

**IEEE Workshop on Japanese Industry Promotion**

# **Looking back on my IEEE Activities**

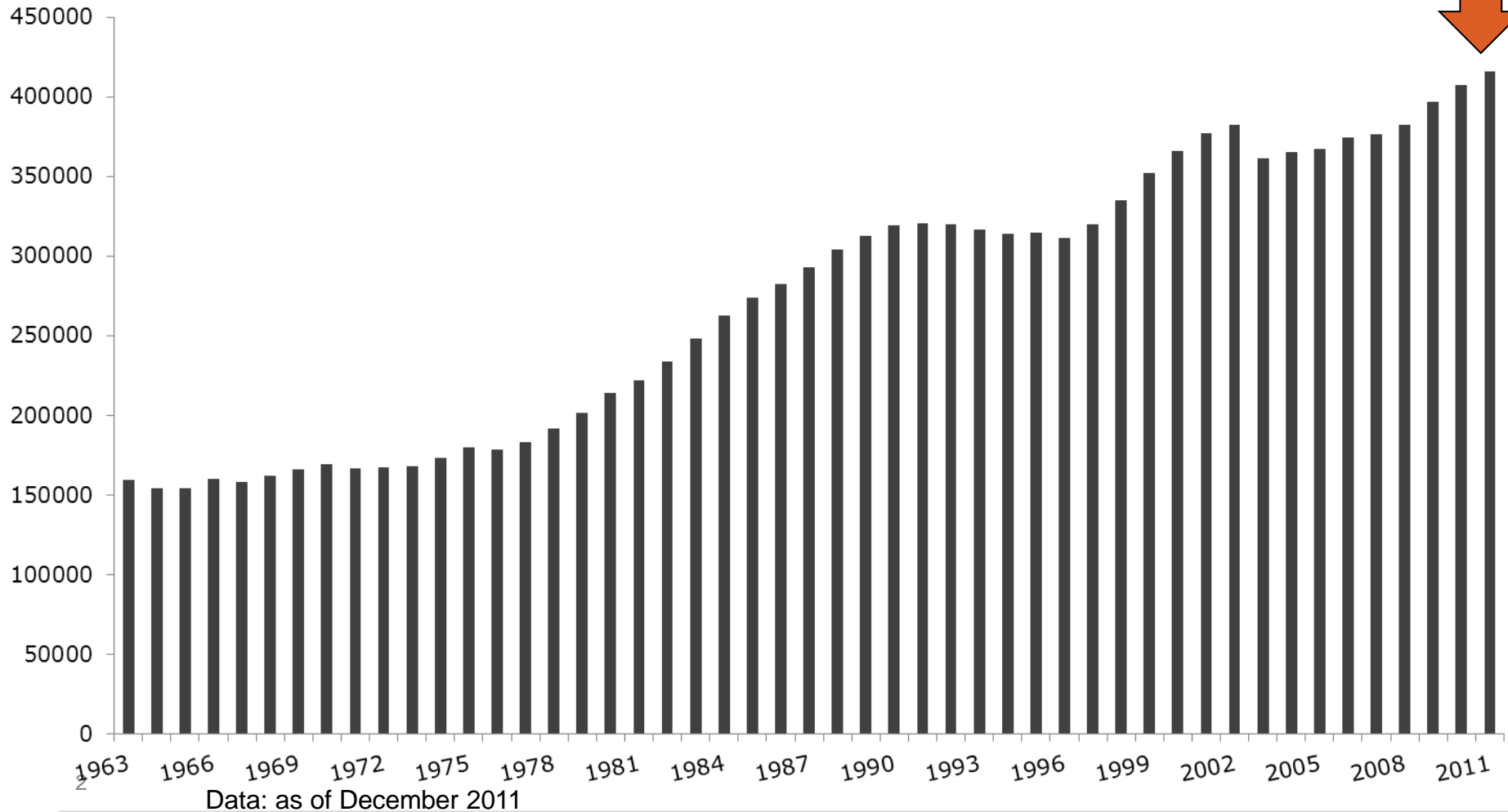
