#### **Report on IEEE R10 HTC2025**

The IEEE R10 HTC2025 (Humanitarian Technology Conference), hosted by the Tokyo Section, was held from Monday, September 29 to Wednesday, October 1, 2025, at Chiba University of Commerce in Ichikawa City, Chiba Prefecture. The theme of this year's conference was "A New Humanitarian Era with Intelligent Partners." A total of 230 participants registered in advance, and 207 attended the event in person. Among them, 69 participants came from 17 countries and regions outside Japan.

HTC is one of the flagship international conferences of IEEE Region 10 (R10). It was first held in 2013 by the Sendai Section as a platform to discuss initiatives focused on recovery from the Great East Japan Earthquake of 2011. Since then, the conference has been hosted in various countries across R10, and this year marks its second time being held in Japan. In the site selection process conducted in 2023, three R10 Sections submitted proposals. Based on the quality of the proposals and the feasibility of the plans, the host location was officially selected in January 2024.

The plenary sessions all focused on topics related to Humanitarian Technology (HT), featuring a total of nine presentations —four from IEEE-affiliated speakers and four from non-IEEE contributors, including three keynote talks.

The research presentations, selected through a rigorous peer-review process from 121 submitted papers, were showcased in one poster session and ten oral presentation sessions, totaling eleven sessions with 64 presentations. All of these were of exceptionally high quality, and among them, seven outstanding papers were recognized with awards: the Best/Outstanding Paper Award, the WIE (Women in Engineering) Paper Award, and the Student Paper Award. Meanwhile, the planned sessions such as workshops and tutorials featured unique proposals related to HT, mainly from R10 members, resulting in 16 sessions held at the venue.

The conference was made possible thanks to grants from five organizations and sponsorships from seven others. We are deeply grateful for their support. Eight organizations, including the sponsors, also set up exhibition booths at the venue to showcase their initiatives to participants.

Furthermore, Chiba University of Commerce (CUC), the host venue, is known as

Japan's first "100% Renewable Energy University," generating more electricity than it consumes through on-campus solar panels and other facilities. A "CUC Tour" was organized to visit these related facilities.

On the evening of the first day, a reception was held at the university cafeteria, and on the second evening, a banquet took place at a nearby hotel. During the banquet, awards were presented for outstanding papers, and certificates of appreciation were given to gold sponsors. The event also provided a lively opportunity for participants to network and connect with one another.

(Reported by Operations Committee Co-chair of IEEE R10 HTC2025 Organizing Committee, Yasuhiro Takishima)





# HTC2025 [Luncheon Seminar] "Taste & Talk: SIGHT Members Around the World" Report

On September 28, 2025, IEEE Tokyo SIGHT held the event [Luncheon Seminar] Taste & Talk: SIGHT Members Around the World at Chiba University of Commerce. This seminar was one of the workshops proposed to IEEE R10 HTC2025 (Humanitarian Technology Conference), held from September 29 to October 1 at the same university, and served as the first session of HTC2025.

During the event, participants prepared and consumed "Kanzen-Meshi" (a Japanese term meaning Nutri-Dense Meals) on their own, while first listening to an overview of IEEE and SIGHT (Special Interest Group on Humanitarian Technology) delivered by Ms. Mayumi Suzuki, Tokyo SIGHT Chair. Afterward, we welcomed Mr. Hideki Maejima, Secretary General of the Japan Optimized Nutri-Dense Meals Association, who presented under the title "Overview of Optimized Nutri-Dense Meals and Related Nutritional Challenges in Disasters." The lecture was delivered in Japanese with simultaneous sequential translation into English, allowing international attendees from HTC2025 to participate broadly. In addition, the association generously provided 50 portions each of Curry-Meshi and Hayashi-Meshi as Nutri-Dense Meals for the participants.

The Japan Optimized Nutri-Dense Meals Association is dedicated to promoting nutritionally optimized meals with a balanced composition of essential nutrients, aiming to enhance people's well-being. In the talk, Mr. Maejima introduced activities promoting such meals as a preventive measure against diseases, especially targeting undernutrition among youth and women, as well as frailty in the elderly. He also presented initiatives related to disaster agreements with various cities and survey results from disaster-affected areas, focusing on nutritional imbalances and limited dietary choices in emergencies. The Q&A session remained lively until the end, with many interesting inquiries covering topics such as questions based on the ingredient labels of the provided meals and the potential for optimization tailored to individual nutritional needs.

A total of 108 participants attended, of whom 29 came from 13 different countries. All participants finished the meals provided, indicating that they appreciated not only the lecture content but also the meal itself. As intended by the event title, participants succeeded in crossing borders to "Taste & Talk" together.

We extend our heartfelt gratitude to Mr. Maejima and all members of the Japan Optimized Nutri-Dense Meals Association for their invaluable support in realizing this

event.

Note: Some participants were provided with long-shelf-life instant meals, which were not Nutri-Dense Meals, including halal-certified and vegetarian-friendly options.

The Japan Optimized Nutri-Dense Meals Association: <a href="https://www.saiteki-eiyo.org/">https://www.saiteki-eiyo.org/</a>
IEEE Tokyo SIGHT: <a href="https://sites.google.com/ieee-jp.org/tokyo-sight/home?authuser=0">https://sites.google.com/ieee-jp.org/tokyo-sight/home?authuser=0</a>

(Reported by Chair of the IEEE Tokyo SIGHT, Mayumi Suzuki)





Introduction of IEEE Tokyo SIGHT by Ms. Suzuki, and invited speaker Mr. Maejima



Group photo with the lecturer and organizers



Group photo with all the participants!

