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Web site below:

http://www.ieice.org/cs/pub/global_news.html

Report on the 3rd International Symposium on Network Virtualization

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1. Introduction

The 3rd International Symposium on Network Virtualization was held on September 6, 2013, at the University of Tokyo. The symposium has been held annually since 2011 with the aim of promoting research and development of network virtualization, one of the core technologies for new-generation networks, and of accelerating broad deployment of new communications infrastructure using the technology while encouraging international collaboration among researchers.

2. Overview of this year's symposium

This year's symposium, with its theme "Social ICT & Deeply Programmable Network/Software Defined Network and Beyond," introduced the latest research activities in the areas of Software Defined Networking (SDN), Network Functions Virtualization (NFV), etc. In the symposium sessions, future directions of research on programmability within networks were discussed from the viewpoints of various stakeholders from academia and industries across the world. Participants also exchanged expertise on the development of Social ICT, which means applying information and communications technology (ICT) to socio-economic activities, as well as on educating graduate students into global, creative research leaders toward the realization of Social ICT.

The symposium was co-sponsored by The 3rd Network Virtualization Symposium Steering Committee; Network Virtualization Working Group, IEICE Technical committee on Network Virtualization; Graduate program for social ICT Global Creative Leaders, the University of Tokyo (GCL); National Institute of Information and Communications Technology (NICT); and Network Virtualization Working Group, JSPS 163rd Committee on Internet Technology (ITRC). Prof. Akihiro Nakao of the

University of Tokyo chaired both the Steering Committee and the Program Committee.

The meeting gathered more than 150 attendees despite the fact that many other conferences on networking technologies were scheduled to be held during the same period. It also gathered a lot of positive feedback, representing a great success.

3. Program

The first session of the symposium started with the opening speech by Makoto Imase of NICT, followed by three keynote speeches. The speakers were Toshihiro Matsui of the Ministry of Internal Affairs and Communications (MIC); Tomonori Aoyama of Keio University; and Chip Elliott of Raytheon BBN Technologies (the GENI Project Office).

The following two sessions were composed of six invited speeches. Researchers from various organizations addressed the most recent issues on SDN and NFV, both of which enable software programs to use isolated virtual resources in networks and thereby help construct more flexible communications infrastructure. The speakers were as follows: Fabian



Fig. 2 Speech by Mr. Matsui



Fig. 1 Greeting by Prof. Nakao (Chair)



Fig. 3 Speech by Mr. Berman



Fig. 4 Speech by Dr. Ricart



Fig. 7 Exhibition



Fig. 5 Q & A during the session

Schneider of NEC Europe (also representing ONF); Kazuaki Obana of NTT (also representing ETSI NFV); Glenn Ricart of US Ignite; Mark Berman of Raytheon BBN Technologies (the GENI Project Office); Inder Monga of ESnet (also representing OGF); and Akihiro Nakao of the University of Tokyo.

In the beginning of the final session, Tohru Asami of the University of Tokyo (GCL) made a keynote speech. Then followed a two-hour long panel discussion, in which the chairperson, Prof. Nakao, and eight other panelists with different backgrounds discussed issues concerning the theme of this year’s symposium, such as applications of SDN/NFV or education for creating innovation in networking research. The panelists included the six keynote/invited speakers (Prof. Asami, Mr. Elliott, Dr. Schneider, Dr. Ricart, Mr. Berman, and Dr. Monga), and two other researchers, Atsushi Takahara of NTT and Motonori Shindo of VMware. The panelists exchanged ideas about the direction of future ICT while sharing the current issues involving



Fig. 6 Panel Discussion

SDN/NFV. For instance, the need to change the management structure to reduce the OPEX, as well as the lack of network engineering tools, like the one for debugging, were recognized in light of the occurring technological trend, in which networking and computing are converging. Network security was one of the biggest concerns. It could be treated as an application in itself or one of the properties that applications should possess, according to the discussions. Regarding the research and development direction, the importance of enhancing programmability within networks was stressed.

Next to the conference room, there were 11 exhibition booths, which were set up along with the sessions. In each booth, researchers from universities, vendors, and carriers explained their newest activities using demonstrations and posters.

The additional information about the program is available at the symposium website [1].

4. Conclusion

Network virtualization has become the largest theme in the networking research community involving industries, universities, and governments. The symposium held in 2013 showed that while the industries were pushing their researches further toward possible commercial uses, the universities were working on even more advanced concepts, such as Deeply Programmable Network (DPN). It also highlighted the importance of cooperation among different entities.

Following this successful symposium, we are planning even more fruitful symposium next year.

5. Reference

[1] <http://www.ieice.org/~nv/english/symposium1>

Report on ICM English Session at 2013 IEICE Society Conference

– BS-7 Network and Service Design, Control, and Management –



Yoshitsugu Kondo
NTT Advanced Technology Corporation

1. Introduction

The 2013 IEICE Society Conference was held at Fukuoka Institute of Technology in Fukuoka City, on September 17-20, 2013, where three societies of Engineering Sciences Society (ESS), Communications Society (CS) and Electronics Society (ES) joined. 18 symposium sessions and 55 general sessions were held. The number of registered participants reached more than 6,134 in total.

In the conference, the IEICE Technical Committee on "Information and Communication Management (ICM) [1]" hosted an full English session entitled "Network and Service Design, Control and Management" as one of 18 symposium sessions which focused on special topics of advanced technologies.

2. Background of ICM English Session

ICM has been hosting English session every year since 2004. The purpose of this English session is to contribute to the globalization of IEICE by offering the chance of the presentation and discussion in English to "the foreign researchers / students living in Japan" and "the overseas researchers / students". Figure 1 shows the change in the number of contribution papers since 2004. When the session began in 2004, only 15 papers were submitted. The number of papers has gradually increased, and it reached 55 papers in this year. While the holding period of the session in the 2004 was one and half days, the holding period of the session in this year was four days which was the same as the period of the IEICE Society Conference. It seems to have to make a parallel session next year.

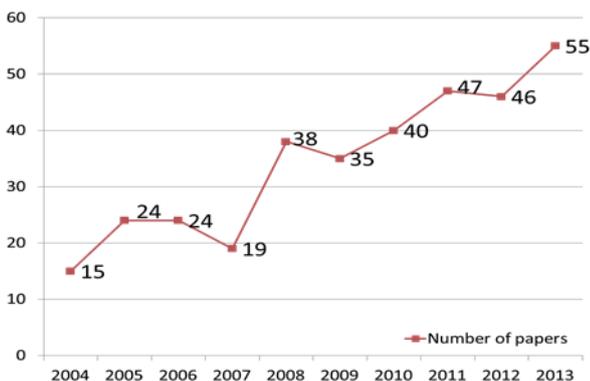


Fig. 1 The number of contribution papers since 2004

3. Presentations in ICM English Session

The contribution papers were classified into 16 sub-sessions according to the topics and set up every day during the Society Conference. Various topics are discussed in each sub-session every year. Figure 2 shows the number of papers corresponding to their topics. 19 papers were especially concerning ad-hoc networks, P2P, multi hop protocols, and wireless systems in this year. These topics stem from an explosive spread of a smart phone, and for the Great East Japan Earthquake, etc. Some topics covering the application layer such as information centric networks, application & services and data centers were also discussed. Topics of optical networks, network management, and QoS also had a lot of discussions as in the ordinary year.

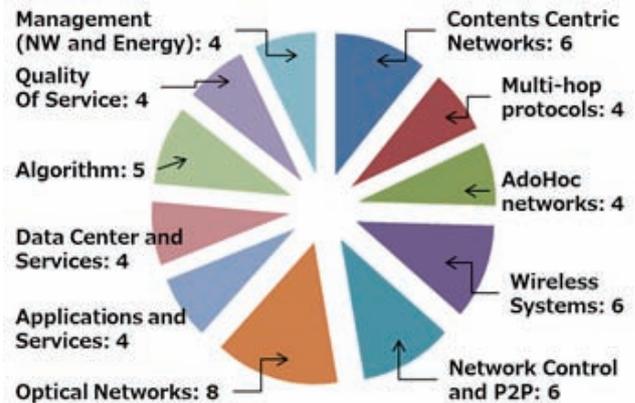


Fig. 2 The number of contribution papers corresponding to their topics

Figure 3 shows the number of papers corresponding to the categorization of the presenter's affiliations. 76% of the presenters belonged to the university. 11% belongs to research institutes, and remained 13% belongs to the industries. The number of contribution papers from the industries increased compared with that in last year. However the situation in which the contribution from the university occupied the majority did not change. Although most of presenters were international students studying in Japan and foreign researchers working in Japanese industries, 6 presenters were Japanese students or researchers. In this symposium, ICM expects the open contribution

from not only the university but also the enterprise, and expects the various presenters from not only the international students and the foreign researchers but also Japanese students and researchers, too. And, there was one contribution from the outside of Japan this year. As the purpose of the English session is the contribution to the globalization of IEICE, ICM hopes that the papers from the outside of Japan will increase in next year.

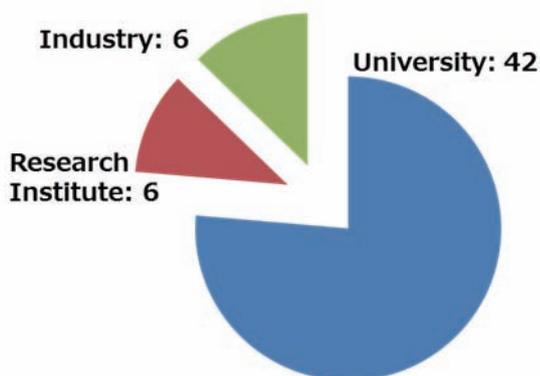


Fig. 3 The number of papers corresponding to the categorization of the presenter's affiliations

Every presenter and audience enthusiastically discussed the ideas and opinions in the time assigned for question and answer as shown in Fig.4. Since the assigned time passed quickly, presenters and questioners continued their discussion here and there even into the break periods.



