For 2020

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PART A - SECTION SUMMARY

A.1 Executive Summary

• Section Executive Committee Member List

<Section Officer>

Chair Hideyuki TOKUDA
Vice Chair Masashi USAMI
Secretary Yasuhiro TAKISHIMA
Treasurer Hiromasa HABUCHI

< Executive Committee Members >

Chapter Operations Committee Chair Haruhiko OKUMURA, Fellow Nominations Committee Chair Yuichi TOHMORI, Membership Development Committee Chair Hiroshi NAKAMURA, Nominations Committee Chair Takuo TANEMURA, **Technical Program Committee Chair** Tetsuya KAWANISHI, **Publications Committee Chair** Hideaki TANAKA, Student Activities Committee Chair Mamiko INAMORI, **History Committee Chair** Hiroshi SUZUKI, Life Member Affinity Group Tokyo Chair Tadashi TAKANO, Young Professionals Chair Takashi YOSHIDA, Japan Council Women In Engineering Chair Natsuko NODA,

Section Appointing Executive Committee Member Masayuki SHIGEMATSU,

Past Tokyo Section Chair Iwao SASASE,
Past Tokyo Section Secretary Toshihiko SUGIE,
Past Tokyo Section Treasurer Yukitoshi SANADA

Section Highlights

- General Assembly: The IEEE Tokyo Section's Year 2020 General Assembly was held on April 3rd online.
- Event: Technical Program Committee of the Tokyo Section organized 8 lecture meetings. On December 15th IEEE Milestone ceremony was held in Tokyo to focus "First Operational Large-Scale Latent Fingerprint Identification System" and "First Commercial Digital Signal Processor Chip" developed by NEC.

- Management: The Tokyo Section Executive Committee Meetings of 2020 were held 4 times, April 3rd with 17 participants, June 3rd with 23 participants, September 30th with 20 participants and December 2nd with 32 participants. On July 22nd 2020 IEEE Tokyo and Shin-Etsu Joint Sections, Women In Engineering Affinity Group was established.
- <u>Membership Development:</u> Tokyo Section produced pin budges which are presented to members of commemorative years (5, 10, 20, 25, 30, and 40 years) for the sake of increasing the retention rate, and Tokyo Section also started to talk much with industries about increasing the elevation to Fellow/Senior members from industry.

• Major Events (International, National)

- On December 15th IEEE Milestone ceremony was held in Tokyo to focus "First Operational Large-Scale Latent Fingerprint Identification System" and "First Commercial Digital Signal Processor Chip" developed by NEC.
- On October 8th, 2020 LMAG-Tokyo 10th anniversary symposium & IEEE Day 2020 Celebration Party was held with LMAG officers in Kikai Shinko Kaikan and other 65 attendees in Zoom celebrated IEEE day together. There were 70 attendees in total.
- The IEEE Tokyo/Shin-etsu Joint Section WIE Kick-off event was held online on December 5th, 2020. The total number of participants was 34 including IEEE members.
- Tokyo Section held an event "17th TOWERS Workshop", an annual workshop operated by students based in Tokyo Section and gathering a variety of engineers on November 28th in 2020 online. (105 attendees)
- Tokyo SIGHT supported a lecture in IEEE Engineer Spotlight held on July 4th, 2020, (88 attendees), which had been announced and was viewed in an elementary school in Aomori Pref. where SIGHT engineers had provided one day lecture in 2018 and 2019

Major Chapter Activities

- Total number of events such as technical meetings held by Chapters in Japan is over 215.
- Chapter chairs participated in the Japan Council Chapter Operation Committee Meetings(online) held on June 15th and November 5th with all other Chapter chairs belonging to sections in Japan, where they discussed procedures of chapter operations and effective ways of information sharing between chapters and with other IEEE OUs.

