

Essay

Through the Experience of 2013 URSI Commission B, International Symposium on Electromagnetic Theory



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It is my great pleasure to have an opportunity of introducing to you, all general readers of IEICE Global Plaza, the academic activities in the “2013 URSI Commission B, International Symposium on Electromagnetic Theory” (EMTS 2013) which was held in Hiroshima, Japan, on May 20-24, 2013. It was organized by Commission B (Fields and Waves) of International Union of Radio Science (URSI) and IEICE Electronics Society (IEICE-ES). EMTS 2013 is the 21st event in a triennial series of international symposia with a long history since 1953, and this is the first EMTS which was held in Japan. As a result of the global campaign of invitation by the members of Technical Committee of EMTS in IEICE over the past longer than 20 years, we had an honorable chance to host the historical event of URSI EMTS. I will also refer to the future URSI activities supporting young radio engineers in Asia.

Who Manages EMTS?

EMTS has internationally organized Technical Advisory Board under the Chair of Commission B (called ‘B-TAB’) as the standing Technical Program Committee for the series of EMTS. Prof. Giuliano Manara (Pisa Univ.) serves as the current Chair. Local Organization Committee (LOC) formed in IEICE-ES, with the Co-chairs, Prof. Tsuneki Yamasaki (Nihon Univ.) and Prof. Makoto Ando was responsible for the Symposium including the finance. LOC included International Advisory Board (IAB), Organizing Committee for fund raising, Local Committee for the Technical Program and Steering Committee where the last two Committees collaborated with B-TAB (See the details at <http://ursi-emts2013.org/committees.html>).

Summary of EMTS2013

338 papers were received, 368 persons including 28 attendants from 31 countries joined the Symposium, and total 290 papers (110 from Japan, 180 from the other countries) were presented in 54 Technical Sessions and 5 Plenary Sessions of invited talks. The number of papers is listed in Table 1.

The Conference covered Opening Ceremony, Plenary Sessions, Oral Sessions of general papers, two Poster Sessions. The main venue of the Symposium was set up at the International Conference Center Hiroshima in Peace Memorial Park. In the Opening Ceremony, Prof. Hiroshi Shirai chaired Welcome address by Prof. Giuliano Manara, Prof. Makoto Ando (myself), Prof. Kiyomichi Araki (then President, IEICE-ES), Prof. Piergiorgio L. E. Uslenghi (VP, URSI), Prof. Tapan K. Sarkar (President-Elect, IEEE Antennas and Propagation Society), followed by the announcement of Prof. Masahiro Nishi (Hiroshima City Univ.).

On May 22, LOC provided the special event of leisurely walk in Miyajima island for more than 200 participants (Fig.1). After two plenary talks and YSA Poster Sessions in the Aki Grand Hall, all attendees enjoyed the excursion to the world heritage Itsukushima

Shrine. (See Proceedings at http://www.ieice.org/jpn/books/p_a.html)

Table 1 Number of submitted and presented papers in EMTS2013.

| Country or Region | Submitted | Presented | Country or Region | | |
|-------------------|-----------|-----------|-------------------|-----|-----|
| Japan | 114 | 110 | Turkey | 3 | 3 |
| USA | 37 | 34 | Hong Kong | 2 | 2 |
| Italy | 17 | 17 | P.R. China | 3 | 2 |
| Germany | 13 | 13 | Singapore | 3 | 2 |
| Sweden | 12 | 12 | Spain | 2 | 2 |
| Russia | 12 | 11 | Brazil | 1 | 1 |
| Taiwan | 12 | 9 | Czech Republic | 1 | 1 |
| Finland | 9 | 8 | Denmark | 1 | 1 |
| India | 14 | 7 | Ireland | 1 | 1 |
| United Kingdom | 9 | 7 | Portugal | 1 | 1 |
| Australia | 6 | 6 | Serbia | 1 | 1 |
| Canada | 8 | 6 | Switzerland | 1 | 1 |
| Israel | 6 | 6 | Ukraine | 2 | 1 |
| France | 10 | 5 | Bangladesh | 2 | 0 |
| The Netherlands | 5 | 5 | Egypt | 1 | 0 |
| Belgium | 4 | 4 | Malaysia | 1 | 0 |
| Iran | 13 | 4 | Mexico | 1 | 0 |
| Korea | 6 | 4 | Sri Lanka | 1 | 0 |
| Saudi Arabia | 3 | 3 | TOTAL | 338 | 290 |

