IEEE Sendai Section
Annual Report 2017

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Highlights
  - The Dedication Ceremony for the IEEE Milestone “Discovery of the Principle of Self-Complementarity in Antennas and the Mushiake Relationship, 1948” was held on 27th July, 2017 in Sendai.
  - 3 members were newly elevated to 2018 Fellow in Sendai Section.
    - Hideo Ohno (Tohoku University)
    - Seiji Samukawa (Tohoku University)
    - Shuji Tanaka (Tohoku University)
  - Sendai Section WIE Affinity Group (Sendai WIE) was organized on 21st April, 2017. The inaugural event “WIE (Women in Engineering) in TOHOKU” was held on 29th September, 2017.
  - Newly Student Branch was organized at The University of Aizu on 20th March, 2017. This becomes the second Student Branch in Sendai Section.
  - Robotics and Automation Society Student Branch Chapter at Tohoku University was newly organized on 11th April, 2017.
  - The following technical events were held.
    - 2 lecture meetings were sponsored
      - Signal Processing Technical Meeting [17th April, 2017]
      - Lecture Meeting “Promotion of agriculture x ICT in NTT Group” [7th December, 2017]
    - 5 technical events were cooperated (3 lecture meetings, 1 international conference, 1 workshop)
  - Co-sponsored “2017 Tohoku-Section Joint Convention of Institute of Electrical and Engineers, Japan (TSJC)” at Hirosaki University. [24th-25th August, 2017]
  - The following Administrative Meetings were held.
    - Annual General Meeting
    - 2 Section Board Meetings
    - 4 Administrative Officers Meetings
  - Activities for students
    - The English Presentation Seminar on TSJC
    - Student Session on TSJC
    - Sendai Section Student Awards 2017 ceremony
  - New Officers and Executive Committee Members (2018-2019) were elected.

- Section Executive Committee Member List [2018-2019]
  - Officers
    - Chair: Michitaka Kameyama (Ishinomaki Senshu University)
    - Past Chair: Masataka Nakazawa (Tohoku University)
    - Vice-Chair: Hirohito Yamada (Tohoku University)
    - Secretary: Noriharu Suematsu (Tohoku University)
    - Treasurer: Tadahiro Yonezawa (NTTEAST-TOHOKU)
  - Executive Committee Members
    - Naofumi Homma (Tohoku University)
    - Naoki Honma (Iwate University)
    - Hiroyasu Ishikawa (Nihon University)
    - Koji Kotani (Akita Prefectural University)
    - Seiji Kumagai (Akita University)
Hiroyuki Masayanagi (NEC Communication Systems, Ltd.)
Shin Masuda (Advantest Laboratories Ltd.)
Fumihiro Sato (Tohoku Gakuin University)
Takashi Uchino (Tohoku Institute of Technology)
Tetsuya Yuasa (Yamagata University)
Tsutomu Zeniya (Hirosaki University)
Qiangfu Zhao (The University of Aizu)

- Section Standing Committee
  - Student Activities Committee (Chair: Naofumi Homma)
  - Membership Development Committee (Chair: Noriharu Suematsu)
  - Chapter Promotion Committee (Chair: Hirohito Yamada)
  - Technical Program Committee (Chair: Hirohito Yamada)

A.2 Financial Report – (Please follow the format given below)
The Sendai Section’s finances are in good condition.
Financial summary of 2017 FY is as follows; (All in JPY)

