

IEEE Nagoya Section Annual Report 2014

February 9, 2015

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List (2015/2016)

(a) Officers:

Chair:

Dr. Takeshi Furuhashi (Professor, Nagoya University)
e-mail: furuhashi@cse.nagoya-u.ac.jp

Vice Chair:

Dr. Shigeaki Aoki (Professor, Kanazawa Institute of Technology)
e-mail: aoki_s@neptune.kanazawa-it.ac.jp

Secretary:

Dr. Yutaka Ishibashi (Professor, Nagoya Institute of Technology)
e-mail: ishibasi@nitech.ac.jp

Treasurer:

Dr. Mitsuo Fukuda (Professor, Toyohashi University of Technology)
e-mail: fukuda@ee.tut.ac.jp

Auditor:

Dr. Manabu Kagami (Principal Researcher, Toyota Central R&D Labs., Inc.)
e-mail: kagami@mosk.tytlabs.co.jp

(b) Standing Committee Chairs:

Nomination Committee:

Dr. Haruhiko Takase (Associate Professor, Mie University)
e-mail: takase@elec.mie-u.ac.jp

Membership Development Committee:

Dr. Shinichi Mitumoto (Associate Professor, Toyota National College of
Technology)
e-mail: mitumoto@toyota-ct.ac.jp

Technical Activities Committee:

Dr. Masayoshi Kanoh (Associate Professor, Chukyo University)
e-mail: mkanoh@sist.chukyo-u.ac.jp

Student Activities Committee:

Dr. Shinji Doki (Professor, Nagoya University)
e-mail: doki@nagoya-u.jp

Award Committee:

Dr. Tsuyoshi Nakamura (Associate Professor, Nagoya Institute of Technology)
e-mail: tnaka@nitech.ac.jp

Chapter Operation Committee:

Dr. Yuji Muramoto (Professor, Meijo University)
e-mail: muramoto@meijo-u.ac.jp

(c) Past Chairs:

2013-2014 Chair:

Dr. Kenji Mase (Professor, Nagoya University)
e-mail: mase@nagoya-u.ac.jp

2009-2010 Chair, Milestone:

Dr. Masayuki Nagao (Professor, Toyohashi University of Technology)
e-mail: nagao@tut.jp

- Section Highlights

- (1) IEEE Milestone Dedication Ceremony for “20-inch photomultiplier tubes” was held on November 5.
- (2) IEEE Nagoya Section Young Researcher Award was established on April 5.
- (3) A number of technical activities were organized and co-organized by Nagoya Section in 2014. Total 21 events including 5 sponsored technical events were held successfully.
- (4) IEEE Nagoya Section Student Research Presentation Awards in IEEE international conferences were given to 4 students.
- (5) Membership activity: Nagoya Section had the following members: Fellow: 34, Senior member: 68, Member 957, Student member: 130, Associate member: 32. Total: 1,221 as of Nov. 2014.
- (6) Section territory: Nagoya Section, one of the eight sections of IEEE Japan Council, is located in the city of Nagoya, central in Japan, and the section territory spreads out to Tokai Area (Aichi, Gifu, Mie, and Shizuoka Prefectures) and Hokuriku Area (Toyama, Ishikawa and Fukui Prefectures) in Japan.

- Major Events (International, National)

- Several local meeting and workshops were organized successfully including co-organization of the 2014 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai and Hokuriku Areas where IEEE Nagoya Section Student Awards were given to 9 excellent student presenters.

- Major Chapter Activities

- Several technical lectures, seminars and meetings were organized successfully.

- Major Student and Affinity Group Activities

- IEEE Nagoya Section Student Research Presentation Awards in IEEE international conferences were given to 9 students.
- Awards
 - Two members were awarded Fellow Grade (Informed by R10 in Nov. 2014).
 - Two members were awarded Senior Member Grade.
 - IEEE Nagoya Section Young Researcher Award was awarded to one member.

A.2 Financial Report

- Summary (as per submitted L50)
 - Total Receipts during the year 2014 were JY5,342,730 including the assessment and rebate of JY2,951,793 from IEEE HQ. The total disbursements amount to JY3,657,583.
- Any other financial activities

None

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

November 2012: 1,219

November 2013: 1,218

November 2014: 1,221 +0.02% to previous year

The number of members of the Nagoya Section as of Nov. 2014 is as follows: (The numbers in parentheses are for Nov. 2013. All figures are from SAMIEEE.)