Activities Addressed to Young Scientists

The Conference started with the first URSI Commission B School for Young Scientists (EMTS School). The EMTS School was organized and sponsored by URSI Commission B and LOC on the first day of the Symposium. Two fundamental lectures were given by leading scientists, to about 50 attendees. This event added a new history on the series of EMTS.

24 Young Scientist Award (YSA) papers were selected out of 45 applications and the local expense for the travel and stay of the authors was supported by LOC. The Award winners are from Italy(3), Japan(3), Sweden(3), Russia(3), Israel(2), Czech Republic(1), Finland(1), France(1), Germany(1), India(1), Saudi Arabia(1), Switzerland(1), Ukraine(1), United Kingdom(1), USA(1), where the bracket indicates the number of selected papers. Further, three papers severely selected out of the Award papers received YSA Best Paper Awards (Fig.2).



Fig.1 Excursion to Miyajima provided for the better mutual understanding of participants in EMTS2013.



Fig.2 YSA Best Paper Award winners with organizing members.

Future Perspectives of URSI in Asian Region

URSI is one of the union members under the NGO, International Council for Science (ICSU, <http://www.icsu.org/>) devoted to international cooperation for the advancement of science. The Important task of ICSU is how to motivate the young scientists in radio science. The URSI events in the near future will include AP-RASC'13 in Taipei, Taiwan on September 3-7, 2013 (<http://apras13.ntu.edu.tw/>) and URSI-GASS 2014 in Beijing, China on August 14-23, 2014 (<http://www.chinaursigas.com/>). EMTS2013 Steering Committee thanks for all the contributions to

the Symposium, also for all the supports from both domestic and international organizations which made EMTS2013 successful.

Hot Topics

2013 IEICE Information and Communication Technology Forum Was Successfully Held!



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Local Chair for 2013 IEICE-ICTF
Secretariat, IEICE Europe Section

Summary

2013 IEICE Information and Communication Technology Forum (ICTF2013) was held at Hotel Europe in Sarajevo, the capital of Bosnia and Herzegovina, on May 29-31, 2013. Sarajevo is one of the most important cultural centers in Balkans which is often called "Europe's Jerusalem" due to its cultural diversity and very eventful history. The Forum was organized by IEICE Europe Section and generally sponsored by the IEICE. In addition, the Forum has been technically sponsored by Communications Society of IEICE (IEICE-CS). The target of ICTF2013 was to gather relevant researchers in Europe around IEICE Europe Section and encourage them to develop the collaboration with universities, national research institutions and private sectors outside Europe. The Forum also promoted the organization of the Section and its activities in Europe.

Presentations

Professors and researchers from Japan, China, UK, France, Belgium, Denmark, Switzerland, Slovenia, Serbia, Montenegro, Poland, Romania and Bosnia and Herzegovina, addressed the most recent issues in information and communication technologies making ICTF 2013 Program very interesting in their presentations.



Fig.3 Dr. Haris Gacanin, Section Representative gives his opening address.



Fig.4 Keynote Speech by Dr. Yuji Inoue, President, IEICE.

The Forum was opened by Dr. Haris Gacanin, IEICE Europe Section Representative (Fig.3). He expressed his joy with the organization of ICTF 2013 and underlined that the number of Forum participant has been increasing year by year, as the quality of presentations improves. He stressed that the IEICE Europe Section would work hard to promote its activities, so that it would gain the significant attention of quite many people in Europe as more people would easily join the organization.