<table>
<thead>
<tr>
<th>Income/Expense</th>
<th>Item</th>
<th>Budget</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>IEEE HQ &amp; Society</td>
<td>1,320,000</td>
<td>1,317,000</td>
</tr>
<tr>
<td></td>
<td>Section Rebate (including Chapter Rebate)</td>
<td>660,000</td>
<td>682,406</td>
</tr>
<tr>
<td></td>
<td>Support from HQ</td>
<td>0</td>
<td>44,192</td>
</tr>
<tr>
<td></td>
<td>Support from Japan Council</td>
<td>0</td>
<td>38,085</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>200</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total of Income</td>
<td>1,980,200</td>
<td>2,081,701</td>
</tr>
<tr>
<td></td>
<td>Support to JC</td>
<td>1,184,400</td>
<td>1,182,936</td>
</tr>
<tr>
<td></td>
<td>Support to Chapter</td>
<td>121,550</td>
<td>125,127</td>
</tr>
<tr>
<td></td>
<td>Meeting &amp; Social Events</td>
<td>320,000</td>
<td>261,346</td>
</tr>
<tr>
<td></td>
<td>Student Activities</td>
<td>270,000</td>
<td>236,982</td>
</tr>
<tr>
<td></td>
<td>Awards</td>
<td>160,000</td>
<td>95,718</td>
</tr>
<tr>
<td></td>
<td>Sections Congress</td>
<td>300,000</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Travel</td>
<td>110,000</td>
<td>49,780</td>
</tr>
<tr>
<td></td>
<td>Management &amp; General Expense</td>
<td>110,000</td>
<td>98,919</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>72,000</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total of Expense</td>
<td>2,647,950</td>
<td>2,050,808</td>
</tr>
</tbody>
</table>

Balance of year end of 2016: 1,785,052
Balance of year end of 2017: 1,815,945

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities
Membership Development Committee nominated and supported to upgrade to Senior Member.

- 9 members were newly elevated to Senior Member in Sendai Section.
- 3 members were newly elevated to Fellow in Sendai Section.
  - Hideo Ohno (Tohoku University) for contributions to materials and device design for spintronics
  - Seiji Samukawa (Tohoku University) for contributions to damage-free plasma processing for nano-device manufacturing
  - Shuji Tanaka (Tohoku University) for contributions to micro-electromechanical systems for acoustic wave devices, physical sensors, and power generation

- Total number of active members in the past 3 each years is 708(2017), 711(2016), 695(2015).

Number of membership by grade in 2017 is as follows;

<table>
<thead>
<tr>
<th>Grade</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fellow</td>
<td>31</td>
</tr>
<tr>
<td>Senior Member</td>
<td>72</td>
</tr>
<tr>
<td>Member</td>
<td>481</td>
</tr>
<tr>
<td>Associate Member</td>
<td>13</td>
</tr>
<tr>
<td>Graduate School Member</td>
<td>98</td>
</tr>
<tr>
<td>Student Member</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>708</td>
</tr>
</tbody>
</table>
B.2 Chapter Activities
Some Promotion Committee supported Chapters activities.
- The following 4 Chapters are active and have good activities.
  - SP01 Sendai Chapter held 2 technical meetings
  - COM19 Sendai Chapter held 14 technical meetings
  - EMC27 Sendai Chapter held 16 technical meetings
  - MAG33 Sendai/Sapporo Joint Sections Chapter held 11 technical meetings

B.3 Professional and Continuing Education Activities
Technical Program Committee arranged following technical meeting on section revel.
- Technical Meetings
  - Sponsored
    - Signal Processing Technical Meeting [17th April, 2017]
      - “Metacommunication between human and machine” Akinori Ito (Tohoku University)
      - “Multipresence and Signal Processing” Michael Cohen (The University of Aizu)
      - Attendance: 25
    - Special Lecture Meeting [4th December, 2017]
      - “Promotion of agriculture x ICT in NTT Group” Mr. Yoshikazu Kusumi (NTT)
      - Attendance: 50
  - Cooperated
    - Lecture Meeting by EDS Distinguished Lecturer [27th October, 2017]
      - “Ohm to Arora: A New Paradigm for Nanoscale Devices and Circuits”
      - Prof. Vijay K. Arora (Wilkes University)
    - The 8th International Conference on Awareness Science and Technology (iCAST2017) [8th -10th November, 2017]
    - Lecture Meeting by EDS Distinguished Lecturer [22nd November, 2017]
      - “Future Devices Enabled by 2D Nanomaterials”
      - Prof. Bin Yu (State University of New York)
    - The 24th International Display Workshops (IDW ’17) [6th-8th December, 2017]
    - Lecture Meeting [20th December, 2017]
      - Dr. Kenichi Okada (Tokyo Institute of Technology)

