IEICE Global Plaza

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

Annual Activity Report of IEICE Overseas Sections
IEICE International Affairs Committee

This corner introduces academic activities of IEICE Overseas Sections in the 2010 fiscal year, following the former issue which reported the activities of four Overseas Sections (Bangkok, Beijing, Singapore and Taipei).

Report-5 IEICE Korea, Communication Section

Chimoon Han, Prof. Dr.,
Hankuk University of Foreign Studies,
Representative of IEICE Korea,
Communication Section

IEICE Korea, Communication Section organized a workshop entitled "Future ICT Technology" on January 19, 2011 which was held in conjunction with the 21st HSN (High Speed Network) workshop at Hilton Hotel in GyeongJu, about 2 hours away from Seoul by KTX (Korea Train Express). The workshop was focused on ICT as a tool for better life in rural area, Web-based IPTV content and service delivery strategies, requirements on the future smart ICT service platform, and environmental friendly IT. About 60 Professors and engineers from universities, R & D sectors, and manufactures attended the workshop (Fig. 1). The invited speakers clearly announced their valuable knowledge and recent situation of development in the field to the participants with high interests in the future ICT. The lectures are summarized as follows.

Opening Address, "Introduction to Communication Society of IEICE" was given by the author, Representative of IEICE Korea, Communication Section with the updated information of IEICE Communications Society and IEICE.

The first speech entitled "Information Divide ; ICT as a Tool for Better Life in Rural Area" was given by Dr. Yuji Inoue, Chairman, Toyota InfoTechnology Center, Japan (Fig. 2). Mobile telephone services are available now everywhere in the world even in the late developing countries with more than 50% penetration, with the history shorter than the telegraph and telephone invented in the 17th century. What should essentially be achieved is to bring better lives to people by the ICT power in overtaking "Poverty", "Healthcare", "Education" especially in rural area, and "Environment" for all nations. A very effective methodology combining ICT and water-control technology was reported not only to monitor and reduce CO_2 but also to bring better lives for the rural people through expert-remotely-assisted agriculture, remote-healthcare and remote-education.

The second speech entitled "Web-based IPTV Content and Service Delivery Strategies" was presented by Prof. Jun-Kyun Choi, Korea Advanced Institute of Science and Technology (KAIST). In the presentation, the open IPTV service concepts were proposed to harmonize Web, mobile and TV environments. The Web-based IPTV platform would be useful to cultivate collective intelligences for the future IPTV service environments. IPTV evolution strategies were reviewed in terms of device, middleware and service. Finally, IPTV content syndication platform was proposed for the future knowledge media society.

The third speech entitled "Requirements on Future Smart ICT Service Platform" was given by Dr. Byung-Sun Lee, Electronics and Telecommunications Research Institute (ETRI), Korea. The service delivery platform (SDP) is emerging as a strategic choice for IT and telecom industries, as it provides new success opportunities in business by enabling the fast development of novel converged applications composed from existing services. The speech pointed out requirements and capabilities for an ICT service platform for the future network in order to support applications making use of context based information and the future diverse applications in convergence including cloud services, machine to machine, and ubiquitous sensor network applications.

The last speech entitled "Environmental Friendly IT Technology" was presented by Dr. Byung-Chang Kang, Samsung Advance Institute Technology (SAIT), Korea. The problem of global warming and increasing CO_2 must be one of the significant threats to human being as well as many species on the earth in the 21st century. It was reviewed and various technologies which would improve the energy efficiency in IT industry were discussed during the session. The speech focused the issue on alternative approaches using the mobile and server technologies.

As one of the other events, the essay entitled "Overview and Beyond of ICT Development in Korea and Expected International Collaborations between Universities" was submitted to IEICE Global Plaza (vol. 94, no. 2, 2011) by the author.

On June 1st, 2011, Prof. Choong-Seon Hong, Kyung-Hee University located near Seoul, took over the role of Representative of the Section from the author.

Fig. 1 IEICE Workshop on Future ICT Technology

Fig. 2 Dr. Yuji Inoue gave a lecture at the Workshop

Report-6 IEICE Korea, Electronics Section

Duk-Gyoo Kim, Prof. Dr.,
Kyungpook National University,
Representative of IEICE Korea,
Electronics Section

The academic activities of IEICE Korea, Electronics Section in the 2010 fiscal year are summarized as following. In the year, the Section organized a joint seminar with the other related institutions. The seminar was entitled "Intelligent Sensors" and it was held at Kyungpook National University (KNU), Daegu, Korea on December 27, 2010. It was co-sponsored by IEICE Korea Section, Korea Sensors Society, Institute of Electronics Engineers of Korea (IEEK), School of Electronics Engineering in KNU and IEEE Daegu Section. Prof. Makoto Ishida, Toyohashi University of Technology was invited to give a lecture on "Intelligent Sensing Devices and Systems" (Fig. 3).

