2016 IEEE Hiroshima Section Activity Report

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Highlights
  - Held 11 sponsored, co-sponsored, and supported Technical Events (Lectures, Contest, and Seminars), and 5 Administrative Meetings including the General Assembly. (Details are in the Section B.3)
  - Held the 18th IEEE Hiroshima Student Symposium (HISS). (Details are in the Section B.4)

- List of 2016 Section Executive Committee Members and Officers
  - Officers [2015-2016]:
    - Chair: Nobuo FUNABIKI (Okayama University)
      funabiki@okayama-u.ac.jp
    - Vice-Chair: Yoshio IWAI (Tottori University)
      iwai@ike.tottori-u.ac.jp
    - Secretary: Yoshinobu TAMURA (Yamaguchi University)
      tamura@yamaguchi-u.ac.jp
    - Treasurer: Yutaka SASAKI (Hiroshima University)
      yusasaki@hiroshima-u.ac.jp
  - Executive Committee Members [2015-2016]:
    - Akimitsu KANZAKI (Shimane University)
      kanzaki@cis.shimane-u.ac.jp
    - Takamaro KIKKAWA (Hiroshima University)
      kikkawa@hiroshima-u.ac.jp
    - Mitsuyoshi KISHIHARA (Okayama Prefectural University)
      kishihara@c.oka-pu.ac.jp
    - Kazuhiro FUJIMORI (Okayama University)
      fujimori@okayama-u.ac.jp
    - Kazushi MIMURA (Hiroshima City University)
      mimura@hiroshima-cu.ac.jp
    - Hiroaki YAMADA(Yamaguchi University)
      hiro-ymd@yamaguchi-u.ac.jp
    - Shigang LI (Hiroshima City University)
      shigangli@hiroshima-cu.ac.jp
    - Sang-Seok LEE (Tottori University)
      sslee@ele.tottori-u.ac.jp
    - Takashi YAMANOUYE (Fukuyama University)
      yamanouye@fuip.fukuyama-u.ac.jp
    - Kenji ISHIDA (Hiroshima City University)
      ishida@hiroshima-cu.ac.jp

Kenji ISHIDA (Hiroshima City University)
[Past Chair, Additional Post: Women in Engineering Committee Chair]

ishida@hiroshima-cu.ac.jp
A.2 2016 Financial Report

<table>
<thead>
<tr>
<th>Income</th>
<th>(Japanese Yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance carried forward</td>
<td>1,157,547</td>
</tr>
<tr>
<td>Section Assessment</td>
<td>1,013,138</td>
</tr>
<tr>
<td>Section Rebate</td>
<td>448,499</td>
</tr>
<tr>
<td>Section Support from IEEE Japan Council</td>
<td>300,000</td>
</tr>
<tr>
<td>Interest</td>
<td>109</td>
</tr>
<tr>
<td>Total of Income</td>
<td>2,919,293</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expense</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Section Assessment</td>
<td>830,323</td>
</tr>
<tr>
<td>Chapter Rebate for SMC28 ($275.00-)</td>
<td>27,673</td>
</tr>
<tr>
<td>Expense for Administrative Meetings</td>
<td>50,698</td>
</tr>
<tr>
<td>Expense for Technical Meetings</td>
<td>56,610</td>
</tr>
<tr>
<td>Support for HISS</td>
<td>560,000</td>
</tr>
<tr>
<td>Section Activities</td>
<td>124,662</td>
</tr>
<tr>
<td>Postage &amp; Supplies</td>
<td>3,760</td>
</tr>
<tr>
<td>Stationery &amp; Bank charge</td>
<td>29,021</td>
</tr>
<tr>
<td>Reserve for next year</td>
<td>1,236,546</td>
</tr>
<tr>
<td>Total of Expense</td>
<td>2,919,293</td>
</tr>
</tbody>
</table>

End-of-Year Balance 0

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities
- Number of Members@ Dec. 2016: 503 [-16 from Dec. 2015]
- Number of Members@ Dec. 2015: 519 [ +9 from Dec. 2014]
  Number of Members@ Dec. 2014: 510
* Excepting the number of Associate Members