Fig. 4 ICM English session in 2013

4. Award of ICM English Session

ICM will select the best papers and award a prize of the session in the near future to encourage continuous activities. The best papers will be awarded in the upcoming ICM workshop in March 2014.

ICM awarded the paper [2] shown in Tab. 1 which was presented in the 2012 IEICE Society Conference in March this year.

Table 1 English Session Awardees of ICM Committee 2012

Awardees	Title
Yunlong Feng (The Graduate University for Advanced Studies), Gene Cheung, Yusheng Ji (NII)	Evolution of Eye Movement Classification for Interactive Streaming System

5. Conclusion

ICM English session in 2013 was a big success because a lot of papers were contributed and a very active discussion was done. I believe that this session became fruitful for all people, and was able to contribute to the globalization of IEICE. I wish that more papers will be contributed to the session in the next year

6. Acknowledgement

I, as the organizer of this ICM English session, would like to thank Prof. Yoshiaki Tanaka of Waseda University, who made a great contribution in soliciting papers, utilizing his nation-wide academic authority and human relations. I would also like to thank all the member of the ICM committee, the attendees and everyone who contributed to the discussions and supported the session.

7. Reference

- [1] IEICE ICM Technical Committee web site, <http://www.ieice.org/~icm/eng/>
- [2] Yunlong Feng (The Graduate University for Advanced Studies), Gene Cheung, Yusheng Ji (NII), "Evolution of Eye Movement Classification for Interactive Streaming System", IEICE Society Conference, BS-5-36, Sep., 2012.

Report on Communications Society Special Talk and Awarding Ceremony at 2013 IEICE Society Conference

Kiyoshi Ueda Takumi Miyoshi
Director of General Affairs, IEICE Communications Society



1. Introduction

This article gives an overview of the Communications Society special talk and awarding ceremony at the 2013 IEICE Society Conference held at Fukuoka Institute of Technology, Fukuoka, Japan, on 18 September 2013. This event, previously known as the Communications Society Annual Assembly, was renamed last year.

During the awarding ceremony, two awards were presented by Prof. Iwao Sasase, President of the Communications Society; the Outstanding Contributions Award and the Distinguished Contributions Award.

A special talk for this year was “*Telecommunication Business Learnt from Assistance to Developing Nations*” by Dr. Yasuhiko Ito, KDDI Foundation, Tokyo.

services prior to 2012. The Distinguished Contribution Award was presented for extraordinary planning activities and voluntary paper reviewing in the Communications Society. One hundred two members were awarded for their contributions prior to 2012.



Fig. 1 Participants in the special talk and awarding ceremony at the 2013 IEICE Society Conference.



Fig. 2 Opening remarks by Prof. Iwao Sasase, President of the Communications Society.



Fig. 3 Outstanding Contribution Award presented by President Iwao Sasase.

2. Awarding ceremony

The Outstanding Contribution Award was presented for the chairing technical committees and chief editor services on the Editorial Board of Transactions on Communications and Communications Society Magazine. Seventeen members were awarded for their

3. Special Talk

A technical lecture was arranged for the special talk.

The title of the special talk was *"Telecommunication Business Learnt from Assistance to Developing Nations"*. Dr. Yasuhiko Ito began his talk on the present living environment in developing countries and asked what they really need. KDDI began assisting developing nations by building communication facilities and educating engineers. There are extreme poverty-stricken areas where there is no electricity, gas, or water service and the rate of children who cannot receive education exceeds 50%. For example, KDDI began building an elementary school in Cambodia from 2005, and still building in many countries. The improved communication may be very worthy, and the combination of education and communication may serve as key to such area's futures. The technology needed in developing countries, e.g., the use of mobile phones for migrant workers to remit small amounts of money, essentially acting as simple banks, to their families, may become a reference for developing telecommunication businesses. Dr. Ito concluded his talk by proposing that Japanese communication business practices can be learned from such assistance, such as introducing a simple remittance system, must be put into practice.



Fig. 5 Closing remarks by Dr. Kou Miyake, President-Elect of Communications Society.



Fig. 4 Special talk by Dr. Yasuhiko Ito, KDDI Foundation.

4. Conclusions

This article gave an overview of the Communications Society special talk and awarding ceremony. The Communications Society supports members' activities in the field of communications by giving contribution awards.

Finally, the special talk and awarding ceremony were adjourned with closing remarks by Dr. Kou Miyake, President-Elect of the Communications Society.

Introduction of English Sessions at IEICE General/Society Conference

Masaki Bandai,[†] Sumaru Niida,^{††} Yukitoshi Sanada,^{†††}
and Soichiro Araki^{††††}

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1. Introduction

The IEICE organizes General/Society Conferences every half year. These conferences provide invited talks, panel discussions, tutorial sessions, poster presentations, and technical sessions to present and exchange recent research results.

In this article, the IEICE Communications Society (CS) Council of Technical Committee Representatives introduces the English-language sessions at the IEICE General/Society conferences.

2. History and Statistics of English Sessions

The IEICE Technical Committees on Network Systems (NS)[1] and Information and Communication Management (ICM)[2] have hosted English-language sessions at every General/Society Conference since 2004 to provide more opportunities for presentations and discussions in English for researchers from all over the world.

Table 1 shows the recent theme and statistics of the English sessions. The sessions accept a broad range of technical topics in terms of network systems and information and communication management, such as wireless networks, photonic networks, and applications. Since the number of papers and participants has increased in recent years, participants can discuss

Table 1 Recent theme and statistics of NS and ICM English Sessions

Conf	Theme	# papers	Cum # participants
2013 Society	Network and Service Design, Control and Management (ICM)	55	154
2013 General	Network Control and Management Technologies for Next Generation Applications (NS)	62	177
2012 Society	Network and Service Design, Control and Management (ICM)	46	156
2012 General	Management and Control Technologies for Innovative Networks (NS)	43	114
2011 Society	Planning, Control and Management on Networks and Services (ICM)	47	168
2011 General	Network Design, Management and Control for Future Networked Systems (NS)	43	N/A



Fig. 1 2013 ICM English Session

technical topics in English for four days during the conference, as shown in Fig. 1.

The English session is held as one of the symposium sessions. Therefore, the maximum paper length is two pages, which is twice as long as general sessions. In addition, the length of each presentation is twenty minutes, which is also twice as long as that of general sessions. By using sufficient paper space and time, presenters and the audience can enjoy extensive discussions of the research in detail. For excellent papers, ICM and NS have awarded prizes to the authors.

3. Conclusion

The 2014 IEICE General Conference will be held at Niigata University from March 18 to 21, 2014. NS will host an English session entitled “Future Network Technologies for Advanced Information and Communications Society.” NS will select the best papers English Session Award of the NS Committee. The deadline for paper submissions will be at the beginning of 2014 (Please check the website of IEICE). We encourage submissions and participation at the sessions.

As additional information, we suggest the submission of an expanded version of the English-session paper to *IEICE Communications Express (ComEX)* [3], which is a new online letter journal of the IEICE-CS.

4. Reference

- [1] IEICE Technical Committee on Network Systems (NS) website, <http://www.ieice.org/cs/ns>
- [2] IEICE Technical Committee on Information and Communication Management (ICM) website, <http://www.ieice.org/~icm/eng>
- [3] IEICE Communications Express (ComEX) website, <http://www.comex.ieice.org>

ASN Special Session in the 19th Asia-Pacific Conference on Communications (APCC2013)

Bing Zhang

National Institute of Information and Communications Technology



1. Introduction

Technical Committee on Ambient Intelligence and Sensor Networks (ASN) was newly launched in April of this year, which was merged by the technical committees of Ad Hoc networks (AN) and Ubiquitous and Sensor Networks (USN). ASN technical committee aims at processing, analyzing, and applying sensing data for enhancement or assistance for human activities, which is called "Ambient Intelligence". It is expected that gentle social environments such as efficient electric power usage in smart grids and effective transportation systems will be established through the systems with ambient intelligence based on sensor networks. Not only developments of technologies supporting the ambient intelligence such as sensor networks but also to look ahead to industry applications are important for ambient-intelligence contributions to social-infrastructure progressions.

As the first step of international exchange, a special session was organized and chaired by ASN technical committee on 30 August, 2013 in the 19th Asia-Pacific Conference on Communications (APCC2013) [1,2]. This special session focused on the sensor networking technology and application for the realization of ambient intelligence. It aimed at contributing to the development of a future sensor network, and the promotion to the practical utilization for the public, by presenting the technical problems and ideas for solving these problems, applications and key technologies to develop the ambient intelligence.

2. ASN Special Session in APCC 2013

ASN special session was held on the second day of APCC2013, in which two sessions were organized from 9:00 to 12:40 on 30 August. In the first part of ASN special session, an invited talk was presented by Prof. Nobuo Nakajima from the University of Electro-Communications. Prof. Nakajima gave an invited speech on wireless radiation sensor network for Fukushima, which was interesting and deep concern to audiences. After Prof. Nakajima's invited talk, four presenters from Malaysia, Australia, China and Japan, respectively, gave their presentations related to the ambient intelligence and sensor networks. In the second part of ASN special session, Prof. Azman O. Lim from Japan Advanced Institute of Science and Technology gave an invited speech on concepts, architectures and standards for smart homes. After the invited talk, four presenters gave their presentations on the ambient intelligence and sensor networks.



Fig. 1 Presentation in ASN special session



Fig. 2 Certificate as the chair of ASN special session is presented to Prof. Yamamoto by APCC2013

3. Future plan

Through this successful experience organizing a special session in APCC, ASN technical committee is planning to organize another special session in the next APCC, held at Pattaya, Thailand in October 1-3, 2014.

4. Reference

- [1] <http://apcc.pro/>
- [2] T. Shimizu and Y. Ishikawa, "Report on the 19th Asia-Pacific Conference on Communications (APCC2013)," IEICE Communications Society GLOBAL NEWSLETTER, Vol.37, No.4, pp.12-13, Dec. 2013.