Fellow:	34	(31)
Senior Member:	68	(66)
Member:	957	(927)
Associate Member:	32	(35)
Student Member:	130	(159)

Total	1,221	(1,218)
-------	-------	---------

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - Several student support activities such as the student research presentation awards in IEEE international conferences and the student awards for research work in local universities and Joint Congresses presentation have been penetrated to the society and positively attracted students for joining to IEEE.
 - A letter of encouragement to apply for a Fellow grade or a Senior Member grade was sent to the Nagoya Section's Senior Members or Members by using a Japan Council mailing list service.
 - Invitation activity to join IEEE was made at the sponsored and co-sponsored events.

B.2 Chapter Activities

- Total number of Chapters in the Section
 - Four (4), AP-S, MTT-S, MAG-S, ITS-S
 - Number of Chapters formed in the current year
 - None
 - Number of Active Chapters (Chapters who have reported required number of meetings during the year)
 - Four (4)
 - Summary of Chapter activities chapter wise with attachment table / information
- ✓ AP-S Nagoya Chapter
- (1) Technical Lectures:
- February 6, 2014
 “Technologies on automatic control for automobile” by Dr. Sadayuki Tsugawa
 (Professor, Meijo University)
 Kojima Industries Corporation, Toyota, Japan
 Participants: 50
 - July 24, 2014
 “On the between the antennas and transmission lines” by Dr. Takashi Nakamura
 (Professor, Gifu University)
 Gero Civic Hall, Gero, Gifu, Japan
 Participants: 67
- (2) Technical Meetings:
- April 25, 2014
 Midland Student Express 2014 Spring (Students’ Meeting; jointly organized with
 IEEE MTT-S Nagoya Chapter)
 Nagoya Innovation Hub, Nagoya, Japan
 Presentations: 24, Participants: 39
 - August 4 - 6, 2014
 2014 IEEE International Workshop on Electromagnetics in Sapporo
 Hokkaido University, Sapporo, Japan
 Presentations: 140, Participants: 140
 - November 28, 2014
 Midland Student Express 2013 Autumn (Students’ Meeting; jointly organized with
 IEEE MTT-S Nagoya Chapter)
 University of Toyama, Toyama, Japan
 Presentations: 14, Participants: 23
- ✓ MAG-S Nagoya Chapter
- (1) Technical Lectures:
- June 11, 2014
 “Opportunities and Challenges in Two Dimensional Magnetic Recording” by Dr.
 Jonathan Coker (HGST, a Western Digital Company, IEEE Magnetic Society
 Distinguished Lecturer)
 Nagoya University, Nagoya, Japan
 - June 16, 2014
 “Topological Effects in Nanomagnetism: From Perpendicular Recording to Monopoles”
 by Dr. Hans-Benjamin Braun (Professor, School of Physics, University College Dublin,

Ireland, IEEE Magnetic Society Distinguished Lecturer)
Nagoya University, Nagoya, Japan

(2) Technical Meetings:

- February 7, 2014
IEEE Magnetic Society Nagoya Chapter, Young Researcher Meeting
Nagoya University, Nagoya, Japan
Presentations: 15, Participants: 43
- March 7, 2014
Joint Workshop of IEEE Magnetics Society Nagoya Chapter & IEICE Technical Committee on Magnetic Recording, IEEJ Technical Committee
Nagoya University, Nagoya, Japan
Presentations: 9, Participants: 41

✓ MTT-S Nagoya Chapter

(1) Technical Lectures:

- June 26, 2014
Keynote Address of IEEE MTT-S Nagoya Chapter
“Semiconductor Technology and Its Challenges for Millimeter-Wave Applications”
by Dr. Yuu Watanabe (Denso Corp.)
“Microwave Signal Generation and Measurement / Microwave Technologies”
by Dr. Naoya Kukutsu (Advanced Telecommunications Research Institute International)
Toyohashi University of Technology, Toyohashi, Japan
Participants: 68

(2) Technical Meeting:

- April 25, 2014
Midland Student Express 2013 Spring (Students' Meeting; jointly organized with IEEE AP-S Nagoya Chapter)
Nagoya Innovation Hub, Nagoya, Japan
Presentations: 24, Participants: 39
- June 26, 2014
Research Meeting (jointly held with above technical lectures)
Toyohashi University of Technology, Toyohashi, Japan
Presentations: 11, Participants: 68
- November 28, 2013
Midland Student Express 2013 Autumn (Students' Meeting; jointly organized with IEEE AP-S Nagoya Chapter)
University of Toyama, Toyama, Japan
Presentations: 14, Participants: 23

(3) In Cooperation

- November 4 - 7, 2014
ASIA-Pacific Microwave Conference
Sendai International Center, Sendai, Japan
Presentations: 25, Participants:
- November 26 - 28, 2014
Thailand-Japan Microwave Workshop 2014
King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand
Presentations: 98, Participants: 245
- December 8 - 12, 2014
2014 Microwave Workshops and Exhibition
Pacifco Yokohama, Yokohama, Japan

Presentations: 58, Participants: 5500

Nine (9) technical meetings on microwave were held in corporation with The Institute of Electronics, Information and Communication Engineers, Electronics Society.