Transition of number of members in Hiroshima Section.
B.2 Chapter Activities
- Total number of Chapters in the Hiroshima Section; 2
  a) Fukuoka/Hiroshima/Shikoku (West Japan) Chapter, EMB18
     Activities of EMB West Japan Chapter; Please refer the Fukuoka Section.
  b) Hiroshima Section Chapter, [SMC Hiroshima Chapter], SMC28
     [Activities of SMC Hiroshima Section Chapter]
     - List of Chapter Officers of SMC [2015-2016]
       Chair: Takumi Akira HARA (Hiroshima City University)
       Vice Chair: Tomohiro HAYASHIDA (Hiroshima University)
       Secretary: Tetsuya SHIGEYASU (Prefectural University of Hiroshima)
       Treasurer: Jun-ichi KUSHIDA (Hiroshima City University)

B.2-b)-I. Technical Activities (SMC):
- Quality and quantity of activities and programs sponsored by the chapter

<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Title</th>
<th>Type</th>
<th>Number of participants (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Mar-2016</td>
<td>Cooperation for 17th Annual Meeting of Self-Organizing Maps in JAPAN 2016</td>
<td>Technical</td>
<td>23(2)</td>
</tr>
<tr>
<td>29-Mar-2016</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture 1st speaker: Prof. S. Sekizaki 2nd speaker: Prof. T. Ogawa</td>
<td>Technical</td>
<td>17(14)</td>
</tr>
<tr>
<td>16-Jul-2016</td>
<td>2016 IEEE SMC Hiroshima Chapter Young Researchers' Workshop</td>
<td>Technical</td>
<td>72(30)</td>
</tr>
<tr>
<td>16-Jul-2016</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture Prof. Y. Teranishi</td>
<td>Technical</td>
<td>72(30)</td>
</tr>
<tr>
<td>11-Oct-2016</td>
<td>Workshop on Innovative Computational Intelligence, Learning Representation of Data, and Industrial Applications</td>
<td>Technical</td>
<td>30(6)</td>
</tr>
<tr>
<td>5-Nov-2016</td>
<td>2016 IEEE 9th International Workshop on Computational Intelligence and Applications (IWICIA)</td>
<td>Technical</td>
<td>28(20)</td>
</tr>
<tr>
<td>5-Nov-2016</td>
<td>IEEE SMC Hiroshima Chapter Invited Special Talk Prof. Y. Tanaka</td>
<td>Technical</td>
<td>28(20)</td>
</tr>
<tr>
<td>22-Dec-2016</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture Prof. T. Tateyama</td>
<td>Technical</td>
<td>14(7)</td>
</tr>
</tbody>
</table>

(* Number of participants of IEEE members)

B.2-b)-II. Educational Activities (SMC):
An educational program offering at least one tutorial, short course, lecture series, or other activity directly related to the tutorial education of its members.

B.2-b)-III. Membership Communication and Advancement (SMC)
Growth of chapter membership

<table>
<thead>
<tr>
<th>Membership at last status report submitted</th>
<th>Current Membership</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>66</td>
<td>-3%</td>
</tr>
</tbody>
</table>

Other detailed activities report of SMC Hiroshima chapter can be found at following website.
http://www.smc-hiroshima.info.hiroshima-cu.ac.jp/eng/

B.3 Professional and Continuing Education Activities
- 2016 General Assembly of IEEE Hiroshima Section, Jan. 28, 2016
  (Hiroshima Garden Palace)
  Attendance: IEEE Members: 10 (letters of attorney; 67)
- Administrative Meetings; 4
  (1) The 1st Board of Directors on April 14, 2016 (Matsue Terrsa)
  Attendance: Officers and Executive Committee Members: 10
Lectures and Events