# HTC2025 [Special Session] "Redefining Tomorrow: Beyond SDGs Challenges" (LMAG)

A special session, organized as an LMAG track and titled "Redefining Tomorrow: Beyond SDGs Challenges," was held.

The session focused on large-scale research projects aiming to generate groundbreaking innovations for social implementation by the year 2050, discussing both their goals and feasibility.

In particular, the following five Program Directors from the Cabinet Office's **Moonshot Program** were invited, each delivering a presentation on their respective projects:

- **Norihiro Hagita** Realizing a society in which people are liberated from the constraints of the body, brain, space, and time.
- **Toshio Fukuda** Realizing robots that learn, act autonomously, and coexist with humans through the co-evolution of AI and robotics.
- Kenji Yamaji Realizing sustainable resource circulation for global environmental restoration.
- Masahiro Kitagawa Realizing a fault-tolerant quantum computer that will dramatically advance the economy, industry, and security.
- **Zensho Yoshida** Realizing a vibrant society that harmonizes with the global environment and is freed from resource limitations through the multifaceted utilization of fusion energy.

The session featured lively discussions and proved to be highly fruitful and meaningful.



(Reported by Life Members Affinity Group-Tokyo Chair, Hideki Hayashi)

# HTC2025 [Special Program] WIE Session Report

The IEEE Tokyo/Shin-etsu Joint Sections WIE Affinity Group collaborated with the IEEE Region 10 WIE Committee to plan and deliver a special program titled "Empowering Women in Engineering: Shaping the Future Through Science and Technology" as a WIE session in the IEEE R10 HTC2025. The session was held on September 30 (Day 2) from 13:30 to 15:00 and included a keynote, a showcase, and a panel discussion.

The keynote talk was given by Prof. Emi Yuda (Innovation Center for Semiconductor and Digital Future (ICSDF), Graduate School of Engineering, Mie University, Graduate School of Engineering, Tohoku University) on the topic of "Women in Biomedical Engineering: Fostering a Balanced and Innovative Future" where she addressed the persistent gender imbalance in engineering and healthcare fields and suggested ways to explore strategies to support early-career female researchers and encourage interdisciplinary collaboration. In the WIE activity showcase portion of the session, Sujata Saini (a finalist of the IEEE R10 WIE Committee initiative ATHEnA Project #1) shared how technology can be used to support caregivers in her winning work "HAMI: Connecting Generations Project". The session ended with a panel discussion including both speakers and Tokyo/Shinetsu Jt. Sections WIE excom officer Prof. Michiko Ohkura (Research and Development Initiative, Chuo University). Approximately 20 men and women from around the world participated in the lively discussion and question and answer session about the current situations surrounding each of the panelists who spanned various stages of career from student to life member stages and the solutions for overcoming obstacles along the way.

In addition, at the banquet held on the evening of the same day at Tobu Hotel Levant Tokyo, the following awards were presented to particularly outstanding papers among the accepted HTC2025 papers whose first authors and presenters were women. The award recipients were presented with certificates along with commemorative gifts from the IEEE Tokyo/Shin-etsu Jt. Sections WIE.

- •HTC2025 WIE Paper Award: Wai Yie Leong. "Drone Swarms for Post-Disaster Search and Rescue in Remote and Inaccessible Areas"
- •HTC2025 WIE Student Paper Award: Nazia Sultana Plabon. "Blockchain-Secured Federated Learning for Energy Forecasting in Steel Manufacturing"

(Reported by: IEEE R10 HTC 2025 Organizing Committee / IEEE Tokyo/Shin-etsu Jt. Sections WIE Affinity Group Chair Takako Nonaka)







#### The 5th Lecture Meeting of Tokyo Section in 2025

On Thursday, September 18, 2025, from 15:00 to 16:30 (JST), the Tokyo Section Technical Program Committee (TPC) hosted the 5th Tokyo Section Lecture Meeting of 2025 via the Zoom Webinar virtual platform. The event was co-sponsored by the IEEE Kansai Section TPC, the IEEE Tokyo Section LMAG (Life Members Affinity Group), and the Institute of Electronics, Information and Communications Technology (IEICE). Approximately 80 participants attended the lecture.

Dr. Shumpei Kameyama, who was elevated to IEEE Fellow in 2024, and currently serves as General Manager at the Advanced Technology R&D Center, Mitsubishi Electric Corporation, was invited to deliver a lecture entitled: "Innovation in atmospheric wind sensing -The process from pioneering to spreading of fiber-based lidar technology-".

Dr. Kameyama shared valuable insights into the evolution of fiber-optic lidar technology, one of today's most advanced sensing technologies. He discussed the development background and the path leading to real-world applications in the field of wind measurement, drawing from his extensive hands-on experience.

The lecture covered a wide range of topics, including the challenges of research and development, the breakthroughs that overcame barriers to adoption, and the journey from international standardization to commercialization. The audience was deeply impressed by the wealth of insights shared. An active Q&A session followed the presentation, providing participants with an engaging and rewarding opportunity for further discussion.

We will continue our efforts to reach a wider audience by organizing future lectures in hybrid and online formats. We would like to express our sincere appreciation to Dr. Kameyama for his insightful presentation, as well as to all participants and contributors for their support and cooperation.

(Reported by Technical Program Committee Secretary, Shinsuke Hara)

#### **Notice from IEEE Tokyo Section Office**

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