IEEE Nagoya Section Annual Report 2020

PART A - SECTION SUMMARY

A.1 Executive Summary – (Please follow the format given below)

• Section Executive Committee Member List

(a) Officers:

Chair:

Dr. Masaaki Katayama (Professor, Nagoya University) e-mail: katayama@nagoya-u.jp

Vice Chair:

Dr. Suehiro Shimauchi (Professor, Kanazawa Institute of Technology) e-mail: shimauchi@neptune.kanazawa-it.ac.jp

Secretary:

Dr. Naoki Uchiyama (Professor, Toyohashi University of Technology) e-mail: uchiyama@tut.jp

Treasurer:

Dr. Shinji Yasui (Professor, Nagoya Institute of Technology) e-mail: yasui.shinji@nitech.ac.jp

Auditor:

Mr. Kuniaki Kondo (NGK Insulators, Ltd.) e-mail: kondok@ngk.co.jp

(b) Standing Committee Chairs:

Nomination Committee:

Dr. Hideyuki Uehara (Professor, Toyohashi University of Technology) e-mail: uehara@tut.jp

Membership Development Committee:

Dr. Atsushi Matsumoto (Senior Assistant Professor, Chubu University) e-mail: atsushi@isc.chubu.ac.jp

Technical Activities Committee:

Mr. Kunihiko Sasaki (DENSO Corporation) e-mail: kunihiko.sasaki.j8g@jp.denso.com

Student Activities Committee:

Dr. Daisuke Anzai (Associate Professor, Nagoya Institute of Technology) e-mail: anzai@nitech.ac.jp

Award Committee:

Dr. Tadahiro Wada (Professor, Shizuoka University) e-mail: wada.tadahiro@shizuoka.ac.jp

Chapter Operation Committee:

Dr. Takuji Tachibana (Professor, University of Fukui) e-mail: takuji-t@u-fukui.ac.jp

(c) Past Chairs:

2019-2020 Chair:

Dr. Naohiro Hozumi (Professor, Toyohashi University of Technology)

e-mail: hozumi@ee.tut.ac.jp

2017-2018 Chair:

Dr. Yutaka Ishibashi (Professor, Nagoya Institute of Technology)

e-mail: ishibasi@nitech.ac.jp

2015-2016 Chair:

Dr. Takeshi Furuhashi (Professor, Nagoya University)

e-mail: furuhashi@cse.nagoya-u.ac.jp

2009-2010 Chair, Milestone:

Dr. Masayuki Nagao (Professor, Toyohashi University of Technology)

e-mail: nagao@tut.jp

• Section Highlights

- (1) Nagoya Section recommended QR Code and Inverter Air Conditioner, for IEEE Milestone Award, and the applications were admitted by the Head Quarter of IEEE.
- (2) IEEE Nagoya Section Student Research Presentation Awards in IEEE international conferences were given to 13 students. The Award ceremony was held in March 2020.
- (3) IEEE Nagoya Section Student Awards were given to 6 excellent students who presented their research in 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai Area.
- (4) IEEE Nagoya Section Young Researcher Awards were given to an excellent young researcher in Nagoya Section. The award ceremony was held in December 2020.
- (5) A number of technical activities were organized and co-organized by Nagoya Section, and a total of 21 events including 3 sponsored events were held successfully in 2020.

• Major Events (International, National)

- (1) 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai Area was held in September 2020, and 6 excellent student presenters were selected for IEEE Nagoya Section Student Awards.
- (2) 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Hokuriku Area was held in September 2020.
- (3) 13 excellent students were awarded IEEE Nagoya Section Student Research Presentation Awards.
- (4) The award ceremony of IEEE Nagoya Section Young Researcher Award was held in December 2020, and an excellent young researcher was awarded the Young Researcher Awards

• Major Chapter Activities

- o AP-S Nagoya Chapter organized 1 technical meeting.
- o MAG-S Nagoya Chapter organized 2 technical meetings and 1 IEEE Distinguished Lecturer meeting.
- o MTT-S Nagoya Chapter organized 2 technical meetings.
- o ITS-S Nagoya Chapter organized 2 technical meetings.

• Major Student and Affinity Group Activities

- o Young Professional Affinity Group (YP) organized a YP meeting in November 2020.
- o Life Member Affiliate Group (LMAG) organized a technical meeting in November 2020.
- o Women In Engineering (WIE) organized an online meeting in June 2020.

- o Student Branch in Nagoya University organized two General Meetings in June and December. The Nagoya University Student Branch also joined 2020 IEEE Student Branch Leadership Training Workshop.
- Awards
 - o No member was awarded Fellow Grade.
 - o 12 members were awarded Senior Member Grade.