Professors Seong-Ho Kong and Jee-Hyun Kim from Kyungpook National University delivered lectures on "MEMS-based Adaptive Liquid Lens" and "Optical Coherence Tomography," respectively (Fig. 4). Prof. Young-Soo Sohn from Catholic University of Daegu also gave a lecture on

Fig. 3 Prof. Makoto Ishida gave a lecture on intelligent sensing devices and systems at the IEICE seminar

"Microsphere-based Multi-analyte Sensor Array". The attendees at the workshop reached more than 30 people and most of them were graduate students in related fields. Then, the overview of IEICE and the Section was introduced by the author, and it covered those organizations, activities and membership benefits. They were encouraged to visit IEICE's homepage.
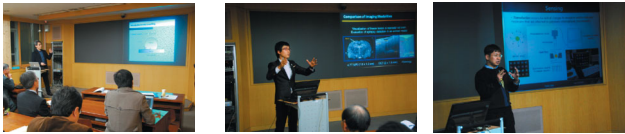

Fig. 4 Lectures by three outstanding Korean Professors

Report-7 IEICE Korea, Information Section

Chan-Hyun Youn, Prof. Dr., Department of Electrical Engineering, Director, Grid Middleware Research Center, KAIST, Representative of IEICE Korea, Information Section

In the 2010 fiscal year, the Representative Office of IEICE Korea, Information Section was located at Grid Middleware Research Center, KAIST, and it organized the 7th Korea-Japan Grid Symposium as an activity of the Section. Korea-Japan Grid Symposiums have been held every year since 2004 and have contributed a lot to the research works of Grid technology. The 7th Korea-Japan Grid Symposium was held in Hongcheon, Korea. Korean and Japanese delegates over 50 members participated in the Symposium. They were from KAIST, Korea University, Kangwon National University, Daejeon University, Ajou University, Korea Institute of Science & Technology Information (KISTI) in Korea, and National Institute of Advanced Industrial Science and Technology (AIST), Osaka University, Tokyo Institute of Technology, University of Tsukuba in Japan.

Korean speakers presented speeches on Grid applications and middleware, like "Large Scale Genome Analysis System and Infrastructure : Genome Engine" given by Dr. Jong Bhak, Teragen BiO Institute, "Retrospect to the Collaboration with EGEE on Grid Activities" given by Dr. Soonwook Hwang, KISTI, "Computer Simulation of Cardiac Arrthymia" given by Prof. Eun Bo Shim, Kangwon National University, "Development of e-Organ System Based on Cyber Computing" given by Dr. Ky-Youb Nam, Bioinformatics and Molecular Design Research Center (BMDRC), "Sensor-Integrated Metabolic Syndrome Estimation with Workflow Management System" given by the author (Prof. Chan-Hyun Youn, KAIST) and the other eight speakers covered the areas of Grid.

On the other hand, Japanese delegates also presented speeches on e-Science applications and Grid middleware, like "Tokyo Tech Storage Solutions for Petascale Data-oriented e-

Fig. 5 2010 Korea-Japan Grid Symposium organized by IEICE Korea, Information Section (in Hongcheon)

Science" given by Dr. Hitoshi Sato, Tokyo Institute of Technology, "A Study of Discovery of Web Service and Modeling Data for Multi-scale Simulation" given by Dr. Yoshiyuki Kido, Osaka University, "High Performance File System Service for Cloud Computing" given by Dr. Kenji Kobayashi, University of Tsukuba,

"Stream Computing for Scalable and Real-time Data Processing Systems" given by Dr. Toyotaro Suzumura, IBM Research / Tokyo Institute of Technology and the other five speeches in the areas of cloud and middleware. Fig. 5 shows the participants in the Symposium, who gathered at the venue of the Symposium in Hongcheon (Daemyung Resort), Korea.

Report-8 IEICE Shanghai Section

Rong-Hong Jin, Prof. Dr., Shanghai Jiaotong University, Representative of IEICE Shanghai Section

In the year 2010, the IEICE Shanghai Section co-organized two events and promoted the participants to join IEICE.

Fig. 6 Promoting the attendees of Broadband Multimedia 2010 to join IEICE activities

One event was the international symposium by IEEE, "Broadband Multimedia 2010" held in Shanghai on March 24-26, 2010, then the Section members including the author and his staff arranged a corner of IEICE near the registration desk and advertised IEICE activities with CD of IEICE, displaying IEICE's logo on the Web site and on the venue board.

Another event was an IEICE lecture, "Metamaterial-inspired Engineering of Antenna Systems" by Prof. Richard W. Ziolkowski, University of Arizona (former IEEE AP-S President), more than 30 people from universities and institutes in Shanghai attended it. In the lecture, the author advertised IEICE activities.

Hot Topics
IEICE's CEATEC 2011 Meeting Comes up!
IEICE Strategic Planning Committee

CEATEC 2011 will be held at Makuhari Messe, Tokyo, on October 4-8, 2011, with the theme of "Smart Innovation-Cutting-edge Technologies to Create the Future". It is the biggest annual comprehensive exhibition focused on IT and electronics, in Asian region. The organizer CEATEC JAPAN plans to attract around 200,000 participants in the exhibition during 5days.

In parallel with the exhibition, it will provide a variety of conferences related to technological innovations and business creation including five Keynote Speeches by top management of relevant industries and joint events of academic meeting and international conference. As one of the events, IEICE will provide a forum to give speeches and discuss the technical background related to a wide range of fields covering electronics, information and communication. Please see the details at, *http://www.ceatec.com/2011/en/application/about/about06.html*.

Message from TFIPP Secretariat

This issue is delivered also by a free mail magazine "IEICE Global Plaza on Line" with updated news. For details, please contact Prof. Takahashi, Task Force for International Policy and Planning (TFIPP) at *global@ieice. org*. Back numbers are available at *http://www.ieice.org/eng/global_plaza/index.html/*.