**November 8, 2014**

**Tomonori Aoyama**

**Keio University**

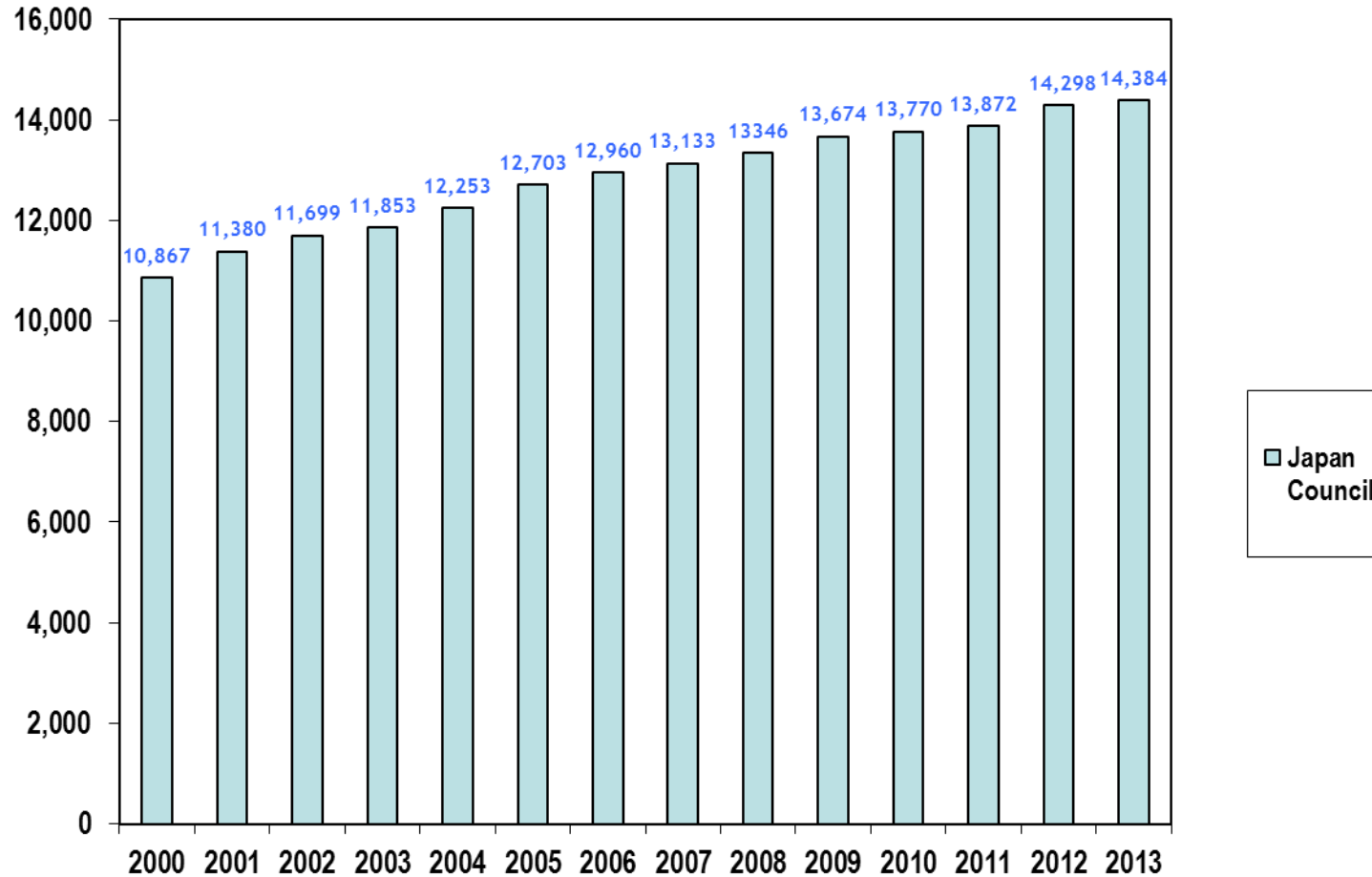