A.2 Financial Report – (Please follow the format given below)

- Summary (as per submitted on NetSuite)
 - o Total Receipts during the year 2020 were JY3,791,291 including the assessment and rebate of JY3,273,845 from IEEE HQ. The total disbursements amount to JY3,665,804.
- Any other financial activities
 - o None

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

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

November 2018: 1,345 November 2019: 1,319 November 2020: 1,268

The number of members of the Nagoya Section as of Oct. 2020 is as follows: (The numbers in parentheses are for Nov. 2019. All figures are from SAMIEEE.)

Fellow:	30	(33)
Senior Member:	108	(96)
Member:	965	(973)
Associate Member:	28	(25)
Student Member:	137	(192)
Total	1,268	(1,319)

 Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

o 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 the IEEE.

- o For encouraging Nagoya Section members to apply toward Fellow grade and Senior Member grade, an example of written application form as well as a letter of encouragement were posted on the Nagoya Section's Home Page, and sent to Nagoya Section members by using a Japan Council mailing list service.
- o Recruiting activities for IEEE membership were held at the sponsored and co-sponsored events.

B.2 Chapter Activities

• Total number of Chapters in the Section

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o Four (4), AP-S, MTT-S, MAG-S, ITS-S
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• Number of Chapters formed in the current year

o None

- Number of active Chapters (Chapters who have reported required number of meetings during the year)
 - o Four (4)
- Summary of Chapter activities (Chapter wise with attachment table/information)
 - AP-S Nagoya Chapter
 - (1) Technical Meetings:

February 20, 2020 IEEE AP-S Nagoya Chapter Special Lecture Shizuoka University Participants: 32

(2) Cooperation

None

(3) IEEE Distinguished Lecturer Lecture Meetings:

None

■ MAG-S Nagoya Chapter

(1) Technical Meetings:

January 24-25, 2020

IEEE Magnetic Society Nagoya Chapter, Young Researcher Meeting

SunHills Mikawawan

Participants: 35

(2) Cooperation:

September 28, 2020

227th The Magnetics Society Of Japan, Researcher Meeting

Online

Participants: 19

(3) IEEE Distinguished Lecturer Lecture Meetings:

March 4, 2019

October 21-22, 2020

MAG-33 Distinguished Lecturer Meeting

Prof. Mathias Kla"ui (Johannes Gutenberg-University Mainz)

Antiferromagnetic Insulatronics: Spintronics without magnetic fields and moving electrons

Prof. Masashi Shiraishi (Kyoto University)

Spins in Low-dimensional Materials Systems: Transport, Gate-control and Conversion

Participants: 58(10/21), 45(10/22)

■ MTT-S Nagoya Chapter

(1) Technical Lectures:

October 5, 2020

First Technical Lecture (Computational Dosimetry Assessment for Human Exposure and Product Safety)

Nagoya Institute of Technology, Online

Participants: 25

November 16-20, 2020

Second Technical Lecture (Workshop on Human Safety from Electromagnetic Fields)

Online

Participants: 31

(2) Cooperation:

April 23, June 4, July 16-17, September 24-25, October 22-23, November 19, 2020

The Technical Committee on Microwaves

Participants: 20(6/4), 11(7/16), 15(7/17), 12(9/24), 9(9/25)

January 23, 2020

13th JEMEA Workshop

Kyoto Academia Forum

May 22, 2020 11th JEMEA Lecture Keio University

November 5-6, 2020 14th JEMEA Symposium Online

(3) IEEE Distinguished Lecturer Lecture Meetings:

None

■ITS-S Nagoya Chapter

(1) Technical Lectures:

September 29, 2020 IEEE ITS Nagoya Chapter Lecture Meeting Online Participants: 40

December 25, 2020 IEEE ITS Nagoya Chapter Lecture Meeting Online

(2) Cooperation:

None

(3) IEEE Distinguished Lecturer Lecture Meetings:

