## IEICE Global Plaza .

Monthly community plaza in English for students, faculties and engineers

#### **Hot Topics**

# Overseas Section Representatives give invited speeches on evolving ICT at 2009 IEICE General Conference IEICE-TFIPP

The annual IEICE General Conference was held at University of Ehime located in the center of Matsuyama on 17th-20th in March 2009. The Conference provided 6 General Sessions including the presentation of 20 guest speeches on general issues planned by the Conference Organizing Committee, 209 speeches on special issues planned by four Societies, 276 Symposium papers and 2641 general papers. The number of Conference participants reached about 5,000. They joined these many sessions and had opportunities of opinion exchange through positive discussion. The General Sessions covered topics concerning the education of engineers, global ICT issues, human resource development for international standardization activities and engineers' ethics.

Above all, one of the General Sessions, TK-2 entitled as "Trend of Electronics or Communications in Overseas Section" was held in the afternoon on 19th(Fig.1). The registration fee of this session was waived to all the participants to have IEICE's global activities understood by as many participants as possible. 45 general participants including foreign researchers and students, 8 IEICE Overseas Section Representatives and International Affairs Committee members joined the session.

The session TK-2 was chaired by Dr.Takashi Hanazawa (VP/NTT), Chief Secretary of IEICE International Affairs Committee and opened with Welcome Address by Dr.Toshitaka Tsuda (VP/Fujitsu Lab), Chairman of the Committee. The invited speeches are "Recent Status of IT Industries in Korea" by Prof.Yong-Jin Park of Hanyang University, "Overview of Microwave and Package Integration Research in National Taiwan University" by Prof. Thong-Lin Wu of National Taiwan University, "Ship Detection in a Polarimetric SAR Data" by Prof. Jian Yang of Tsinghua University and "Wideband and Compact Printed Antennas" by Prof.Rong-Hong Jin of Shanghai Jiao Tong University. The participants could know updated ICT issues in Asian countries through their presentation and discussion.



Fig.1 Session TK-2 (The photo shows Speech by Prof.Park) Next nationwide IEICE Conference will be held at University of Niigata on 15th-18th in coming September this year. If you are interested in paper presentation in the Conference, please follow up <a href="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</a>.

#### 2009 Overseas Section Representatives Meeting successfully held IEICE-TFIPP

The 2009 annual Overseas Section Representatives Meeting was held at the same venue in Matsuyama as 2009 IEICE General Conference in the morning on 19th (Fig.2). Overseas Section Representatives and the members of IEICE International Affairs Committee joined the Meeting. In the Meeting, the revised Manual and Program of IEICE Overseas Section, IEICE's financial support and host of lectures were introduced, then updated schemes and global activities of Societies, the progress of academic activities of Overseas Sections were introduced and discussed. It was reported that IEICE would publish articles covering the summary of organization and current academic activities of each Overseas Section in consecutive special issues of IEICE Global Plaza in the near future. For some questions of IEICE's service development proposed by Overseas Section Representatives, IEICE's fundamental idea was introduced and they confirmed that IEICE would develop the electronic registration and renewal system for membership services on English Web pages in the future, study the extended use of current award systems to encourage overseas members.

At the end of the Meeting, Prof.Chul-Hee Kang of Korea University, the current Korea Section on Communication Representative and Prof.Yong-Jin Park of Hanyang University, the current Korea Section on Information Representative received the IEICE's plaque certifying the appreciation for their long year contributions on the occasion of change of their Representative positions. Simultaneously, the list of Overseas Section Representatives was revised (Table 1).



Fig.2 At 2009 IEICE Overseas Section Representative Meeting

Table 1 Updated list of Overseas Section Representatives

Section	Name	Affiliation
Bangkok	Watit Benjapolalul	Chulalongkorn University
Beijing	Jian Yang	Tsinghua University
Korea,	Chi Moon Han	HanKuk University of Foreign
Communication		Students
Korea, Electronics	Duk-Gyoo Kim	Kyungpook National University
Korea, Information	Chan-Hyun Youn	KAIST-ICC
Shanghai	Rong-Hong Jin	Shanghai Jiaotong University
Singapore	Lei Zhu	Nanyang Technological Unversity
Taipei	Tzong-Lin Wu	National Taiwan Unversity

#### Useful Remarks

### **Welcome to Technical Committee On Information Theory**

by Toyoo Takata

Prof., Iwate Prefectural University Chair, IEICE Technical Committee on Information Theory **Engineering Sciences Society** 

Have you ever participated in our Technical Committee on Information Theory? As referred in the article "What is Engineering Sciences Society?" in IEICE Global Plaza No.2 issue, our Technical Committee belongs to Fundamentals on Information and Communication (FIC) Sub-Society in Engineering Sciences Society (ESS), IEICE.