• Major Student and Affinity Group Activities

- 8 Student Branches of Tokyo Section participated in the event "Student Branch Leadership Training Workshop" (SBLTW) online on 4th of June, 2020. This is an annual meeting of presentation and interaction among SB students from all areas of Japan, which gathered 72 attendees.
- Tokyo Section held "17th TOWERS Workshop", an annual workshop operated by students based in Tokyo Section and gathering a variety of engineers on November 28th in 2020 online (105 attendees).
- Tokyo Section SB web meeting on July 16th, 2020, where 6 Student Branches participated in a round-table discussion about their activities online.
- IEEE Student online gathering on October 24th, 2020, where 24 student members and 6 facilitators attended to mutually talk about life in universities, job hunting, etc. convivially.

• Tokyo YP held a STEP event on November 4th, 2020 in KDDI Research, Inc. with 18 attendees for technical presentation and discussion.

Awards

• Members of Tokyo Section received 4 Technical Field Awards and one IEEE recognition in 2020. In 2021 one member of Tokyo Section is to receive IEEE Medal (Edison Medal) and two members are to receive IEEE Technical Field Awards.

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

- Summary (as per submitted on NetSuite)
 - Due to COVID-19 many of onsite events were not executable which could make the transition of finance sluggish and increase surplus. However, Tokyo Section changed its policy of activities in the middle of the year onto the focus of MD/public relations, increase of high grade members, and so on, which has kept the financial activities positive and this investment is expected to be profitable also in the coming years.

IEEE
IEEE : Region 10 : Region 10 JPY
Income Statement
From Jan 2020 to Adjust 2020

Financial Row	Amount
Sales	
3.10 - Rebate from IEEE HQ	¥4,495,406.00
3.20 - Region Receipts	¥361,340.00
3.30 - Sections or Councils	¥2,113,348.00
3.32 - Receipts from MGA Board, other Major	¥180,000.00
Boards	•
3.34 - IEEE HQ & Societies	¥14,088,987.00
3.45 - Non-IEEE CB Account Interest	¥9,763.00
Total – Sales	¥21,248,844.00
Gross Profit	¥21,248,844.00
Overheads	
4.10 - Meetings & Social Events Expense	¥484,152.00
4.80 - Student Activities Expense	¥272,128.00
4.90 - Other Program Expenses	¥1,366,550.00
5.10 - Occupancy Expense	¥572,140.00
5.30 - Salaries Expense	¥1,669,095.00
5.50 - Support to Sections/Chapters Expense	¥15,241,182.00
5.60 - Other Management & General Expenses	¥949,989.00
Total – Overheads	¥20,555,236.00
Operating Profit	¥693,608.00
Net Profit/(Loss)	¥693,608.00

- Any other financial activities
 - Budget management was reinforced by monthly monitoring of executed activities of each committee and AGs. Total budget was revised in July, which enabled to shift the activity focus from onsite events to public relations activities and so on.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

• Total number of active members in the past 3 years is shown below. The table also contains numbers of each grade.

G 1	Number	Number	Number	
Grade	(12/27/2018)	(12/31/2019)	(12/31/2020)	
Life Fellow	209	202	208	
Fellow	124	130	121	
Life Senior Member	103	97	106	
Senior Member	466	491	504	
Life Member	369	337	351	
Member	5.520	5,501	5,385	
Associate	201	183	187	
Graduate Student Member	664	663	598	
Student	181	155	139	
Others (HM, PM, LA)	2	2	2	
Total	7,839	7,761	7,601	

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
- The Membership Development Committee (MDC) made every effort to enhance membership. The MDC distributed emails to renew membership and promote upgrading to Senior Members. In the timing of IEEE Day, it distributed an announcement of newly subscription campaign by email.
- MDC chair participated in Zoom meetings on April 24th and November 25th organized by JC-MD Coordinator and shared information to understand current issues and best practices in all Japan's sections.
- As a step to make IEEE more recognized in many events all over Japan, MD Coordinator had kept collaboration with chapters and Japan Office since 2019 to secure time slots for introduction of IEEE activities in the session of events and to install booths of IEEE promotion for distributing PR materials (MD kit) on the sites of the events. (However due to COVID-19 there was no event to distribute the materials in 2020.)
- 6members were newly selected as IEEE fellows from Tokyo Section in 2020: (Hideaki AOCHI, Hideaki ISHII, Itsuro MORITA, Jinhua SHE, Takatoshi TSUJIMURA, Shinji YUASA)
- Fellow Nominations Committee distributed emails to promote nominations for Fellow Members.

