Topics

Attend the VAMAS SC-47 Hybrid Conference

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VAMAS was established as an international standard project for pre-standardization of advanced materials agreed upon at the G-7 Versailles Summit in 1982, and has continued to develop as an international collaboration with a 40-year history. The 47th VAMAS Steering Committee meeting (Thursday, October 20, 2022 - Friday, October 21, 2022), which is positioned as the highest decision-making body, has successfully concluded. This is an overview of the meeting with the aim of acquainting readers with the current activities of VAMAS.

1. Introduction

It has been eight years since I started working for the NIMS International Standardization Secretariat and the VAMAS (Versailles Project on Advanced Materials and Standards) Japan Steering Committee Secretariat. Unfortunately, I have never been involved in standardization myself, but through various encounters I have come to understand the importance of standardization to some extent. I previously wrote article about the 45th VAMAS Steering Committee (SC) meeting in "NIMS Materials Standardization Activities Report 2019". I also attended the 47th VAMAS SC meeting (Thursday, October 20, 2022 - Friday, October 21, 2022) online. Again, I will write an article focusing on the contents of this meeting from the perspective of the secretariat.

Fig 1. Photos of VAMAS SC-47 meeting participants

2. Overview of the VAMAS Steering Committee Meeting

VAMAS itself was established as an international standards project for the pre-standardization of advanced materials agreed upon at the G-7 Versailles Summit in 1982. Japan has participated in this program since its inception. It is an international joint research project with a history of less than 40 years.[1-3)]

The VAMAS SC Meeting is held once a year to bring together representatives from each country to discuss the activities of each Technical Working Area (TWA) during the year, reports on the activities of liaison organizations such as ISO TC229 (Nanotechnology) and the Asia Pacific Metrology Program (APMP), regional reports from Australia, the UK, China, Italy, Japan, etc., proposals for new TWAs and new projects for each TWA, proposals for new TWA projects, and reports on inactive TWAs. The meeting is also a forum for discussion of approval of the venue for the next SC meeting, replacement of chairpersons, etc. It is the highest decision-making body of VAMAS.

The author attended the 43rd SC meeting in 2018 held at

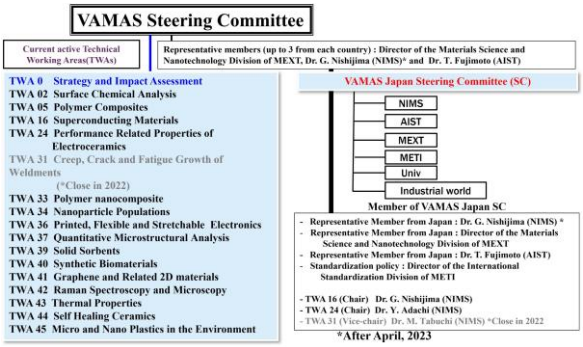

Fig 2. Organizational Chart of the VAMAS Japan Steering Committee (as of February 2023)

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the German Federal Institute for Materials Research (BAM, Berlin, Germany) , the 44th SC meeting at NIST (Boulder, USA) in 2019, the 45th SC meeting (online meeting, hosted by NIST, USA) in 2020, the 46th SC meeting (hybrid meeting, hosted by National Physical Laboratory(NPL, UK) in 2021, and now the 47th SC meeting (hybrid meeting, hosted by Instituto Nazionale di Ricerca Metrologica (INRIM, Turin, Italy) in 2022 as a member of the Japanese delegation. As you know, the novel coronavirus began its pandemic around the world around the end of 2019, and three years have already passed, but it has not yet come to an end. By mid-2022, the idea of “With Corona”, many Western countries had returned to normal social life. This year's meeting in Italy was a hybrid meeting, combining on-site and online sessions, taking into consideration countries where overseas travel was difficult. At that time, overseas travel was still restricted in Japan, so all participants from Japan had to participate online.