IEICE Fellow Conferred on 13 IEICE-CS Members

Fumio Futami
 Director of Planning and Member Activities,
 IEICE Communications Society



1. Introduction

The title of IEICE Fellow is conferred on IEICE members who are recognized as having made a significant contribution to the institute in academic, technical or related fields. In 2013, IEICE Fellow is conferred on 37 IEICE members including 13 from Communications Society (CS) who are listed in Table 1.

2. The Conferment Ceremony

On 18th September during IEICE Society Conference 2013 in Fukuoka, the 14th Fellow Conferment Ceremony was held (Fig.1). In the Ceremony, Dr. Yuji Inoue, the president of IEICE handed a fellow badge and a certification plate to each new Fellow.

3. Contribution to the GLOBAL NEWSLETTER

As a part of Fellows' continuing contribution to the IEICE, articles by new Fellows are planned to be published in the following issues.

Table 1 New IEICE Fellows from Communications Society

Name	Contribution contents
Osamu Ishida	For contributions to research, development and standardization of high-speed Ethernet transport technologies
Uno Hiroshi	For contributions to technologies of optical transmission scheme and their management in access networks
Eiji Oki	For contributions to packet switching speeding up and path computation technologies

Haruki Ogoshi	For contributions to the development of high-power and wideband Er-doped optical fiber amplifiers
Seizo Onoe	For contributions to research, development and international standardization on mobile communication systems from third generation to fourth generation.
Naoto Kadowaki	For contributions to research and development of networking technology in broadband satellite communications network
Masahiko Jinno	For contributions to the creation of wide wavelength band and spectrum-efficient WDM optical networks
Shigeru Tanaka	For contributions to research and development on mass-producing, reliability enhancement, and installing technologies of optical fiber cables
Kunitoshi Nishikawa	For contributions to research and development on automotive electronic devices and antennas
Toru Hasegawa	For contributions to the development of high performance and high quality TCP communication method in the wide area networks and its implementation to commercial systems
Noriharu Miyaho	For contributions to research and development of ATM node and studies on QoS guarantee switching node architecture
Atsushi Murase	For pioneering development of IMT-2000 mobile communication systems using W-CDMA
Takaya Yamazato	For contributions to the studies on visible light communication for ITS and the promotion of the Communications Society



Fig. 1 Photo in the Fellow Conferment Ceremony with Dr. Y. Inoue, President of IEICE and Prof. I. Sasase, President of IEICE Communications Society

IEICE-CS Related Conferences Calendar

Date	Conference Name	Location	Note
2 Dec - 5 Dec 2014	2014 International Symposium on Antennas and Propagation (ISAP2014)	Kaohsiung, Taiwan	Submission deadline: 4 Jul. 2014
6 Jul. - 10 Jul. 2014	OptoElectronics and Communications Conference and the Australian Conference on Optical Fibre Technology 2014 (OECC/ACOFT 2014)	Melbourne, Australia	Submission deadline: 7 Feb. 2014
28 May - 30 May 2014	IEICE Information and Communication Technology Forum 2014 (IEICE ictf2014)	Poznan, Poland	Submission deadline: 29 Dec. 2013
12 May - 16 May 2014	2014 International Symposium on Electromagnetic Compatibility (EMC'14/Tokyo)	Tokyo Japan	Submission deadline: Closed
10 Feb. – 12 Feb. 2014	The 28 th International Conference on Information Networking (ICOIN2014)	Phuket, Thailand	To be held soon
12 Dec. - 15 Dec. 2013	2013 IEEE Electrical Design of Advanced Packaging & Systems Symposium (EDAPS2013)	Nara, Japan	To be held soon
23 Oct. - 25 Oct. 2013	2013 International Symposium on Antennas and Propagation (ISAP2013)	Nanjing, China	Done
23 Oct. 2013	International Workshop on Cloud Cooperated Heterogeneous Networks (CC-HetNet2013)	Osaka, Japan	Done
20 Oct. - 23 Oct. 2013	International Conference on Renewable Energy Research and Applications (ICRERA 2013)	Madrid, Spain	Done
15 Oct. - 16 Oct. 2013	17 th International Conference on Intelligence in Next Generation Networks (ICIN2013)	Venice, Italy	Done
14 Oct. - 16 Oct. 2013	International Conference on Information and Communication technology Convergence 2013 (ICTC2013)	Jeju Island, Korea	Done
30 Sep. 2013	TeleManagement Forum Tokyo Spotlight 2013 (TM Forum Tokyo Spotlight 2013)	Tokyo, Japan	Done
25 Sep. - 27 Sep. 2013	Asia-Pacific Network Operations and Management Symposium 2013 (APNOMS 2013)	Hiroshima, Japan	Done
22 Sep. 2013	Workshop in the European Conference and Exhibition on Optical Communication (ECOC2013 workshop)	London, UK	Done
8 Sep. 2013	The 6 th International WDN Workshop on Cooperative and Heterogeneous Cellular Networks (WDN-CN2013)	London, UK	Reported on this issue
29 Aug. - 31 Aug. 2013	The 19 th Asia-Pacific Conference on Communication (APCC2013)	Bali Island, Indonesia	Reported on this issue

Please confirm with the following IEICE-CS web site for the latest information.
<http://www.ieice.org/cs/conf/calendar.html>

Report on the 19th Asia-Pacific Conference on Communications (APCC2013)

Takashi SHIMIZU and Yoshihiro ISHIKAWA
APCC Steering Committee



1. Introduction

The 19th Asia-Pacific Conference on Communications (APCC2013) was held in Bali, Indonesia from August 29 to August 31, 2013. With the theme “Smart Communications to Enhance the Quality of Life”, the conference program included four keynote addresses, a special session by the Technical Committee on Ambient Intelligence and Sensor Networks (ASN) [1], 7 tutorial sessions, 19 technical sessions and two panel sessions. It was technically co-sponsored by IEICE Communications Society (IEICE-CS), Korea Information and Communications Society (KICS), China Institute of Communications (CIC) and IEEE Communications Society Indonesia Chapter. It was attended by 172 researchers and engineers mostly from Asia-Pacific region.

2. Opening Ceremony and Keynote Sessions

The conference was commenced by welcome address by General Chair, Dr. Wiseto Agung. It was followed by congratulatory addresses by Dr. Satriyo Dharmanto, Chair of IEEE Communications Society Indonesia Chapter and Dr. Kuncoro Wastuwibowo, Chair of IEEE Indonesia Section.

After the opening ceremony, four high-profile speakers from all over the world addressed the variety of visions for future ICT society. The first address by Prof. Byeong Gi Lee, Seoul National University, introduced the creative economy that would facilitate the transformation from industrial society to knowledge creation society and discussed the role of ICT in expanding ecosystem in this field. Energetic and inspiring talks by Prof. Adnan Al-Anbuky, Auckland



Fig. 1 Welcome address by Dr. Wiseto Agung

University of Technology, Dr. Indra Utoyo, Telkom Indonesia and Dr. Ichiro Inoue, NTT, addressed a range of R&D visions from sensor networks to broadband access.

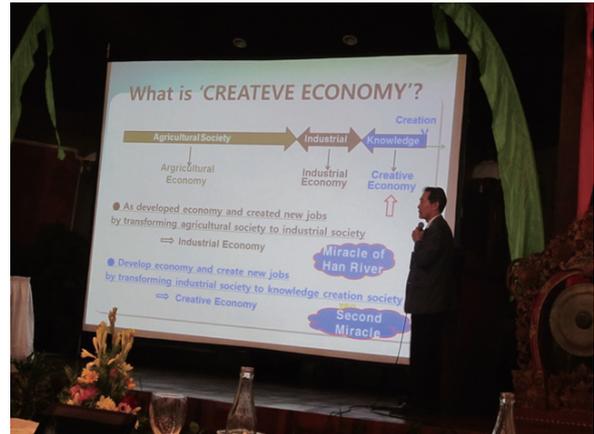


Fig. 2 Introduction of the Creative Economy by Prof. Lee

3. Technical Program

The Technical Program Committee received 309 paper submissions from 31 countries and regions, and selected 163 papers for presentation by careful peer-review process. The peer-review was completed by more than 430 professionals. Oral presentations were organized in 21 sessions for 118 papers, and poster presentations were organized in two sessions for 32 papers. Each session was well-attended and vigorous discussions were facilitated.



Fig. 3 Discussion at a technical session

4. Best Paper Award

Each year, Best Paper Awards were selected by the Award Committee established in APCC Steering Committee. The members of the committee made another peer-review of the top 10 high-score papers, considering not only technical aspects but also the impact of the paper in the relevant field. By averaging the score of the committee and the original score, following three papers were selected.

1) “Joint Optimization of Frequency Allocation and User Association with Differentiated Service in Hyper-cellular Networks”

Authors: Shan Zhang
Sheng Zhou
Zhisheng Niu
(Tsinghua University)

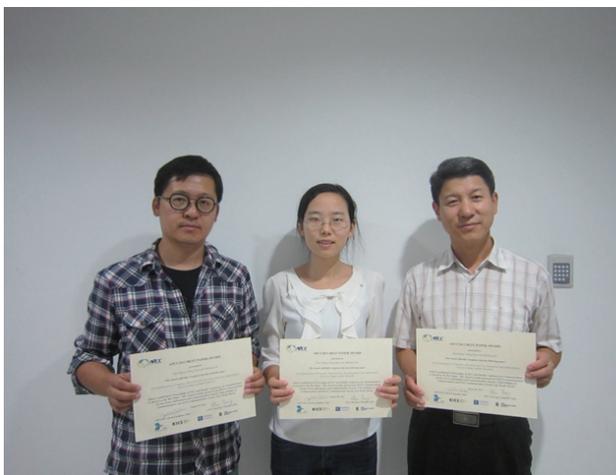


Fig. 4 Recipients of the best paper

2) “An Innovative Hearing System Utilizing the Human Body as a Transmission Medium”

Authors: Sung-Eun Kim
Taewook Kang
Jung Hwan Hwang
Sung Weon Kang
Kyoung Hwan Park
Sungwon Sohn
(Electronics and Telecommunications
Research Institute: ETRI)



Fig. 5 Recipients of the best paper

3) “Bounds on the Expected Rank of Sparse Linear Operator Channel Matrices”

Authors: Chenchen Liu
Wai Ho Mow
(The Hong Kong University of Science and
Technology)



Fig. 6 Recipients of the best paper

The certificate of the award was given to each author during the conference dinner on August 30. This award was sponsored by IEICE-CS, KICS, CIC and IEEE Comsoc Asia-Pacific Board.