B.2 Chapter Activities

• Total number of Chapters in the Section is 38 as shown below:

#	Chapter	#	Chapter	
1	Signal Processing (SP-01)	20	Electronics Packaging (EP-21) [previous	
			name: Components, Packaging &	
			Manufacturing Technology (CPMT-21)]	
2	Broadcast Technology (BT-02)	21	Oceanic Engineering (OE-22)	
3	Antennas & Propagation (AP-03)	22	Control Systems (CS-23)	
4	Circuits & Systems (CAS-04)	23	Robotics and Automation (RA-24)	
5	Nuclear & Plasma Sciences (NPS-05)	24	Education (E-25)	
6	Vehicular Technology (VT-06)	25	Professional Communication (PC-26)	
7	Reliability (R-07)	26	Electromagnetic Compatibility (EMC-27)	
8	Consumer Electronics (CE-08)	27	Systems, Man & Cybernetics (SMC-28)	
9	Instrumentation & Measurement (IM-09)	28	Geoscience & Remote Sensing (GRS-29)	
10	Aerospace and Electronic Systems (AES-10)	29	Society on Social Implications of	
			Technology (SIT-30)	
11	Computational Intelligence (CIS-11)	30	Power & Energy (PE-31)	
12	Information Theory (IT-12)	31	Dielectrics & Electrical Insulation (DEI-	
			32)	
13	Technology and Engineering Management	32	Magnetics (MAG-33)	
	(TM-14)			
14	Electron Devices (ED-15)	33	Industry Applications (IA-34)	
15	Computer (C-16)	34	Power Electronics (PEL-35)	
16	Microwave Theory & Techniques (MTT-17)	35	Photonics (Formerly LEOS) (PHOT-36)	
17	Engineering in Medicine & Biology (EMB-	36	Solid-State Circuits (SSC-37)	
	18)			
18	Communications (COM-19)	37	Intelligent Transportation (ITS-38)	
19	Ultrasonics, Ferroelectrics & Frequency	38	Electronic Design Automation (CEDA-44)	
	Control (UFFC -20)			

- Number of Chapters formed in the current year is zero.
- Number of active Chapters (Chapters who have reported required number of meetings during the year) is 38 i. e. all the Chapters are active.
- Summary of Chapter activities (Chapter wise with attachment table/information)
- Total number of events such as technical meetings held by Chapters in Japan is over 215.
- Chapter chairs participated in the Japan Council Chapter Operation Committee Meetings (online) held on June 15th and November 5th with all other Chapter chairs belonging to Sections in Japan, where they discussed procedures of chapter operations and effective ways of information sharing between chapters and with other IEEE OUs.
- With the introduction of IEEE's TCS Fee in 2019, Chapter Operation Committee (COC) responded to the conclusion of MOU and sponsorship, especially for joint chapters. Tokyo Section approved 11 MOUs in total for TCS/FCS in 2020.

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
- Tokyo SIGHT supported a lecture in IEEE Engineer Spotlight held on July 4th, 2020, (88 attendees), which had been announced and was viewed in an elementary school in Aomori Pref. where SIGHT engineers had provided one day lecture in 2018 and 2019
- In total, 8 lecture meetings were held during the year of 2020, as follows:

