

# IEICE Global Plaza no.6

— Monthly community plaza in English for students, faculties and engineers —

## Essay

### Toward Institution of Excellence for Education and Research in Collaboration with Asian and Western Institutions



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I have been working with KMITL in Bangkok, Thailand, since I graduated and obtained my PhD from Tohoku University, Sendai, Japan in 1986. KMITL was firstly established as a Telecommunication Training Center on August 24, 1960 with academic cooperation from the Government of Japan. This training center became the Nondhaburi Institute of Telecommunications under the COLUMBO Plan, later in 1964. During this period, many of our staff had been dispatched to study in higher level in Japanese Universities under the Japanese Government supported scholarship. This human resources development was the foundation for initiating KMITL to be a legitimate public university in 1986. At present, KMITL, like other public or autonomous universities, is under the supervision of the Commission on Higher Education affiliated with the Ministry of Education.

The name of the institute was derived from the name of King Rama IV. The royal grand crown seal has been graciously used as the emblem of the institute (Fig.1). King Rama IV was one of the King of Thailand and was well known as the “Father of Science of Thailand”. It was our honor since our institution has the vision to be a premier education institute with emphasis on research in science and technology. We always believe that education and advance research in science, engineering and technology as well as morality, arts and culture preservation are the foundation of the development of the nation.

KMITL is located at the east part of Bangkok and about three kilometers from Thai International (Suvarnabhumi) Airport. The land of KMITL extends to about 1,360,000 square meters. There are 7 faculties and 3 colleges in our main campus; those are of Engineering, Science, Architecture, Agricultural Technology, Industrial Education, Agro-industry, Information Technology, Nanotechnology, Data Storage Technology and International College. The approximate total number of students is 18,177 in bachelor course, 3,344 in master course and 369 in doctor course. The total number of academic staff is 961, and 40 % of them are PhD degree holders.

The education system for bachelor course is also emphasis on the technical skill for the students. Every third year bachelor student has to pass the internship or training program. All these students have to perform the on-job training program at

companies or industries related to their major study for at least one or two months up to one semester. For this purpose, the institution has established many academic agreements with companies, industries and other organizations. The internship can be performed not only inside Thailand, but also in foreign countries. Currently, we have sent our students for internship or training programs in Japan, for examples, at Tokai University, University of Electro-Communications, Sendai National College of Technology, Maizuru National College of Technology, Fukuoka Institute of Technology, Muroran Institute of Technology, Nissin Manufacturing Co.Ltd.; in Kyoto, Nitto Seiko Co.Ltd.; in Kyoto, Sumitomo Heavy Industries Modern Ltd.; and Showa Precision Tools Co.Ltd.; in Yokohama (under the co-assistance of Yokohama Industrial Development Corporation: IDEC YOKOHAMA).

KMITL has placed emphasis on fostering friendly relationships and technical cooperation with overseas universities and institutions. The international cooperation has contributed significantly to the reinforcement of the KMITL's capabilities in education and research and to its achievement of international recognition. Presently, KMITL is actively engaged in academic collaboration agreements and Memoranda of Understanding (MOU) with 50 institutions in 14 countries, including Japan, USA, UK, Australia, Germany, China, Laos, Philippines, Russia, Korea, Taiwan New Zealand and Austria. Cooperative activities include exchange of students, faculty and researchers, research collaboration, joint/dual degree education programs and co-organization of international conferences and workshops. Please see [https://www.itrector.kmitl.ac.th/kmitl\\_eng/](https://www.itrector.kmitl.ac.th/kmitl_eng/).



Fig.1 KMITL established in commemoration of King Rama IV puts forward academic collaborations with many institutions now.

## Call for Papers

### 2009 IEICE Society Conference will be held at Niigata University soon

The 2009 IEICE Society Conference will be held at Niigata University on 15-18 in coming September. The IEICE Communications Society will provide English sessions on Network Planning, Control, and Management additionally to the current Japanese sessions. It will be a good chance of presentation and opinion exchange for your research activities. Please see and follow up [http://www.toyoag.co.jp/ieice/E\\_S\\_top/e\\_s\\_top.html](http://www.toyoag.co.jp/ieice/E_S_top/e_s_top.html).

## **Useful Remarks**

### **Important Role of Executive Board in IEICE Electronics Society**

#### **IEICE Electronics Society**

The scheme of Society management through the Electronics Society (ES) Executive Board is introduced here for your better understanding of academic activities in our Society. The ES Executive Board organizes the following three types of councils (please visit <http://www.ieice.org/es/eng/aboutus/index.html>) for more information).

#### **(1) The Projects, Finance, and Public Relations Council**

This Council tackles some topics such as putting together projects for revitalizing the Society and enhancing members' services. These activities include the establishment of the ES Student Award in the IEICE Society/General Conferences, and the delivery of special lecture videos to the members who were unable to participate in conferences. It also manages the financial issues for the whole Electronics Society.

