2021 IEEE Hiroshima Section Activity Report

PART A - SECTION SUMMARY

A.1 Executive Summary

- **Section Executive Committee Member List**
  - **Officers [2021-2022]:**
    - **Chair:** Kazuhiro Uehara (Okayama University)
      uehara@okayama-u.ac.jp
    - **Vice Chair:** Satoshi Taoka (Hiroshima University)
      taoka@infonets.hiroshima-u.ac.jp
    - **Secretary:** Hiroaki Yamada (Yamaguchi University)
      hiro-ymd@yamaguchi-u.ac.jp
    - **Treasurer:** Kokoro Kitamura (Shimane University)
      kitamura@ecs.shimane-u.ac.jp
  - **Executive Committee Members [2021-2022]:**
    - Akira Furui (Hiroshima University)
      akirafurui@hiroshima-u.ac.jp
    - Yusuke Fujita (Yamaguchi University)
      y-fujita@yamaguchi-u.ac.jp
    - Yukinobu Fukushima (Okayama University)
      fukusima@okayama-u.ac.jp
    - Kiyotaka Komoku (Okayama Prefectural University)
      takimoto@c.oka-pu.ac.jp
    - Masashi Nakayama (Hiroshima City University)
      masashi@hiroshima-cu.ac.jp
    - Naoto Sasaoka(Tottori University)
      sasaoka@tottori-u.ac.jp
    - Toshiyuki Yoshida (Shimane University)
      yosisi@ecs.shimane-u.ac.jp
    - Naoki Kagawa (Fukuyama University)
      kagawa@fukuyama-u.ac.jp
    - Kensuke Okubo (Okayama Prefectural University)
      okubo@c.oka-pu.ac.jp

- **Section Highlights**
  - Section Sponsored Technical and Educational Lectures (Lecture meeting 4, Technical symposium 1, Technical workshop 1): 6
  - Section co-sponsored or supported Technical Events: 7
  - Total number of Student Branches in Hiroshima Section: 2
  - The 23rd IEEE Hiroshima Student Symposium (HISS) (Details are in Section B.4)

- **Major Events (International, National)**

- **Major Chapter Activities**

- **Major Student and Affinity Group Activities**

- **Awards**
  - The 2021 Hiroshima Section Contribution Award
A.2 **Financial Report** – (Please follow the format given below)

<table>
<thead>
<tr>
<th></th>
<th>(Japanese Yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
</tr>
<tr>
<td>Balance carried forward</td>
<td>1,435,382</td>
</tr>
<tr>
<td>Section Assessment</td>
<td>933,629</td>
</tr>
<tr>
<td>Section Rebate</td>
<td>470,652</td>
</tr>
<tr>
<td>Student Rebate</td>
<td>19,114</td>
</tr>
<tr>
<td>2021 R10 Section Incentive</td>
<td>172,635</td>
</tr>
<tr>
<td>Interest</td>
<td>1,632</td>
</tr>
<tr>
<td>Support for HISS from Foundation</td>
<td>562,850</td>
</tr>
<tr>
<td><strong>Total of Income in Section Account</strong></td>
<td>3,595,894</td>
</tr>
<tr>
<td>Income of HISS (different account from section)</td>
<td>347,000</td>
</tr>
<tr>
<td><strong>Sum of Total of Income in Section Account and Income of HISS</strong></td>
<td>3,942,894</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td></td>
</tr>
<tr>
<td>Section Assessment</td>
<td>792,925</td>
</tr>
<tr>
<td>Chapter Rebate for SMC28 ($295.00-)</td>
<td>32,113</td>
</tr>
<tr>
<td>Student Rebate for HSSB and YUSB</td>
<td>18,941</td>
</tr>
<tr>
<td>Expense for Technical Meetings</td>
<td>33,410</td>
</tr>
<tr>
<td>Section Activities</td>
<td>159,000</td>
</tr>
<tr>
<td>Postage &amp; Supplies</td>
<td>6,920</td>
</tr>
<tr>
<td>Stationery &amp; Bank charge</td>
<td>26,049</td>
</tr>
<tr>
<td>Reserve for next year</td>
<td>1,925,655</td>
</tr>
<tr>
<td>Support for HISS</td>
<td>100,000</td>
</tr>
<tr>
<td>Support for HISS from Foundation</td>
<td>559,850</td>
</tr>
<tr>
<td>Exchange gain and loss</td>
<td>-58,969</td>
</tr>
<tr>
<td><strong>Total of Expense in Section Account</strong></td>
<td>3,595,894</td>
</tr>
<tr>
<td>Expense of HISS (different account from section)</td>
<td>347,000</td>
</tr>
<tr>
<td><strong>Sum of Total of Expense in Section Account and Expense of HISS</strong></td>
<td>3,942,894</td>
</tr>
<tr>
<td><strong>End-of-Year Balance</strong></td>
<td>0</td>
</tr>
</tbody>
</table>

