

Region 10 Shin-etsu Section Report

PART A - SECTION SUMMARY

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

- Section Executive Committee Member List
 - ✓ Chair: Keizo Kato, Niigata University
 - ✓ Vice-chair: Toshiro Sato, Shinshu University
 - ✓ Secretary: Minseok Kim, Niigata University
 - ✓ Treasurer: Isao Nanbu, Nagaoka University of Technology
 - ✓ Past-chair: Kiyoshi Ohishi, Nagaoka University of Technology
 - ✓ Membership Development Chair: Kenichi Itoh, Niigata Institute of Technology
 - ✓ Student Activities Chair: Shogo Muramatsu, Niigata University
 - ✓ Nominations Chair: Masahiro Iwahashi, Nagaoka University of Technology
 - ✓ Technical Program Chair: Tadashi Tsubone, Nagaoka University of Technology
- Section Highlights
 - ✓ 4 board meetings
 - ✓ 4 co-sponsored invited lectures
 - ✓ 3 IEEE sessions in coordination with IEICE and IEEJ where IEEE Shin-etsu Section and SSB presented various awards to 4 excellent students.
- Major Events (International, National)
 - ✓ International Events
 - ✓ Domestic Events
 - ◇ 4 board meetings: 6/4, 9/26, 11/19, 12/25
 - ◇ IEEE sessions: 1 oral and 1 poster sessions on 9/26
 - ◇ 4 co-sponsored invited lectures: 10/31



< IEEE session award ceremony (2020/9/27), all presentations done online due to onsite gathering restrictions relating to COVID-19 pandemic situation.

- Major Chapter Activities
Shin-etsu Section chapter (MAG-33) organized and/or co-sponsored 4 technical meetings, 2 SSB presentation sessions, and 1 distinguished lecture event in 2020.
- Major Student and Affinity Group Activities

Shin-etsu SSB: The IEEE Shin-etsu Section Student Branch (SSB) composed of students from Shinshu Univ., Nagaoka Univ. of Tech., and Niigata Univ. officially started in Jan. 2019, and is actively providing opportunities to share and exchange information not limited to research and promote friendship within the local communities. Because of travel restrictions of the COVID-19 pandemic situation, members did not visit campuses for membership development events this year, but participated online in the IEEE JC-

SAC SBLTW 2020 (6/4) and the 2020 Shin-Etsu Chapter of the Institute of Electronics, Information, and Communication Engineers (IEICE), IEEE Shin-etsu Section oral and SSB poster sessions (9/26).

- Awards
 - ✓ Young Researcher Paper Awards to 1 student
 - ✓ Young Researcher Presentation Awards to 1 student
 - ✓ Section Student Branch Awards to 1 student
 - ✓ Best Poster Presentation Awards to 1 student

Tokyo/Shin-etsu Joint Section WiE affinity group: The Tokyo and Shin-etsu Sections filed a joint petition to form the Tokyo/Shin-etsu Joint Section Women in Engineering (WiE) affinity group and received the approval in 2020. The IEEE Tokyo/Shin-etsu Joint Section WIE Kick-off event was held online on Dec. 5, 2020 with the support of co-organizers IEEE JC WIE, other Section WIEs, Tokyo YP, and Tokyo SAC. Because of the pandemic situation restrictions, the event was done successfully online and attracted participants of various ages ranging from high school to working professionals and included a good balance of men and women. The Shin-etsu WiE liaison also participated in the IEEE TOWERS event online to assist with judging and presenting the WiE award to an exceptional female presenter (11/28).

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

- Summary (as per submitted on NetSuite)

Our balance at the end of 2019 was 941,237 yen. Income for 2020 totaled 1,822,977 yen. Expenses in 2020 were 527,032 yen, resulting in a balance at the end of 2020 of 1,295,945yen, which is about US\$12,342 at an exchange rate of 105 yen/\$.

- Any other financial activities

No activities.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

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

Grade	2/2021	2/2020	2/2019
Student Member	6	16	15
Senior Member	13	13	10
Member	166	170	158
Life Senior	1	1	1
Life Member	8	6	6
Life Fellow	2	3	1
Graduate Student Member	27	25	45
Fellow	2	2	4
Associate Member	5	9	10
Affiliate	7	7	8

Total: 237 252 258

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

In order to increase membership, we offer awards to student members and encourage professional members to apply for higher membership status. To this end, some of our executive committee members applied and were accepted for Senior Member status. These members can encourage other members to apply by outlining the application procedure and helping with the required documents. From 2021, a memorial medal will be awarded to every new senior member.