#### **(2) The Publication Activities Council**

This Council deals with policies on our IEICE Transactions. The editorial board of each Journal is in charge of refereeing and editing of submitted papers. The Council strongly promotes the online publication of the Transactions with managerial procedures based on the balance of revenue and expenditure. Above all, the Electronics Society fortunately provides the all-electronic journal "ELEX", which keeps excellent reputation both in Japan and overseas for the world level and shortest term referee capabilities which enable earlier publication of papers, and for the free subscription systems. The ELEX is expected to be a pioneer for the future innovations.

#### **(3) The Technical Council**

This Council is in charge of matters such as the support of the Technical Groups which cover the essential parts of IEICE's activities and the revitalization of the annual conferences. The Electronics Society has many opportunities for sponsoring or co-sponsoring international conferences, focused on the role of IEICE, particularly in Asian region. The representative international conferences which will be sponsored or cosponsored by the Electronics Society this year are:

[1] 12th International Superconductive Electronics Conference (ISEC'09), Jun. 16-19, 2009, Fukuoka, Japan, technically cosponsored by IEICE/ES

[2] Thai Japan MicroWave Workshop 2009 (TJMW2009), Aug. 20-21, 2009, Bangkok, Thailand, sponsored by IEICE/ES/MW and Bangkok Section

[3] 2009 Topical Workshop on Hetero-structure Microelectronics (TWHM2009), Aug. 25-28, 2009, Nagano, Japan, sponsored by IEICE/ES/ED

[4] 9th International Conference on Materials & Mechanisms of Superconductivity (M2S-IX), Sep. 7-12, 2009, Tokyo, Japan, technically cosponsored by IEICE/ES

[5] 2009 International Topical Meeting on Microwave Photonics (MWP2009), Oct. 14-16, 2009, Valencia, Spain, technically cosponsored by IEICE/ES

[6] 15th Micro-optics Conference (MOC '09), Oct. 25-28, 2009, Tokyo, Japan, technically cosponsored by IEICE/ES

[7] International Workshop on Terahertz Technology (IWTT, TeraTech '09), Nov. 30-Dec. 3, 2009, Osaka, Japan, technically cosponsored by IEICE/ES.

Please visit our Website at <http://www.ieice.org/es/eng/> and join the conferences with us!

### **IEICE Acoustics and Ultrasonics Sub-Society leads evolving research activities in the fields through co-work of two Technical Groups**

**Futoshi Asano, Dr. (AIST)**

**Chair, Technical Group on Engineering Acoustics**

**and Toru Nomura, Dr. (Shibaura Inst. Tech.)**

**Chair, Technical Group on Ultrasonics**

**IEICE Engineering Sciences Society**

IEICE Engineering Sciences Society supports research activities in the fundamental fields of electronics, information and communications with 16 active Technical Groups which are focused on special topics, and promotes for relevant Technical Groups to develop interdisciplinary areas by forming a joint Sub-Society. Four Sub-Societies are available now (See IEICE Global Plaza no.3 at [http://www.ieice.org/eng/global\\_plaza](http://www.ieice.org/eng/global_plaza)).

The Acoustics and Ultrasonics Sub-Society is one of the four Sub-Societies. This Sub-Society combines two Technical Groups, i.e., (1) Technical Group on Engineering Acoustics (EA) and (2) Technical group on Ultrasonics (US). These two Technical Groups annually have a joint meeting. For the 2008 fiscal year, they held the joint meeting at Doshisha University in January. Thirty three papers including one invited paper were presented there and approximately 60 researchers joined it. Most of the participants had opportunities of reviewing or discussing updated technologies of both fields.

Current activities of each Technical Group are as follows:

#### **(1) Technical Group on Engineering Acoustics (EA)**

Typical topics of the EA group cover acoustic signal processing, sound field control, signal enhancement, echo canceller, blind signal separation, digital audio, transducer, acoustic measurement. In 2009 fiscal year, nine research meetings are going to be held at various parts of Japan such as Hokkaido (June), Sendai (August) and Hiroshima (November). Four of them will be joint meetings with the other research groups such as Technical Group on Signal Processing (SIP).

#### **(2) Technical Group on Ultrasonics (US)**

Topics of the group cover ultrasonic properties of materials, nondestructive testing, acousto-optics, bulk wave devices, surface wave devices, sonochemistry, medical ultrasound, high power ultrasound, and underwater ultrasound miscellaneous. Eleven research meeting will be held in 2009 fiscal year. Some of them are joint meetings with the other research groups such as IEICE Research Committee of Acoustic Imaging and the Japan Society of Ultrasonics Medicine and Marine Acoustics Society of Japan.

### **Message from TFIPP Secretariat**

#### **Let's contact TFIPP about IEICE matters!**

IEICE Task Force for International Policy and Planning (IEICE-TFIPP) in charge of IEICE Global Plaza also plans the improvement of overseas membership services. Whenever you have questions or difficulties on IEICE matters, please do not hesitate to contact Prof. Kenzo Takahashi, IEICE-TFIPP, at [global@ieice.org](mailto:global@ieice.org). Your constructive opinions for the overseas membership service improvement are most welcome.

