

IEEE Sapporo Section Annual Report 2023

February 6, 2024

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List
 - Chair: Hajime Igarashi
 - Vice Chair: Kunimasa Saitoh
 - Secretary/Treasurer: Koichi Kobayashi
 - Auditors: Takeshi Fujisawa, Tatsuya Kashiwa
 - Chair of Fellow Nomination Committee: Naoto Yoshimoto
 - Chair of Membership Development Committee: Hirofumi Sanada
 - Chair of Student Activities Committee: Mianxiong Dong
 - Chair of Publications Committee: Tetsuya Asai
 - Chair of Nominating Committee: Kunitoshi Motoki
 - Chair of Technical Program Committee: Hiroshi Tsutsui
 - Chair of Award Committee: Tetsuya Asai
 - Other Executive Committee Members: Kiyohiko Itoh, Yuichi Fujino, He Li, Miki Haseyama, Kaoru Sumi, Takeo Ohgane, Toshihiko Nishimura
 - Student Representative: Kyotaro Kunii
- Major Events (National)
 - 10 technical meetings were delivered.
 - We co-sponsored a domestic conference named 2023 Hokkaido-Section Joint Convention of Institutes of Electrical and Information Engineers
 - We organized IEEE CASS Sapporo Workshop on Circuits and Systems in collaboration with IEEE CAS Society and CASS Japan and Korea Chapters.
 - We organized 25th Anniversary Lecture of IEEE Sapporo Section.
- Major Student and Affinity Group Activities
 - Hokkaido University and Muroran Institute of Technology Student Branches organized one special networking session in Hokkaido-Section Joint Convention of Institutes of Electrical and Information Engineers to exchange their experiences in university life. This session was co-organized with IEICE Muroran Institute of Technology Student Branch.
 - Hokkaido University and Muroran Institute of Technology Student Branches co-organized a domestic symposium for students named IEICE Hokkaido Section SAC Internet Symposium with IEICE Hokkaido Section Student Activity Committee and IEICE Muroran Institute of Technology Student Branch.
 - Hokkaido University and Muroran Institute of Technology Student Branches jointly organized Student Branch Joint Workshop in collaboration with Sapporo Section YP. This workshop was held concurrently with the 3rd Hokkaido Young Professionals Workshop.
 - Muroran Institute of Technology Student Branch organized/co-organized 30 technical meetings/lectures. Furthermore, the Darrel Chong Student Activity Award was presented to MITSB by SAC. Our Counsellor, Prof. Mianxiong Dong, was presented with the Outstanding Student Branch Counsellor Award.
 - Hokkaido University Student Branch co-organized ten technical meetings and one workshop.
 - Sapporo Section WIE organized eleven technical meetings/lectures and two workshops/events.
 - Sapporo Section YP organized/co-organized 20 technical meetings/lectures. Furthermore, two young professionals were awarded by YP.
 - Sapporo Section LMAG co-organized 12 technical meetings and held two committee meetings.
- Awards
 - We organized the following two types of student awards.
 - IEEE Sapporo Section Student Paper Contest
 - IEEE Sapporo Section Student Paper Awards

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

- Summary (as per submitted on NetSuite)
 - Income: JPY 1,110,584
 - Rebate from IEEE HQ JPY 642,562
 - Region 10 Assessment JPY 578,773
 - Non-IEEE CB Account Interest JPY 24
 - Expense: JPY 1,428,965
 - Meetings & Social Events Expense JPY 0
 - Educational Activities Expense JPY 382,404
 - Student Activities Expense JPY 38,895
 - Grants & Awards JPY 130,000
 - Other Program Expenses JPY 361,712
 - Travel Expense JPY 0
 - Support to Sections/Chapters Expense JPY 490,962
 - Other Management & General Expenses JPY 24,992
 - Cash on Hand at Beginning of Year: JPY 2,726,562
 - Cash on Hand at End of Year: JPY 2,818,956
- Any other financial activities (IEEE NextGen Banking)
 - Income: USD 0.06
 - Interest USD 0.06
 - Expense: USD 0
 - Cash on Hand at Beginning of Year: USD 3,289.14
 - Cash on Hand at End of Year: USD 3,289.20

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.
 - End of 2021: 323
 - End of 2022: 331
 - End of 2023: 333
- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members
 - 10 technical meetings
 - Support to new student members

B.2 Chapter Activities

- Total number of Chapters in the Section
 - No chapters other than joint chapters.
- Number of Chapters formed in the current year
 - 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

The following 10 speakers were invited as educational/technical programs.