- January 16 - 17, 2014
Promotion of Machine Industry Building, Tokyo, Japan
Presentations: 23, Participants: 74
- March 4, 2014
Ehime University, Matsuyama, Japan
Presentations: 29, Participants: 92
- April 17 - 18, 2014
Promotion of Machine Industry Building, Tokyo, Japan
Presentations: 24, Participants: 130
- May 22 - 23, 2014
Doshisha University, Kyoto, Japan
Presentations: 18, Participants: 92
- July 17 - 18, 2014
Muroran Institute of Technology, Muroran, Hokkaido, Japan
Presentations: 40, Participants: 118
- September 18 - 19, 2014
Tokyo Institute of Technology, Tokyo, Japan
Presentations: 28, Participants: 126
- October 23 - 24, 2014
Akita Prefectural University, Akita, Japan
Presentations: 23, Participants: 108
- November 20 - 21, 2014
Nagasaki University, Nagasaki, Japan
Presentations: 25, Participants: 92
- December 18 - 19, 2014
Aoyama Gakuin University, Tokyo, Japan
Presentations: 25, Participants: 118

✓ ITS-S Nagoya Chapter

(1) Technical Lectures:

- July 4, 2014
First Lectures on Special Theme: FOT in Japan
Nagoya University Venture Business Laboratory, Nagoya, Japan
Presentations: 8, Participants: 70
- November 27, 2014
Lectures for Students (IEEE ITSS Distinguished Lecture Series)
University of Tokyo, Interfaculty Initiative in Information Studies, Fukutake Hall,
Tokyo, Japan
Presentations: 2, Participants: 56
- December 19, 2014
Second Lectures on Special Theme: Reports of International conferences
Nagoya University, Nagoya, Japan
Presentations: 7, Participants: 40

(2) In Corporation:

- November 13, 2014
17th Public Symposium on Next Generation Vehicles/4th Overtrust CREST
Symposium
Nagoya University, Nagoya, Japan
Presentations: 6, Participants:
- December 15, 2014
IEEE ITSS Tokyo Chapter Panel Discussion on Security in Connected Vehicle (CV)
Generation

University of Tokyo, Institute of Industrial Science, Tokyo, Japan
Participants: 70

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

- Total 21 events including 5 sponsored technical events in the area of antenna, magnetics, robot, vehicle, power engineering, education, etc. were held successfully.
- See the list in the following table for the detail of the meeting organized/cooperated meetings by the Nagoya Section. For the list and the detail of Chapter-organized meetings, see Section B.2.

Table 1 List of Technical Meetings organized/cooperated by Nagoya Section

sponsorship	meeting category	dates	meeting/lecture title
cooperation	seminar	Jan. 24	7th Power-Techno-Promenade: Personnel training of the electrical engineering field – A policy to bring up the engineers playing a role in the future
cooperation	student research meeting	Feb. 1	Presentation on Master Theses on Communication and Related Engineering by Students of Three Universities in Tokai Area
sponsored	Seminar	Feb. 24	Nagoya University, Leading Graduate Program “Real-world data circulation” Seminar
cooperation	lecture	Mar. 7	Lectures on Present and Future of Sensor Network
corporation	student research meeting	Apr. 25	Midland Student Express2014, Spring
cooperation	lecture	May 14	Special Talks in Advanced Theory on Electromagnetic Waves: “Precision Antenna Measurements Using Gain Comparison Method” by Dr. Jin-Seob Kang and “Circularly-polarized Antenna Technologies for automotive applications” by Prof. Kyeong-Sik Min
co-sponsored	lecture	May 20	Special Lecture by Professor Shigeo Tsujii, “Science of Information Security in Age of Big Data”
co-sponsored	lecture	May 22	Special Lecture by Professor Matsuyama, “i-Energy: Concepts and Technologies for Smart Community Development”
cooperation	lecture	June 11	Special Lecture Meeting: “Opportunities and Challenges in Two Dimensional Magnetic Recording” by Dr. Jonathan Coker (HGST, a Western Digital Company)
cooperation	lecture	June 16	Special Lecture Meeting: “Topological Effects in Nanomagnetism: From Perpendicular Recording to Monopoles” by Prof. Hans-Benjamin Braun (School of Physics, University College Dublin)
corporation	workshop	June 29- July 2	12th International Workshop on Breast Imaging (IWDM 2014)
cooperation	symposium	July 4	1st Energy System Symposium “Energy System for Sustainable Society”
corporation	experiment	Aug. 9-10	Science school for elementary and junior high school students by the Japan Society of Applied Physics
sponsored	conference	Sept.8-9	2014 Tokai-Section Joint Conference on Electrical, Electronics, Information, and Related Engineering
sponsored	conference	Sept.11-12	2014 Joint Conference of Hokuriku Chapters of Electrical Societies
corporation	symposium	Sept. 27	11th Symposium of the Chubu Branch of the Operations Research Society of Japan
sponsored	ceremony	Nov. 5	IEEE Milestone Dedication Ceremony for “20-inch photomultiplier tubes”
cooperation	lecture	Nov. 22	Lecture open to the public “Strategies to Improve Safety and Security of Electric Power System”
cooperation	student research meeting	Nov. 28	Midland Student Express 2014, Autumn
corporation	symposium	Dec. 11	18th Symposium of The Research Center for Future Vehicle City, Toyohashi University of Technology
sponsored	lecture	Dec. 13	Special Lecture by newly awarded IEEE Fellow