B.2 Chapter Activities

- Total number of Chapters in the Section
- Number of Chapters formed in the current year
- Number of active Chapters (Chapters who have reported required number of meetings during the year)
- Summary of Chapter activities (Chapter wise with attachment table/information)

We have one chapter in our section. Shin-etsu Section MAG-33 chapter organized and/or co-sponsored the following technical meetings and lectures in 2020:

[Co-sponsor]

- ✓ Jan. 9: Seminar for young researcher with Tokai Chapter in IEE Japan (sponsor), 1 invited presentation, 49 participants, “Security regulation in the civilian aircraft” by Mr. Yukihiko NAKADA (Nagano Prefecture General Industrial Technology Center)
- ✓ Jan. 23: Seminar for young researcher with Tokai Chapter in IEE Japan (sponsor), 1 invited presentation, 43 participants, “Control techniques in the aerospace systems” by Dr. Taro TSUKAMOTO (Japan Aerospace Exploration Agency)
- ✓ Jan. 23: Student research presentation event with Tokai Chapter in IEE Japan (sponsor), 14 presentations, 43 participants
- ✓ Dec. 25: Seminar for young researcher with Tokai Chapter in IEE Japan (sponsor), 1 invited presentation, 183 participants, “Next generation power electronics strategy derived from TESLA model and future vehicle”, by Prof. Masayoshi YAMAMOTO (Nagoya University) , online (WebEx)
- ✓ Dec. 28: Student research presentation event with Tokai Chapter in IEE Japan (sponsor), 5 presentations, 23 participants, online (WebEx)

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

- ✓ Oct. 30: Special Lecture "Generation and application of heavy ion beam by laser ion source" by Asst. Prof. Kazumasa Takahashi (Nagaoka Univ. Tech.)
- ✓ Oct. 30: Special Lecture "Voltage-induced deterioration phenomenon of crystalline Si solar cell module" by Assoc. Prof. Sachicho Jonai (Niigata Univ. Tech.)
- ✓ Oct. 30: Special Lecture "Research at a university that was conceived by a new university faculty member during a winding career" by Asst. Prof. Naoki Wakui (Nagaoka Inst. Tech.)
- ✓ Oct. 30: Special Lecture "Development of several kW class wireless power supply system" by Asst. Prof. Keisuke Kusasuka (Nagaoka Univ. Tech.)

B.4 Students Activities

- Total number of Student Branches in the Section: 1 Section Student Branch
- Number of Student Branches formed in the current year: 0
- Section level student activities (student congress, paper and other contests, awards etc)
 - Oral/Poster sessions
 - Joint workshop

- Student branch board meeting
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year): 1
- Summary of Student Branch activities (Student Branch wise with attachment table/information)
The IEEE Shin-etsu SSB composed by Shinshu Univ., Nagaoka Univ. Tech., and Niigata Univ officially started in Jan. 2019, and is actively providing opportunities to exchange various information not limited to research and promote friendship within local community.

B.5 Affinity Group Activities

- Young Professional (YP)
- Women In Engineering (WIE)

The petition for the Tokyo/Shin-etsu Joint Section Women in Engineering (WiE) affinity group was filed and approved in 2020. The IEEE Tokyo/Shin-etsu Joint Section WIE Kick-off event was held online (12/20) with the support of co-organizers IEEE JC WIE, other Section WIEs, Tokyo YP, and Tokyo SAC. Because of the pandemic situation restrictions, the online event was a success and attracted participants of various ages, ranging from high school to working professionals, and included a good balance of men and women. The Shin-etsu WIE liaison also participated in the IEEE TOWERS event online to assist with judging and presenting the WiE award to an exceptional female presenter (11/28).

- Life Member (LM)

B.6 Awards & Recognition Activities

- Award constituted by the Section
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R10 and IEEE HQ during the year

In the Shin-etsu Section, we presented excellent paper/poster awards to students who presented papers at the IEEE Sessions held in conjunction with the IEICE Shin-Etsu Section Conference and IEEJ Niigata branch Conference.

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

- Newsletter (name and number of issues in the year)
- Home Page of the Section (give the URL and how often it is updated)
- Other means of contacts with Section members including social media

Our main method of communication with members in our section is via our homepage. The URL of the English version is:

<http://www.ieee-jp.org/section/shin-etsu/index-e.html>

Our homepage is updated as quickly as possible when new information is available (typically every 1-2 months).

B.8 Industry Relations

- Membership growth and retention
- Activities for/with industrial members

We have no industrial members. However, there are many industrial companies in this region and in the future, we plan to develop relations with these companies.

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.
- SIGHT Activities

We have no committee or activities for Humanitarian Technology, but we will support them if any.

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)”

We have no IEEE social activities

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
- Funding secured from the IEEE and external sources including sponsorships

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

- Nature of relationship and details of any formal agreement signed
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)
- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

There are several Japanese professional societies such as the IEICE and IEEJ. Since many people are members of both the IEEE and one or both of the IEICE and IEEJ groups, it is our policy to work in cooperation with these societies to promote engineering in the Shin-etsu region of Japan. To this end, we co-sponsor and co-organize many events.

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
- Joint activities with any other Section

We have no collaborations with other IEEE sections in this year. We will discuss future collaboration with several sections.

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

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

We have no Sub-sections and Society Chapters.

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

None at this time.

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

In 2021, we will continue to provide awards as described above. Also, we will try to organize technical meetings at each university in the Shin-etsu region every year.

D.2 Goals and Future Plans

In the future, we will try to connect members to activate the student branch, a Young Professionals branch, and the joint section WiE affinity group. The relatively small number of members in our section is a major obstacle, so we must consider how to increase our membership.

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

Plan IEEE sessions and events that will benefit students to gain new members and sustain membership.

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

The Shin-etsu Section conducts its yearly activities within a financially stable budget plan using income from the annual Section Assessment and Section Rebate. The income and expenses for the section have been balanced for the past three years and we plan to continue the same style of budget planning in the coming year.