

Event Report: 2021 IEEE CASS JJC Blended Meeting

Shintaro Arai, Secretary of CASS JJC



Event Name: **Blended Meeting to Rising of Young CAS Researches and Students to Survive COVID-19 Pandemic**

Event Date: November 22, 2021

Event Venue: Okayama Convention Center
(14-1 Ekimoto-machi, Kita-ku, Okayama 700-0024, Japan)

Organizer: IEEE Circuits and Systems Society Japan Joint Chapter

The global impact of the COVID-19 epidemic, which began in 2020, has deprived us of the opportunity for face-to-face research discussions and interactions, even though we can do so using online tools. Although the COVID-19 epidemic is still unpredictable, there are signs that life is slowly returning to normal. To revive the active discussion forum that had stagnated under the influence of COVID-19, CASS JJC planned and organized a blended meeting for students and young researchers with the title indicated above.

The event was held on November 22, 2021 at Okayama Convention Center (Okayama, JAPAN). Figures 1-3 show the scene on the day of the event. Tables 1 and 2 show the meeting schedule and the number of participants. In this meeting, we had two invited lectures and one distinguished lecture. In addition, we held a research presentation contest for students and young researchers.



Fig. 1: Reception.



Fig 2: Meeting room.

Table 1: Time Schedule.

Time	Event
10:30 – 10:40	Opening Ceremony
10:40 – 10:50	Introduction of IEEE CASS JJC Speaker: Atsushi Takahashi (2021 CASS JJC Chair, Tokyo Institute of Technology)
10:50 – 11:20	Invited Talk 1: Encouragement for IEEE journal submission Speaker: Hiroo Sekiya (Chiba University)
11:20 – 12:00	Distinguished Lecture: Enabling Accessible Health and Wellness via AI Humanity Lecturer: Gwo Giun (Chris) Lee (National Cheng Kung University)
12:00 – 13:00	Lunch
13:00 - 13:30	Invited Talk 2: Encouragement for going on to graduate school Speaker: Yuki Ohira (Sumitomo Heavy Industries, Ltd./Nagaoka University of Technology)
13:30 – 16:00	CASS JJC Presentation Competition for Research Bragging

Table 2: Number of Participants.

Category	# of Participants (# of IEEE members)		Total
	In-person	Online	
Regular	13 (9)	19 (16)	32 (25)
Student	36 (15)	13 (2)	49 (17)
			81 (42)

After the Opening Ceremony, Prof. Atsushi Takahashi (2021 CASS JJC Chair) introduced IEEE and CASS (Fig. 3). Next, Prof. Hiroo Sekiya (Chiba University) gave a talk titled “Encouragement for IEEE journal submission” as the first invited talk (Figs. 4 & 5). In this lecture, Prof. Sekiya explained the significance of submitting papers to journals for students and young researchers. In addition, he emphasized that the experience of writing, submitting, and accepting papers will greatly improve the abilities of all contributors.

The next lecture was the CASS distinguished Lecture (online) by Professor Lee. Gwo Giun (Chris) Lee (National Cheng Kung University). The presentation title was “Enabling Accessible Health and Wellness via AI Humanity” (Figs. 6 & 7). Prof. Lee introduced the basic concept of the Algorithm and Architecture co-design that he has been working on, as well as several examples of system design in the field of medical engineering that has been realized by applying the concept.

During the lunch break, we enjoyed lunch in the hall while taking measures against infectious diseases (Fig. 8).



Fig. 3: Introduction of IEEE CASS JJC.



Fig. 4: Invited Talk 1 (1).



Fig. 5: Invited Talk 1 (2).



Fig. 6: Distinguished Lecture (1).



Fig. 7: Distinguished Lecture (2).



Fig. 8: Lunch.



Fig. 9: Invited Talk 2 (1).



Fig. 10: Invited Talk 2 (2).

The afternoon started with the second invited lecture by Mr. Yuki Ohira (Sumitomo Heavy Industries, Ltd., Nagaoka Univ. of Technology) (Figs. 9 & 10). The title of his lecture was “Encouragement for going on to graduate school.” Mr. Ohira explained what you can learn and experience by going to a graduate school with his own experience. He also emphasized the importance of entering graduate school with a goal in mind.