# Total IEEE Membership 1963 to 2011

415,989



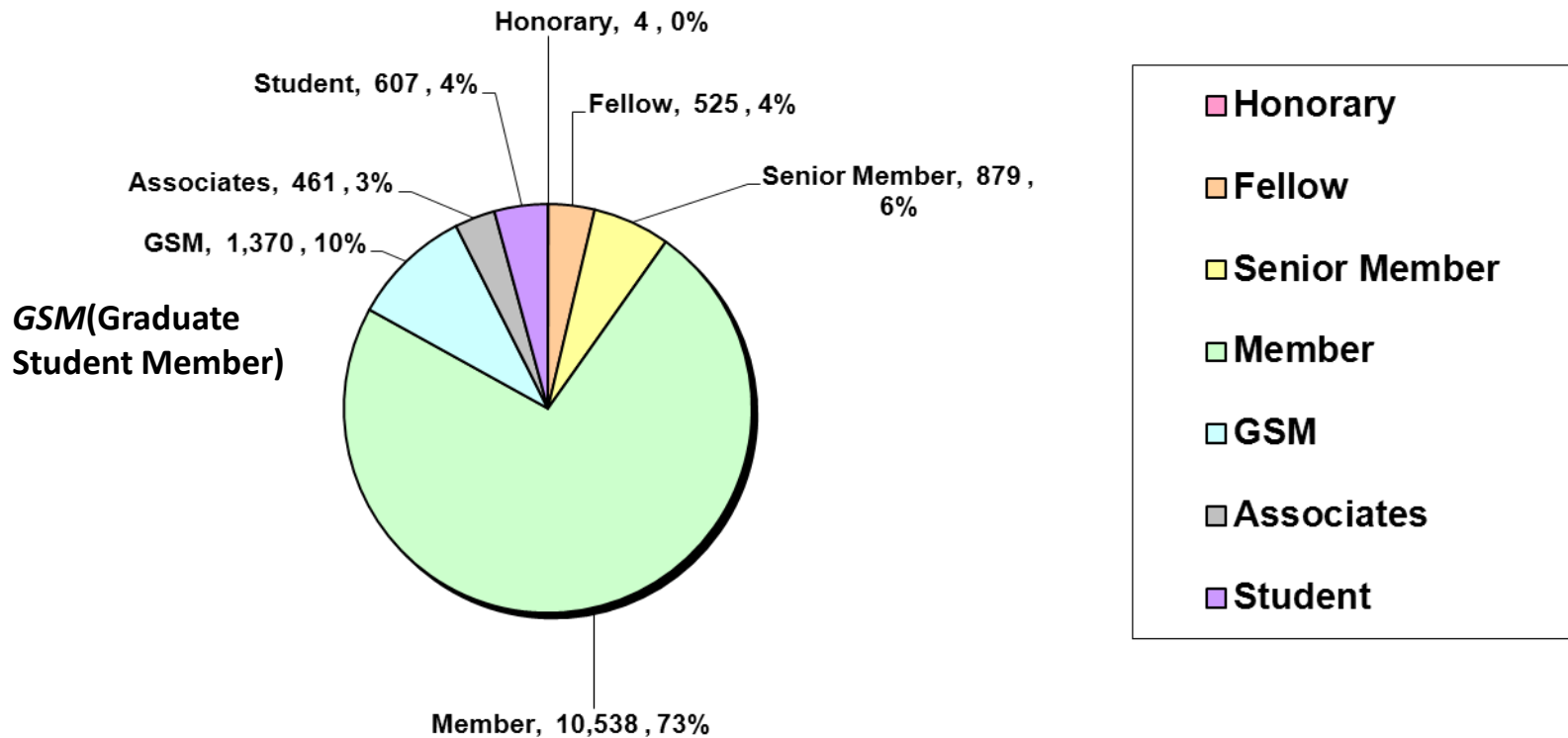
# Japan Council Total Members Since Year 2000