The ICTF 2013 program covered three main categories, Communications, Engineering and Electronics in a single Session. The Forum consisted of Keynote, Industry and invited Speeches and 13 technical paper presentations which were accepted by ICTF2013 Program Committee for their presentation. The Forum started with Keynote Speech by Dr. Yuji Inoue, (President of IEICE and Chairman of the Board, Toyota InfoTechnology Center Co., Ltd.) entitled "Inter-industry Innovation". In his talk, he stressed the importance of change of industry formation from the competition basis to the collaboration basis, not only within the same industry but among different industries (Fig.4).

The second Keynote Speech was provided by the ICTF 2013 General Chair, Prof. Fumiyuki Adachi, (Tohoku University) entitled "Disaster-resilient Multilayered Communication Networks" (Fig.5). Prof. Adachi gave an overview of research efforts in order to design a new communication system available even in a disaster or emergency. The final Keynote Speech was given by Prof. Maciej Stasiak (Poznan University of Technology, Poland) entitled "Modeling Traffic Control Mechanism in Mobile Networks". In his

talk, he addressed the issues of analytical modeling interfaces in radio access networks (Fig.6).



Fig.5 Keynote Speech by Prof. Fumiyuki Adachi.



Fig.6 Keynote Speech by Prof. Maciej Stasiak.

The Industry Speakers from Docomo Beijing Labs, Toshiba Research Europe, Alcatel-Lucent Bell N.V. and Bell-Labs provided very interesting recent topics in the area of ICT.

More than 40 people participated in the Forum during the two days and it had their reputation that it was a very successful event. Most of Forum speakers expressed their good impression at the quality of program, presentations and forum organization.

At the end of the second day, Dr. Gacanin gave the Closing Remarks. He expressed his delight with the ICTF 2013, and gratitude to all speakers who led this year event to a true success.

Future Plans

At the end of the first day of the Forum, IEICE Europe Section held its meeting. In this meeting the following issues were discussed:

- (1) Management and Development of the Section in 2013-2015
- (2) Events to be planned in 2014-2015
- (3) Election of IEICE Europe Section Secretary General
- (4) Special issue of IEICE Transactions on Communications
- (5) New activities.

Dr Piotr Zwierzykowski from Poznan University of Technology (Poland) was elected as Secretary General of IEICE Europe Section. It was also decided that starting from next year, the Forum would move on from Sarajevo and different cities were considered as hosts in the forthcoming years. ICTF2014 will be set up in Poznan, Poland, while the IEICE Europe Section received a proposal of host for ICTF2015 from Dr Bamidele Adebisi of Manchester Metropolitan University in UK. In addition, Dr Adebisi gave a presentation of the University and town of Manchester in the meeting.

The next event "2014 IEICE Information and Communication Technology Forum (ICTF2014)" will be held on 29th and 30th of May, 2014 in Poznan, Poland. Dr. Piotr Zwierzykowski (Organizing Committee Chair of ICTF 2014) gave a very nice presentation on the next year host, Poznan city. The detailed information on ICTF2014 will be distributed to IEICE members and provided on the Web page, once defined. Your participation will be most welcome!

Let's Join 2013 IEICE Society Conference in Fukuoka, Japan, on September 17-20

IEICE-TFIPP

IEICE Society Conference will be held at Fukuoka Institute of Technology, in Fukuoka, Japan, on Sept. 17-20, 2013. The English Session BS-7 entitled "Network and Service Design, Control and Management" will be provided at C-Building in the venue over the four days, through the 55 paper presentations completely in English. (https://www.gakkai-web.net/gakkai/ieice/pro13s/0730_Bpro.pdf).

Message from TFIPP Secretariat

This issue is delivered also by a free mail magazine "IEICE Global Plaza on Line" with updated news of interest for you. Please contact Prof. Takahashi, TFIPP (Task Force for International Policy and Planning) at global@ieice.org, if you need. Back numbers are available in archives at:

http://www.ieice.org/eng/global_plaza/index.html

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