(1) Section sponsored Technical and Educational Lectures; 7

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Attendance*</th>
</tr>
</thead>
</table>
| 28 Jan., 2016 | Special Lecture at Hiroshima  
Title: Device Reliability and Characterization  
Speaker: Prof. Tsuchiya Toshiaki (Shimane University)  
Location: Hiroshima Garden Palace, Hiroshima, Hiroshima, Japan | 9(9)         |
| 14 Apr., 2016 | Technical Lectures at Okayama  
Title: Latest Trends from a Payment Division as Financier  
Speaker: Mr. Keiji Minami (Sony Payment Services Inc.)  
Location: Okayama University, Okayama, Okayama, Japan | 10(10)       |
| 22 May, 2016 | Technical Lectures for Students at Yamaguchi  
Title: What should you do in the IEEE Hiroshima Section Student Symposium?  
Speaker: Prof. Masashi Hotta (Yamaguchi Univ.)  
Location: Yamaguchi University, Ube, Yamaguchi, Japan | 52(10)       |
| 22 Aug., 2016 | Technical Lecture at Okayama  
Title: Electronic Craftsman of Microwave Technology  
Speaker: Mr. Yukihiro Takeuchi, Sanyo Electronic Industries Co.,Ltd. and AI Electronics Ltd.  
Location: Okayama University, Okayama, Okayama, Japan | 24(8)        |
| 16 Nov., 2016 | Technical Lecture at Okayama  
Title: Realistic communication -Network Utilization of Five Senses-  
Speaker: Prof. Yutaka Ishibashi (Nagoya Institute of Technology)  
Location: Okayama University, Okayama, Okayama, Japan | 56(4)        |
| 19 Nov., 2016 | Technical Symposium at Yamaguchi  
Title: Diversity for Accelerating Innovation  
Speaker: Prof. Yuko Hayashi (Yamaguchi University Management of Technology)  
Location: Yamaguchi University, Ube, Yamaguchi, Japan | 224(22)      |
| 19-20 Nov., 2016 | Technical Symposium at Yamaguchi  
Title: The 18th IEEE Hiroshima Student Symposium (HISS)  
Location: Yamaguchi University, Ube, Yamaguchi, Japan | 416(44)      |

(2) Section co-sponsored or supported Technical Events; 4

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Attendance*</th>
</tr>
</thead>
</table>
| 2 Mar, 2016 | Co-sponsored Technical Event - Organized by Research Institute for Nanodevice and Bio Systems, Hiroshima University  
Title: International Workshop on Nanodevice Technologies 2016  
Location: Hiroshima University, Higashi Hiroshima, Hiroshima, Japan | 60(35)       |
| 1 July, 2016 | Sponsored Technical Lectures - Organized by Hiroshima City University  
Title: Monitorology and Big Data in the Age of Data Analytics  
Speaker: Prof. Miroslaw Malek, Universita della Svizzera italiana  
Location: Hiroshima City University, Hiroshima, Hiroshima, Japan | 30(7)        |
| 8 Apr., 2016 | Co-sponsored Technical Lectures - Organized by Hiroshima City University  
Title: The Time-Triggered Architecture  
Speaker: Em.Prof. Dr. Hermann Kopetz (Vienna University of Technology) | 22(7)        |
B.4 Students Activities

- The 18th IEEE Hiroshima Student Symposium (HISS)
  In November 19 and 20, the 18th HISS was held at Yamaguchi University, Ube, Yamaguchi, Japan. The number of attendance for the 18th HISS is about 400 (sum of two days). The contents of this symposium are as follows:
  - One keynote lecture
  - One panel discussion
  - 2 presentation from industrial company
  - 8 presentations from academic laboratories
  - One get together meeting for the students
  - Technical presentations (Number of Technical Presentations: 134)
  - On this symposium, following prizes are awarded;
    (a) Selected by the Nomination Committee of HISS Research Award.
      - HISS Best Research Award: 1
      - HISS Good Research Award: 21
      - HISS International Session Award: 1
      - HISS Best Presentation Award for High School Students: 1
      - HISS Excellence Presentation Award for High School Students: 4
    (b) Selected by the vote of attendances.
      - HISS Best Presentation Award: 1
      - HISS Good Presentation Award: 6

- Recruitment of Student Members
  - Student members who joined HISS steering committee deserve additional prizes with their contribution awards
  - Establishment of encouragement system for presentation of the student members on the domestic conference.
  - Amend the supporting system for the presentation of the student members on the international symposium or conference. Such active IEEE student members deserve to receive grant (Max: 10,000Yen).