The main research theme of our Technical Committee is 'Information Theory', in which we promote the studies of processing, transmission, storage, and use of information. Typical keywords of our research area are: Shannon Theory, Channel Coding, Source Coding, Communication Theory, Coding Theory, Data Compression and so on. As you know, all of these topics have been studied over the past 70 years and contributed to the progress of ICT so far. They will further be the base of the future information and communications systems covering NGN or multimedia systems. For the details of the Society, please see http://www.ieice.org/ess/ESS/techg-e.html.

One of our main academic activities is to provide workshops (technical meetings) to people who are interested in the research area. The workshops are held five or six times a year, every two months in average. In 2008 FY, the workshops were held in May, July, September, October and March, 131 papers were presented there. Above all, 29 papers were written in English and some of them were presented completely in English.

The workshop held in July traditionally includes a special program 'Freshmen Session', where young people who received their bachelor or master degrees in March of the same year present their theses. Moreover, an invited talk is planned in the workshop in order to encourage their continuous research activities. Last July, Prof. Hideichi Sasaoka of Doshisha University presented the invited paper "Information Security Schemes in Wireless Communication Based on Radio Propagation Characteristics."

Last September, we organized a joint workshop with Low-Density Parity Check Code Workshop (LDPC Workshop) in Okinawa. We also provided two invited talks there: "Applications of Sparse Matrices to Coding Problems" presented by Dr. Jun Muramatsu, NTT (Fig.3), and "Single-Gaussian Decoding and Density Evolution for Low-Density Lattice Codes" presented by Prof. Brian M. Kurkoski, University of Electro-Communications.

In autumn, we traditionally hold a special workshop at the venue for Symposium on Information Theory and Its Application (SITA), jointly organized with Society of Information Theory and Its Application (SITA) and IEEE IT Society Japan Chapter. It provides invited talks entitled 'Lectures for Young Researchers'. For example, in the workshop held in Kinugawa-spa in Tochigi Prefecture last October, an invited talk entitled "Capacity Problem of Finite States Channels" was presented by Prof. Kingo Kobayashi of University of Electro-Communications, Chair of ESS (Fig.4), followed by the special session entitled "Sixty years since Shannon published his milestone paper". In the special

session, we had the following three invited talks, "Theory of Complex Systems Starting from the Axiomatic Formulation of an Entropy" by Prof. Hiroki Suyari, Chiba University, "Practical Lossless Source Coding which Achieves the Entropy Rate" by Prof. Hiroyoshi Morita, University of Electro-Communications, "Gallager Bound of Channel Coding and the Replica Method" by Prof. Yoshiyuki Kabashima, Tokyo Institute of Technology.

In March this year, a joint workshop with the other relevant Technical Committees in FIC Sub-Society was held in Hakodate, covering Information Security and Wideband System. An invited talk entitled "Performance Evaluation of Error Correcting Codes" was presented by Prof. Toru Fujiwara, Osaka University to commemorate his promotion to IEICE Fellow, .

We will organize six workshops 2009 FY, that is May, July, September, December (joint with SITA and IEEE IT Society Japan Chapter), January, March (joint with the relevant Technical Committees). In January 2010, we will hold our regular workshop in Hawaii, all talks should be presented in English there. We also will organize a tutorial session on MIMO-OFDM in IEICE Society Conference at Niigata University in coming September. Your paper submission and attendance in the workshop and tutorial session will be most welcome. Please visit our web site: http://www.ieice.org/~it/







Fig.3 Invited lecture at LDPC Workshop (by Dr.Muramatsu)

Fig.4 Invited lecture at Young Researchers Workshop (by Prof.Kobayashi)

#### Message from TFIPP Secretariat

#### IEICE Global Plaza is earlier delivered via **Internet mail**

IEICE Task Force for International Policy and Planning (IEICE-TFIPP) under IEICE International Affairs Committee publishes the IEICE Global Plaza with the following media. (1)Mail Magazine "Global Plaza on Line" via Internet. If you are interested in it, please send your request of subscription to global@ieice.org. This is published in real time.

(2)IEICE Home Page which you are reading now. http://www.ieice.org/eng/global\_plaza/index.html.

This is published about one month later than the Mail Magazine. (3)IEICE Journal (monthly publication). See English Pages "IEICE Global Plaza".

This is published about two months later than the Mail Magazine.

Whenever you encounter any difficulties or indistinct process on IEICE matters, please contact Prof.Kenzo Takahashi, IEICE-TFIPP, at global@ieice.org. Your constructive opinions are most welcome. Please send your questions or opinions to improve IEICE membership services. Some of them will be introduced in this IEICE Global Plaza..