5. Conclusion

Since 1993, APCC has been the forum for researchers and engineers in the Asia-Pacific region to present and discuss topics related to advanced information and communication technologies and services, while at the same time, opening the door to the world. APCC2013 successfully provided an excellent venue and facilitated the research collaboration in Asia-Pacific regions.

Next year, APCC2014 will be held in Pattaya, Thailand on October 1-3, 2014.

6. Reference

[1] B. Zhang, “ASN Special Session in the 19th Asia-Pacific Conference on Communications (APCC2013),” IEICE Communications Society GLOBAL NEWSLETTER, Vol.37, No.4, p.9, Dec. 2013.

Report on the 6th International WDN Workshop on Cooperative and Heterogeneous Networks (WDN-CN2013)

Gia Khanh Tran[†], Suguru Kameda^{††}

[†]Tokyo Institute of Technology ^{††}Tohoku University



1. Introduction

The 6th International Wireless Distributed Network (WDN) Workshop on Cooperative and Heterogeneous Networks (WDN-CN2013) in cooperation with IEICE-CS and IEEE ComSoc was held in conjunction with IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC2013) on 8th September 2013 in London, England (Fig. 1)[1]. This workshop is co-sponsored by IEEE ComSoc Japan Chapter and IEICE Communications Society. The previous WDN workshops were held in Cannes France in 2008, Tokyo Japan in 2009, Istanbul Turkey in 2010, Toronto Canada in 2011, and Sydney Australia in 2012 [2] respectively. WDN-CN2013 is the only full-day workshop at PIMRC2013 which attracts more than 50 audiences of the conference.

2. Workshop committee

1) General co-chairs: Dr. Emilio Calvanese Strinati from CEA-LETI (France), Prof. Mehdi Bennis from University of Oulu (Finland) and Dr. Satoshi Konishi from KDDI R&D Laboratories (Japan).

2) TPC co-chairs: Dr. David Mazzaresse from Huawei Technologies (China), Prof. Kei Sakaguchi from Osaka University (Japan) and Prof. Takeo Fujii from the University of Electro-Communications (Japan).

3. Scope and Objectives

The unrelenting user traffic demand triggered by data-centric standards such as 3GPP's LTE-Advanced places a premium on area spectral and energy efficiency over already crowded wireless spectrum. A promising approach to solving this problem is through the deployment of heterogeneous and small cell networks (HetNets), which represent a novel networking paradigm based on the idea of deploying low-power and low-cost base stations operating in conjunction with the macro-cellular network infrastructure. HetNets are envisioned to enable next-generation networks to provide high data rates, offload traffic from the macro cell, minimize energy consumption and provide dedicated capacity to homes, enterprises, or urban hotspots.

There are significant technical problems that need to be addressed for the successful deployment and operation of HetNets. In particular, due to lack of coordination with the rest of the network, time and frequency domain interference management in dense heterogeneous networks is a fundamental issue. HetNets should be designed to deal with peak data



Fig. 1 British Parliament

demands, and react based on interference/load/congestion levels, by adapting their transmission strategy and opportunistically accessing radio resources over licensed and unlicensed bands. Furthermore, recent advances in the understanding of interference channels, cooperative games and distributed optimization theory could be useful for novel designs of the next generation of HetNets. Finally, research on small cell networks could benefit from backhaul coordinated multi-point transmission schemes wherein multiple base stations steer their beams through array processing to minimize interference.

Beside research activities in academia, there are considerable industry-wide standardization efforts related to HetNets 3GPP RAN working groups and IEEE. Innovative ICIC schemes in both time and frequency domain have been proposed for negotiating the interference problem for both data and control channels at both macrocell and small cell users. While industry efforts have also targeted efficient operation of picocell deployments based on cell-range expansion techniques and wireless relays, fundamental research on the cost-performance tradeoffs of each of these deployments are certainly desirable for both academia and industry.

Following the past events, WDN-CN2013 gathered participants from both academia and industry to offer a forum for spreading and sharing the latest results and understanding for making communication networks more energy efficient than they are today.

4. Summary of WDN-CN2013

The workshop venue of WDN-CN2013 was the 4-star Hilton London Metropole – one of European largest hotel and conference centers. Based in central London, the hotel is just a ten minute walk from Oxford Street, or Hyde Park. The workshop received 33 submissions among which 14 papers were accepted for oral presentation at the acceptance rate of 42 percent. The workshop was divided into four sessions including accepted papers, 4 invited talks and finalized by a panel

discussion. In the opening, Dr. Satoshi Konishi, one of the general co-chairs of the workshop, briefly explained the scope of WDN-CN2013, introduced the program, the panelist and also called for cooperation toward the proposal of the next workshop in conjunction with PIMRC2014 to be held in Washington DC.



Fig. 2 Invited speakers (a) Dr. Kishiyama (b) Dr. Claussen (c) Prof. Barbarossa (d) Prof. Debbah

In the first invited talk, Dr. Yoshihisa Kishiyama, one of the LTE-A standard leaders in NTT DOCOMO (Japan) gave a speech on “Future Radio Access for Beyond 2020”. The speaker explained about the concept of Future Radio Access (FRA) which must support for a thousand times of traffic explosion with massive device connectivity, QoE for various applications and an intelligent network with low cost and high robustness. From the point of view of NTT DOCOMO, FRA should integrate future technologies including phantom cell with U/C splitting, efficient small cell operation, macro-assisted massive MIMO and non-orthogonal multiple access. The speaker ended the talk by demonstrating a developed FRA real-time simulator by which spectral efficiency can be improved significantly.

In the second invited talk, Dr. Holger Claussen from Bell Labs, Alcatel-Lucent (Ireland) talked about “Future Evolution of Heterogeneous Networks”. The speaker pointed out the capacity limit of conventional macro cellular networks and suggested the future trend of cellular network topology should become dense co-channel deployment of multi-tier HetNets where small cells provide capacity and macrocells ensure area coverage. To deal with the interference problem associated with co-channel deployment, the author proposed a novel concept of multi-carrier configuration HetNets with offset sectorization, where numerical results showed significant improvement of user rate’s CDF. Concluding the talk, the speaker showed a further advantage of small cell deployment in terms of improving energy efficiency.

The third invited talk was given by Prof. Sergio Barbarossa from University of Rome (Italy) with title “Femtocloud: Jointly Optimal Allocation of Communication/Computation Resources for Mobile Cloud Computing”. The speaker focused on the mobile cloud computing aspect of cellular network and pointed out that the conventional technology results in high

computing latency experienced through a wide area network. To solve the problem, the speaker proposed a novel concept of femtocloud where conventional centralized cloud computing server is decomposed into small-size distributed cloud computing servers to bring about computational scalability with smaller latency and QoE guarantee. The author also proposed some optimization frameworks to balance between computation and energy efficiencies.

“How to Densify: Massive (MIMO) or Small (Cells)” was the title of the last invited talk given by Prof. Merouane Debbah from SUPELEC (France). The presenter, who is well-known for the studies on random matrix theory, is an expert speaker who pointed out the pros and cons of the two recent cellular network topology trends. Using stochastic geometry, the speaker came to the conclusion that distributed antenna settings asymptotically give more throughput gain, which is supportive for the concept of small cells. To achieve more gain, the speaker recommended the two-tier HetNet topology where massive MIMO can be introduced at the macro BSs to realize non-linear spatial signal processing for interference coordination with the small cells.

Finally, a panel discussion with the topic “Future Cooperative Heterogeneous Networks” was organized and moderated by Dr. Emilio Calvanese Strinati. Beside two invited speakers from NTT DOCOMO and Bell Labs, Dr. Thomas Haustein from Fraunhofer HHI (Germany) and Dr. David Mazzarese from Huawei Technologies (China), two of the workshop steering committee members, also joined the panelist. Responding to the question of Dr. Strinati about next evolution of HetNet-based communication systems, the panelist explained their own viewpoints based on technological and economical resources of each company. Especially, the panelist came to a consensus about the importance of a well-equipped backhauling network to support future cellular network, which includes the introduction of developing optical fiber based technologies e.g. C-RAN and CPRI. The panelist received many questions from the floor, many of which were related to the practical aspect of implementing HetNet including cost and energy efficiency issues. Prof. Seiichi Sampei from Osaka University (Japan) expressed an important comment that future network designers should pay more attention to the factor of latency as well.

Finally, the workshop organizers expressed gratitude to all the speakers and the audiences for fruitful discussion at the event, and closed the workshop. A petit party was held that night at a local bar close to the conference venue with the attendance of presenters and committee members as well as the audiences of the workshop.

5. Reference

- [1] <http://www.icwdn.org/>
(Slides of invited talks are available)
- [2] <http://www.icwdn.org/past>

Researching Myself in Japan

K. I. Amila Sampath

Graduate School of Science and Engineering, Yamagata University



1. Introduction

I was really impressed when I heard about this opportunity to write an article for IEICE-CS GLOBAL NEWSLETTER and share my views and experiences with its worldwide readers. To be honest, I had not taken time to look back and think about the past few years until I started to write this. But once I started to remember back, day by day up to my first day in Japan, I found some interesting stories. I wish I could write all of them here. As the space is limited, I am going to summarize some of those stories below into few categories.

I am K. I. Amila Sampath, a Master's student from Sri Lanka. In this article, I am going to look back through my life as a student in Japan.