**PART B - ORGANIZATIONAL ACTIVITIES**

**B.1 Membership Development Activities**

- Number of Members@ Dec. 2021: 535 [ +19 from Dec. 2020]
- Number of Members@ Dec. 2020: 516 [ +2 from Dec. 2019]
- Number of Members@ Dec. 2019: 514 [ +3 from Dec. 2018]
- Number of Members@ Dec. 2018: 511 [ +2 from Dec. 2017]

**B.2 Chapter Activities**

**Total number of Chapters in the Hiroshima Section: 2**

- Fukuoka/Hiroshima/Shikoku (West Japan) Chapter, EMB18
- Activities of EMB West Japan Chapter; Please refer the Fukuoka Section.
- Hiroshima Section Chapter, [SMC Hiroshima Chapter], SMC28
  [Activities of SMC Hiroshima Section Chapter]

List of Chapter Officers of SMC [2020-2021]
Chair: Tomohiro HAYASHIDA (Hiroshima University)
Vice Chair: Keiichi TAMURA (Hiroshima City University)
Secretary: Daisuke HIROTANI (Prefectural University of Hiroshima), Yosuke Kakiuchi(Hiroshima Institute of Technology)
Treasurer: Tatsuhiro SAKAI (Shimane University)

### Technical Activities (SMC)

<table>
<thead>
<tr>
<th>Meeting date</th>
<th>Title</th>
<th>Type</th>
<th>Number of days</th>
<th>Number of participants (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 24 Apr. 2021</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture Prof. T. Tanizaki (Kindai University)</td>
<td>Technical</td>
<td>1</td>
<td>16 (16)</td>
</tr>
<tr>
<td>2 17 Jul. 2021</td>
<td>2021 IEEE SMC Hiroshima Chapter Young Researchers' Workshop</td>
<td>Technical</td>
<td>1</td>
<td>63 (28)</td>
</tr>
<tr>
<td>3 17 Jul. 2021</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture Prof. T. Kajiyama (Hiroshima City University)</td>
<td>Technical</td>
<td>1</td>
<td>63 (28)</td>
</tr>
<tr>
<td>4 18 Oct. 2021</td>
<td>Special Session on Advanced Computational Intelligence and Knowledge Extraction in SMC2021</td>
<td>Technical</td>
<td>1</td>
<td>21 (15)</td>
</tr>
<tr>
<td>5 6-7 Nov. 2021</td>
<td>2021 IEEE 12th International Workshop on Computational Intelligence and Applications (IWCAI2021)</td>
<td>Technical</td>
<td>2</td>
<td>55 (29)</td>
</tr>
<tr>
<td>6 6 Nov. 2021</td>
<td>IEEE SMC Hiroshima Chapter Invited Special Talk Prof. A. Niimi (Future University Hakodate)</td>
<td>Technical</td>
<td>1</td>
<td>55(29)</td>
</tr>
<tr>
<td>7 18 Dec. 2021</td>
<td>IEEE SMC Hiroshima Chapter Special Lecture Prof. K. Taniguchi (Yasuda Women’s University)</td>
<td>Technical</td>
<td>1</td>
<td>24(15)</td>
</tr>
</tbody>
</table>

(* Number of participants of IEEE members)

### 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>51</td>
<td>56</td>
<td>+9.8%</td>
</tr>
</tbody>
</table>

Other detailed activities report of SMC Hiroshima chapter can be found at following website. https://www.ieee-jp.org/section/hiroshima/chapter/SMC-28/english/

### B.3 Professional and Continuing Education Activities

(B.3.1) 2021 General Assembly of IEEE Hiroshima Section

Jan. 26, 2021 (Online), Attendance: IEEE Members: 27 (letters of attorney: 85)

(B.3.2) Administrative Meetings

Administrative meetings were held 4 times.

1. The 1st Board of Directors on April 2, 2021 (Online)
   Attendance: Officers and Executive Committee Members 12
2. The 2nd Board of Directors on May 29, 2021 (Online)
   Attendance: Officers and Executive Committee Members 11
3. The 3rd Board of Directors on Sept. 10, 2021 (Online)
   Attendance: Officers and Executive Committee Members 11
4. The 4th Board of Directors on Nov. 26, 2021 (Online)
   Attendance: Officers and Executive Committee Members: 12
   https://www.ieee-jp.org/section/hiroshima/e/activity-report/