Formation Date: 25 June 1999



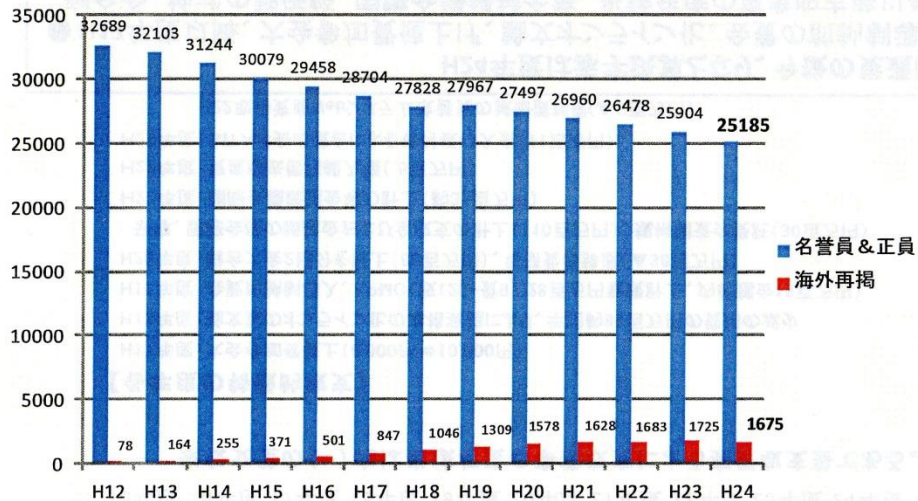
# IEEE Japan Council Membership

## 31 December 2013



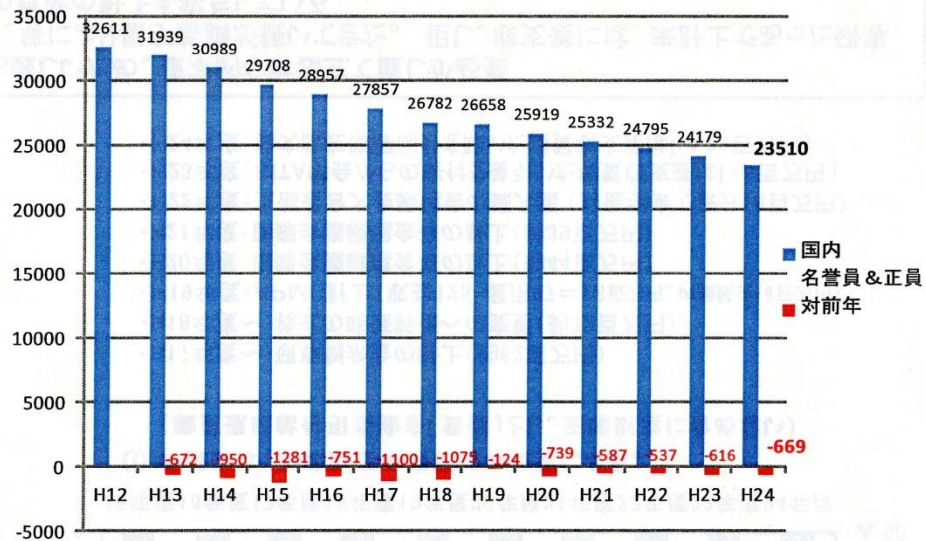
# Trend of the number of IEICE Members

〈名誉員＋正員〉数の推移（再掲：海外会員数の推移）

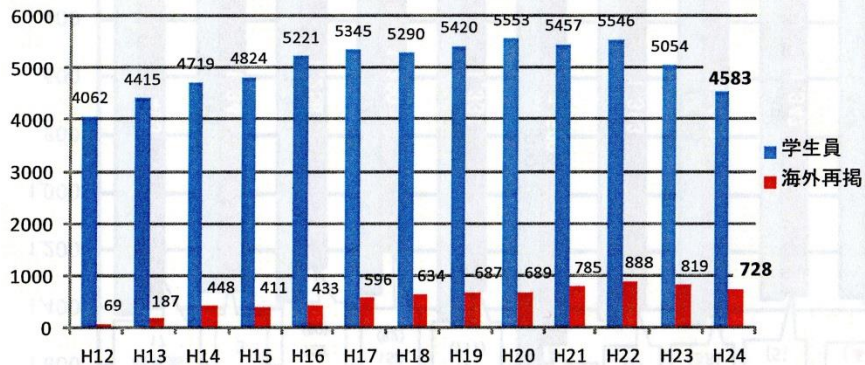


Regular Member

国内〈名誉員＋正員〉数の推移と対前年増減

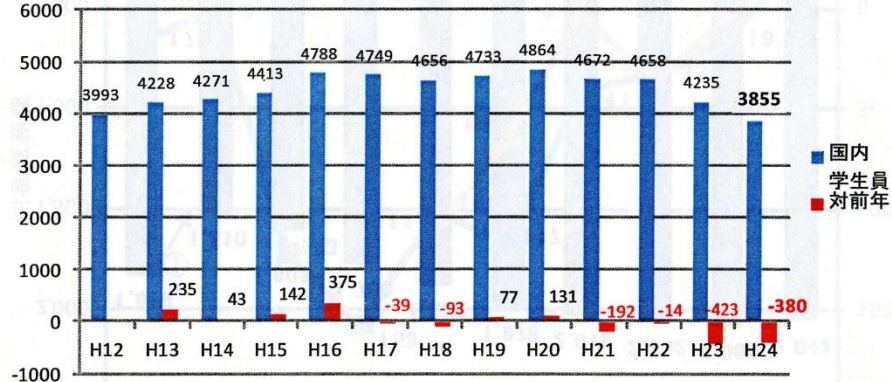


学生員の推移（再掲：海外学生員）

