



IEEE Seoul Section

Annual Report 2015



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PART A - SECTION SUMMARY

A.1 Executive Summary

The IEEE Seoul Section had a fruitful year in 2015 with the following activities:

- Seoul Section experienced a big loss in memberships in 2015, more specifically in graduate members compared to 2014. The section is going to prepare both retention program for graduating members and recruit program for undergraduate students.
- The student activity in Seoul Section can be highlighted by the Student Paper Contest 2015 held in Korea Aerospace University in which 16 papers were presented and evaluated for prizes.
- IEEE Seoul Section had 4 professional seminars by the experts in emerging areas of electrical engineering.
- In 2015, Seoul Section has two new chapters, Intelligent Transportation Systems Society Chapter (ITS38) chaired by Prof. Kyongsu Yi of Seoul National University, and Photonics Society Chapter (PHO36), chaired by Prof Young-Wan Choi of Chung-Ang University.
- In 2015, the most active chapter was Circuits and Systems Society Chapter (CAS04) led by Prof. Myung Hoon Sunwoo, Ajou University. The chapter had 19 technical or professional meetings during 2015.
- The section had four executive committee meetings (March, May, August and October).
- The General Assembly of IEEE Seoul Section was held in Dec. 5, 2015 and approved the financial report.
- The 40th HMPC 2015 Dinner Meeting was held on December 30th with 90 participants at Westin Chosun Hotel to promote members to higher grades. The event consisted of award ceremony, special lectures and music entertainment along with dinner, followed by informal gatherings.
- IEEE/IEEK Joint Outstanding Young Engineer Award 2015 was given to Professor Kyoungsik Yu of KAIST for his outstanding contributions to integrated optoelectronic devices and systems for generation, manipulation, and acquisition of photonic signals.

A.2 Financial Report

The IEEE Seoul Section's financial condition has recovered quite well from the turmoil of the year 2014, where the R10 rebate was not delivered due to some misunderstanding between R10 and Seoul Section. While the initial balance of 2014 was 17,632,977 Won, the year 2015 started with 3,913,000 Won at the beginning and closed with net increase of 27,227,710 Won. The R10 rebate was successfully secured and there were further supports from IEEE. Most of the expenditure was allocated for social events or workshops including HMPC event. The Section's 2015 financial report has been approved by the general assembly of IEEE Seoul Section in Dec.5, 2015. All the details of transactions are described and reported through the IEEE Netsuite reporting.

1. Income

Item	Amount (Won)
R10 Rebate	14,010,566
IEEE Support	22,016,076
Contribution	3,700,000
Interest	18,713
Total	39,746,055

2. Expenditure

Item	Amount (Won)
Meetings and Social Events	8,161,250
Student Activities	1,000,000
Chapter Support	3,205,450
Other Management & General Expenses	151,645
Total	12,518,345

3. Total Net Worth

Item	Amount (Won)	
Balance beginning of the year 2015	3,913,000	A
Total Income of the year 2015	39,746,055	B
Total Expenditure of the year 2015	12,518,345	C
Total Net Increases	27,227,710	B-C
Balance end of the year 2015	31,140,710	A+B-C

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Programs

There has been a big decrease in memberships in 2015, more specifically in student memberships. In 2016, an aggressive membership development program will be pursued.

Year	Member	Honorary Member	Life Fellow	Fellow	Life Member	Life Senior Member	Senior Member	Associate	Student	Total
2013	1598	1	6	24	5	4	239	110	826	2813
2014	1637	1	6	27	6	6	258	106	1403	3554
2015	1632	1	4	29	5	3	288	88	955	3005

Seoul Section is going to establish a membership development program in 4 ways.

- To develop a recruit program for undergraduate students.
- To develop a maintaining program for graduate students.
- To develop a membership recruit program for industry
- To develop a membership elevation program for member-to-senior member

The undergraduate program will be focused on seeding prospective student group circles interested in IEEE in universities in the section.

B.2 Professional and Continuing Education Activities

B.2.1 Professional Seminars

IEEE Seoul Section had 4 Executive Committee Meetings, General Assembly and HMPC Dinner Meeting with the following professional seminars by the experts in electrical engineering and related areas.

