EINA website. Are these contents of magazine and website good for you?

- \* *Yes. It is very much useful to know about other lab and developments.*
- \* *Both of these contents are good for me.*
- \* *No, I don't know EINA before.*
- \* *Of course. Go on please.*
- \* *Yes.*
- \* *Only one issue in a year is too limited. May be more information on-time can be posted on the web. Anyway, more issues in a year are expected.*

### 4. How method of publication of EINA magazine is good for readers in Asia?

- \* *Present System is very good.*
- \* *Published in English, and informing readers with news monthly.*
- \* *Free.*
- \* *Publication in print is better than internet.*
- \* *In the form of hard copy delivered by postal service.*
- \* *Web and magazine are pretty enough. In addition, having the EINA session is a very good idea.*
- \* *Electronic version is more suitable, and also with a suitable quantities of hardcopy version.*

### 5. We hope that EINA news is from many Asian countries, but many sources have been from Japan so far. How do you think many Asian countries can participate in EINA?



- ✧ *Invited other researchers to introduce their research activity.*
- ✧ *Yes, Japanese Electrical Insulation research is front in Asia.*
- ✧ *I think it depends on the strategy of EINA.*
- ✧ *It may take sometime to synchronize the movement of many countries. I believe that advanced countries like Korea will follow.*
- ✧ *Topics in eq. Japan- Korea. Symposium will be helpful to find out some articles.*
- ✧ *Organizing editorial group in Asian countries will promote significantly.*
- ✧ *Yes, of course.*

**6. Have you ever sent any news in your country to other countries as EINA magazine?**

- ✧ *Yes. I have sent information to other researchers in India and collaborations in around.*
- ✧ *No.*
- ✧ *Not yet.*
- ✧ *Not yet. I will try. Actually I early hope to submit a manuscript to EINA from China.*

**7. Do you have any news on research activity in your country?**

- ✧ *Yes.*
- ✧ *Sorry.*

**8. Please contribute news source, activity in your country to EINA magazine**

- ✧ *I will contribute work for it.*
- ✧ *Ok.*
- ✧ *Sorry.*
- ✧ *I will.*
- ✧ *Yes, as much as possible.*

Thank you for sending us the kindly comments, messages and suggestions. These comments are very helpful and strongly encouraging for EINA committee members. Thank you again and we are looking forward to seeing you again in next EINA session.



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