2. Life as a student

I came to Japan in April 2006 under the scholarship program of MEXT (Ministry of Education, Culture, Sports, Science and Technology), Japan. I was worrying about the language barrier even before I put my steps on this land. I started learning Japanese as soon as I came here. I was enrolled in a one-year Japanese language course in Tokyo Japanese Language Education Center where I learned many things other



Fig. 1 My wonderful classmates of K5, Tokyo Japanese Language Education Center, 2006-2007.

than Japanese and made a lot of wonderful memories with my classmates from different countries.

Then the real challenge started after I entered to Kosen (College of Technology) in Nara. I could communicate somehow with my classmates with my one year Japanese knowledge, but I hardly understood anything from lectures in my first six months. I was

lucky that I had already learned most of the things they taught me in my 1st year, in my country (I entered the 3rd year of Kosen). The college arranged two special classes for me and my Malaysian friend who was also struggling with the language problem at that time. During these classes, we always had very fruitful discussions about what we did not understand during the lectures. Two kind professors helped us to clear up everything that we needed clarification. And with the help of my tutor and dorm mates, I got my scholarship extended for two more years which gave me the chance to continue my studies in a university.

After finishing three years diploma course in Kosen, I transferred to Yamagata University where I am doing my Master's now. I was interested in fiber optic communication since I was in Kosen. Currently I am researching about Optical SSB (Single Side-band) transmission in Takano Lab, Yamagata University.

Even though there are some hurdles still to overcome, optical single side-band transmission is a promising technique to solve the problem of increasing bandwidth demand. Modern DSP techniques bring a new light to this area of research and keep hopes alive.

3. Benefits of student life in Japan

In here, I would like to talk about some facts which I have been benefited from my student life in Japan. One of the great benefit for me is I can learn about not only Japan and Japanese culture but also make friends all over the world and learn about different cultures and backgrounds. I still love the time I spent at Tokyo Language Education Center where I met students from 42 different countries.

Japan is filled with natural beauty, plenty of culture and history. Japanese are people with warm hearts even



Fig. 2 Cutter boat riding in Kinki Kosen exchange program, Wakasa Wan, Fukui 2009.

though some of them may show some shyness in the beginning, when they deal with foreigners. I should mention here that the friendly environment for foreign students in Japan is another asset for me. I made many friends here in Japan as my Japanese speaking ability improved gradually.



Fig. 3 Culture exchange program with high school students of Tenri Senior High school, 2008.

I also had many chances to participate in culture exchange programs where I learned lots of things while introducing the culture in my home country.

Being in a country which has one of the best education systems in the world gives me access to many resources. It allows me to learn anything I like. More than anything I appreciate the calm and quietness and peace and harmony I experience in Japan which I think is very important for a student. I feel that I am in a secure place so that I can concentrate on my studies.

I feel I have more freedom, freedom of choices here in Japan when I choose my subjects. This freedom allows me to research myself and get to know what I am capable of and what I have to improve. I had a chance to go for an internship in a Japanese company when I was in Kosen. It was my firsthand experience of high efficiency of management in Japan.

Even though the cost of living in Japan is very high,



Fig. 4 The beauty of Sakura, Yonezawa, Yamagata. 2010.

there are special offers and discounts for students for services like transportation, entertainment etc. which is a big relief for many foreign students. There are many Non-Profit Organizations (NPOs) all over Japan which shows the generosity of Japanese people. These NPOs provide scholarships for foreign students who study in Japan. It is not difficult to find a scholarship for a foreign student with sufficient communication skills in Japanese in a case that he or she does not have enough time to do a part time job.

4. From my experience

As it is well known, Japanese people are very polite inherently. The customs, manners and etiquette that show one's respect and consideration towards others are very important in day to day life in Japan to build strong human relationships. In my experience, I could say that following (imitating) the customs helped me a lot more than trying to speak with my broken Japanese in the beginning.

It is important to keep in mind that the use of the language (vocabulary) has to change depending on who you are speaking to. There are two different forms of the language that they use in their daily life called Keigo (honorific) and Hyojungo (standard). There are expressions that include the feeling of respect or politeness toward to the addressee. This is called Keigo. Switching between these two forms according to the situation may be difficult for foreigners in the beginning. My advice will be to use Keigo everywhere in the beginning and then apply Hyojungo in the safe place.

5. Concluding remarks

So far I was able to learn many things about the Japanese culture, technology and the society in inside and outside of the classroom by engaging in different activities. I am happy that I could do my studies in a country where tradition and cutting-edge high technology coexists. It is my pleasure to share my experiences and views about the student life in Japan. Hopefully this kind of sharing experience will help someone who likes to know about Japan or someone who wishes to come to Japan for studies.

Acknowledgement

My deepest gratitude to Japanese Government (Monbukagakusho: MEXT) scholarship program [1] which funded my studies in the period of 2006 – 2012. And I am thankful to Rotary Yoneyama Memorial Foundation [2] for providing me the scholarship for my Master degree. I am always grateful for the guidance and valuable advices of my current advisor, associate professor Katsumi Takano who always encourages and supports me in my studies and who made me write this article as well. I also like to thank the editors of IECE-CS GLOBAL NEWSLETTER for providing a space for me in this international newsletter.

References

- [1] <http://www.mext.go.jp/english/highered/1303739.htm>
- [2] <http://www.rotary-yoneyama.or.jp/english/>

Special Section Calendar of IEICE Transactions on Communications

Issue	Special Section	Note
Mar. 2015	Position Papers Exploring Innovative Intelligence and Technologies in Communications	Submission due: 1 June 2014 See page 23
Jan. 2015	Quality of Diversifying Communication Networks and Services	Submission due: 30 April 2014 See page 24
	Position Papers Exploring Innovative Intelligence and Technologies in Communications	Submission due: 1 April 2014 See page 23
Dec. 2014	Technologies and Architectures for Improving Scalability, Reliability, and Robustness for Future Information Networks	Submission due: 16 March 2014 See page 22
Nov. 2014	Network Virtualization, and Fusion Platform of Computing and Networking	Submission due: 3 March 2014 See page 21
Oct. 2014	Recent Progress in Measurement and Design Techniques on Antennas, Propagation and Wireless Systems	Submission due: 3 February 2014 See page 20
Sep. 2014	Ambient Intelligence and Sensor Networks	Submission due: 6 January 2014 See page 19
Aug. 2014	EU's FP7 ICT R&D Project Activities on Future Broadband Access Technologies in Conjunction with Main Topics of 2013 IEICE ICT Forum	To be issued
Jul. 2014	Opto-electronics and Communications for Future Optical Network	To be issued
Jun. 2014	No special section	
May 2014	No special section	
Apr. 2014	No special section	
Mar. 2014	Information and Communication Technology for Medical and Healthcare Applications in Conjunction with Main Topics of ISMICT2013	To be issued
Feb. 2014	Technologies for Effective Utilization of Spectrum White Space	To be issued soon
Jan. 2014	Management for Flexible ICT Systems and Services	To be issued soon

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Call for Papers

----- Special Section on Ambient Intelligence and Sensor Networks -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Ambient Intelligence and Sensor Networks" in September 2014.

Sensor networks enable connections among peoples, products, and sensing devices for real space. Sensing data should be processed, analyzed, and applied for enhancement or assistance for human activities, which is called "Ambient Intelligence". It is expected that gentle social environments such as efficient electric power usage in smart grids and effective transportation systems will be established through the systems with ambient intelligence based on sensor networks. Not only developments of technologies supporting the ambient intelligence such as sensor networks but also to look ahead to industry applications are important for ambient-intelligence contributions to social-infrastructure progressions. From above points of view, the special section is planned (scheduled to appear in the September 2014 issue) to publish papers on the related fields.

1. Scope

The scope of this special section includes not only information communication research fields but also its multidisciplinary research with agriculture, forestry and fisheries industry fields, industry fields including incineration and power-generator plants, and service fields such as health-care, medical-care, and circulations because they are important and major applications for the ASN. Possible topics include, but are not limited to:

- a. Ubiquitous sensing and actuation technologies
Space sensing, ambient interface, embedded software, sensing and control theory, etc
- b. Ad-hoc, mesh, and sensor networks
MAC/routing protocols, multi-hop and cooperative communication, security, green wireless, communication and network theory, etc
- c. Ambient Intelligence
Sensor database, location-information technology, stream processing, privacy and security, big data, learning signal processing, etc
- d. System infrastructure
Large scale widening, dependability, IoT, M2M, cyber physical, operation administrative, autonomous distributed control, etc.
- e. System applications
Agriculture, forestry and fishery support systems, medical and health systems, industrial support system, social infrastructure system, smart grid, etc.

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

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---- Special Section on Recent Progress in Measurement and Design Techniques on Antennas,
Propagation and Wireless Systems ----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Recent Progress in Measurement and Design Techniques on Antennas, Propagation and Wireless Systems" in **October 2014**.

With the developments of wireless technologies, high-speed telecommunication systems such as MIMO using small handsets have been dramatically getting popular in recent years. In this situation, further developments of multiband techniques and high-performance antenna systems have been required for further miniaturization techniques of terminals. For responding to this issue, wireless engineers have to consider that this status requires more sophisticated and diversified designs in wireless systems and devices. Considering the requirements, this special section will be publishing papers on mainly recent antenna measurement and evaluation techniques. Furthermore, papers with new design concepts on antennas propagation and wireless systems will also be published to share the trends and requirements from both viewpoints of evaluation and design.

1. Scope

The major topics of interest include:

Antenna measurement techniques

- Measurements of antenna parameters
- Experimental models of propagation environment
- Infinitesimal power measurements
- Radiated power measurements
- SAR measurements
- Other related topics

Designs and systems

- Antenna designs and systems
- Human body communication
- MIMO
- Propagation
- Wireless power transfer
- Other related topics

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule. This special section will accept papers only by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

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Call for Papers

----- Special Section on Network Virtualization, and Fusion Platform of Computing and Networking -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Network Virtualization, and Fusion Platform of Computing and Networking" in November 2014.