None

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

- o Totally 21 events including 3 sponsored technical events in the area of antenna, magnetics, robot, vehicle, power engineering, education, etc. were held successfully.
- o 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	lecture	Jan. 16	IPSJ Tokai Branch Lecture Meeting
cooperation	symposium	Jan. 30	The 4th Energy System Symposium
cooperation	conference	Feb. 8	The 21th Annual Joint Master's Thesis Presentation on Communications and Related Engineering by Students of Three Universities in Tokai Area
cooperation	workshop	Feb. 16-17	The 48th Workshop of Tokai Chapter of Japan Society for Fuzzy Theory and Intelligent Informatics (The 48th Tokai Fuzzy Kenkyukai)
cooperation	conference	Mar. 8	Student Research Presentation 2019 at Hokuriku
cooperation	seminar	Mar. 9	IEEJ Tokai Section Young Researchers Seminar "Communications and Signal Processing Technology for big data usage"
cooperation	seminar	Jun. 17	The 3st WA-KA-TE Seminar (Seminar for young people) / The 1st Science- Cafe "Consider the power system and society where renewable energy becomes the main power source."
cooperation	conference	Jun. 26-28	2020 2nd International Conference on Computer Communication and the Internet (ICCCI)
cooperation	conference	Jul. 3	The 35th International Technical Conference on Circuits/Systems, Computers and Communications

cooperation	lecture	Aug. 18	The 5th Energy-Technology Academy
sponsored	conference	Sep. 3-4	2020 Tokai-Section Joint Conference on Electrical, Electronics, Information, and Related Engineering
sponsored	conference	Sep. 13	Joint Conference of Hokuriku Chapters of Electrical and Information Societies 2020
cooperation seminar		6 14	IEEJ Tokai Section Young Researchers Seminar
	Sep. 14	"Communications and Signal Processing Technology for IoT"	
cooperation	lecture	Oct. 15	IPSJ Tokai Branch Lecture Meeting
cooperation	lecture	Oct. 17	The 3rd lecture open to the public
cooperation	workshop	Nov. 7	Tokai-Regional Technical Workshop on Ubiquitous Computing
cooperation	workshop	Nov. 16	Workshop on Human Safety from Electromagnetic Fields
cooperation	conference	Nov. 16-19	2020 IEEE REGION 10 CONFERENCE (TENCON)
cooperation	lecture	Nov. 24	IPSJ Tokai Branch Lecture Meeting
sponsored	lecture	Dec. 5	IEEE Nagoya Section Young Researcher Award Winner Lecture
cooperation	symposium	Dec. 18	The 3rd Energy System Symposium

B.4 Students Activities

- Total number of Student Branches in the Section
 - o Two (2): Nagoya University and Fukui University
- Number of Student Branches formed in the current year
 - o None
- Section level student activities (student congress, paper and other contests, awards etc.)
 - o 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai Areas was held in September 2020, and IEEE Nagoya Section Student Awards were awarded to 6 excellent student presenters.
 - o 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Hokuriku Areas was held in September 2020.
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
 - o Two (2): Nagoya University, Fukui University
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
 - o Nagoya University SB
 - General Meeting (June 27, 2020) activity report, research exchange
 - General Meeting (December 28, 2020) workshop, research exchange
 - 2020 IEEE Student Branch Leadership Training Workshop (June 4, 2020)
 - o Fukui University SB
 - Lecture for high school students (October 25, 2020)

B.5 Affinity Group Activities

- Young Professional (YP)
 - o Cooperating The 11th IEEE Career Building Essay Contest (September 25, 2020)
 - o Cooperating IEEE Japan SYWL Workshop in Hiroshima (and Online) 2020 (October 17, 2020)
 - o Organizing IEEE Nagoya YP meeting 2020 (November 21, 2020)
- Women In Engineering (WIE)

- o Organizing IEEE WIE Online Gathering (May 16, 2020)
- o Organizing IEEE WIE Online Gathering (June 20, 2020)
- o Organizing IEEE Essay Contest (September 11, 2020)
- Life Member (LM)
 - o Organizing committee meetings (February 1, 2020)
 - o Organizing committee meetings (September 11, 2020)
 - o Organizing IEEE LMAG Nagoya Member Communication Meeting and Lecture (November 28, 2020)

B.6 Awards & Recognition Activities

- Award constituted by the Section
 - o IEEE Nagoya Section Student Awards of 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai Area were given to 6 excellent student presenters at the Tokai Area Conference.
 - o Student Research Presentation Awards in IEEE international conferences were given to 13 students.
 - o IEEE Nagoya Section Excellent Student Awards were given at six universities: Nagoya Institute of Technology, Mie University, Meijo University, Chubu University, Toyohashi University of Technology and Chukyo University.
 - o IEEE Nagoya Section Young Researcher Award was given to one young member.
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year
 - o Plaque of a Token of Appreciation in IEEE REGION 10 SYWL VIRTUAL CONGRESS'2020 was awarded to LMAG Chair Dr. Masashi Umeno.