- 1. June 5th, 2020, lecture online (Webex) with 65 participants, by Dr. Y. Shiroishi, Chief Architect, Hitachi, Ltd., R&D Group on "CPS-driven Social Innovation for Society 5.0"
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.123eng.pdf
- 2. July 27th, 2020, lecture at Kikai Shinko Kaikan and online (Zoom) with 85 participants by H. IMAOKA, Fellow, NEC on "Frontier of AI and face recognition technology"
- 3. August 28th, 2020, lecture online (Zoom) with 60 participants, by Dr. S. FUJIWARA Senior Distinguished Researcher, NTT on "Ultimate electronics using silicon single-electron devices"
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.125eng.pdf
- 4. September 14th, 2020, lecture online (Zoom) with 144 participants by Prof. K. Aizawa, The University of Tokyo on "Building a Movie Map Virtual Exploration in a City"
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.125eng.pdf
- 5. October 8th in 2020, LMAG-Tokyo's 10th Anniversary Symposium (Onsite/Online-Hybrid) with 7 participants (onsite: Kikai-Shinko Kaikan) and 63 attendees (online). Dr. H.Imai (Vice Chair of LMAG-Tokyo), Dr. H. Tokuda (Chair of Tokyo Section), Dr. T. Takano (Chair of LMAG-Tokyo), Prof. T. Fukuda (President of IEEE), Prof. A. Nishihara (IEEE R10 Director), some of LMAG chairs of other sections in Japan and Dr. Habara (LMAG-Tokyo's founding Chair) were the speakers.
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.126eng.pdf
- 6. November 16th in 2020, lecture online (Zoom) with 85 participants, by Prof. Masayuki Fujita, Department of Information Physics & Computing, The University of Tokyo on "Networked Autonomy" https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.127eng.pdf
- 7. December 7th in 2020, lecture online (Zoom) with 95 participants, by Dr. Kohtaro Asai, Technical Adviser, Mitsubishi Electric Corporation, Corporate R&D, Plannning & Administration Department, on "Video Coding: Development, Standardization and Expansion"
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.127eng.pdf
- 8. December 15th in 2020, commemorative lectures onsite/online-hybrid with 223 attendees in total.
 - Lecture 1: Dr. Isao Shirakawa (Japan Council History Committee Chair) on "IEEE Milestones in Electrical Engineering and Computing"
 - Lecture 2: Mr. Yukio Hoshino (Former NEC Security Systems Director) on "Research on NEC/AFIS"
 - Lecture 3: Mr. Masanori Hara (NEC 2nd Government and Public Solution Division) on "Looking back on the Practical Realization of Operational Large-Scale Latent Fingerprint Identification System"
 - Lecture 4: Dr. Takao Nishitani (Former NEC Multimedia Research Laboratories. Director and Former Tokyo Metropolitan University Professor) on "Basic Architecture of $\mu PD7720DSP$ "
 - Lecture 5: Mr. Yuichi Kawakami (NEC Capital Solutions Limited Adviser) on "Development History and Application of μPD7720DSP"
 - https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.127eng.pdf

B.4 Students Activities

• Total number of Student Branches in the Section is 13. The Student Branches are as follows:

University of Tokyo (1976), Tokyo Institute of Technology (1994), Yokohama National University (1995), Tokyo City University (2004), Tokyo Denki University (2005),

Meiji University (2007), Tokyo University of Science (2009),

Waseda University (2010), Chuo University (2012),

Tokyo University of Agriculture and Technology (2012),

University of Electro-Communications (2015).

Aoyama Gakuin University (2017)

- Number of Student Branches formed in the current year is zero.
- Section level student activities (student congress, paper and other contests, awards, etc.)
 - · Major Activities as follows:
 - ✓ 8 Student Branches of Tokyo Section participated in the event "Student Branch Leadership Training Workshop" (SBLTW) online on 4th of June, 2020. This is an annual meeting of presentation and interaction among SB students from all areas of Japan, which gathered 72 attendees.
 - ✓ Tokyo Section held an event "17th TOWERS Workshop", an annual workshop operated by students based in Tokyo Section and gathering a variety of engineers on November 28th in 2020 online. (105 attendees)
 - ✓ Tokyo Section SB web meeting on July 16th, 2020, where 6 Student Branches participated in a round-table discussion about their activities online.
 - ✓ IEEE Student online gathering on October 24th, 2020, where 24 student members and 6 facilitators attended to mutually talk about life in universities, job hunting, etc. convivially.
 - ✓ In collaboration with Tokyo YP, a STEP event was held on November 4th, 2020 in KDDI Research, Inc. with 18 attendees for technical presentation and discussion.
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year) is 7.
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
 - The student branch of the University of Electro-Communications released a video material of a lecture on LaTeX on October 30th.
 - The student branch of Tokyo University of Science had a web meeting on July 4th.
 - The student branch of Meiji University had a web meeting on October 24th.
 - The student branch of Tokyo Institute of Technology had two explanatory sessions for recruiting officers on November 26th and December 24th.