While the Internet has become indispensable social infrastructure for supporting our social and economic activities, its various issues have been also addressed in the areas of security, availability, robustness, etc. It is necessary to innovative information and communication infrastructure such as the Internet in order to enable platforms to deliver communication services that meet demands from the users in a prompt and flexible manner. The merge of computing and networking has been gaining its acceleration and the benefit of systematically consolidating computing, networking, and storage resources and dynamically and elastically utilizing them has recently caught our attention.

Advanced network virtualization is the key to realizing such ICT infrastructure and is expected to enable coexistence of multiple customized networks, prompt delivery of innovative network functionalities, programmable network within isolated resources, stable operation and management of massive ICT systems, extension of cloud computing to networking, and secure service infrastructure.

We thus call for publications (scheduled to appear in the November 2014 issue) for promoting discussion and development of technologies on advanced network virtualization and on fusion of computing and networking.

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics include, but are not limited to:

- Network virtualization architecture for enabling multiple customized networks
- Innovative applications based on network virtualization
- Fusion of networking and computing
- Operation and management of integrated multi-layer networks and network virtualization
- Resources monitoring for network virtualization
- Data center networking based on network virtualization
- Operating systems and network virtualization
- Software defined network
- Network function virtualization
- Security for network virtualization and secure services
- Scalability & impact on data center design
- Testbeds for above technologies and experimental results

2. Submission Instructions

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Call for Papers

----- Special Section on Technologies and Architectures for Improving Scalability, Reliability, and Robustness for Future Information Networks -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Technologies and Architectures for Improving Scalability, Reliability, and Robustness for Future Information Networks" in **December 2014**.

In order to construct future information networks, many researches have been performed on various kinds of network technologies and architectures such as information/content centric networking (ICN/CCN), software-defined networking (SDN), data centers and cloud computing, delay/disruption/disaster tolerant networks (DTN), and so on. These network technologies and architectures are considered to possess the features of scalability, reliability, and robustness so that they can provide high quality communication services while adapting to changing circumstances and disturbances. In order to further promote the research on scalability, reliability, and robustness of future information network technologies and architectures by timely dissemination of currently available research results, this special section has been scheduled to appear in the December 2014 issue.

1. Scope

The scope of this special section includes, but is not limited to, the following topics:

- Future information network design
- Network virtualization
- ID/locator split-based architecture
- Sensor networks
- Wireless-wireline internetworking
- Smart grid networks
- Network planning and management
- Social networks
- Information/content centric networking (ICN/CCN)
- Data centers and cloud networking
- Delay/disruption/disaster tolerant networks (DTN)
- Embedded systems networking
- Optical network architecture
- Smart home networks
- Survivability and fault tolerance
- Self-organization networks
- Software-defined networking (SDN)
- Mobility-oriented architectures
- New naming and addressing
- RFID networks and protocols
- Overlay networking
- Environment monitoring networks
- Anomaly/intrusion/attack detection
- Future network testbed systems

2. Submission Instructions

The standard number of pages is eight (8). The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the "Information for Authors" guideline available at http://www.ieice.org/eng/shiori/mokuji_cs.html. The time available for revising the manuscript after receiving the result of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

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1. Submit a manuscript (PDF file) and electronic source files (TeX/Word files, figures, authors' photos and biographies) via the IEICE website https://review.ieice.org/regist/regist_baseinfo_e.aspx by **March 16, 2014 (JST)**. Authors should choose the Technologies and Architectures for Improving Scalability, Reliability, and Robustness for Future Information Networks as a "Type of Section (Issue)" on the submission webpage. Do not choose [Regular-EB].
2. Send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" by E-mail or FAX to the following address (guest editor of the special section) by the above due date. We may withdraw the submission if these documents have not been received by the due date, even if the manuscript has been received by electronic submission. For additional guidelines on manuscript preparation, please visit http://www.ieice.org/eng/shiori/mokuji_cs.html.

Send the above documents to:

Takuji Tachibana

Graduate School of Engineering, University of Fukui

Address: 3-9-1 Bunkyo, Fukui City, Fukui Prefecture 910-8507, Japan

Tel: +81-776-27-9971, Fax: +81-776-27-8751, Email: in_ac-tokushu-kanji-2013@mail.ieice.org

3. Special Section Editorial Committee

Guest Editor-in-Chief: Tohru Asami (Univ. of Tokyo)

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* Please note that if the submitted paper is accepted, all authors, including authors of invited papers, are requested to pay for the page charges covering partial cost of publications. Authors will receive 50 copies of reprints.

* At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit <http://www.ieice.org/eng/member/OM-appli.html>

Call for Papers

----- Special Section of Position Papers Exploring Innovative Intelligence and Technologies in Communications -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section of Position Papers Exploring Innovative Intelligence and Technologies in Communications" in the Jan. 2015 issue and in the Mar. 2015 issue.

Expansion of the field of communications has unlimited boundaries, and research and development (R&D) has been continuously pursued to support this expansion. A lot of new key ideas are emerging and open up novel research areas, which become driving force of further development of communications technologies. Aiming at the world's best performance has been also one of the major driving forces of R&D, and its resulting outputs lead to the stimulation of the R&D itself in turn. This special section will be publishing *position papers*, which exhibit novel ideas and/or significant achievements leading to such innovative technologies. There are two deadlines of the submission, and correspondingly, this special section will be published in two issues (scheduled to appear in the Jan. 2015 issue and in the Mar. 2015 issue). Moreover, for the wide promotion of the papers in this special section, all accepted papers will be

- introduced in GLOBAL NEWSLETTER published by IEICE Communications Society,
- available by open access through the website of the IEICE Transactions on Communications.

1. Scope

This special section aims at whole research areas covered by the IEICE Transactions on Communications, such as Fundamental Theories for Communications, Fiber-Optic Communications, Networking, Antennas and Propagation, and Wireless Communications. In this special section, POSITION PAPERS are defined as papers having at least one of the following features:

- introduction of novel viewpoints, frameworks, and/or paradigms
- proposal of technologies or methods based on innovative ideas (not just extension of existing technologies)
- novel ideas with the potential to bring about innovative technologies
- prototyping or experimental results with noteworthy features, such as achievement of the world's best performance or the world's first realization

In this special section, only papers having the significant feature(s) above will be accepted, while comprehensive evaluations of the performance or the effectiveness will not be required.

2. Submission Instructions

In view of the scope of this special section, the paper is assumed to be shorter (around 4 pages) than the regular paper (the standard number of pages is 8), although there is no restriction on the number of pages. The page charges are considerably higher for extra pages exceeding 8 pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. Please note that the paper will be handled and published as a PAPER defined in "1.1 Type of Manuscript" of "Information for Authors". The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

1. Submit a manuscript and electronic source files (LaTeX/Word files, figures, authors' photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by **April 1, 2014 (JST) for the publication in January 2015, and by June 1, 2014 (JST) for the publication in March 2015**. Authors should choose the **Position Papers Exploring Innovative Intelligence and Technologies in Communications** as a "Journal/Section" on the online screen. Do not choose [Regular-EB].
2. Send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" by E-mail or Fax to the following address/Fax number (guest editor of the special section) by the above due date. We may not accept the submission if these documents have not been received by the due date, even if the manuscript has been received by electronic submission. For additional guidelines on manuscript preparation, please visit: http://www.ieice.org/eng/shiori/mokuji_cs.html

Send the above documents to:

Kazunori Hayashi

Graduate School of Informatics, Kyoto University

Tel: +81-75-753-5509, Fax: +81-75-753-5509, E-mail: positionpapers@sys.i.kyoto-u.ac.jp

3. Special Section Editorial Committee

Guest Editor-in-Chief: Hisato Iwai (Doshisha Univ.)

Guest Editors: Kazunori Hayashi (Kyoto Univ.), Takahiro Matsuda (Osaka Univ.)

Guest Associate Editors: Shingo Ata (Osaka City Univ.), Keizo Cho (Chiba Institute of Technology), Motohiko Isaka (Kwansei Gakuin Univ.), Shoji Kasahara (Nara Institute of Science and Technology), Tadashi Minowa (NICT), Hiraku Okada (Nagoya Univ.), Shigeo Shioda (Chiba Univ.), Shinji Sugawara (Chiba Institute of Technology), Satoshi Suyama (NTT DOCOMO), Takuji Tachibana (Univ. of Fukui), Daisuke Umehara (Kyoto Institute of Technology), Kazuto Yano (ATR)

* Please note that if the submitted paper is accepted, all authors are requested to pay for the page charges covering partial cost of publications. **Note also that, in this special section, all authors will be exempted from the page charges up to the fee required for 50 reprints of 4 pages with electronic source data using the IEICE LaTeX style file.**

* At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit: <http://www.ieice.org/eng/member/OM-appli.html>

Call for Papers

Special Section on Quality of Diversifying Communication Networks and Services

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Quality of Diversifying Communication Networks and Services" in **January 2015**.

With the progress of seamless wired/wireless network technologies and advancement of communication terminals such as smartphones, diversified communication services have been provided through communication networks. In addition to infrastructure improvements, e.g. broadband access networks, network virtualization technologies, cloud technologies, and multimedia compression technologies, the stable provision of diversified services requires advanced operation, management, and assessment techniques. To meet such quality requirements and provide secure and reliable network services, it is important to build technologies for measuring, assessing, managing, and visualizing the communication quality, and network operation technologies. Because of such reasons, a special section is being planned (scheduled to appear in the January 2015 issue) to further promote research and development on the quality of diversifying communication networks and services.