1. Schedule: Jun. 5, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Introducing extended finite element approaches in analysis of high-frequency electromagnetic devices
 - Lecturer: Dr. Shingo Hiruma, Kyoto University, Japan
2. Schedule: Jun. 7, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: What is the difference in how to work at Japanese or non-Japanese company as engineer?
 - Lecturer: Dr. Kenji Kawano, Texas Instruments, Japan
3. Schedule: Aug. 4, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Electromagnetic field analysis of accelerator magnets
 - Lecturer: Dr. Kengo Sugawara, Kindai Technology, Japan
4. Schedule: Aug. 29, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: What's easy and what's hard in keeping control systems security
 - Lecturer: Dr. Kenji Sawada, The University of Electro-Communications, Japan
5. Schedule: Oct. 28, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Toward Automated Design of Electrical Equipment Using Machine Learning
 - Lecturer: Dr. Takahiro Sato, Muroran Institute of Technology, Japan
6. Schedule: Oct. 28, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: 3D Topology Optimization of Electrical and Electronic Equipment and Future Prospects
 - Lecturer: Dr. Yoshitsugu Otomo, Nagasaki University, Japan
7. Schedule: Oct. 28, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Structural Techniques for Air-Core Planar Inductors and Load Testing Methods for Transformers

- Lecturer: Dr. Koji Orikawa, Hokkaido University, Japan
- 8. Schedule: Oct. 28, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Study on high-performance computation in the field of numerical linear algebra
 - Lecturer: Dr. Takeshi Fukaya, Hokkaido University, Japan
- 9. Schedule: Oct. 28, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Imagine the future of system control 25 years from now, brought about by IoT in about 20 minutes
 - Lecturer: Dr. Ryosuke Adachi, Yamaguchi University, Japan
- 10. Schedule: Nov. 13, 2023, with Sapporo Section LMAG, WIE, Hokkaido University and Muroran Institute of Technology Student Branches
 - Title: Human-in-the-loop control system enhanced with human understanding/guidance
 - Lecturer: Dr. Masaki Inoue, Keio University, Japan

Sapporo Section co-sponsored the following conference.

1. We co-sponsored a domestic conference named 2023 Hokkaido-Section Joint Convention of Institutes of Electrical and Information Engineers.

B.4 Students Activities

- Total number of Student Branches in the Section
 - Two student branches (Hokkaido University and Muroran Institute of Technology)
- Section level student activities (student congress, paper and other contests, awards etc.)
 - IEEE Sapporo Section Student Paper Contest
We awarded eight excellent student presenters at Hokkaido-Section Joint Convention of Institutes of Electrical and Information Engineers.
 - IEEE Sapporo Section Student Paper Awards
We awarded five excellent student authors whose papers were published in the IEEE Transactions, Journals, and/or Proceedings.
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year)
 - Two student branches (Hokkaido University and Muroran Institute of Technology)
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
 - In 2023, Student Branches in Hokkaido University and Muroran Institute of Technology organized one special networking session in Hokkaido-Section Joint Convention of Institutes of Electrical and Information Engineers to exchange their experiences in university life. This session was co-organized with IEICE Muroran Institute of Technology Student Branch. Also, ten technical meetings were jointly held with Sapporo Section.

B.5 Affinity Group Activities

- Young Professional (YP)
 - 20 technical meetings were held, including the 3rd Hokkaido Young Professionals Workshop.
 - 2023 IEEE Sapporo Section Young Professionals Awards
Two young professionals were respectively awarded “IEEE Sapporo Section Young Professionals Best Researcher Award” and “IEEE Sapporo Section Young Professionals Best Paper Award”.
- Women In Engineering (WIE)
 - Ten technical meetings were jointly held with Sapporo Section.
 - One event for female students support was held.
 - One technical meeting jointly held with Future University Hakodate.
 - IEEE Sendai WIE 6th anniversary event was jointly held with WIE Sendai Section.
 - WIE 2023 was jointly held.
- Life Member
 - Twelve technical meetings were jointly held with Sapporo Section.
 - General Assembly and Board Meeting were held.
 - Attendance of online R10 LMAG meets of 2023 on Feb. 26 and Dec. 10.

B.6 Awards & Recognition Activities

- Award constituted by the Section
 - 2023 IEEE Sapporo Young Professionals Awards
Two young professionals were respectively awarded “IEEE Sapporo Young Professionals Best Researcher Award” and “IEEE Sapporo Young Professionals Best Paper Award”.

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

- Home Page of the Section (give the URL and how often it is updated)
 - Section’s web page:
<https://www.ieee-jp.org/section/sapporo/>
 - Sapporo Section WIE:
<https://scrapbox.io/WIE-Sapporo/>
 - Sapporo Section YP:
<https://r10.ieee.org/sapporo-yp/>
 - Student Branch at Hokkaido University
<https://csw.ist.hokudai.ac.jp/ieee/>
 - Student Branch at Muroran Institute of Technology
http://www3.muroran-it.ac.jp/enes/student_branch/
- Other means of contacts with Section members including social media
 - eNotice

B.8 Industry Relations

None.

B.9 Humanitarian Technology Activities

None.

B.10 Community Activities

None.

PART C - OTHERS

C.1 Special Events

None.

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

None.

C.3. Collaboration with other IEEE Sections

None.

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

None.

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

None.

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

None.

PART D - GOALS AND PLANS

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

We are planning to organize technical lectures, symposiums, workshops on topics of interests. In some cases, these might be in collaborations with other institutes.

D.2 Goals and Future Plans

- Increasing the membership
- Enhancing the student activities
- Nominations of members for Senior Member and Fellow of the Institute
- Providing better services to the members
- Exploring the possibility of new student branches

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

We do not have any actual ideas. We would like to discuss this issue in the section.

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

We do not have any actual plan yet. We would like to discuss this issue in the section.