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

- Newsletter (name and number of issues in the year)
 - o None.
- Home Page of the Section (give the URL and how often it is updated)
 - o https://ieee-jp.org/section/nagoya/
 - o Updating about every event.
- Other means of contacts with Section members including social media
 - o Mailing lists are available for section officers, executive committees, LMAG and YP core members.
 - 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 activities.

B.8 Industry Relations

- Membership growth and retention
 - o IEEE Nagoya Section sends request e-mails for new membership and retention of IEEE membership to all the members and non-renewal members, respectively, in February and April. However, when student members enter industry, unfortunately some of the members leave from the IEEE.
 - o Membership recruitment brochures are distributed to attendees when technical meetings are organized/cooperated by IEEE Nagoya Section.

- Activities for/with industrial members
 - \circ Chapter activities in Section B.2 and technical meetings in Section B.3 are held for industrial members as well as for academic members.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
 - o None.
- SIGHT Activities
 - o None.

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)"
 - o None.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
 - The IEEE Nagoya Section supported the special events of Life Member Affinity Group, Yang Professionals Affinity Group and Women In Engineering Affinity Group co-organizing special lectures and social events. These special events attract life members, young researchers and women engineers.
- Funding secured from the IEEE and external sources including sponsorships
 - o None

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
 - Two annual activities are sponsored by IEEE Nagoya Section together with national societies. Around 21 activities organized by national societies are financially/technically cooperated by IEEE Nagoya Section.
- Details of joint activities

Sponsored Activities

We have the following two joint activities every year:

- (a) Joint Conference of Institutes related to Electrical, Electronics, and Information Engineering in Tokai Area
- Sponsored together with IEEJ Tokai Branch, IEICE Tokai, IPSJ Tokai Branch, ITE Tokai, IEIJ Tokai, IEIJ Chubu, and ASJ (Acoustical Society of Japan) Tokai Chapter
- IEEE Nagoya Section Student Awards are given to several students every year in this
 conference.
- (b) Joint Conference of Institutes related to Electrical, Electronics, and Information Engineering in Hokuriku Area
 - Sponsored together with IEEJ Hokuriku Branch, IEICE Hokuriku, IPSJ Hokuriku Branch, ITE Hokuriku, IEIJ Hokuriku, SICE Hokuriku, IEIEJ Chubu, ASJ (Acoustical Society of Japan) Hokuriku Chapter, and JSMBE (Japanese Society for Medical and Biological Engineering) Hokuriku

Cooperation Activities

Several activities such as lectures, symposiums, and meetings organized by local national societies, e.g., IEICE Tokai, IPSJ Tokai Branch, SOFT (Japan Society for Fuzzy Theory and Intelligent Informatics) Tokai Branch, are held in cooperation with IEEE Nagoya Section.

- Benefit to IEEE members (for example discounts, access to technical information etc.)
 - o Discounts of registration fees
 - o Access to technical information
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)
 - Help in membership development by distributing the IEEE membership recruitment brochures to attendees
 - Cost saving by cooperation
 - o Improvement of IEEE's familiarity

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
 - IEEE Nagoya Section collaborates with the other IEEE Sections in Japan through IEEE Japan Council (JC).
- Joint activities with any other Section
 - Nagoya Section Young Professionals (YP) Affinity Group is co-organizing Career Building Essay Contest with IEEE Japan Council (JC), Tokyo Section YP, Kansai Section YP and WIE Affinity Groups.
 - o Nagoya Section Women In Engineering (WIE) organized a online meeting with other WIE.
 - Nagoya Section Student Branch (SB) is collaborating with Student Branch of other sections joining SBLTW.

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C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organizing technical, educational and professional activities
 - Several activities organized by society chapters within IEEE Nagoya Section are financially supported by IEEE Nagoya Section.
- Joint activities for membership development
 - o When the above activities are held, announcement of cooperation with IEEE Nagoya Section is made by the society chapters.
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

oNone.

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

o None.

C.6 Problems anticipated and suggestions for solutions, if any

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

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

- o Enhancing the activities of newly established Nagoya WIE Affinity Group.
- o Enhancing the activities of Student Branches.
- o Increasing the membership.
- o Nominations of members for Senior Member and Fellow of the Institute.
- o 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 2020 Joint Conferences of Institutes related to Electrical, Electronics, and Information Engineering in Tokai/Hokuriku Areas to be held in autumn in 2020.
- o Providing better services to the members.
- o Supporting activities of young members.

D.2 Goals and Future Plans

- Establishing joint chapters
- Establishing new chapters
- o Establishing new student branches
- o Application for IEEE Milestone

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

o None.

D.4 Business Plan for Sustainable Growth and Financial Stability.

o None.