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics include, but are not limited to:

- Measurement and control methodologies of wired/wireless networks
- Evaluation, modeling and use cases of reliability and security in wired/wireless networks
- Quality management systems based on measurement of wired/wireless networks and their use cases
- Network measurement, design and control methodologies for improving communication quality
- Modeling and simulation for improving communication quality
- Network quality and quality of experience (QoE)
- Assessment and management of QoE
- Subjective and objective quality assessments of voice, audio, and video media
- Quality of ultra-realistic communication and multi-sensory media communication
- Quality of services and incentive/user utility/user behavior
- Evaluation, modeling and use cases of service satisfaction
- Novel concept of communication quality

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

1. Submit a manuscript and electronic source files (TeX/Word files, figures, authors' photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx **by April 30, 2014 (JST)**. Authors should choose Quality of Diversifying Communication Networks and Services as a "Journal/Section" on the online screen. Do not choose [Regular-EB].
2. Send "Copyright Transfer and Page Charge Agreement" and "Confirmation Sheet of Manuscript Registration" by E-mail or FAX to the following address (guest editor of the special section) by the above due date. We may withdraw the submission if these documents have not been received by the due date, even if the manuscript has been received by electronic submission. For additional guidelines on manuscript preparation, please visit: http://www.ieice.org/eng/shiori/mokuji_cs.html

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3. Special Section Editorial Committee

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Guest Editors: Ryogo Kubo (Keio Univ.), Hideyuki Shimonishi (NEC)

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* Please note that if the submitted paper is accepted, all authors, including authors of invited papers, are requested to pay for the page charges covering partial cost of publications. Authors will receive 50 reprints.

* At least one of the authors must be an IEICE member when the manuscript is submitted for review. Invited papers are an exception. We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit <http://www.ieice.org/eng/member/OM-appli.html>



Membership for Overseas Candidates: Overseas Members may opt to join **one IEICE Society of their choice** and may request to receive the **IEICE Transactions of online version** of that Society. Furthermore, Overseas Members may request to receive the IEICE Journal (written in Japanese) and Transactions (published in paper) at an additional cost. Similar services are available to **Overseas Student Members**. Voting privileges in the IEICE election do not apply to Overseas Members. Note that the Overseas Membership applies only to candidates who reside outside of Japan and who have citizenship in countries other than Japan.

OMDP (Overseas Membership Development Program): OMDP is provided for candidates **from countries/areas in Asia (except Republic of Korea and Taiwan), Africa, Central America, and South America**. This program is designed so that IEICE can contribute to and support the progress of science and technology throughout the world. Scientists and engineers in these countries/areas are encouraged to apply to the program.

● **IEICE Societies and Publications**

Society	Transactions	Editorial Subject Indexes
A (Fundamentals of Electronics, Communications and Computer Sciences)	EA (English) A (Japanese)	Engineering Acoustics, Noise and Vibration, Speech and Hearing, Ultrasonics, Digital Signal Processing, Analog Signal Processing, Systems and Control, Nonlinear Problems, Circuit Theory, VLSI Design Technology and CAD, Numerical Analysis and Optimization, Algorithms and Data Structures, Graphs and Networks, Reliability, Maintainability and Safety Analysis, Cryptography and Information Security, Information Theory, Coding Theory, Communication Theory and Signals, Spread Spectrum Technologies and Applications, Mobile Information Network and Personal Communications, Intelligent Transport System, Image, Vision, Computer Graphics, Language, Thought, Knowledge and Intelligence, Human Communications, Neural Networks and Bioengineering, Multimedia Environment Technology, Communication Environment and Ethics, Concurrent Systems, Measurement Technology, General Fundamentals and Boundaries
B (Communications)	EB (English) B (Japanese)	Fundamental Theories for Communications, Devices/Circuits for Communications, Transmission Systems and Transmission Equipment for Communications, Optical Fiber for Communications, Fiber-Optic Transmission for Communications, Switching for Communications, Switching for Mobile Communications, Network, Network Management/Operation, Internet, Wireless Communication Technologies, Terrestrial Radio Communications, Satellite Communications, Optical Wireless Communications, Antennas and Propagation, Electromagnetic Compatibility (EMC), Sensing, Navigation, Guidance and Control Systems, Energy in Electronics Communications, Terminals for Communications, Multimedia Systems for Communications, Broadcast Systems, Integrated Systems for Communications, Space Utilization Systems for Communications
C (Electronics)	EC (English) C (Japanese)	Electromagnetic Theory, Lasers, Quantum Electronics, Optoelectronics, Microwaves, Millimeter-Waves, Ultrasonic Electronics, Electronic Circuits, Electronic Materials, Organic Molecular Electronics, Electronic Components, Electromechanical Devices and Components, Semiconductor Materials and Devices, Integrated Electronics, Electron Tubes, Vacuum and Beam Technology, Electronic Displays, Superconducting Electronics, Storage Technology, Electronic Instrumentation and Control
D (Information and Systems)	ED (English) D (Japanese)	Computation and Computational Models, Automata and Formal Language Theory, Algorithm Theory, Complexity Theory, Computer Components, VLSI Systems, Computer Systems, Fundamentals of Software and Theory of Programs, System Programs, Software Engineering, Database, Contents Technology and Web Information Systems, Data Mining, Networks, Dependable Computing, Application Information Security, Distributed Cooperation and Agents, Artificial Intelligence and Cognitive Science, Human-computer Interaction, Office Information Systems, e-Business Modeling, Educational Technology, Rehabilitation Engineering and Assistive Technology, Pattern Recognition, Speech and Hearing, Image Processing and Video Processing, Image Recognition, Computer Vision, Computer Graphics, Multimedia Pattern Processing, Natural Language Processing, Biocybernetics, Neurocomputing, Biological Engineering, Music Information Processing, Kansei Information Processing, Affective Information Processing
Journal of IEICE (written in Japanese only)		

● **Membership Charges (<http://www.ieice.org/eng/member/OM-appli.html#c>)**

Basic Membership Charge is as follows. It will change the term when you join IEICE. Please refer to the above website.

Basic Membership Charge (UNIT : Japanese YEN)

Service coverage for overseas members	Admission charge	Online Version		Paper Version (optional)		
		Registration of the first society (includes its online version transactions)	Registration of additional societies (includes its online version transactions)	Journal (written in Japanese)	Transactions (written in Japanese or in English)	
					(In one society)	
One title	Two titles					
Member (overseas)	1,400	7,000	3,500 / 1society	6,000	4,000	10,000
Member (overseas) with OMDP*	1,000	5,000	3,000 / 1society	5,000		
Student member (overseas)	-	2,000	2,000 / 1society	6,000		
Student member (overseas) with OMDP*	-	1,000	1,500 / 1society	5,000		

NOTE

- You need to choose one Society, and you can subscribe Transactions online of your registered society.
Example: If you want to subscribe to Transaction of EA, please check Society Registration as "A", and your membership fee amounts to 7,000 yen / 5,000 yen.
- If you want to register other Societies and Transaction of web version, please check "Additional Society registration".
Example: If you want to subscribe to Transaction of EA and EB, please check Society Registration as "A", Additional Society registration (optional) as "B". Your membership fee amounts to 7,000+3,500 yen / 5,000+3,000 yen.
- If you want to subscribe to one Transaction of paper version, please check "Additional Transaction subscription (published in paper)".
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- If you want to change membership from Member (In Japan) to Overseas Member, you don't need to pay an Entrance charge.

● **Optional Rapid Mailing Service**

Surface mail charge is included in the membership charge. Optional rapid mailing service is available by air mail or surface air lifted (SAL) mail. The additional charge per year periodical depends on the mailing address, as shown in the right table.

Areas	Air mail	SAL mail
Asia; Guam; Midway islands	5,600 yen	3,200 yen
Oceania; Near & Middle East; North & Central America; Europe	7,800 yen	4,400 yen
Africa; South America	11,000 yen	5,600 yen

Please contact the IEICE Membership Section: E-mail: member@ieice.org FAX: +81 3 3433 6659 **Please fill out the application form printed on the opposite side of this page.**

IEICE Overseas Membership Application Form

URL <http://www.ieice.org/eng/member/OM-appli.html> E-mail member@ieice.org FAX +81-3-3433-6659

◆ **Please type or print in English. The deadline for submitting application form is the 1st day of every month.**

Personal Information

Full name: First name _____ Middle name _____ Last name _____ **Nationality:** _____ Male
 Female
 Prof. Dr. Mr. Ms. **Place of birth:** _____ **Date of birth:** _____
 Day _____ Month _____ Year _____

Mailing Address

Home Office

Name of Company/School/College _____ Department/Section _____
 Street _____ City _____ State/Province _____
 Postal code _____ Country _____
 TEL _____ FAX _____ E-mail _____

Academic Background

The highest academic degree: Ph.D. Masters Bachelors Others: _____

University/college/school of the highest academic degree _____ Month & year of graduation _____

(For Student Member) Academic degree which will be conferred on you _____ Month & year when the degree will be conferred on you _____

Application Information

Membership: I want to apply for the following membership (check one item!)

- Member (Overseas) Student Member (Overseas)
 ◆ If you want to apply for OMDP, please check; OMDP (Overseas Membership Development Program)

Society registration (Membership fee includes one Society of Transaction of Online version.):

- A: Engineering Sciences B: Communications C: Electronics D: Information and Systems

Additional Society (optional): A: Engineering Sciences B: Communications C: Electronics D: Information and Systems

Additional Transactions of paper version (optional):

- EA: Fundamentals EB: Communications EC: Electronics ED: Information and Systems
 A: Fundamentals (Japanese) B: Communications (Japanese) C: Electronics (Japanese) D: Information and Systems (Japanese)

Journal subscription (optional): (Japanese)

Remittance

Remittance is available only in *Japanese yen* by a *credit card*.

Admission charge.....¥ _____ Journal subscription (optional).....¥ _____
 Annual charge.....¥ _____ Mailing option: Air mail.....¥ _____
 Additional Society (optional) ¥ _____ SAL mail.....¥ _____
 Additional Transactions (optional).....¥ _____ **Total**.....¥ _____

Credit Card: UC Master Card VISA JCB American Express

Card number:

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Expiry date: _____ / _____ Credit Card Holder: _____ Signature: _____
 Year _____ Month _____

Endorsement

Endorsements by one IEICE Member application is required. If it is difficult to find endorsers, please contact the IEICE Membership Activities Section by sending this sheet, and we will help you.

I recommend this applicant for IEICE membership.