B.4 Students Activities

- Total number of Student branches in the Section
 - Two (2): Nagoya University and Shizuoka University
- Number of Student branches formed in the current year
 - Zero (0)
- Section level student activities (student congress, paper and other contests, awards etc)
 - 2014 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai/Hokuriku Areas. IEEE Nagoya Section

Student Awards were awarded to 9 excellent student presenters at the Tokai Area Conference.

- Student Research Presentation Awards in IEEE international conferences were given to 4 students.
- IEEE Nagoya Section Excellent Student Awards were given at two universities; Meijo University: 8, Chubu University: 2.
- Number of Active Student branches (Student branches who have reported required number of meetings during the year)
 - Two (2): Nagoya University and Shizuoka University
- Summary of Student branch activities student branch wise with attachment table / information
 - Nagoya University SB
 - Annual meeting (May 29, 2014)
 - First group work (July 22, 2014)
 - Second group work (November 19, 2014)
 - New member development activity
 - Shizuoka University SB
 - Young Researcher Workshop 2014 (October 31, 2014)
 - New member development activity

B.5 Affinity Group Activities

- GOLD
- WIE
- Life Member

None

B.6 Awards & Recognition Activities

- Award constituted by the section
 - IEEE Nagoya Section Student Awards of 2014 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai/Hokuriku Areas were given to 9 excellent student presenters at the Tokai Area Conference.
 - Student Research Presentation Awards in IEEE international conferences were given to 4 students.
 - IEEE Nagoya Section Excellent Student Awards were given at two universities: Meijo University: 8, Chubu University: 2.
 - IEEE Nagoya Section Young Researcher Award was given to one member.
- Award(s) received from R10
 - None.
- Award(s) received from IEEE HQ
 - None.

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)
 - None.
- Home Page of the section (give the URL and frequency which it is updated)
 - <http://ieee-nagoya.org/>

- Updated approx. several times a month.
- Other means of contacts with section members
 - Mailing lists are available for section officers and executive committees.
 - Mailing lists service by Japan Council is available for announcements of section annual meeting, encouragement of application to Senior Member and Fellow grade, call for award applications and technical activity.

B.8 Community Activities

- None.

B.9 Other Organizational Activities

- Section officer/executive committee meetings were held three times to exchange information on activities and discuss plans.

PART C - OTHERS

C.1 Relationship with National Societies

- 2014 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai/Hokuriku Areas were organized jointly with other national societies; IEICE, IPSJ, IEE, and ITE.
- Several technical meetings by other national societies were co-sponsored or cooperated.

C.2 Special Events

- IEEE Milestone Dedication Ceremony for “20-inch photomultiplier tubes” was held on November 5.
- Special lectures on “Voice Synthesis based on statistical model,” “Micro solid photonics,” and “Application of computer to electric power technology” were given by three new IEEE Fellows (Prof. Keiichi Tokuda, Dr. Takunori Taira, and Prof. Hisao Taoka, respectively).

C.3 Problems to be Anticipated

- Fortunately, IEEE has been holding a good status of membership retention. However, many national societies are facing the membership decreasing these years.

C.4 Best Practices of your section (which you would like share with other sections for the benefits of members)

- None.

PART D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans

- Enhancing the student activities.
- Increasing the membership.
- Nominations of members for Senior Member and Fellow of the Institute.
- Organizing technical lectures and symposium, workshops on topics of interest, in some cases in collaborations with other institutes.
- Making close collaborations with other professional organizations related to Electrical, Electronics, and Information Engineering. Nagoya Section will actively participate in the 2015 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai/Hokuriku

Areas to be held in autumn in 2015.

- Establishing a new award, Research Award
- Providing better services to the members.

D.2 Goals and Future Plans

- Establishing a LMAG.
- Establishing joint chapters
- Establishing a new chapter
- Establishing a new student branch
- Application for IEEE Milestone