B.5 Affinity Group Activities

• Young Professional (YP)

Tokyo Section YP continued to have varied activities with much enthusiasm. Major activities are as follows:

- 1. Tokyo YP Kick-off Meeting was held on February 9th, 2020 at the Tokyo Metropolitan University, Tokyo with 9 attendees for discussion of action plan and YP structure.
- 2. In IEEE Engineer Spotlight lecturers from YP presented on web twice. June 7th, 2020, 109 attendees, and July 4th, 2020, 88 attendees.
- 3. Idea Contest in Japan gathered 8 applications until the deadline on July 8th, 2020. Tokyo Section funded JPY 38,500 (tentative).
- 4. Tokyo YP recommended 3 applicants to IEEE YESIST12 2020.
- 5. To R10 SYWL Congress (online), 3YP member from Tokyo Section attended on September 19th October 4th, 2020.
- 6. Essay Contest on career-up visions gathered 11 applications until August 31st, 2020. Award Ceremony was held on October 25th, 2020. https://ieee-jp.org/section/tokyo/about/yp/activity/12th-essaycontest.html (Japanese only)
- 7. Tokyo YP supported Japan SYWL Workshop in Hiroshima on October 17th, 2020 on theme "Make a new normal (We change the future)", where 43 attendees on-site and online discussed their experience during the COVID-19 and make plans for the future in 10 groups.
 - https://www.ieee-jp.org/japancouncil/affinitygroup/SYWL2020/
- 8. Tokyo YP held a STEP event on November 4th, 2020 in KDDI Research, Inc. with 18 attendees for technical presentation and discussion.

• Women In Engineering (WIE)

- On July 22nd, 2020 IEEE Tokyo and Shin-Etsu Joint Sections, Women In Engineering Affinity Group was established.
- The IEEE Tokyo/Shin-etsu Joint Section WIE Kick-off event was held online on December 5th, 2020. This event was organized by the newly launched IEEE Tokyo/Shin-etsu Joint Section WIE and co-organized by IEEE Tokyo Section, IEEE Shin-etsu section, IEEE JC WIE, other Section WIEs, Tokyo YP, and Tokyo SAC. The total number of participants was 34 including IEEE members.

• Life Member (LM)

- Tokyo Section LMAG continues to work very actively. In 2020, it had many lecture meetings and visits to attractive sites. Major activities are as follows:
 - 1. April 3rd, 2020: LMAG Annual General Assembly online (WebEx) with 24 attendees
 - https://www.ieee-jp.org/section/tokyo/lmag/newsletter/2020/28 e.pdf
 - 2. April 5th, 2020: Executive Committee Meeting online (Zoom) with 3 Officers
 - 3. May 21st, 2020: Apply for IEEE LMAG Achievement Award (Tokyo Section endorsement)
 - 4. June 30th in 2020: Published LMAG Newsletter No. 28
 - "Address of Prof. T. Takano, Chair, In the 2020 Annual General Assembly of IEEE LMAG-Tokyo", etc.
 - https://www.ieee-jp.org/section/tokyo/lmag/newsletter/2020/28 e.pdf
 - 5. June 27th, 2020: Lecture (30 participants) at Kikai Shinko Kaikan & on Zoom (85 attendees) "Frontier of AI and face recognition technology" by Dr. Hitoshi Imaoka, NEC.

