Cooperative Research Committee on Establish EINA Magazine-Issued IV

Technical Committee on Dielectrics and Electrical Insulating Materials

1. Objective

The Asian (Pacific Rim) region has undergone remarkable development as a global base of manufacturing and a massive market, and it continue to grow in importance. The objective of this committee is to promote exchange of ideas and information between regional researchers and engineers working on dielectric and insulating material technology and high-voltage and insulation technology, based on information sent and received bidirectionally.

2. Historical background and internal and external trends

The EINA Committee is a result of the "Asian Nation and Region Academic and Technical Exchange" joint research committee established under the umbrella of the Technical Committee on Dielectrics and Electrical Insulation in January 1991, thanks to the late former president of the IEEJ, Masayuki Ieda, who was passionate about the internationalization of the IEEJ. This committee historically overlooked the IEEJ while promoting activity in the field of dielectric and insulating materials. As a result, this committee was launched to disseminate information. Since September 1994, it has published the EINA Magazine (Electrical Insulation News in Asia) once, and 27 issues were published in fiscal year 2020. In the interim, the Society A: International Activity Committee was launched in September 2004, and at its request, there was a shift to a subcommittee under the International Activity Committee. However, in September 2015, owing to a change in the activity policy of the International Activity Committee, the committee was re-established under the umbrella of the Technical Committee on Dielectrics and Electrical Insulation as the same cooperative research committee that it was before. The term of duty of the cooperative research subcommittee is set at 2 years. To continue EINA academic and technical exchange activities, a successor subcommittee needed to be established. The scope of the EINA Magazine has expanded to include areas such as electrical discharge, plasma, electromagnetic environments, high-voltage power equipment, cables, and high-frequency communication equipment as related fields, in addition to dielectric and insulating materials. During the transition to a subcommittee from 2004 to 2015, the activities of the technical committees under Society A were addressed more broadly. However, 2015 onward, the committee returned to its initial fields. In addition, this committee disseminated information from Japan with regard to the aforementioned fields but published articles from Asian researchers. Then, it proceeded to exchange this information in a form guided by the IEEJ. In 2001, the EINA Web Site (http://eina.ws) was launched to further facilitate the distribution of other data in publications, and this content has been enhanced year on year.

Thus, activities in which the IEEJ transmits information to foreign countries and leads the mutual exchange of related researchers in Asia have few comparable examples and are expected to continue being improvised.

3. Specific activities

(1) Publication of English EINA Magazine

There are plans to assemble, edit, and publish an English EINA Magazine annually.

Academic, research, and exchange activities during the coronavirus pandemic were included as a special edition in Issue No. 27, and such content will be further enhanced. Efforts were made to

drastically reduce publishing and distribution costs. In principle, PDF copies are browsable and downloadable via the website, but copies will be sent to those who require, including authors and libraries.

(2) Editing and operation of EINA Web Site

As the website is gradually becoming important and its roles are being diversified with the adoption of electronic publishing, further enhancements will be made.

(3) Other (operation of international meetings, etc.)

The latest editions and back issues of EINA Magazine will be distributed at relevant international conferences to raise awareness, introduce the website, and attract new readers. In addition, EINA sessions will be held if there are appropriate opportunities at international conferences.

4. Expected effects

Exchanges with researchers and engineers in the Asia Pacific region will deepen, focusing on dielectric/insulation material technology, electrical/electronic system technology, basic phenomena such as electrical discharge, high-voltage power equipment, and related technologies such as cables. This may contribute to international activities conducted by academic associations and industries in Asia and strengthen relationships among countries. This is expected to help raise the presence of the IEEJ. In addition, it is expected that there will be an increase in the number of participants at IEEJ-sponsored international conferences and IEEJ members representing the Asia Pacific region.

5. Term of investigation

September 2021 to March 2023 (1 year and 7 months)

6. Committee members

Position	Name	Affiliation	Member/Non-member category of IEEJ
Chairperson	Yasuhiro Tanaka	Tokyo City University	Member
Member (Advisor)	Toshikatsu Tanaka	Waseda University	Member
Member (supervisor)	Tatsuo Takada	Tokyo City University	Member
Member	Takahiro Imai	Toshiba Infrastructure Systems & Solutions Corporation	Member
〃	Mitsumasa Iwamoto	Tokyo Institute of Technology	Member
〃	Yoshiyasu Ehara	Tokyo City University	Member
〃	Yoshimichi Oki	Waseda University	Member
〃	Sigenori Okada	Takaoka Chemical Co., Ltd.	Member
〃	Kenji Okamoto	Fuji Electric Co., Ltd.	Member
〃	Hiroshi Morita	Hitachi, Ltd.	Member
〃	Akiko Kumada	The University of Tokyo	Member
〃	Takanori Kondo	NGK Insulators, Ltd.	Member
〃	Yasuo Suzuoki	Aichi Institute of Technology	Member
〃	Yoitsu Sekiguchi	Sumitomo Electric Industries, Ltd.	Member
〃	Hideo Tanaka	Furukawa Electric Co., Ltd.	Member
〃	Hiroyuki Tanaka	Chubu Electric Power Co., Inc.	Member
〃	Hiroyuki Nisikawa	Shibaura Institute of Technology	Member
〃	Naoki Hayakawa	Nagoya University	Member
〃	Kunihiko Hidaka	Tokyo Denki University	Member
〃	Michitomo Fujita	SWCC Showa Cable Systems Co., Ltd.	Member

Position	Name	Affiliation	Member/Non-member category of IEEJ
Member	Naohiro Hozumi	Toyohashi University of Technology	Member
〃	Hirotaka Muto	Mitsubishi Electric Corporation	Member
Member (TF)	Masayuki Nagao	Toyohashi University of Technology	Member
〃	Yoshiyuki Inoue	Toshiba Mitsubishi-Electric Industrial Systems Corporation	Member
〃	Kazuyuki Toyama	National Institute of Technology (KOSEN), Numazu College	Member
〃	Hiroaki Miyake	Tokyo City University	Member
Secretary	Masahiro Kozako	Kyushu Institute of Technology	Member
〃	Norikazu Fuse	Central Research Institute of Electric Power Industry	Member

7. Activity schedule

Committees conduct electronic mail deliberations once/year

Secretariat (TF) 4–6 times/year (including mail deliberations)

8. Activity costs (approximate)

The main source of income is budget subsidies for the Society A Technical Committee and the corporate membership fees (15,000 yen/year). If subsidies are provided via coordination with international conference parent committee, these will be used as well. The one-year budget shall be as follows:

(1) Income

Corporate membership fee—165,000 yen/year (15,000 yen × 11 companies = 165,000 yen)

Society A activity fund—119,000 yen/year

Total—284,000 yen/year

(2) Expenses

Magazine printing and shipping costs—278,000 yen/year

Website operating cost—6000 yen/year

Total 284,000 yen/year

Here, it is assumed that the installation period will be one and a half years, and the period of issuance of the magazine will be eliminated from the time lag of approximately half a year in the commission's term of duty. In addition, the committee shall not prepare a two-time invoice for participating fees within the fiscal year as a permanent activity.

9. Reporting format

Annual publication of the English magazine EINA Magazine will be used as an alternative to reports.