- "50 year of Korean economic development due to electrical engineers", by D. Jung Uck Seo, Former Minister for the Ministry of Science and Technology, Korea.
- "Successive NAC Strategy", by CEO Moosung Lee of MLSosft Corp.
- "Photonics: Harmony of light and electrons ", by , Professor Kyung Sik Yu, KAIST.
- "Convergence: Way of revival of Korean economy", by President Jong Lok Youn, NIPA.

B.3 Students Activities

B.3.1 Student Branches

IEEE Seoul Section has 13 student branches in 2015. Each student branch consists of graduate students ranging from about 20 to 50. Each student branch was operated independently under the supervision of the student branch advisor of the section. The following are student branches of Seoul Section:

- Aju University
- Catholic University of Korea
- Chung-Ang University
- Dankook University
- Ewha Women's University
- Hanyang University
- Hongik University
- Korea Aerospace University
- Korea University
- Seoul National University
- Soongsil University
- University of Seoul
- Yonsei University

B.3.2 Student Paper Contest

The Student Paper Contest 2015 for graduate student paper competition was held at the Lecture Building, Korea Aerospace University on Dec. 05, 2015. Total 16 papers were presented in two areas with 4 sessions: 8 papers in information and communication technology area and 8 papers in electrical energy, image processing and electrical materials area. The committee members and the recipients of the 2015 Student Paper Contest Prizes were as follows:

- Organizing Committee
 - General Chair: Prof. Gilsoo Jang (Korea Univ.)
 - Technical Program Committee: Sungho Yoon (Chair, SNU), Cheon Won Choi (Dankook U.), Yoonhee Kim (Sookmyung Women's U.), Jung Hee Han (KAU), Myeong-Jin Lee (KAU), Keon Hur (Yonsei U.), Yongsin Kim (korea U.), Junhee Seok (Korea U.)
- 2 Gold Prize Awards went to the following 2 papers:

- OFDMA FD-MAC Protocol Based on the Idle Channel Information, Hye-Rim Cheon, Jae-Hyun Kim (Ajou U.)
- Development of Operational Strategy for Conservation Voltage Reduction on Transmission System Based on Analytic Hierarchy Process, Kyungsung An, Kyeon Hur (Yonsei U.)
- 6 Silver Prize Awards went to 6 papers from Korea U., Korea Aerospace U., Kwangwoon U., Sejong U. and KAIST.

B.4 Chapter Activities

In IEEE Seoul Section, 24 chapters are in active operation as shown in the following table.

Chapter	Full Name	Chair
AES10	Aerospace and Electronic Systems Society	Young Kil Kwag, Korea Aerospace Univ.
AP03	Antennas and Propagation Society	Jae Hoon Choi, Hanyang Univ.
BT02	Broadcast Technology Society	Byungwoo Jeon, Sungkyoonkwan Univ.
C16	Computer Society	Chang Sung Jeong, Korea Univ.
CAS04	Circuits and Systems Society	Myung Hoon Sunwoo, Ajou Univ.
CE08	Consumer Electronics Society	Kang-Sun Choi, Koreatech
COM19	Communications Society	Sunghyun Choi, Seoul National Univ.
CS23	Control Systems Society	Poo Gyeon Park, Postech Univ.
E25	Education Society	Vacant
ED15	IEEE Electron Devices Society	Yong Taek Hong, Seoul National Univ.
GRS29	Geoscience & Remote Sensing Society	Hoonyol Lee, Kangwon Univ.
IT12	Information Theory Society	Hong-Yeop Song, Yonsei Univ.
ITS38	Intelligent Transportation Systems Society	Kyongsu Yi, Seoul National Univ.
MAG33	Magnetics Society	Jongil Hong, Yonsei Univ.
MTT17	Microwave Theory and Techniques Society	Jae-Sung Rieh, Korea Univ.
NANO42	Nano Technology Society	Jo-Won Lee, Hanyang Univ.
NPS05	Nuclear and Plasma Science Society	Yong Choi, Sogang Univ.