The last event was the “CASS JJC Presentation Competition for Research Bragging.” In this contest, students were asked to give a presentation in which they boasted about the interesting and amazing aspects of their research. The content of the presentations was not limited to research results, but also included life hacks related to research.

Tables 3 and 4 show the contest finalists selected after the first screening. In the contest, the presenting groups were divided into two groups, A and B, and they gave “Short Presentation (for online)” and “Poster Session (for in-person)” respectively (Figs. 11 & 12). For some presenters, it had been a long time since they had presented face-to-face, while others were presenting face-to-face for the first time. In the poster session, there was a lively discussion in front of each poster.

The judging of the contest was done by all participants except the finalists. Tables 4 and 5 show the award winners. The awards ceremony was held after the contest, and two winners were given “Best Presentation Award” and four winners were given “Presentation Award” (Fig. 13). The winners also received an Amazon gift card as an extra prize. Finalists who missed out on the awards also received a finalist certificate and a small gift.

Table 3: Contest Finalist (Group A).

Speaker name	Title
Ayano Komanaka (Chiba Univ.)	Mathematical Properties of Load-Independent Circuits
Yosuke Susa (Tokyo Univ. of Sci.)	Improvement of Load Response by Using Hysteresis Comparator in Step-Up/Step-Down Converter for Portable Devices
Ryosuke Nakada (Chiba Univ.)	Building a small-amount payment system using the virtual currency “IOTA”
Takuya Tani (Kagawa Univ.)	Predicting Boat Races Using Neural Network
Katsuki Tokanou (Chiba Univ.)	Wireless Power Transmission System for Robot Arms
Miu Kimura (Shikoku Univ.)	Prototype of an inexpensive timekeeping sensor for improving athletic performance in the long jump
Yuki Horie (Chiba Univ.)	Performance Evaluation of Congestion Control Algorithms in Wi-Fi Network Using Emulator
Ryukichi Hirai (Tokyo Univ. of Sci.)	Introduction to Hybrid A/D Converters with Flash-SAR Configuration
Yuichi Hiramama (Chiba Univ.)	Toward the Construction of an Automatic Power Circuit Synthesis System
Zhengqiang Tang (Nagoya Univ.)	Dark noise reduction on an image using Sliding Window

Table 4: Contest Finalist (Group B).

Speaker name	Title
Hideya Masaki (Chiba Univ.)	Providing QoS using virtual currency
Taichi Asaka (Shikoku Univ.)	Data Acquisition for Sweet Potato Quality Discrimination by Deep Learning
Yutaro Komiyama (Chiba Univ.)	Frequency Control in Load-Independent Class-E Inverter
Kosei Saito (Tokyo Univ. of Sci.)	Highly Linear Mixer Using Compensation MOSFETs to Counteract Third-Order Distortion in Current Bleeding
Ryuji Nagasawa (Chiba Univ.)	Wibic system and its applications
Takuto Ohtaguro (Univ. of the Ryukyus)	Experiment of receiving multi-level signals using noise and 1-bit ADC
Hiroaki Motohashi (Chiba Univ.)	Implementation of multipath communication using P4
Masayuki Kinoshita (Chiba Inst. of Tech.)	Job Hunting for a Doctoral Student: What I Did to get a faculty position
Toshihiro Matsuda (Chiba Univ.)	Design of multi-powered WPT system



Fig. 9: Short Presentation.



Fig. 10: Poster Presentation.

Table 5: Best Presentation Award Winners.

Speaker name	Title
Ayano Komanaka (Chiba Univ.)	Mathematical Properties of Load-Independent Circuits
Taichi Asaka (Shikoku Univ.)	Data Acquisition for Sweet Potato Quality Discrimination by Deep Learning

Table 6: Presentation Award Winners.

Speaker name	Title
Katsuki Tokanou (Chiba Univ.)	Wireless Power Transmission System for Robot Arms
Zhengqiang Tang (Nagoya Univ.)	Dark noise reduction on an image using Sliding Window
Takuto Ohtaguro (Univ. of the Ryukyus)	Experiment of receiving multi-level signals using noise and 1-bit ADC
Masayuki Kinoshita (Chiba Inst. of Tech.)	Job Hunting for a Doctoral Student: What I Did to get a faculty position



Fig. 13: Award Ceremony

After the award ceremony, Prof. Nozomu Togawa (2021 CASS JJC Vice Chair) gave a closing speech. The event ended with a group photo of all the participants.