(B.3.4) Lectures and Events
1. Special Lecture at Hiroshima
   Title: Research Activities in Diversity
   Speaker: Prof. Nobuo Funabiki (Okayama University)
   Location: Online (Zoom)
   Date: Jan. 26, 2021
   Attendance: 27 (IEEE Member:27)
   https://www.ieee-jp.org/section/hiroshima/e/2021/01/15/special-lecture-january-26-2021/

2. Technical Lecture
   Title: Development of detection method for defect in the casting and evaluation method of material properties for steel using magnetic non-destructive testing
   Speaker: Prof. Kenji Sakai (Okayama University)
   Location: Online (Webex)
   Date: Apr. 2, 2021
   Attendance: 13 (IEEE Member:12)
   https://www.ieee-jp.org/section/hiroshima/e/2021/04/03/technical-lecture-april-2-2021/

3. Technical Lecture
   Title: Let’s make the IEEE Hiroshima Section Student Symposium (HISS) successful!
   Speaker: Prof. Masashi Hotta
   Location: Online (Zoom)
   Date: May 29, 2021
   Attendance: 38 (IEEE Member:10)
   https://www.ieee-jp.org/section/hiroshima/e/2021/05/30/technical-lecture-may-29-2021/

4. Technical Lecture
   Title: Japanese chicken - genetic resource in research and foods -
   Speaker: Prof. Masaaki Tsuzuki
   Location: Online (Zoom)
   Date: November 26, 2021
   Attendance: 17 (IEEE Member:15)
   https://www.ieee-jp.org/section/hiroshima/e/2021/11/30/technical-lecture-november-26-2021/
Technical symposium (HISS2021) was held as follows:

The 23rd IEEE Hiroshima Section Student Symposium (HISS) was held in November 27, 28, 2021 via online. HISS is an event, “for society by student” mainly planned and managed by the students. The number of attendances for the 23rd HISS is 241 (sum of two days).

Zoom Maximum number of simultaneous accesses
- Opening ceremony: 130
- Invited lecture (21st IEEE Engineer Spotlight): 141
- Keynote lecture: 95
- Exchange meeting: 65

The contents of this symposium are as follows:
- Invited lecture
  - Title: Future and development of semiconductor memory industry, how to work in manufacturing business and global environment
  - Speaker: Dr. Nahomi Aoto (Micron Technology, Inc.)
- Keynote lecture
  - Title: Toward an innovation construction city “Ube”
  - Speaker: Toshiaki Mito (Administration officer, Commerce and fishery section, Ube city)
- One presentation from industrial company
- 1 presentation from academic laboratories
- 1 presentation from high-school students
- One get-together meeting
- Technical presentations (Number of Technical Presentations: 87)
- One experience course
- On this symposium, following prizes are awarded:
  - Selected by the Nomination Committee of HISS Research Award.
    - HISS Best Paper Award: 1
    - HISS Excellent Paper Award: 16
    - HISS English Presentation Award: 1
  - IEEE WIE Shikoku, Fukuoka, and Hiroshima Section Award: 1
  - HISS Best Presentation Award for High School Students: 1
  - HISS Excellent Presentation Award for High School Students: 1
  - Selected by the vote of attendances.
    - HISS Best Presentation Award: 1
    - Micron Award: 1
    - HISS Good Presentation Award: 4
    - HISS Good Presentation Award for Academic Laboratories: 1

http://www.ieee-jp.org/section/hiroshima/e/
(2) Section co-sponsored or supported Technical Events: 7

1. Technical Co-Sponsored Event
   Title: 20th International Symposium on Communications and Information Technologies (IS CIT 2021)
   Date: 19-22 Oct., 2021
   Location: Tottori University (Online)

2. Co-sponsored Technical Lecture
   Title: “Let’s think about a work-life balance under the new normal for Young CAS Researches and Students” Women in Circuits and Systems (WiCAS)
   Date: 22 Nov., 2021
   Location: Okayama Convention Center (hybrid)

3. Technical Co-Sponsored Event
   Title: 24th International Symposium on Wireless Personal Multimedia Communications (WPMC2021)
   Date: 13-16 Dec., 2021
   Location: Okayama Convention Center (hybrid)

4. Technical Co-Sponsored Event
   Title: 4th International Symposium on Devices, Circuits and Systems
   Date: 3-5 March, 2021
   Location: Online

5. Technical Co-Sponsored Event
   Title: Fresh IT Award 2021
   Sponsored: IEICE
   Date: 31 Oct., 2021
   Location: Online

6. Technical Co-Sponsored Event
   Title: Technical forum – A new twist of design, implementation, and control in actual system
   Sponsored: Japan Society of Mechanical Engineers
   Date: 10 Dec., 2021
   Location: Online-

B.4 Students Activities
(B.4.1) Recruitment of Student Members

- Student members who joined HISS steering committee deserve additional prizes with their contribution awards.
- Continuation of encouragement systems for presentation of the student members on the international/domestic conferences. In 2021, 11 students have been supported for their presentation.