- Total Number of Student Branches in Hiroshima Section: 1
  - Yamaguchi University Student Branch (YSB)
    - List of 2016 officers of YSB
      - Chair: Kurachi Shinya
      - Vice-chair: Murata Masanari
      - Treasurer & Secretary: Katamoto Yuta
  - Number of Student Branches Formed in the Current Year: 0
B.5 Awards & Recognition Activities
- Award Constituted by the Section
  - The 18th HISS Distinguished Contribution Award: 29 students
  - The 18th HISS Distinguished Service Award: 19 students

B.6 Communication Activities (Newsletter, Home Page, E-mail etc.)
- Section Web site
  - http://www.ieee-jp.org/section/hiroshima/En (in English)
- The web page of Yamaguchi University Student Branch:
  - http://www.ieee-jp.org/section/hiroshima/YSB/ (will be appeared soon)
- The web page of IEEE SMC chapter in Hiroshima Section:
  - http://www.smc-hiroshima.info.hiroshima-cu.ac.jp/eng/
- The web page of IEEE EMBS West Japan Joint Chapter:
  - http://www.ieee-jp.org/section/fukuoka/embwj/
- The 18th HISS website (in Japanese):
  - http://hiss18th.sakura.ne.jp/

PART C - OTHERS

C.1 Relationship with National Societies
- In Japan, we have very well-organized national technical societies for electrical, electronic and information engineering, e.g. Institute of Electronics, Information and Communication Engineers (IEICE). They also have local branches as well as the IEEE Sections.
- Hold technical lectures and events in co-operation with other national technical societies, such as IEICE or IEEJ (The Institute of Electrical Engineers of Japan) and so on, through their local branches around the Hiroshima Section, and also Universities.

C.2 Special Events
- IEEE Hiroshima Section Student Symposium (HISS)
  - HISS is the one of unique event in IEEE Hiroshima Section whose purpose is to support the growth of students with independence and spirit of enterprise. HISS had two special characteristics; one is that students themselves carry out the planning and management of the symposium and the other is that all the technical papers in HISS are presented by students by the interactive sessions. The main theme of each HISS would be decided by the students. And also, based on the interest with students’ point of view, the topics of the Keynote Speech and the Technical Lecture in HISS are selected. The major part of the income of the symposium was obtained by support from Japan Council, Hiroshima Section, Electric Technology Research Foundation of Chugoku, some sections of domestic technical societies, and presenters’ submission fee.
The IEEE Hiroshima Section hope to grow this HISS to surrounding sections and it to be the one of unique event in Japan or R10 in near future.

PART D - GOALS AND PLANS

D.1 Continuation of Project/Activity in Progress and Their Implementation Plans
(1) General Assembly
   • Annual meeting plan to hold at Hiroshima on January 27, 2017.
(2) Board of Directors
   • Four committee meetings plan to hold.
(3) The 19th IEEE Hiroshima Student Symposium (HISS)
   • The 19th HISS plan to hold at Shimane University, Shimane, Japan on November, 2017.
(4) Technical Lectures
   • Planning at least 5 Sponsored Technical Lectures and at least 4 co-sponsored or supported Technical Lectures and/or Forums with other National Societies in Japan.
(5) Encouragement of student members
   • Strongly encourage the student members to present their research work at the international and also the domestic conferences or symposium.

D.2 Goals and Future Plans
  ➢ Our goal is to develop the number of active members and to be a useful organization for already existing members.
  ➢ We are planning the 19th Hiroshima Student Symposium (HISS) at Shimane.
  ➢ We try to find the system for active communications between academic and company members.

D.3 Standing Committees Activities
(1) Membership Development & Student Activities Committees
   • Promote to join the IEEE at the IEEE Hiroshima Student Symposium (HISS).
   • Encouraging the researchers and also the student in Hiroshima Section to be member or student member of IEEE.
   • Improvement of membership service quality in Hiroshima Section for member or student member of IEEE
(2) Student Activity Committee
   • Promotion for the use of a grant (Max.: 10,000JPY) to active IEEE student members.
     We encourage the student members to present their work at the domestic and/or international symposia.
   • We plan to establish new student branch and also encourage the activities of existing student branch.
(3) Fellow Nomination Committee
   • We encourage the members to upgrade their higher grade membership.
(4) Award Committee
   • We plan to present the Section Contribution Award to the Contributors for Hiroshima Section and the Section Award to the members of IEEE.