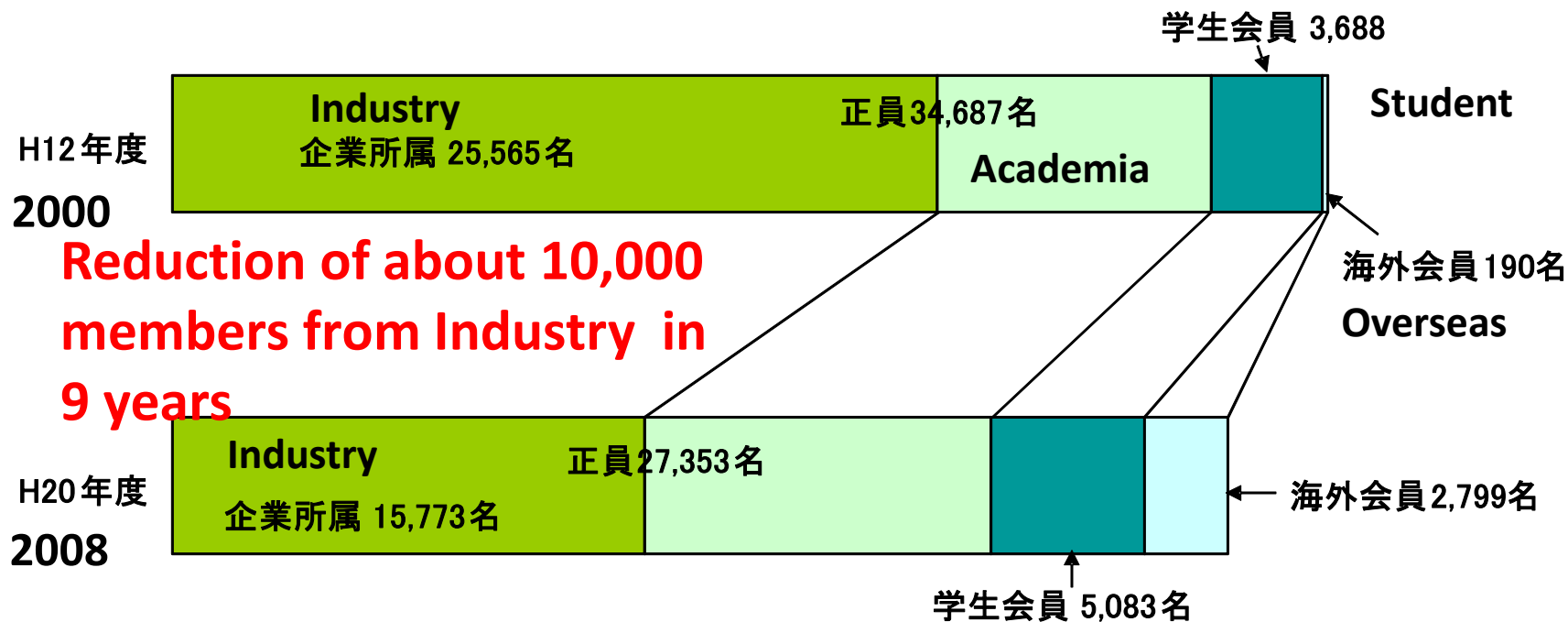


Student Member

国内学生員の推移と対前年増減



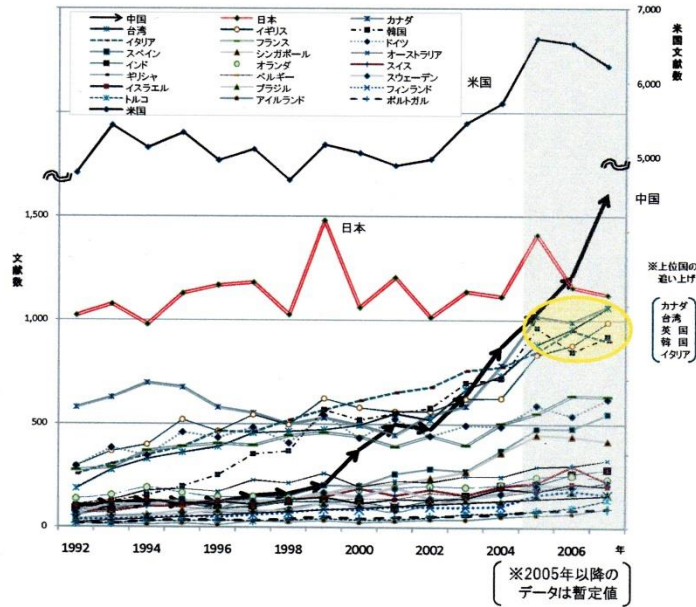
# Trend of the number of IEICE members



**Reduction of about 10,000 members from Industry in 9 years**

- ・ 最近8年間の平均: 個人会員数は、約400名／年の割合で減少
- ・ H18年まで、正会員は 約800名／年の割合で減少
- ・ **企業の正会員数は9年間で“1万人”も急減** ←
- ・ 学生会員は 約100 数十名／年の割合で増加
- ・ 海外会員も、急増している。