Endorser's name _____ Membership number _____ Endorser's signature _____ Date _____

IEICE-CS Overseas Membership with Special Annual Fees for Sister Society Members

To foster the cooperation between the Sister Society and the IEICE Communications Society (IEICE-CS), the Sister Society agreement enables members of each institution to become members of both societies by granting special annual fees.

A 10% - 20% discount* of the annual fees will be granted to the sister society members to become the IEICE-CS overseas members. The discounted fees will be applied for the individual members when the new membership is starting or the current membership is renewing.

* The discount does not apply to the optional items and services i.e. “Additional Society”, “Additional Transactions of paper version” and “Rapid Mailing Service”.

----- Please send the following Sister Society membership information, together with membership application form in the next page. -----

Sister Society membership information

To apply discount rates for this IEICE-CS Sister Society member’s application, please indicate your Sister Society Membership number below, and attach a copy of your Sister Society Membership certificate or card to this form.

Sister Society: IEEE ComSoc KICS VDE-ITG

Membership number (Member): _____

Copy of Membership certificate or Membership card:

(Attached here)

IEICE Communications Society - GLOBAL NEWSLETTER

Submission Guideline

First version in only Japanese: May 30, 2008
Second version in only Japanese: Feb. 13, 2009
Third version in only Japanese: Jul. 22, 2010
Forth version in English and Japanese: Mar. 8, 2011
Ver 5.0 : August 10 2013

1. About GLOBAL NEWSLETTER

The Institute of Electronics, Information and Communication Engineers Communications Society (IEICE-CS) GLOBAL NEWSLETTER has been established since 2002. We quarterly publish an English newsletter every March, June, September, and December.

1.1. Goal

Our goal is to share information between overseas/foreign members and other members in IEICE-CS as a global activity, and to show IEICE presence internationally.

1.2 Category of Articles

- 1) Messages from President/Vice President
 - An inaugural message from CS President is published once per year in June. Message from CS Vice President is published properly.
 - 2) IEICE-CS Activities Now
 - IEICE General/Society Conference information/reports
 - Activities of Technical Committees
 - International activities of the society
 - 3) IEICE-CS Related Conferences Reports
 - Information/reports on IEICE-CS related conferences
 - IEICE-CS Conferences Calendar (*)
 - 4) Others
 - Essays, Laboratory activity reports, Technology reports, Messages from overseas/foreign members, etc.
 - Information from Sister Societies
 - Special topics (*)
 - 5) IEICE-CS Information
 - Call for papers
 - From editor's desk (*)
- *: planned / written by IEICE-CS Directors, Planning and Members Activities

2. Major notes for Contribution

Basically, IEICE-CS members and readers can contribute articles. IEICE-CS Directors, Planning and Members Activities may ask non-IEICE-CS members to contribute articles. The articles should be fruitful and profitable for IEICE-CS members, **NOT** for particular organization. IEICE-CS Directors, Planning and Members Activities may not accept an article for publication if it does not follow this guideline.

2.1 Template and Language

Please use template downloadable at the URL:
http://www.ieice.org/cs/pub/global_howto.html
Please use English for all articles.

2.2 Number of pages

Two to four pages are preferable. One page article is also acceptable. The maximum number of pages is eight. When you try to entry a contribution with five to eight pages, you need to negotiate with IEICE-CS Directors, Planning and Members Activities.

3. Copyright

The copyrights of all articles in the GLOBAL NEWSLETTER should belong to the IEICE. However, the original authors retain the right to copy, translate or modify their own manuscripts. In cases when a manuscript is translated into another language or when any portion of the manuscript is to be submitted to another publication, authors

should register the action with the IEICE, and the original manuscript should be clearly cited in the publications. Please see a web site related to IEICE provisions on copyright.

<http://www.ieice.org/eng/about/copyright.html>

4. Publication fee / Manuscript fee

No publication fee and no manuscript fee for all articles.

5. Schedule

Standard editing schedule is as follows. Please note that the schedule may vary due to public holidays or other circumstances. The exact deadlines are indicated in call for newsletters.

Publication date	1 st , Mar.	1 st , Jun.	1 st , Sept.	1 st , Dec.
Call for newsletters	1 st Mon., Dec.	1 st Mon., Mar.	1 st Mon., Jun.	1 st Mon., Sept.
Contribution entry	4 th Fri., Dec.	4 th Fri., Mar.	4 th Fri., Jun.	4 th Fri., Sept.
Submission of Manuscript/Copyright	3 rd Fri., Jan.	3 rd Fri., Apr.	3 rd Fri., Jul.	3 rd Fri., Oct.

5.1 Call for Newsletters

IEICE-CS Directors, Planning and Members Activities will give you the information on call for newsletters.

5.2 Contribution Entry

You should send **information on title, summary(around 50 words or less) and number of page** to IEICE-CS Directors, Planning and Members Activities by e-mail.

E-mail: cs-gnl@mail.ieice.org

5.3 Submission of Manuscript

You should send a manuscript both in word file and pdf file to IEICE-CS Directors, Planning and Members Activities by e-mail.

E-mail: cs-gnl@mail.ieice.org

5.4 Submission of COPYRIGHT TRANSFER FORM

COPYRIGHT TRANSFER FORM can be downloaded at:

http://www.ieice.org/cs/pub/global_howto.html

Signed **COPYRIGHT TRANSFER FORM** should be sent by one of the following ways:

- By email.
- By facsimile.

Address to send:

- In case of email: cs-gnl@mail.ieice.org
- In case of facsimile:

Name: Publications Department, IEICE

Facsimile: +81-3-3433-6616, Phone: +81-3-3433-6692

6 Contact Point

IEICE-CS Directors, Planning and Members Activities in charge of IEICE-CS GLOBAL NEWSLETTER, cs-gnl@mail.ieice.org

From Editor's Desk

● Season's greetings

The time goes so quickly and this year is almost ending. In Japan, we have a custom to send New Year's cards to relatives and friends. It's a fun to receive New Year's card to know how relatives and friends are doing. In the holiday, families, relatives and friends tend to gather to celebrate the new year. Usually, people eat specially-prepared New Year's dishes called Osechi. It can be eaten during the first three days of January when most offices and businesses are closed. Most dishes are cooked to be preserved for at least three days so that people don't have to cook during that period. Various kinds of beautifully-prepared dishes are set in four-tiered lacquer boxes. Each of the dishes has some auspicious meaning reflecting people's wishes. For example, "Kazunoko", herring roe, represents fertility, "Kuromame", cooked black beans, are for health, and lobsters are for longevity because their bodies are bent like an old people's body.

Season's greetings and best wishes for the New Year.

One thing we would like to remind readers after the winter vacation is to consider submitting a paper to IEICE Society Conference 2014 to be held in Niigata University, Niigata, for March 18-21, 2014. Complete English Sessions will be scheduled in the Conference for the globalization of IEICE's academic activities. Please refer to the following article in this issue for the introduction of the English session:

M. Bandai, S. Niida, Y. Sanada, and S. Araki, "Introduction of English Sessions at IEICE General/Society Conference," IEICE Communications Society GLOBAL NEWSLETTER, Vol.37, No.4, p.8, Dec. 2013.

Please also check out the latest information on the IEICE web site at:

http://www.toyoag.co.jp/ieice/E_S_top/e_s_top.html

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Editorial Staff of this issue

No special order is observed



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Director, Planning and Member Activities, IEICE Communications Society



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Tamagawa University

Quantum ICT Research Institute

Director, Planning and Member Activities, IEICE Communications Society

Melbourne Convention and Exhibition Centre, Melbourne, Australia

6-10
JULY
2014

OECC/ACOFT 2014

OPTOELECTRONICS AND COMMUNICATIONS CONFERENCE 2014

AUSTRALIAN CONFERENCE ON OPTICAL FIBRE TECHNOLOGY

www.oecc-acoft-2014.org

CALL FOR PAPERS

PAPER SUBMISSION OPENS 25 NOVEMBER 2014

PAPER SUBMISSION CLOSES 7 FEBRUARY 2014

The Conference's objective is to provide an outstanding forum to present and discuss progresses in research, development and application in the fields of optoelectronics and optical communication systems.

KEYNOTE SPEAKERS

Dr Andrew Chraplyvy

Alcatel-Lucent Bell Labs, United States of America

Professor Shanhui Fan

Stanford University, United States of America

Mr John Lord

Huawei Technologies Australia, Australia

Professor Susumu Noda

Kyoto University, Japan

Dr Masaya Notomi

NTT, Japan

Professor Alan Willner

University of Southern California, United States of America

MELBOURNE

OECC/ACOFT 2014 will be held in Melbourne, Australia. Melbourne is a lively, sophisticated city packed with shops, restaurants, bars and cafes in wide, leafy boulevards and tiny, atmospheric laneways that beckon to be explored. Visit www.visitmelbourne.com for more information.

SUPPORTED BY:



SCOPE

Papers can be submitted under the following six categories:

Cat 1: Core/access networks and switching systems

Cat 2: Transmission systems and subsystems

Cat 3: Optical fibers, cables, and devices

Cat 4: Optical active devices and modules

Cat 5: Optical passive devices and modules

Cat 6: CLEO focus session

Please visit the website to find out more about each category scope.

SUBMISSION

Authors are requested to submit papers electronically through the online submission system no later than 7 February 2014. Each paper must consist of 2-3 pages in A4 page size.

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2014 IEICE ICT Forum

May 28-30, Poznań, Poland

important dates

full paper

December 29, 2013

notification of acceptance

February 10, 2014

final camera-ready

March 3, 2014

Engineering/Fundamentals

- theory and application of mathematical systems sciences
- signal processing interdisciplinary
- non-linear phenomena
- cryptography and information security
- coding theories
- VLSI systems, applications and computer aided network design
- acoustics engineering

Electronics

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- digital coding and filtering
- microwave devices, components, systems and applications
- analog and mixed-signal circuits
- low power designs
- embedded systems
- consumer and multimedia system
- biomedical/bioengineering circuits and systems

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