VAMAS currently has 15 member countries plus two institutions, and elected members from each country are invited to participate in the SC meeting. Figure 1 shows the photos of some of the members who participated in the online meeting, but the official minutes of the meeting have not been obtained to date. Therefore, we do not know the number of participants, but we believe that several dozen people attended. Due to the eight-hour time difference between Japan and INRIM, the organizer of the conference, I attended the meeting from 5:45 p.m. on the first day, Wednesday, October 20, until 1:00 a.m. the next day, during the time of gradual fatigue in Japan. The host institution, INRIM, is based in Turin, Italy, and is the leading international metrology organization in Italy. Prior to the SC meeting, INRIM's workshop "Measurement Needs for Microplastics" was held on October 19, and the Charisma School was held on October 18-19.

For a long time, the chairmanship of the SC meeting was rotated between NPL (UK) and NIST (US), but at the time of the SC-43 meeting, Dr. Pedro D. Portella of BAM was the chair. Unfortunately, after the SC-43 meeting, he had to step down for some reason and was replaced by Dr. Michael Fasolka from NIST (USA), who chaired the SC-44 and SC-45 meetings. Since the SC-45 meeting, Dr. Fernando Castro of NPL (UK) has been the chairman and Sam Gnaniah has been the secretary. Figure 2 shows the organizational chart of the VAMAS Japan Steering Committee as of February 2023.

Over its long history, the Technical Working Areas (TWAs) themselves have risen and fallen. Some TWAs with missing numbers in a sequence of numbers mean the existence of closed TWAs in the past. Once a TWA is discontinued, it is promised that the number will no longer be used. Thus, the TWA is constantly evolving. TWA2 (Surface Chemical Analysis) is one of the oldest, but still active TWAs. Very recently, in 2020, a new TWA, TWA 0 (Strategy and Impact Assessment), was launched and is responsible for strategic planning, stakeholder outreach activities, and evaluation of technical working group activities.

Now, (1) TWA 2 (Surface Chemical Analysis), (2) TWA 16 (Superconducting Materials), (3) TWA 24 (Performance Related Properties of Electroceramics), and (4) TWA 44 (Self healing Ceramics) are TWAs in which Japan is actively taking the lead. For more information, please see this web page, which includes some of the contents.

It was decided at the SC-47 meeting that the 2023 meeting will be held in India (location and date to be determined). Now I look forward to a return to active international standards activities through face-to-face participation.

3. Summary

Since the former Science and Technology Agency and the former Ministry of International Trade and Industry were in charge of VAMAS when it was established, the Director of the Materials Science and Nanotechnology Division of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Director of the International Standardization Division of the Ministry of Economy, Trade and Industry (METI) attend the VAMAS Japan Steering Committee meetings held at the end of each fiscal year to present our activity reports and receive their reviews. In fact, while I myself was engaged in standardization secretariat work, I thought I understood in my head that standardization and patenting are both important, but I had my doubts about whether they are conflicting activities. At the VAMAS Japan Steering Committee meeting held in March 2022, a comment by Mr. Watanabe, Director of the International Standardization Division of METI, cleared up my long-standing question. The QR Code, as you all know, was invented by Denso Corporation, a well-known manufacturer of automotive parts, for inventory control within the company. It should be noted here that by not claiming

exclusive rights to all of this invention, but by following an open-close strategy of technology diffusion (standardization of QR Code rules) and monopoly (exclusive sales of exclusive reading devices protected by patents), the coexistence of standards and patents was possible, and the company could make a high profit. In other words, if we researchers are serious about commercializing our technology, we should aim not only for patents but also for standards. We hope that readers of this report will also take a keen interest in the standard.

References

1) VAMAS HP: http://www.vamas.org/
2) VAMAS Japan HP: https://www.nims.go.jp/vamas/
3) M. Kanao, K. Nii, N. Shinya 74 (1988) 207, in Japanese.