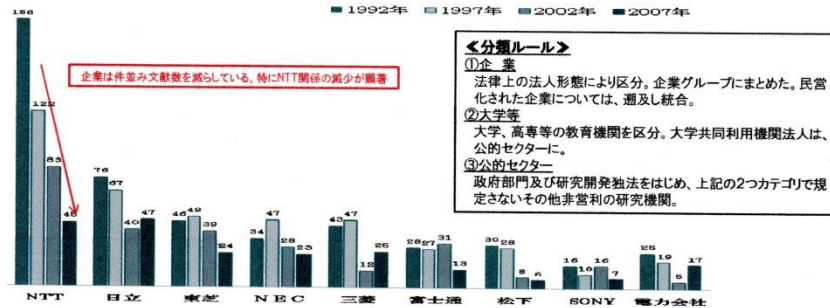
(図1) IEEEにおける国別文献数の推移(1992~2007年)



The number of papers published in IEEE publications submitted from country by country

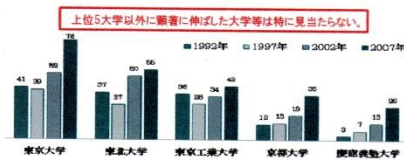
(図2) 日本のセクター別(産学官)のトップ機関の文献数の推移 (1992年,1997年,2002年,2007年)

①企業トップ機関(企業グループ単位)



The number of papers published in IEEE publications submitted from members in Japanese industry

②大学等トップ機関(上位5大学)



③公的セクタートップ機関(上位機関)



The number of papers published in IEEE publications submitted from academia in Japan

# **Looking back on the IEEE activities as an example**

**Join IEEE as an student member**

**Attend IEEE sponsored conferences**

**Serve as a session organization/chair in IEEE conferences**

**Serve as a guest editor for IEEE Transactions, Magazines and J-SAC issues**

**Serve as General Co-chair/Technical Program Co-chair for IEEE sponsored conference/symposium/workshop**

**Participate in IEEE society and other activities**

**Start up new conferences**

**Involve in IEEE Section/ Council**



# **To Join IEEE as a student member**

**My supervisor professor strongly advised me to join IEEE as a student member.**

**Joined IEEE as a student member in 1967**

**Supervisor advice is very important for becoming an IEEE student member !**

# **To attend IEEE sponsored conferences**

**The first attended IEEE conference was INTERCON'74 held in New York.**

**The strong impression was given to me by watching what was an IEEE sponsored conference.**

**An clear objective to submit a paper to an IEEE sponsored conference appeared in order to attend an IEEE conference**

**An experience of participating in an IEEE conference can make a strong objective to do.**

## INTERCON '74: getting down to business

**Conference program organizers are serious about new products, new markets, and solving society's problems, too**

As the handiwork of electrical and electronics engineers becomes more entwined in the fabric of society, issues such as energy and materials shortages, international trade policies, pension reform, CATV, pollution control (among a host of other front-page stories) increasingly involve the electronics industry. These subjects, as well as numerous reports on the latest developments in all areas of electronic technology, make up the technical program of INTERCON '74. An added element this year is a series of special sessions organized by various IEEE Societies and Groups on timely subjects such as alternative energy sources, energy and social values, health care, and pollution, as well as design-oriented topics. Nine of

these special sessions are listed in the table on p. 92. More are being organized at the time of this writing.

Another innovation this year is the condensation of last year's four days of technical sessions into three, so that attendees need not miss sessions on the last day because of travel arrangements.

Here are some of the highlights of the sessions—including, incidentally, two special evening programs on subjects of general interest. A schedule of the regular daytime program appears on the facing page.

### Behind the headlines

Shortages of semiconductors are causing great concern throughout the industry. Superimposed on skyrocketing demand are both a shortage of silicon and the effects of power reductions on device manufacturers. Session 5, "The Semiconductor Crunch,"

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Gerald Lapidus Associate Editor

Fiber optical communications may hold the key to future expansion of telephone systems. The state of the art will be reviewed in session 12.