• Yamaguchi SB: A meeting and 2 workshops were held by Yamaguchi SB Committee.

1. Election of board member
   Date: Feb. 22, 2021
   Location: Online (Zoom)
   Number of participants: 8
   Description: New board members were elected in an annual election.

2. Presentation workshop
   Date: May 7, 2021
   Location: Online (Zoom)
   Speaker: Prof. Hiroaki Yamada (Department of Electrical and Electronic Engineering)
   Number of participants: 9
   Description: The presentation workshop was held. A speaker described how to make presentation slide and talk in front of an audience.

3. LaTeX workshop for beginners
   Date: May 19, 2021
   Location: Online (Zoom)
   Speaker: Prof. Hiroaki Yamada (Department of Electrical and Electronic Engineering)
   Number of participants: 9
   Description: The LaTeX workshop was held for beginners. A speaker described how to make a document by LaTeX.

http://ysb.eee.yamaguchi-u.ac.jp/activity/
• **Hiroshima Section SB**: Administrative Meetings were held 3 times.

1. Homepage management  
   Date: Jan. 6, 2021  
   Location: Online (Google Meet)  
   Number of participants: 4  
   Description: Teaching of homepage management.

2. Meeting to elect officers  
   Date: Jan. 29, 2021  
   Location: Online (Google Meet)  
   Number of participants: 7  
   Description: We decided on the officers.

3. 1st board meeting  
   Date: May. 25, 2021  
   Location: Online (Google Meet)  
   Number of participants: 4  
   Description: We discussed the activities of the SBLTW (Student Branch Leadership Training Workshop) and changes to the bylaws to elect officers for the vacant positions.

   https://hiroshima-ssb.netlify.app/

**B.5 Affinity Group Activities**  
- Women In Engineering (WIE)  
  The IEEE WIE Shikoku, Fukuoka, and Hiroshima Section Award was instituted for the technical symposium 23rd HISS.

**B.6 Awards & Recognition Activities**  
- Awards constituted by the Hiroshima Section  
  o The 2021 Hiroshima Section Contribution Award: Prof. Toshihiko Hamasaki (Hiroshima Institute of Technology)  
  o The 23rd HISS Distinguished Contribution Award: 1 student  
  o The 23rd HISS Contribution Award: 8 students  
  o The 23rd HISS Distinguished Activity Award: 8 students  
  o The 23rd HISS Activity Award: 20 students

[Screenshot of the 2021 Hiroshima Section Contribution Award.]
B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter
  R10 Newsletter, “R10 Small Section of the Month”, p.23, July 2021

- Website of the Hiroshima Section
  Section website
  o https://www.ieee-jp.org/section/hiroshima/ (in Japanese)
  o http://www.ieee-jp.org/section/hiroshima/e/ (in English)

The website of Hiroshima Section Student Branch

The website of Yamaguchi University Student Branch
  o http://ysb.eee.yamaguchi-u.ac.jp/ (in Japanese)

The website of IEEE SMC chapter in Hiroshima Section
  o https://www.ieee-jp.org/section/hiroshima/chapter/SMC-28/english/ (in English)

The website of 23rd HISS
  o http://www.ieee-jp.org/section/hiroshima/e/

- Other means of contacts with Section members including social media
  Section Facebook page

PART C - OTHERS

C.1 Special Events
The 23rd IEEE Hiroshima Section Student Symposium (HISS) (refer to Section B.3)
HISS is the one of unique events in IEEE Hiroshima Section whose purpose is to support the growth of students with independence and a 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 from 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 the Hiroshima Section, the Micron Foundation, some sections of domestic technical societies, and presenters’ submission fee. The IEEE Hiroshima Section hopes to grow this HISS to surrounding sections and it to be one of unique events in Japan or R10 in near future.

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)
- 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 IPSJ (The Information Processing Society of Japan) and so on, through their local branches around the Hiroshima Section, and Universities.

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

C.5 Best Practices of your Section
- Welcome message to the new members
We had sent welcome messages to the members who newly joined the Hiroshima Section, in order to announce the services for members, Section Web site, events in the Section (including HISS), etc.

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans
   (D.1.1) General Assembly
   Annual meeting plan to hold via online (zoom) on January 19, 2022.
   (D.1.2) Board of Directors
   Four committee meetings plan to hold.
   (D.1.3) The 24th IEEE Hiroshima Student Symposium (HISS)
   The 24th HISS plan to hold at Okayama University, Okayama, Japan on November, 2022.
   (D.1.4) 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.
   (D.1.5) 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 24th HISS at Okayama University.
   • We try to find the system for active communications between academic and company members.