- 6. November 29th in 2019: Technical Tour was with 43 participants on September 27th, 2020: IEEE R10 SYWL Congress 2020/Life Members Track online (WebEx) Track Chair: Rajendra K. Asthana (Chair LM Committee Region 10)
- 7. October 8th, 2020: LMAG-Tokyo 10th anniversary symposium & IEEE Day 2020 Celebration Party, LMAG officers in Kikai Shinko Kaikan and other 65 attendees in Zoom celebrated IEEE day together. Total 70 attendees.

https://ieee-jp.org/section/tokyo/en/lmag-tokyos-10th-anniversary-symposium-with-ieee-day-celebration.html

https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.126eng.pdf

- Tokyo Section LMAG issued three newsletters:
 - \checkmark No. 28 on June 30th
 - ✓ No. 29 on October 30th
 - ✓ No. 30 on December 27th

B.6 Awards & Recognition Activities

- Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year are as follows:
 - 1. [IEEE Medal 2021] IEEE Edison Medal
 - "For pioneering contributions to the concept, physics, and development of the vertical-cavity surface-emitting laser."
 - Kenichi Iga (Tokyo Institute of Technology)
 - 2. [IEEE Technical Field Awards 2021] IEEE Control Systems Award
 - "For contributions to synthesis theory of control systems and its applications to manufacturing devices and systems."
 - Hidenori Kimura (RIKEN)
 - 3. [IEEE Technical Field Awards 2021] IEEE Andrew S. Grove Award "For pioneering and sustained contributions to high-density, three-dimensional flash memory."
 - Hideaki Aochi, Ryota Katsumata, and Masaru Kito (KIOXIA)
 - 4. [IEEE Technical Field Awards 2020] IEEE Richard Harold Kaufmann Award "For pioneering contributions to the advancement of sensorless vector control of AC drives and multilevel inverters for industrial applications" Kouki Matsuse (Meiji University)
 - 5. [IEEE Technical Field Awards 2020] IEEE Frederik Philips Award "For leadership in the development and materialization of human-centric IoT technology in the electronics industry."
 - Kazuo Yano (Hitachi)
 - 6. [IEEE Technical Field Awards 2020] IEEE Innovation in Societal Infrastructure Award
 - "For contributions to big data collection and analytics of real-world problems with advanced data engineering technologies"
 - Masaru Kitsuregawa (NII)
 - 7. [IEEE Technical Field Awards 2020] IEEE Nikola Tesla Award "For contributions to big data collection and analytics of real-world problems with advanced data engineering technologies"
 - Akira Chiba (Toukyou Institute of Technology)
 - 8. [IEEE Medal 2020] IEEE Robert N. Noyce Medal

"For global executive leadership in CMOS technology development, and for standardization of design methodology and its impact on the semiconductor industry."

Susumu Kohyama (K. Associates)

9. [IEEE Region 10 SYWL Congress Cultural Contest] The Runner-up Award "For a live dance performance to the tune of a traditional Japanese song called "Tankoubushi" played with a traditional Japanese instrument called "Sanshin", a kind of guitar with three strings"

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

- Newsletter
 - The Publications Committee issued a newsletter named "Tokyo Bulletin" Eight times during the year of 2020.

https://ieee-jp.org/section/tokyo/en/report/bulletin.html

- Home Page of the Section
 - Tokyo Section home page has been updated with much effort a couple of times each month.

https://ieee-jp.org/section/tokyo/en/

- Other means of contacts with Section members including social media
 - Besides the bulletin, the information on professional and technical meetings was timely distributed to members by IEEE eNotice (e-mail).
 - The Publications Committee also submitted 3 articles to the R10 Newsletter in 2020. http://www.newsletter.ieeer10.org/

B.8 Industry Relations

- Membership growth and retention
 - Tokyo Section has collaboration with Japan Council Industry Promotion Committee (IPC) to share the current situation of companies regarding IEEE activities and to discuss the way of expanding opportunities for companies to recognize and be engaged in IEEE.
 - Tokyo Section started to talk much with industries about increasing the elevation to Fellow/Senior members from industry. 11 major organizations were selected and some delegates from Tokyo Section talked with persons of those organizations on the status of IEEE Fellows/Senior Members in their organizations and what kind of measurers they can take to increase the Fellows/Senior members.
- Activities for/with industrial members
 - Several Industry members from the Tokyo Section participated in "IEEE Metro Area Workshop (MAW) in Hiroshima 2020", for a purpose to activate the industry relation, organized by IEEE Hiroshima Section. The workshop was held on October 16th, 2020 on Hotel Hiroshima Garden Palace Hiroshima-shi and online.