To serve as a session organization/chair in IEEE conferences

I attended ICC and Globecom almost every year since 1980s

In 1980s, **the number of accepted papers from Asia was very small**, and then I considered how to increase it.

I found that IEEE has been quite **open and equal** for all the members regardless of age and country.

I participated in a meeting to organize the next conference although I was not a committee member.

In the committee, proposals were requested for technical sessions in the next conference.

**I tried to propose a technical session** with no expectation to be adopted.

## **Conferences where I served as a session organizer/session chair**

<b>IEEE ISCAS'85</b>	<b>Chair</b>
<b>IEEE Globecom'86</b>	<b>Organizer/chair</b>
<b>IEEE ICASSP'86</b>	<b>Organizer/chair</b>
<b>IEEE Globecom'87</b>	<b>Organizer/chair</b>
<b>IEEE ISIT'88</b>	<b>Chair</b>
<b>IEEE Globecom'88</b>	<b>Organizer/chair</b>

# **Role of a session organizer**

**To collect papers submitted to this session along with the session title**

**Selection of papers to be accepted**

**I tried to include at least one paper submitted from Asian countries to increase the number of presentation by speaker from Asia.**

**I served as a session organizer and the session chair for the proposed session many times in ICC/Globecom.**

**Serve as a guest editor for IEEE Transactions, Magazines and J-SAC Issues**

**IEEE Journal of Selected Area of Communications (J-SAC)**

**Guest Editor :**

- 1. Voice Coding of Communications, Feb. 1988**
- 2. Packet Speech and Video, June 1899**
- 3. Intelligent Signal Processing in Communications, December 1994 and January 1995**

**To serve as co-founder of new IEEE sponsored  
workshop/symposium/conference**

**ISPACS**

**APCC**

**COIN**





# WORKSHOP NOTES

1992 IEEE International Workshop  
on

## Intelligent Signal Processing and Communication Systems

March 19-21, 1992  
International Convention Center  
Taipei, Taiwan, R.O.C.



Sponsored by  
IEEE Communications Society  
Signal Proc. and Comm. Electronics Committee  
Asian & Pacific Committee



### GREETINGS FROM THE WORKSHOP CO-CHAIRS

The spring blossom of Taipei city will welcome all the attendants of the 1992 IEEE International Workshop on Intelligent Signal Processing and Communication Systems (ISPACS '92), taking place on March 19 to 21, 1992 at the Taipei International convention Center. This is the first international workshop sponsored by IEEE Communications Society to be held in Taipei. This is also the first time the words "Intelligent Signal Processing" appear as the title of an international workshop. We would like to invite all the authors and participants to experience a modern oriental metropolis with hospitality of Chinese style, and on the same time to jointly define and describe the scope and directions of "intelligent signal processing" and its applications to communication systems by their papers, presentations and discussions. We are sure the leaders, researchers and engineers working in the related areas from all over the world will find an excellent forum for innovation and discussions, a very interesting new territory, and a natural habitat to extend friendship and fellowship here in Taipei. Please join us for such a special event of Communications Society.

To complement the in-depth technical program of ISPACS '92, several exciting social events are also planned. These include a reception party in the evening of March 18, a Chinese banquet featuring the "real" Chinese food on March 20, and two specially arranged tours to bring our guests to the National Palace Museum to see the fabulous Chinese art treasures and the Taroko Gorge National Park to see the beautiful 12-mile long marble cliffs uniquely found in the world. On behalf of the organizing team of ISPACS '92, we would like to welcome you here in Taipei in March 1992.

*Lij-Shan Lee* *Tomonori Aoyama*  
Lij-Shan Lee Tomonori Aoyama

Workshop Co-chairs

## Agreement for Future

### Asia-Pacific Conference on Communications(APCC)

prepared by Initial Steering Committee on August 26, 1993

#### ○Background

The IEEE COMSOC Asian & Pacific Committee(APC) proposed a new technical conference on communications, named APCOM (Asia Pacific Communication Symposium), after two years discussion, to encourage technical activities and more effective information exchange among Asia Pacific countries. Its basic idea was approved by most APC members and the first conference has been proposed for 1995.

Independently of the COMSOC's activities, Korea Institute of Communication Science(KICS) started an Asia-Pacific(AP) regional conference under the name of Asia-Pacific Conference on Communications(APCC) in 1993 in Taejon in commemoration of EXPO'93. The conference was held successfully with more than 200 papers presented and with more than 500 participations from 24 countries/areas mostly in the AP region.