B.4 Students Activities
- Two Student Branches are active in Sendai Section (1 Student Branch was newly organized in 2017)
  - Tohoku University Student Branch
    - Attended Student Branch Leadership Training Workshop (SBLTW) at Chiba Institute of Technology [3rd March, 2017]
    - Joined as the judge on Student Session
  - The University of Aizu Student Branch
    - Newly organized on 20th March, 2017
    - Joined as the judge on Student Session
- Section level student activities
  - Student Session on TSJC (38 presentations)
  - English Presentation Seminar on TSJC (attendance:64)
  - Sendai Section Student Awards ceremony
    - 3 students were received The Best Paper Prize
    - 5 students were received The Encouragement Prize

B.5 Affinity Group Activities
- Sendai WIE (Sendai Section Women in Engineering Affinity Group)
  - Sendai WIE was organized on 21st April, 2017.
  - The inaugural event “WIE (Women in Engineering) in Tohoku” was held on 29th September, 2017.
    (Attendance: 27)
    - Kickoff Meeting
    - Panel discussion “Current status and future of female engineers and researchers in the field of technology”
      [Panelists]
      - Prof. Akinori Nishihara (R10 Director Elect)
      - Mrs. Emi Yano (WIE JC Chair)
      - Dr. Fumi Seto (Tohoku University Gender Promotion Center)
      - Prof. Basabi Chakraborty (Iwate Prefectural University and chair Sendai WIE)
    - Three times Sendai WIE administrative meeting were held in 2017.
B.6 Awards & Recognition Activities
- Sendai Section Student Awards 2017
  - The Best Paper Prize
    - Misumi Hata (Tohoku University)
    - Nobuaki Kadowaki (Tohoku University)
    - Hiroki Takano (Tohoku University)
  - The Encouragement Prize
    - Ryosuke Sato (Tohoku University)
    - Yasuyuki Maruyama (The University of Aizu)
    - Daisuke Sato (Tohoku University)
    - Shogo Takahashi (Tohoku University)
    - Daisuke Minami (Tohoku University)

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)
- Home Page of the Section and Chapters
  - Sendai Section
    - http://www.ecei.tohoku.ac.jp/ieee-sendai/
  - Chapters
    - SP01
      - http://www.sps-sendai.org/
    - EMC27
      - http://www.topic.ad.jp/emc-sendai/
    - COM19
      - https://webinabox.vtools.ieee.org/wibp_home/index/CH10605
    - MAG33
  - Articles to R10 Newsletter
    - “IEEE Sendai Section - Learning from the experience” (March issue)
    - “IEEE Milestone Dedication Ceremony (Discovery of the Principle of Self-Complementarity in Antennas and the Mushiake Relationship, 1948)” (October issue)

- Sendai Section provided 9 times of information of meeting, seminar, and other events for section members via mailing list.

PART C  - OTHERS

C.1 Special Events

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)
- Sendai Section is maintaining a good relationship with Tohoku Section of the following 7 National societies.
  - The Acoustical Society of Japan (ASJ)
  - The Institute of Electrical Engineers of Japan (IEEJ)
  - The Illuminating Engineering Institute of Japan (IEIJ)
  - The Institute of Electronics, Information and Communication Engineers (IEICE)
  - The Institute of Electrical Installation Engineers of Japan (IEIEJ)
  - Information Processing Society of Japan (IPSJ)
  - The Institute of Image Information and Television Engineers of Japan (ITE)

C.3 Collaboration with other IEEE Sections
Sendai Section has been continuing to cooperate with other Sections by attending Japan Council ExCom Meeting, R10 Meeting, Sections Congress 2017 and other opportunities.

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

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)
PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans
- Technical Lecture Meetings
- Activities for students
  - Student Session on TSJC
  - Seminar for writing English paper
  - Student Awards
- Student Branch activities
- 2018 Tohoku-Section Joint Convention of Institute of Electrical and Engineers, Japan (TSJC)
- Promotion to elevation to Senior Member, Fellow
- Support for Chapter activities
- Annual general meeting
- Administrative meetings
  - Section Board Meetings
  - Administrative Officers Meetings
- Forming the Life Member Affinity Group (LMAG)
- Planning about Metro Area Workshop will be held in 2019 in Sendai.

D.2 Goals and Future Plans
- Planning for section unique activities by standing committees
- Organizing events for improving skill of members
- Encouragement students
- Promotion to develop Senior Member and Fellow
- Continuously support for chapter’s activities
- Be more useful for section members

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

We will continue to provide more beneficial activities for section members with keeping good financial condition.