B.9 Humanitarian Technology Activities

• Humanitarian Technology related activities supported by the Section including collaboration with other OUs.

 Tokyo SIGHT supported a lecture in IEEE Engineer Spotlight held on July 4th, 2020, (88 attendees), which had been announced and was viewed in an elementary school in Aomori Pref. where SIGHT engineers had provided one day lecture in 2018 and 2019

B.10 Community Activities

- IEEE Social activities
 - Tokyo Section had a celebration for newly selected IEEE Fellows on December 2nd, 2020.
 - Tokyo Section held LMAG 10th anniversary ceremony and IEEE Day celebration on October 8th, 2020. 5 members in Kikai Shinko Kaikan and other 65 attendees in Zoom are celebrating IEEE day together.

https://ieee-jp.org/section/tokyo/en/lmag-tokyos-10th-anniversary-symposium-with-ieee-day-elebration.html

https://ieee-jp.org/section/tokyo/adm/info/bulletin/No.126eng.pdfs.

PART C - OTHERS

C.1 Special Events

• IEEE DAY CELEBRATION PARTY

Tokyo Section held LMAG 10th anniversary ceremony and IEEE Day celebration on October 8th, 2020. 5 members in Kikai Shinko Kaikan and other 65 attendees in Zoom are celebrating IEEE day together.

• IEEE Milestone Ceremony
On December 15th IEEE Milestone ceremony was held in Tokyo to focus "First
Operational Large-Scale Latent Fingerprint Identification System" and "First
Commercial Digital Signal Processor Chip" developed by NEC.

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

• Tokyo Section along with Japan Council supported the cooperation agreements between IEEE and 3 national academic societies and plans to make re-cooperation between IEEE and 7 other national academic societies. Joint activities are mainly technical conferences organized collaboratively. Benefit to IEEE members is discounted subscription fee and participation fee, while benefit to section is enhancement of IEEE's presence to Japanese society.

https://www.ieee.org/about/corporate/agreements/regional.html

- agreement: IEICE/ISS, IPSJ, SICE
- planning to make agreement: IEEJ, IEICE, IEIJ, ITE, JSAP, JSSPRM, MSJ,
 - ✓ The Institute of Electronics, Information and Communication Engineers/ Information & Systems Society (IEICE/ISS)
 - ✓ Information Processing Society of Japan (IPSJ)
 - ✓ The Society of Instrument and Control Engineers (SICE)
 - ✓ The Institute of Electrical Engineers of Japan (IEEJ)
 - ✓ The Institute of Electronics, Information and Communication Engineers (IEICE)
 - ✓ The Illuminating Engineering Institute of Japan (IEIJ)
 - ✓ The Institute of Image Information and Television Engineers of Japan (ITE)
 - ✓ The Japan Society of Applied Physics (JSAP)
 - ✓ The Japan Society for Science Policy and Research Management (JSSPRM)
 - ✓ Magnetics Society of Japan (MSJ)

C3. Collaboration with other IEEE Sections

- Tokyo section had collaborative activities with other sections in Japan such as MAW2020 and Japan SYWL workshop held in Hiroshima on October 16th and 17th.
- Tokyo Section attended "secretaries meeting" proposed by Japan Council in 2020 for the sake of sharing information and discussion of common concerns among 9 sections in Japan. In 2020 two meetings were held: September 25th and November 25th, and the main topic was how to motivate IEEE members to elevate higher degrees such as Fellow and Senior members. According to the discussion of these meetings it was decided to provide memorial medal to new senior members in every section every year.
- Tokyo Section participated in the discussion with Japan Council and other sections in Japan on new activities for education. To promote EA continuously, after two preparatory meetings (June 22nd, and July 23rd, 2020), EA coordinator was nominated in Japan Council on July 31st, 2020 and EA Group officially started working. The first EA meeting was held on October 19th, 2020 with 14 attendees (Webex). Tokyo Section designated a delegate for this activity.
- For the management sake, chairs and other delegates participated in joint meetings organized by Japan Council, which includes SAC, MDC, and HC to share information and discuss common subjects with other sections.