PEL35	Power Electronics Society	Bo Hyung Cho, Seoul National Univ.
PHO36	Photonics Society	Young-Wan Choi, Chung-Ang Univ.
RA24	Robotics & Automation Society	Frank Park, Seoul National Univ.
SMC28	Systems, Man, and Cybernetics Society	Seong Whan Lee, Korea Univ.
SP01	Signal Processing Society	Gibak, Kim, Soongsil Univ.
SSC37	Solid-State Circuits Society	Yong Moon, Soongsil Univ.
VT06	Vehicular Technology Society	Jun Heo, Korea Univ..

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Seoul Section also has a joint chapter CIS011 for the Computational Intelligence Society with Seoul, Daejeon, Daegu and Changwon Section, chaired by Prof. Byoung-Tak Zhang of Seoul National University. The section also has the Counsel on Electronic Design Automation (CEDA44), very actively operated by the chair, Professor Soonhoi Ha, Seoul National University.

In 2015, the most active chapter was Circuits and Systems Society Chapter (CAS04) led by Prof. Myung Hoon Sunwoo, Ajou University. The chapter had 19 technical or professional meetings.

Activity reports for other chapter are available in L31 meeting report in www.ieee.org.

PART C - OTHERS

C.1 Relationship with National Societies

The IEEE Seoul Section has close relationships with Korean technical societies such as the Korean Institute of Communications and Information Sciences (KICS), the Institute of Electronics and Information Engineers (IEIE), the Korean Institute of Electrical Engineers (KIEE), Korean Institute of Electromagnetic Engineering and Science (KIEES), The Korean Institute of Information Scientists and Engineers (KIISE), and The Korean Society of Broadcast Engineers (KOSBE). The IEEE Seoul Section provides technical supports to these societies.

2015 IEIE-IEEE Joint Award for Young Scientist went to Prof. Kyoungsik Yu of KIAST for "his contributions to integrated optoelectronic devices and systems for generation,

manipulation, and acquisition of photonic signals". The award ceremony was held in the IEIE 2015 Summer Conference at Jeju during June 21-23.

C.2 Special Events

The 40th HMPC 2015 Dinner Meeting was held on December 30th at Westin Chosun Hotel, Seoul with 90 participants, to promote members to higher grades. The event consisted of award ceremony honoring 10 members for their outstanding service to Seoul Section, followed by celebration for three newly elevated IEEE Fellows in Seoul Section.

Then a special technical talk was presented by the Prof. Kyung Sik Yu of KAIST, the IEEE/IEIE Joint Young Engineer Award 2015 winner, with the title of "Photonics: Harmony of light and electrons.", followed by another talk by the President Jong Lok Youn of NIPA with the title, "Convergence: The way of revival of Korean economy"

The HMPC Meeting was also highlighted by a classical mini-concert of vocal, violin and brass band along with dinner, followed by one-minute talks by most participants and informal gatherings. HMPC was established 40 years ago for the purpose of providing attention to the electrical and electronics engineers who have been unnoticed and rendering wider publicity to their distinguished service to Korea. The HMPC 2015 has been an important meeting in the light of its purpose!

PART D - GOALS AND PLANS

D.1 Implementation Plans

All section officers, chapter chairs, and student branch advisors will ask to join membership to the attendee of the conferences, workshops, and seminars. Chapter chairs will be encouraged to hold seminars and workshops with proper activity reports. Seoul Section will also support international conferences.

D.2 Goals and future plans

The IEEE Seoul Section will hold the spirit of the IEEE and align section objectives to the working plans of R10. The section has several active plans for the year of 2016. Some of work items are listed below.

- Encourage academia-industry cooperation by Metropolitan Area Workshop
- Increase retention rate by promoting new industry memberships

- Promote student branch activities such as IEEE Day
- Promote membership elevation to higher memberships
- Support technical activities for chapters in Seoul Section
- Strengthen member service for all section members through website by providing appropriate contents without visiting IEEE main-page
- Publish section newsletter to communicate with other members in the section.
- Collaborate more closely with other academic societies of Korea including IEIE (IEEK), KICS, KISS, KIEES, KIISE and KOSBE.
- Establish history committee to update technology and service history of Korea, and investigate prospective milestone technologies. This task will enforce the life member activities.