Many of the event participants said that it was a very fulfilling event. This event was the first chapter meeting for CASS JJC, and we hope to take this opportunity to plan chapter meetings regularly. Finally, we would like to express our sincere gratitude to IEEE CASS for the fund to hold this event.

Event Report: 2021 IEEE CASS JJC WiCAS Event

Shintaro Arai, Secretary of CASS JJC

Event Name: Let's think about a work-life balance under the new normal for Young CAS Researches and Students
Event Date: November 22, 2021
Event Venue: Okayama Convention Center
(14-1 Ekimoto-machi, Kita-ku, Okayama 700-0024, Japan)
Organizer: IEEE Circuits and Systems Society Japan Joint Chapter

On November 22, 2021, IEEE CASS JJC organized a WiCAS event “Let's think about a work-life balance under the new normal for Young CAS Researches and Students” in a blended format (in-person and online). The idea for this event was inspired by the new way of life brought about by COVID-19 infection. Lectures and conferences using online tools have become commonplace, but the way we work has also changed dramatically. For example, the promotion of telework and staggered work hours was quickly popularized by COVID-19. This infection has also changed the way we live with our future partners. However, there is still a big difference in the way males and females think about gender equality, with the male being more indifferent in Japan. We believe that now is the perfect time to think about life planning with an eye to the future, as individual work styles are changing. Therefore, CASS JJC planned and held a WiCAS event mentioned above, targeting men (especially young students and researchers).

Figures 1-3 show the scene on the day of the event. Tables 1 and 2 show the schedule of the day and the number of participants. First of all, Prof. Yoko Uwate (2021 WiCAS Chair, Tokushima University) online introduced WiCAS.

In this event, we had two invited speakers. As the first invited speaker, we invited Prof. Kimio Ito, Kyoto Sangyo University. Prof. Ito is an expert in gender equality, especially in the field of men's studies. The title of his lecture was “Thinking about Gender Equality from a Male Perspective.” Prof. Ito gave a lecture on the current gender balance in Japan and the history of gender in Japan and the world based on data.



Fig 1: View of the event.



Fig 2: Invited Speaker (Prof. Kimio Ito).



Fig 3: Free discussion.

Table 1: Time Schedule.

Time	Event
16:00 – 16:10	Introduction of WiCAS Speaker: Prof. Yoko Uwate (2021 WiCAS Chair, Tokushima University)
16:10 – 17:00	Invited Talk 1: Thinking about Gender Equality from a Male Perspective Speaker: Prof. Kimio Ito (Kyoto Sangyo University)
17:00 – 17:20	Invited Talk 2: Case of the child-rearing for male office workers Speaker: Dr. Hiroya Tanaka (Toyota Central R&D Labs., Inc.)
17:20 – 17:45	Free discussion

Table 2: Number of Participants.

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	In-person	Online	
Regular	13 (9)	19 (16)	32 (25)
Student	36 (15)	13 (2)	49 (17)
			81 (42)

The second invited speaker was Dr. Hiroya Tanaka from Toyota Central R&D Labs, who gave an online presentation. The title of his presentation was “Case of the child-rearing for male office workers.” Since Dr. Tanaka and his wife both work and are currently raising children, he spoke about his experiences raising children from a male perspective, as well as the questions and issues he learned about Japan's childcare system through his experiences.

After both lectures, there was time for a free discussion, where questions from the audience and online participants were discussed. Thanks to the large number of questions raised, the discussion became very heated.

The event ended with great success. After the event, we asked the participants what they thought of the event, and many of them said they were very satisfied, which made us happy as organizers. They were also pleased to hear that this kind of WiCAS event from a male perspective was new to them. We also received some requests to hold a second WiCAS event. Then, we would like to continue planning and holding WiCAS events like this one in the future.

Finally, we would like to express our gratitude to IEEE CAS WiCAS for providing us with the fund to hold this event.