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

- Tokyo Section summarized and updated the MOU approval procedures with COC for chapters in Tokyo Section and joint chapters in Japan to accommodate the introduction of new co-sponsorship policy (TCS Fee).
- Tokyo Section approved 11 MOUs in total for TCS/FCS in 2020.

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

- Tokyo Section referred operational information guide for membership development officers in sections corresponding to IEEE URL (website) revision 2018 in Japanese released by Japan Council.
- Tokyo Section started to utilize a new office tool "Garoon" in 2019 for the sake of information sharing, communication promotion, expediting discussion and decision, optimization of office work effort, and so on among the members of the executive committee. In 2020 Tokyo Section extended its use to more of committees and chapters by distributing ID account.
- For online communication, Tokyo Section started to use "Zoom" from May 2020 in collaboration with Japan Council.
- Budget management was reinforced by monthly monitoring of executed activities of
 each committee and AG. Total budget was revised in July, which enabled to shift
 the activity focus from onsite events to public relations activities and so on.

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

- Reporting, communication and decision-making is still to be improved for smooth activities, perhaps by system automation, procedure optimization, modifying role assignment, and so on.
- Due to COVID-19, the conventional method to hold events needs to change. In 2020 online or onsite-online hybrid types of events were tried and there were more participants in many cases. However, some problems are still to be solves such as deep interaction, sub-group discussion, direct experience on demonstration, and onsite tours. Establishing common VR platform which enables us to pseudo-experience the meeting and tours may be one solution.

PART D - GOALS AND PLANS

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

- To encourage and support YP, LMAG and WIE joint activity to build a cross generation network.
- To promote support of Japan Council's operation and develop closer ties with other sections in Japan.
- To support Student Brunch activities in corporation with R10 and support further establishment of new Student Branches in Tokyo Section.

D.2 Goals and Future Plans

- Membership recruitment and retention
- To increase the relationship with IEEE and industry members, and to provide benefit for industry members as well as academic members
- To increase management efficiency and effectiveness
- To ensure the sustainable growth and financial stability considering currency exchange rate and membership
- To enhance collaboration:
 - · Regional communities and other non-IEEE societies
 - · Other IEEE Sections (joint activities with neighboring sections)
- Comprehensively analyze the opinion of members and various information and make use of it in section activities.

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

• It is known that increasing fellow and senior grade members is effective for membership retention. For that purpose, it would be necessary that their qualifications be even more respected and attractive. IEEE may need to add valuable privileges to those members in extensive scenes of IEEE activities, e. g. IEEE invites more fellows/seniors to major IEEE conferences/events, or IEEE takes measures to make their presence higher to public, local/global communities, government and so on.

- For the retention and recruitment of industries, it may be effective to make more benefits to those organizations with a certain number of members, e. g. price discount for those in IEEE events.
- Point accumulation system for voluntary work or participation in IEEE activities may be useful for membership retention.
- It would be effective to make tighter relationship with industries to make rankings of the organizations open to public every year according to their contributions to IEEE, e. g. number of members, number of participants to IEEE events, special support to activities, and so on, in addition to presenting awards to them.

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

- Selling tools and data for research use may be another source of income. They may
 be made by IEEE or provided by IEEE members. For example, AI model of proposed
 technologies and bigdata for public use are really valuable for many researchers as
 benchmark resources.
- Returning more portion of membership fee to local organizations (councils/sections) is very effective to enhance their activities. Particularly office management only by volunteers or few employees is very tough work for councils or sections with a large number of members.

Photograph



Photo 1. LMAG-Tokyo $10^{\rm th}$ Anniversary and IEEE DAY Celebration Party in Tokyo on October $8^{\rm th}$



Photo 2. IEEE Milestone Ceremony on December 15th in NEC, Tokyo

Membership period and Badge color	Badge face	Membership period and Badge color	Badge face
5 Years Blue	♦ IEEE	25 Years Yellow	 IEEE
10 Years Purple	♦IEEE	30 Years Red	 IEEE
20 years Green	◆IEEE	40 Years Black	 ●IEEE

Photo 3. Commemorative Pins for long staying members