On the day 26 of August, 1993, representatives of IEEE COMSOC and representatives from major institutes in the AP region held a meeting in Taejon for the future collaboration of the proposed APCOM and the APCC. Through discussions in the meeting the representatives realized that the objectives of the two conferences are very close, so they came up with the agreement to merge the two conferences under the name of APCC.

#### 1. Objectives of APCC

The main purpose of the expanded APCC conference is to provide researchers and engineers in the AP region with an opportunity to discuss topics related to advanced telecommunication technologies and services, while opening the door to the world. It is expected that the conference will become a major regular international conference and stimulate research and development activities in AP countries/areas.

#### 2. Features of APCC

(1) Steering Committee : The conference will be controlled by a standing international steering committee consisting of representatives from institutes/societies of AP countries/areas and IEEE COMSOC. The main policy and strategy of APCC will be discussed and decided at the steering committee.

The steering committee will consist of one to three representatives from all participating countries/areas in the AP region and IEEE COMSOC, but each country/area will have only one vote.

(2) Contribution to the local activities : There have been a number of international conferences on communication technologies periodically held by the AP countries/areas themselves to encourage their own academic activities. (For example, ICCT in China, ISCOM in Taiwan, and ICCS in Singapore.) APCC will support the internationalization of those activities by increasing the chance to hold APCC jointly with such conferences. Also APCC can provide seminar/tutorials by inviting experts from the world so that AP people can get access to the latest topics in telecommunications.

(3) Sponsorship : Sponsorship will be jointly taken by the institutes/societies of the participating countries/areas in the AP region and IEEE COMSOC. APCC is an international conference sponsored by the Asia-Pacific region. Accordingly, this conference will be open to participants from all over the world.

(4) Topics : The conference will cover telecommunication technologies, systems, services and related areas. Special topics will be planned for each conference to address areas of interest. These topics could be selected or added within this scope depending on the regional interests.

(5) Finance : Each conference should be financially self-supporting.

(6) Site and Period : The initial APCC conference was held in Korea in 1993. The next expanded APCC conference will be held in Japan in 1995. From then on it will be held once in every one or two years in the Asia-Pacific countries/areas in rotation.

#### 3. Initial Steering Committee members

IE(Aust) : John L. HULLETT(ATRI)  
 CIC(China) : Zheu Yin DENG(CIC)  
 Jongpan ZHOU(BUPT)  
 COMSOC(IEEE) : Tomonori AOYAMA(NTT)  
 Tetsuya MIKI(NTT)  
 IEICE(Japan) : Hideo MIYAHARA(Osaka Univ.)  
 Hideyoshi TOMINAGA(Waseda Univ.)  
 KICS(Korea) : Jae-kyoon KIM(KAIST)  
 Byeong Gi LEE(Seoul Nat'l Univ.)  
 HanKyu PARK(Yonsei Univ.)  
 CIEE(Taiwan) : Lin-shan LEE(Academia Sinica)  
 Che-Ho WEI(Chiao Tung Univ.)

# **To serve as General Co-chair/Technical Program Co-chair for IEEE Conferences**

**ISPACS**

**APCC**

**OECC**

**COIN**

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**IEEE R10 HTC2013**

**etc.**

## **ComSoc Management activities**

**Member-at-large Board of Governor, 1996  
and 2000**

**Asia Pacific Committee Chair, 1996**

**ComSoc Director for Sister Society , 2000**

## **IEEE Tokyo Section**

**Board member of the section**

**Section Chair**

## **IEEE Japan Council**

**JC Chair in the next year**

**IEEE Fellow Committee member**

**Signing the sister society agreement between IEEE ComSoc and IEICE Communication Society at Yokohama in 2000**



IEEE ComSoc

Dr. Roberto de Marca

IEICE-CS

Dr. Tomonori Aoyama

# IEEE President visited NTT DOCOMO on November 4, 2014



# Summary 1

Merit of IEEE activities from my experience

- Human relations in the world
- New information on ICT in the world
- Inform research output
- Contribution to IEEE members through conferences and publications
- Visiting various places of conferences in the world

## Summary 2

**I have been involved in TAB activities first and then have served for MGA activities later.**

**Both activities can provide whole structure of IEEE and value for members more.**

**I do expect that young members will be involved in both activities in your field and places.**





**Thank you  
for your attention !**

**Bungy Jump !**

**260m !**

**Highest Jump in  
North America**

**Las Vegas  
in April 8, 2014**